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*Translating Research Implications to applications: Industry's commentary*

## **Pricing decisions during the FIFA 2014 World Cup: São Paulo and Rio de Janeiro**

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## **Pricing decisions during the FIFA 2014 World Cup: São Paulo and Rio de Janeiro**

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## Abstract

**Purpose:** This report explores the host destination's response to the 2014 FIFA World Cup. The study establishes how the hotel Key Performance Indicators (KPIs) of two of the main cities in Brazil reacted to the World Cup.

**Originality/value:** Exploring Brazilian hotel revenue managers' responses to a major sporting event in Latin America is the main contribution of this research report.

**Relevance of the topic:** Several business sectors in the travel and hospitality industry experience distinctive positive and negative performance for hosting mega-sporting events. The findings of this research report will be helpful for hotel revenue managers who regularly propose strategic pricing strategies. This report examines the response to the 2014 FIFA World Cup which is determined by the variance in the hotel key performance indexes: occupancy, average daily rate (ADR), revenue per available room (RevPAR), and supply.

**Design/methodology/approach:** Using data gathered from Smith Travel Research (STR), this research report distinctly displays how two of the main Brazilian host cities (São Paulo and Rio de Janeiro) reacted to the World Cup. The obtained hotel KPIs represented annual data three years before the event and year after the event. The STR data entailed monthly hotel-level performance information, rooms revenue and rooms sold (demand) from the period of 2011-2015 containing a broad sample of Brazilian hotels in São Paulo and Rio de Janeiro.

**Key findings:** Results of the analysis for São Paulo suggest that supply level did not increase drastically during the sporting event. However, ADR levels increased significantly during the event. Additionally, the variances in occupancy in 2014 echo with the variances in ADR in the same time, showing the elasticity of price. Results of the analysis for Rio de Janeiro suggest that supply volumes stay consistent before, during, and after the sporting event. The findings suggest that ADR and RevPAR were quite related, with notable increases and declines before and after the event during the comparable months in previous years.

**Implications for practice and policy:** Our findings contained expected and unexpected results for hotel managers. For instance, Rio de Janeiro experienced growth of hotel room supply during the mega event. For this city, the drastic increase in ADR and supply did not result in a sharp decrease of their hotel occupancy rate. Other results suggest that São Paulo did not experience any changes in their hotel room supply level during the event. The performance of the occupancy rate still shows differences. For São Paulo, although there is no supply increase of the hotel industry, the occupancy rate still dropped during the mega event. This report lends support to the theory of price inelasticity of demand during mega sporting events, such as the FIFA World Cup.

**Key Words:** revenue management, pricing strategies, price elasticity of demand, hotel performance, mega events, RevPAR, ADR, occupancy percentage

## Introduction

The 2014 FIFA World Cup hosted by Brazil in twelve venues took place over a period of four weeks from June 12 to July 13, 2014. Hosting the FIFA World Cup produces favorable shifts in tourism demand on a short-term and long-term basis (Schwambach, 2012). The FIFA World Cup attracts travelers from different countries to visit the hosting destination. The hotel and tourism industry (Giampiccoli *et al*, 2015), as one of the principal players during sporting events, do not miss the opportunity and always prepare to welcome this international sporting event.

The present study attempts to illustrate the host destination's response to the 2014 FIFA World Cup in two of the main Brazilian cities (São Paulo and Rio de Janeiro). The goal is to explore how travel demand influences hotel pricing and revenue management strategies during this worldwide sporting event in São Paulo and Rio de Janeiro experiencing seasonal growths in sport fans. The study establishes how the KPIs of the Brazil's lodging sector reacted to the World Cup.

## Background

Sporting events have important influence (positive and negative) on the host destination because these events affect the dynamics of the destination by developing new infrastructure, by increasing the number of visitors, and by creating a global awareness of the destination. Schwambach (2012) suggest that hosting the FIFA World Cup generates positive shifts in tourism supply and demand. In addition, sporting events attract tourists and sport fans from different parts of the world to visit the host destination. These destinations definitively become appealing tourist destinations for travelers (Solberg and Preuss, 2007).

Some researchers have examined the effect of a mega sporting event such as the Olympics and the FIFA World Cup on the host country (Kesenne, 2012). These works have generated important theoretical and practical contributions to the literature. Other research has focused on investigating the impact of external events (depression, NFL games, recession, and natural events) on mega sporting events (Garcia *et al*, 2015). However, limited research has focused on determining the effects of the FIFA World Cup on hotel performance at the country level.

Taylor and Young (2005) suggest that limited scholars have examined the impact of sporting mega events in the lodging sector at the macro level. Precisely, the response of the host's lodging sector to the FIFA World Cup has received limited attention. There are no other investigations that have examined the relationship between hotel performance and the FIFA World Cup. Mega

events such as the Olympics and the FIFA World Cup impact not only on the increase of place brand awareness and the number of visitors, but also on hotel products and services consumed intensively in a short period of time. Therefore, the authors believe that it is important to study how the hotel sector at the host country responds to international sporting events and the implications of these events in the destination.

### ***The Dynamic of a Mega Sporting Events***

According to Knott *et al.* (2015) mega sporting events are large-scale cultural events that have an outstanding appeal to the host destination and global favorable consequences. Sporting events offer the host country the opportunity to promote itself globally, permitting the country to generate a strong awareness and positive association to international travelers including sport fans, leisure tourists, global businesses, and television viewers (Grix, 2012).

Sporting events such as the FIFA World Cup, not only attract huge numbers of domestic and foreign travelers with promising spending behaviors (Peeters *et al.*, 2014), but also seem to impact on tourism patterns of host destinations (Lepp and Gibson, 2011). A sporting event is viewed as an opportunity for economic benefits and tourism growth in a destination. A large-scale sporting event is associated with the construction and development of infrastructure and event amenities regularly carrying long-term debts and continually effective management (Greene, 2014). Despite of the favorable and unfavorable effects, more government and tourism leaders are intensely competing to host international sporting events (Martins and Serra, 2011).

### ***The Influence of a Mega Sport Event***

Major sporting destinations such as Brazil, South Africa, and South Korea host large-scale tourism sporting events with projections to bring benefits such as economic opportunities, destination brand awareness, image development, international investment, strong tourism demand, sustainable growth, and others (Grix and Houlihan, 2014). Among these benefits, it is essential for the host community to acknowledge the impact of hosting a mega-event on the performance of the lodging industry.

### ***Demand and the FIFA World Cup***

The 2014 FIFA World Cup attracted more than one million international travelers and more than 3 million domestic fans (Armstrong, 2014). Remarkable figures included the 3.2 million tickets available for the 64 matches of the tournament held from June 12<sup>th</sup> through July 14<sup>th</sup>, 2014 (FIFA, 2014).

Although the sports matches were held at twelve cities, travelers mainly visited popular destinations such as São Paulo and Rio de Janeiro. Therefore, São Paulo and Rio de Janeiro attracted international travelers and were perceived as major destinations. The remarkable growth in demand from international travelers created opportunities for the hotel sector. Based on Ernst and Young (2014), tourist arrivals impacted the influx of sales, mainly from the hospitality, transportation, communications, culture, entertainment, and retail industries.

### ***Price Elasticity of Demand***

Based on economic theories (e.g. the law of demand), when the price of a service/product augments, the quantity desired of that product decreases (Kaul and Chowdhury, 2014). Mega-events, such as the FIFA WC, are short-term and one-time events (every four years) that typically are expected to produce long-term intense impact (favorable and unfavorable) on hosting destinations (Ferreira and Boshoff, 2014). Soccer fans and other international travelers understand that there are limited alternatives of hotel accommodations during the FIFA WC. Specially, in some cities of Brazil, the demand for hotel accommodations during a mega-event might be believed to be price insensitive (travelers willing to pay higher room rates). In this report, instead, hotel demand shows a more sensitive pattern although the authors expect the WC demand to be insensitive to price changes. To study how profit managers reacted to the WC, average daily rate (ADR), room sold, and revenue are investigated for São Paulo and Rio de Janeiro during the period of the event and compared to the performance in other periods.

### **Research Methodology**

This report followed a methodology used in previous research. The methodology considers the examination of the percentage variations and changes in KPIs. For example, our methodology is in line with Taylor and Young's methodology (2005) and Dermody et al. (2003). The authors analyzed data from STR and studied the proposition that the execution of sporting

events such as the NFL team in a regional market impacts the lodging industry. They specifically studied the influence of an NFL team's play dates on hotel performance KPIs.

The methodology in this report is used to determine the impact of the 2014 FIFA WC on the hotel performance in São Paulo and Rio de Janeiro. Data and findings of the six most common hotel indexes are studied. Data for this analysis was obtained from STR. The data includes monthly hotel-level performance information, rooms revenue and rooms sold (demand) for the period of 2011-2015 from a broad sample of hotels. Hotels with less than 1 year of hotel performance data were not considered in the analysis. This results in a sample size of 21,149 hotel rooms in Rio de Janeiro and 37,339 hotel rooms in São Paulo.

The hotel performance information was analyzed for the variation in each of the KPIs from different years. The analysis was completed by comparing hotel performance during the period of the event compared to the monthly periods three years prior and one year after the event. The analysis includes supply, demand, occupancy percentage (Occ %), average daily rate (ADR), total room revenue, and revenue per available room (RevPAR). The degree of variation properly explains the effect that each city experienced because of the mega event (Li, 2014).

The degree of variation in this report is represented by the percentage differences among the indexes. To distinguish the variance in the six metrics (ADR, Occ %, RevPAR, Room Revenue, Supply, and Demand), the result was displayed as percentage as the most adequate approach. In this report, the authors explain the variance between indexes from year to year during the month when the event took place (June 12<sup>th</sup> – July 13<sup>th</sup>).

For instance, to compute the percent difference in ADR, the average ADR of the period when the World Cup took place was subtracted from the average ADR of the previous year in the same month. The percentage differences in the other indexes were also calculated and graphed to show the impact of the FIFA World Cup on hotel performance. The percent difference is interpreted as what percent an index of the date of the World Cup has increased or decreased compared to the three previous years (2011, 2012, and 2013) and one subsequent year (2015).

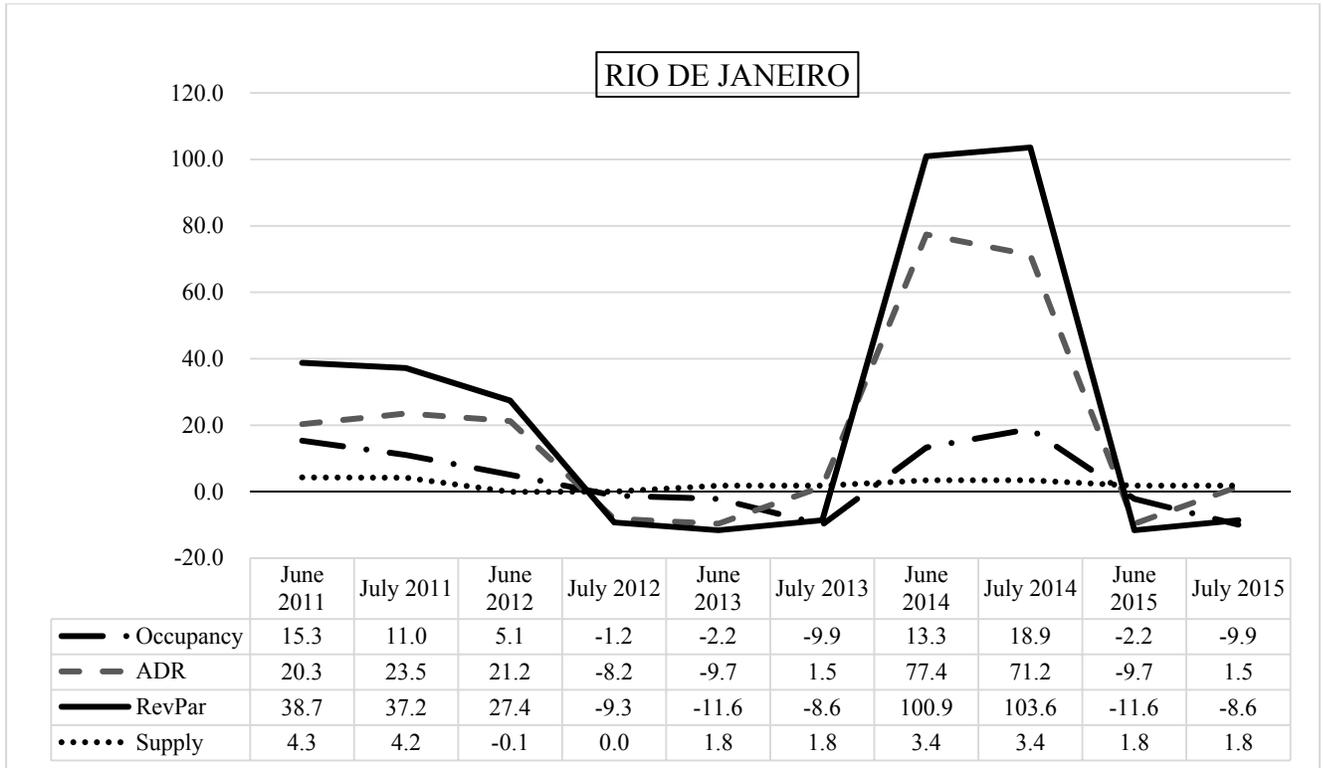
### **Findings and Solutions**

Figure 1 displays June-July monthly ADR, supply, occupancy, and RevPAR indexes for the three years before the WC, during the WC, and one year after the event in Rio de Janeiro. Figure 1 exhibits that supply volumes stay consistent before, during, and after the sporting event. The

graph indicates that ADR and RevPAR follow a similar trend, with significant increase and decrease before and after the WC in similar months in previous years. ADR and RevPAR generally move together from 2011-2015 in Rio de Janeiro.

Figure 1.

June-July Monthly KPI's for 2011-2015 in Rio de Janeiro



Note: KPI's: key performance indicators

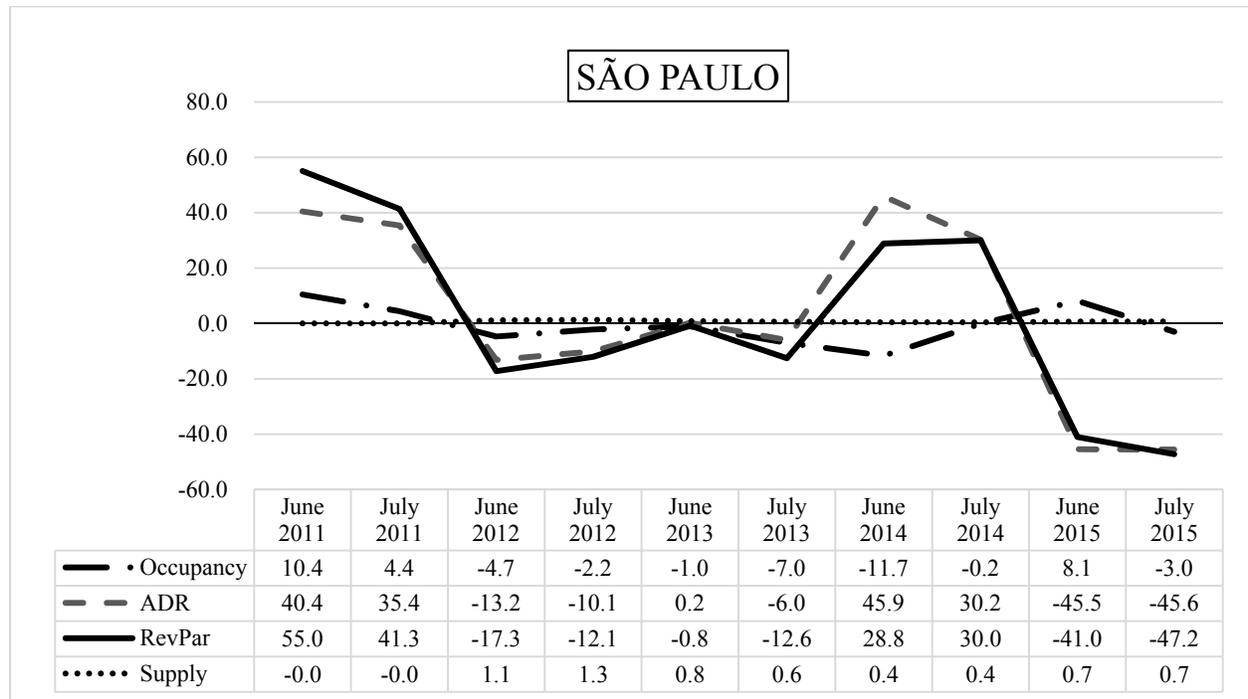
The degree of the occupancy rate normally does not change significantly but occupancy percentage has grown because of the WC. The strength of the RevPAR influence in Rio de Janeiro is due to the pricing power and the inelasticity of price when visitors prioritize securing a room during the event. The findings also indicate that managers experience a significant revenue performance during the WC and a considerable decrease in all hotel indicators one year after the event in 2015, indicating that ADR, demand, and room revenue return to typical dynamics. The authors note that one year after the event, room occupancy decrease to 9.9 percent and RevPAR decrease 8.6 percent.

Figure 2 suggests that the supply in São Paulo did not increase radically during the WC, displaying a growth 0.4 percent in both June and July 2014. However, the ADR increased significantly during the WC. ADR increased by 45.9 percent in June 2014 and 30.2 in July 2014,

which may be the reason for the decrease in occupancy levels in the same period. The occupancy percentage dropped by 11.7 in June 2014 and 0.2 percent in July 2014. These variances in occupancy percentage in 2014 echo with the changes in ADR in the same time, suggesting the price elasticity effect.

Figure 2.

June-July Monthly KPI's for 2011-2015 in São Paulo



Demand for rooms decreased as ADR increased whereas the demand increased to normal levels when the price decreased. Even though occupancy levels decreased, significantly increased ADR resulted in increased RevPAR levels in relation to previous years before the WC, with a percentage growth of 28.8 in June 2014 and 30 percent in July the same year. This result suggests the significance role of ADR in defining positive hotel revenue performance. One year after the WC, supply levels kept increasing while ADR levels decreased substantially. Finally, occupancy levels increased by 8.1 percent in June 2015 due to the decrease of hotel ADR in the same month, showing the strong elasticity of hotel price. However, RevPAR decreased in 2015 due to the influence of ADR on hotel revenue performance.

### **Implications for Practice or Policy**

FIFA WC has a favorable impact on the hotel sector in Rio de Janeiro and São Paulo during the period of the event. Both cities experienced RevPAR growth during the event higher than previous years (2011-2013) and one year after the event (2015). This hotel performance increase has been determined mainly by price increase and demand increase in the beginning of the event (June 2014). Although no new hotels were added to the market, it is noted that hoteliers use efficiently existent supply to increase hotel performance by having competitive pricing power during the event. The positive variance in pricing power was 77% for Rio de Janeiro and 46% for São Paulo. This type of strong pricing power during periods of high demand generates a better performance than just offering regular prices to increase hotel occupancy.

Results demonstrate that the KPIs of São Paulo and Rio de Janeiro reacted differently to the WC. Although these cities experienced significant RevPAR growth due to the increase of hotel room rates during the WC, supply levels did not change dramatically in both cities, and occupancy levels performed uniquely from city to city. We believe that supply did not increase because no new hotel rooms were added (built or converted) during the event. Rio de Janeiro experienced a marginal growth of supply during the WC. For this city, the drastic increase of ADR and a slight increase in supply did not result in a sharp decrease in occupancy levels. The occupancy rate increased unexpectedly, which indicates the lack of elasticity for hotel pricing.

Contrarily, São Paulo experienced a decrease in occupancy levels with the growth of ADR. It seems that hosting the WC did not attract too much demand to this city. The significant increase in ADR levels balanced the decrease of occupancy, which resulted in a positive increase in RevPAR levels. São Paulo did not experience major changes in room supply since 2011. For this city, occupancy rates still dropped during the event although there was not an addition in supply. The significant increase in ADR levels balanced the drop-in occupancy and resulted in a significant increase in RevPAR during the event. São Paulo did not experience an increase in room supply but it experienced a decrease in customer demand.

Both cities experienced increased ADR levels during the event. On the other hand, São Paulo experienced a dramatic decrease in ADR after the event even when occupancy levels were similar to previous years of constant demand. For Rio de Janeiro, travelers seem to be less sensitive to price increases during the event, which indicates the inelasticity of prices during sporting events. Travelers mainly want to secure a hotel room regardless of how high the room

price is. Hoteliers should take advantage of the characteristics of these travelers and increase room rates and room supply to generate the maximum revenue possible. For São Paulo, where the hotel industry experienced a decrease on demand levels due to the drastic increase in ADR levels, addition of room supply for a mega event is not suggested since it will affect the performance of the hotel industry during and after the event.

This report lends support to pricing theories suggesting that room rates must be increased during phases of inelastic demand. Visitors have limited hotel alternatives during the WC and have a higher desire to secure accommodations resulting in a more inelastic demand for hotel products and visitors' willingness to pay superior rates. For São Paulo, the price elasticity of demand still applied when the price changes went beyond the budget of consumers. For cities such as Rio de Janeiro, the demand of hotel rooms tends to be inelastic. Hoteliers in Rio de Janeiro should take aggressive pricing strategies to increase room rates to the maximum levels that customers could afford to optimize their profit. Since demand is driven by the event, it is suggested to expand room supply to accommodate more tourists. Thus, investors might invest in new hotels in these host cities to experience revenue growth during and after the mega event.

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