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A WORKING PAPER OF THE DEPARTMENT OF ECONOMICS AND THE
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ABSTRACT

The FIFA World Cup hosted in South Africa during June/July 2010 was a much anticipated sport spectacle, but also widely expected to yield lasting and considerable economic benefits for the host country. Optimistic scenarios have encouraged these expectations, but there have also been cautionary studies based on the economic impact of earlier mega sport events. There are three dimensions to the potential contribution of a mega sport event to the local economy, (i) the preparatory activity such as the construction of stadia, (ii) the event itself and the impact of large numbers of tourists and (iii) the long term impact of the tournament due to a changed perception of the host economy and the potential for trade, investment and tourism. This paper provides an early assessment of the tournament's known impact along these dimensions and the results are sobering: the tournament made only a small contribution to the economy in the preparatory phase, though that was fortuitously countercyclical. Further the immediate impact of the event on the economy, around 0.1% of GDP, was much lower than widely expected and reported. It is the longer run implications of hosting a successful tournament that holds more promise for sizeable benefits, though the outcome remains uncertain on that dimension and contingent on other factors that might undermine the favourable impression created by the tournament.

Keywords: FIFA world cup, Mega sport events, Sport and economics
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1. Introduction

World Cup 2010 kicked off amid extraordinary expectations: that the home team would excel, that the tournament would be a memorable spectacle and advertise the unique potential of its South African hosts, and that the tournament would bring substantial economic benefits. It is time to measure the evidence: the home team did well relative to reasonable expectations; the tournament was a logistical success, much enjoyed by hosts and guests alike and favourably received by the world's media; and it is the purpose of this paper to measure the likely economic impact.

This is by necessity a preliminary exercise as the relevant data will take months to compile (and even years to finalise), and even then a precise identification of the tournament's contribution will not be possible. Having said that, it is already possible to identify the economic impact in broad outlines.

The economic impact of a mega sport event like the Fédération Internationale de Football Association (FIFA) World Cup (or the Olympic Games) has three time dimensions: first, there is the economic activity associated with the tournament preparation, second activity associated with the event itself, and finally there is the event's longer run legacy. Where the preparations are concerned the tournament accelerated the upgrade of the national public transport system and added a number of purpose-built structures such as stadia. Private sector accommodation also expanded. During the event the hospitality and related services sectors enjoyed heavy demand (in a traditionally quiet tourist season in South Africa) and there are intangible benefits from experiencing the tournament. In the longer run the economy stands to benefit from improved confidence at home and an enhanced image internationally following very extensive media coverage as well as the impression made on thousands of visiting fans. These benefits and the costs incurred in the attempt to secure them are explored more fully below.

2. The World Cup market

The peculiar division of profits and costs associated with the FIFA World Cup cannot be understood without a brief discussion of the institutional arrangements that define the market for the world's largest mega sport event (Maennig and Du Plessis, 2007). Under present arrangements (the football federations of) potential host countries join a fiercely competitive bidding process to buy the right to host a future tournament. FIFA is a monopolist seller in this market and unsurprisingly extracts the bulk of the associated profit.

The price paid by the winning host is a contract that stipulates the extensive infrastructure developments required by FIFA⁴, tax privileges for FIFA as well as extensive control over media and advertising associated with the tournament. There is nothing untoward in this: potential hosts are aware of these requirements when they submit their bids, though the public in the host country rarely are. In South Africa, as in Germany during 2006, there has been much dissatisfaction as the various agreements with FIFA have come to light (for example, Beeld, 23 June 2010; Butler, 2010).

A tentative estimate of FIFA's revenues and expenditure for WC2010 are as follows: the expected revenue (largely from television rights and sponsorships) is expected to be US\$3.3 billion. Against this FIFA is expected to spend about US\$1.2 billion, which will include US\$ 700 million to the Local Organising Committee (LOC) in South Africa and financial support for the 32 participating teams as well as prize money. A further US\$ 1 billion will be spent on soccer development and to aid national football associations amongst the other projects undertaken by FIFA (Blitz, 2010a).

The direct profit of the tournament is therefore expected to be US 2.1 billion, though FIFA prefers to subtract non-tournament related expenses of US1 billion as well, to arrive at an expected profit of US\$1.1 billion. It is not yet clear whether the LOC will show a profit on the tournament and FIFA has agreed to a US\$80 million guarantee for the LOC, which should insure them against a potential small loss. That was the same amount as the surplus earned by the German LOC in 2006 (Maennig and Du Plessis, 2007).

3. Costs and expected benefits from the tournament

Regardless of the likely small surplus for the LOC one might hope for broader benefits to the economy along three dimensions: from the preparation for the tournament, from the event itself and from a longer-run legacy. South African President Jacob Zuma recently emphasised all three dimensions when he proclaimed the economic success of the tournament with the hyperbole that "South Africa will never be the same again after this 2010 World Cup" (quoted in Mnyandu, 2010). His optimistic assessment was informed by the calculations of consultants Grant Thornton who have estimated a total direct and indirect impact for the tournament on the economy amounting to R93 billion, or 3.6% of GDP (Reuters, 2010). Also optimistic, though less exuberantly so, was Finance Minister Pravin

⁴ With respect to the 2014 FIFA World Cup to be hosted in Brazil, Jerome Valcke (FIFA's secretary general) recently said that FIFA was concerned about stadium development, airports, tourist accommodation and the telecommunications system of Brazil (Blitz, 2010a). These concerns entail major investments by the government of Brazil and are part of the price paid by the host country to the sellers of the FIFA World Cup 2014.

Gordhan who claimed after the tournament that "... the level of GDP is about one percent higher than it would have otherwise been" (Gordhan, 2010). This section explores the evidence for these benefits.

3.1 Preparation for the tournament

Hosting the FIFA World Cup is an expensive undertaking, with exacting requirements not just for the sport stadia, but also for transport infrastructure, the hospitality sector and the media. The preparation for FIFA WC2010 required investment on all these dimensions, with the public sector assuming much of the responsibility for the investment in stadia and the upgrades to the transport and media infrastructure, while the private sector supplied the need in hotel capacity.

There is an inherent difficulty in identifying the expenditure associated with a single event such as the FIFA World Cup: while expenses directly related to hosting the tournament, such as hospitality for the players and fan parks, can be attributed to the tournament without controversy, it is much harder to identify investment expenditure directly attributable to the tournament.

The stadiums seem like an easy place to start and a number of these would clearly not have been built without the prospect of the tournament, including the new Cape Town stadium in Green Point. But even with stadia the identification runs into difficulties: should the upgrade of Loftus Versfeld be attributed solely to the World Cup even though it is the home ground of a successful rugby franchise who would have upgraded the stadium in any event over the medium term? More difficult still is the identification of infrastructure upgrades as attributable to the tournament, given the backlog in the logistical network at the end of a long economic expansion. highways, bypasses, busses, rail upgrades and even airports were necessitated by the pressure of an economy running ahead of its infrastructure⁵.

In this paper we take a minimalist approach and identify only those projects with the World Cup which are incontrovertibly associated with the tournament or the preparation for the tournament, or have been labelled as such by the government in the allocation of public funds. In its preparation for the tournament the South African government identified 24 projects that would ensure a successful event as well as leave a lasting positive legacy for the economy. They are listed in table 1. Public expenditure on projects directly related to WC2010 started in the 2005/2005 fiscal year and these expenditures have been summarised in Table 2, adjusted to show calendar year totals⁶.

⁵ In February 2006 in the Accelerated and Shared Growth Initiative (ASGISA) government recognised the logistical network as a key constraint to faster long-run growth in the economy.

⁶ Since the fiscal year ends on 31 March each year the fiscal year totals were allocated pro-rata to the overlapping calendar years. Allocations for the 2010/2011 fiscal year were allocated entirely to calendar year 2010.

Table 1 *Public sector projects for FIFA WC2010*

Project number	Brief Description
Project 1	Stadium
Project 2	Stadium Precinct and Sub-Projects
Project 3	Transport Infrastructure (fixed and commuter) and Sub-Projects
Project 4	Training Venues and Sub-Projects
Project 5	Fan Parks and Sub-Projects
Project 6	Supporting Infrastructure, Utilities and Sub-Projects
Project 7	ICT and International Broadcast Centre and Sub-Projects
Project 8	Accommodation and Sub-Projects
Project 9	Tourism, General Hospitality and Sub-Projects
Project 10	Marketing Communication, Signage and Sub-Projects
Project 11	City Beautification and Sub-Projects
Project 12	Public Health and Sub-Projects
Project 13	Disaster Management and Sub-Projects
Project 14	FIFA Events, Match Planning & Hospitality, Matches and Sub-Projects
Project 15	Safety, Security, Justice, Municipal Bye-Laws and Sub-Projects
Project 16	Volunteers (City and LOC Hired)
Project 17	Environmental Rehabilitation and Sub-Projects
Project 18	Waste Management and Sub-Projects
Project 19	Business Closure during Event
Project 20	Protocol and Ports of Entry Matters
Project 21	Government Communication, Hosting Strategy, Legacy & Cultural Activities
Project 22	Project Support (Procurement, Tax-Bubble Management, Refunds for Tickets, Capacity Building, Stadium Commissioning, Base Camps)
Project 23	Overall Co-ordination & Reporting (Inter-Ministerial Committee)
Project 24	2010 FIFA World Cup Finance

Source: "2010 FIFA World Cup Unit" at the National Treasury

Table 2 *Public expenditure on the World Cup (in millions of Rand)*

Line	Project	Description	2005	2006	2007	2008	2009	2010	Subtotal	Project Total
1	1	Stadiums	181.1	510.4	3603.8	4372.5	2319.5	717.3	11704.6	11704.6
2	3	Public transport in host cities	184.3	473.6	1010.4	2668.5	2606.1	4304.0	11246.9	
3	3	Commuter rail		134.3	401.8	119.0	0.0	464.8	1119.9	
4	3	Motorways			97.5	107.5	179.9	51.6	436.5	
5	3	Buses						500.0	500.0	
6	3	Transport sub-totals	184.3	607.9	1509.7	2895.0	2786.0	5320.4	13303.3	13303.3
7	6	Emergency power and utilities				102.0	34.0		136.0	136.0
8	7	Broadcast and telecommunications				600.0	612.5	287.5	1500.0	1500.0
9	12	Event health management			151.5	229.1	348.6	96.4	825.6	825.6
10	13	Event disaster management						60.0	60.0	60.0
11	14	Event operations (including Confederations cup)					380.3	336.8	717.1	717.1
12	15	Event safety and security			112.5	225.1	261.7	706.4	1305.7	1305.7
13	16	Event volunteers							25.0	25.0
14	20	Event protocol, ports of entry infrastructure				750.0	1150.0	1100.0	3000.0	
15	20	Immigration services			0.7	86.9	150.7	391.8	630.1	
16	20	Total protocol and ports of entry			0.7	836.9	1300.7	1491.8	3630.1	3630.1
17	21	Event communication, hosting, strategy, legacy & cultural events							504.0	504.0
18		Tournament tickets and paraphernalia						30.9	30.9	30.9
19		Total	365.4	1118.2	5378.1	9260.6	8043.3	9047.4		33741.9

Sources: "2010 FIFA World Cup Unit" at the National Treasury and Estimates of National Expenditure survey 2010.

Table 3 *Public investment on the World Cup (in millions of Rand)*

Line	Project	Description	2005	2006	2007	2008	2009	2010	Total
1	1	Stadiums	181.1	510.4	3603.8	4372.5	2319.5	717.3	11704.6
2	3	Transport	184.3	607.8	1509.6	2895.0	2786.1	5320.4	13303.2
3	6	Emergency power and utilities				102.0	34.0		136.0
4	7	Broadcast and telecommunications				600.0	612.5	287.5	1500.0
5	12	Event health management			151.5	229.1	348.6	96.4	825.6
6	13	Event disaster management						60.0	60.0
7	20	Total protocol and ports of entry			0.7	836.9	1300.7	1491.8	3630.1
8		Total Public Investment in the World Cup	365.4	1118.2	5265.6	9035.5	7401.4	7973.4	31159.5
9		Nominal GDP at market prices	1571082.0	1767422.0	2017102.0	2283823.0	2407689.0	2645993†	
10		Total Investment Expenditure	263754.0	324083.0	406918.0	513749.0	543392.0	568664†	
11		Private sector investment	196267.0	236118.0	284364.0	333899.0	322600.0	334804.5†	
12		Public sector investment (government plus public corporations)	67487.0	87965.0	122554.0	179850.0	220792.0	233724.7	
13		Share of World Cup investment in total investment	0.0	0.1	0.3	0.4	0.3	0.3	
14		Share of World Cup investment in public sector investment	0.5	1.3	4.3	5.0	3.4	3.4	

Source: "2010 FIFA World Cup Unit" at the National Treasury, Quarterly Bulletin of the South African Reserve Bank and Medium Term forecast by the Bureau for Economic Research (BER) at the University of Stellenbosch

† Estimates for 2010 were taken from the BER's medium term forecast updated in June 2010.

Table 2 shows that public expenditure in the run up to and during the event amounted to R33.7 billion Rand. Row 18 of table 2 shows the R30.9 that government departments have apparently⁷ spent on tickets and other tournament related paraphernalia⁸ (Kahn, 2010; Azzakani, 2010). Much public criticism has resulted from this last item, especially since municipalities and large state owned enterprises have reportedly spent a further R100 million on tickets and event related entertainment. Amongst the biggest spenders have been SAA (the national carrier who has received billions of Rand in support from National Treasury over the last decade) who spent R23 million and the electricity utility ESKOM (a recipient of major public financial support in recent years) who spent R12 million (Govender, 2010).

To estimate the economic impact of these outlays it is necessary to separate those items that may be regarded as investment from those that are consumption, since investment can, in principle, contribute to the long-run growth potential of the economy. Table 3 shows a reduced version of table 2, with just the investment expenditure by project and some national accounts data as points of reference.

In absolute terms the numbers in tables 2 and 3 are undoubtedly large, especially when compared with the R818 million envisaged as the total cost of these projects in the South African Government's original bid document (FIFA, 2004: 65). Unsurprisingly, therefore, the opportunity cost of hosting the tournament in a country with urgent claims on public resources has been highly contentious. The difficulty of the political decision at stake is clear from the examples of opportunity costs that have been used in the debate, including: that the R33 billion in expenditure would easily cover the R23 billion required to solve the country's problem with urban sanitation as claimed by Greta Steyn (Steyn, 2010), or that 205 schools in the Gauteng province could have been funded with the R10.8 million of the money spent by government departments on tickets and World Cup paraphernalia (Flanagan, 2010), or that the pupils of the Cyril Clarke primary and John Mdluli secondary schools had to move to temporary tin structures for schools to allow the contractors of the world cup stadium in Mbombela to use their schools as office while the project lasted (Tolsi, 2010).

Economic calculations cannot determine whether students should have been moved into tin classrooms for 2 years to allow the construction of a soccer stadium. This is a political decision, though it is difficult to imagine that this political decision would not have been influenced by a more realistic initial assessment of the costs. That the bid document's assessment was a dramatic underestimation was

⁷ Final data was not available at the time of writing.

⁸ Finance Minister Gordhan has indicated that such expenditure by government departments falls foul of the Public Finance Management Act and has cautioned both government departments and municipalities that the Auditor General would look investigate any such expenditure (Benjamin, 2010).

soon apparent (Maennig and Du Plessis, 2007), but the political decisions, based as they were on dramatically skewed information had by that time been taken⁹.

But economic calculations can be a useful barometer to measure the expected direct economic impact of hosting FIFA's World Cup. To that end the data in table 3 are instructive: Public sector investment directly attributable to the tournament amounted to some R31 billion spread over 6 years, with the peak in 2008¹⁰. To give a sense of scale it is useful to note that in the year of peak World Cup investment (2008) when government spent R9 billion on tournament preparations, the public sector invested R180 billion and the private sector R334 billion. At the maximum in 2008 World Cup investment was 0.4% of GDP, in a year when the total investment rate for the economy was 22.5%.

Modest though the numbers are for the WC projects, they still overstate the relative importance of these projects in the years leading up to the tournament. Crucially, a third of the investment expenditure was on the 10 newly built or renovated tournament stadia. While the improvement of highways, airports and the rail network can, if correctly planned and implemented cost effectively, improve the long run growth potential of the economy, the economic viability of the stadia is a much harder proposition to prove.

The dominant role of the public sector in the development of these stadia itself raises caution about their long-run viability. Ahlert (2001) found that the beneficial impact of stadium development on the economy rises with the share of private sector finance in the project. That the private sector provided more than 60% of the finance for the 12 stadia used in the 2006 German FIFA World Cup suggests that those stadia were developed with greater sensitivity to the economic needs of their longer term clients, the regional football clubs. Clubs are keen to invest in new stadia due to the encouraging impact on attendance and prices supported (at least for a period) by a well designed new stadium (Feddersen, Maennig and Borchering, 2006; Howard and Crompton, 2003; Coates and Humphreys, 2005).

World Cup 2010's stadia are predominantly public sector projects, which suggests that the needs of football clubs and the long run economic viability of these stadia were not binding considerations in their location and design. While the upgraded rugby stadia at Ellis Park in Johannesburg, Loftus Versfeld in Pretoria and the Bloemfontein stadium will likely see productive use by the large local rugby

⁹ A further cost associated with the tournament is the various constraints on local business and society required by FIFA in their bid to protect brand and associated rights of their tournament. FIFA is especially concerned about ambush marketing and the resulting constraints on local businesses led to much resentment and a diversion of local police resource to enforce FIFA's rights (Beeld, 2010).

¹⁰ While the R11.7 billion invested in stadia is easily attributable to the tournament, that is not true of many other projects, such as upgrading airports, highways and border posts. These would have been priorities in any event, though it is true that the tournament with its unyielding deadlines accelerated their delivery. This was both a benefit (earlier improvement in the country's logistical network) and a drawback (the tight deadlines raised the costs of these projects).

franchises, it is far more doubtful whether the stadia in Nelspruit, Polokwane and even Port Elizabeth will be profitable enterprises in the long run. The prospects for the spectacular stadia in Cape Town and Durban are also uncertain if the local rugby team does not relocate from their present home stadia (Maenig and Du Plessis, 2009), a prospect which is presently doubtful not just in Cape Town, but also in Durban (Blitz, 2010b). Since the local football league would not be able to support the stadia from attendance, rugby and alternative events would have to cover the bulk of the maintenance costs¹¹.

The potentially productive investment by the public sector for World Cup projects, therefore amounts to R19.455 billion spread over 6 years, with the largest investment occurring in 2009, at R5.08 billion. Given that investment expenditure accounted for just more than a fifth of economic growth since the mid-1990s (Du Plessis and Smit, 2007), it is clear that the potential contribution of these projects to economic growth prior to the tournament at no stage exceeded a fraction of a percent of GDP.

There was also considerable private sector investment in the tourism sector in the years leading up to the tournament. Table 4 shows the number of hotel beds available in the various categories of hotels as surveyed by Pam Golding Tourism and Hospitality.

Table 4 The supply of hotel beds in South Africa

Level	2007	2010	Avg growth p.a.
5 star	8013	10295	8.7
4 star	12585	21049	18.7
3 star	23714	26698	4
2 star	3559	4185	5.5
1 star	3156	3645	4.9
Total	51027	65872	8.9

Source: Pam Golding Tourism & Hospitality Consulting (Pam Golding, 2010)

While there was robust expansion of hotel capacity over this period, especially at the luxury end of the market it would not be appropriate to attribute this solely, or even largely, to the approaching World Cup. Instead rising demand had long since necessitated investment in extra capacity. Nevertheless, the approaching World Cup affected the timing of these projects with the completion dates brought

¹¹ The low average attendance and low tickets prices at local PSL (Professional soccer League) matches is the reasons for the importance of the ruby teams in the economic calculations. The team with the largest fan base in the PSL, Kaizer Chiefs, enjoyed average match attendance of 21533 for the 2009/2010 season, while the average for the PSL as a whole was 7637 (www.stats.football365.co.za).

forward to be ready for the tournament. The investment in hotel capacity should, accordingly, not be counted as a net gain for the economy associated with the World Cup, and while the latter undoubtedly affected the timing of the projects with the beneficial effect of earlier completion, it also raised the cost of these projects by working to a tighter deadline.

Even if neither private nor public investment directly associated with the tournament made an important contribution to economic growth, it is possible that these projects nevertheless created valuable job opportunities. Unemployment is a major economic and social pathology in South Africa where the measured unemployment rate is estimated to be in order of 24% on the narrow (ILO - International Labour Organisation) definition. Against this backdrop even temporary additional employment would meet an important social goal.

Due to the nature of the projects associated with the World Cup new job opportunities would mainly arise in construction. Indeed the South African Government has claimed that 66 000 new jobs were created in construction and that the police force was permanently expanded by 40 000 new officers (Hartley, 2010). The World Cup could at most have affected the timing of a permanent increase in the police force, as such an expansion must be justified by long run safety and security conditions unrelated to any particular event, however large. But construction sector jobs might well have been created in preparation for the tournament, requiring a closer look at the national employment statistics as published in the Quarterly Labour Force Survey. Table 5 shows employment in construction and total formal sector employment since 2004Q4.

Construction on the stadia started in 2006 when around 458 000 workers were employed in the construction sector, which was around 5.6% of total formal sector employment. As the stadium construction gathered pace around 17 000 construction jobs workers were added to this total. However, these were the final years of the long economic expansion which started in South Africa in the third quarter of 1999 and the economy was employing more workers across a broad range of sectors at this time. Indeed the proportion of workers in construction hardly changed as the stadia projects gathered pace suggesting that total construction employment was simply keeping pace with the economy.

Table 5 Construction and total formal sector employment

Date	Construction employment (1000s)	Total formal employment (1000s)	Proportion of total employment in construction (%)
2004Q4	373	7097	5.2
2005Q1	375	6945	5.4
2005Q2	432	7078	6.1
2005Q3	439	7165	6.1
2005Q4	449	7248	6.2
2006Q1	457	7238	6.3
2006Q2	456	8059	5.7
2006Q3	459	8124	5.6
2006Q4	458	8222	5.6
2007Q1	470	8244	5.7
2007Q2	473	8288	5.7
2007Q3	475	8343	5.7
2007Q4	466	8410	5.5
2008Q1	468	8417	5.6
2008Q2	474	8457	5.6
2008Q3	467	8490	5.5
2008Q4	474	8512	5.7
2009Q1	458	8326	5.5
2009Q2	441	8241	5.4
2009Q3	430	8143	5.3
2009Q4	415	8163	5.1
2010Q1	408	8084	5.0

The data shown here provides little support of the claim of 60 000 new construction jobs related to the World Cup: the rise in construction employment was much more modest, around 17 000, and that was simply proportional to the expansion of employment throughout the economy. An explanation better supported by the data is that construction jobs at stadia expanded while employment contracted

proportionally elsewhere in the construction sector, leading to very few new jobs created. This is also consistent with the rapid decline in construction sector employment (faster than total employment) from 474 000 at the end of 2008 to 408 000 in the first quarter 2009 as World Cup projects finished but the recession-hit construction industry provided little alternative for the immediate redeployment of these workers (see also Mokopanele, 2010).

It is reasonable to argue that the World Cup projects supported employment in the cyclically sensitive construction sector during the recession that started domestically in November of 2007. But this counter-cyclical effect had evidently run its course by the end of 2008 and subsequently employment contracted faster in construction than in the economy on average.

3.2 Activity during the event

Turning now to the economic impact of the event itself narrows our focus to the tourist industry where most of the immediate impact of the tournament falls. The FIFA World Cup is the largest of the mega-sport events and tens of thousands of supporters travel to the tournament to see their teams in action, while hundreds of millions follow the tournament on television.

In light of previous large sporting events hosted in South Africa (the rugby and cricket world cups, the British Lions tour and so on) it was reasonable to expect a significant rise in tourist arrivals relative to the usual number of tourists in June (a low season for tourism in South Africa) (Spronk and Fourie, 2010). It is too early for the official statistics on tourist arrivals during the tournament and widely diverging estimates are currently in the public domain. At the upper end of the range 500 000 and more tourists were expected (though that was prior to the international recession, the high forecasts are now in the order of 350 000 to 400 000) to travel to South Africa for the tournament (Baumann, 2010), while estimates at the lower end are around 200 000 as is the case with this paper. To estimate the arrivals we used the following evidence:

1. Data on actual arrivals at the international airports
2. Data on occupancy rates in the hotels of the major cities

Hotel occupancy rates in Cape Town, Durban and Gauteng for the month of June since 2007 are shown in table 6.

Table 6 Hotel occupancy rates in the major cities

	Cape Town	Durban	Gauteng
Jun 2006	52.5	79.6	68.2
Jun 2007	55	74.2	73.1
Jun 2008	48.1	74.6	72.5
Jun 2009	49.5	67.3	54.9
Jun 2010	51.7	61.8	77.3

Source: STR Global

The data in table 6 should be read with the information on capacity expansion in table 4 where the growth in especially high-end accommodation was indicated. Table 6 shows the extent to which World Cup visitors used Gauteng as their base for the tournament, given the number of stadia at close proximity and the easy access by road and air to more distant stadia. In terms of occupancy Cape Town experience a better than average June, though not by much and in Durban occupancy has continued its long decline.

We are interested in calculating the number of extra tourist arrivals in addition to what would have been expected from a normal June. The following conservative assumptions were made about a normal June, based on the data for June 2009. However, there was a British Lions tour to South Africa during June 2009 which would have raised arrivals from the UK dramatically¹². Based on Spronk and Fourie's (2010) estimate of the Lions tour related arrivals we adjusted the June arrivals downwards to 114 000. We also used the hotel room rates from 2009 and assumed that these tourists stayed for one week on average, and spent R4000 each on local travel. Combining the cost of accommodation with the assumed travel expenses and another R1000 per day for food and other expenditure yields an average weekly expenditure by the June 2009 tourists of R15320 and the baseline expenditure by international tourists for June is therefore R1.75 billion.

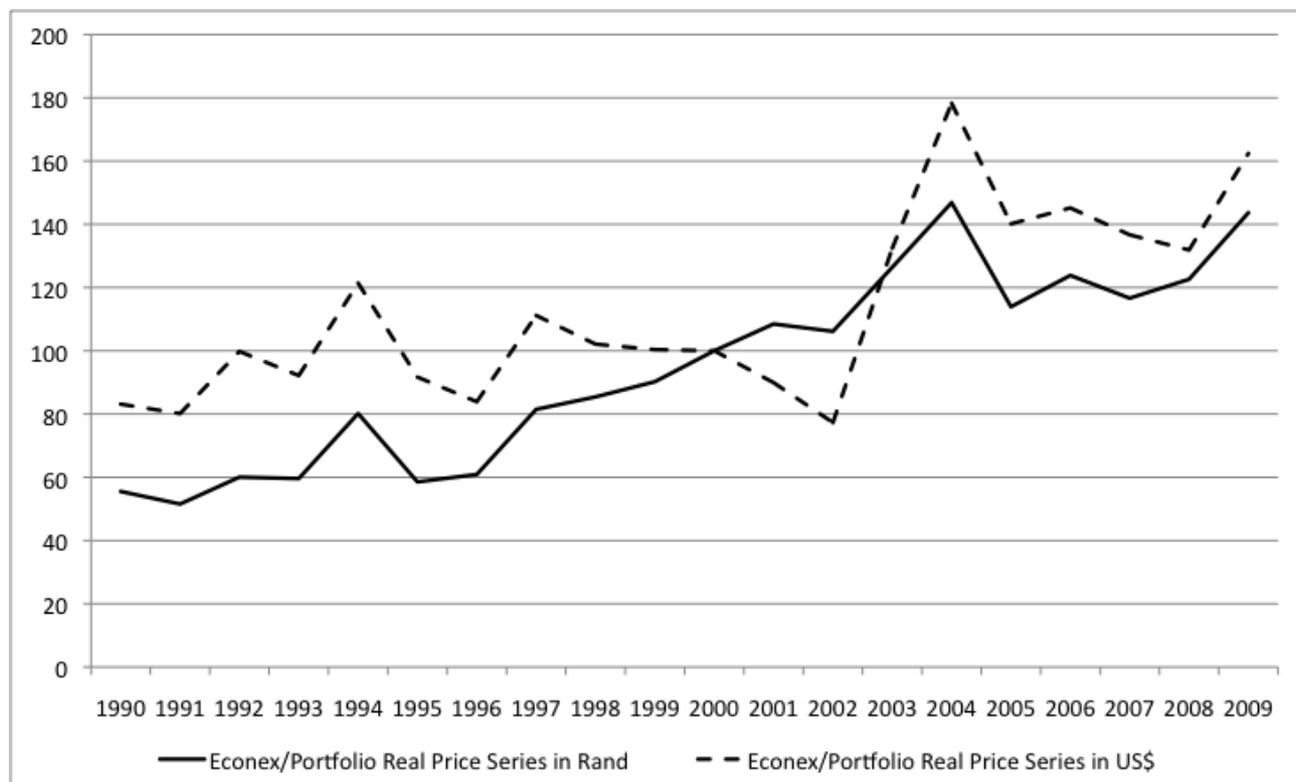
Combining the increment in occupancy rates between June 2010 and June 2009 with the number of available hotel rooms (and assuming that half as many additional guest house rooms were occupied as hotel rooms) in the major cities gives a figure of 7497 extra rooms rented on an average day during the tournament. Making the further assumptions that these guests stay on average for 1 week and that 60% of the rooms are occupied by 2 persons, with the remainder single occupancy yields 71 977

¹² Spronk and Fourie estimated an increase of 57% for UK arrivals on account of the Lions tour.

additional visitors during the World Cup and a total arrival for June 2010 of 186000. We assume that a quarter of the tournament guests were form elsewhere in the Southern African region.

A number of factors combined to yield a total considerably below the most sanguine expectations. These factors include the international recession and relatively high local tourist sector prices (in dollar terms). To demonstrate the latter, figure 1 shows the Econex/Portfolio real price index in Rand and Dollar terms¹³. The influence of Rand appreciation on this index is clear, leading to sharply higher dollar prices for international tourists over the last 5 years.

Figure 1 Rand and Dollar tourist sector price index



Source: Econex

How high were the room rates charged by hotels to these World Cup visitors? As with the 2006 World Cup there is clear evidence that the inflexibility of the tournament schedule improved the pricing power (in local currency) of hotels more than is usual for this season and that is reflected in the average room rates (in current Rand) recorded in table 7. Table 8 shows the same data adjusted for inflation since 2006.

¹³ The Econex/Portfolio price index reflects the price of accommodation in the tourist sector in South Africa.

Table 7 Average room rates - current Rand

	Cape Town	Durban	Gauteng
Jun 2006	649.3	549.2	544.1
Jun 2007	724.1	625.7	670.3
Jun 2008	805.4	733.5	810.3
Jun 2009	908.8	832	959.4
Jun 2010	2598.5	1872.7	2858.8

Source: STR Global

Table 8 Average room rates - constant 2006 prices

	Cape Town	Durban	Gauteng
Jun 2006	649.3	549.2	544.1
Jun 2007	683.3	590.4	632.5
Jun 2008	687.1	625.8	691.3
Jun 2009	725.4	664.0	765.7
Jun 2010	1983.1	1429.2	2181.8

Source: STR Global

It is clear that hoteliers enjoyed a much enhanced price environment during the World Cup, with room rates rising by as much as 185% over the preceding June for Gauteng, 173 for Cape Town and 115% for Durban. Revenue per room was therefore sharply higher in all these cities and hoteliers were unambiguous beneficiaries of the tournament during the event. Though comparable data does not exist for motor and bus transport services and restaurants, these businesses would also have gained handsomely during the tournament.

With an estimate of arrivals and price data for hotel we are now in a position to calculate a rough estimate of the expenditure by international tourists in South Africa during the world cup. The calculation is based on the following assumptions:

1. 72 000 extra international arrivals, a quarter of which were from neighbouring countries;
2. These tourists were assumed to have stayed on average for 5 days¹⁴;
3. A daily rate of R1400 is assumed per person for a high end hotel and R500 at the lower end;

¹⁴ Visitors earlier in the tournament were more likely to stay longer, while the knock out phase of the tournament would have seen more shorter visits.

4. We assume that 2/3 of the international tourist stay in high end hotels and all the tourists from neighbouring countries in low end hotels;
5. We assume daily expenditure (other than accommodation and transport) of R1230 by international visitors and R500 by visitors from neighbouring countries
6. We assume domestic transport of R8000 per trip from the international visitors and R4000 for visitors from neighbouring countries.
7. Since we assumed 72 000 extra arrivals in June 2010, that leaves the 114 000 tourists that arrived this year who would have arrived without the tournament, but spending at the inflated accommodation and transport prices of 2010. The gap between the average expenditure of these tourists and their compatriots in 2009 was R9000 per trip and we add this additional expenditure to the outcome of WC2010.

These assumptions amount to R24310¹⁵ spent on average per trip by the international visitors and R 11 000 on average by visitors from neighbouring countries. Combining these data with the assumed number of arrivals yields net additional expenditure of R2.535 billion (0.1 % of projected GDP for 2010) by visitors to the tournament.

Since the bulk of the tickets for the tournament were bought by South Africans and this money accrues to FIFA (and leaves South Africa) we need to subtract the ticket sales to South Africans to arrive at a realistic estimate of the net contribution of the tournament. We assumed that South Africans bought 80% of 2.7 million tickets sold, at an average price of R500, which amounts to R1.3 billion. The net gain on net exports from the event itself in Rand term is therefore, R1.5 billion minus R1.3 billion which is R1.235 billion or 0.05% of GDP. A realistic multiplier for the tourism sector is in the order of two which suggests that the ultimate impact of the event on the economy would be around 0.1% of GDP.

While the calculation above is sobering in comparison to the most optimistic expectations our claim is not that the benefit of hosting the tournament should only be measured in Rand and cent. There are a number of intangible effects associated with hosting the tournament, some immediate and others over the longer run.

The first of these is the enjoyment of experiencing the tournament, one might call it the “feel good” factor. Economists have studied the difference between the value local citizens place on such tournaments before and after the event and have found a very significant rise in their evaluation of what it was worth to them to have experienced the tournament on home soil (Maennig and du Plessis,

¹⁵ An amount confirmed with tour operators as a realistic average for their clients during this period.

2007). The generally successful hosting of the tournament in South Africa and the widely shared positive assessment by South Africans thereof suggest that this effect was relevant for FIFA World Cup 2010. But there are also longer term intangible benefits.

3.3 Long run benefits and costs

The dramatic stadia constructed for the World Cup open another opportunity, namely the possibility of an “iconic” building emerging from the tournament forever associated with the event. Examples of such “iconic” buildings include the Sydney opera house and the Guggenheim museum in Bilbao or in sport, the Allianz Arena in Munich. While there is much controversy over the features of “iconic” buildings as well as the economic and cultural benefits that have been associated with them, two features do seem common to the few successes: first the building needs to be visually dramatic (even unconventional, and certainly memorable) and offer a new image for the city, in the manner of the Eiffel tower or Sydney’s opera house. Second, there must be some positive connotation with the building and its image.

With a thirty story arch that soars over the pitch in the shape of the central bands of the South African flag, the dramatic design of Durban’s world cup stadium at least has the potential to become a new image for the city. The association that South Africans and the world will form about this tournament in retrospect will determine whether this stadium can become a new image for Durban. Even then, the “iconic” building is only ever the icing on the cake of successful urban renewal, with the bulk of the work done by the successful integration of the building with the city centre, including an efficient transport system linked to major travel hubs, safe and clean surrounding, and policies that encourage competition, innovation and the dissemination of technology. But if it succeeds, the gain in international exposure and the spill-over effects to other industries beyond tourism can be significant and long-lasting for cities like Durban, as it has been in Bilbao.

An improved international image need not be restricted to stadia or particular cities alone, but could be enjoyed by the entire country, especially the business sector, conditional on a successful tournament from an logistical and organisation perspective with spectacular images beamed to television sets around the world and unprecedented column inches in the printed and electronic media commenting on the events and the location. There is evidence that Germany enjoyed an improved international image form the successful 2006 World Cup (and the “Land of Ideas” image project associated with it) and South Africa has more to gain than Germany on that front. Germany gained handsomely on indices of national brands and South African has further to climb on the same measures.

4. Summary for FIFA World Cup 2010

In summary, preparations for the tournament were expensive in absolute terms and raise real questions about the opportunity costs of allocating public funds in that direction, but were small relative to the size of the economy and investment occurring elsewhere in the public and private sectors. As an augmentation to the capital stock the tournament preparations is a very minor story and at most the tournament affected the timing of wider infrastructure upgrades.

Employment was not much affected by the World Cup Preparations either. The evidence suggests that workers were redeployed within the construction sector and few new job opportunities were created. However the World Cup projects did have a counter-cyclical impact during the recession that started in November 2007.

The event itself made only a small net contribution to the economy, here estimated to be in the order of 0.1% of GDP. Of course some sectors, notably in the tourist industry, enjoyed an unseasonably good June and were beneficiaries of the tournament.

South Africans and international visitors also enjoyed the tournament immensely, a benefit that is no less real because it is hard to quantify in monetary terms. And there are potential longer run benefits mainly due to the improved image of a vibrant economy where institutions function smoothly and which offers attractive scope for trade and investment. These benefits, if they raise the long-run growth trajectory of the economy, will be more valuable in time than the somewhat disappointing net benefits from June 2010.

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