

**MEGA-SPORTING EVENTS IN DEVELOPING NATIONS:  
PLAYING THE WAY TO PROSPERITY?**

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## **ABSTRACT**

Supporters of mega-sporting events such as the World Cup and Olympics claim that these events attract hoards of wealthy visitors and lead to lasting economic benefits for the host regions. For this reason, cities and countries compete vigorously for the right to stage these spectacles. Recently, developing countries have become increasingly vocal in demanding that they get the right to share in the economic benefits of these international games. China, for example, has been awarded the 2008 Summer Olympics, and an African nation seems destined to host the 2010 World Cup. The specialized infrastructure and operating expenses required to host these events, however, can be extremely costly, and it is not at all clear that either the long or short-term benefits of the games are anywhere nearly large enough to cover these costs.

This paper reviews other researchers' as well as our own previous work on mega-sporting events such as the Super Bowl and World Series as well as international events like the World Cup and Olympics. Independent researchers nearly unanimously find that boosters' projections of the economic impact of sporting events exaggerate the true economic impact of these competitions by a wide margin. In particular, in this paper we focus on the particular circumstances that face developing countries hosting these games. Our research suggests that in most cases mega-sporting events are an even worse investment for developing countries than for industrialized countries.

## **Introduction**

With in-person 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, but no reason appears more compelling than the promise of an economic windfall. Increasingly developing nations have begun insisting on their right to host these competitions and thereby reap the 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 using the experience of the Summer Olympics Games held in Los Angeles in 1984 and Atlanta 1996 as well as the World Cup held in the United States in 1994 as well as anecdotal evidence from the 2000 Sydney Olympics at the 2002 World Cup co-hosted by Japan and South Korea. Particular attention will be paid to how the experience of industrialized nation hosts compares that of developing nation hosts.

The modern Summer Olympic Games were first held in 1896 in Athens, Greece, and are held every four years at predetermined sites. From modest beginnings, the Summer Games have grown to encompass 300 events and 10,651 athletes from 199 nations in 2000. In 1924, the International Olympic Committee (IOC), began staging the Winter Olympic Games also to be held every four years at rotating sites. The Winter Games are roughly one-quarter the size of the Summer Games in terms of the number of athletes and events.

The site of the Summer and Winter Olympic Games is determined by the IOC roughly seven years in advance of the actual event. After the \$200 million profit generated by the 1984 Los Angeles

Summer Olympic Games, the prevailing perception seems to be that a properly run Olympics generates millions, if not billions, of dollars in profit for the host city. In response to this economic motivation as well as the potential for prestige and the opportunity to make a political statement offered by the Games, each recent Olympic Games has received multiple bidders. Of course, with the increase in the number of cities bidding to host the Games, the competition among potential hosts has also increased culminating with the well-documented examples of bribery that marred the Salt Lake City Winter Games of 2002. This stands in marked contrast to the situation just two or three decades before where Los Angeles was the sole applicant to host the 1984 Summer Games. Indeed, following the politically disastrous 1972 Summer Games in Munich which were marred by the terrorist killings of eleven Israeli team members, the IOC had to scramble to find any location willing to host the Winter Games when Colorado voters rejected the 1976 event after it had already been awarded to the state.

The IOC has predominantly awarded the Olympic Games to western, industrialized nations. Fourteen of the twenty-five Summer Games between 1896 and 2004 were held in Western European cities with another seven hosted by cities in the United States, Canada, or Australia. Only the 1968 and 1988 Games hosted by Mexico City and Seoul, respectively, have been held in developing nations. (While many would consider Moscow, the host of the 1980 Summer Games a developing nation, in the context of the time of the Games, Moscow would have been considered a developed nation.) The situation for the Winter Olympics is even more pronounced with only the 1984 Winter Games in Sarajevo, Yugoslavia being held in a (nominally) developing area. Of course, this also is largely due to geography as few developing nations have climates amenable to hosting the Winter Games. See Table 1 for a list of Summer and Winter Olympic hosts from 1896 to the present. While the Olympics have

historically been held in industrialized nations, developing nations have increasingly demanded the right to host the Games. 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 World Cup began in 1930, at least partially in response to the growing popularity of the soccer competition in the Summer Olympics. Like the Olympics, the World Cup is held every four years at a site predetermined by the Federation Internationale de Football Association (FIFA), the governing body for soccer worldwide. 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. Until 1994, the tournament alternated between Europe and Latin America, the traditional powerhouses of soccer. Motivated by a desire to promote the sport and to capitalize on surging soccer popularity elsewhere in the world, FIFA has recently designated host countries outside Europe and Latin America. In 1994, the United States hosted the tournament, and in 2002 Japan and South Korea were designated as co-hosts for the event. See Table 2 for a list of World Cup hosts since 1930.

FIFA's strategy to use the World Cup to open or expand markets for the sport explains the selection of the United States and Japan, arguably the world's two most affluent countries but without notable soccer traditions. Many soccer purists, by contrast, would eschew the commercial imperative, and would continue to award the World Cup to countries whose on-the-field performance merits such an honor. Based on a performance criterion, the United States had certainly not earned the right to host the 1994 event since, at the time of the decision to award the World Cup to the USA six years earlier, the USA had not qualified for the finals since 1950. These competing points of view forged a

compromise of sorts in the decision to have co-hosts for the 2002 Cup. Those intent on promoting soccer viewed Japan as a viable candidate more for its economic might and soccer potential rather than its distinction in the sport. South Korea, on the other hand, had achieved some soccer prominence as indicated by the fact that it had qualified for three straight Cup Finals. Indeed South Korea has been recognized as the dominant team among east Asian countries while Japan had qualified for the World Cup finals only once. Critical to understanding FIFA's decision making as it relates to host cities is a financial reality. Soccer's governing body finances its entire operation through the promotion of tournaments like the World Cup, and it would be surprising if FIFA did not select a venue that maximized the organization's profit.

As is the case with the Olympics, the designation of the host country for recent World Cups has been tainted by scandal. The most controversial FIFA decision as it relates to the site selection for the World Cup, perhaps, came in July, 2000 with the award of the 2006 World Cup to Germany. In the wake of the controversial decision to award the Cup to the United States and the Asian nations, a groundswell of support had emerged for awarding the World Cup to an African nation. Supporters of the African application made or could make three compelling arguments: (1) Africa had never hosted the games previously; (2) the African Football Confederation had the largest number of members among any of the regions in FIFA; (3) African nations had become increasingly competitive on the world soccer stage. Nigeria, for example, upset both Argentina and Brazil on their way to winning the gold medal in the 1996 Olympic Games, and African teams have routinely won world youth championships.

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, New Zealander Jack Dempsey, broke with his confederation and abstained from voting, leaving the vote 12-11 in favor of Germany. A vote in favor of South Africa would have led FIFA President Joseph “Sepp” Blatter with the tie-breaking vote which would have resulted in South Africa’s selection. Allegations were made that Dempsey faced “personal threats and monumental pressure from lobbyists” in order to secure his “vote” (Soccerroos Realm, 2002). Dempsey resigned in the face of criticism from soccer federations in Oceania as well as pressure from the New Zealand government itself.

### **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, for the 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. 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 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 on 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. Even excluding construction spending, just the operating costs for the Summer and Winter Games typically exceed \$1 billion. 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, for example, predicted it would bring thousands of visitors to the country and result in a \$4 billion boost to the United States economy. (Hewlett Packard, 1998) 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. As a percentage of total national income, these figures represent 0.6 and 2.2 percent of the total Japanese and South Korean economies, respectively (Finer, 2002).

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).

The promise of substantial economic impact provides a justification for public subsidies for mega-event infrastructure. Promoters of subsidies for mega-events throughout the world argue that the expenditures should properly be treated as investments that generate positive economic returns, that is to say yields that exceed those generated by the next-best, alternative use of those funds.

Claims that sports mega-events provide a substantial boost to the economy of the host city, region, and country have been strongly criticized by some 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, Philip Porter disputed claims by the National Football League (NFL) that the contest provided substantial economic impact. In fact, Porter claimed a proper measurement of the Super Bowl's economic impact would show the event had no impact. (Porter, 1999). Likewise, Baade and Matheson (2000) challenged an NFL claim that as a result of the 1999 Super Bowl in Miami, taxable sales in South Florida increased by more than \$670 million dollars. Their study of taxable sales data in the region concluded that the NFL has exaggerated the impact of the Miami Super Bowl by approximately a factor of ten using assumptions that favored identifying a strong

economic impact.

Baade and Matheson (2003) also examined the 1984 and 1996 Summer Olympics using metropolitan area employment data. Their examination 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, the Game could be said to have produced this employment effect. This employment effect would translate into roughly a \$300 million boost for the Los Angeles economy (in 2001 dollars). 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 job predicted by the organizing committee.

.Baade and Matheson (2002) 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.

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 tourist influx to pay for the costs of hosting these events. Theoretical issues that have implications for the size of the economic impact estimates are identified and analyzed in the paper's next section.

## **Theoretical Issues**

The exaggeration of benefits induced by a sports mega-event occurs for at least three specific reasons. First, the increase in direct spending attributable to the games may be a “gross” as opposed to a “net” measure. Direct spending has been estimated by some subsidy advocates by simply summing all receipts associated with the event. The fact that the gross-spending approach fails to account for decreased spending directly attributable to the event represents a major theoretical and practical shortcoming. 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. Failure to account for this important distinction between gross and net spending has been cited by economists as a chief reason why sports events or teams do not contribute as much to metropolitan economies as boosters claim (Baade, 1996).

Eliminating the spending by residents of the host community would at first blush appear to account for a significant source of bias in estimating direct expenditures. Surveys on expenditures by those attending the event, complete with a question on place of residence, would appear to be a straightforward way of estimating direct expenditures in a manner that is statistically acceptable. 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. An international sporting event could be characterized as “zero sum” from a global perspective, while still exercising a strong, positive economic impact on the host country. Stated somewhat differently, spending at a major sporting event qualifies as export spending since most of it is thought to be undertaken by people from outside the city and country. Unfortunately, while measuring only visitor

spending may well provide acceptable spending estimates for those patronizing the event, such a technique offers no data on changes in spending by local residents not attending the event. It is conceivable that some residents may dramatically change their spending during the event given their desire to avoid the congestion in the venue(s) environs.

Recent evidence assessing the economic impact of the Summer Olympics in 2000 in Sydney, Australia indicate the “substitution effect” may be substantial even in cases where the event has a clear international character. An Arthur Andersen survey on hotel activity in Sydney and other capital cities prior to and during the Olympic Games concluded:

As expected, survey results indicate the vast majority of Sydney hotels peaking at near 100% occupancies during the Games period from September 16-30. This represents an increase of 49% in occupancy levels relative to the first half of September.

In contrast, other capital cities experienced significant demand shortfalls for the same period. For example, occupancies in Melbourne and Brisbane plummeted by 19% and 17% in the second half of September relative to the period from 1-15 September.

Overall, with the exception of Sydney and Adelaide, all hotel markets in Australia experienced a decline in occupancy in September 2000 relative to September 1999 despite the Olympic Games, as reported in the Hotel Industry Benchmark Survey.

Holiday destinations such as Tropical North Queensland and the Gold Coast also recorded lower occupancy in September 2000 relative to September 1999. Hoteliers indicate that while international demand was strong, particularly in upmarket destinations such as Port Douglas and the Whitsunday Islands, domestic leisure travel traditionally taking place during the September school holiday period was displaced to Sydney for the Olympics. (Andersen, 2000)

The Anderson report indicates the importance of the substitution effect, and compels consideration of which, if any, governmental entities should be involved in subsidizing sports mega-events. Sydney’s gains may well have come at the expense of other Australian cities, and if the federal

government subsidizes the games there must be a rationale for enriching Sydney at the expense of Adelaide and other regional cities.

A second reason that economic impact may be exaggerated is the “crowding out” effect. Event tourists may simply supplant other travelers who would normally visit the host venues. A competition that attracts one million sports visitors while displacing an equal number of regular visitors is huge event in by gross measures even though the net impact of the event is negligible. A typical survey 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 behavior for those who are not.

The first anecdotal evidence of the economic impact of the World Cup on South Korea and Japan indicates that the true impact will be far below that predicted prior to the tournament. While the number of European visitors to South Korea was higher than normal, this increase was offset by a similar sized decrease in the usual tourists from Japan. The total number of foreign visitors to South Korea during the World Cup in 2002 was estimated at 460,000, an figure identical to the number of foreign visitors during the same period in the previous year (Golovnina, 2002). The substitution and crowding out effects appear to be quite obvious. “Consumer goods such as TVs and sporting goods sold well, while some casinos and hotels had drop-offs as regular customers and business travelers avoided World Cup hassles.” (USA Today, 2002)

A final reason economic impact may be exaggerated relates to what economists refer to as the

“multiplier,” the notion that direct spending increases induce additional rounds of spending due to increased incomes that occur as a result of additional 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. Of course, if errors are made in assessing direct spending, those errors are compounded in calculating indirect spending through standard multiplier analysis. Furthermore, 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, for example, it may be that the labor essential to conducting the event resides in other communities where unemployment or a labor surplus exists. To the extent that this is true, then the indirect spending that constitutes the multiplier effect must be adjusted to reflect this leakage of income and subsequent spending.

Labor 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. In short, to assess the impact of mega-events, a balance of payments approach should be utilized. That is to say, to what extent does the event give rise to money inflows and outflows that would not occur in its absence? Since the input-output models used in the most sophisticated *ex ante* analyses are based on fixed relationships between inputs and outputs, such models do not account for the subtleties of full employment and capital ownership noted here. As a consequence, it is not clear if economic impact estimates based on them are biased up or down. It is reasonable to believe,

however, that since mega-events represent specialized entertainment where the entertainers (or athletes) must be imported from participating countries around the world, the multiplier will be lower than the multiplier for spending on local entertainment.

In its extreme, imported entertainment could have a multiplier of nearly zero so that the lower multiplier combined with the substitution and crowding out effects could lead to an event having a negative economic impact. Consider the example of a touring circus (or a rock and roll tour) of foreign entertainers which arrives in a certain host city. Suppose, the circus is entirely self-supporting requiring no local labor or local purchases to permit its operations. Since the circus is self-sustaining, it has an effective multiplier of zero. Thus, any local spending on the circus will actually reduce local income as residents substitute their regular spending on local goods for spending on the circus. Any visitors to the community travel to the host venue simply to see the circus will spend a portion of their money on the circus, which will not benefit the host community, and a portion of their money outside the circus' environs, which would benefit the host community. However, even the spending by visitors outside of the actual event may result in losses to the host if the event visitors crowd out regular visitors who would be more apt to spend money on local goods and services. A visitor spending \$100 at the circus and \$100 for lodging in the host community (for a \$100 community benefit) may be displacing a regular visitor who would spend \$100 on local entertainment and \$100 for lodging (for a \$200 community benefit.)

### **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 (including a minor facelift for the Cotton Bowl in Dallas and the installation of real grass inside the Pontiac Silverdome in Detroit). The U.S. could easily provide nine existing facilities that met FIFA standards for hosting the games and at least another twenty pre-existing stadiums would have also been adequate for the purpose. In 1998, the host country, France, simply refurbished existing stadiums and built the Stade de France to host the opening ceremonies and the final championship but still kept its infrastructure spending at under \$500 million. 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 would need to build entirely new facilities to meet FIFA's stringent demands should it win the right to host the 2010 World Cup. Morocco, a dark horse candidate for the 2010 World Cup, currently has only two stadiums of the ten required to host the tournament.

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. Nigeria's government recently spent \$330 million on a new national soccer stadium, more than the annual national government expenditures on health or education. (Farah, 2001) During the same time period Detroit built Primerica Park to replace aging Tiger Stadium for roughly the same cost. While many would argue that Detroit has also misplaced its spending priorities, condemnation of the Nigerian soccer stadium has been nearly universal. The criticism is not directly

due to the cost of the stadium, but rather the cost of the stadium in the face of other pressing needs for a low development country like Nigeria. On the other hand, Japan's \$6 billion spending spree for the 2002 World Cup has come under little fire. Since the Japanese government has committed itself to massive public works projects in a Keynesian effort to spend its way out of its decade-long economic slump, the construction of new soccer stadia is as good as spending on other spending projects. The opportunity cost of capital for stadium construction in Japan is essentially zero since the other possible spending projects are also widely considered to be white elephants.

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 and entertainment is a luxury good, the demand for sports infrastructure in the aftermath 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 possible music and cultural events or occasional international soccer matches. Only five of the ten stadiums currently have regular tenants, and these teams rarely draw significant crowds. Professional soccer in S. Korea averages 3,000 spectators per game. Japan, on the other hand, has a well-developed professional soccer league, the J-League, which has already moved into seven of the new stadiums. While the average J-League crowds of 16,000 fans will not come close to filling the new 45,000 seat stadiums, the much larger crowds should provide for a bigger economic impact from the stadiums following the World Cup.

Along similar lines, the anticipation of 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, sports infrastructure 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. In the 2002 World Cup, Japanese stadiums were filled to 89.1% capacity for its 32 games while Korean stadiums achieved only a 78.8% capacity. Roughly twice as many seats remained unfilled in Korean as in Japan. These unsold seats existed despite the surprising success of the Korean team boosted ticket sales. Excluding matches featuring the home team, Japan filled 88.7% of its seats while Korea sold only 73.9% of available tickets.

It should be noted that South Korea is fairly high on the scale of economic development with a purchasing power parity adjusted (PPP) per capita income of \$13,478 in 1998 compared to a PPP per capita income of \$23,257 for Japan. The per capita income levels of other aspiring mega-event hosts are lower: Argentina, \$12,013, S. Africa, \$8,488, Brazil, \$6,625, Turkey \$6,500, Morocco, \$3,305, and China, \$3,105. (United Nations, 2000) While many factors contribute to the willingness of domestic and foreign visitors to attend (and to pay high ticket prices for) a mega-event, the relative level of economic development is certainly a significant consideration.

### **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. The official operating budget of the 2004 Summer Games in Athens of \$1.71 billion is lower than the \$1.97 spent by Sydney four years earlier and the \$2.4 billion (adjusted for inflation) spent by Atlanta in 1996. Beijing is proposing 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.

Next, while academic economists are nearly universal in their critique 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. Similarly, only about \$450 million of the estimated \$4.4 billion in infrastructure work being undertaken by Portugal in preparation for the Euro 2004 (soccer's Europe-only version of the World Cup) is being spent directly on stadium construction and improvements. A mega-event may prompt otherwise reluctant public officials into making needed general infrastructure improvements. 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.

Furthermore, the separation between what is "sports" infrastructure and what is "general" infrastructure is not always clear. The new Wembley stadium in London is slated to cost around \$500

million. In addition, over \$150 million in “general” infrastructure improvements are being done 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.

A final factor that favors hosting mega-events in developing nations is the widespread availability of unemployed or underemployed labor in most developing countries. In the presence of underemployment, the opportunity cost of labor nears zero. Furthermore, the presence of unemployment discourages labor migration. In 1996, Atlanta was at or near full employment. The temporary demand for workers during the actual Games was met in large part by importing labor from other locations. When the Games ended, these temporary workers returned home and repatriated their Olympics earnings, reducing the multiplier effect in Atlanta. Atlanta does not benefit from its investment in the Games if the earnings for the Olympics are paid to outside sources of labor and if the resulting indirect spending takes place outside of Atlanta’s metropolitan area. If a city has unutilized labor resources, the chances are increased that earnings generated by a mega-event will be earned by citizens of the city and stay within the city after the event is concluded.

### **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 skeptical 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 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. Indeed, hosting these premier events may be more of a burden than an honor.

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**Table 1: Summer and Winter Olympic Host Cities**

<u>Year</u>	<u>Summer Olympics Host City</u>	<u>Winter Olympics Host City</u>
1896	Athens, Greece	Not held
1900	Paris, France	Not held
1904	St. Louis, United States	Not held
1908	London, Great Britain	Not held
1912	Stockholm, Sweden	Not held
1916	Not held	Not held
1920	Antwerp, Belgium	Not held
1924	Paris, France	Chamonix, France
1928	Amsterdam, Netherlands	St. Moritz, Switzerland
1932	Los Angeles, United States	Lake Placid, United States
1936	Berlin, Germany	Garmisch/Partenkirchen, Germany
1940	Not held	Not held
1944	Not held	Not held
1948	London, Great Britain	St. Moritz, Switzerland
1952	Helsinki, Finland	Oslo, Norway
1956	Melbourne, Australia	Cortina d'Ampezzo, Italy
1960	Rome, Italy	Squaw Valley, United States
1964	Tokyo, Japan	Innsbruck, Austria
1968	Mexico City, Mexico	Grenoble, France
1972	Munich, West Germany	Sapporo, Japan
1976	Montreal, Canada	Innsbruck, Austria
1980	Moscow, Soviet Union	Lake Placid, United States
1984	Los Angeles, United States	Sarajevo, Yugoslavia
1988	Seoul, South Korea	Calgary, Canada
1992	Barcelona, Spain	Albertville, France
1994	-	Lillehammer, Norway
1996	Atlanta, United States	-
1998	-	Nagano, Japan
2000	Sydney, Australia	-
2002	-	Salt Lake City, United States
2004	Athens, Greece	-
2006	-	Torino, Italy
2008	Beijing, China	-

Note: In 1994, the Summer and Winter Olympics began to be held on opposite years.

**Table 2: World Cup Host Countries**

<u>Year</u>	<u>Site</u>
1930	Uruguay
1934	Italy
1938	France
1942	Not held
1946	Not held
1950	Brazil
1954	Switzerland
1958	Sweden
1962	Chile
1966	England
1970	Mexico
1974	Germany
1978	Argentina
1982	Spain
1986	Mexico
1990	Italy
1994	United States
1998	France
2002	Japan / South Korea
2006	Germany