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Getting the Message Across in the Twittersphere: How Remain and Leave Use Hashtags

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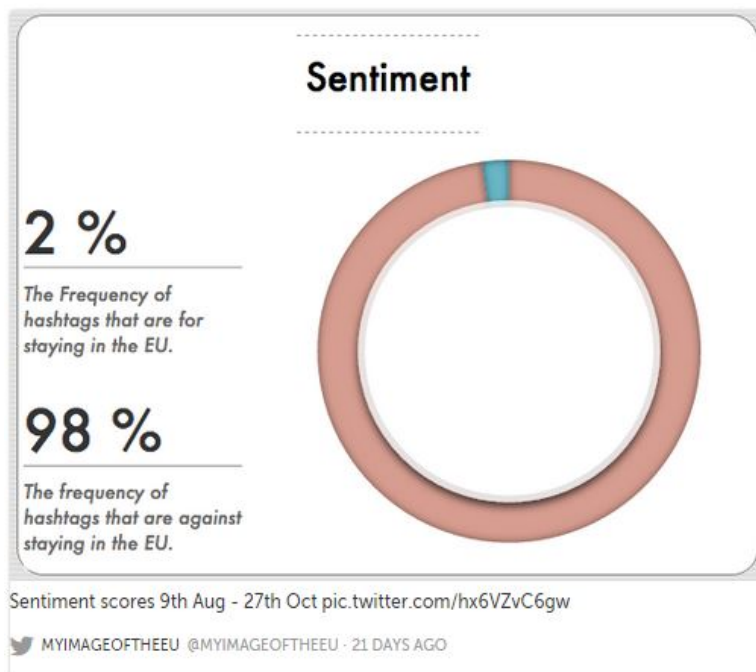
Article text:

Taking the [Imagine Europe](#) project's Twitter data, Clare Llewellyn and Laura Cram explain how people express sentiment on the UK's membership of the EU through using hashtags.

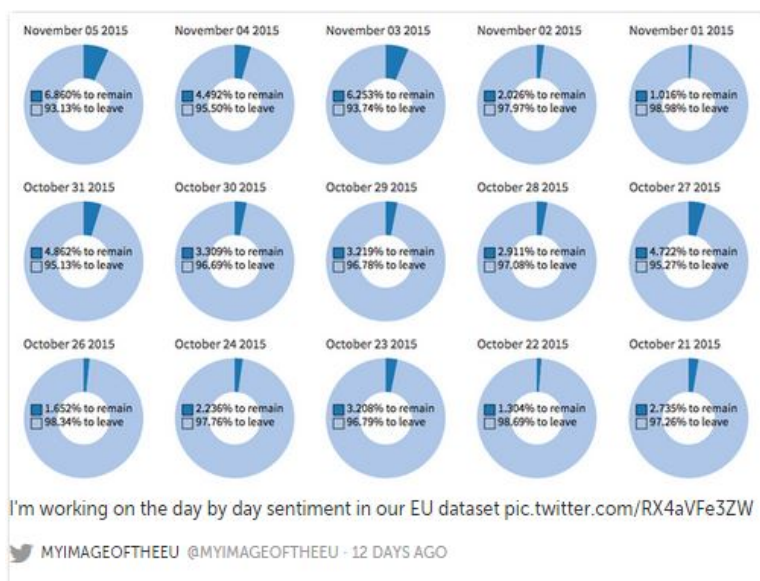
In our work investigating how people discuss the EU on Twitter, one of the aims is to determine sentiment, both pro- and anti-EU and, in relation to the referendum on the UK's membership of the EU, pro-Remain or pro-Leave.

Our initial approach has been very straightforward. If Tweeters use hashtags associated with the Leave camp (including [#brexit](#), [#no2eu](#), [#notoEU](#), [#betteroffout](#), [#voteout](#), [#eureform](#), [#britainout](#), [#leaveeu](#), [#voteleave](#), [#beleave](#), [#loveeuropeleaveeu](#), [#leaveeu](#)), then we judge their sentiment to be pro-Leave. If they use hashtags associated with the Remain camp ([#yes2eu](#), [#yestoeu](#), [#betteroffin](#), [#votein](#), [#ukineu](#), [#bremain](#), [#strongerin](#), [#leadnotleave](#), [#voteremain](#)), then their sentiment is pro-Remain.

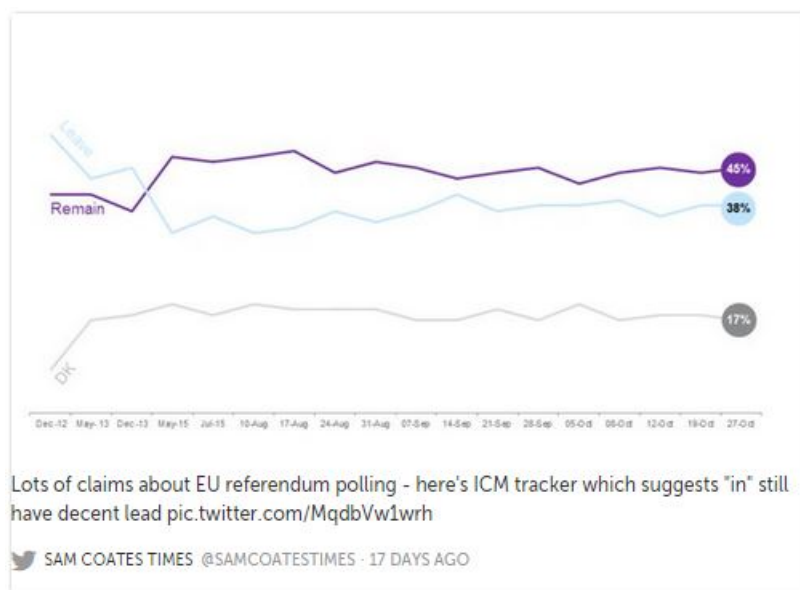
If we organise our dataset in this way, we get the following results:



We can see that these results are fairly stable day-to-day:



However, they are not consistent with polling data. The ICM tracker below shows Remain with a higher percentage. So why is there this difference?



First, we need to remember that research with Twitter data can only ever be indicative of Twitter users, who do not necessarily reflect the population at large. Interestingly, this has been a problem for pollsters attempting to include Twitter data in their vote forecasting.

[How \(Not\) to Predict Elections](#)

Using social media for political discourse is increasingly becoming common practice, especially around election time. Arguably, one of the most interesting aspects of this trend is the possibility of "pulsing" the public's opinion in near real-time and, thus, it has attracted the interest of many researchers as well as news organisations.

 [IEEE EXPLORE](#)

Second, we also need to keep in mind that, as we discussed in a previous post, people tend to tweet against things rather than for them.

[Imagining the EU: Words Associated with the EU and Europe](#)

 [IMAGINE EUROPE](#)

Third, we are currently limiting our analysis to sentiment associated with hashtags. If a Tweet doesn't have hashtags, it is not included for these purposes.

If we take a look at the data, we can see some differences between the two sides of the campaign. Both camps have distinct styles in their usage of Tweets, and in particular hashtags. The Leave camp tend to use many hashtags. These are some examples from both LEAVE.EU and Vote Leave – especially LEAVE.EU.



LEAVE.EU use hashtags in their Twitter account biography. This may encourage followers to use these hashtags.

[LEAVE.EU \(@LeaveEUOfficial\) | Twitter](#)

The latest Tweets from LEAVE.EU (@LeaveEUOfficial). A cross party & non-political campaign, advocating the vote to leave the EU in the upcoming referendum. #LeaveEU #Brexit

 [LEAVEEUOFFICIAL](#)

The Remain camp does not tend to use as many hashtags in their posts. For example:

"YOU THINK THIS IS NASTY YOU AIN'T SEEN NUTHIN YET"
HEAD OF VOTE LEAVE, DOMINIC CUMMINGS
 Source: Twitter, 9/11/2015

Stand up to 'Project Nasty'. Play your part in this crucial referendum: www.strongerin.co.uk/join

The Leave Campaign are losing the arguments + threatening to get 'nasty'. Let's stop them: strongerin.co.uk/join pic.twitter.com/zvPJpbXEcW

STRONGER IN @STRONGER_IN · 8 DAYS AGO

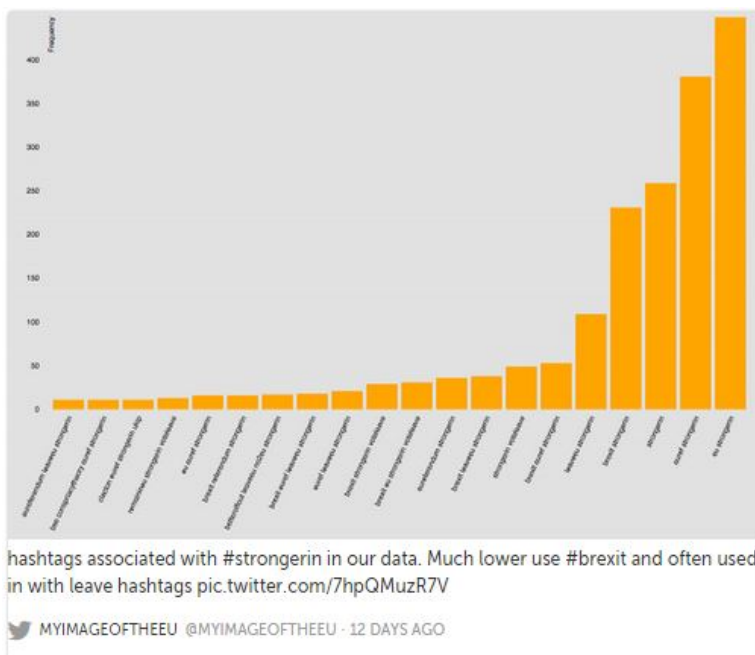
Tweets that would be considered pro-Remain often also include hashtags we have classified as pro-Leave. This could be the result of several factors, such as positioning within the debate by using a popular hashtag or trying to talk to those which hold opposite views.

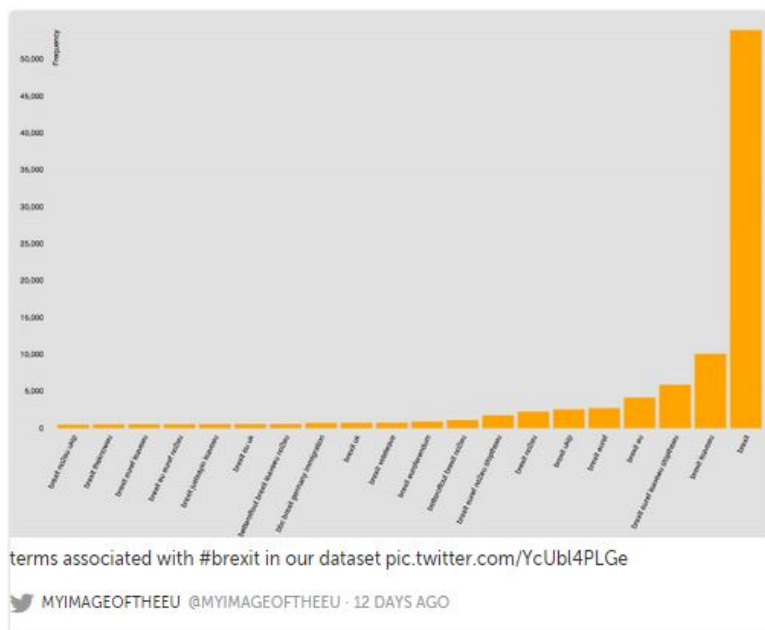
Richard Corbett @RCorbettMEP

U think being part of EU holds back trade with rest of world? Think again: view.publitas.com/british-influe... #StrongerIn #Brexit #EUref @euromove

14 DAYS AGO

When we look at hashtags that are used in conjunction with #strongerin and #brexit, we find, overall, a much lower use of #strongerin. This is used with leave hashtags especially #brexit, #leaveEU, #voteLeave. In contrast, #brexit is used not used with Remain hashtags at all, but instead with other Leave hashtags.





In the future, we aim to undertake a more sophisticated form of sentiment analysis including the text of Tweets. This leads on to another problem that is often discussed in sentiment analysis of text – identifying the target of the sentiment.

The target is the item that the sentiment is expressed towards. In the tweet by Richard Corbett MEP above, the ‘Leave’ sentiment is expressed towards the ‘U think being part of EU holds back trade with rest of world?’ and the ‘Remain’ sentiment is expressed within ‘Think again’. Identifying the text associated with the target is not always easy. This is a challenging issue to tackle, and we haven't even begun to discuss distinguishing jokes and sarcasm!

You might be tempted to ask that if this data is not representative of the general public why are we looking at it? Our main observations are on how this data changes. If we can identify the differences and track the relationships between Twitter data and more general public opinion, we can start to hypothesise about how changes on Twitter equate to public opinion more widely. We'll speak to this more in the future.

Our project is part of the Economic and Social Research Council’s [The UK in a Changing Europe](#) programme. Look out for our regular updates as the project tracks developments in the debate on the UK's continued membership of the EU and follow us on Twitter [@myimageoftheEU](#).

[Neuropolitics Research Lab – People – Politics and International Relations \(PIR\)](#)

Neuropolitics research politics experiments using fMRI brain scanning.
WWW.POL.ED.AC.UK

Laura Cram is Senior Fellow, The UK in a Changing Europe, investigating The European Union in the Public Imagination: Maximising the Impact of Transdisciplinary Insights ([ESRC/ES/N003985/1](#)).

This article was originally published on the [imagineEurope Storify](#).

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