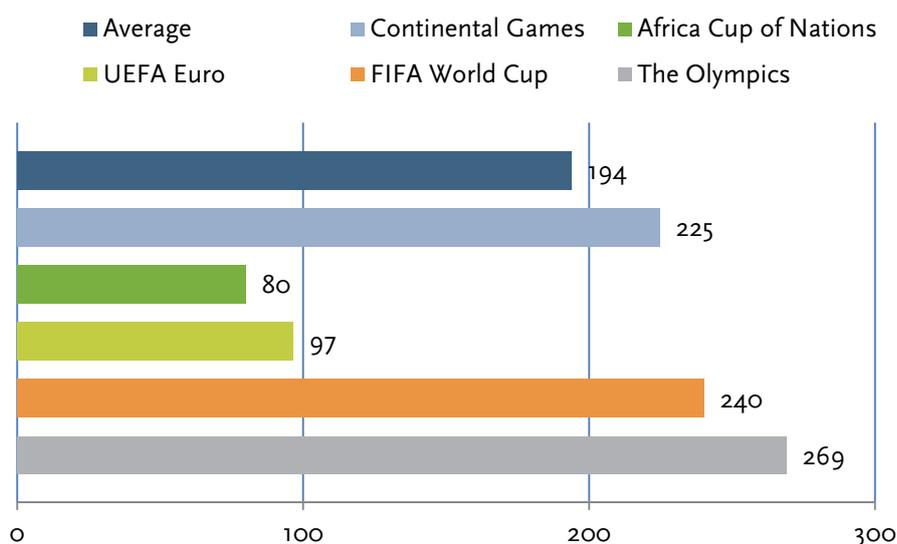


9. Analysis

This report shows that the 75 stadiums included in this study that have been built or have undergone major renovations in order to stage a major sporting event have cost nearly \$14.5 bn. The total cost of these stadiums is even bigger as we have not included the cost of minor renovations.

Figure 9.1: Average construction price for major sporting event stadiums (million dollars)



All prices in 2010 dollar value

Not surprising, the Olympic main stadiums have proven to be the most expensive to construct – \$269 million on average. On top of these costs, the host countries and cities also need to construct several sports facilities. Rio de Janeiro, the 2016 host, has a budget of \$3 bn. only for sports facilities – and the costs will probably be even more as the construction of stadiums tends to exceed original budgets.

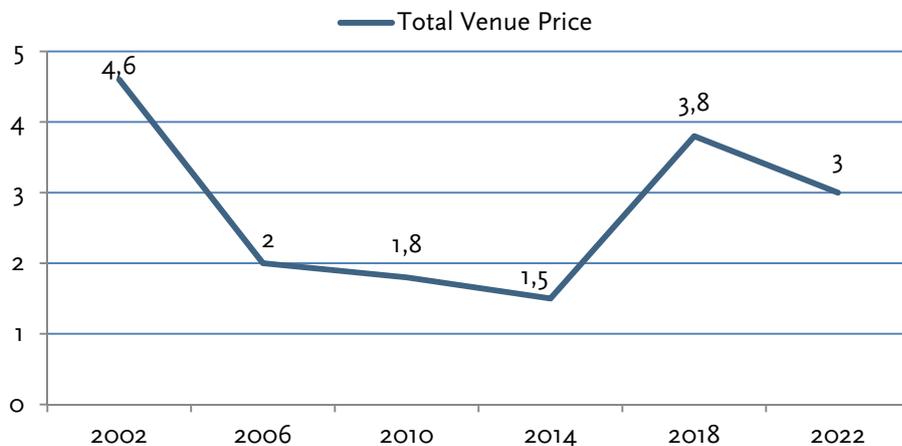
Just like Rio de Janeiro, Qatar has a budget of \$3 bn. it is going to invest in stadiums for the FIFA World Cup 2022. A FIFA World Cup stadium is on average the next most expensive to construct after an Olympic main stadium. However, a World Cup stadium has a higher price per seat than a main Olympic venue.

The main reason for the high cost of the World Cup venues is FIFA's requirements. New stadiums or major renovations are often necessary to fulfil FIFA's demands. On average, a FIFA World Cup tournament costs \$2.8 bn. in stadium investments alone. As Figure 9.2 below shows, the 2002 World Cup in Korea/Japan pulls up the average as Japan and Korea built or renovated 19 stadiums. However, if the initial budgets for the three future World Cups are not exceeded, which appears unlikely, the average cost for a World Cup stadium will be roughly constant.

As mentioned before, the report has shown that it is not unusual for initial budgets to be exceeded and for stadiums to become more expensive than expected. According to sources, South Africa heavily exceeded

the initial stadium budgets presented in its bid, and its stadiums ended up being 16 times more expensive than first estimated.

Figure 9.2: Total stadium prices, FIFA World Cup 2002-2022 (billion dollars)

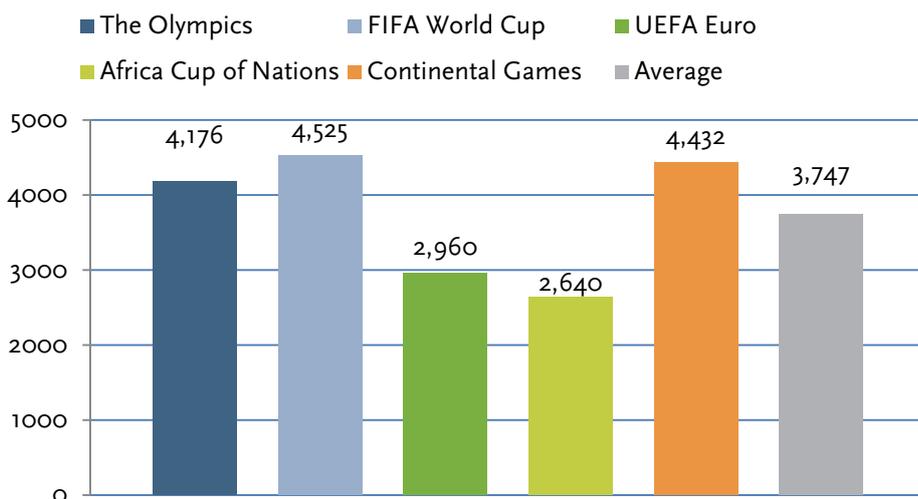


All prices in 2010 dollar value

If a country has an intention to host a major sporting event, but does not want spend \$3 bn. on stadiums, hosting a continental football championship could be a less costly alternative.

The stadiums built for the Africa Cup of Nations and UEFA Euro had the lowest average construction costs and were fairly cheap to build compared to the other stadiums included in this study. As Figure 9.3 shows, the CAN and UEFA Euro stadiums had the lowest average price per seat, which was also below the general average.

Figure 9.3: Average prices per seat for major sporting events (dollars)



All prices in 2010 dollar value

However, the construction price of a stadium does not tell much about what the sporting legacy of the stadium will be. As far as we can see, there is no significant connection between the price and the

sporting legacy of the stadiums examined. Other aspects are more crucial and, as the report has shown, a cheaply constructed stadium does not automatically mean that the stadium will be cheap in the long run. Some stadiums have had major problems after having hosted a major sporting event. The lack of a high profile anchor tenant from the outset or weak attendance figures are the main reasons why some stadium owners have financial problems and why several stadiums have negative sporting legacies.

Several stadiums could not be seen as sustainable from financially or a sporting perspective. Does it have to be this way? What can be done otherwise?

The ideal and desirable situation would be if all stadiums built or renovated for a major sporting event had a long lasting legacy and were utilised to a fairly high extent after the event was over. The reality is unfortunately different. But it is essential not to blame one single party for the empty stadiums.

One of the parties with a crucial role, and maybe the most significant responsibility for the current situation, is the international sports federations. They are most likely aware of the problem, but they have not explicitly taken responsibility. More stadiums are and will be built and there is an imminent risk that several more stadiums will be empty in relation to their capacity.

If the international and continental sports federations intend to make the Olympics, the FIFA World Cup and other major sporting events favourable for each host country in terms of financial and sporting sustainability, there are elements in the present awarding process that should be improved. The sports federations should be more accurate and precise when they award a major event and should award the events to a country/countries or city/cities with a realistic chance of converting the short-lived honour of hosting a major event into a long-term stadium legacy. It is very unusual that a sole event creates a long lasting interest if the interest was not present before the event, and even though an event may well attract a large crowd to the stadiums during the event, the stadiums will most likely be under-utilised when daily life returns.

One problem with such a solution is that if these rules were followed only very few countries would then have the opportunity to host a major sporting event, because only a minority of the world's countries have a significant interest in sport or a population base that they can count on to guarantee a long lasting sporting legacy. The major events would then, to a great extent, be held in the same countries and cities time after time – a scenario the international sports federations are not interested in. This challenge could be solved by co-hosting arrangements or looser demands on stadium infrastructure in some countries – but does not appear to be interest to the sports federations either, because they can often pick and choose between several bidders who claim to be able to meet the requirements.

Loosening the demands on stadium infrastructure would not require the sports federations to lower their standards of safety, but instead to reduce their requirements for capacity and the number of stadiums potential hosts need to stage an event.

When a country like Portugal expresses that it is planning to build or renovate ten stadiums, it would be preferable for UEFA to question this number and make it clear that only six or eight stadiums would be needed based on the experience from previous events that indicates that ten major stadiums will most

likely be under-utilised in the long run. But this control mechanism is not present at the moment, and it is often up to those who finance the stadiums to determine if the stadiums will be utilised in the future – and these funding bodies are usually politicians who have overly optimistic expectations and lack realistic data on how much a stadium and an event will cost in the long term and how it will be utilised.

Some major international sporting events, including the FIFA World Cup, have already been co-hosted by two countries, and this is likely to remain an attractive option for smaller countries and cities which cannot compete economically or in terms of existing infrastructure with larger ones. But would it be possible to have three or four FIFA World Cup hosts? And when are we going to experience a co-hosted Olympics? Of course there would be some problems connected to such arrangements, but they appear to be easier to overcome than long term legacy problems after the events.

Such problems are also minor compared to the amounts the hosting countries could save in the short and long term. If it is possible for Qatar, a small country and currently in 88th place on the FIFA World Ranking¹⁵⁷, to host a FIFA World Cup by itself, then it should not be a too hard to solve the problems that might occur with three or four hosting countries.

However, it is not just the sports federations' fault that several stadiums stand empty. Of course, the host countries and cities also have a responsibility as they are ultimately (almost every time) paying the bill. Countries and cities should have a greater awareness of what the impacts of hosting an event really are and should hold a longer time perspective and be more focused on what the legacy will be after the event is over. In their eagerness to host an event several host countries and cities seem to forget about the long term perspective and most likely neglect the negative consequences that an event may result in. As the study shows, several cities have paid a significant price for their ill-considered decisions and several venues have been put up for sale as a consequence of the countries' and cities' lack of self-awareness. But even some cities that were aware of the potential risks and wanted to elude them still ended up with empty stadiums. Cape Town had intended to upgrade an already existing stadium for the 2010 FIFA World Cup, but after pressure from the South African government and FIFA it had to build a new one.

Paradoxically, Cape Town Stadium is, after Nissan Stadium in Japan, the most expensive stadium built for a World Cup (more than \$535 million) and after the World Cup it has been one of the stadiums with the greatest legacy problems. There are certainly several other cases where cities have felt obliged to build a new stadium even though there is no real need for one, but the allurements of hosting an international sporting event gets too big for them to resist the external pressure.

Countries and cities would be better to build stadiums in accordance with their national and local sporting needs and then the international and continental sports federations can decide whether it is reasonable to award the country and the city the event or not. This would partly contribute to the utilisation of the stadiums after the event, and may partly even lead to the stadiums attracting larger crowds as there would be no over-construction of stadiums in the country or city.

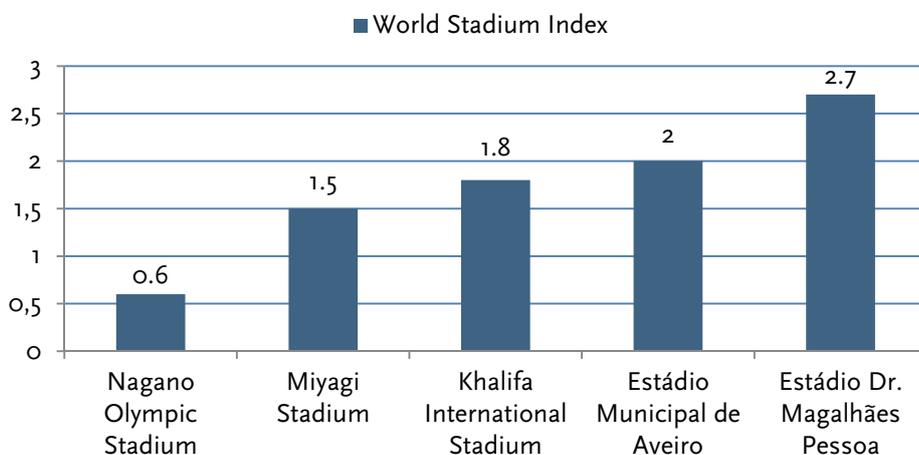
¹⁵⁷ <http://www.fifa.com/worldranking/rankingtable/index.html>

Since public authorities seem to replicate the same problems with their excessive underestimations of construction costs from the initial bidding phase to the actual construction phase and unrealistic sporting and financial legacy plans for many venues, a nasty questions remains – who profits from all of these stadiums in spite of the solid evidence of legacy problems attached to mega events? This certainly underlines the need for research and public debate based on solid empirical data in connection with future host city and region decisions.

The poor and the good ones

Portugal has, as the figure below shows, two stadiums among the five stadiums with the lowest World Stadium Index. This highlights the thought that the UEFA Euro 2004 in Portugal should either have been co-hosted or hosted by another country to avoid empty stadiums and an over-construction of stadiums.

Figure 9.4: Last 5 World Stadium Index



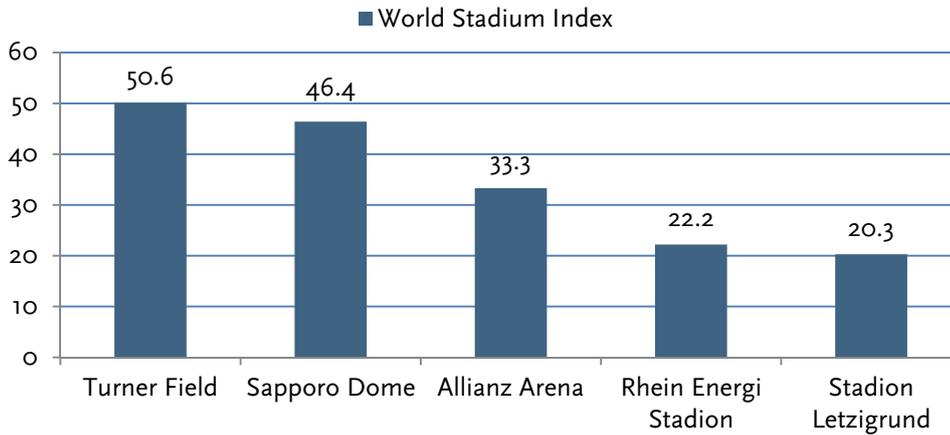
All five of the stadiums above have had significant problems in attracting spectators after their major events have finished. All of their indexes are proof of how hollow the sporting legacy can be if there is no real sporting need present.

Although the international sports federations and future host countries and cities have a lot to keep in mind in order to avoid empty stadiums and financial problems, there are stadiums that have been built for major international sporting events that have done well after the event and have a positive sporting legacy.

Popular local baseball teams have contributed to the success of both Turner Field in Atlanta and Sapporo Dome in Japan. The two baseball teams do not have higher average audience figures than the majority of the German football teams playing at the World Cup 2006 stadiums, but as baseball teams in both the U.S. and Japan play more than 70 games per season, Turner Field and Sapporo Dome have a higher total attendance figure per season. In Atlanta they had a clear idea of what do with their main stadium, Turner Field, after the Olympics and, largely thanks to a reduced capacity and an adaption to local sporting needs, Atlanta has had a successful legacy.

The 2006 FIFA World Cup in Germany is the only major sporting event that has two stadiums in the top 5. Above all, Allianz Arena in Munich has a very impressive index. FC Bayern Munich is the main reason why the stadium has been so successful because the club has a high average attendance. Allianz Arena's other anchor tenant, TSV 1860 München, which also provides good figures for the venue.

Figure 9.5: Top 5 World Stadium Index



The German Bundesliga already had strong attendance figures before the 2006 FIFA World Cup, which ensured that the stadiums would be packed after the major event. So Germany's good index figures are thus not a surprise. Despite the German stadiums' good indexes, the stadiums for the 2006 FIFA World Cup did not have the best average index among the included events. Instead it is the Olympics stadiums that have the best average, which is largely due to Turner Field and the fact that we do not have the data from Atatürk Olympic Stadium or Beijing National Stadium. Had the data from Turkey and China been available, the Olympic stadiums would most likely have had a lower average.

Figure 9.6: Average World Stadium Index

