# MEGA-SPORTING EVENTS IN DEVELOPING NATIONS:

# PLAYING THE WAY TO PROSPERITY?

VICTOR A. MATHESON\* AND ROBERT A. BAADE\*\*

with attendances in the millions and television viewing audiences in the billions, the World Cup and Olympic Games without question qualify as mega-events. Nation states compete as vigorously to host these events as the athletes who participate in them. Why? A variety of reasons explain the quest to host these events. Many argue that these events "put the country (or city) on the map" and provide significant international exposure to the host. These events can also be seen as political events that serve to showcase the economic, political, and cultural power of the host country or as a signal that a country has arrived as a major figure on the international scene.

No reason appears more compelling, however, than the promise of an economic windfall. Event promoters envision hoards of rich visitors with fat wallets descending upon the venues lucky enough to host these competitions. Increasingly developing nations have begun insisting on their right to host these events, and thereby reap the perceived monetary rewards. The question, however, remains: do mega-sporting events provide a boost to the host nation's economy that justifies the substantial costs and risks? The purpose of this paper is to shed some light on this subject by reviewing the existing academic literature on the economic impact of sporting events and

<sup>\*</sup> Lecturer, Department of Economics, College of the Holy Cross, Worcester, USA.

<sup>\*\*</sup> Lecturer, Department of Economics and Business, Lake Forest College, Lake Forest, IL. USA. The authors would like to thank Professor Black and three anonymous referees for helpful comments on earlier drafts of the paper.

providing discussion regarding the benefits of these competitions on developing nations.

#### 1. BACKGROUND

The sites of the Summer and Winter Olympic Games are determined by the International Olympic Committee (IOC) years in advance of the actual event, and historically, the IOC has awarded the Olympic Games to western, industrialized nations. Only the 1968 and 1988 Summer Games hosted by Mexico City and Seoul, respectively, and the 1984 Winter Games in Sarajevo, Yugoslavia have been held in developing nations. In recent years, however, cities from developing nations have increasingly demanded the right to host these spectacles. Finalists for the 2004 and 2008 Summer Games included Cape Town, Buenos Aires, and Istanbul with Beijing ultimately winning the right to host the 2008 event.

The choice of the host country for soccer's World Cup is determined by the Federation Internationale de Football Association (FIFA). FIFA has been much more willing than the IOC to award its tournament to developing nations, in part because of the rich soccer tradition that exists in Latin America, with past hosts including Brazil, Argentina, Mexico, and Uruguay. Like the IOC selection of Salt Lake City as the 2002 Winter Olympics host, the recent decision to award the 2006 World Cup to Germany was tainted by scandal. In the wake of previous decisions to award the Cup to the United States and the Asian nations of Japan and South Korea, a groundswell of support had emerged for awarding the World Cup to an African nation both because Africa had never hosted the games previously and because African nations have become increasingly competitive on the world soccer stage.

In the final round of voting, the 24 members of the venue selection committee chose Germany over South Africa only after the Oceania Football Confederation delegate broke with his confederation and abstained from voting, leaving the vote 12-11 in favour of Germany. A vote in favour of South Africa would have left FIFA President Joseph "Sepp" Blatter with the tie-breaking vote

which would have resulted in South Africa's selection. Allegations were made that the Oceania delegate faced personal threats and monumental pressure from lobbyists in order to secure his "vote" (BBC, 2000).

In response to the furore over the 2006 decision, FIFA guaranteed that an African nation would host the event in 2010, and five countries, Egypt, Libya, Morocco, Tunisia, and South Africa, all submitted formal bids for the tournament. Ultimately, South Africa won the final bid and will host the 2010 World Cup.

#### 2. REVIEW OF "MEGA-EVENT" ECONOMIC IMPACT STUDIES

Hosting the Olympics and the World Cup brings significant costs and potentially large benefits. On the cost side, FIFA requires that the World Cup host country provide at least 8 and preferably 10 modern stadiums capable of seating 40,000 to 60,000 spectators each. For the jointly hosted 2002 World Cup in Japan and South Korea, each country offered to provide 10 separate stadiums. As neither country had a large existing infrastructure for soccer, South Korea built ten new stadiums at a cost of nearly \$2 billion, and Japan built 7 new stadiums and refurbished 3 others at a cost of at least \$4 billion. The total investment for new infrastructure in Japan for the World Cup "is unknown but some analysts peg the expenditure at more than 750 billion yen (\$5.6 billion)." (Sloan, 2002)

The Olympics can be an equally expensive affair. Both the Summer and Winter Games require extensive specialized infrastructure in order to accommodate all of the events. Atlanta spent \$600 million in direct infrastructure improvements for their Games, Nagano spent \$1.3 billion on the 1998 Winter Games, and Beijing will reportedly spend over \$20 billion on just on infrastructure improvements in preparation for the 2008 Summer Games.

The operating costs of a mega-event are enormous and are growing. In the wake of terrorist incidents at the 1972 and 2000 Olympics and September 11, 2001 in the United States, security arrangements alone can run into the hundreds of millions of dollars.

Salt Lake City spent in excess of \$300 million on security alone for the 2002 Winter Olympics in addition to \$1.7 billion in other operating costs. Greece spent upwards of \$1.5 billion on security alone for the 2004 Games. With expenditures of this magnitude, can the economic impact of an event, even one the size of the World Cup or Olympics, compensate the host nation for the substantial infrastructure and operating costs?

Past and present prospective economic impact analyses prepared by event boosters have predicted economic windfalls from hosting the World Cup and Olympics. Boosters for the 1994 World Cup in the United States predicted it would bring thousands of visitors to the country and result in a \$4 billion boost to the United States economy. South Africa's bid for the 2006 World Cup was based, in part, on the promise that it would bolster the economy by approximately \$6 billion and create as many as 129,000 new jobs (Khoza, 2000). The largest estimates to date have been provided by the co-hosts of the 2002 World Cup. A study by the Dentsu Institute for Human Studies estimated a \$24.8 billion impact from the Cup for Japan and a \$8.9 billion impact for South Korea.

Olympic boosters have provided equally rosy projections for their events. An analysis sponsored by the Atlanta Olympic Organizing Committee predicted a \$5.1 billion economic boost and 77,000 new jobs as a result of the Atlanta Games. The Office of Financial Management for the New South Wales Treasury predicted a \$6.3 billion impact for the Sydney Games in 2000 along with roughly 100,000 new jobs. Promoters for future Summer and Winter Olympics bids have touted economic impacts of \$4.3 billion (Houston, 2012), \$5.7 to \$10 billion (Vancouver/Whistler, 2010), and \$11 billion (New York City, 2012).

Even smaller international events such as the Cricket and Rugby World Cups tout large benefits. Tourism officials estimated that the 2003 Cricket World Cup generated at least 1.2 billion rands (about \$200 million) for the South African economy. (Hassen, 2003).

Claims that sports mega-events provide a substantial boost to the economy of the host city, region, and country have been strongly criticized by most independent scholars. In contrast to event organizers who make *ex ante* predictions regarding the potential impact of a mega-event, several researchers have examined past economic data for cities that have hosted large sporting events to make *ex post* estimates of the economic impact of these competitions. In assessing the impact of the American football championship, the Super Bowl, Porter (1999) claimed a proper measurement of the economic impact would show the event had no permanent net effect.

Baade and Matheson (2003) examined the 1984 and 1996 Summer Olympics using metropolitan area employment data. Their study of the 1984 Olympics revealed that Los Angeles experienced an unexplained increase of 5,000 jobs during the year of the Olympics. If all of the unexplained increase were attributed to the presence of the Olympic Games, this employment effect would translate into roughly a \$300 million boost for the Los Angeles economy (in 2001 dollars), but one which is likely to be of a transitory nature only. The estimates for the Atlanta economy over the period from 1994-1996 ranged from a cumulative employment increase of 3,500 jobs to an increase of over 42,000 jobs. While the estimates for Atlanta exhibit a great deal of uncertainty, even the most generous estimate was roughly half that of the 77,000 increase in jobs predicted by the organizing committee.

Baade and Matheson (2004) also examined the 1994 World Cup using metropolitan area income data. While boosters predicted a cumulative \$4 billion positive impact on the nine host cities, Baade and Matheson found that in 1994 the economies of the host cities experienced economic growth that was \$4 billion less than would normally have been expected for these metropolitan areas. Few, if any, ex post studies have been performed on mega-events taking place in developing nations, at least in part due to the limited frequency of such events.

What is responsible for the wide divergence between the *ex ante* figures provided by event boosters and the *ex post* numbers estimated by economic scholars? The answer to this question should concern

public officials who are betting on a massive influx of tourists to pay for the costs of hosting these events.

### 3. THEORETICAL ISSUES

Scholars generally cite three specific reasons why the benefits induced by a sports mega-event are exaggerated. First, the increase in direct spending attributable to the games may be a "gross" as opposed to a "net" measure. Most economic impact studies estimate direct spending by simply summing all receipts associated with the event. However, spending on a mega-event displaces spending that would have occurred otherwise as local residents purchase tickets to the event rather than spend that money on other activities in the local economy. The international appeal of the World Cup or the Olympics arguably allows for a convergence of the gross and net spending figures given the fact that so many of the attendees come from other countries. Even eliminating the spending by residents of the host community does not fully eliminate this bias, however, since some residents may dramatically change their spending during the event given their desire to avoid the congestion in the venues' environs.

A second reason that economic impact may be exaggerated is the "crowding out" effect. Event tourists may simply supplant other travellers who would normally visit the host venues. A typical approach to measuring economic impact will identify a large number of visitors to a mega-event, but will fail to identify those regular visitors who are displaced. A fundamental shortcoming of economic impact studies pertains, therefore, not to information on spending for those who are included in a direct expenditure survey, but rather with the lack of information on the spending behaviour for those who are not.

For example, during the 2002 World Cup the number of European visitors to South Korea was higher than normal, but this increase was offset by a similar sized decrease in the usual tourists and business travellers from Japan who avoided World Cup hassles. The total number of foreign visitors to South Korea throughout the

tournament was estimated at 460,000, a figure identical to the number of foreign visitors during the same period in the previous year (Golovnina, 2002).

A final reason economic impact may be exaggerated relates to the multiplier, the notion that direct spending increases induce additional rounds of spending. Typical *ex ante* economic impact studies estimate direct expenditures as a result of foreign visitors and then apply an economic multiplier, which usually doubles the final impact numbers. Precise multiplier analysis includes all "leakages" from the circular flow of payments and uses multipliers that are appropriate to the event industry. Leakages may be significant depending on the state of the economy. If the host economy is at or very near full employment or if the labour needed is highly specialized, it may be that the workers essential to conducting the event reside in other communities or countries. To the extent that this is true, the multiplier must be adjusted to reflect this leakage of income. Furthermore, the multiplier technique exacerbates any errors made in estimating direct expenditures.

Labour is not the only factor of production that may repatriate income. If hotels experience higher than normal occupancy rates during a mega-event, then the question must be raised about the fraction of increased earnings that remain in the community if the hotel is a nationally or internationally owned chain. Since mega-events represent specialized entertainment where the athletes must be imported from participating countries around the world, the multiplier for such a event will be lower than the multiplier for spending on many other local goods and services.

## 4. CONSIDERING DEVELOPING NATIONS: THE CASE AGAINST HOSTING

The experience of developing nations hosting a mega-event may differ widely from that of a developed nation. First, the expenditure required for infrastructure is likely to be much higher in developing nations. In order to host the 1994 World Cup, the United States spent less than \$30 million on infrastructure improvements since the

country could easily provide nine existing facilities that met FIFA standards for hosting the games. South Korea in 2002, on the other hand, needed to build its stadium infrastructure from scratch, spending \$2 billion on 10 new soccer-specific stadiums. Similarly, South Africa, having won the right to host the 2010 World Cup, will require significant refurbishment to its stadiums to meet FIFA's stringent demands, and the other potential hosts would have needed even more massive building programs.

The opportunity cost of capital may also be particularly high in developing nations. From an economic point of view, the cost of building a new stadium is not best described by the amount of money needed to build the facility but rather the value to society from the same amount of capital spent on the next best public project. The Nigerian government recently spent \$330 million on a new national soccer stadium, more than the annual national government expenditures on health or education (Farah, 2001). The intense criticism of this project is not directed at the cost of the stadium, but rather the cost of the stadium in the face of other pressing needs in a country like Nigeria.

The extent to which newly constructed sports facilities represent a good public investment depends not only on the immediate economic impact of the mega-event but also on the usage of the facility after the event. As sports entertainment is a luxury good, the demand for specialized sports infrastructure in the wake of the World Cup or the Olympics will likely be lower in developing nations than in developed countries. South Korea, for example, has few plans for its ten sparkling new stadiums outside of infrequent cultural events and occasional international soccer matches. Only five of the ten stadiums currently have regular tenants, and these teams rarely draw significant crowds. Attracting the World Cup or Olympics without a well-developed domestic spectator sports industry reduces the benefits of the new infrastructure.

Along similar lines, the 2002 Winter Olympics resulted in a surge in hotel construction in the Salt Lake City area. While these facilities were filled during the actual Games, hotel occupancy rates in general have fallen significantly in Utah over the past few years due to this increase in supply. Clearly, stadiums are not the only buildings that may go unused after a mega-event.

Finally, industrialized nations tend to be able to attract larger numbers of fans to mega-events than developing nations. Local residents in developing nations are more reluctant to pay the high ticket prices required to pay for the event. Foreign visitors approach developing nations with trepidation due to worries about crime, infrastructure, and the quality of accommodations. The English National team chose to forfeit a match in the 2003 Cricket World Cup rather than play in Zimbabwe due to concerns about player safety. In the 2002 World Cup, Japanese stadiums were filled to 89.1 per cent capacity for its games while Korean stadiums achieved only a 78.8 per cent capacity, so that roughly twice as many seats remained unfilled in Korea, a relatively wealthy developing country, than in Japan.

The fear of crime also limits the potential development benefits of non-specialized infrastructure improvements. Hundreds of new residential units for athlete housing were proposed as part of Cape Town's bid for the Olympic Games. Unlike sports specific infrastructure, this type of spending can easily be converted to non-sports use after the event. The desire to locate visitor accommodations in low-crime areas, however, meant that most of the new construction would occur in parts of the city that were in the least need of rehabilitation.

# 5. CONSIDERING DEVELOPING NATIONS: THE CASE FOR HOSTING

Not every factor unique to developing countries works against the economic success of a mega-event. First, the relatively low wages of developing nations serve to lower operating and infrastructure costs. Before security demands resulted in exploding costs, the official operating budget of \$1.71 billion for the 2004 Summer Games in lowwage Athens was lower than the \$1.97 billion spent by Sydney four years earlier and the \$2.4 billion (adjusted for inflation) spent by

Atlanta in 1996. Beijing initially proposed a \$1.625 billion budget for 2008 excluding infrastructure improvements. While low wages do reduce a host city's ability to charge high prices to local residents or domestic visitors, lower wages do not limit a host's ability to charge wealthy foreign visitors high prices for lodging, meals, and tickets.

Second, while academic economists are nearly universal in their criticism that specialized sports infrastructure does little to promote economic growth, mega-events often spur spending on non-sports related infrastructure that may provide for future economic development. Only a fraction of Beijing's planned \$22 billion in infrastructure improvements will be spent on sports facilities. A mega-event may prompt otherwise reluctant public officials into making needed improvements in general infrastructure. On the other side of the coin, there is, of course, no reason to believe that general infrastructure improvements necessarily increase economic growth. As mentioned previously, even infrastructure that is not directly sports related may go unused after the completion of the event, or may be a second-best use of scarce investment capital.

Furthermore, the separation between what is "sports" infrastructure and what is "general" infrastructure is not always clear. The new Wembley stadium in London was originally slated to cost around \$500 million. In addition, over \$150 million in "general" infrastructure improvements were proposed at the same time including new roads and a completely renovated underground station. Without the presence of Wembley Stadium, however, no new roads or subway station would be required. Therefore, from an objective standpoint, the entire \$650 million price tag should be considered specialized sports infrastructure, and an analysis of the expenditure would likely lead to a negative appraisal of its economic benefit.

An additional factor that favours hosting mega-events in developing nations is the widespread availability of unemployed or underemployed labour in most developing countries. In the presence of underemployment, the opportunity cost of labour nears zero. Furthermore, the presence of unemployment discourages temporary

labour migration where temporary workers return home and repatriate their Olympics earnings. If a city has unutilised labour resources, the chances are increased that earnings generated by a mega-event will be earned by local citizens and stay within the area after the event is concluded.

Mega-events can also serve a role in providing intangible benefits in the form of publicity or nation building. The 1995 Rugby World Cup in South Africa represented an opportunity for the country to announce its re-emergence as a full member of not only the world's sporting community but its political community. The picture of South African President Nelson Mandela wearing the jersey of the white South African captain Francois Pienaar while presenting him with the championship trophy, was a powerful image to the world indicating that South Africa had emerged from its years of racial oppression and served to unify the country.

While these benefits undoubtedly exist, the question remains as to whether their value exceeds the cost. Furthermore, it should be remembered that mega-events need not always lead to positive intangible gains. For example, the German psyche was damaged by the terrorist events during the 1972 games in Munich, and the reputation of the citizens of Salt Lake City certainly suffered from the bribery scandal associated with the 2002 Winter Games.

#### 6. CONCLUSIONS AND POLICY IMPLICATIONS

Cities vigorously compete to host sports mega-events because they perceive that doing so will enhance their image and stimulate their economies. International sporting events require substantial expenditures on infrastructure, organization and security and critically depend, therefore, on public subsidization. The ability of event promoters to secure public funds often depends on convincing a sometimes sceptical public that hosting the event generates economic profit. A motive for exaggerating the impact of a mega-event clearly exists. Our own previous examinations of mega-events, as well as the research of other independent scholars, suggest that the true economic benefits are typically far less than the

numbers touted by promoters. Cities and countries would be well advised to more thoroughly evaluate booster promises of a financial windfall from hosting a sports mega-event such as the World Cup and Olympics before committing substantial public resources to such an event (rather than to other uses in the economy). Indeed, hosting these premier events may be more of a monetary burden than an honour and a means of achieving economic development.

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