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Potential Economic Impact of the Rugby World Cup on a Host Nation

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Contents

Foreword	2
Introduction	3
Overview	4
Rugby World Cup impact headlines	5
The benefits of major sports events	6
Rugby World Cup in context	8
Economic impact of previous Rugby World Cups	13
Potential Rugby World Cup impact	14
Rugby World Cup tax impact	20
Report preparation, methodology and limitations	24

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Foreword

The Rugby World Cup is the world's third largest major sporting event, commanding a substantial and growing presence in the global sporting calendar. Since the inaugural competition in 1987, the world's best Rugby players have gathered every four years to compete in the Game's showpiece event and, for the 44 days of the competition, all eyes are focussed on the Host Nation.

All indicators show that the RWC has grown spectacularly since its inception only 21 years ago. We wanted to understand in more detail the full scale and impact of the event – and its potential for future growth. Hence, we commissioned Deloitte's eminent Sports Business Group to provide this independent, robust overview of the considerable economic benefits that a RWC can bring to a Host Nation. It provides an outline of the potential scale of economic impact that a future RWC could bring to a potential Host Nation. I hope you find the report interesting and useful.

The 48 matches of RWC 2007 attracted a record number of spectators with 97% capacity crowds in France. Over 2.3 million tickets were sold to fans who wanted to be part of the excitement and witness Rugby being played at the highest level.

The intense global interest in the competition and the dedication of Rugby fans means a huge number of visitors travel to a Host Nation to be part of RWC. It is estimated that over 350,000 overseas visitors travelled to France for RWC 2007 with many incorporating the event into a wider holiday.

The scale and duration of a RWC means it can generate very sizeable, direct economic benefits to the Host Nation. The Deloitte analysis shows that RWC can deliver between £260m and £1.1 billion of Gross Value Added (the accepted measure of additional economic impact) to a Host Nation, depending on location.

In addition to the economic benefits profiled in the following pages, RWC presents wider benefits, such as the boost to a Host Nation's profile as a tourist destination and the domestic feel good factor that can lead to increased participation in Rugby and health and fitness in general.

The IRB remains committed to developing world Rugby and providing financial support for the global growth of the Game. Fees from RWC are central to this development opportunity. We are confident that RWC 2011 in New Zealand, and thereafter RWC 2015 and RWC 2019 will provide Host Nations with significant economic benefits, and also provide the platform to continue the global growth of Rugby.

Bernard Lapasset – Chairman,
International Rugby Board

We were delighted to have the opportunity to work with Rugby World Cup Limited to assess the potential economic impact of the Rugby World Cup on a Host Nation. The announcement in August 2008 that ten nations had expressed an interest in hosting RWC 2015 and RWC 2019 demonstrates the global prestige associated with this event and confirms our findings about the potential impact of RWC.

In awarding the RWC 2015 and RWC 2019 tournaments concurrently in July 2009, the IRB will assist the chosen Host Nations by providing a timescale that facilitates thorough planning for the event – allowing them to prepare, stimulate interest and enthusiasm, develop local and national government support and generate maximum economic benefit.

Our analysis confirms that RWC has the potential to deliver a very significant economic benefit to a Host Nation and, for a number of potential Host Nations, this can be achieved without the large scale infrastructure development which can introduce increased cost and financial uncertainly to the hosting of a major sporting event.

Our work in Deloitte's Sports Business Group exposes us to many major sporting events across a wide range of sports and geographic locations. The sporting bodies responsible for awarding these events have to make important decisions which balance the global growth of the game with its economic development. A record number of fans travelled to France for RWC 2007, and with RWC sitting firmly amongst the top major events in terms of attracting international visitors, the IRB is in a strong position to both deliver Rugby to fans in new markets and continue to develop its economic potential.

The increasing understanding of the impact of hosting major events and the increasing creativity and sophistication used to maximise the economic potential for the Host Nation dictates that a number of stakeholders will be involved in addition to the Host Union. RWC benefits extend significantly beyond the Game itself and, if strong partnerships amongst key stakeholders in Host Nations are formed with time to develop long term strategies, the benefits are likely to be significant.

We have conducted our analysis using well established and robust methodologies but we have also deliberately tried to keep the report easy to digest and user friendly to the reader with an interest in the economic impact of RWC. We trust that it serves that purpose.

Dan Jones – Partner,
Sports Business Group Deloitte

Introduction

Scope and aims of this Report

Rugby World Cup Limited (RWCL) commissioned Deloitte to perform an assessment of the potential economic impact of a Rugby World Cup (RWC) tournament on a Host Nation.

RWC is one of the world's major international sports events being ranked the third most popular event in the world in terms of both attendances and international visitors. In addition, the tournament lasts for six weeks (covering seven weekends) and attracts a cumulative worldwide television audience of four billion. Rugby fans are loyal and follow their teams in significant numbers, with associated spending underpinning the economic benefits of hosting the tournament.

Previous single tournament studies have profiled the economic impact of RWC 2003 in Australia and RWC 2007 in France, while an advance study has estimated the likely impact of RWC 2011 on New Zealand. This Report builds on these studies and uses Deloitte's tried and tested economic impact methodology to estimate the potential impact for a future event on a Host Nation.

This Report also provides additional analysis which helps to put RWC event into context by:

- Outlining the generic economic benefits and return on investment to a country's economy of hosting a major event such as RWC.
- Profiling RWC and comparing it to other similar international events in respect of the key elements underpinning economic impact.
- Identifying regional factors and drivers that may affect the economic impact of RWC in different regions including Western Europe, the SANZAR (South Africa, New Zealand and Australia) region and developing Rugby nations such as Japan and North America.
- Outlining the possible contribution to a Host Nation's Government via taxation, as a result of hosting RWC.
- Summarising the key, high-level stadium infrastructure costs and Government investment associated with RWCs in 2003, 2007 and 2011.

Report structure

This Report is structured into five sections as described below:

Section 1: The benefits of major sports events

Section 2: Rugby World Cup in context

Section 3: Economic impact of previous Rugby World Cups

Section 4: Potential Rugby World Cup impact

Section 5: Rugby World Cup tax impact

Basis of preparation

All currency figures have been translated into Sterling using the exchange rate as at 30 June in the appropriate year. Consistent with our economic modelling, figures have not been adjusted for inflation.

Overview

Major sports events

- In recent years there has been an increasing realisation of the significant benefits to be earned from hosting major international sports events. Many cities and countries now actively pursue hosting major events as a strategic priority and ensure that they leverage the event to the maximum.

- Major sports events bring benefits to the sport. These include media coverage and increased profile, increased attendances and grassroots participation, and the development of the pool of volunteers working in sport. Flowing from these benefits may be significant commercial value for the sport's stakeholders.

- There are also benefits to the Host Nation. Major events can drive significant numbers of visitors to the country during the event and act as an excellent shop window to showcase the country and develop tourism campaigns afterwards. Major events can also lead to increased business activity and potential inward investment. The benefits are not confined to the Host Nation with neighbouring countries also able to benefit from increased visitor travel.

- Innovative methods of promoting major events can make them available to those beyond the ticket holders and deliver greater commercial benefit to the Host Nation. Fan zones, live sites and festivals have successfully been introduced to major events including RWC to enhance the visitor experience and deliver increased economic benefits.

- Domestic residents benefit from having a major event on their doorstep. Substantial domestic spend demonstrates a high level of local interest and supports a number of non-financial impacts that may be driven by hosting a major event.

Rugby World Cup benefits

- RWC has one of the largest paying attendances of any major sports event, confirming its position among the elite of global sports events. Match attendances have grown to exceed two million at RWC 2007 in France.

- RWC delivers the largest number of international visitors except for the FIFA World Cup and Olympic Games with visitor days between 1.6m and 2.8m seen in recent tournaments. The 44 day period over which RWC is held is one of the longest durations for a major sports event and is a key factor in delivering visitor numbers of this scale.

- With a higher concentration of supporters in the higher socio-economic groupings, a RWC tends to attract visitors who have a greater propensity to spend than supporters of other sports.

- RWC is broadcast in over 200 countries and attracts a cumulative TV audience of over four billion, comparing favourably with all major sports events outside of the Olympic Games, FIFA World Cup and the UEFA European Football Championships. The audience for RWC presents an opportunity for the Host Nation to achieve significant awareness and profile delivering positive tourism impacts in the longer term.

- RWC benefits from high attendances leading to significant expenditure focussed on the travel, hospitality and leisure markets. Stadium utilisation for the tournament is very high with 97% capacity utilisation at RWC 2007 for the matches played in France.

- With limited stadium development typically required to host RWC there is a lower level of infrastructure spending than for other large sporting events. This results in greater certainty over costs for the Host Nation and reduced financial risk for the event.

- The decision to award two consecutive RWCs to Host Nations concurrently gives the nations greater advance notice of the competition, which in turn allows them additional preparation time to maximise the economic impact of the event.

Rugby World Cup potential economic impact

- The direct economic impact of future RWCs (i.e. the amount of additional expenditure in the host economy due to RWC) is estimated to range from £200m to over £800m depending upon the location. This wide range reflects differing stadium capacities and utilisation, visitor numbers, and the relative cost of living in each potential Host Nation.

- Including indirect impact (i.e. the 'ripple effect' as direct expenditure is recycled through the economy), RWC is estimated to have the potential to generate at least £610m for a Host Nation, and up to £2.1 billion in some territories in Europe.

- The indirect impact will vary depending on the Host Nation's economy. For larger self contained economies, the indirect impact can be as much as three times the size of the direct impact, providing a significant boost. However, for smaller more internationally dependent economies the multiplier is lower.

- Hosting RWC is forecast to provide an incremental boost to the Host Nation economy of a minimum of £260m in Gross Value Added (GVA) terms, rising to over £1 billion in certain European locations.

- There is a very significant tax inflow to the Government of any country hosting RWC. For sales tax alone, the figure is likely to reach over £100m in certain countries.

Rugby World Cup impact headlines

Potential RWC impact

£200m-£810m
Direct expenditure into the Host Nation economy by RWC visitors

£610m-£2.1 billion
Total potential economic impact to a Host Nation, including indirect impact ripple effects

£260m-£1 billion
Total Gross Value Added (the accepted measure of additional economic impact) to the Host Nation economy

£100m
Potential additional sales tax income to a Host Nation Government as a result of RWC

2,500 VIPs (including 250 official Tournament Guests)
Estimated to stay an average of 12 days at RWC

2,500 media
Estimated to stay an average of 41 days at RWC

Rugby World Cup 2007

4 billion
Cumulative TV audience

238
Number of countries broadcasting RWC

2.3m
Paying spectators – the third largest number for any global sports event

94%
Average stadium utilisation – effectively a sell-out

350,000
International visitors to France

47,000
Average match attendance

28%
Increase in registered Rugby players in France following RWC 2007

RWC benefits

44 day event duration leads to high visitor numbers and impact

Limited stadium investment is required compared to many other global sports events

Feel good factor for Host Nation

8% increase in attendances at Super Rugby in Australia after RWC 2003 – positive knock on from RWC on domestic sport

9% of visitors to RWC 2003 expected to return to visit Australia again

Impact spread across the whole of the Host Nation, not just in host cities

Rugby supporters more likely to travel and spend than other sports as they tend to be in higher social groupings

Greater certainty and preparation time to maximise economic impact as a result of awarding two RWCs to Host Nations concurrently

Indirect impact 'ripple effect' can be up to three times the size of direct expenditure, depending on Host Nation economy

Source: Deloitte analysis.

The benefits of major sports events

Introduction

Major sports events have the capacity to deliver significant benefits – both tangible impacts such as additional expenditure by visitors and intangible such as the impact on national pride, sport's profile and participation. Hosting a major event has a number of benefits for the sport, and the Host Nation, as outlined below.

Benefits for the sport

- Major events attract huge amounts of media coverage and present an opportunity for a sport to increase its profile. This may lead to increased interest from current and potential fans and participants through media coverage of the event. RWC 2007 was broadcast in 238 countries to a cumulative worldwide audience of four billion.

- Events present an opportunity to leverage the enhanced profile of the sport by increasing domestic attendances and participation at grassroots level. Many major events have been followed by an increase in popularity of the domestic game – for example, Australian Super Rugby attendances increased by 8% in the season following the country's hosting of RWC 2003 and since hosting RWC 2007, France has experienced a 28% increase in the number of registered rugby players. Similarly, major football championships such as the FIFA World Cup and UEFA European Championships have subsequently been followed by increased domestic league attendances in the Host Nation.

- Events can also deliver a step change improvement in stadia and training facilities hosting the events. However, in the case of RWC the level of investment required in facilities is likely to be relatively small and manageable compared to other major sports events, as discussed later, which is itself a clear competitive strength of the event from a potential Host Nation's point of view.

- During the course of the event additional manpower in terms of volunteers is likely to be required. There may be possibilities to develop the pool of volunteers working in sport by offering them opportunities after the event.

Benefits for the Host Nation

- Major events are likely to attract significant numbers of visitors, as international supporters congregate to follow the event. The 2006 FIFA World Cup is reported to have attracted over one million international visitors to Germany, while RWC 2007 was estimated to have attracted 350,000 international visitors to France. In addition, visitors may extend an existing visit to incorporate the event and bring additional family and friends with them, thus increasing the financial impact.

- A large influx of international visitors, many of whom may not have visited the country or city previously, presents an excellent opportunity to showcase the country and secure repeat visits and positive word of mouth publicity when visitors return home. The RWC 2003 study estimated that 9% of visitors to RWC held in Australia expected to return again, highlighting the potential long term tourism legacy of the event in terms of driving repeat visits to the Host Nation.

- Innovative methods of promoting major events such as fan zones, live sites and festivals have successfully been introduced to major events to enhance the visitor experience and deliver increased commercial benefits.

- The host city or country's profile enjoys a significant boost by hosting major events. The additional coverage presents a global 'banner' of advertising which the country can use as the basis of tourism campaigns. This strategy has been successfully employed at international level by Germany (2006 World Cup) and Ireland (Ryder Cup), and at city level by Barcelona (1992 Olympic Games) and Melbourne (Commonwealth Games 2006).

- Major events can encourage increased participation in the sport which can deliver, in the medium to long term, significant benefits in terms of a healthier population and even reduced health spending.

> "Hosting a major event is often accompanied by a feeling of local pride and a feel good factor often permeates the Host Nation. There are also social benefits as a result of national unity and assisting social inclusion."

- The increased profile of the Host Nation may lead to increased business activity and potential inward investment. In addition, should major infrastructural improvements take place (e.g. to transport systems) this can be the catalyst for significant regeneration activity. For example, the 1992 Olympic Games are widely credited with playing a significant role in the regeneration of the harbour area of Barcelona.

- Hosting a major event is often accompanied by a feeling of local pride and a feel good factor often permeates the Host Nation. There are also social benefits as a result of national unity and assisting social inclusion.

- Finally, hosting a RWC can help develop best practice in environmental impact, assisting the development of policies and practices relating to climate change, waste management, public transport, and other initiatives. This can help a Host Nation's economy in the long term.

With the RWC 2015 and RWC 2019 tournaments being allocated concurrently, this provides each Host Nation a significant lead time which may be used to develop programmes and initiatives to maximise both the impact of the tournament, and enhance the international profile of the Host Nation.

Summary

In recent years there has been an increasing realisation of the significant benefits that can be generated by hosting major events. Many cities and countries now actively pursue hosting major events as a strategic priority and ensure that they leverage the event to the maximum.

Major events can have a marked impact on the Host Nation – for example the Euro'96 Football Championship is credited with adding 0.1% to GDP for the second quarter of 1996, which represented 25% of the total GDP growth in that quarter.

Rugby World Cup in context

Introduction

This section briefly outlines Rugby World Cup with reference to other major sporting events. RWC was first contested in 1987, and has since been held on a four yearly basis. The map below illustrates the countries which have hosted the tournament.

Most recently RWC 2007 was hosted by France and in November 2005 the IRB announced that RWC 2011 would be hosted by New Zealand. In July 2008 the IRB announced that the 2015 and 2019 events would be awarded concurrently with hosts to be announced in July 2009.

The RWC finals are contested by 20 nations playing a total of 48 matches. In RWC 2007 these matches were held over a 44 day period and this makes it one of the longest durations for a major event and aids economic impact.

At RWC 2007 12 venues hosted matches (including one venue each in Scotland and Wales) showing how the impact of the tournament can be spread beyond a single city and, in some cases, beyond the primary Host Nation. With teams generally playing only one game per week the event also gives visitors the opportunity to explore the Host Nation in between matches.

The structure of the RWC 2011 tournament has been confirmed as the same as the RWC 2007 tournament format and, for the purposes of this document, it is assumed that this structure will remain in place for future RWCs.

Attendances are among the highest of any major sports event

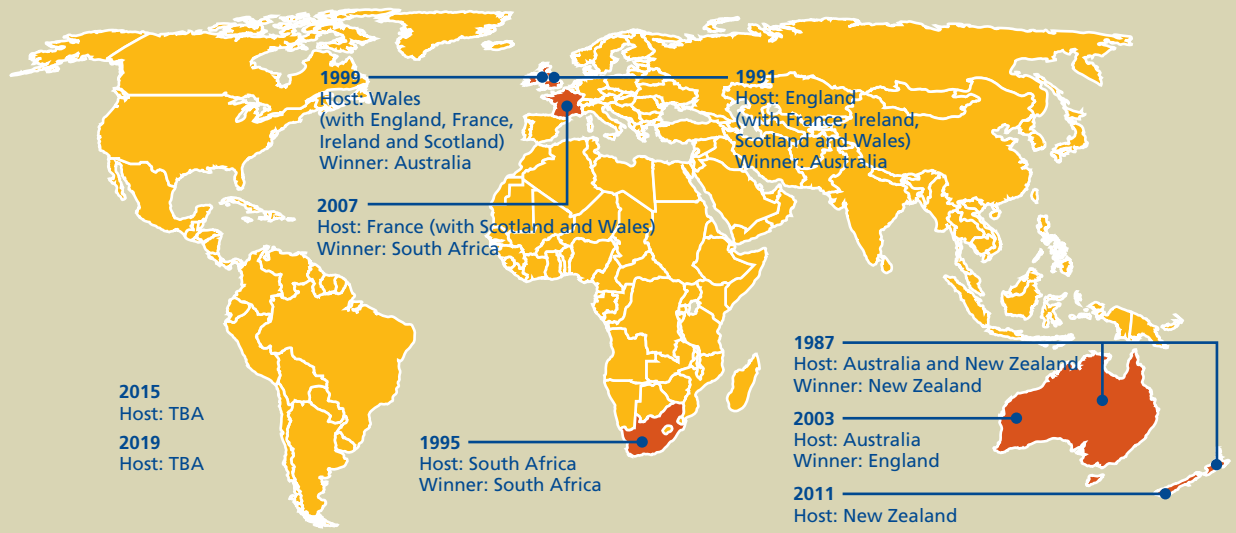
The strong international profile of Rugby and high levels of interest in the sport are reflected by RWC attendances. Total attendances have grown from 600,000 in the first RWC in 1987 to 2.3m in RWC 2007. Although some of this can be explained by an expansion in the size of the tournament from 16 to 20 teams in 1999, average attendances have increased from 18,750 in the first RWC to almost 47,000 in RWC 2007.

RWC 2011 is expected to deliver 1.5m attendees with an average match attendance of 30,600. The primary reason for the smaller projected attendance is the smaller capacities of the New Zealand venues. However, two venues (Eden Park in Auckland and the AMI stadium in Christchurch) are being expanded in advance of the tournament, so increasing capacity. The New Zealand Rugby Union projects capacity utilisation for the tournament of 85%, which is broadly consistent with the levels seen at previous events. However, given the profile of Rugby in New Zealand and relatively small capacity stadia, even higher utilisation than that projected may actually be witnessed.

Capacity utilisation for the tournament is invariably high – the 2003 and 2007 tournaments had capacity utilisations of 89% and 94% respectively, with 97% capacity utilisation in 2007 for the matches played in France. This suggests that demand for tickets often exceeds supply and therefore suggests that future tournaments should be able to achieve effective sell outs.

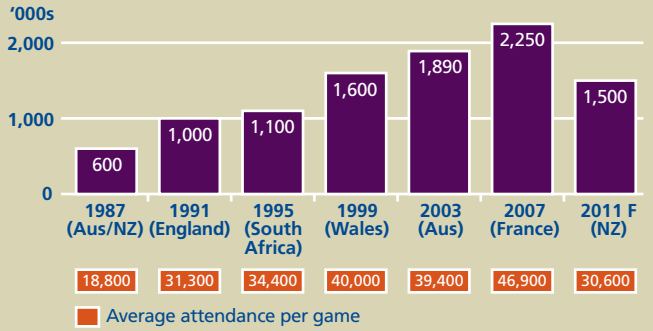
Chart 2.2 reveals the steady growth seen in RWC match attendances.

Chart 2.1: Previous Rugby World Cup venues



Source: IRB.

Chart 2.2: Rugby World Cup attendances 1987-2011F



Note: F = Forecast. Source: IRB.

Attendance data from other events confirms RWC as one of the foremost international sporting events. As the chart below shows, only the Olympic Games and FIFA World Cup deliver higher paying attendances than RWC, and despite the reduction in attendance for the 2011 tournament, this remains well above other major international sporting events.

Chart 2.3: Total attendance: Benchmark events

Note: F = Forecast. Source: IRB; press reports; economic impact studies; Deloitte analysis.

Although some events, notably the Tour de France, Americas Cup and major city marathons, reportedly deliver huge mass attendances, these are almost exclusively non paying spectators and are neither directly comparable nor similar in respect of revenue generation.

Summary

RWC has one of the largest paying attendances of any major sports event, confirming its position among the world's elite sports events. Attendances have grown to exceed two million for the most recent RWC.

Huge numbers of international visitors are attracted to the Host Nation

Major Rugby events have traditionally been characterised by significant numbers of travelling supporters, as events such as Six Nations matches, British and Irish Lions tours and previous RWCs have illustrated.

As the foremost Rugby competition RWC attracts travelling support in huge numbers, bringing colour and vibrancy to the tournament in addition to significant additional expenditure. Overseas visitors provide the primary source of additional income to a Host Nation as they bring significant new consumer spending into the country.

The profile of international visitors varies with the location of the tournament, as illustrated by the table below. An estimated 60,000 international visitors travelled to Australia to watch RWC 2003, with around half travelling from Europe. RWC 2011 is anticipated to attract over 65,000 international visitors, reflecting the growing stature of the tournament. Total visitor days are anticipated to be in the region of 1.3m.

European tournaments have different visitor dynamics. The shorter travelling distances mean European visitors tend to make a number of trips, each of a relatively short duration, surrounding particular matches. RWC 2007 attracted 350,000 visitors to France in connection with the tournament, of which 75% were from other European countries. The larger numbers of visitors means that the total number of international visitor days was estimated to be 2.8m. This total was derived with only 40 of the 48 matches taking place in France, suggesting that had all 48 matches been held in the country total visitor number may have been boosted to 420,000.

The total number of visitors may also be boosted by people coming to the Host Nation without tickets or with the intention of enjoying the atmosphere without attending matches themselves, providing an additional boost to economic impact.

Table 1.1: RWC visitor origins and average duration of stay

Visitor origin	RWC 2003 No. of visitors	Average duration	RWC 2007 No. of visitors	Average duration	RWC 2011F No. of visitors	Average duration
Europe	28,200	36	262,500	3	29,700	24
Australasia	18,600	15	49,000	24	16,500	11
Africa	10,200	24	24,500	22	9,900	22
Other	3,000	22	14,000	20	9,900	20
Total	**60,000**	**27**	**350,000**	**8**	**66,000**	**20**
Visitor days	**1,605,000**		**2,782,500**		**1,310,100**	

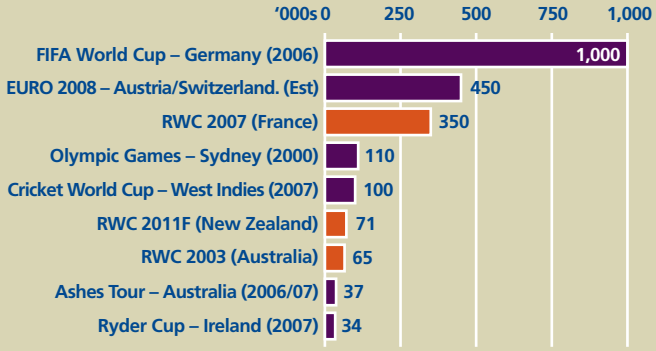
Note: Visitor numbers exclude approximately 5,000 international media and VIP guests at each RWC.

Source: Previous RWC economic impact studies; Deloitte analysis.

As the following chart shows, apart from football's two biggest tournaments – the FIFA World Cup 2006 and UEFA Euro 2008 – RWC 2007 has delivered more international visitors than any other major sports event held in mainland Europe. Overseas visitor numbers are lower for RWC tournaments held in Australia or New Zealand, but the average duration of visitors' stay is higher.

RWC 2003 visitor numbers and those forecast for RWC 2011 are considerably higher than those witnessed for the 2006/07 Ashes cricket tour in Australia for example.

Chart 2.4: Number of international visitors to major sports events



Source: IRB; press reports; economic impact studies; Deloitte analysis.

Summary

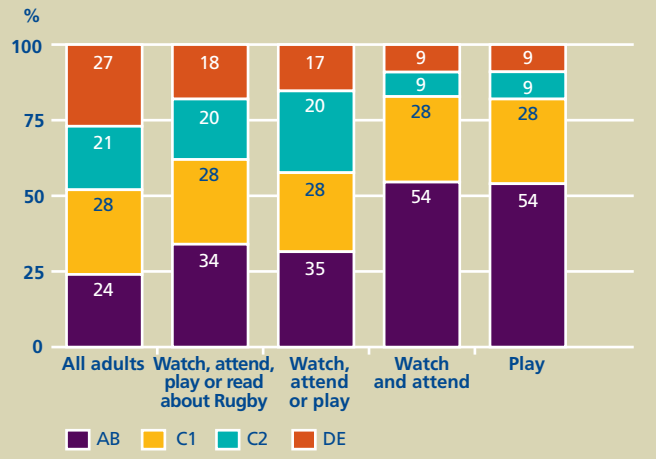
RWC delivers the largest number of international visitors except for the world's two biggest football competitions and the Olympic Games, with visitor days between 1.6m and 2.8m seen in recent events, and 1.3m projected for 2011.

Rugby supporters have relatively high spending power

Although analysis of the worldwide Rugby watching population is not available, the English Rugby Football Union have profiled English Rugby fans. The analysis shows that Rugby supporters are traditionally from higher social groups than the broader population. While 24% of the overall adult population are from the AB social groups, among those who watch and attend Rugby matches, the proportion is 54%.

This suggests that Rugby supporters are more likely to have a higher spend per trip than fans of some other sports.

Chart 2.5: Characteristics of English Rugby supporters – social group



Source: RFU.

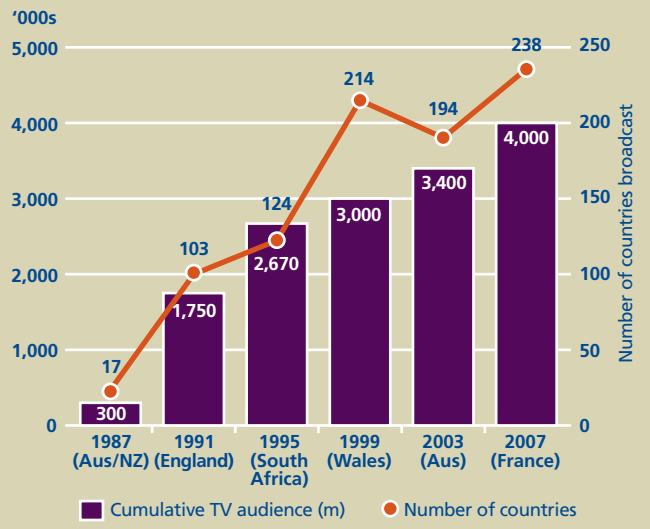
Summary
With a higher concentration of supporters in the higher social groupings, Rugby supporters may be considered to have a greater propensity to spend than supporters of other sports.

Significant TV audiences boost the Host Nation's profile

RWC has a strong international profile, and this is reflected in the very large TV audiences the event attracts. TV audiences for the event have grown steadily, and RWC 2007 was watched by a cumulative TV audience of over 4 billion in 238 countries.

This significant and increasing international profile also gives a boost to the Host Nation's international profile, which may deliver long term benefits in terms of increased tourism.

Chart 2.6: RWC broadcast countries and cumulative TV audiences: 1987-2007



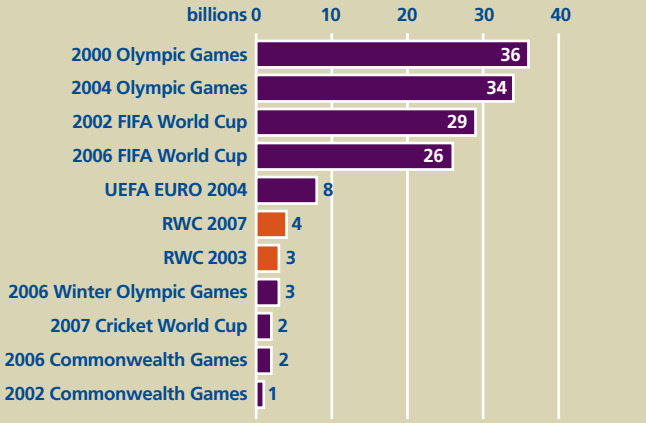
Source: IRB.

Whereas RWC 1991 was broadcast in 103 countries (itself a significant number), by 2007 over 230 countries broadcast the tournament, highlighting the massive growth in the event's exposure.

Benchmarks from other major sports events demonstrate that RWC attracts considerably higher viewing figures than the Commonwealth Games for example, confirming its status as the premier major sports event except for the biggest international football events and the Olympic Games.

> "Rugby World Cup attracts travelling support in huge numbers, bringing colour and vibrancy to the event in addition to significant additional expenditure."

Chart 2.7: Cumulative TV audiences of selected sports events



Note: Olympic Games viewing figures are measured in terms of viewing hours rather than by cumulative audience.

Source: IRB; press reports; economic impact studies; Deloitte analysis.

Summary
RWC is broadcast in over 200 countries and attracts a cumulative TV audience of over 4 billion, comparing favourably with all major sports events except for the Olympic Games, the FIFA World Cup and the European Football Championships.

This presents an opportunity for the RWC Host Nation to achieve significant 'place marketing' effects delivering indirect tourism impacts in the longer term.

Construction costs are limited, reducing risks to the event and improving budgeting accuracy

RWC compares well against many other major events in terms of attendances, international visitors and global television audiences. A further key advantage of RWC is its relatively limited costs, particularly in respect of stadium and infrastructure investment. The following chart sets out the primary stadium costs associated with RWCs since 2003, compared with other major events.

Compared with RWC, events such as the FIFA World Cup and Olympic Games are typically preceded by large scale construction activity, often involving building new stadia, arenas and other facilities (as well as associated transport infrastructure costs). In addition to placing pressure on the overall budget of the events, these costs are difficult to predict and manage, and often result in significant cost overruns, placing further pressure on the limited budget for the event. The debate regarding the costs of the London 2012 Olympic Games has been widely reported with a total budget of £9 billion, of which £1.2 billion is allocated to venues costs, while the 2010 FIFA World Cup is, at the time of publishing this report, already expecting costs to overrun by a third compared to initial budgets.

Chart 2.8: Estimated stadium/facilities development costs relating to major sports events

Note: Although no major stadium developments took place in advance of the RWCs in 2003 and 2007, a nominal amount of £30m has been assumed to account for minor projects. 2010 FIFA World Cup and RWC 2011 figures are reported forecasts of capital expenditure required.

Source: IRB; press reports; economic impact studies; Deloitte analysis.

For the most part, previous RWCs have used existing stadia, or also used stadia from other sports (e.g. football). Co-hosting of RWC also means the need for new stadia builds or significant redevelopments is reduced.

The limited stadia and construction costs associated with RWC mean that overall costs can be estimated with a greater degree of confidence. This means the event carries less risk in financial terms than many of the benchmark events profiled, resulting in greater confidence about its financial success.

Summary
With limited stadium developments required to host a RWC, there is greater certainty over costs. This results in reduced financial risk for the event, and is likely to increase the return on investment for the Host Nation.

> "Compared with RWC, events such as the FIFA World Cup and Olympic Games are typically preceded by large scale construction activity, often involving building new stadia, arenas and other facilities."

Potential economic benefits of awarding two RWCs concurrently

The IRB has decided to award the RWC 2015 and RWC 2019 tournaments concurrently. This could have a significant positive effect on economic impact and potentially deliver benefits to both host countries for a number of reasons:

- Early confirmation of Host Nation status can provide greater certainty to governments, commercial partners and other stakeholders.
- Early confirmation allows Host Nations more time to prepare in terms of generating awareness through international promotional campaigns and planning local logistics for hosting the event. This is particularly important for those Unions without prior experience of hosting RWC.
- The benefits from being awarded host status can be enjoyed for a longer period of time.
- Given the above, joint awarding should be of commercial benefit to governments, sponsors, broadcasters and other commercial partners.

Significant and growing economic returns from a RWC to a Host Nation and its government suggests scope for an enhanced Tournament Fee to the IRB for the benefit of global Rugby.

Summary
The decision to award two consecutive RWCs to Host Nations concurrently gives the Host Nation, world Rugby and other stakeholders greater certainty, which in turn allows them additional preparation time to maximise the economic impact of the tournament.

Economic impact of previous Rugby World Cups

Introduction

RWC has a very significant economic impact. Previous studies have estimated the economic impact of RWC and this section includes key elements from those studies, before going on to develop estimates for a potential future RWC in the next section.

Separate economic impact studies were conducted for the RWCs in 2003, 2007 and 2011. The studies vary in their methodologies and assumptions. Therefore the studies do not permit a precise retrospective like for like comparison of total economic impact. However, a summary of headline results from each study gives an indication of the overall impacts achieved.

The direct economic impact of international expenditure is the most readily available comparison of RWC economic impact. The level of economic impact appears to be greater in Europe because of the high number of international visitors, when compared to non-European events. However, events held outside European countries are likely to see an increased duration of stay from European visitors.

Summary

It is clear that RWC benefits from high attendances leading to significant expenditure focussed on the travel, hospitality and leisure markets.

Table 3.1: Summary of economic impact of Rugby World Cups 2003-2011 (forecast)

Event	Summary of economic impact
RWC 2003 – Australia	• 1.9m aggregate attendance at matches, with average attendance of almost 40,000, and capacity utilisation of 89%. • 65,000 international visitors to Australia (including a total of 5,000 media and VIP visitors), of which around half were from Europe. • Visitor duration ranged from 15 to 36 days depending on origin of visitor. • Total direct expenditure of £168m. • Generating £208m in additional industry sales in the Australian economy. • Contributing £122m in Gross Domestic Product to the Australian economy.
RWC 2007 – France	• Over 2.2m tickets sold, with average attendance of almost 47,000 and capacity utilisation of 94%. • Stadium investment of c.£35m. • Pre-event study estimates: - 350,000 international visitors to France, of which 275,000 attended matches. - A total direct economic impact of c.£800m. - Domestic spectator spending adding a further £1.7 billion. • Post-event study estimates: - More than £363m in net additional economic gain to the French economy for the seven week duration of the tournament only. However, this is after deducting all outgoing expenditure related to the RWC from French economic sources, including payment of TV rights fees, sponsorship and ticket purchases for example by French businesses. Hence, the RWC 2007 post-event study used a different methodology from the pre-event study and most other studies of this kind. The netting off of outgoing expenditure will have reduced the £363m figure by at least £200m.
RWC 2011 – New Zealand (forecast)	• Anticipated total attendances of 1.5m, with average attendance of 30,600 and capacity utilisation of 85%. • Total international visitors of 71,000, including a total of 5,000 media and VIP visitors. • Almost 30,000 international visitors from Europe. • Visitor durations to range from 11 to 24 days. • Total direct economic activity of £456m. • £201m in additional Gross Domestic Product in the New Zealand economy. • Resulting in £189m of total direct additional expenditure within New Zealand.

Source: IRB; Estimated Economic Impact of the 2011 Rugby World Cup, Horwarth Asia Pacific and Market Economics, 2006; Les Retombees economiques de la Coupe du Monde de Rugby 2007 en France, ESSEC, 2007; Rugby World Cup France 2007, Economic and Social Benefits Impact, Summary, Centre de Droit et d'Economie du Sport, 2008; Economic Impact of the Rugby World Cup 2003 on the Australian Economy – Post Analysis, URS, 2003.

Potential Rugby World Cup impact

Introduction

Having looked at previous RWCs, in terms of key figures and results from previous studies, this section moves on to gauge the potential economic impact of future RWCs on a Host Nation. Deloitte have developed an economic impact model for a typical RWC which estimates the economic impact of the event, with variations based on hosting RWC in different locations.

About economic impact

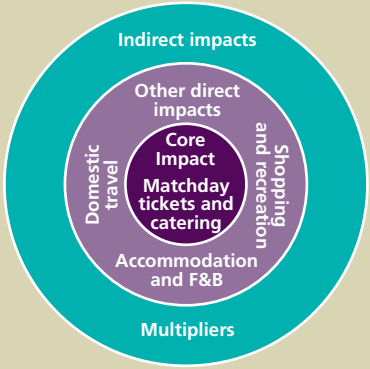
In high level terms economic impact studies aim to measure the increased economic activity surrounding an event. For sporting events, the key stimulants of activity are the expenditure of spectators, event organisers and other stakeholders, which flow through the local economy to expand total regional and national GDP.

The diagram below illustrates the principal components of economic impact. There are three broad areas in which impact will occur, as follows:

- **Core impacts** – primarily comprising expenditure by, or generated from, international spectators attending RWC matches from tickets and matchday catering;
- **Other direct impacts** – comprising spending by spectators and other visitors on accommodation, food and beverage, transport and other spending, as well as investment in infrastructure; and
- **Indirect and induced impacts** – relating to the 'ripple effect' as the direct spending is recycled through the economy. The primary components are indirect impacts, achieved largely by businesses spending on suppliers, and induced impacts, as recipients reinvest money in the economy themselves.

In addition, there is also significant expenditure by domestic residents. Domestic spending comprises an important element of the full value of RWC to a Host Nation.

Chart 4.1: Components of economic impact



It is important to include only the additional impacts, i.e. those which would not have occurred if the event had not taken place. Some of the expenditure relating to air fares, for example, has been excluded as it is unlikely that all of this will have accrued to the Host Nation.

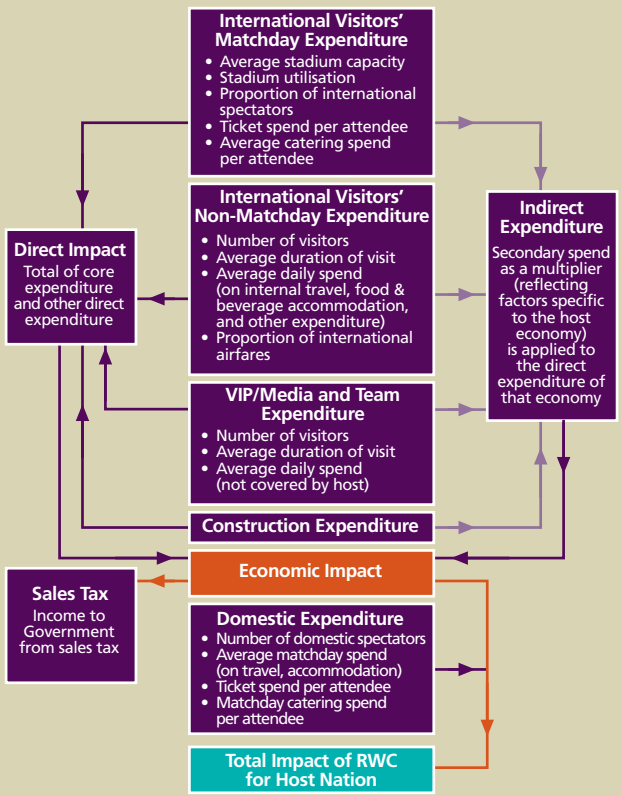
For the purpose of this Report the potential economic impact of hosting a RWC in one of three specific regions has been modelled:

- **Europe** – England, Ireland, Scotland, Wales, France and Italy
- **SANZAR** – South Africa, New Zealand and Australia
- **Other developed economies/regions** – Japan and North America

In developing the model there are specific regional factors and drivers that will have an influence on the economic impact. For the purposes of this study it is assumed that Ireland, Scotland and Wales would not be sole hosts of a RWC, but would have to jointly host the tournament with one or more other European countries.

The diagram below illustrates the key components in determining the potential economic impact of RWC:

Chart 4.2: Key Components of economic impact of RWC



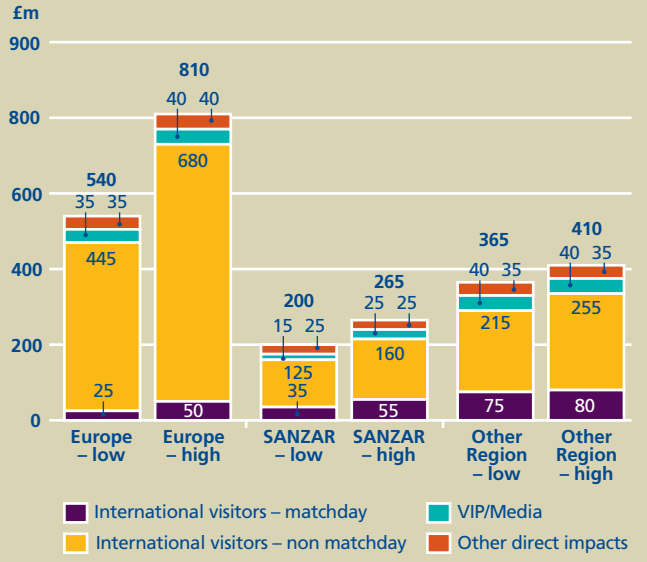
"For sporting events, the key stimulants of activity are the expenditure of spectators, event organisers and other stakeholders."

Direct impact summary

The direct impact of a RWC on the Host Nation is illustrated in the chart below, and ranges from £200m to over £800m depending on the Host Nation. This wide range reflects the variation in assumptions underpinning the analysis, including stadium capacities and utilisation, visitor numbers, and the relative cost of living in each country.

Our analysis at a national level also includes the impacts which would be seen at a local and regional level at each host city location.

Chart 4.3: Total estimated potential RWC direct impact by region (showing high and low ranges for each region)



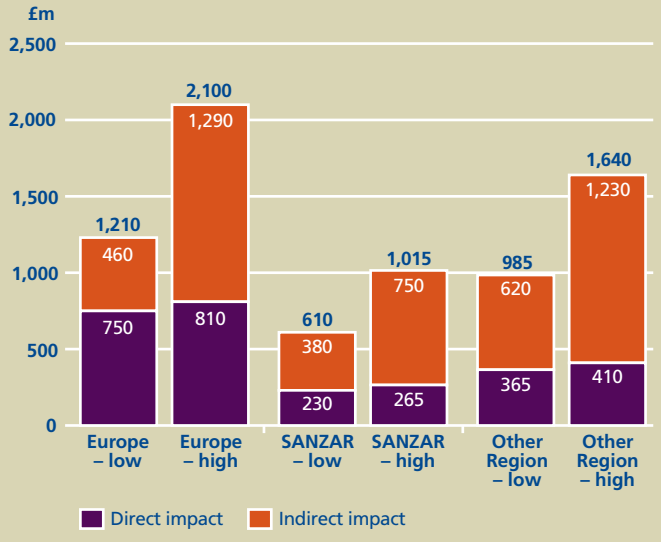
Source: Deloitte analysis.

As illustrated in the chart, the key element is the non matchday spending by international visitors, which accounts for up to 80% of direct expenditure in Europe and around 60% elsewhere.

Total impact summary (direct and indirect impact)

Including indirect impact, RWC is estimated to have the potential to generate at least £610m for the Host Nation, and up to £2.1 billion in some territories in Europe.

Chart 4.4: Total estimated potential RWC direct impact by region



Note: The variation in the indirect multiplier means that the country with the lowest direct impact may be different to the country with the lowest overall impact.

Source: Deloitte analysis.

The wide range between the potential impact in different regions (and indeed within individual regions) reflects significant differences across a number of the specific regional factors and drivers that have an influence on the economic impact. The three key factors causing the significant spread are:

- A wide variation in visitor numbers, with a European RWC expected to accommodate approximately seven times the number of international visitors attracted to the other regions (albeit a significant number of these visitors may visit the Host Nation on a match by match basis and therefore be represented more than once within the total figure).
- Significant differences in the average duration of visit – from 8-9 days for a European RWC to 20-23 days for a SANZAR RWC.
- The significant variance in the indirect multiplier applied to the direct expenditure to determine the indirect impact – as each country has its own specific economic characteristics which will impact on the extent of the 'ripple effect'. The variation in the indirect multiplier means that the country with the lowest direct impact may be different to the country with the lowest overall impact.

The following pages profile the components making up the economic impact total.

Direct impact

International visitor expenditure is likely to comprise the largest single element of additional economic impact to a Host Nation. The principal components of expenditure which may accrue to the Host Nation are international visitor matchday spending and non matchday spending and media/VIP and team expenditure, as well as construction expenditure. These are examined in turn below.

International visitors' matchday expenditure

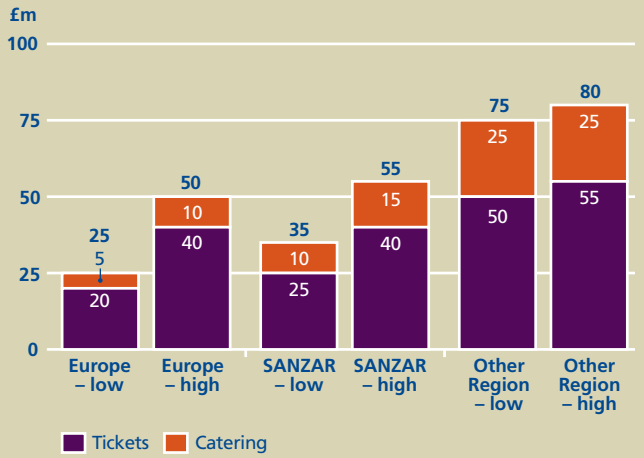
International visitors will buy match tickets and catering at RWC matches. Both ticket and catering spend are driven by the average stadium size and capacity utilisation achieved in the stadia. Stadium capacity is assumed to range between 40,000 and 50,000 and capacity utilisation between 85% and 94%. Over the course of a 48 game tournament, total attendances range from 1.4m to 2.3m.

Based on estimates from RWC 2007 and projections for RWC 2011 the proportion of international spectators is assumed to be 16% (in Europe), 22% (SANZAR) and 30% (elsewhere). International attendees therefore range from 230,000 to 490,000 (4,800 to 10,000 per match). Average ticket prices are assumed to range from £60 – £110 reflecting ticket price projections for RWC 2011 and the relative cost of living in different countries.

All international attendees are assumed to spend between £4 and £6 per match on food and beverage with a proportion of international attendees (ranging from 14% in Europe to 25% in other regions) assumed to purchase a hospitality package. Corporate hospitality spend per head is assumed to vary across the regions (ranging from £125 to £175) which reflects the projected RWC 2011 expenditure and the relative cost of living.

The chart below illustrates matchday expenditure in each of the three regions – split between ticket and catering expenditure and Table 4.1 sets out the key metrics that drive this spend.

Chart 4.5: Visitors' matchday expenditure by region



Source: Deloitte analysis.

Table 4.1: Ticket and catering spend per attendee by region

	Europe	SANZAR	Other Region
Number of international spectators	230k-360k	315k-420k	490k
Ticket spend per international attendee	£90-£110	£60-£90	£105-£110
Catering spend per international attendee	£25-£30	£30-£40	£50

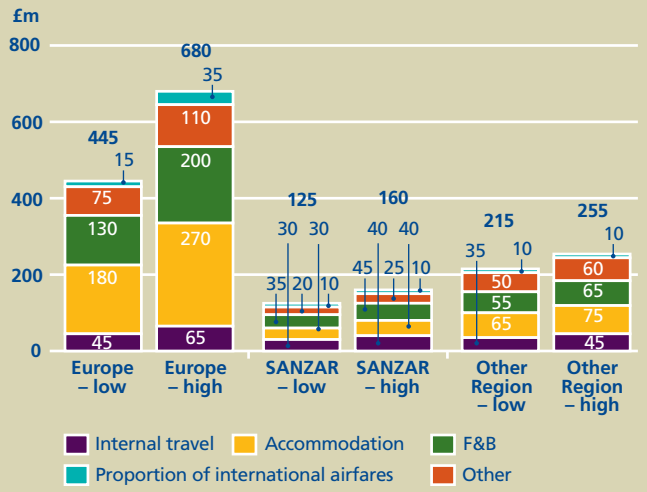
Note: Within each region, countries with the lowest number of international spectators may be different to those with the lowest ticket and/or catering spend (and similarly for highest figures).

Source: Deloitte analysis.

International visitors' non matchday expenditure

Attending matches is likely to comprise a small but significant element of a wider holiday for visitors, including expenditure in other key sectors. Many visitors will travel around the Host Nation between matches, widening the impact beyond the host cities and extending the flavour and colour of the event throughout the country. Hence the impact of the event will be felt right across a Host Nation. This expenditure is profiled below, and varies widely between the regions, resulting in a wide range in estimated visitor spending – from £120m-£150m in the SANZAR region to £430m-£650m in Europe.

Chart 4.6: Visitors' non matchday expenditure by region



Source: Deloitte analysis.

Three key metrics determine the differences between visitor spending in the different regions; the number of international visitors, trip duration and daily spend.

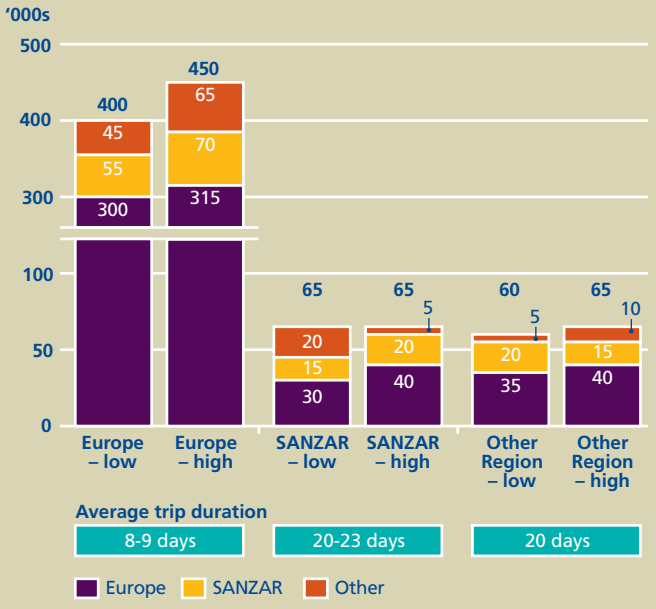
International visitors represent the biggest opportunity to increase the direct impact from hosting RWC. Host Nations can – by careful planning and judicious marketing investment – maximise each component of the visitor profile (number of visitors, trip duration and daily spend per visitor) and significant economic impact can be generated.

- **The number of international visitors** varies significantly with a higher number of visitors to a European tournament compared to elsewhere. Between 400,000 and 450,000 have been assumed for a European tournament, consistent with visitor numbers seen at RWC 2007 in France. For RWC held elsewhere, international visitor attendance is assumed to be lower, at around 65,000 (which is comparable with the number projected to attend RWC 2011 in New Zealand) due mainly to the significantly higher travel times and costs of reaching those countries.

- **Average trip duration of international visitors** also varies widely, with durations being considerably shorter for a European competition. The following chart illustrates the anticipated number and origin of visitors to a RWC in each of the three regions. Approximately 70% of visitors to a RWC in Europe are assumed to travel from another European country, with some visitors making multiple trips and an average duration of 3 days. Non European visitors are assumed to make a small number of visits, but extend their stay an average of 3 weeks. As a result, the average trip duration is 8 to 9 days.

  By contrast, tournaments in the SANZAR and Other Regions see significantly higher trip durations, of between 20 and 23 days, reflecting the higher proportion of visitors travelling from outside the region and hence staying for a longer period

Chart 4.7: Visitor origin by region and average duration

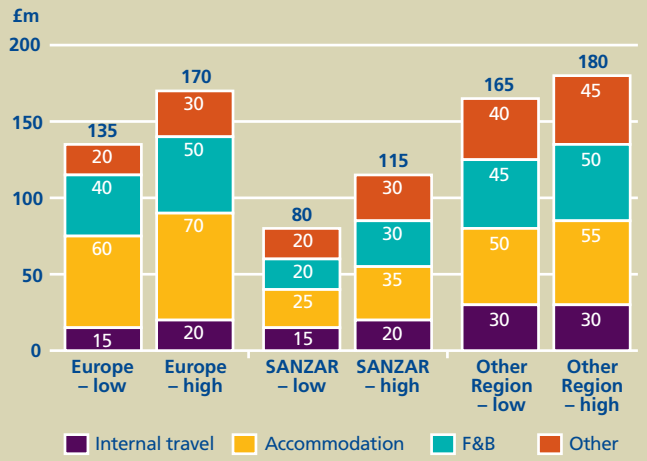


Source: Deloitte analysis.

- **Average daily spend per attendee** relates to accommodation, food and beverage, domestic travel and recreational spend, but excludes match day expenditure (as already outlined) and international travel costs.

The expenditure profiles are shown in the chart below and reflect the relative cost of living in different countries, with the highest spend per visitor in the Other Regions (at approximately £175) and the SANZAR region having the lowest daily average spend.

Chart 4.8: Visitor daily spend by region



Source: Deloitte analysis.

In addition to the direct expenditure associated with attending matches and other expenditure in the country, a proportion of international air travel expenditure will accrue to the Host Nation. For each Host Nation the impact generated from international airfares has been calculated based on the number of international travellers, the estimated cost per flight and the proportion of travellers assumed to be travelling on the Host Nation's national airlines.

Table 4.2: Airfare expenditure by region

	Europe	SANZAR	Other Region
Number of international visitors	400-450k	65,000	60-65,000
Average airfare ticket price	£500	£1,070	£1,070
Percentage accruing to Host Nation	5%-15%	15%	15%
Airfare expenditure accruing to Host Nation	**£15m-£35m**	**£10m**	**£10m**

Note: For a RWC in Europe, the countries with the lowest number of international visitors may be different to those with the lowest percentage accruing to the Host Nation (and similarly for the highest figures).

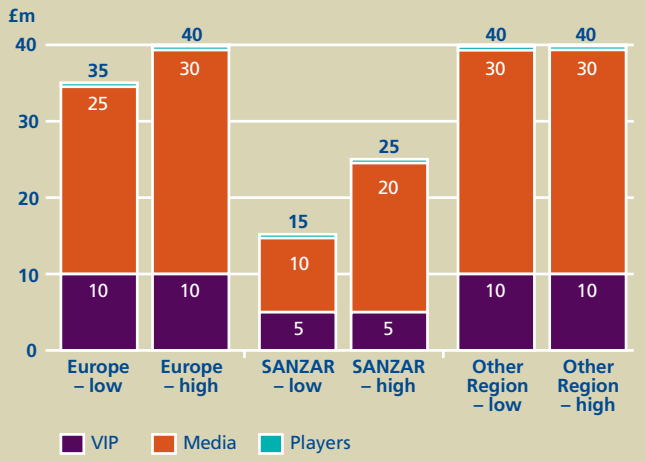
Source: Deloitte analysis.

Air travel expenditure is anticipated to vary between £10m and £30m. The higher number of international visitors in Europe is the main driver of higher expenditure in a RWC in Europe.

VIP/Media and team expenditure

In addition to international visitors, RWC attracts VIP and media visitors, and their number and duration of stay is assumed to be the same across all host countries, with 2,500 VIPs (including 250 official Tournament Guests) staying for 12 days and 2,500 media staying for 41 days. Figures for daily spend reflect the relative cost of living in different locations.

Chart 4.9: VIP and media spend by region



Source: Deloitte analysis.

Table 4.3: VIP and media spend by region

	Europe	SANZAR	Other Region
VIP spend per day	£300-£375	£150-£230	£350-£370
Media spend per day	£235-£300	£120-£185	£275-£290

Source: Deloitte analysis.

For the duration of RWC, competing teams' costs (including accommodation, food and beverage and domestic travel) are paid for by the Host Union. It is assumed that in addition to costs covered by the Host Union, players will each incur expenditure of c.£20 per day. Based on 19 international teams with an average size of 45 each staying for 45 days, this equates to c.£1m of additional other direct expenditure.

Construction expenditure

As noted previously, RWC related construction expenditure is likely to be relatively low compared to other major sports events. A nominal level of construction investment is included, consistent with small developments at tournament venues. The total, which ranges from £25m to £40m across the regions, is a relatively small amount relative to other major sporting events considering the number of stadia which are likely to be used.

Table 4.4: Construction expenditure by region

	Europe	SANZAR	Other Region
Construction expend.	£35m-£40m	£25m	£35m

Source: Deloitte analysis.

Indirect impact

In addition to direct expenditure there is an indirect impact when direct expenditure is recycled through the economy. The size of this 'ripple effect' can vary depending on the structure of each economy. Thus the indirect impact multiplier ranges from 0.3 to 3.0, depending on the scale and structure of the Host Nation economy. As illustrated by the table below, the indirect impact varies from £380m to £1.3 billion based on Host Nation characteristics and the level of direct impact.

Table 4.5: Indirect impact by region

	Europe	SANZAR	Other Region
Direct expenditure	£540m-£815m	£200m-£270m	£365m-£410m
Indirect and induced expenditure	£460m-£1,290m	£380m-£750m	£620m-£1,225m
GVA	£570m-£1,140m	£260m-£430m	£540m-£870m

Note: Within each region, countries with the lowest direct expenditure may be different to those with the lowest indirect and induced expenditure and/or GVA, (and similarly for the highest figures).

Source: Deloitte analysis.

GVA (Gross Value Added) is an alternative measure of economic impact. Whilst expenditure outlines the financial flows in the economy, GVA is a measure of the additional economic output attributable to hosting RWC. The GVA figure includes value added to the economy by RWC through wages and associated contributions paid, profit made, and taxes paid (e.g. income tax and company tax) at each stage of production. It excludes purchases made and/or services used to produce a good or service whether that was sourced domestically or from abroad.

GVA also varies significantly across the different regions – from £260m to £1.1 billion.

Summary

The indirect impact of RWC is highly variable and depends largely on the structural nature of the economy. For larger, self contained economies, the indirect impact can be as much as three times the size of the direct impact, providing a significant boost. However, for smaller, more internationally dependent economies the multiplier is lower.

In GVA terms, hosting RWC is forecast to provide an incremental boost to the Host Nation economy of a minimum of £260m, rising to over £1 billion in certain European locations.

Additional expenditure by domestic RWC attendees

Domestic residents comprise the majority of RWC attendees and therefore their expenditure comprises a considerable and important element of the full value of RWC to a Host Nation. Substantial domestic spend demonstrates the high level of interest amongst domestic residents and provides support to a number of the non financial impacts which are assumed to be driven by hosting RWC but which cannot be quantified.

Key metrics are similar to those for international visitors, and are set out in the table below:

Table 4.6: Key metrics by region

	Europe	SANZAR	Other Region
Number of domestic spectators '000s	1,200-1,900	1,100-1,500	1,100
Ticket spend per attendee	£90-£110	£60-£90	£105-£110
Catering spend per attendee	£20-£35	£5-£10	£15
Other spend per attendee	£20-£25	£30-£45	£25

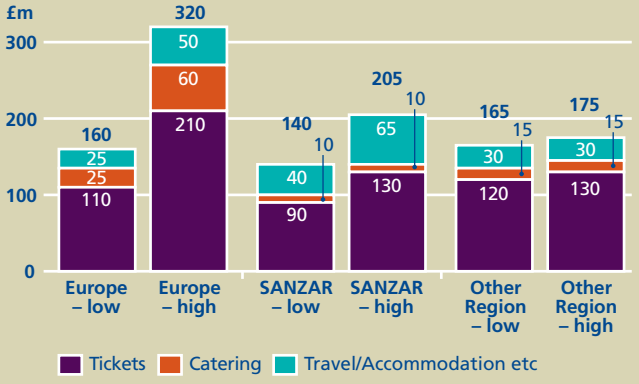
Note: Within each region, countries with the lowest number of domestic spectators may be different to those with the lowest ticket, catering and/or other spend (and similarly for the highest figures).

Source: Deloitte analysis.

Average domestic attendance is assumed to range from 1.1m to 1.5m across the regions.

Ticket spend is in line with that of international visitors. However catering spend per attendee is considerably lower as a result of the lower proportion of domestic visitors that are assumed to purchase corporate hospitality packages. Between 10% and 15% of domestic visitors in Europe are assumed to purchase hospitality packages compared with 2% in the SANZAR region and 5% in other regions.

Chart 4.10: Match related expenditure by domestic residents by region



Source: Deloitte analysis.

In calculating the economic impact on a Host Nation expenditure by domestic residents is considered to be displacement activity which would otherwise be invested in the national economy through other means. This investment has therefore been excluded from the economic impact calculations but is included here for information.

Rugby World Cup tax impact

Introduction

With its large economic footprint, long duration and significant international visitor numbers, RWC delivers substantial tax revenues to a Host Nation's government.

This section outlines the potential types of tax revenue that can accrue to a RWC host government and an indication of the possible levels of such tax revenue.

In summary, the tax revenues to the government of the Host Nation include:

- **Sales tax** associated with RWC related revenues arising in the Host Nation; e.g. VAT (Value Added Tax) or GST (Goods and Services Tax). This would primarily be related to (i) direct expenditure in the host economy and (ii) ticket sales.
- **Company (corporation or corporate income) tax** – generated from additional company profits as a result of RWC.
- **Personal income tax** – derived from the additional employment generated by RWC and hosting of international sportsmen.

RWC 2003: Australia

- The RWC 2003 impact report estimated that the tournament in Australia led to an increase in state tax to the state of Victoria of £4.5m.
- Seven of the 48 matches (15%) were held in Melbourne. If the same level of state tax income that was generated in Victoria also accrued to other states, the total for all of Australia would be £31m.

> "The figures highlight how important the high numbers of visitors particularly including international visitors are to RWC, since spending by these individuals during their stay directly drives GST amounts to government."

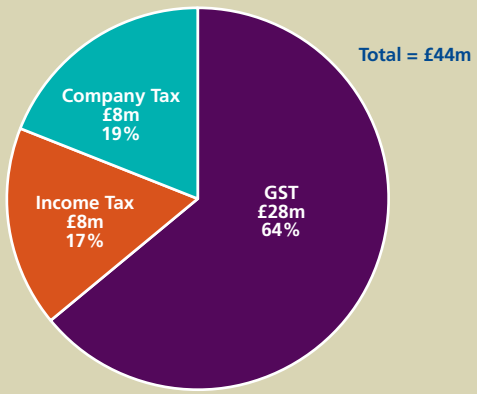
RWC 2007: France

- At the time of writing, no figures regarding the precise amount of tax income generated for the French Government are available.
- However, we would expect the figure to be even greater than those estimated for RWC 2011 (below), given the relative estimated economic impact of both events.

RWC 2011: New Zealand

- The prospective 2011 New Zealand economic impact report estimated the tax revenues to central Government resulting from RWC 2011.
- It was estimated that the total additional tax revenue generated for New Zealand would be £44m, as shown in the chart below.
- Almost two thirds of the tax contribution comes from GST (64%) with the remainder roughly equally split between company tax and income tax.
- The figures highlight how important the high numbers of visitors particularly including international visitors are to a RWC, since spending by these individuals during their stay directly drives GST amounts to Government.

Chart 5.1: Additional Tax Contributions: RWC 2011



Source: Horwarth Asia Pacific.

Future RWC tax impact

The section below outlines the tax revenues that might accrue to the government of a future Host Nation of a RWC. An estimate of sales tax levels is provided, and company tax and personal income tax are discussed.

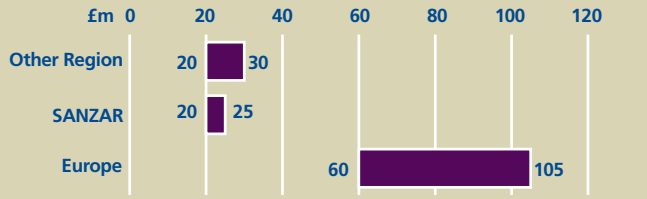
Sales tax

By far the main driver of incremental tax revenues associated with hosting an international event like RWC is the sales tax associated with the incremental revenues arising in the Host Nation; e.g. VAT or GST.

Sales tax rates differ significantly between countries (and in the case of the US, are different between states). The rates tend to be in the region of 10% to 20%, although lower rates prevail for certain types of revenues in some countries, and rates in Japan are all 5%. Consequently, the incremental tax revenue from sales tax that the government of potential Host Nation stand to generate from hosting the tournament will vary.

The chart below shows the estimated amounts that would be generated from sales tax in different regions.

Chart 5.2: Estimated sales taxes generated by RWC by region



Source: Deloitte analysis.

- In all regions there will be very significant tax revenues flowing to Host Nation Governments
- In Europe, where economic impact is likely to be highest, the anticipated revenues are a minimum of £60m, rising to over £100m depending on territory.
- It is estimated that sales tax will contribute over £20m to governments in the SANZAR region.
- Finally, even in other developed nations, the figure is estimated to be a minimum of £20m, rising to £30m.

Company tax

Company tax would be generated from the incremental profits of companies in various industries which might benefit from hosting RWC – for example travel, food and beverage, hotels and so forth cascading right through the economy.

This will therefore provide a financial input to the Host Nation Government. This company tax figure is included already in the GVA figures provided by the economic impact model and outlined in Section 4.

In terms of the RWC tournament itself, for a number of reasons it may well be the case that direct taxes would not be levied on the tournament company itself:

- In certain countries (e.g. Australia), if National Governing Bodies (NGBs) of sport organise international events and keep a share of the profit, that share of the profit is exempt from direct tax.
- Some countries grant specific exemptions from direct tax for NGBs when they are set-up as not for profit organisations.
- In other countries, all income generated in a revenue cycle is allocated back to the game – therefore even extra profits from tournaments are re-invested and do not therefore generate direct tax.

> " Very substantial tax inflows to Government will potentially arise for any country hosting a RWC. Looking at sales tax alone, the figure may reach over £100m in certain countries."

Personal income tax

The economic impact of the tournament cascading right through the economy will create additional jobs (either temporary or permanent) in certain industries. These new jobs will therefore incur income tax. As with company tax, personal income tax is included already in the GVA figures provided by the economic impact model and outlined in Section 4.

Personal income tax related directly to the tournament itself will not be significant for a number of reasons.

- RWC will obviously mean international players and officials visiting the Host Nation, and it will require a large number of volunteers to help run the event. It is likely that volunteers helping to organise the tournament will move from other sectors of the workforce, and will not generate incremental salary (and therefore income tax and social security contributions);
- A small number of employees from the IRB and other organisations (e.g. broadcasters and other media) may spend significant time in the Host Nation, such that they become technically tax resident and subject to Host Nation personal income taxation. From an individual's personal perspective this is unlikely to result in a significant increase in income tax suffered as such tax would be creditable against the individual's domestic tax liability. This therefore represents effectively a shift in taxation from the country of origin to the Host Nation. Given that Social Security Agreements may prevent a similar position on social security, and the overall numbers of individuals involved, it is unlikely that significant additional tax would be generated; and
- Finally, the players and officials from competing nations would be in the country for approximately two months. This is insufficient time for officials (managers, coaches etc.) to become taxable in the Host Nation, but players are generally taxed on income associated with the performance of their duties in the Host Nation, unless the Host Nation chooses to offer a specific exemption. Again, it is likely that this tax will be creditable against the players' overall income tax liability in their country of residence thus effectively switching personal income tax from the country of origin to the Host Nation, but in the context of the overall economic impact of RWC the amounts are unlikely to be significant.

Summary

Very substantial tax inflows to Government will potentially arise for any country hosting a RWC. Looking at sales tax alone, the figure may reach over £100m in certain countries.

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Report preparation, methodology and limitations

Introduction and scope of the review
Rugby World Cup Limited (RWCL) commissioned Deloitte & Touche LLP ("Deloitte") to produce this Report, which has been prepared in accordance with our contracted terms of engagement dated 13 June 2008. The Report sets out the potential economic impact of hosting Rugby World Cup (RWC), and provides indicative estimates of the economic impact of RWC, and sets this in the context of other sporting events.

Use of this Report and legal responsibility
Some of the matters discussed in this Report are by their nature technical. The intended recipient of the Report, RWCL, is familiar with the issues, facts and other matters addressed and the Report was written with that in mind.

This Report is prepared for the sole and confidential use of RWCL and for the purposes set out in the terms of engagement. In preparing this Report our only responsibility and duty of care is to RWCL. We did not, and do not by consenting to publication of this Report, assume or accept or owe any responsibility or duty of care to any other person.

RWCL has asked for our consent to making this Report available by distribution to its Member Unions, and other appropriate distribution methods as agreed with Deloitte. We have agreed to provide such consent on the following conditions:

- This Report may not be suitable for the use of any person other than RWCL. Accordingly, publication of this Report to persons other than RWCL is for information purposes only and no person other than RWCL should place any reliance on this Report; and

- We do not assume or accept or owe any responsibility or duty of care to any person other than RWCL. Accordingly, any person other than RWCL who, contrary to the above, chooses to rely on this Report, does so at their own risk and we will not be responsible for any losses of any such person caused by their reliance on this Report.

Methodology
In developing this Report we have:

- Compared RWC with other major sports events, in terms of key elements underpinning economic impact such as attendances, numbers of international visitors, television audiences and stadium investment, using publicly available information;

- Reviewed previous economic impact studies produced in relation to RWC 2003 and RWC 2007 and the advance study relating to RWC 2011;

- Developed a generic economic impact 'model' for a typical RWC which estimates the direct spend associated with RWC, with variations depending on the location and relative size of the tournament in a number of territories;

- Using an Input-Output model calculated the possible indirect effects of any expenditure identified above; and

- Presented our findings on a regional basis.

Historic currency figures have been translated into Sterling using the exchange rate as at 30 June in the appropriate year. Figures have not been adjusted for inflation. Prospective currency figures have been translated into Sterling using the exchange rate as at 31 May 2008.

Since any prospective information relates to the future, it may be affected by unforeseen events. Actual results are likely to be different from those projected because events and circumstances frequently do not occur as expected and those differences may be material.

Economic model methodology
The methodology applied to estimate the economic impact can be simplified into two broad stages described below:

- Collation of direct expenditure data from available information.

The methodology used in estimating direct expenditure associated with an RWC is discussed in the main body of the document. Our estimations have sourced appropriate benchmarks from previous RWC economic impact reports where available to ensure consistency and aid interpretation.

- Development and use of an input-output model to estimate the indirect (or knock on) impact of the direct expenditure on the wider economy

The multiplier methodology described below is used extensively by Deloitte in assessing both the impact of a given sector or industry on the national economy or the economic impact of new developments in a given location.

Indirect effects add to the direct contribution and are based upon factors specific to the economy in question, such as size, industry linkages and import propensity as well as the scale of the direct impact. The model details what proportion of inputs each industrial sector sources from other sectors when producing an extra unit of output.

The principle behind a multiplier effect is that a change in economic activity will have knock-on effects for the rest of the economy. These effects can be assumed to take place through two channels:

- Supply-side linkages (Business to Business effects) – if industry demand increases it can be assumed that production will increase. This expansion requires more raw materials and associated services from other industries. In turn these other industries may need to increase production to meet the demand and they too will increase levels of economic activity (the indirect effect); and

- Consumer or wage effects – an increase in an organisation's activity level will mean a higher wage bill. This money will be spent partly in the economy. This rise in consumer demand requires increasing production of goods and services, hence increasing expenditure (the induced effect).

The multipliers used in this Report give both the indirect and induced effects of expenditure around RWC.

The indirect and induced effects are estimated by Type I and Type II multipliers in the model. Type I multiplier data allows us to calculate the indirect effects as a result of the initial expenditure. Type II multipliers enable us to calculate the indirect and induced effects generated by the initial expenditure. By taking the differences between Type II and Type I effects, it is possible to isolate the consumer spending effects of the expenditure.

Sources of information

In preparing this Report, we have used information and data extracted from various published reports, which we assume to be reliable, to obtain the inputs into the economic model. In addition, we have used non-confidential information and data which has been provided to us by a wide variety of organisations including the IRB.

In particular, we have extensively used three economic impact studies produced in respect of RWCs. These are:

- Estimated Economic Impact of the 2011 Rugby World Cup, Horwarth Asia Pacific and Market Economics, 2006;

- Les Retombees economiques de la Coupe du Monde de Rugby 2007 en France, ESSEC, 2007;

- Rugby World Cup France 2007, Economic and Social Benefits Impact, Summary, Centre de Droit et d'Economie du Sport, 2008; and

- Economic Impact of the Rugby World Cup 2003 on the Australian Economy – Post Analysis, URS, 2003.

In all cases (and including information from organisations not listed), we have relied upon such information and data as being true, correct and complete and have not audited, tested or checked any such information or data.

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