

April 14, 2016

How much does the toss really matter?

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The numbers show that the team winning the toss has a marginal advantage, and the extent of it varies depending on the format and the quality of the teams



Data shows that it's wiser for visiting captains to field first at the start of the English season © PA Photos

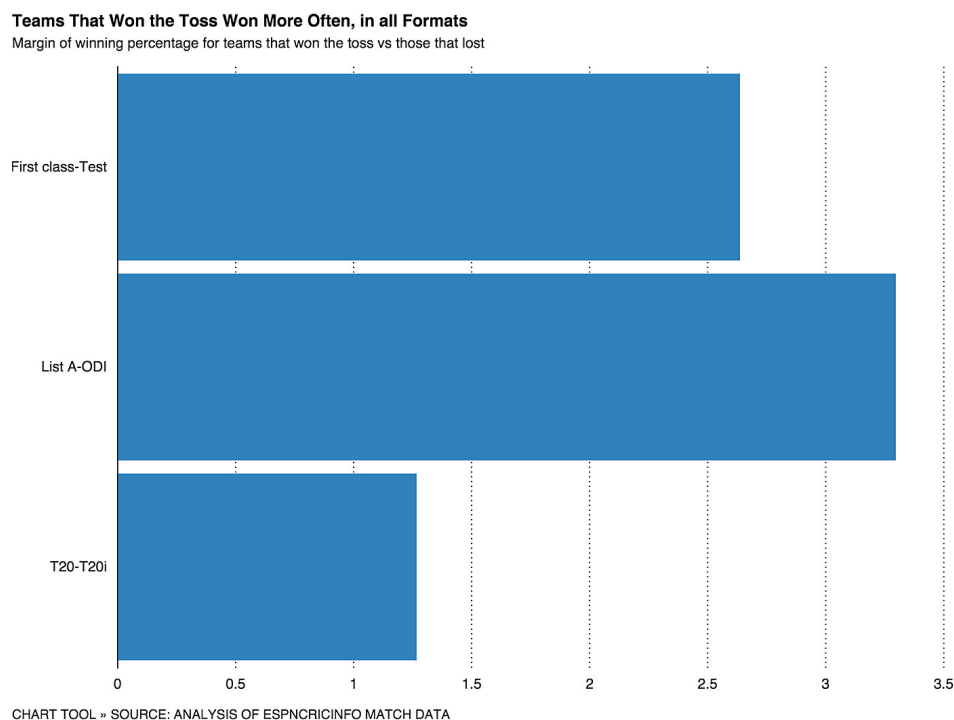
The run of good fortune enjoyed by [Darren Sammy](#) at the toss during the World T20 was noticed by commentators and journalists. On the way to the World T20 title, Sammy called ten consecutive tosses correctly.

Leave aside the conspiracy theorists - the chance of correctly calling out the side of the coin left facing the sky after the flip ten times in a row is just a shade less than one in a thousand, but over many matches, streaks do occur. Instead, focus on the more fundamental question: how much of a difference does winning the toss make? The general feeling is that it does matter. How else would we arrive at the [recent changes in the English County Championship?](#)

After analysing data from more than 44,000 cricket matches across formats, however, we find that there is generally just a small - though material - advantage of winning the toss. The benefit varies widely, across formats, conditions, and depending on how closely matched the teams are.

We find that over all those matches, the team that wins the toss has won the match 2.8% more often. That small advantage increases for one-day matches and decreases for T20 contests. For day-night ODI and List A matches, the advantage is greater still, with the side winning the toss winning nearly 6% more games.

Winning the toss convey an advantage of 2.6% in first-class and Test matches, where pitches can deteriorate, giving the team that bats last a tougher challenge. But the largest boost appears to be in one-day matches, where teams that win the toss win the match 3.3% more often.



None of this proves that winning the toss guarantees a team an increased chance of winning every time, of course. The outcome depends on many things, including whether teams are able to capitalise on the toss advantage. It probably did not hurt that Sammy had the bowlers to make an immediate impact against England in the World T20 final. A weaker team may have seen little benefit.

Our findings might not change the minds of captains who, having lost the toss, apportion it some blame in the post-match press conference. "But you have to realise it was half an hour early start, a bad toss to lose," [MS Dhoni said](#) after India's loss to West Indies in the [World T20 semi-final](#).

Dew can be a factor during evening contests, but among the three formats T20 matches showed the smallest benefit for the toss winner (and thus the smallest disadvantage for the loser). The advantage shrinks even further in day-night T20 contests.

Playing conditions, which occupy a large portion of pre-match commentary, matter as well. It's not surprising that we found that in ODI, List A and T20 matches where the Duckworth-Lewis rule was invoked, teams that won the toss won the match even more often than when full matches were played.

These findings probably won't reassure critics of the Duckworth-Lewis method, since in theory winning the toss should convey approximately the same benefit each time, regardless of whether the match is shortened. Perhaps there is some inherent bias in Duckworth-Lewis that makes winning the toss even more important.

Other factors influence the outcome of a cricket match, not the least of which is the quality of the sides involved. Using ICC monthly rankings for international sides, we looked at whether winning the toss made a difference when teams were closely matched or at opposite ends of the rankings. When closely matched teams play, winning the toss has a larger impact on the probability of winning. As expected, the impact of winning the toss was less when a clearly better side played a weaker one.

Larger Advantage to Winning the Toss in Day/Night ODIs

Margin of winning percentage for teams that win the toss

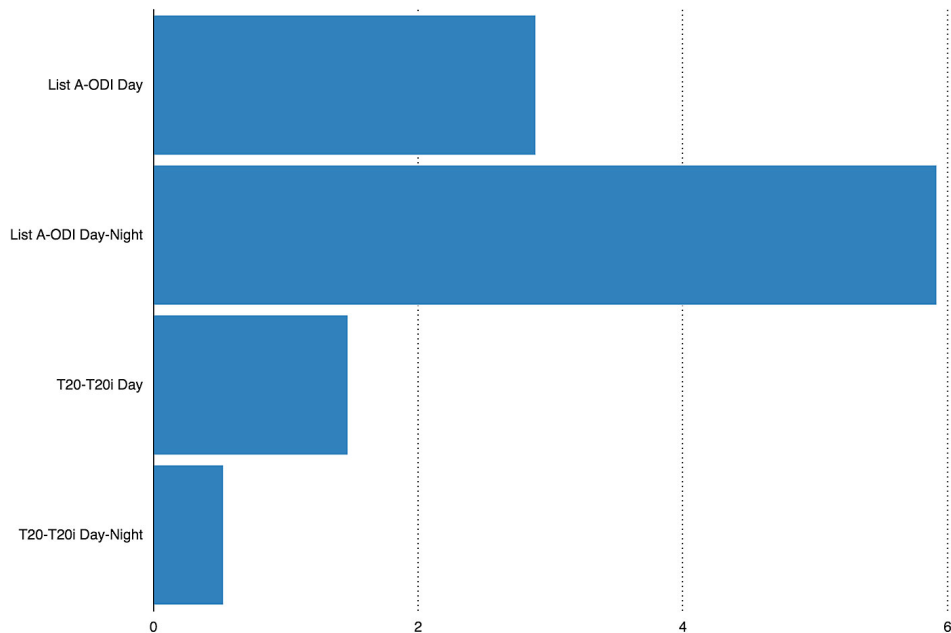


CHART TOOL » SOURCE: ANALYSIS OF ESPNCRICINFO MATCH DATA

We also looked at performance: are some countries better than others at capitalising when they win the toss? The data isn't clear on this. There are small but insignificant boosts for most sides, with the exception of New Zealand, who seem to do better in matches where they lose the toss. Sri Lanka and India seem to enjoy the greatest benefit.

To try to counter some of the advantages that home sides could enjoy in English domestic matches and to encourage spin bowling, County Championship matches this season do not have a mandatory toss. The visiting team can choose to field first, and if they do not want to, then the toss occurs. The data on the impact of winning the toss in England is similar to the overall picture - a small but significant advantage is gained by the side that wins the toss - with one glaring exception: matches played in April.

Whether due to cold weather or grassy pitches that can make batting difficult, teams that won the toss in April matches in England lost nearly 5% more often than they won. In every other month, the toss winner was more likely to win the match. Perhaps that alone will encourage visiting captains to take the field first, at least at the start of the English season.

A full write-up of the facts presented in this article, and the underlying data, [are here](#)

