



INDONESIA TO HOST THE FIFA WORLD CUP? A COST-BENEFIT ANALYSIS

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ABSTRACT

Numerous studies have shown that hosting the FIFA World Cup potentially creates positive economic benefits although it costs a substantial amount of money. The biggest cost comes from infrastructure needs which are highly correlated with a country's geographical characteristics. This research evaluates the feasibility of hosting the FIFA World Cup in Indonesia given its geographical characteristics. Using data compiled from various studies, estimation was conducted using Cost-Benefit Analysis. Results show that hosting the FIFA World Cup is not financially profitable for Indonesia. However, after accounting for potential social benefits, economic analysis suggested that in the short run, it potentially boosts tourism and income of related sectors. In the long run, benefits include acquiring top notch stadiums, provision of high quality infrastructure, training opportunities for talented young players, and exposure of Indonesia's tourist attractions. These social benefits may outweigh the financial loss; making the hosting project economically viable.

Keywords: *Cost-Benefit Analysis (CBA), Feasibility, Geographical Characteristic, Infrastructure Needs*

1. INTRODUCTION

Modern day sports have undergone a substantial transformation for more than 40 years. Monetary values put on the activity have redefined sports not only as physical activities to maintain health but also an industry which involves many businesses (Rosen and Sanderson 2000; Horne 2004; Gásquez and Royuela 2014).

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These businesses produce all sorts of goods and services related to its main output i.e. the sports events or matches (Mabugu & Mohamed, 2008). In the context of professional team sports, clubs act as firms. Corresponding to machineries and structures, stadiums serve as capital for sports clubs while athletes serve as labour (Bulley, 2002). Moreover, clubs invest and manage athletes the way they do their assets since they can be sold at an increased value and become a source of income for clubs (BBC 2009; Wang 2010).

At a macro level, both regular and mega sporting events facilitate/generate multi-million-dollar worth of economic benefits. In the US, regular sporting events such as National Football League (NFL), Major League Baseball (MLB), and National Collegiate Athletic Association (NCAA) typically create \$75 million even up to \$400 million in economic benefits. International mega sporting events such as the Olympics and the FIFA World Cup have generated even bigger benefits (Matheson, 2006). As examples, the 1988 Summer Olympics in Seoul created US \$ 1.6 billion worth of economic benefits, one of which was 336,000 additional employments. In 1996, England obtained £ 120 million in economic benefits from visitors alone by hosting The Euro Football Championship. The 2010 FIFA World Cup in South Africa generated R21.3 billion (approximately \$1.79 billion) worth of economic benefits in forms of job creations and event revenue as well as R163 millions (\pm \$13.71 million) worth of additional GDP (Kim *et al.*, 1989; referenced by Mabugu and Mohamed 2008; Horne 2004; Matheson 2006).

The impressive amount of economic value created by a sport event is highly correlated with its popularity, i.e. the number of fans (Sauter, Poltrack, & Allen, 2012). Based on estimated number of fans, soccer/football tops the most popular sports list globally– above cricket and field hockey – with more than 1 billion enthusiasts (Ludden 2017; Most Popular Sports n.d.). This statement is confirmed by Gásquez who stated that every FIFA World Cup event is being watched by more than one billion viewers worldwide (Gásquez & Royuela, 2014). Being the number one popular sports, football events' ability to bring the commercial trinity of sponsors, advertisers, and media is unquestionable (Horne & Manzenreiter, 2004). As a comparison, the 1999 Rugby World Cup in Wales generated £40 million worth of benefits to its host – Wales while a regional level football competition such as 1996 Euro Football Championship allowed England to obtain £ 120 million in economic benefits. It can then be inferred that hosting a popular sport is potentially more beneficial than hosting a less known sport.

Although handsome amounts of benefits are reported, mega sporting events also cost a lot of money. For instance, France earned 8 billion Euros by hosting The Rugby World Cup in 2007 but the event costed about \$137 million Euros. The 2012 London Summer Olympics costed around £ 3.7 billion or \$5.7 billion (Barget & Gouguet, 2010). The 2010 FIFA World Cup in South Africa took up a budget of approximately 42.5 trillion Rupiahs or \$3.2 billion. The most recent one, the 2014 FIFA World Cup in Brazil costed almost 165 trillion Rupiahs or \$14 billion; almost three times as much as the one in South Africa or in Germany (Detik News, 2014). The significant amount of money is due to the substantial investment needed to build various relevant infrastructures; namely stadiums, roads, train stations, docks and airports (see, among others, Mabugu and Mohamed 2008; Szymanski 2011). Considering the sizeable expenditure of the event, the government is always directly involved in the hosting process (Mabugu & Mohamed, 2008).

Indonesia has not yet tried to bid for a hosting opportunity despite football's popularity and net economic benefits it potentially generates. The government is reportedly reluctant to dedicate such a tremendous financial support since they are doubtful regarding net

and long term benefits of the project (BBC Sport, 2010). This reluctance is not unjustified. Although the sum of financial and social costs of hosting the FIFA World Cup is proven to be enormous, some studies show that (positive) economic impacts generated are neither significant nor persistent. It has been found that direct contributions of hosting the World Cup on improving national income in subsequent years are inconclusive (Manzenreiter, 2008). Net benefits from World Cup related tourism are lower than commonly believed since tourists who are not football fanatics are discouraged from coming to a particular country because they don't want to be associated with the event nor be inconvenienced by it. Hence, there is revenue forgone from these tourists which deduct the net benefit of hosting the World Cup (Szymanski, 2011). It was also found that the multiplier effect on job creation induced by construction process was vague since it will stop once construction process is completed and the event has started (Feddersen, Grötzingler and Maennig 2009; Gruben, Moss and Moss 2012).

Notwithstanding the benefits and losses discussed above, this article investigates the overall feasibility of hosting the FIFA World Cup in Indonesia. The substantial novelty of this research lies in the fact that Indonesia's specific geographical characteristics are central to the feasibility study and its result. The geographical characteristics determine the relevant types of infrastructures and consequently may alter the project's feasibility. In the following sections we review the literature about hosting the FIFA World Cup, assess data availability and explain the method chosen. Afterwards, the estimation result is presented and discussed. Some closing remarks shall conclude this article.

2. THE CASE OF HOSTING THE FIFA WORLD CUP

The FIFA World Cup is a mega sporting event. It is defined as a sporting event which takes place in a previously determined time and duration, involves many countries, numerous participants, and requires a significant amount of money to organize (Andersson, Armbrecht, & Lundberg, 2008). Many countries are interested in hosting The World Cup because it provides entertainment, attracts media coverage, and potentially brings about return from massive investment expenditure being poured in (Lakshman 2008; Maennig and Du Plessis 2007).

Every time the FIFA World Cup takes place it is almost always that the host country needs to upgrade or even build new transportation infrastructures which include roads, airports, or subways (Szymanski 2011; Lakshman 2008; Mabugu and Mohamed 2008). They are costly yet unavoidable expenses due to its relevance to spatial interconnectivity since the main purpose of transportation is to facilitate a swift and efficient movement of passengers and freight (Rodrigue, Comtois, & Slack, 2013, p. 1). In the context of hosting The World Cup, different transportation modes are needed at different times. During the preparation stage massive construction materials are being hauled from and to numerous places across the country. When the event takes place thousands of spectators are being transported daily.

Geographical characteristics determine the proper transportation modes and infrastructure required. Since island countries are dominated by water they have more rivers, lakes, and seas available (Rodrigue, Comtois, & Slack, 2013, p. 9). Consequently, unlike their continental counterparts where FIFA World Cup is usually held, island countries like Indonesia will rely more on maritime infrastructure than on roads or railways. The economies of scale of maritime transportation are found to be superior to road transport given size and weight consideration. It is the main reason why maritime transportation is predominantly used in global freight distribution and in island states (Jacobs, 2012). Additionally, physical

properties of water provide some sort of buoyancy to limit frictions of the freight (Kementerian Perekonomian Indonesia, 2011; Rodrigue, Comtois and Slack 2013, 23, 96). In the context of the FIFA World Cup, maritime transportation is the best mode to haul heavy and bulky materials such as rocks, steel, and concrete across the country during the preparation of a mega sports event (Rodrigue, Comtois and Slack 2013, 31, 93; Heaver N.d).

The often sparsely situated nature of islands comprising maritime countries calls for comprehensive interconnectivity. It requires an assortment of transportation modes being perfectly integrated. Additional to maritime infrastructure, roads, railways are still required to serve the role of connecting ports with factories and then factories with markets due to their exceptional penetration lines to hinterlands (Rodrigue, Comtois, & Slack, 2013, p. 93). By contrast, due to their expensive maintenance costs road transport systems are more suitable for smaller and lighter freights such as transporting final products to markets and/or transporting passengers within a short distance (Rodrigue, Comtois, & Slack, 2013, p. 91). In other words, distributing FIFA merchandises and transporting football spectators to nearby locations can be efficiently done on roads. As a supporting example, de Paula (2014) reported that in alignment with the 2010 FIFA World Cup Brazil underwent subway projects on top of the BRT (Bus Rapid Transit) which could carry up to 30,000 passengers an hour in São Paolo alone (de Paula, <https://www.boell.de/en/2016/07/26/2014-world-cup-brazil-its-legacy-and-challenges>, 2016). In Rio de Janeiro the BRT system was even connected to its international airport and the Maracanã Stadium. South Africa built BRT systems in both Johannesburg and Tshwane in preparation of the 2010 FIFA World Cup. Gauteng, the province where Pretoria and Johannesburg are situated, had even integrated BRT into its railway system – The Gautrain – to further facilitate movements during preparation and the event itself (Alexander, 2007).

FIFA World Cup attracts people from around the globe like no other which creates a spike in the number of travellers to, from, or across the country host circa the time of the event. The number is so high that a country host need to provide as many travelling options as possible to facilitate football fans. In preparation to host the 2014 World Cup, Brazil upgraded thirty-one of its airports to accommodate up to 600,000 foreign and 6 million local expected tourists (Genasci, 2012). More and better airports were crucial to quickly transport multitude of fans across all match venues in a relatively short period of time. This is true since aircrafts can carry up to 500 passengers each time to both adjacent and distant locations (Rodrigue, Comtois, & Slack, 2013, p. 101).

Hosting the FIFA World Cup is also expensive because FIFA demands high class sports infrastructure (Mabugu and Mohamed 2008; Agha and Taks 2015). To satisfy FIFA's standards, a stadium used for a World Cup event must contain at least 40,000 spectators. At least \$435 million was required to build 12 stadiums for the 2014 FIFA World Cup in Brazil (Panja, 2013). Japan spent roughly ¥570 billion (± \$4.69 billion) to finance the stadiums used during the 2002 World Cup (Manzenreiter, 2008). Costs of sports infrastructure can also come from climatic condition(s) of the host country. Qatar is preparing an amplitude compensation for the engineers who build state of the art stadiums which can stay cool during summer when it can get to above 45 centigrade (Szymanski, 2011). On top of it, FIFA also requires hosts to provide related non-sport infrastructures such as commercial display, exclusion zones, FIFA Fan Parks, and FIFA Partner Clubs (Mabugu & Mohamed, 2008).

Despite tremendous spending required to hosting the FIFA World Cup, many countries still interested in hosting The World Cup. In the short run, a sports event of that calibre creates business opportunities, increases national income, creates jobs, boosts tourism

and provides an important positive impact for businesses and the society (Dolles and Söderman 2008; Agha and Taks 2015). By hosting the 2010 FIFA World Cup South Africa generated R21.3 billion (\pm \$1.79 billion) worth of economic benefits with R12.7 billion (\pm \$1.06 billion) of it was direct spending. It created 159,000 jobs and contributed R51.1 billion (\pm \$4.28 billions) to its 2006-2010 GDP. Even a relatively small event such as The Euro Football Championship in 1996 attracted 280,000 spectators, resulted in a positive return in ticket sales, and brought about £ 120 million in economic benefits for England – the host (Kim et al. 1989; referenced by Mabugu and Mohamed 2008; Mabugu and Mohamed 2008). In the long run, a mega sporting event expands investment and capital stock. It was especially due to infrastructure provisions, promotes regional economic revitalization, and helps build the host's regional or international image (Andersson, Armbrecht and Lundberg 2008; Manzenreiter 2008). Moreover, hosting a mega sports event was also reported to be correlated with higher economic growth (Gásquez & Royuela, 2014).

The tremendous value of hosting the FIFA World Cup is created by backward and forward linkages, both directly and indirectly. Directly, it affects industries such as sporting gears, merchandising, restaurants, hotels, transportation, broadcasting, security service, and entertainment. Indirectly, industries such as banking, event organizing, even talent scouting flourish to sustain the gigantic-scale football celebration (Blair, 1997). From a regional perspective, impacts of hosting the FIFA World Cup accrue not only to a particular region where the matches are taking place. It has an inter-regional spill over effect since many of the resources related to the event are not supplied locally (Andersson, Armbrecht and Lundberg 2008; Mabugu and Mohamed 2008).

According to Andersson et.al (2008) empirical studies on hosting the FIFA World Cup had been done using different methods depending on specific aspects being investigated. Studies regarding impacts of FIFA World Cup are usually conducted using Input-Output Analysis (IOA), Cost and Benefit Analysis (CBA), or Computable General Equilibrium (CGE). The underlying difference between these methods is the technique used in their analysis. CGE and IOA use financial approach while CBA uses economic approach (Andersson, Armbrecht, & Lundberg, 2008). CBA evaluate expenses from economic efficiency. It not only looks at positive figures in the balance sheet or the value generated as evident in the GDP but also calculates the net social welfare generated by the activity or project. A project might be beneficial for the stakeholders, e.g. generates high profits but has an adverse impact for the society, e.g. emits excessive pollution. For example, the 2007 Rugby World Cup held in France generated a total social benefit of 212,694,461 €. After accounting for social costs such as costs for the community and nuisances caused, the Cost-Benefit Analysis reported a result that the Rugby World Cup in 2007 generated a net gain of only 113.235.781 € (Barget & Gouguet, 2010). On the other hand, a perfect and complete CBA might be difficult, if not impossible, to calculate since it calls for calculations of opportunity costs of employed resources (Perkins 1994; Andersson, Armbrecht and Lundberg 2008; Brent 2009). More current attempts try to complement the above methods using Balanced Scorecard (Kaplan & Norton, 1996 as referenced by (Dolles & Söderman, 2008). It covers aspects such as economic impact, sports development, media and sponsor evaluation, and place marketing effects (Gratton et.al, 2006 as referenced by Dolles and Söderman 2008).

3. ESTIMATION METHOD

Hosting the FIFA World Cup brings social benefits as well as the associated social costs. Consequently, estimation method(s) which rely solely on the ground of financial consideration such as CGE or IOA will not suffice. On the other hand, a comprehensive method such as Balance Scorecard approach demands more detailed data that is unavailable for the case of Indonesia. Hence, Cost-Benefit Analysis (CBA) is the most suitable method to measure the feasibility of hosting the FIFA World Cup in Indonesia.

The Cost and Benefit Analysis is performed through calculating Net Present Value (NPV) and Internal Rate of Returns (IRR). NPV calculates net benefit of a project in terms of today's money. A project is deemed feasible if the value of NPV is greater than zero and the calculated IRR is above the prevailing interest rate (Perkins, 1994). Following equations specify formulas for NPV and IRR:

$$NPV = \sum_{t=1}^n \frac{B_t - C_t}{(1 - i)^t}$$

where

- B_t = benefits of project at year t
- C_t = costs of project at year t
- i = interest rate
- n = project duration

$$IRR = \sum_{t=1}^n \frac{B_t - C_t}{(1 - r^*)^t}$$

where

- B_t = benefits of project at year t
- C_t = costs of project at year t
- r^* = interest rate
- n = project duration

CBA is conducted before a project is taking place. Hence, following Barget & Gouguet (2010) as well as Mabugu and Mohamed (2008) this article presents an *ex ante* study. Data used are obtained from numerous reports and coverage regarding previous hosts' experiences such as Brazil, Japan, Korea, and South Africa. As an example, the amount of grants to be received from FIFA is based on Japan's experience in hosting the 2002 World Cup which was reported by Manzenreiter (2008). The amount was then adjusted for inflation to make it more relevant. Each variable's data were obtained in a similar way in order to provide enough information for estimation. Investigated variables are presented in Table 1 below.

Table 1: Costs and Benefits Variables of Hosting the FIFA World Cup (Multiple reports and publications)

Benefit	Cost
Financial Benefit	Financial Cost
FIFA grant	Asset Cost
Ticket revenues	Bidding
Sponsorship	Sporting infrastructures
Commercial revenues	Security provision
Tourist expenditure	Advertisement expenses

Income from sports infrastructures (rent after the event)	Supporting infrastructures (roads, railways, train stations, airports, docks) Operational Cost Sporting infrastructure maintenance
Social Benefit	Social Cost
Sports infrastructure availability	Product value forgone
Supporting infrastructure availability	Congestion
Domestic athletes' improvement	
Job opportunities	
Increase in national/ regional income	

Variables considered as financial benefits and financial costs are variables relevant only to those directly involved in the event. These are the variables included to calculate NPV and IRR. Variables considered as social benefits and social costs are variables accrued to the whole society; whether they are directly involved with the event or not. These variables are discussed to complement NPV and IRR calculations and make the Cost-Benefit Analysis complete.

Every feasibility study requires a specified project life span; the duration in which the benefit of a particular project can still be realised. In most cases involving infrastructure, it is the length of time until the next improvement or upgrade is necessary. In the case of FIFA World Cup, the life span of stadiums is the most reasonable measurement of the project's duration since it is the most crucial infrastructure required. Gelora Bung Karno is Indonesia's most prominent stadium with an 88.000 spectator capacity. It was built in 1960 and was majorly renovated and upgraded in 2013. It was comparable to the Los Angeles' Olympic stadium which was a fifty-year old structure when it was being renovated in preparation for the 1984 Summer Olympics in Los Angeles (Deng & Poon, 2013). Given the above description, this study considers 53 years as the project duration. The first 8 years will be the preparation stage. The remaining 45 years will be the duration within which economic benefits can still be realized. The discount factor used in this study is 7.5%. The lower limit was 5% and the upper limit was 10%.

4. RESULTS AND DISCUSSION

Financial analysis using NPV and IRR was conducted with two scenarios to be analysed. The first scenario waives Indonesia's specific infrastructure needs as an archipelago. The result of this scenario is summarized in the second and third column of Table 2. Estimation under this scenario suggests that the project is not financially feasible due to its negative NPV and the IRR (-19%) is lower than prevailing interest rates. The second scenario realizes Indonesia's needs for different infrastructure due to its geographical characteristics. The result of the financial analysis of this scenario is presented in the fourth and fifth column of Table 2. Estimation under this scenario still recommends Indonesia against hosting the FIFA World Cup.

*Table 2: NPV and IRR Estimation of Hosting the FIFA World Cup
(Authors' estimation)*

Interest Rates (%)	First Scenario		Second Scenario		Third Scenario	
	NPV (billion USD)	IRR (%)	NPV (billion USD)	IRR (%)	NPV (billion USD)	IRR (%)
10	-5,412	-19%	-5,772	-19%	8,088	16
7.5	-5,993	-19%	-6,392	-19%	10,167	16
5	-6,677	-19%	-7,121	-19%	12,971	16

Two calculations above show that hosting FIFA World Cup is not financially viable for Indonesia. Since data used for calculations were reports on previous hosts' experience, it is indicative that previous hosts such as Brazil, Japan, Korea, and South Africa – regardless of their geographical characteristics – did not perform well on their balance sheets either. This raises a question on the rationale behind any country wanting to host FIFA World Cup or any mega sports event for that matter.

Infrastructures are used even long after the event concludes and it remains facilitating the economy. We then argue that infrastructure provision should be taken out from operational cost. In fact, it should not be considered cost at all but an investment instead. This notion is consistent with findings by Manzenreiter (2008) and Szymanski (2011). The idea to take out infrastructure provision from feasibility estimation is manifested in our third scenario, presented in the last two columns of Table 2. Undoubtedly, the third scenario confirms Szymanski's notion about viability of hosting if infrastructure provision is taken out from the CBA calculation.

Accounting for social dimensions to complement the financial analysis is the very definition of economic analysis. High social benefits may cause a particular project to be economically feasible although financial analysis showed a negative result. Barget & Gouguet (2010) supported this notion by showing that after applying CBA, the net gain of 2007 Rugby World Cup was positive for France only after accounting for both total social benefit and social costs. In the context of the FIFA World Cup, an increase in regional and national income, additional job opportunities, the provision of sports and supporting infrastructure as well as exposure of talented young Indonesian athletes create long term benefits for the society as a whole. This is arguably the main consideration for a country to host the World Cup instead of how much money earned from the event (Andersson, Armbrecht and Lundberg 2008; Dolles and Söderman 2008; Manzenreiter 2008).

As suggested by Dembek and Włoch (2014) the main reason for hosting a mega sports event is the utility it creates instead of the profits it generates. More specifically, it is anchored at the urge for pride. Sometimes it is also motivated by an effort of exposing a country's culture to the world, putting a country on the world map, as well as presenting the symbol of economic and political restoration. Dembek argued that hosting UEFA Euro 2012 championship was proven effective in transforming Poland's image from traditional, fervently Catholic farmers into modern, aspiring European economy; a profitable investment destination. It is indicative that hosting the FIFA World Cup is not merely an attempt to generate income.

Other social benefits are easily recognized but not as easily quantified. A few examples are the provision of top notch stadiums and infrastructure. After the event concludes, the massive, world-class infrastructures will still be in place for many years to come (Deng & Poon, 2013). Stadiums built can then be used for other domestic sports activities or rented out to be home bases of local football teams which can facilitate the effort to improve local football teams and athletes. These stadiums can also be used for future sports events such as ASEAN Games, Sea Games, or PON – the domestic multi sports event. Each of these sports events creates additional benefits and expands society's well-being even further. Moreover, the world class stadiums are definitely built with impeccable specifications. They will have longer life span and require less maintenance which improves long term efficiency. Constructions of superior supporting infrastructures such as roads, docks, and airports should be considered as a legacy which foster economic activities, and eventually enhance the nation's economic performance in the long term (Dolles and Söderman 2008; Mabugu and Mohamed 2008; Deng and Poon 2013). Indonesia has displayed spatial disparity for decades. Unlike previous host countries, the benefit of improved infrastructure for Indonesia goes beyond mere economic growth; it allows promotion of equality as well.

Some of the non-sport related infrastructures built can also be used for the benefit of local people. For instance, Agha and Taks (2015) argued that when the World Cup is taking place temporary accommodation should be provided for participating athletes. If Indonesia is to host the World Cup, temporary athlete settlements can be sold to local people once the event concludes; it shall help address the issue of housing shortage. As a country with more than 250 million people to date, any action to resolve the housing backlog undoubtedly increases society's welfare in Indonesia.

Motivated by Dolles and Söderman (2008), another social benefit to be considered when considering hosting a mega sports event is the benefit of Indonesian athletes' training opportunity and international exposure. Football events attract talent scouts who are looking for fresh talents to be exposed and eventually drafted to professional football clubs. As an example, Evan Dimas' stunning performance in Indonesia's U-23 national team rewards him a training invitation from a Spanish Segunda Division club, Unio Esportiva Llagostera. An event as gigantic as The World Cup gives even more exposure through which it is hoped that these athletes can obtain better training to further enhance their skills. The long term benefit created is the opportunity for Indonesia to have a world class national football team which is a priceless outcome for a country with such high interest in football.

FIFA World Cup also facilitates tourism exposure. Hosting the FIFA World Cup allows people who initially come to watch the event to also have a short vacation and visit these tourist attractions. Exposure of previously less or even unknown destinations allow more tourists to come to Indonesia. As a consequence, local economic activities will accelerate and income will increase. This argument is also empirically supported by Horne & Manzenreiter (2004), Dolles (2008), Manzenreiter (2008), and Gruben et.al (2012).

Previous hosts have unanimously witnessed augmented economic growth by hosting the FIFA World Cup. Accounting for structural differences, we grouped hosts which are categorized as developing countries and calculated their average growth. We obtained that on average, they realized additional 2.3% additional economic growth by hosting the FIFA World Cup (Horne and Manzenreiter 2004; Lakshman 2008). On top of it, empirical studies also showed that multiplier effects allow additional job creation as a result of investment spending correlated with a mega sports event. In 1988, South Korea realized additional

336,000 jobs by hosting the Summer Olympics. South Africa created 159,000 additional jobs by hosting the 2010 FIFA World Cup (Kim et al. 1989 in Mabugu and Mohamed 2008; Mabugu and Mohamed 2008). While precise figures of expected growth rate and job opportunities creation need more rigorous calculations, the potentially increased growth is certainly appealing. This is true since Indonesia's economic growth has been rather static at around 5% per annum for the last 10 years (BPS, 2015).

Despite massive social benefit potentials described above, social costs pertinent to the event are not negligible either. First, there is the social cost of land use conversion. It is the loss of production value accrues to landowners due to land conversions from their current use to World Cup related use. A sports event of this magnitude requires gigantic stadiums which call for humongous pieces of land. The demand for land conversion also comes from needs for wider roads, bigger airports, and more complex railway system. Land converted from agriculture implies loss in agricultural output as well as loss of jobs for farmers. Land converted from housing brings costs of land acquisition as well as inconvenience cost of relocating home owners.

The second social cost is induced by traffic congestion created by and related to the World Cup event. During preparation time, there will be massive constructions of sports and supporting infrastructures. In Indonesia, the FIFA World Cup will be more likely to be held in major cities which unfortunately suffer from limited and inferior infrastructure provision. The presence of heavy machineries used in constructions will definitely cause congestions. Congestions may still happen during the event, especially at places where match venues are located. Congestion also drives up pollution which, in case of Indonesia, is already alarmingly high. These social and environmental concerns are shared by previous research such as Mabugu and Szymanski (Mabugu and Mohamed 2008; (Szymanski, 2011).

5. CONCLUSION

This study aims at evaluating the feasibility of hosting the FIFA World Cup in Indonesia given its geographical characteristics. Using the cost-benefit analysis, the project was found to be not financially feasible. However, treating infrastructure provision as an investment which will increase long term economic efficiency instead of operational cost substantially alters the project's viability. Economic analysis also suggested that the project has numerous social benefits which will increase the society's overall well-being.

It has been confirmed once again that the decision to host a mega sports event is not fundamentally geared towards generating profits. Rather, it is motivated by the generated utility. Profits earned become secondary compared to how satisfied people are with the event and every preparation stage it entails. When the utility created is high then the project is deemed valuable which explains why decision makers are willing to pay such an enormous amount of money for the event to take place. If Indonesia is to host the FIFA World Cup, it needs to be understood that the decision is predominantly based on attempts of enhancing utility.

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