



Linnæus University

Sweden

Bachelor Essay

Did the UEFA European Championship increase the arrival of foreign tourists to the host regions of Poland?



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Term: VT19
Subject: Degree Project
Level: Bachelor
Course code: 2NA11E



Abstract

This essay analyses the impact of the UEFA European Championship in 2012 on the regional inflow of tourists in Poland. In this essay we use a difference-in-differences method to compare the regions who hosted the event with the regions who did not host the event. Our results show that there is a statistically significant differences between the two groups regarding the arrival of foreign tourists. The results show that the regions who hosted the event experienced a significant increase in the inflow of tourists and that was related to the tournament. The arrival of foreign tourists increased during the month of June 2012, when the event took place and in the months after. The conclusion we draw from this essay is that the UEFA European Championship had a positive impact both in the short and long run in the inflow of tourists in the regions who hosted the 2012 tournament in Poland.

Acknowledgments

I would like to thank Lars Behrenz for the time he spent on helping and guiding me through this essay. It would not have been possible without his help.

I would also like to thank Dominique Anxo for his comments which helped a lot.



Key words

UEFA Union of European Football Associations

DID Difference-in-Differences

GDP Gross Domestic Product

WC World cup

Euros UEFA European Championship



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1. Introduction

Football is the world's biggest sport. It has more followers and active players around the world than any other sport. It is today a celebrated activity worldwide. With more people actively participating and following the sport. The UEFA European Championship is arranged by UEFA. The event takes place every fourth year and it has done so since 1960. A total of 54 member states are sorted in to groups where they compete for the participation of the next event in 2020. The event has historically been hosted by one or two countries, where the hosting countries get a direct spot in the event. But for the next event in 2020 the event will be hosted by thirteen different cities around Europe. The UEFA European Championship is as the name predicts a European tournament for European nations, but because of the scale of the event and the top leagues of Europe the event attracts a broad international audience. The fact that the UEFA European Championship is an international event, followed of fans around the world makes it a mega-event. Because of its international significance and power to affect and change regions makes it one of the recognized international mega-events of today. Mega-events like the UEFA European Championship is an attractive toll for transition economies like Poland, where they see the opportunity to attract more foreign tourists but also big international companies and investors. They see an opportunity with the event to modernize their country in a short period of time. The countries like Poland are very aggressive in there bidding for these mega-events, the opportunity to be seen on the international stage in a positive atmosphere is very important for these countries. The media coverage that comes from the mega-event can be of great importance in attracting new foreign tourists and companies. In many interviews we rarely see the politicians and the representatives for UEFA talk about the downside with these mega-events. They often talk about the positive impact the event could have on the host countries. Many studies have been made to put this to the test. Mostly on the economic impact of the events. Most of the literature are focusing on the economic perspective in the short-run with respect to the investments in the bid for the event and the alternative cost. Most these studies are focusing on the World cup and the summer Olympics. There are very few studies about the impact on the arrival of foreign tourists from the UEFA European Championship on the host countries. The purpose of this essay is therefore to contribute to the small range of studies that are available on the subject of the impact of the UEFA European Championship on the arrival of foreign tourists to the host countries. Therefore, the question which we will try to answer is:

Did the UEFA European Championship increase the arrival of foreign tourists to the host regions of Poland?



The reason for choosing to study the case of the event in Poland 2012 is because of the popularity among transition economies and their aim to host these events to boost their image and attract more foreigners. To answer our question, we will use the difference-in-differences (DID) method. The difference-in-differences will allow us to compare the differences between the regions. Where we can compare the impact of the UEFA European Championship on the regions of Poland. The data that we use to run our regression on are gathered from Statistics of Poland and are on monthly basis. The reason for this is because the event takes place during the month of June 2012. Therefore, only monthly data will be able to give an answer to our question. Data on Gross Domestic Product (GDP) was not to be found on monthly basis for the 17 regions of Poland that are included in our regression. Therefore, we will only use time and place as our variables. It is important to mention that it would have made our regression more precise with a control variable as GDP but it will not affect the results negatively. In the next chapter we will explain the historical perspective and importance of the UEFA European Championship and what the previous literature can give us on the subject. We will also define and explain the meaning of a mega-event and why the UEFA European Championship is considered one. In chapter three we will explain the theory behind the mega-event and why many countries want to arrange it. In chapter four we will present the data we are going to use in our regression. In chapter five we will introduce the difference-in-differences method and justify its use. In chapter six we will present the results of our regression. This will be followed by chapter seven where we will make a conclusion of our results.

2. Background

In this chapter of the essay we will explain the topics we are going to analyze and give a historical explanation and a historical background to what the UEFA European Championship is and what it means in terms of economic and social terms to host the UEFA European Championship. This essay will also explain the term Mega-event, to be able to understand the question and complexity of this topic later on. The chapter will explain what we mean by a Mega-event and why the UEFA European Championship is considered a Mega-event. We will then later on look at previous literature on the topic to get a wider picture of the subject.

2.1 UEFA European Championship

European football has today a major significance in European politics, economics and culture. Europe is and has been historically a place with diversity, where different countries with different



languages, political systems, religions and cultural differences have been living alongside each other. Historically Europe has been divided, even within the countries itself. Where we have for example Spain, where the country's major regions Catalonia and Madrid have been and are still in conflict over land and rights of the major city Barcelona. In the north of the country we have the Basques who are in conflict with the central government in Madrid. Despite these regional conflicts, the country comes together as one every time they compete in the European championship. Where players from Madrid, Basque and Catalonia wears the Spanish shirt and are cheered on by the whole country. Therefore many historians claim that football has had a major impact on uniting Europe and its countries (Spitaler & Manzenreiter, 2010, p.1). The UEFA European Championship has for the last decades grown in a rapid pace. The major events in sports are therefore today the World Cup and the UEFA European Championship, right behind the summer Olympics. According to Forbes Magazine the UEFA European Championship is today one of the major mega-events when it comes to both the media coverage and revenue (Schwartz, 2012). The UEFA European Championship was first an idea that came from two French citizens Henri Delaunay and Hugo Meisl. In 1927 Delaunay and Meisl considered that there should be a European tournament that could match the World cup. In 1954 the Union of European Football Association (UEFA) was established and Delaunay became the first general secretary of UEFA. In 1960 Delaunay made his dream a reality where the European Nations cup for the first time was played in France (UEFA c, 2011). The tournament has since 1960 expanded from four countries to 24 countries in the most recent UEFA European Championship in 2016. With 53 countries being part of UEFA and its process, it has become a factor in European culture and life. Since then the tournament has gained in associations for the last decades, with more countries competing and a bigger audience watching, the requirements for hosting the UEFA European championship has been more demanding for the host countries. Mainly because of the investments in arenas and infrastructure, since the tournament attracts more people now than before. A demand that is relevant for our essay is the demand for a smooth arrival into the host country. UEFA demands that the country has clear guidelines for the tourists, and visas for the workers. This is of course important for the host country as well since they want to attract more tourists from abroad which is one of the reasons to host the tournament. The infrastructure is an important factor in the bidding for the tournament. Since the tournament is taking place in June the supporters have to be able to in a smooth and fast way travel between the arenas. The airports have to be able to take the increasing amount of tourist that will fly in to the host country in a short period of time. UEFA helps the host country financially in some cases. In the case of Poland UEFA helped with the funding the arenas while the host country stood for the costs of



infrastructure and security. This is one of the reasons why UEFA have decided that for the Championship in 2020 it will instead of being hosted by one nation, it will instead be hosted by thirteen different cities around Europe. This is due to the high demands and the economic burden on the host countries.

2.2 Mega-event

Mega-event is a term we usually use when we describe the summer Olympics and other big international events. It is used when we want to describe events that attracts a broad international audience. It is important to understand the term "mega-event" since we in this essay are going to analyze the effects of the UEFA European Championship on the regions of Poland. There are many descriptions on the term, in this essay we will focus on the description of Maurice Roche, who has studied the term for a long time. Roche (2002) defines mega-events as a "Large-scale cultural (including commercial and sporting) events which has a dramatic character, which appeals to the large mass and has an international and cultural significance" (Roche, 2002). The event has to be able to appeal the broad audience from abroad, it has to be able to create an atmosphere that draws people to the event. The UEFA European Championship fits this picture and is because of this considered to be a mega-event. Because it draws a broad of international audience to the host country, where it is created an atmosphere that attracts people. This essay will focus on the foreign tourism inflow to the regions of Poland. But it is out of interest to mention that these mega-events are often criticized by experts for its expensive and demanding nature on the host countries. Many pre-post studies show that these events are often not in line with the budget and that the actual cost for arranging the event are often higher than the predicted costs. One of the reasons for hosting a mega-event is that of the increase in foreign tourists. Who will bring in new money to the country and by goods and services from the locals which will generate in new income from taxes for the host regions. But the after party is almost never mentioned. Much of the costs in the budget for arranging a mega-event like the UEFA European Championship is spent on new arenas and modernizing the country's infrastructure. Many of these arenas are often left empty after the tournament, this is due to the size of the inbound league often being smaller than the big leagues in Europe and the local teams can't fill them. An example of this is the arena in Leiria, Portugal which cost the region 80 million euros to build and is today not used by the local team, since it is too big and too expansive in the long-run. The arena was built for the UEFA European championship in Portugal 2004 and was only used twice. The



maintenance of the arena is still today affecting the small community by taking eight percent of the county's budget every year (Rasmussen, 2012). Therefore the alternative cost is a major factor in the bidding for the mega-events. Should a small country bid for these events when the alternative cost is much greater and could do much greater good for the regions. It should also be mentioned that the mega-events often speeds up the modernization of the host country. Where the infrastructure is renewed under a much shorter period of time, where in other cases it would take decades (Roche, 2000). It creates job opportunities and a pride in the nation. Many transition economies like Poland see the mega-events as an opportunity to modernize their country. We will later on in the essay explain how and why this could boost the image and attract foreign tourism and investors to the host country. Football is today a political and cultural power in the world. The president for the Ukrainian football association mentioned an important aspect of the UEFA European Championship in 2012, where the Ukrainians after the mega-event felt more like Europeans. Where new train lines and connections have been created to link the country more closer to Europe (UEFA b, 2012). The mega-events can also affect the socio-economic dimension of the host country. A good example of this is the summer Olympics in London. The old area of Stamford, where the majority of the residents belonged to the working class. They had to move out before the summer Olympics. The city of London decided to renew the area by building new apartments and office buildings. The new apartments was too expensive for the working class and where therefore crowded out by the middle-class (The Economist, 2012). As we see the mega-event can affect the host countries and cities in many aspects. The mega-event has a force to change areas and countries, but is also very expensive to host. Even decades after the event took place. In part three we will look at previous literature on the topic of the impact of the UEFA European championship on the host countries inflow of tourists.

2.3 Literature review

Many countries like Poland and Ukraine have for the last decades showed a great interest to arrange mega-events like the UEFA European Championship. The growing interest is mainly due to the growing marketing of football and the growing media covering of the sport. The growing broadcasting of the game has let the sport to become an international experience (Horne & Manzenreiter, 2006). Many regions in transition economies have for the last years been very aggressive in there bidding to host these mega-events. They see an opportunity to increase the image and the economic benefits from foreign tourists. The impact of the mega-event on the host countries is still uncertain. Whether the gain in foreign tourists will be worth it is related to the investments the host countries have to do. There have been many studies made on the topic of the



impact the mega-event like the UEFA European Championship has on the host countries. They have often been focusing on the net gains from ticket sales and the investments on the infrastructure and arenas (Li & Jago, 2013). The economic perspective regarding investments on infrastructure in the short-run does not always consider the long-run benefits of the event, where the host country's may gain an image boost from the event that further increase foreign tourism and investments. In recent years several studies have been conducted focusing on the long-run effect on tourists and the image boost the event brings and therefore more regions and countries are using these mega-events like the UEFA European Championship in their image strategies (Dwyer & Forsyth, 2010). Many studies have been made on former events on the impact the mega-event has on the host countries foreign tourism arrivals. Cadima Ribeiro et al. (2004a) analyzed the UEFA European Championship in Portugal 2004. Where they looked at the investments on the new build arena in Braga and the renewed arena in Guimaraes with respect to the spending of foreign tourists in the region, to be able to analyze the short-run economic benefits. They showed that the host country gained 9.7 percent from the investments in the new arena in Braga and the renewed arena in Guimaraes during the time when the event was held. As many other studies the long-run impact is not analyzed in this study. The same authors studied (2004b) the potential comeback of foreign tourist to Portugal after the event. In this case the theory predicted that tourists that visited Portugal in 2004 for the event as a priority and the country as a secondary activity would be less eager to come back to the country. But their study showed that there was no difference between the two groups. Where the tourists that came to Portugal and had the event as a priority was as eager as the tourists who had the event as a secondary activity to come back to the country in the future. Whether they would actually in reality act according to their answers is still uncertain. The study still shows the impact the event has on establishing new foreign tourists to the host country. A big part of hosting these events is to establish new tourists in the future, where the losses in the short-run will be gained in the long-run. One of the reasons for hosting the event is the increase in foreign tourists, where they will stimulate the detail economy with renting rooms and buying local goods. A study on the impact of the UEFA European championship had on the accommodation industry in Algarve, Portugal by Perinea and Custidou (2008) showed a decrease in the rent of rooms over night during the month of June, when the event was taking place. The reason for this was the increase in prices due to the event, where the local industries increased the prices due to the increase of foreign tourists. This could have been scaring the tourists away. It should also be noted that the authors did not look at the long-run impact or the impact on the local restaurants or transports. It should also be of



interest to study the crowding out effect of traditional tourist since the Algarve region is one of Portugal's most popular tourist regions, to see if potential and traditional tourists from abroad was crowded out. The Mega-event like the UEFA European Championship has as explained before very high demands on the host countries. In recent years UEFA have decided to let two countries arrange the event together, to release some of the economic burden. Like the 2012 tournament where Poland and Ukraine arranged the event together. Switzerland and Austria also arranged the tournament together in 2008. And because the tournament is taken place during the month of June the arrival of tourists to the countries have to be arranged in a smooth and safe way. Therefore, for the UEFA European Championship in Switzerland and Austria in 2008 the countries had to for the two months of the event pause the Schengen agreement. This was due to control the passing of football hooligans entering the countries. This could have a positive and a negative impact on the inflow of tourists. This could also increase the risk of the crowding out effect of traditional tourists who want to visit the country for its traditional tourist attractions (Lauss & Szigetvari 2010). Further studies should also be made on this, to see if it effected the transport industry and the export and import of goods to the countries during this period of time. As mentioned before the potential marketing of local product is an important variable in the bidding for the event. In Switzerland and Austria 2008 they arranged fan-zones. This was made for the supporters who couldn't get tickets, but also to make them stay longer in the country. Many saw this as overestimated. The concept is not new and has been used before. The fan-zones was an opportunity for the local industries to promote their goods and services to the tourists. The concept was later on used in the event in Poland and Ukraine in 2012. The major problems with arranging this kind of mega-events as mentioned before is the predictions of the costs for the host countries. Hachleitner and Manzenreiter (2010) analyzed the predicted costs of the tournament in 2008 and concluded that the budget was not in balance in Austria. The major reasons for this was that the budget for the buildings of new arenas and renewed arenas was not in line with the budget. Also the costs for the criticized fan-zones was over the budget. But the main problem was as it often is after these events, the size of the stadiums. In Austria in 2008, the budget left money for the downgrading of the arenas, since the league in Austria does not have the same capability as the big leagues in Europe to fill the stadiums after the event. This cost was a big part in why the budget was not in balance. Since this essay is focusing on the inflow of tourist, the authors found that the tournament brought 5,8 percent more tourists to the host country for the period of June, in comparison to the years before. They also found out that this was a short-run effect since the tourist-boost decrease the year after. We can see a short-run boost in almost all of these studies,



but rarely a long-run effect. In the case of Switzerland and Austria the authors address this by looking at the global economy at that period. The world economy in 2008 was all time high and the year after the crash came. The authors suggest that the world economy and the economic crash in 2008/2009 could have resulted in the large decrease the years after. Many experts in the field often criticizes the mega-event for its crowding out effect of traditional tourist attractions. As mentioned before many of the host countries sees an opportunity to raise the prices which often results in scaring the traditional tourists away. The authors showed that this was the case in Wien. They found out that the most attractive tourist attractions in Wien had a drastic decrease during the period of the event, compared to the same period the year before. The same authors made a pre-study in 2004 and a post-study in 2008 for the Swiss government. The numbers showed a more positive impact on Switzerland than Austria. They showed as in the Austrian analysis a budget that was not in line with the actual costs of the event but they also showed that Switzerland had a 20 percent increase in tourist arrivals, which was undermined in the pre-post analysis. It should also be noted that the authors in this study did not consider the years after the tournament, therefore the boost in tourists arrival was maybe just a short-run effect. As we have seen there are many studies on the topic. The subject is debated whether the impact is positive for the inflow of tourists. As mentioned many transition economies like Poland sees the mega-event as a very attractive toll to modernize their countries. In the next section we will present the theory behind this. To get a better explanation to why many countries still want to arrange these events, despite the previous literature on how uncertain the results are on the increase in tourist arrivals and the costs. We will explain how the mega-event should affect the host countries in theory and the theory these countries really on when they bid for these mega-events.

3. Theoretical framework

The previous literature showed that in the short-run the host regions will see an increase in tourism. Where in the long-run they will see a decrease, due to many reasons. It could be financial crisis or that the boom in tourists was only due to the event and that the tourists who came was mostly there for the event and had the country as a secondary activity. The mega-events are as mentioned before uncertain when it comes to predict the costs and the arrival of tourists, it is not unusual that the predications of the event is not in line whit the actual outcome of the event. Still many transition economies like Poland bid for the mega-events. Why do they do that? When the experts on the field show the uncertainty with hosting this mega-events. The transition economies like Poland and rest of the world live today in a global economy. Where



they are more integrated with each other than ever before. Where we in Europe have the Schengen agreement, where human capital, money, goods and services can be freely transported between the countries in Europe who are a part of this. The countries of today must show that they are competitive. They compete for the same international companies and investors on the same platform. The mega-event like the UEFA European Championship can provide a broad international audience to the regions. The international mega-event can boost the image of the regions in a positive atmosphere. According to Richard Florida (Florida, 2002, p.9) regions with modern infrastructure and social stability attracts more highly educated individuals which will attract international companies and investors to the region. As mentioned before UEFA have high demands for the bidding of the event. The countries who get to host the event sends out signals of stability and good economical situation. The signal of the bidding for the event is itself a signal of a climate for investments. This is one of the reasons why many countries have adopted the theory of "Place Branding". The theory can be defined as a praxis of marketing of goods and services, but has later on been adopted by regions and countries who want to attract more tourists and investors. It has in the last years been used in the economic field of regions to attract the big global companies (Palgarve Macmillan, 2012). The complexity of Place Branding is that you are marketing the regions identity and social environment. The identity of the regions have to be consumed by the tourists. In doing Place branding there is a sub-category called nation marketing that the host countries can use with the mega-event. The transition economies like Poland, sees the opportunity with the event to market the country to the outside world. In the case of Poland the country want to use the UEFA European Championship to remark the country as an open small European economy, open for international investors and tourists. With the media coverage of the tournament the country will be able to reach out a broad international audience. In the Short-run the mega-event will increase the inflow of tourists, we will later on in the result section see an example of the short-run impact the event has on the inflow of tourists. In the long-run the country expects in theory an image boost that will attract foreign investors and companies and an increasing inflow of tourists. As mentioned before the Place Branding will also help with the event to show modern infrastructure and social stability to the world, which will make the host regions more attractive for foreign tourism and investors. In theory the mega-event is a toll for transition economies like Poland. A toll where they can in a short-period of time get international media coverage which will reach the large international companies in the world. The investors will see a country open for investments and an atmosphere of a growing economy ready for the



next step. They will also see a country that has invested in its infrastructure and social atmosphere which will attract highly educated individuals.

4. Data

To answer the question whether the UEFA European Championship increases the arrival of foreign tourists to the host regions of Poland compared to the regions that did not host the event. We need monthly data on the inflow of foreign tourists (non-resident) to the various regions of Poland. We cannot use quarterly or yearly data, only monthly data will show us the difference between the regions. Because the tournament is taking place in June of 2012, the yearly and quarterly data is a too long period. We want to study the effect of the event on the arrival of foreign tourists to the regions of Poland. Therefore, monthly data is required in this case. The panel data that was collected for all the 17 regions of Poland come from Statistics Poland. The data shows number of foreign tourists that arrived to the 17 regions for all the months from January 2009 to December 2018. The reason for this long period is to see whether there is a shock in June 2012 when the event took place and if there is an increase of tourists after the event. We want to study this to see if the theory is in line with reality. Where in that case we will see an upsurge of foreign tourists in June 2012 and a decrease in the months before and after the event. The data will later on in the regression be turned into a treatment group of four regions (Warsaw, Gdansk, Poznan and Wroclaw) and a control group of the remaining 13 regions. This is also one of the reasons why monthly data is required. For our regression later on, where we will run a difference-in-differences to see the differences between the two groups. Monthly data on all the 17 regions of Poland is important for our regression later on, we couldn't use Gross Domestic Product (GDP) as a control variable as this was not available on monthly basis for the 17 regions. It would have been of interest to have it in the regression to control for seasonal trends and the inflow of tourists. But because there were not monthly data on it for the 17 regions this was not possible. The result of our regression will later on in this essay not be negatively affected by this, but as mentioned before it would be a good control variable, where we would control for financial crises and monetary changes which could affect the inflow of tourists as mentioned in previous literature. Our panel data set of the arrival of foreign tourists consist of 120 Observations and 17 regions to run our regression on. Where we have all the four regions that hosted the event (Warsaw, Gdansk, Poznan and Wroclaw) and 13 other regions to compare with. In the summary statistics we can see how our data is spread out. We can see that the four regions that hosted the event has a larger arrival of foreign tourists than the 13 other



regions who did not host the event. This will lead to a higher curve for the treatment group in the graphs later on. It also shows us that the treatment group is already an attractive destination for tourists, and a reason why they get to host the event. For Warsaw the mean value of foreign tourist arrivals is 95284.36, for Gdansk it is 33841.26, for Poznan it is 22665.65 and for Wroclaw it is 42637.72. This is in general higher than most other regions, such as Galizien with 8757.5 and Lublin with 9074.75. The only really big tourism city in the control group is Krakow with a mean value of foreign tourist arrivals of 97109.14.

Table 1: Summary statistics of foreign tourist arrivals

Variable	Obs	Mean	Std. Dev.	Min	Max
Krakow	120	97 109,14	34 268,63	36665	170488
Katowice	120	26 399,61	8383.593	12397	50778
Lubusz	120	13 866,95	3918.899	5420	22429
Poznan	120	22 665,65	0144.706	10463	55501
Szczecin	120	45 299,30	20 938,52	15614	110062
Wroclaw	120	42 637,72	15 976,84	15186	81128
Opole	120	3210.942	1163.415	1098	6337
Torun	120	7990.467	3966.993	2489	17369
Gdansk	120	33 841,26	18 254,48	6724	80841
Warminskom	120	13 342,77	9007.921	2504	32272
Lodz	120	13 240,42	3869.598	6301	26835
Kielce	120	2447.492	914,0481	996	5095
Lublin	120	9 074,75	2957.578	3224	16238
Galizien	120	8 757,5	3523.041	3255	18062
Podlaskie	120	11 061,03	4624.799	2593	23221
Warsaw	120	95 284,36	28 587,77	34826	167289
Mazowiecki	120	4215.008	2094.586	1267	10930

Source: Statistics of Poland and own calculations



5. Method

The main propose of this essay is to see if the UEFA European Championship have a positive impact on the arrival of foreign tourists to the host regions of Poland. As mentioned before we want to see if there is an increase in foreign tourists to the regions that hosted the venues compared to the regions who did not host the venues. We want to see if there is a difference between the two groups and a difference in time. Therefore, we have decided to use the difference-in-differences method. The difference-in-differences method is a popular method and used in many studies, where we want to study a shock. The method is popular in terms of medicine, reform changes and economics. Were we can study the reform or the changes in policy and see if the difference before, during and after the shock. In this case we will with help of the difference-in-differences method study the shock of the mega-event in Poland 2012, to see if the foreign tourism increased for the period of the event. The difference-in-differences is based on an OLS regression:

$$\text{Tourism } t = \beta_0 + \beta_1 (\text{Dummygroup}) t + \beta_2 (\text{Dummytime}) t + \beta_3 (\text{Interaction}) t + \epsilon t$$

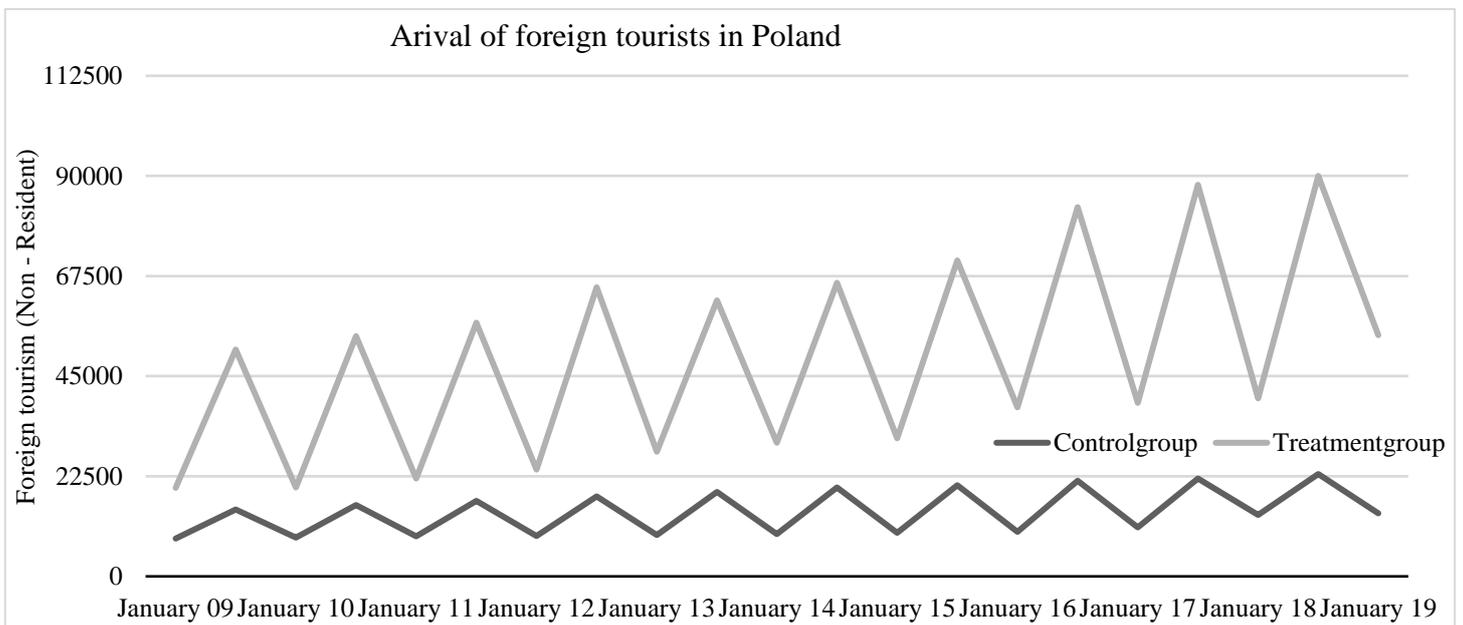
Where the dependent variable is the inflow of foreign tourists in region at time t . Where there are three independent variables, where group is a dummy variable equal to zero for the control group and equal to one for the treatment group. Time is also a dummy variable, where it is equal to zero for all the months before the event in June 2012 and equal to one for June 2012 and the month after. The last beta is the one of interest. It is the interaction variable (time*treatment) which is the difference-in-differences coefficient. It measures the interaction between the variables time and group. This gives us the difference before and after the shock, which in this case is the event. And ϵt is the error term. As mentioned before it would have been out of interest to have a control variable like GDP for all the 17 regions. With a control variable like GDP we could control for differences between the two groups. And as mentioned before the inflow of tourists can be affected by many things. Therefore, a control variable like GDP could control for other such external factors. Because it was not available on monthly basis for all the regions we could not control for this. This will still not affect our regression negatively, but it would make it more precise. It should also be mentioned that the difference-in-differences assumes that the tourists that comes to the regions are going to be in the host region fore the whole month. Because the sporting mega-event is based on the countries that compete it is clear to say that those who come to the event as a priority will go back home if their nation does not reach the final games. The difference-in-differences does not either take into account the fact that some of these foreign



tourists are there for the traditional attractions and has the event as a secondary activity. As we could see in the previous chapter (Chapter 4) the regions who hosted the venues attracted a large number of foreign tourists before the event. The regions that hosted the event was the regions that was the most attractive to tourists. As mentioned in the theory, the countries want to attract foreign investors and tourists. The media coverage leads to an international exposure which the host countries want. Therefore, the host regions are those who are capable but also the biggest and the most attractive ones in the host country. Then time and place should also be mentioned. The difference-in-differences does not take this into account. It does not take into account the seasonal patterns or trends. Therefore, it can be a problem with causality. Because time and place are important for the mega-event, but the difference-in-differences (DID) does not take this into account. Even if we get a positive result from our DID coefficient we don't know if it is because of the event or the time and place. We can have a problem with reverse causality. In theory, we assume that the mega-event will attract more foreign tourists to the host regions of Poland. But in reality, the case might be that time and place causes the event and the increase in foreign tourists and not vice versa. Because the mega-event like the UEFA European Championship cannot be placed in every city. The demands have to be full filled. The major cities in the country are the ones who can manage to host such a venue. And as we saw in the summary statistics (Chapter 4) the regions that hosted the event had already very high numbers of foreign visitors.

6. Results and discussion

Figure 1: The arrival of foreign tourists (Non-resident) for all the months from January 2009 to December 2018



Source: Statistics of Poland and own calculations

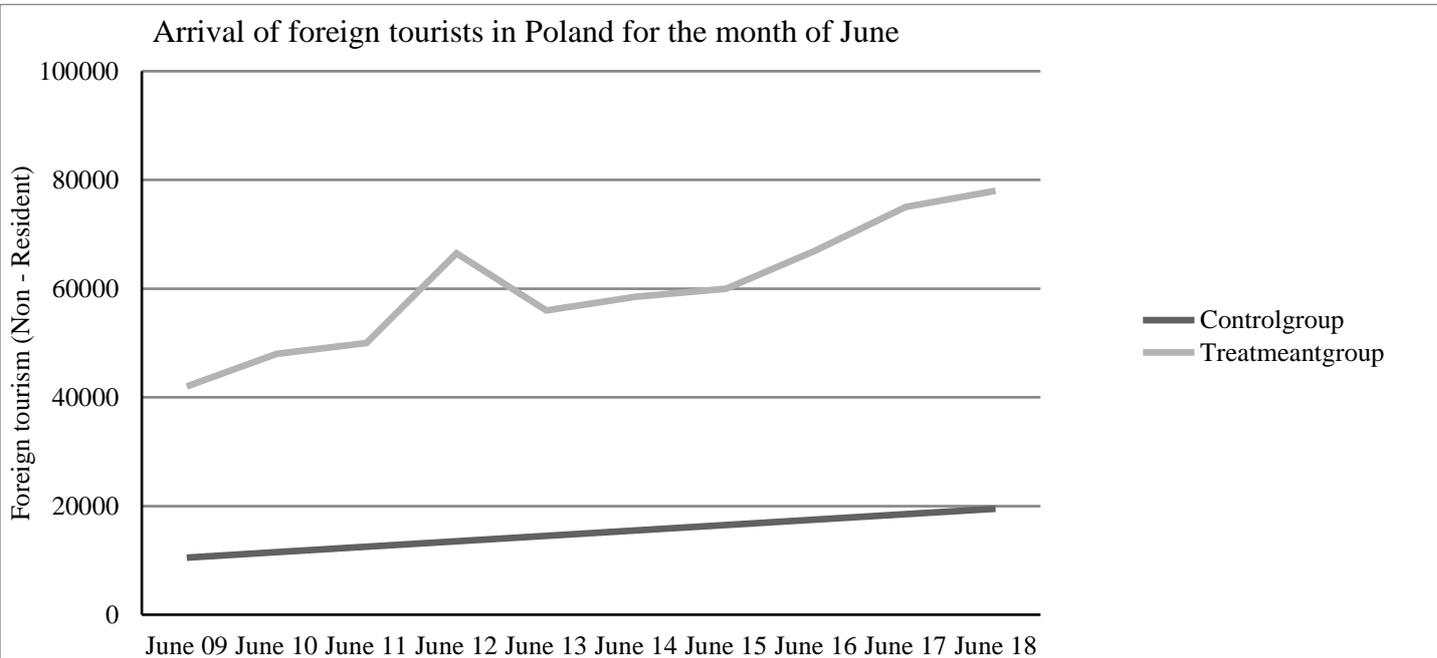


Figure one shows the arrival of foreign tourists (Non-resident) from January 2009 to December 2018. For the control group (the regions who did not host the event) and the treatment group (the regions who hosted the event). The curves in the figure are based on the mean of the arrival of foreign tourists for both the treatment group and the control group. The purpose of the figure is to see the historical evolution of the arrival of foreign tourists to the regions of Poland. To get a better picture of how the arrival of foreign tourists have evolved to the regions. Where we want to see if the arrival of foreign tourists has increased since June 2012 when the event was hosted. It is also of importance to see how the inflow of tourist was before, to see if our theory is in line with the results. The figure shows us that the trend for the arrival of foreign tourists are increasing, both for the control group and the treatment group. We can see that the trend for the treatment group is much higher during all of the months from January 2009 to December 2018. As we showed in part 4, it is not surprising since the mean for the treatment group was much higher than the mean for the control group. This also shows us that the regions who did host the venues was already before the event attractive areas for foreign tourists. The seasonal patterns can also be seen clearly in this figure where historically and after the event, the summer period and month of June is much higher both for the treatment group and the control group. The figure shows us that for the month of June 2012 when the event was taken place there was an increase for the treatment group. The increase is much higher than the previous months from 2009 to June of 2012. The increase is also shown for the control group, where it has increased compared to the months before but not as much as the treatment group. The sudden increase in June 2012 is followed by a decrease in June of 2013. This suggest that the increase in June 2012 for the treatment group, is likely to be because of the event. As mentioned before in previous chapter and according to the theory the host regions should have a shock in increasing arrival of foreign tourists. The figure shows that there have been a shock in June 2012 where it later on decreases for the same month, the year after. The curve for both the treatment group and the control group shows a pattern of increasing arrivals of tourists, we can see that it has increased for both groups from January 2009 to December 2018. Like in the previous literature in the short-run the figure shows an increase in foreign tourists for the month of the event, but this figure also shows an increase in the long-run. The figure indicates that the impact of the UEFA European Championship was positive on the inflow of foreign tourists, it also predicts that we will have a positive difference-in-differences coefficient for the treatment group. Figure one provides us the historical and long-term arrival of foreign tourists. It shows us a positive trend for both the treatment group and the control group, where the arrival of foreign tourists is increasing for every



year. We also want to see if the shock is as high as we predict, if the shock is in line with the theory.

Figure 2: The arrival of foreign tourists (Non-residents) for the month of June



Source: Statistics of Poland and own calculations

Figure two shows us the arrival of foreign tourists (Non-Resident) to the host regions (The treatment- group) and the regions who did not host the event (The control group). Figure two shows us the arrival of foreign tourists for the month of June only. It shows us the historical and long-term arrival of foreign tourists to the regions of Poland for the month of June. The reason for this figure is to show us the shock for the month of June 2012. The figure is of importance because here we can clearly see that the event had an impact on the arrival of foreign tourists. As the figure shows the trend for both the control group and the treatment group is that the arrival of foreign tourists are increasing, but the arrival in June 2012 is much higher for the treatment group then for the control group. The increase is very clear we can later on se a decrease for the month of June in 2013. As in figure one the years after shows a positive trend, were the arrivals of foreign tourists is increasing. Both figures show a positive trend. Where in figure one we can see a long-run positive trend. Figure two clearly shows the shock that is predicted in the theory and previous literature.



Table 2: Difference-in-Differences Estimation

Source	SS	df	MS	Number of obs	=	240
Model	8.8600e+10	3	2.9533e+10	F(3, 236)	=	248.25
Residual	2.8076e+10	236	118966579	Prob > F	=	0.0000
				R-squared	=	0.7594
				Adj R-squared	=	0.7563
Total	1.1668e+11	239	488185119	Root MSE	=	10907

tourism_n	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
dummytime	4326.296	2099.412	2.06	0.040	190.3146 8462.278
dummygroup	27433.95	2408.993	11.39	0.000	22688.07 32179.83
interaction	13594.55	2969.017	4.58	0.000	7745.385 19443.71
_cons	9375.411	1703.415	5.50	0.000	6019.569 12731.25

Source: Statistics of Poland and own calculations

Table two shows the results of the difference-in-differences for the arrival of foreign tourists (Non-Resident) to the host regions of Poland. As we mentioned before in chapter 5 the variable of interest is the interaction, which is (time*treatment) the difference-in-differences coefficient. Figure one and two indicates that we should have a positive and significant difference-in-differences coefficient. The coefficient should be in line with Figures one and two, where we clearly saw the shock of increasing arrivals of foreign tourists. And as the Figures depicted the difference-in-differences coefficient is positive. We get from the table and the coefficient that from the month of June 2012 to December 2018 the number of foreign tourist's arrival increased by 13594 visitors in the treatment group compared to the control group. Our difference-in-differences coefficient is statistically significant at one percent level. Where also time is statistically significant. Our results are in line with our figures. As predicted in the theory, we saw a short-run effect of an increasing arrival of foreign tourist for the month of June 2012. As further shown by Table 2 the event has had a positive impact on the arrival of foreign tourists to the host regions of Poland even in the long-run. The results from the table might have been different if we would have controlled for GDP. However, the results would still be significant since the figures clearly showed the increase, even though the control variable of GDP would make the results more precise. The table and the difference-in-differences coefficient shows that the arrival of foreign tourists to the host regions increased, but as mentioned before the problem of causality is still present. As previously mentioned the difference-in-differences method does not take the patterns and trends into account. Despite the results being positive there are still a chance of that



the event is affected by the time and place and not the way around. Because the figures showed clearly a pattern of more foreign tourists during the summer and month of June for all the years compared with the months before. But it is safe to say that the mega-event had a positive impact on the arrival of foreign tourists to the host regions of Poland.

7. Conclusion

The UEFA European Championship is a well-known and recognized mega-sporting event. Many studies have been made on the subject, whether the event has a positive impact on the host countries or a negative impact. Previous literature have mainly focused on the question whether the event has a negative impact on the host country's economy. The alternative cost is often brought up in the literature and the debate. Whether the high investments are worth the spending's to bid for the event, or would it be more efficient to spend it on the public sector. With building new schools and investing in the public hospitals, instead of building new arenas. Therefore, the purpose of this essay was to highlight the impact the event had on the arrival of foreign tourists to the host country. Since this is very important for transition economies like Poland wanting to attract foreign investors and tourists and bringing new money to the country. The results showed a significant increase in inflow of foreign tourists for the regions who hosted the event compared to the regions who did not host the event. As predicted by the theory, the increase of foreign tourists was not limited to the short-run but we found a positive impact even in the long-run. The regions who hosted the event was from the beginning the most attractive regions for tourists, but saw a significant increase for the years after the event as well. Compared to the regions who did not host the event, it was a much higher increase. This was of course not surprising since the mean of the treatment group (The regions who hosted the event) was much higher than the control group (The regions who did not host the event). The results would have been more precise if it would have been possible to control for GDP. But as mentioned before this was not possible due to the lack of monthly regional GDP data. We can still suggest that the UEFA European Championship had a positive impact on the host regions of Poland, when it comes to the arrival of foreign tourists. During this essay further questions arose. For future studies it would be interesting to develop this and see whether the event attracted more international companies and investors in Poland. It would also be interesting to see if the foreign tourists who came to attend the event as a priority came back to the country after the event, as a result of the tournament.



References



Dwyer, L., Forsyth, P., & Dwyer, W. (2010). Economic evaluation of special events. I *Tourism economics and policy*, L. Dwyer, P. Forsyth, & W. Dwyer (red.), 405–453. Accessed:2019-07-28

Florida, Richard. (2002). *THE RISE OF THE CREATIVE CLASS... and how it's transforming work leisure, community, & and everyday life*. Basic books. Paperback edition. New York.

Horne, J. & Manzenreiter, W. (2006). An introduction to the sociology of sports mega-events. *The Sociological Review*. 54: 1–24. Accessed: 2019-07-28.

Lauss, G. & Szigetvarim A. (2010). Governing by fun: EURO 2008 and the appealing power of fan zones. *Soccer & society* 11 (6): 737-747. Accessed: 2019-08-01

Li, S. & Jago, L. (2013). Evaluating economic impacts of major sports events - a meta analysis of the key trends. *Current Issues in Tourism*, 16 (6): 591-611. Accessed: 2019-07-28.

Manzenreiter, Wolfram. Spitaler, Georg. (2010). Governance, citizenship and the new European Football Championships: the European spectacle, Vol. 11, No. 6, 695–708.

Perna, F. & Custódio, M.J. (2008). Importance of events in tourism: Impacts of the UEFA-EURO 2004 on the accommodation industry in Algarve, Portugal. *Anatolia: An International Journal of Tourism and Hospitality Research*, 19 (1): 5-22. Accessed: 2019-07-28

Palgrave Macmillan. (2012). Place branding and Public diplomacy. Accessed: 2019-08-01 (<http://www.palgrave-journals.com/pb/about.html>)

Statistics of Poland 2019. <https://stat.gov.pl/en/>. Accessed: 2019-03-01

Ribeiro, J. C., Viseu, J., Delalande, T., & Rodrigues, C. (2004a). UEFA Euro 2004 tourism impact analysis. Accessed: 2019-07-29

Ribeiro, J. C., Viseu, J., Delalande, T., & Rodrigues, C. (2004b). UEFA Euro 2004 visitors analysis. Accessed: 2019-07-29



Rütter, H., Amstutz, M., Stettler, J., & de Bary, A. (2008). Wirtschaftliche Wirkungen der UEFA EURO 2008 in der Schweiz. Ex-post Analyse (provisorische Ergebnisse) [Economic effects of EURO 2008 in Switzerland. Ex-post analysis (preliminary results)]. Magglingen: Bundesamt für Sport (BASPO).

Accessed: 2019-07-28

Roche, M. (2000). Mega-Events and Modernity: Olympics and expos in the growth of global culture(Chp.,1, p.1-30). Accessed 2019-08-01 London.

(http://www.la84foundation.org/SportsLibrary/Olympika/Olympika_2002/olympika1101g.pdf)

Rasmussen, Katja. IDAN & Play The Game: New world stadium index. Published: 2012-05-10. Accessed: 2019-07-28. (<http://www.playthegame.org/news/detailed/new-world-stadium-index-report-exposes-the-best-and-the-worst-5390.html>)

The Economist, 2012, The London Model: The city is trying to pull off a mightily ambitious games. Published: 2012-07-28. Accessed: 2019-08-02.

(<http://www.economist.com/node/21559672>)

Schwartz, Peter J. Forbes Asia Magazine: The World's Top Sports Events. Published: 2010-03-05. Accessed: 2019-07-29. (<http://www.forbes.com/global/2010/0315/companies-olympics-superbowl-daytona-worlds-top-sports-events.html>)

UEFA a. Polish Pride at EURO success. Published: 2012-07-17. Accessed: 2019-08-01. (<http://www.uefa.com/uefaeuro/news/newsid=1841839.html#polish+pride+euro+success>)

UEFA b. A Fantastic Event. Published: 2012-07-16. Accessed: 2019-08-01.

(<http://www.uefa.com/uefaeuro/news/newsid=1841679.html#uefa+euro+2012+fantastic+event>)

UEFA c. UEFA European Football Championship origins. Published: 2011-12-21. Accessed: 2019-07-28.

(<http://www.uefa.com/uefaeuro/history/background/index.html>)



UEFA d. Focus Turns To France. Published: 2012-07-02. Accessed: 2019-07-28.

(<http://www.uefa.com/uefa/footballfirst/newsid=1837508.html>)

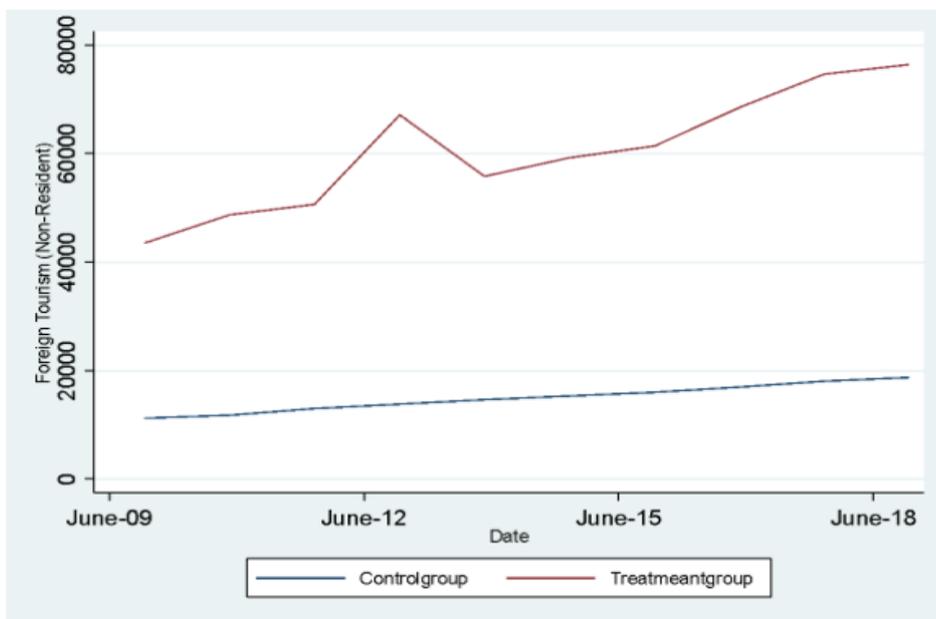
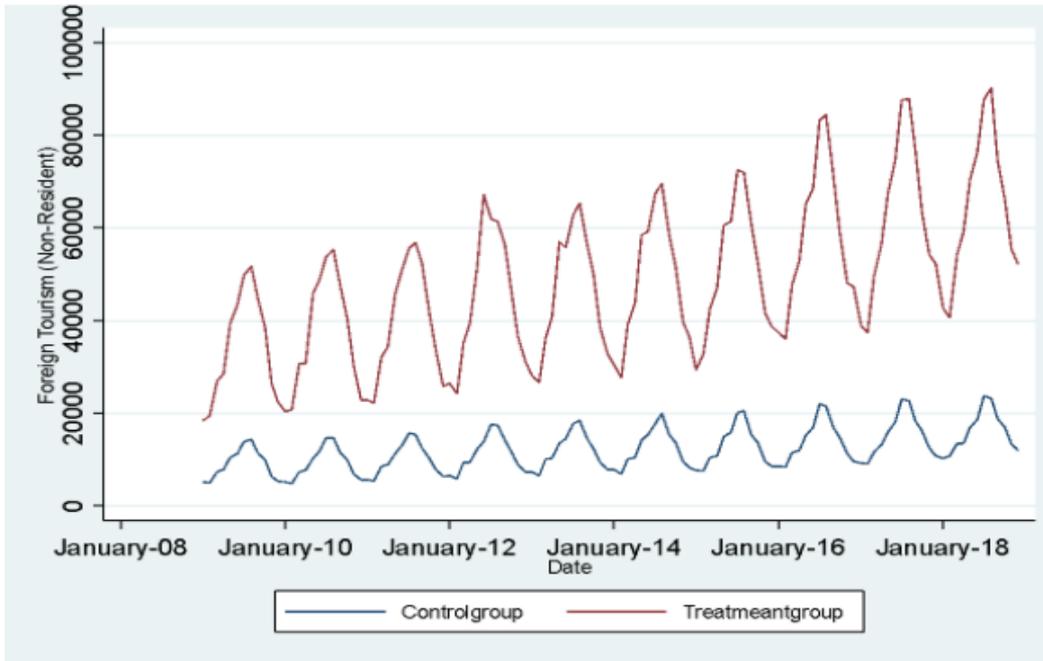
UEFA e. UEFA European Football Championship Final Tournament 2012: Phase I Bid Requirements.

Published:2004-12-16.Accessed:2019-08-01 (<http://www.uefa.com/newsfiles/279728.pdf>)

UEFA f. Surkis proud as Ukraine shows true face: Phase I Bid Requirements. Published:2004-12-16.Accessed:2019-08-01 (<http://www.uefa.com/uefaeuro/news/newsid=1837051.html>)



Appendix





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interaction	13594.55	2969.017	4.58	0.000	7745.385 19443.71
_cons	9375.411	1703.415	5.50	0.000	6019.569 12731.25

Summary statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
MAŁOPOLSKIE	120	97109.14	34268.63	36665	170488
ŚLĄSKIE	120	26399.61	8383.593	12397	50778
LUBUSKIE	120	13866.95	3918.899	5420	22429
WIELKOPOLS~E	120	22665.65	8144.706	10463	55501
ZACHODNIOP~E	120	45299.3	20938.52	15614	110062
DOLNOŚLĄSKIE	120	42637.72	15976.84	15186	81128
OPOLSKIE	120	3210.942	1163.415	1098	6337
KUJAWSKOPO~E	120	7990.467	3966.993	2489	17369
POMORSKIE	120	33841.26	18254.48	6724	80841
WARMIŃSKOM~E	120	13342.77	9007.921	2504	32272
ŁÓDZKIE	120	13240.42	3869.598	6301	26835
ŚWIĘTOKRZY~E	120	2447.492	914.0481	996	5095
LUBELSKIE	120	9074.75	2957.578	3224	16238
PODKARPACKIE	120	8757.5	3523.041	3255	18062
PODLASKIE	120	11061.03	4624.799	2593	23221
WARSZAWSKI	120	95284.36	28587.77	34826	167289
MAZOWIECKI	120	4215.008	2094.586	1267	10930