

Harvard Sports Marketing Club

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Hunting White Elephants

The inspiration for this article came from our conversations with the Boston Globe's Shira Springer following an on-campus event in February. As the conversation had floated toward the upcoming Rio Olympics, it was Shira who had originally stressed the flaws with the current Olympic selection system and the potential benefits of having permanent hosts for the games. Our curiosity piqued, we chose to investigate if past Olympic data would tell a similar story. Our initial skepticism of her idea quickly faded as the data trends became apparent and the story materialized. The conclusions of this article, and our disillusionment with today's Olympic politics, is a direct result of this investigation into her ideas.

The ruins of the first Greek Olympics in Olympia have stood the test of time for the last two millennia. Ruins of the last Greek Olympics may not last two decades. The fallout of the 2004 Athens Summer Olympics, the most recent Greek tragedy, has become symbolic of the problems with the modern Olympic narrative. In this narrative, a developing country or world power looking to rebrand itself wins the right to host the games after putting forth a highly imaginative and expensive plan. Massive stadiums, built in inconvenient places with taxpayer dollars, are used copiously over the course of a two-week span then rarely after that. While there have been success stories, the host is often left with domestic or international disapproval to complement a king's ransom of debt.

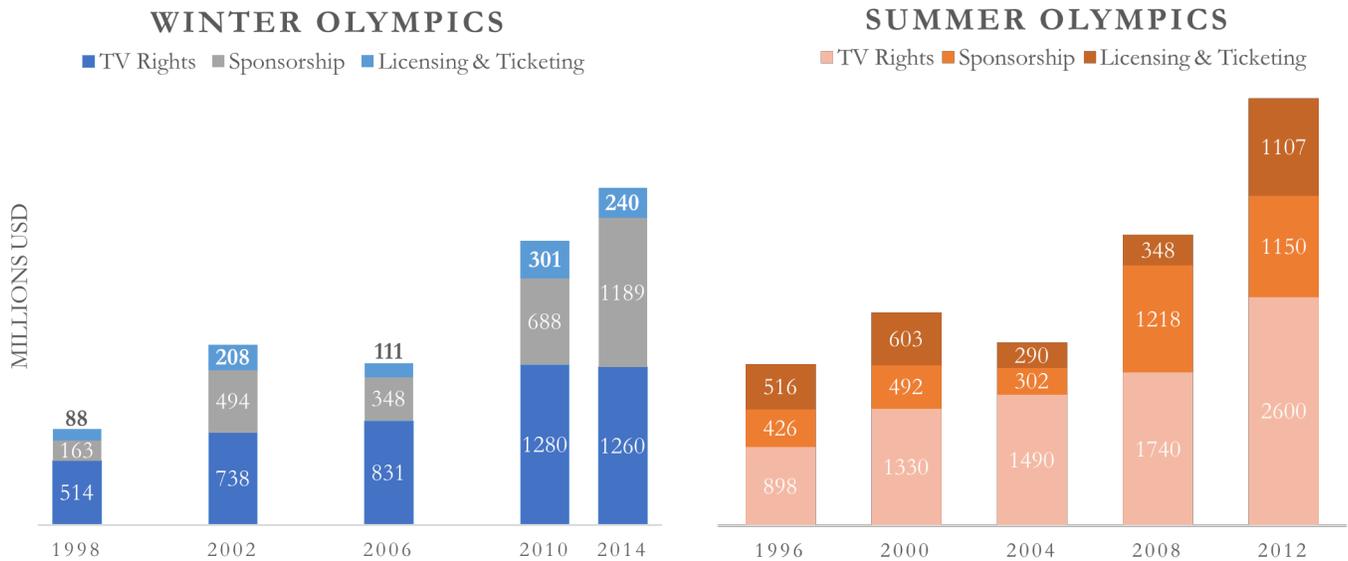
We're looking at a radical solution to combat this problem: Olympic recycling. What if venues were used repeatedly in cycles, instead of being left to rot as soon as the torch is put out? This paper looks at the implications of this question – why to change the current system in the first place, historical examples to build off of, and how to choose which countries to be considered as permanent hosts. We're also going to evaluate potential objections to such a system and provide ways to limit the qualitative costs of having a permanent rotating host. Ultimately, we're hoping that this new system can fix many of the rampant economic problems which plague the games.

What's wrong with the system?

We've attempted to identify economic trends in the Olympics by compiling cost and revenue data from both summer and winter Olympic Games over the course of the past 40 years. Data has been taken mostly from IOC official documents, although data sources have been expanded when these reports do not disclose all relevant data. To correct for inflationary and currency change, all values have been adjusted to represent each game's cost in 2009 USD. Three concerning trends about Olympics operations have emerged from the data: countries lose money in the short term, receive little to no long term benefit from massive investment costs, and those spending the most are the least equipped to do so.

1. Short-term losses

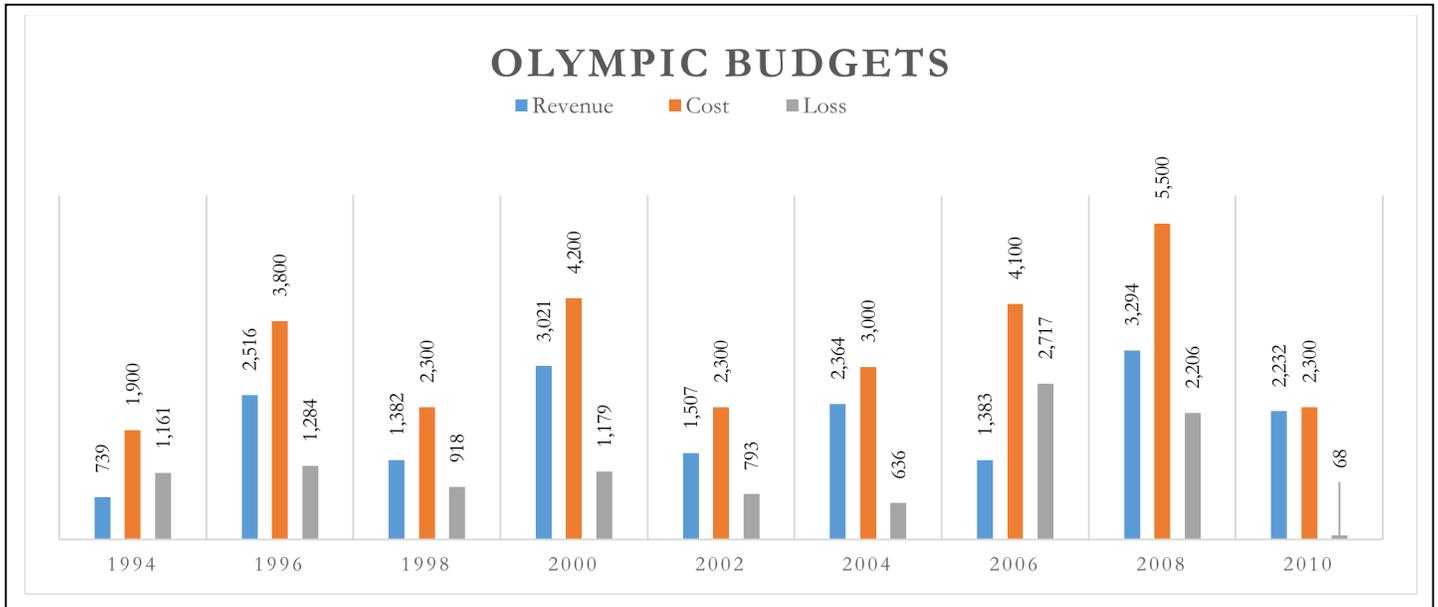
Finding the revenues brought in during each of the games was a very straightforward process. A 2016 IOC report on Olympic marketing history detailed the four main sources of recent Olympic revenue and their past values. While these four main sources of revenue – TV broadcasting rights, corporate sponsorship, ticketing, and licensing – do not account for all revenue earned during games they constitute the lion’s share of it. Even after adjusting for inflation, there is a clear upward trend in past Olympic revenues for both the winter and summer games. Increasing demand for TV broadcasting rights accounts for the majority of this; the 2012 London Olympics took in a record \$2.423 billion from that source alone.¹



Finding the costs of the Olympic games is nowhere near as simple. Host countries often don’t take into account government-funded infrastructure improvements or building costs on official reports submitted to the IOC, making the games seem far more profitable than they appear. In a famous example of this, the Athens 2004 Official Report boasted of a net profit while the Greek government weathered a rumored 10 billion-dollar loss¹. Numerous other sources have found real costs of all Olympic-related activity to be much higher than the organizing committees would lead people to believe. One analysis out of Oxford’s Said School of Business, *Olympic Proportions: Cost and Cost Overrun at the Olympics 1960-2012*, calculates total direct cost as a function of the organizing committee’s budget and federal investment in games-related construction²². In the below graph, we use their analysis in addition to the above revenue values to estimate recent game’s net losses (in 2009 USD).

¹ How the 2004 Olympics Triggered Greece's Decline - 2012-08-02 - Bloomberg Business. Retrieved 2014-02-12.

² Flyvbjerg, Bent; Allison Stewart (2012). "Olympic Proportions: Cost and Cost Overrun at the Olympics 1960-2012". Working Paper. Said Business School, University of Oxford.

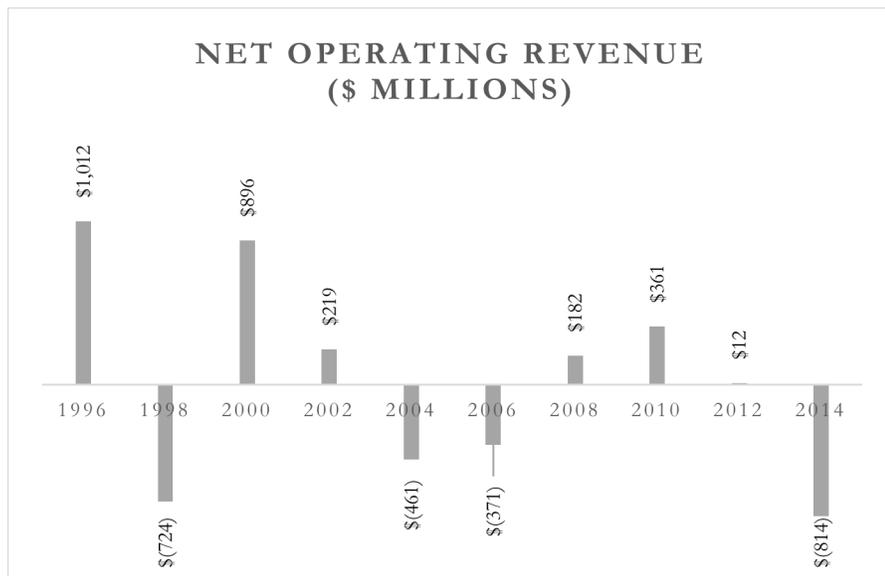


This data revealed a staggering imbalance of costs and revenues. From 1994 to 2010, the Olympic Games resulted in an average net debt of over \$1.2 billion owed by the host city. Even so, the cost data out of this report is likely underestimating the true financial burden of the Olympic Games. The authors Flyvberg and Stewart elected to not include government expenditure on infrastructural improvements prior to the games as a part of their cost values, considering only *direct* expenditure, like stadium costs or operating grants. Including these costs ³causes the total cost to balloon substantially; China’s total Olympics expenditure rises from \$5.5 to \$42 billion after accounting for the shopping centers, museums, parks, and highways built in preparation for the 2008 games⁴.

We’ve elected to include those costs in our additional analysis in order to gauge the true price of the games. These infrastructure costs, which according to our calculations account for approximately 76% of total Olympic costs since 1980, appear to be the reason for this dismal profit record. By treating infrastructure and security costs as fixed costs, profit margins for net operating revenue appear far less foreboding. The below graph displays this effect over the course of the last ten Olympic cycles:

³ <http://www.npr.org/2012/07/10/156368611/chinas-post-olympic-woe-how-to-fill-an-empty-nest>

⁴ <http://www.transportnexus.com/olympic-games-4/>



Without accounting for infrastructure and security costs, six of the last ten Olympics would have been able to post net positive operating revenues. This is likely an underestimate, as many additional sources of private sales and enterprise were not included in our revenue calculation. At the extremes, this effect is even more prevalent. Over 90% of the \$40 billion and \$50 billion dollar costs of the Beijing and Sochi Olympics can be attributed to government-backed infrastructural expenses. A short term profit was beyond

impossible in these cases - those costs were both greater than the combined direct revenue of the ten previous games combined. Excluding infrastructure costs, Beijing was able to turn a modest profit. For the purpose of our data, it appears that future Olympic cost efficiency is dependent on cutting infrastructure costs.

2. Mixed long-run returns

The inherent flaw with examining “infrastructure” as an all-encompassing category is that much of pre-Olympic construction is commissioned with the expectation that it will benefit the country long after the tourists leave. Much of these costs stem from public improvements in preparation for the games, such as the construction of the Athenian metro system.⁴ It is possible that this kind of investment can be a net social positive in the long run, although it requires an Olympic-sized spike in government spending. The long-term value of Olympic stadiums is far more questionable. As mentioned earlier, it took less than 12 years for Athenian Olympic stadiums to look like sets for a post-apocalyptic war movie. Today, 21 of the 22 stadiums constructed for the 2004 games are reported to be unoccupied. It’s safe to assume that the money spent building those Olympic stadiums has become a sunk cost.

Of course, not all stadiums spend their post-Olympic lives in abandonment. Barcelona in particular has managed to integrate its Olympic infrastructure into general life fairly well. Water polo and diving facilities built for the 1992 games spend their retirement years as public pools and training facilities during the summertime. The main Olympic Stadium constructed for the 1996 Atlanta Olympics is now home to Major League Baseball’s Atlanta Braves, although the team is set to move to a newer stadium next season. Olympic housing and diving pools have been adopted by local colleges in the Atlanta area, with Georgia State University and Georgia Tech reaping the benefits.⁵ However, recent trends have not been as encouraging. High-capacity “super-stadiums,” such the 91,000 seat “Bird’s Nest” China built for the 2008 Summer Games in Beijing, come with high maintenance costs to complement enormous initial construction costs. The \$480 million venue demands an additional annual investment of \$11 million for maintenance and upkeep, a burden which has scared away local Chinese professional

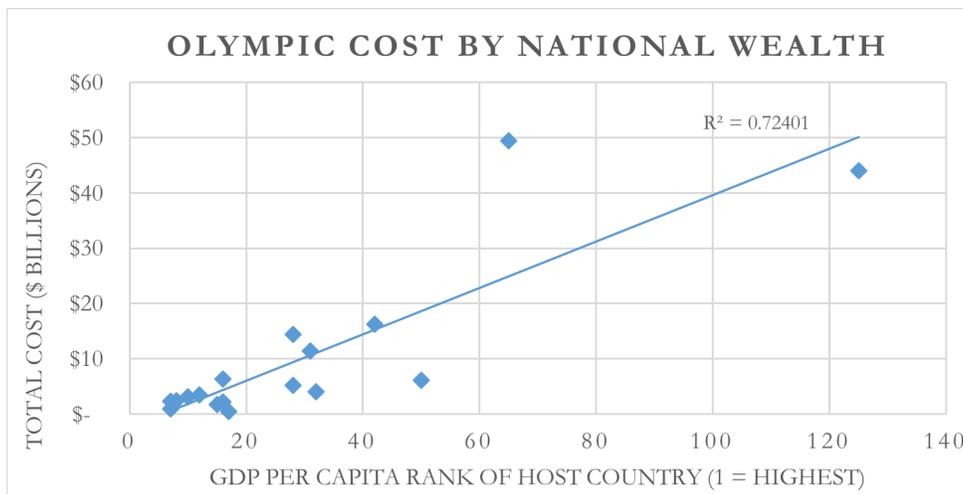
⁵ <https://www.bostonglobe.com/metro/2014/08/02/atlanta-games-venues-from-left-legacy-some-lessons/Jj8zIJqrUcdTT6sEXUjseK/story.html>

soccer teams from adopting it as a home field⁶. Though the Bird's Nest is still in operation, and has played host to a smattering of concerts, professional soccer games and other sports events including freestyle skiing competitions, the city is already struggling to occupy the facility and justify a half-a-billion-dollar price tag.

The argument that the Olympics will lead to an eventual vitalization of the city seems to be a similar form of optimism. As Shira Springer of the Boston Globe wrote, "With the Summer Games as catalyst, Barcelona in the 1980s and early 1990s reimagined its cityscape, reclaimed its Mediterranean seafront from industrial usage, and rebranded itself. Local leaders wanted the world to see a transformed city when the Olympics arrived. And it did"⁷. Host cities and countries hope that the outside world sees the beauty of their area and a swell of tourism and investment will follow. It is seen as an investment into the future of each area. But this idealistic view of the Olympics as a jumpstart to national investment and transformation is one that simply does not hold true, even when success stories such as Barcelona's are examined. In the New York Times, economist Phillip Porter is quoted "the bottom line is every time we've looked – dozens of times, dozens of scholars- we find no real change in economic activity."⁸ Athens, once again, represents a fairly harsh example of this. Many reporters believe that the enormous cost of the 2004 Olympics helped lead to the current status of the Greek economy⁹. In fact, this also represents a running theme of recent Olympic history: the countries which end up taking on the most debt are the ones least able to manage it.

3. Poorer and more corrupt countries are footing a larger bill

It would make sense to view Olympic extravagance as a kind of normal good, meaning that richer countries use their wealth advantage to put on more expensive games. That doesn't happen. As shown on the graph below, there is actually an inverse relationship between a host's per capita wealth (measured as the rank during the year of its hosting) and the total amount of money it spends on the games. While rich nations are tightening their wallets when it is their turn to host, poorer nations are spending money aggressively.



The concern over this trend is twofold: 1) countries who would likely be better off using investment to assist their developing economies are instead investing in seldom-used stadiums and 2) the previously mentioned low efficiency of Olympic investment all but guarantee that their investments are going to be result in a net loss.

⁶ <http://www.npr.org/2012/07/10/156368611/chinas-post-olympic-woe-how-to-fill-an-empty-nest>

⁷ Springer, Shira. "Barcelona's Olympic makeover may hold lesson for Boston." *Boston Globe* 7 Nov. 2014: n. pag. Web. 1 Apr. 2016.

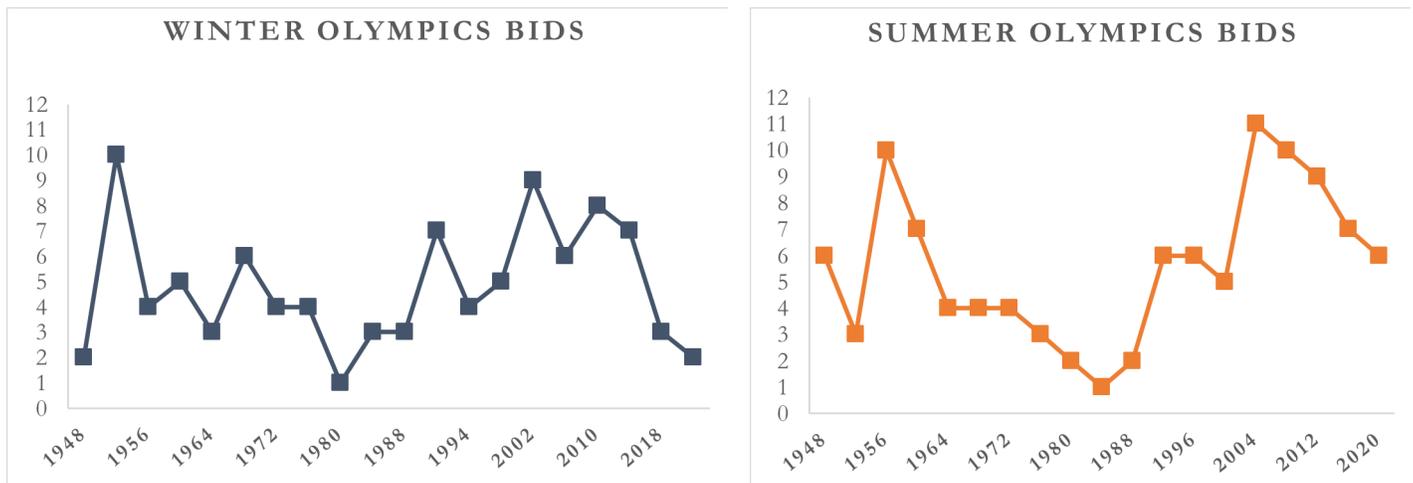
⁸ Appelbaum, Binyamin. "Does Hosting the Olympics Actually Pay Off?" *New York Times* 5 Aug. 2014: n. pag. Web. 2 Apr. 2016.

⁹ How the 2004 Olympics Triggered Greece's Decline - 2012-08-02 - Bloomberg Business. Retrieved 2014-02-12.

This in turn leads to a problem of selection bias. Leaders of democratic countries, whose position is dependent on the approval of the taxpayer, is unlikely to support a system which would require heavy public funding with limited gain. Autocratic rulers face no such constraints, and are far more likely to value the chance to create an expensive national spectacle than the economic pragmatism of doing so. This in turn leaves the IOC with China and Kazakhstan, whom Transparency International ranks as the 83rd and 123rd least corrupt countries in the world, as the only bidders for the 2022 Winter Olympics. Beijing won that contest, and it will become the first city ever to host the Summer and Winter Games. Sam Laird of Mashable describes this effect best: “What do China and Kazakhstan have in common? Both have reason to seek the world's spotlight for the Olympics' two-week run. Both also have autocratic political systems ripe for a select few to take advantage of at the expense of the many”.¹⁰

How did we get to this point?

In recent memory, the aforementioned state of the 2022 Olympic Cycle has proven to be the exception rather than the rule. Even as the Games have evolved into an increasingly-menacing black hole, countries have been lining up for the honor of hosting them. Just three cycles ago, the IOC had their pick of a record 11 potential suitors for the 2004 summer games and nine for the 2002 winter games. To find a time when demand for the games was similarly anemic, one has to look back over 30 years into the past. From that point, the history of bidders for each type of Olympic Games tells a clear story:¹¹



After reaching a relative maximum halfway through the 20th century, the number of Olympic bids began to steadily drop for the next three decades. A trend of poor financial solvency, coupled with newfound security concerns following the 1972 Munich massacre, sunk bids to an absolute minimum in the early 80's. Eventually the IOC was left with one lone bidder for the 1984 summer cycle. In an Orwellian twist of fate, the 1984 Summer Olympics would completely alter the world's perspective on hosting the games entirely.

¹⁰ Laird, Sam. "Not just Boston: Why no one wants to host the Olympics." *Mashable*. N.p., 29 July 2015. Web. 2 Apr. 2016.

¹¹ <http://gamesbids.com/eng/past-bid-results/>

For the first time in over a half century, the Los Angeles Olympic Organizing Committee (LAOOC) had made hosting the games a profitable venture. From that point forward the number of bids for each Olympic Cycle rose each year as nations yearned to imitate Los Angeles' financial success. None of them were able to. Each nation had failed to recreate the exact factors which allowed for Los Angeles to succeed while others had failed. In this next section, we're going to break down these factors, along with an amended system which best recreates them.

The LA 1984 model

By all standards, the Los Angeles Summer Games of 1984 were a massive economic success. In addition to being the first games that did not require funding from the local government, the '84 Games were also the first since 1932 to turn a profit, finishing \$232.5 million in the black.¹² The Los Angeles Olympic Organizing Committee (LAOOC) achieved this feat through prudent financial planning that took place well ahead of the Games themselves, executed as early as the International Olympic Committee's rules permitted.

The LAOOC's first move was to set aside a mass of funds in the early stages of planning. Although the IOC's rules dictated that the Committee could not finalize sponsors until after the conclusion of the 1980 Olympics, the Committee, formed in 1979, began looking for sponsors immediately without finalizing contracts. The LAOOC created a formula that was used throughout the process of generating funding for the games: demand large portions of cash up front, then reinvest that cash immediately into a temporary growth fund. This fund would generate interest that significantly helped pay for Committee operations both leading up to and during the games. They applied this to potential broadcasters and to sponsors, even requiring a \$500,000 refundable deposit from each of five potential broadcasters simply to kick-start their reinvestment program before they finalized contracts. Between 1979 and 1984, up to the start of the games, the LAOOC had generated over \$50 million in interest alone – accounting for nearly 10% of their total costs.¹³

Given that there would be no governmental funding, the LAOOC also designed their budgetary approach to be as frugal as possible. In keeping with this philosophy, only three new permanent structures were built for the games. All other construction costs were for lower-cost temporary buildings. Inexpensive "Look Items," such as souvenir tents and decorations, were often constructed using rented scaffolding. On the entirety of Exposition Park, which was the hub of activity at the Games both in 1932 and in 1984, only \$1.8 million of renovations were made. According to the Official Report of the Games, the total infrastructure costs add up to just over \$200 million in 2009 US dollars,¹⁴ a number which pales in comparison to the cost of Montreal's Olympic Stadium alone, which totaled around 770,000,000 CAD in 1976, or about \$1.4 billion US in today's dollars.¹⁵ The entire total costs, according to the official report issued by the LAOOC, were also significantly less than that number, totaling about \$546 million.¹⁶

¹² *Los Angeles and the 1984 Olympic Games*, Boys and Girls Club of Venice, Venice, CA, p.1

<http://www.bgcv.org/Websites/bgcv/Images/20thAnniversary.pdf>

¹³ *Official Report of the Games of the XXIIIrd Olympiad Los Angeles, 1984*, Los Angeles Olympic Organizing Committee, 1985, Section 11 (p.309)

¹⁴ Ibid, corrected for inflation

¹⁵ *1976 Montreal Olympic Stadium*, <http://olympics.ballparks.com/1976Montreal/>, Musney & Suppes, 2016.

¹⁶ <http://library.la84.org/SportsLibrary/JOH/JOHv1n1/JOHv1n1f.pdf>

Adapting the LA 1984 model

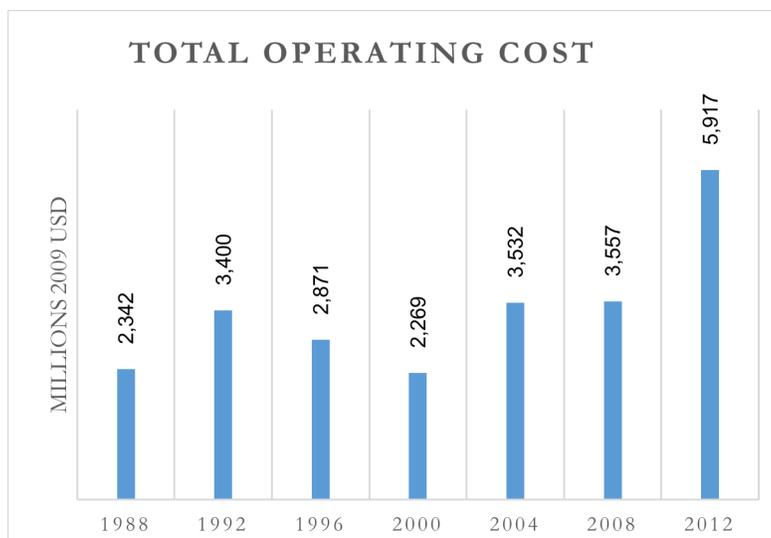
The economic success of the rotating-host system is dependent on how well the host country can imitate the successes of the LAOOC. Below, we've mapped out three possible scenarios for the future of Olympic balance sheets under this system – a downside case, a baseline case, and an optimistic case – in an attempt to see how economically viable this solution may be.

1. Future infrastructure maintenance fees

The permanent-host plan would allow for much more reasonable overall infrastructure costs, but even after assuming that all Olympic stadiums are pre-built there would still be large costs associated with maintaining and preparing a venue for the Olympic Games. Almost all of Los Angeles' costs were for renovations or temporary Olympic structures, and they still had to spend \$192 million (2009 USD) in construction and preparatory costs for the games. It's safe to assume that even in a fixed-stadium model no country will be able to rival Los Angeles' efficiency, and the lower bound will have to be higher than this cost. Atlanta, which constructed a very modest Olympic stadium in comparison to past trends, had the next lowest construction costs at about \$550 million (2009 USD). Atlanta therefore serves as a baseline for infrastructure costs, with a reasonable lower bound lying midway through Atlanta and LA - \$375 million. A conservative estimate of infrastructure costs would likely have to be a standard deviation upward of Atlanta's cost, or approximately \$750.

2. Predicting future operating costs¹⁷

One would expect real operating costs, defined as the cost for security of the games plus all costs associated with actually running the games, to have clearly risen increased over time. As shown in the graph below, they've actually remained fairly stagnant over time, outside of a massive spike with the cost of running the most recent London Summer Olympics. However there are reasons to believe costs will increase in the future – such as the exorbitant \$1.4 billion London had to spend on Olympic security costs in this new age of terrorism.



For that reason, it seems fair to construct a confidence interval around the average operating cost of past Olympics rather than predicting steadily increasing costs. This average operating cost, spanning the 1988 to 2012 summer games, comes out to be \$3.413 billion, which will be rounded to \$3.4 billion for brevity's sake. Since London is such an outlier, it is fair to say that its overall cost of about \$5.9 billion is an upper bound, while the midpoint between this upper bound and the average cost seems to be a fair predictor of future cost – \$4,650.

¹⁷ All courtesy of referenced country's official reports, and state audit for Sydney 2000

3. Predicting future cash inflows¹⁸

As mentioned in the earlier Olympic revenue section, TV broadcasting rights and sponsorship agreements make up the majority of all Olympic earnings. Broadcasting rights, which the IOC has kept accurate historical records of over the past 30 years, have risen 24.4% per year in real terms, albeit with individual increases ranging from 2% (Sydney – Athens) to 65% (Seoul – Barcelona). The IOC has only kept accurate overall revenue readings in its main database for the past 5 summer cycles, but that limited data yields a similar growth rate of 18.9%. From this, we assume a baseline revenue growth of about 20% per cycle in real terms, with lower and higher intervals rounding out to 10% and 25% to account for excess risk. To be conservative in our estimate, we choose to use a midpoint of London and Beijing’s revenue values as an initial point – approximately \$4 billion USD. This leaves us with revenue projections of \$4.4, \$4.8, and \$5 billion

4. Overall projections

Compiling all of these different values yields the following profit breakdown:

| | Net Cost | | Total | Revenue | | Profit/Loss |
|-------------------|----------------|-----------|--------------|-------------|-------------|----------------|
| | Infrastructure | Operating | | Growth Rate | Total | |
| Downside | 750 | 5,900 | 6,650 | 15% | 4650 | (2,000) |
| Baseline | 550 | 4,650 | 5,200 | 20% | 4800 | (400) |
| Optimistic | 375 | 3,400 | 3,775 | 25% | 5000 | 1,225 |

Regardless of how the probabilities of each of these scenarios play out, it is clear that switching to the permanent stadium model would make the Olympics dramatically more cost efficient. Both the base and optimistic scenarios suggest positive net operating income, and even the worst-case scenario would lead to the smallest net overall money spent on an Olympic cycle since Salt Lake City’s games in 2002. While it is important to note that these costs do not include any initial construction costs to build Olympic venues in the first place, it seems clear that the Olympics have the potential to run far more efficiently under this system.

The 1984 Los Angeles Olympics also had another dramatic advantage - the LAOOC had the foresight to start funding the games as early as possible by demanding upfront payments for broadcasting rights. While the LAOOC was able to take advantage of absurdly high interest rates of the early 80s, the effect of compound interest over time cannot be understated. Over the course of five, the 1984 organizing committee was able to accumulate enough interest off of dramatic upfront costs to pay 10% of its total costs. The rotating host system has the advantage of knowing well in advance when it will host the Olympic Games – 24 years in advance rather than seven. Any sort of upfront fee paid well in advance, regardless of value, has the potential to grow dramatically.

¹⁸ IOC Marketing Fact File 2012

A rotating Olympics^{19, 20}

According to its official doctrine, the IOC evaluates Olympic bids on two main parameters: governance and vision. The first is more of a practical requirement, evaluating a potential host's ability to impose order during the games and to adequately finance any costs imposed for the spectacle. The latter is more imaginative, examining the quality of the product the host plans to create and contemplating how this will contribute to the Olympic legacy in the long run. Recent history suggests that the IOC has neglected pragmatic concerns in favor of visionary ideals – the political and economic records of hosts such as Greece, Russia, China, and the autocratic South Korea of the late 80s were less than stellar. But building a permanent residence for future Olympic Games leaves little room for romanticism. Investment in a permanent site for the Olympic Games is an investment in the long-term political and economic viability of the host; the IOC cannot afford to discount pragmatic factors when determining this type of host.

Chief among these pragmatic concerns are a country's economic status, political stability, and carrying capacity. Achieving such standards is critical in ensuring the safety of all those involved and leaving the host country in a desirable situation. Principally measured by GDP and GDP per capita, the economic welfare of a potential site must indicate a thriving economy. Equally important is the functionality of a host's government, determined by a country's prevalence of violence and terrorism, as well as its citizens' satisfaction with the operations of the state. As people from all over the world will be spending time in the country, there must be minimal to no risk of danger or revolution. The ability of the candidate to adequately manage the great influx of visitors must not be ignored either. If a country's population is already high, then it's likely that infrastructure is already in place to support a flood of tourists. This makes a host less reliant on time and resources spent on developing infrastructure that would lose utility upon the Games' conclusion. Population also acts as a qualitative determinant of a country's importance in a region. Bigger nations tend to have a larger influence on regional culture and economics, and thus demand a bigger stage.

These parameters serve as guidelines for evaluating the potential permanent homes for the Olympic Games. In this process, we begin broadly by using GDP per capita (data from The World Bank) and a political stability index (data from The World Bank) to determine viable countries. From there, looking at them as one entity, we discover the most populated cities to ultimately make a conclusion as to competent hosts as cities for permanent Olympics stadiums.

| Economy | | Political Stability | | | |
|---------------|----------------|---------------------|-------------------|--------------|---------------------|
| | GDP per capita | | GDP (\$ Millions) | | Political Stability |
| Africa | | | | | |
| Botswana | \$ 7,123 | Nigeria | \$ 568,508 | Zambia | 0.21 |
| Libya | \$ 6,573 | South Africa | \$ 350,085 | South Africa | -0.08 |
| South Africa | \$ 6,483 | Egypt | \$ 286,538 | Rwanda | -0.10 |
| Asia | | | | | |
| Japan | \$ 36,194 | China | \$ 10,354,832 | Macao | 1.12 |
| South Korea | \$ 27,971 | Japan | \$ 4,601,461 | Hong Kong | 1.13 |
| China | \$ 7,590 | India | \$ 2,048,517 | Japan | 1.02 |
| Europe | | | | | |

¹⁹ <http://databank.worldbank.org/data/>

²⁰ <http://info.worldbank.org/governance/wgi/index.aspx#reports>

| | | | | | | | |
|----------------------|----|--------|------------------|----|------------|---------------|------|
| Norway | \$ | 97,300 | Germany | \$ | 3,868,291 | Sweden | 1.07 |
| Switzerland | \$ | 85,617 | United Kingdom | \$ | 2,988,893 | Netherlands | 1.05 |
| Denmark | \$ | 60,718 | France | \$ | 2,829,192 | Germany | 0.93 |
| North America | | | | | | | |
| United States | \$ | 54,629 | United States | \$ | 17,419,000 | Barbados | 1.35 |
| Canada | \$ | 50,231 | Canada | \$ | 1,785,387 | Canada | 1.18 |
| Mexico | \$ | 10,415 | Mexico | \$ | 1,294,690 | United States | 0.62 |
| Oceania | | | | | | | |
| Australia | \$ | 61,980 | Australia | \$ | 1,454,675 | New Zealand | 1.49 |
| Singapore | \$ | 56,284 | New Zealand | \$ | 199,997 | Samoa | 1.15 |
| New Zealand | \$ | 44,342 | Papua New Guinea | \$ | 16,929 | Australia | 1.08 |
| South America | | | | | | | |
| Uruguay | \$ | 16,807 | Argentina | \$ | 537,660 | Uruguay | 1.00 |
| Chile | \$ | 14,528 | Chile | \$ | 258,062 | Chile | 0.49 |
| Argentina | \$ | 12,510 | Uruguay | \$ | 57,471 | Argentina | 0.08 |

In an effort to minimize the economic costs of hosting the Olympic Games without failing to ignore the welfare of those attending and participating, the regional set-up of venues should be done continent-wise. Our continent-by-continent recap results in the following conclusions:

- At this point in time, South Africa appears to be the only country in the continent stable enough to host the Olympics. All other places in Africa are too risky: the rest of the continent's high political instability makes it very unreliable. Johannesburg in particular has already proven its worth as a stadium location for the success it gathered from hosting the 2010 World Cup, hopefully some of the pre-existing infrastructure could minimize future construction costs.
- In Asia, Beijing appears to be the strongest candidate. Massive infrastructure investments already made for the 2008 Summer Olympics would serve as a vital initial investment, and would hopefully save the aforementioned "Bird's Nest" from abandonment.
- With no lack of developed countries and international tourist destinations, Europe provides a wealth of potential hosts. London and Barcelona have proved that they are capable of handling the modern Olympic chaos and would be able to provide pre-existing infrastructure for the cause. Berlin, Madrid, Vienna, and Rome all boast impressive tourism credentials along with stable governments. Of those, Berlin may have the strongest resume – its public transportation is exceptional, and Germany boasts the top-rated government efficiency outside of Scandinavia to complement the region's largest economy.
- For the North American venue, Los Angeles appears to be the odds-on favorite given its excellent track record in its Olympic efficiency, having hosted two prior summer cycles with positive profit margins. If the famed Los Angeles traffic situation proves to be formidable, Vancouver, Miami, and Atlanta are also viable options.
- As the region's largest economic power by a large margin, Australia seems to be the obvious choice of host in Oceania. Given its recent hosting experience, Sydney appears to be the leading domestic candidate to play host, although Melbourne could also present a strong case as the second largest city in the region.

- The reversal of seasons in South America presents a unique predicament – the “summer” months when the Games happen occur during the Latin American winter. Although Buenos Aires in Argentina has a strong economic and political case (relative to the rest of the region) for hosting the Games, it can be as cold as 40 degrees Fahrenheit in August/July, which is not an ideal temperature for Olympic events. If Rio can prove to be an adequate host this summer and quell nagging political concerns, then it may be the most viable host.

The selection process of choosing the continent to host a certain year’s Olympic Games is contingent on cyclical rotation. Every four years the location changes to the next geographically clock-wise continent. Therefore, the rotation is (starting from an arbitrary continent) North America —> Europe —> Asia —> Oceania —> Africa —> South America when the cycle repeats again. It’s important to note that this still leaves a 24-year gap in between Olympic cycles, which is still a daunting amount of time. After all, it took less than ten years for Athenian Olympic infrastructure to become decrepit. Our hope is that countries will capitalize on the stability of the system to prevent their stadiums from disintegrating and to inspire a confident vision for future Games.

Conclusion

This paper has taken a long look at the problems associated with the current Olympics, isolating the demand for the spectacular over the affordable as the root cause of Olympic-sized waste. The IOC’s infatuation with magnificent 100,000-capacity stadiums has been helping the White Elephant population soar and has saddled hosts with loads of debt. To combat this, we’ve posted a radical but economically effective solution that has the potential to make the Olympics efficient once again. There is one major problem with this mode of thought though: The Olympic Games are not a business; they are an investment in national pride and exposure. For those honored to host it, it is a chance to bring a population together and build upon abstract ideas of nationalism, unity, and nostalgia that can’t be quantified on a balance sheet. No voice of economic reason or business-like practicality is ever going to overwhelm the power of those feelings.

At the same time, the current system is in a state where something has to give. The permanent-host system is unlikely to ever get adopted, and the difficulty of pricing nationalism renders it unclear if it ever should, but that cannot possibly justify the current way of doing things. The super-stadium, for all of its decadence, has become a toxic investment. All the same, the IOC has encouraged the buildings to be bigger, the spectacles to be grander, and the costs to be more and more unfathomable. At best, this is myopic. At worst, it is purposefully neglectful.

For every bit of pride that an Athenian may feel at being the center of the world for three short weeks, there is an equal feeling of disgust for wasting billions of dollars just in time for the world to experience a debt crisis. The IOC has happily fed this fire in years past, but the recent lack of demand for future hosting rights suggests that there is a light at the end of the tunnel. At the very least, the hope is that rationality will win out in the long run, and mega-stadiums will be replaced with pre-existing ones. They might not have the grandeur that the Bird’s Nest inspires, but they will get the job done at a much lower cost, and it would give developing countries the hope of hosting in the future. The answer does not stem exclusively from the head or the heart but from a mixture of the two, and the world would be better with it.