

News release	
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World Cup home advantage boost for Brazil, but England face battle in 'Group of Death', says PwC report

London, 2 June 2014--As hosts Brazil prepare to kick off the FIFA World Cup in Sao Paulo on Thursday June 12th, PwC has turned to 'econometrics' in a bid to determine success and failure at this major sporting event.

Says PwC economist Dan Broadfield: "In previous analyses of the Olympic Games, we found a strong link between medal totals and the size of the economy. But no such relationship has been found for the World Cup. Instead, key factors include the number of players available to each country, the national interest in football, long-term footballing tradition, and recent form."

Strength of teams

The result of analysing all the key variables is a 'PwC World Cup Index' (*Figure 1*) – a qualitative assessment of each country's relative strength. This clearly indicates that Brazil are favourites this year, due to footballing tradition and home advantage; but Germany, Argentina and Spain will push them hard. Meanwhile, although England rank in the top eight on the index, they face a battle to progress from their group – given the slightly higher ranking of their direct rivals Italy and Uruguay.

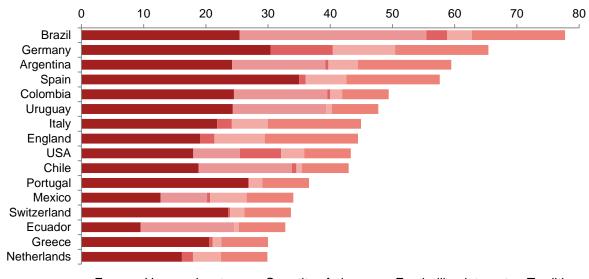


Figure 1: PwC's estimated relative strength of leading teams in the 2014 World Cup

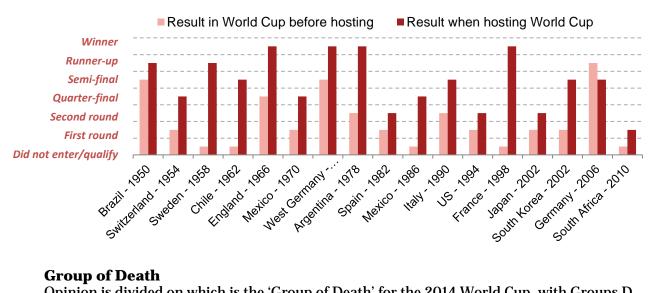
Form Home advantage Quantity of players Footballing interest Tradition



The 'host factor'

Modelling shows that, on average, host countries can expect to progress a further two rounds than if they were not hosting (see Figure 2). There is also a clear 'home region' effect, with strong crowd support and familiar climatic conditions giving a potential boost this year to all the South American teams. An interesting statistic: a European country has never won a World Cup hosted in the Americas, while only once has a Latin American country won a World Cup in Europe – Brazil in Sweden in 1958.

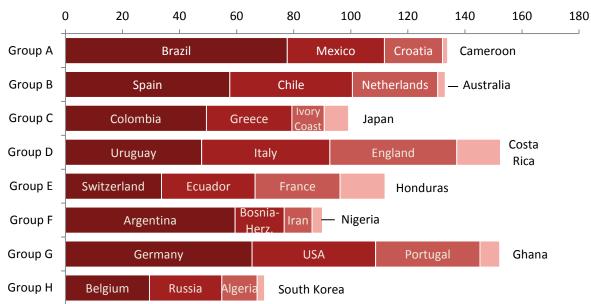
Figure 2: Host country performance at the World Cup



Group of Death

Opinion is divided on which is the 'Group of Death' for the 2014 World Cup, with Groups D and G being the two toughest according to combined PwC index scores (see Figure 3 below).

Figure 3: The estimated strength of each 2014 World Cup group according to PwC index





John Hawksworth, UK chief economist at PwC, commented: "Group D has the highest total combined score on our index and is therefore deemed to be the 'Group of Death'. This reflects the strong collective footballing tradition of Uruguay, England and Italy – three countries in the top 10 of the all-time World Cup table that between them have won seven of the previous 19 World Cups. It will be tough for England to qualify from this group but, if they do, they should have a decent chance to at least reach the quarter finals."

Over and underachievers

The PwC paper establishes several variables which explain, to a significant extent, the differences in World Cup performance across countries. These are the number of registered football players, attendance at top division club matches, number of bids to host the World Cup, and whether the country is from Europe or South America.

PwC model estimates of each country's total World Cup points (see note 1 for definition) compared to their actual points is shown in Figure 4 below, which indicates whether each country has under or overachieved relative to model estimates.

Figure 4: Model estimates vs actual historic World Cup performance



Brazil is the most significant overachiever, collecting an additional 95 World Cup points compared to our model estimate; they have consistently had greater success than other countries with a similar pool of registered players and level of club attendances.

England's reputation among some as perennial underachievers is also justified to some degree by the fact that they have collected 26 fewer World Cup points than estimated by the model. But the largest underachievers are in fact the USA, who should have collected an additional 76 points according to our model, given their abundance of registered football players and that they often bid to host the tournament. However, it should be noted that this estimate does not take into account the fact that a larger proportion of the USA's total registered players are female than other countries. This is reflected in the fact that the USA has done much better in the Women's World Cup.



Notes:

1. Key features of our analysis

We use historic data on the 56 countries who have played at least six World Cup games. We measure historical World Cup performance using FIFA's all-time rankings table, which awards three points for a win, one point for a draw and zero points for a loss for every World Cup game played.

We find that the following factors are important in explaining past World Cup performance:

- The total number of football players registered in a country
- The average attendance of top division football matches
- How many times the country has bid to host the World Cup
- Whether the country is from Europe or South America
- Whether the country is the home nation or continent
- Recent form, as measured in our historical analysis by how the country performed in the last two World Cups, and in our 2014 assessment by the latest FIFA world rankings.

These factors were then combined in a new PwC World Cup index as an indicator of relative prospects for the 2014 World Cup (see Figure 1).

The analysis found that economic variables such as GDP per capita and population were statistically insignificant after controlling for football-specific factors. Further details of the technical modelling results can be found in the full report.

- 2. The full report, *The PwC World Cup Index: what can the dismal science tell us about the beautiful game?* can be downloaded at www.pwc.com
- **3.** PwC helps organisations and individuals create the value they're looking for. We're a network of firms in 157 countries with more than 184,000 people who are committed to delivering quality in assurance, tax and advisory services. Tell us what matters to you and find out more by visiting us at <u>www.pwc.com</u>.

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