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# Facebook affordances and citizen engagement during elections: European political parties and their benefit from online strategies? ${ }^{1}$ 

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#### Abstract

This paper examines how Facebook is used by political parties during elections to extend or accelerate their reach within the electorate and how successful these efforts are. Specifically, we compare the content and style of parties' Facebook posts during the 2014 European parliament elections, and how this affects followers' responses in terms of liking, sharing and commenting on the posts. Our findings reveal while that the timing and visual content of posts are important in increasing voters' attention, interactivity matters most. Responsive party posts on Facebooks are significantly more likely to be shared, liked, and commented on by users. Given that follower reactions, particularly sharing, helps to increase the visibility of party communication through indirect or two-step flow communication (online and offline), these findings are important in advancing our understanding of how and why social media campaigns are able to influence voters and thus affect election outcomes. For parties themselves the results provide some useful insights into what makes for an 'effective' Facebook campaign in terms of how they can accelerate the reach of their communication.


Keywords: affordances, Facebook, social media, political communication, electoral campaign, interactivity

## Introduction

A wealth of literature has examined the way in which political parties use the online environment in election campaigns, and particularly whether the more interactive mode of communication that platforms offer is utilised to connect parties with those they seek to represent (Gerodimos \& Justinussen, 2015; Lilleker et al., 2017). To date, there is broad consensus that digital technologies have had minimal effects on the nature of political communication. Parties are typically seen as following a more 'normalized' 'top down; approach that limits meaningful engagement and enforces "controlled interactive" experiences for those who visit their websites or follow them on social media (Jennifer Stromer-Galley, 2014). Users asking questions, seeking to clarify policy details or attempting to influence policy is often seen as an unwelcome by-product of social media usage, and, as evidence suggests, user comments are unread or ignored by the host (Vaccari, 2014; Zurutuza-Muñoz \& Lilleker, 2018). Given this general consensus, the question of how far party strategies that are more interactive actually work in terms of increasing their reach within online networks has to date gained very little attention. It is this gap that this paper seeks to fill.

While Facebook, like all forms of media, is used by political parties to gain an electoral advantage (Lilleker et al., 2015), one of its key affordances in a campaign is the way in which it helps parties to extend their reach by mobilizing their activist base to spread their message more widely, and bypass the often critical mainstream media. This two-step flow of communication, while a benefit of internet communication in the pre-social media era, has gained significant prominence with the arrival of social networking platforms (Norris \& Curtice, 2008). Facebook in particular allows election campaigns to mobilize their supporters to become opinion formers within their networks, and to take an active role in parties'
message distribution (Gibson, 2015). The precise mechanism through which this process works i.e. how parties encourage their supporters to like and share their content and thereby achieve this accelerated reach through their follower networks has so far not been a focus of extensive study. Our research seeks to fill that gap by more systematically measuring and examining the parties' Facebook communication during an election and the extent to which it is actively responded to in terms of likes, shares or comments from users. We do so using a database that contains over 16 thousand Facebook posts from 279 political parties in 28 EU nations that campaigned during the 2014 European Parliament. Ultimately our goal is to measure both how strategic party communication is on social media, and to what extent these activities work in terms of accelerating a party's reach (Bene, 2017; Karlsen, 2015; Lilleker et al., 2015).

## Understanding Facebook Affordances

Research to date has demonstrated that significant electoral benefits can accrue to political organizations as result of their use of social media (Ceron \& d'Adda, 2016; Jungherr, 2016; Kruikemeier et al., 2014; Pletikosa Cvijikj \& Michahelles, 2013; Sampietro \& Ordaz, 2015). While it remains unclear precisely how these electoral benefits are gained, attention is increasingly focused on the networked nature of social media communication and the role of two-step communication flow in extending or accelerating the reach of political messages to voters (Auter \& Fine, 2018; Fowler \& Hagar, 2013; Vergeer et al., 2013). Facebook, as one of the most widely used social networking platforms, is seen as a highly cost-effective way to distribute content in elections. Its capacity for sharing and spreading messages at scale very quickly has provided an alternative channel for campaigns to use to mobilise supporters to help increase the reach of messages and 'get out the vote'. As such Facebook offers valuable 'affordances' for a party to exploit during elections. Below we expand on the notion of
affordance in general, and its more particular application to the communication context relevant to this study.

An affordance, in generic terms, constitutes an opportunity to perform an action that may be of benefit to a given actor. Affordances are actual but also perceived, and exist only "when the properties of an object intersect with the ability of a social agent" (Cabiddu et al., 2014, p. 177). In the context of social media communicative action researchers have identified several key affordances - behaviour visibility, persistent conversation, editability, the capacity for developing associations that enable community building, and for average users, providing access to expertise (Treem \& Leonardi, 2013). The first, second and especially the fourth of these affordances -behaviour visibility, persistent conversation, and developing associations - would appear most aligned with the activities parties undertake in the context of an election campaign to maximize voter support (Kalsnes et al., 2017). Through Facebook, parties can raise the visibility of their campaign events, rallies and supporter events, build a supportive and active community of followers, and build a dialogue with those supporters and voters more generally. A key component of all these activities is the extent to which they can encourage followers to engage in liking and sharing their content. Such activities allow them to build relationships that can result in greater loyalty, reciprocity and directed activism (Cabiddu et al., 2014; Kizgin et al., 2020; Majchrzak et al., 2013).

## Party communication strategies

To date while there is an expectation that parties would seek to make their social media content more appealing to encourage supporters' to engage with it, by liking, commenting and sharing there has been very little work that has compared the extent to which parties engage in this activity, and the benefits parties receive. In this section we set out some of the
communication strategies that evidence or logic suggests may help to enhance these types of supporter engagement.

Interactivity: Despite the apparent benefits of interactivity for increasing the reach of parties' messages on social media, the evidence suggests it is not extensively used, with parties typically preferring to rely on a more functionalist, broadcasting approach, i.e. sending out text messages accompanied by pictures or video. This is a particularly notable among the major parties who fear becoming involved in extended and potentially damaging public dialogue. Such parties typically opt for a more bespoke targeted and customized experience using big data solutions to inform their communication strategy (Fulgoni et al., 2016; Lilleker et al., 2015).

Such an approach, however, arguably conflicts with best practice in terms of building a loyal base of online activists who will engage in the type of sharing, commenting and liking behaviour that will effectively extend the parties' reach. Committed party supporters claim to desire interaction with their party (N. A. Jackson \& Lilleker, 2007), and regardless of commitment levels the increased opportunities for interactions afforded by social media might lead followers to expect the more "personalized and mediated forms of engagement" which underpin connective (interactive), collective action (Bennett \& Segerberg, 2013, p. 147). Thus, followers may seek the reciprocity that platforms afford and in turn are more likely to award a party accelerated reach when comments are responded to in public (Steinberg, 2017). Arguably therefore parties may gain higher benefits if they offer a reciprocal communication experience as opposed to restricting their communication strategy due to fears of the risks associated with interactive communication (Stromer-Galley, 2000).

Vividness: Communication form might also be a factor that mobilises followers to engage. Cvijikj and Michahelles (2013) suggest the vividness of communication, how eye-catching it is, makes content more likely to be seen, and in turn to be liked and shared; hence by using more vivid content parties might earn greater reach as users appear keen to share content that will be liked by their network. Research has found videos and pictures receive most likes and shares, with videos most likely to be viewed on Facebook (Bene, 2017; Bossetta, 2018); textual posts tend to gain less traction among followers. The argument or logic here is that the visual form of the post, as opposed purely to text, opens up a range of interpretations of likes, beyond their being a basic expression of support for the party. Peyton (2014, p. 117) considers a like to be a black box of semiotic and semantic meaning, ranging from a simple bookmarking or tracking device to an expression of amusement, and even a statement of political identity and solidarity. Of course, while we assume a like affords the user an opportunity to show their support, likes can also be manufactured through automation via bots or artificial accounts. Certainly, there is increasing evidence that some parties' do see this type of virtual inflation or amplification of their popularity and appeal as a legitimate tactic (Klinger, 2019). However, in 2014 the problem of automated likes and 'digital astroturfing' via Facebook was considerably less severe. This was in part due to the requirement for users to have a minimal public profile which acted as a deterrent against mass scale orchestration of accounts through bots (Maréchal, 2016). As such our analysis arguably presents something of a unique opportunity to address questions about the real impact and benefits of parties' Facebook campaigns.

Timing: Alongside producing vivid content, posting at key times might also afford parties greater benefits. Marketing research (BuddyMedia, 2012) suggests differences in communication posting strategy may earn higher levels of community responsiveness (e.g.
posting during weekends was found beneficial for non-profit organizations). One report (York, 2018) indicates substantial differences in the success of posting strategies depending on the industry (e.g. with non-profit organizations significantly differing from commercial use of Facebook). In addition, the frequency of posting may impact engagement levels with parties who over-post finding their communication gets lost. However, we recognise that there is interection between the outcome of time-related variables and follower engagement levels. Because the Facebook algorithm promotes posts popular within a network, the greater engagement a post receives the more likely it will appear in a follower's timeline even if they $\log$ into Facebook somewhat later than when the post was originally published. Therefore, the form of the post, with video offering the most vivid experience, and the time of posting could be determinants that drive follower behaviour, if correct this opens up an array of more complex analytical questions ${ }^{2}$.

Drawing these arguments together, the logic of affordances and the relevant empirical literature to date suggests that parties are most likely to benefit from the higher or accelerated reach and visibility offered by social media (and particularly Facebook) if their communication strategies include: 1. Interactivity with users; 2. Images and visual content; 3 . Shorter posts; and 4. Careful timing. We convert these expectations into a series of hypotheses:

H1. Interactive communication will encourage follower engagement to a greater extent than if parties do not respond to follower comments.

H2. A more vivid communication strategy (images or videos) will increase follower engagement.

[^1]H3. Shorter messages will increase follower engagement.

H4a. The gaps of time between posts done by parties have an impact on a steady increase in engagement over time.

H4b. Parties that communicate too frequently will earn lower levels of follower engagement.

## Research Context

We test these hypotheses using data from parties' Facebook pages during the European parliamentary (EP) elections of 2014. Specifically, we collected the number of likes, shares and comments from parties' Facebook posts within all 28 EU member states during the campaign. In total 279 parties had a Facebook profile. The EP elections provide an excellent opportunity for researchers of political campaigns to analyse the strategies of parties and their effectiveness due to their concurrent nature and focus. Previous studies have frequently utilised data from these contests to explore commonalities across campaigns as well as to highlight how party or national variables influence the design, implementation and impact (Lusoli, 2005; Stromback et al., 2011). Elections to the European parliament are typically defined as second order contests (Maier et al., 2011; Reif \& Schmitt, 1980), in that they are a lower priority for parties than first order national parliamentary and Presidential elections. This means in practical terms that they have fewer resources devoted to them, and both media and voters pay less attention to the campaign. Despite their lower profile, the outcomes of EP elections have increasingly been seen as indicators of future support for parties in first order elections, and evidence is mounting that parties may now be taking these contests more seriously (Vergeer et al., 2013). Furthermore, some nations have seen parties innovate to a degree at EP elections, employing these second-order contests to experiment with new techniques and tactics (Jackson \& Lilleker, 2010). Finally, EP contests also represent an opportunity for parties to gain greater visibility, particularly smaller parties seeking to build
support. Therefore, we expect EP elections to provide a meaningful arena for parties to focus on waging credible social media campaigns.

In addition to the growing importance of EP elections, the 2014 EP election were of particular significance for voters across most member states compared with previous contests. These were the first elections following the signing of the 2009 Treaty of Lisbon which had substantially increased the powers of the parliament. More generally the EU now enjoyed higher visibility due to the 2008 global economic crisis and the enhanced role for supranational powers in fiscal management. These economic crisis in particular intensified the debate about the future direction and powers of the EU and its relationship with member states (Van den Berge, 2014). Parties with a strongly Eurosceptic stance had become a stronger voice in many country's national elections, thereby raising the prominence of the EU as an issue for voters in their decision-making. Finally, the 2014 EP elections were also concurrent with national elections in three member states - Belgium, Ireland and Lithuania. Given this backdrop to the contest, we would expect parties to take the occasion seriously and campaign with the express intention of maximizing their vote.

The election results showed a small but largely uniform shift away from traditional parties of government and an increase in support for parties belonging to far left and Eurosceptic groupings as well as the non-aligned parties which tend to inhabit the far right of the political spectrum. It also marked the first contest where the majority of parties were using the Facebook platform. This meant our analysis was able to encompass parties from across the ideological spectrum. Given that 2019 saw an unprecedented surge in a range of new parties challenging the status quo and the dominance of the traditional Conservative and Social Democrat groupings, it is likely that 2014 was the last EP elections of the pre-populist era
and the first step toward the fragmentation of the parliament. As such it allows insight into what we might deem as the more standardized use of Facebook between the major, minor and fringe parties.

## Methodology

The data is drawn from the Facebook profiles of 279 political parties standing for election to the European Parliament across the 28 EU states. Of this total, 264 party profiles were recorded as active during the two weeks before the Election Day. Data was collected ${ }^{3}$ during the two weeks before election day, in most countries 25th May 2014, with the exception of the United Kingdom and the Netherlands (22nd), Ireland and the Czech Republic (23rd), and Slovakia, Malta and Latvia (24th) where the two week period was adapted accordingly. 16,218 party posts were captured, and relevant data on each post was extracted (date, hour, format, length of the text), these constitute our independent variables. We also extracted data on follower responses, this allows us to measure community engagement and constitutes our dependent variable. We exclude posts on Election day itself from our analysis as in many countries communication was forbidden until polling stations closed and so including these would skew the data.

## Variable Operationalisation

Our dependent variable was broadly defined as community engagement. We measured this in terms of three types of user response - the number of likes, shares and comments made by social media users in response to each post by the political parties. During the electoral

[^2]campaign we recorded a total of 5,036,916 likes ( $\mathrm{M}=283$; $\mathrm{SD}=954$ ), a total of 1,083,657 shares $(M=61 ; S D=413)$ and a total 546,754 comments $(M=30.7 ; S D=142)$ across all posts by parties standing across the 28 member states.

The main independent variables in our model were designed to test the hypotheses specified above:
(1) Interactive posts were measured as a binary variable, whereby political party posts that showed a party had responded to comments left by visitors in the comments section under the original post were coded as $1.1,137$ posts were identified as demonstrating interaction occurred ( $\mathrm{M}=.13(\mathrm{SD}=1.17)$ ). Only replies posted under the party name were counted.

Although research argues that this may not represent dialogue in the true sense (Lane \& Kent, 2018), a conversation between the party representative and one of their followers (Kent \& Theunissen, 2016), it gives the perception the 'party' reads comments and willing to acknowledge communication from their followers while also accelerating the reach of the post commented on.
(2) Vividness of posts was measured using binary variables that indicated if the post contained a Video, Photo, Link or a text only Status.
(3) Length of posts was measured as a count variable that was logarithmically calculated. The count was based on number of characters in the post, which ranged from zero for no text upwards to 17,442 characters $(\mathrm{M}=212(\mathrm{SD}=497)$. We also created an interaction term that combined the length of a post with a measure of vividness (i.e. Video, Photo Link, Status) * text length).
(4) Timing of posts was measured as a count in seconds between posts. As with length, the counts were then logarithmically calculated, and transformed to a log squared version of the count. The logarithmic calculation was undertaken to control for the impact of posting
frequency. If posts are made within seconds of each other, one would expect more responses to the last post in a sequence than the first ${ }^{4}$. Two variations were tested in order to examine our expectation (H4) that posting in a more linear manner, i.e. leaving gaps between posts to allow for reading and responding, may have a positive impact on community activity, as opposed to an exponential posting strategy.

As well as our substantive variables of interest we included a range of control variables that were likely to affect our findings. These were:

1. Follower engagement with the preceding post - here we are controlling for any heightened attention that a post receives due to the preceding post or thread having gone viral, either naturally and/or from any automated promotion via the Facebook algorithm. This was measured as a continuous logarithm of likes, shares and comments performed for a preceding post.
2. Campaign stage - this measures the number of days since the campaign started. This allows us to factor in the role that development or maturity of the campaign plays on supporter engagement and particularly the influence of campaign intensity. It is measured as a count variable based on days, with 0 used to indicate the start of the campaign up to 13 indicating the final day prior to the vote.
3. Campaign silence - in some countries there is an official period of electoral silence that can be up to 48 hours before the end of voting. This was measured using a dummy with 1 indicating a silence period was in operation and 0 that no restrictions applied.
4. Timing of the election - we included a dummy to measure if the election occurred on a weekend (coded as 1 ) or weekday ( 0 )

[^3]5. Timing of post - controls for hour of the day (dummy) when the thread was posted.
6. Party characteristics -we added dummies for parties to capture the extent to which any fixed effects such as ideology, size or country location, might influence their levels of likes, shares and comments. The findings relating to these variables are omitted from the main results table, but are available in Appendix B Table B3. Additional information on party and country are available in Appendix B Table B1 and B2.

The models were tested using negative binomial regression. We do so because count data are used as our dependent variable, i.e. the number of likes, shares and comments per post. Standard linear regression is not suitable for this type of distribution. While we could also have used Poisson regression, given that our data demonstrates dispersion, a negative binomial model was found most appropriate (Hilbe, 2011).

## Analysis

## Basic trends

The most common strategy European political parties used on their Facebook profiles was to offer a vivid experience for users, and to direct followers to websites to reinforce their arguments. Of the 16,218 posts from the two-week campaign, the majority contained pictures (7271). The next most common approach was to include hyperlinks (6490). Overall, just 17\% of posts (1061) were text-only (for the breakdown by country and party see Appendix B). Overall parties in Italy, Malta and Romania posted most frequently (relative to the number of parties present in the election), while the least active were Latvian parties. Parties from Italy and Hungary also had the most active followers, while the least active were somewhat predictably in Latvia but also somewhat more surprisingly in France (also see (KocMichalska \& Lilleker, 2020)).

In terms of the timing of activity, the trend was clearly toward a peak of activity in the final few days of the campaign, with a dip in activity in the day before elections, and then a minipeak on election day (Figure 1). The reduced activity is likely due to the obligatory campaign silence in most EU countries, although the restrictions are not as specific for social media campaigning as they are for campaigning via traditional media or offline ${ }^{5}$.

Some variation was observed in the type of posts that appeared in these two peak periods with photos proving most popular. This would suggest parties were making strategic decisions in their posting behaviour to ensure they produced more commonly shared content at key points in the campaign when the accelerated reach afforded by Facebook could be most beneficial.

In terms of patterns in the dependent variable as Figure 2 shows there is a clear increase in liking and commenting, two days before the end of the campaign followed by a one-day decrease in activity likely caused by the period of campaign silence prior to election day itself. Notably party posts gain most likes and comments on Election Day, shown by the spike in Figure 2. Sharing activity is more variable across the campaign but seems to be somewhat lower in the first week compared to the second.

[^4]Figure 1: Post and type of post by parties by day of campaign


Figure 2: Engagement performed by day of campaign


## Communication strategies for community engagement

Table 1 shows the results for our statistical models predicting the extent of liking, sharing and commenting on party posts within the Facebook user community. The data shows support for our hypotheses, specifically: the main drivers of supporter engagement with party posts are interactivity (H1), post type (H2 and H3) and timing (H4). Party interaction with users and reciprocity of posting is particularly important and earns the highest dividend in terms of increasing the amount of comments as well as accelerating reach by gaining likes and shares. This finding thus confirms H1 suggesting interactivity is a key driver of follower engagement (Lewis et al, 2015). Reciprocal communication (the engagement of the political party in the discussion within the 'comments' section of the post) has a substantial (and statistically significant) impact on receiving all forms of reaction from the community. A response by a political party brings in $40 \%$ more likes, $70 \%$ more shares and $150 \%$ more comments in comparison to posts with no reciprocal communication (Appendix Table B3). Whether this is due to followers being more supportive of parties who enter into reciprocal communication (Holton et al., 2015) or whether a party responding simply makes a post more visible is an open question, and one that we are not able to answer from these data. Overall, however, it does seem clear that parties are rewarded with accelerated reach for their posts when they engage with their followers on Facebook.

A second main finding is that format and content matter for increasing the levels of engagement and reach for party posts. The inclusion of images typically boosts all forms of engagement, however, videos are particularly important for increasing shares. This means that H 2 is broadly confirmed, but we find different types of post can be used to encourage different responses from followers. In terms of text length, we find little support for H3. All things being equal, followers do not engage more with short, text-only posts (ZurutuzaMuñoz \& Lilleker, 2018). Actually, the longer the post the more impact it appears to have.

This effect is further strengthened when it is linked with a particular type of post. In particular it seems that a longer post associated with a status update (Status*Length of thread) has a positive effect on levels of sharing and commenting on that post. While closer content analysis (not performed for this study) is needed to unpack precisely why this might be the case, our data does offer some basis for speculation. Specifically, smaller parties are more likely to write longer posts ${ }^{6}$, presumably in a bid to exploit the equalising properties of the medium and articulate their views at greater length than they are normally able to do in the traditional media. If this the case then it appears their tactics are working, and that minor parties are managing to increase the impact and reach of their message within their user community. Finally, our expectations for post timing (H4a and 4 b ) are broadly supported. A higher frequency and intensity of posting is positively associated with all forms of community responses over the course of the campaign and, the closer to election day, the more supporters engage with content posted by the party they follow. The results from the last section of Table 1 also show that timing between posts is influential with the strongest effect found for time since last post. Specifically, the number of likes, shares and comments increases with the time from the last post (linear) but at a declining rate (squared). In practical terms this means that the time between the two posts must be sufficiently long in order to give followers a chance to react. Posting frequently in a short period of time makes all but the most recent posts invisible. However, if the time between posts is too long, engagement starts to decline exponentially. This finding is validated through an added variable - number of posts within hourly window - which is negatively quadratic and also declines exponentially (see Appendix TableA1). Finally, our results show that there are also optimal times of the day for parties to post if they want to encourage more engagement from their audience, with 6-7 a.m. or 6-7 p.m. windows being the most likely to produce a response.

[^5]Table 1. Negative binomial regressions results for follower engagement

|  | Likes |  | Shares | Comments |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reciprocal communication | $\begin{array}{r} .379 \\ (.055) \end{array}$ | *** | $\begin{array}{r} .607 \\ (.087) \\ \hline \end{array}$ | *** | $\begin{aligned} & 1.048 \\ & (.079) \\ & \hline \end{aligned}$ | *** |
| Thread characteristics (ref. hyperlinks) |  |  |  |  |  |  |
| Photo | . 767 | *** | . 597 | ** | . 257 | ** |
|  | (.116) |  | (.253) |  | (.108) |  |
| Status | -1.029 | *** | -3.000 | *** | -1.281 | ** |
|  | (.375) |  | (.666) |  | (.601) |  |
| Video | . 120 |  | . 661 | *** | . 039 |  |
|  | (.153) |  | (.221) |  | (.195) |  |
| Length of the thread (ln) | . 028 | * | $.136$ | *** | $.065$ | *** |
|  | (.015) |  | (.030) |  | $(.016)$ |  |
| Photo*Length of thread (ln) | -. 063 | *** | . 002 |  | -. 002 |  |
|  | (.025) |  | (.048) |  | (.023) |  |
| Status*Length of thread (ln) | . 146 | ** | . 408 | *** | . 209 | ** |
|  | (.058) |  | (.110) |  | (.090) |  |
| Video*Length of thread (ln) | . 006 |  | -. 010 |  | . 020 |  |
|  | (.030) |  | (.046) |  | (.040) |  |
| Previous activity |  |  |  |  |  |  |
| Likes for last post (ln) | 0.109 | *** | . 018 |  | . 008 |  |
|  | (.019) |  | (.026) |  | (.029) |  |
| Shares for last post (ln) | -. 018 | ** | . 039 | ** | -. 019 |  |
|  | (.009) |  | (.016) |  | (.012) |  |
| Comments for last post (ln) | -. 002 |  | . 025 |  | . 099 | *** |
|  | (.016) |  | (.023) |  | (.023) |  |
| Time specificity |  |  |  |  |  |  |
| Time since last post (ln) | . 211 | *** | . 261 | *** | . 218 | *** |
|  | (.063) |  | (.064) |  | (.050) |  |
| Time since last post (ln) squared | -. 011 | *** | -. 014 | *** | -. 012 | *** |
|  | (.003) |  | (.004) |  | (.003) |  |
| Time till next post (ln) | . 188 | *** | . 162 | ** | . 063 |  |
|  | (.057) |  | (.067) |  | (.061) |  |
| Time till next post (ln) squared | -. 009 | ** | -. 004 |  | . 003 |  |
|  | (.003) |  | (.004) |  | (.004) |  |
| Number of posts within a 1 hour window | . 002 |  | -. 001 |  | -. 009 |  |
|  | (.011) |  | (.016) |  | (.022) |  |
| Number of posts within a 1 hour window squared | -. 001 | *** | -. 002 | *** | -. 002 | *** |
|  | (.000) |  | (.000) |  | (.000) |  |
| Weekend (dummy) | . 051 |  | -. 057 |  | -. 042 |  |
|  | (.034) |  | (.051) |  | (.058) |  |
| Day of campaign | . 025 | *** | . 028 | *** | . 024 | *** |
|  | (.004) |  | (.007) |  | (.005) |  |
| Campaign silence 48h | -. 098 |  | -. 339 | *** | -. 215 |  |
|  | (.089) |  | (.112) |  | (.158) |  |
| Campaign silence 24h | -. 171 | ** | -. 257 | ** | . 106 |  |
|  | (.078) |  | (.131) |  | (.127) |  |
| Hours \& Party fix § |  |  |  |  |  |  |
| Constant | $\begin{array}{r} .949 \\ (.401) \end{array}$ | ** | $\begin{array}{r} -3.810 \\ (0.551) \end{array}$ | *** | $\begin{aligned} & -.971 \\ & (.453) \end{aligned}$ | ** |
| Number of observations | 16218 |  | 16218 |  | 16218 |  |
| Dispersion | 1.1366 |  | 1.0993 |  | 1.0277 |  |
| Dispersion - Pearson | 1.899 |  | 1.9184 |  | 1.7394 |  |
| Stat significance * $\mathrm{p}<0.10, * * \mathrm{p}<0.05, * * * \mathrm{p}<0.01$ |  |  |  |  |  |  |
| Note: § hours, party fixed effects are omitted from the output due to place constrain (available upon request). We use party fixed effects in order to control for party characteristics, ideology etc, as well as the Facebook community size <br> Coefficients on dummy variables such as "response owner" give the effect on the outcome of switching the value of that variable from 0 to 1 . For variables with interactions, such as "Photo": i) the coefficient on "Photo" at zero of the interacted variable "Length of thread (ln)" gives the intercept difference in the outcome variable from the reference content (hyperlink); ii) The coefficient on the continuous "Length of thread (ln)" is the slope for the case when Photo, Status and Video are set to zero (post contains a hyperlink); iii) interaction Photo*Length of thread (ln) gives the additional difference for the outcome variable when Photo $=1$ that can be interpreted i.e. the mean of "Length of thread (ln)". |  |  |  |  |  |  |

One additional finding of interest is found when controlling for prior community activity, the finding is statistically significant, but only within the same activity. We found the number of likes awarded the previous post has a significant impact on the likes for the following post but not on the extent of shares or comments it receives. Similar exclusivity is found for sharing and commenting, i.e. shares accelerate shares and comments accelerate comments.

In summary our analysis confirms that a more interactive and relational communication style on Facebook is beneficial for online community building and accelerating the reach of campaign messages. Furthermore, while more vivid forms of communication also help to engage followers, video is particularly important for extending reach. Somewhat surprisingly, long-form text messages are more likely to engage followers than short text updates. Lastly, the timing of message is important with a period of tie being needed in order to maximize the responsiveness from a parties' audience.

## Discussion

Our results are interesting in that they show Facebook constitutes a significant additional platform that parties can use during election campaigns to engage and mobilize their followers and perhaps most importantly to extend or accelerate their reach beyond their committed support base. Not all content is created equal, however. Some types of post are more likely to provoke a response and / or go viral than others. Posts that are more vivid in terms of containing visual content such as photos and video prove to be highly popular with the latter proving to be particularly shareable among Facebook users. Text-only posts can prove engaging, if they are extensive in length. However, the strongest finding is that when a party engages in a more conversational approach and engages in dialogue relating to a post this is a clear driver of engagement and increases its popularity and visibility. If parties
increase the frequency of their posting closer to election day this can also have some benefit, although they need to maintain a steady pace in their activity and not overload users with messages.

Beyond the findings about the strategic use and 'return on investment' of Facebook posting by parties during campaigns, our results are also interesting in terms of what they reveal about follower behaviour. In particular, we find a path dependency emerging in terms of likes, comments and shares predicting further likes, comments and shares respectively. Essentially, followers appear to cluster around one type of activity in response to a post. Whether this is simply contagion or a 'copycat' type of effect or because some posts or posts by a party are intrinsically more likely to be liked, commented on or shared than others is not clear from our analysis. The former explanation is perhaps more likely for likes and shares due to them being simple click responses. Comments which require some degree of reflection or mental processing. The differences in volume of each type of response provides further support for the idea of patterns of response. Likes far exceed shares (by 3 to 1 ) and comments were the least popular form of response. Overall, therefore, the data suggests that most followers are performing one, fairly low effort form of engagement, mostly clicking like, while a minority of highly engaged followers regularly post comments. Once that chain of response begins, however, it builds a momentum of its own, attracting further similar responses. While these dynamics require further exploration, our findings clearly show a relationship between the content and form of a post and the reactions it receives. However, the relationship appears more complex than previous research has suggested.

One further aspect of this relationship that our findings suggest requires closer scrutiny is the impact of text length. Specifically, we find that more elaborated textual posts gain a higher
levels of follower engagement in all respects - likes, comments and shares. One might hypothesise this is due to the fact some posts are intrinsically more likely to elicit comments, perhaps due to their more controversial or provocative nature. Alternatively, a longer post may have a broader appeal in terms of having 'something for everyone' and so may draw more community members into the discussion. A richer textual analysis of posts than was possible for this paper is required to investigate the mechanisms of influence at work here. While we do not examine the impact of parties' Facebook posting on levels of voter support and election outcomes, our findings do provide some useful insight into the potential 'real world' benefits of these strategies. Prior research has pointed to the vote dividend for parties in having a network of the highly engaged followers (Anstead \& O’Loughlin, 2015).

Our research suggests a possible mechanism for how this may be occurring. Through strategic use of posting, parties are able to extend their reach into their followers' networks. While this may simply increase the visibility of party posts within a largely partisan echo chamber (Messing \& Westwood, 2014), it is also possible that it increases exposure to more vivid and dynamic content among those within the networks of supporters, but who are undecided (Weeks et al., 2015). While these numbers are likely to be very small, our results suggest that longer term party networks could grow if parties adopt a more interactive visual posting strategy. Such activity is likely to increase the size of their active followership, which in turn will accelerate their reach into the wider (undecided) electorate. Given that as of 2014 parties were more likely to avoid interaction than to engage in it (as demonstrated by the fact that only 1,000 of the over 16,000 posts were classified as reciprocal), we argue that while parties are clearly missing opportunities to mobilize their base, they may also be missing out on wider electoral gains. It seems that party fears of straying off message by engaging in dialogue with the public online (Stromer-Galley, 2000), may be imposing a cost on their
capacity to fully exploit the organizational and electoral affordances of Facebook campaigning.

## Conclusions

Overall, our analysis has confirmed that social media use can have positive effects on parties' online visibility, and furthermore that differing tactics can yield different responses and types of engagement. For mobilizing the base in terms of sparking comments and likes interaction is important as well as visual cues. However, for provoking wider sharing of party campaign content and two-step flow of communication, video is particularly helpful. The relationship between differential strategies and follower reactions appears to be platform driven with a uniformity emerging across countries and parties with regard to these results. Contextual effects appear to be marginal.

## Limitations

While these findings may be due in part to the uniformity in the level and timing of the campaigns studied i.e. the European parliamentary elections, the very fact they are 'second order' implies they are a stage for the contestation of first order or national issues. Thus, while there may be a case for lower contextual effects than if one were comparing General election campaigns, one would not expect local factors to be entirely irrelevant or eradicated. A second and arguably more important qualifier, however, is the limitations of our data and an acknowledgement that our methods rely on quantitative measures and metrics for categorizing parties' posting style and form, rather than nuances of content. Notably, however, our findings are in accordance with several smaller scale studies that have employed more granular methods to understand the behaviour of party followers on Facebook (Bene, 2017; Heiss et al., 2018). A third potentially confounding element or
challenge to our findings that we should recognize in drawing out any broader conclusions is the extent to which they may be driven or affected by the algorithms that operate behind the scenes of Facebook to promote content and accounts. As with bots, however, these invisible actors have arguably become more sophisticated and influential since the period studied here. (Bene, 2017; Gibson, 2015; Heiss et al., 2018; Karlsen, 2015)this particular 'black box’ we regard as an endemic or intractable problem faced by all studies of this nature.

We do take comfort in the fact that our key findings have face validity in a political context and align with previous research on patterns of Facebook user behaviour. Essentially, the desire uncovered by our research for reciprocity and a close, more interactive, relationship with a party is one that has emerged from other comparative and single nation studies over the same time period (Bene, 2017; Gibson, 2015; Heiss et al., 2018; Karlsen, 2015). Our findings go beyond observing this inclination, however, and show that parties that interact with their communities of interest stimulate higher levels of engagement among those groups. Whether parties are bold enough to accept the challenge to shift from the typical cautionary stance and embrace a reciprocal style of electoral communication is a question to return to in future national and comparative studies of social media campaigning.

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## ONLINE APPENDIXES

## Appendix A

Table A1. Negative binomial regressions results for follower engagement with hour time slots

|  | Likes |  | Shares |  | Comments |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reciprocal communication | 0.3795 | *** | 0.6069 | *** | 1.0478 | *** |
|  | (0.0554) |  | (0.0860) |  | (0.0780) |  |
| Photo | 0.7692 | *** | 0.5633 | ** | 0.2570 | ** |
|  | (0.1278) |  | (0.2658) |  | (0.1128) |  |
| Status | -0.9926 | *** | -2.9576 | *** | -1.2519 | ** |
|  | (0.3708) |  | (0.6605) |  | (0.5938) |  |
| Video | 0.1180 |  | 0.6442 | *** | 0.0249 |  |
|  | (0.1578) |  | (0.2280) |  | (0.2056) |  |
| Length of the thread (ln) | 0.0269 | * | 0.1311 | *** | 0.0622 | *** |
|  | (0.0160) |  | (0.0322) |  | (0.0176) |  |
| Photo*Length of thread (ln) | -0.0635 | ** | 0.0099 |  | -0.0011 |  |
|  | (0.0266) |  | (0.0505) |  | (0.0232) |  |
| Status*Length of thread (ln) | 0.1414 | ** | 0.4020 | *** | 0.2065 | ** |
|  | (0.0582) |  | (0.1100) |  | (0.0894) |  |
| Video*Length of thread (ln) | 0.0074 |  | -0.0055 |  | 0.0228 |  |
|  | (0.0316) |  | (0.0471) |  | (0.0421) |  |
| Likes for last post (ln) | 0.1098 | *** | 0.0271 |  | 0.0188 |  |
|  | (0.0206) |  | (0.0301) |  | (0.0290) |  |
| Comments for last post (ln) | -0.0054 |  | 0.0210 |  | 0.0890 | *** |
|  | (0.0109) |  | (0.0231) |  | (0.0207) |  |
| Shares for last post (ln) | -0.0168 | * | 0.0423 | ** | -0.0167 |  |
|  | (0.0099) |  | (0.0174) |  | (0.0144) |  |
| Day of campaign | 0.0286 | *** | 0.0329 | *** | 0.0280 | *** |
|  | (0.0038) |  | (0.0063) |  | (0.0054) |  |
| Time since last post (ln) | 0.1736 | *** | 0.3004 | *** | 0.2177 | *** |
|  | (0.0532) |  | (0.0743) |  | (0.0454) |  |
| Time till next post (ln) | 0.1968 | *** | 0.1988 | *** | 0.1195 | *** |
|  | (0.0477) |  | (0.0717) |  | (0.0427) |  |
| Time since last post (ln) squared | -0.0109 | *** | -0.0171 | *** | -0.0134 | *** |
|  | (0.0033) |  | (0.0045) |  | (0.0027) |  |
| Time till next post (ln) squared | -0.0091 | *** | -0.0060 |  | -0.0002 |  |
|  | (0.0030) |  | (0.0044) |  | (0.0029) |  |
| NB of posts in last 10 min | -0.1069 | *** | -0.0373 |  | -0.1022 | * |
|  | (0.0265) |  | (0.0447) |  | (0.0563) |  |
| NB of posts in last 1h | -0.0438 | ** | -0.0479 | ** | -0.0820 | ** |
|  | (0.0205) |  | (0.0229) |  | (0.0409) |  |
| NB of posts in last 3h | -0.0141 | * | -0.0105 |  | -0.0168 | *** |
|  | (0.0083) |  | (0.0082) |  | (0.0063) |  |
| NB of posts in last 6h | -0.0228 | *** | -0.0153 |  | -0.0130 |  |
|  | (0.0053) |  | (0.0100) |  | (0.0084) |  |
| NB of posts in last 12h | -0.0219 | * | -0.0227 | *** | -0.0249 | *** |
|  | (0.0119) |  | (0.0081) |  | (0.0046) |  |
| NB of posts in last 24h | -0.0048 |  | -0.0022 |  | -0.0084 | *** |
|  | (0.0036) |  | (0.0032) |  | (0.0030) |  |
| NB of posts in last 48h | 0.0003 |  | -0.0056 |  | -0.0020 |  |
|  | (0.0034) |  | (0.0041) |  | (0.0015) |  |
| Weekend (dummy) | 0.0225 |  | -0.0858 | * | -0.0720 |  |
|  | (0.0315) |  | (0.0495) |  | (0.0493) |  |
| Campaign silence 48h | -0.0566 |  | -0.2754 | *** | -0.1740 |  |
|  | (0.0905) |  | (0.1067) |  | (0.1478) |  |


| Campaign silence 24h | -0.1788 | ** | -0.2530 | * | 0.1201 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (0.0808) |  | (0.1411) |  | (0.1397) |  |
| Time of the day |  |  |  |  |  |  |
| h1_2 a.m. | 0.1726 |  | 0.1374 |  | 0.3433 |  |
|  | (0.1986) |  | (0.3070) |  | (0.3104) |  |
| h2_3 a.m. | -0.1392 |  | 1.2971 |  | -0.4387 |  |
|  | (0.3624) |  | (0.8882) |  | (0.4580) |  |
| h3_4 a.m. | -0.2642 |  | -0.1209 |  | 0.1641 |  |
|  | (0.2341) |  | (0.3997) |  | (0.3771) |  |
| h4_5 a.m. | 0.1185 |  | 0.7832 | * | 0.5557 | * |
|  | (0.2660) |  | (0.4159) |  | (0.3084) |  |
| h5_6 a.m. | 0.1413 |  | 0.6956 | ** | 0.5055 | * |
|  | (0.2041) |  | (0.3366) |  | (0.2640) |  |
| h6_7 a.m. | 0.2790 |  | 0.7533 | ** | 0.7550 | *** |
|  | (0.1963) |  | (0.3149) |  | (0.2572) |  |
| h7_8 a.m. | 0.0987 |  | 0.6246 | ** | 0.5820 | ** |
|  | (0.1892) |  | (0.3070) |  | (0.2507) |  |
| h8_9 a.m. | 0.1101 |  | 0.7114 | ** | 0.6401 | ** |
|  | (0.1849) |  | (0.3050) |  | (0.2518) |  |
| h9_10 a.m. | 0.0556 |  | 0.6415 | ** | 0.5554 | ** |
|  | (0.1871) |  | (0.3015) |  | (0.2507) |  |
| h10_11 a.m. | 0.1454 |  | 0.6809 | ** | 0.6488 | *** |
|  | (0.1912) |  | (0.3008) |  | (0.2507) |  |
| h11_12 a.m. | 0.2003 |  | 0.7391 | ** | 0.5973 | ** |
|  | (0.1759) |  | (0.3136) |  | (0.2600) |  |
| h12_1 p.m. | 0.1645 |  | 0.6854 | ** | 0.6564 | *** |
|  | (0.1840) |  | (0.2985) |  | (0.2545) |  |
| h1 2 p.m. | 0.2031 |  | 0.6291 | ** | 0.6938 | *** |
|  | (0.1878) |  | (0.2937) |  | (0.2571) |  |
| H 2_3 p.m. | 0.1458 |  | 0.6671 | ** | 0.5679 | ** |
|  | (0.1772) |  | (0.2999) |  | (0.2484) |  |
| H3 4 p.m. | 0.1623 |  | 0.6491 | ** | 0.7760 | *** |
|  | (0.1644) |  | (0.3135) |  | (0.2689) |  |
| H4 5 p.m. | 0.1394 |  | 0.6301 | ** | 0.6686 | ** |
|  | (0.1920) |  | (0.2995) |  | (0.2620) |  |
| H5 6 p.m. | 0.2006 |  | 0.6871 | ** | 0.5955 | ** |
|  | (0.1729) |  | (0.3190) |  | (0.2418) |  |
| H6 7 p.m. | 0.2222 |  | 0.6356 | ** | 0.6877 | *** |
|  | (0.1746) |  | (0.3030) |  | (0.2502) |  |
| H7 8 p.m. | 0.3534 | * | 0.6908 | ** | 0.6457 | ** |
|  | (0.1869) |  | (0.3065) |  | (0.2538) |  |
| H89 p.m. | 0.3294 | * | 0.6313 | ** | 0.7046 | *** |
|  | (0.1734) |  | (0.3046) |  | (0.2536) |  |
| H9 10 p.m. | 0.3549 | ** | 0.6338 | ** | 0.8074 | *** |
|  | (0.1782) |  | (0.3054) |  | (0.2571) |  |
| H10 11 p.m. | 0.3236 | * | 0.6902 | * | 0.5653 | ** |
|  | (0.1672) |  | (0.3554) |  | (0.2491) |  |
| H11 12 p.m. | 0.2280 |  | 0.7079 | ** | 0.3415 |  |
|  | (0.1907) |  | (0.3540) |  | (0.2303) |  |
| CONSTANT | 1.2489 | *** | -4.0734 | *** | -0.9872 | ** |
|  | (0.3371) |  | (0.5936) |  | (0.3858) |  |
| Party fix |  |  |  |  |  |  |
| N | 16218 |  | 16218 |  | 16218 |  |
| Dispersion | 1.1370 |  | 1.1032 |  | 1.0265 |  |
| Dispersion - Pearson | 2.0109 |  | 1.9435 |  | 1.8095 |  |
| Stat significance * $\mathrm{p}<0.10,{ }^{* *} \mathrm{p}<0.05, * * * \mathrm{p}<0.01$ |  |  |  |  |  |  |

## Appendix B.

Table B1. Information per party
$\left.\begin{array}{|l|l|l|l|l|r|r|r|r|r|r|r|}\hline & & & \\ \text { Party size } \\ \text { Party name }\end{array} \quad \begin{array}{l}\text { EU } \\ \text { position }\end{array}\right)$

| Strana zelenych CZ | CENTER | pro_EU | 1989 | Major Frin. | 37 | 10 | 4 | 27 | 1209 | 263 | 92 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hnutu Usvit CZ | RIGHT | pro_EU | 2013 | Minor Parl. | 42 | 13 | 14 | 24 | 5343 | 1138 | 849 |
| CDU DE | RIGHT | pro_EU | 1945 | Major Parl. | 31 | 12 | 3 | 13 | 25227 | 5945 | 5198 |
| CSU DE | RIGHT | pro_EU | 1946 | Minor Parl. | 15 | 4 | 3 | 10 | 6685 | 884 | 798 |
| SPD DE | LEFT | pro_EU | 1875 | Major Parl. | 62 | 14 | 1 | 16 | 38833 | 6388 | 8110 |
| FDP DE | CENTER | pro_EU | 1948 | Major Frin. | 11 | 8 | 1 | 17 | 6476 | 880 | 773 |
| BUNDNIS 90/DIE GRUNEN DE | LEFT | pro_EU | 1980 | Minor Parl. | 18 | 2 | 0 | 0 | 13932 | 2405 | 8018 |
| Piratenpartei DE | LEFT | pro_EU | 2006 | Major Frin. | 57 | 10 | 2 | 35 | 13909 | 1405 | 5628 |
| Die Linke DE | LEFT | pro_EU | 2007 | Minor Parl. | 28 | 4 | 2 | 2 | 37489 | 2299 | 5652 |
| AfD DE | CENTER | pro_EU | 2013 | Major Frin. | 37 | 3 | 1 | 6 | 122975 | 16180 | 19370 |
| NPD DE | LEFT | anti_EU | 1964 | Major Frin. | 68 | 9 | 7 | 80 | 131856 | 20695 | 28641 |
| DIE <br> REPUBLIKANER <br> DE | RIGHT | anti_EU | 1983 | Minor Frin. | 18 | 1 | 0 | 17 | 8950 | 2756 | 2310 |
| Tierschutzpartei DE | LEFT | pro_EU | 1993 | Minor Frin. | 48 | 10 | 4 | 23 | 12820 | 1437 | 5427 |
| ODP DE | LEFT | pro_EU | 1982 | Minor Frin. | 10 | 1 | 2 | 28 | 1287 | 133 | 304 |
| Die PARTEI DE | Sing.Issue | neutral | 2004 | Minor Frin. | 19 | 9 | 2 | 25 | 95393 | 3608 | 7465 |
| Bayernpartei DE | RIGHT | neutral | 1946 | Minor Frin. | 4 | 1 | 1 | 0 | 605 | 52 | 162 |
| MLPD DE | LEFT | anti_EU | 1982 | Minor Frin. | 0 | 0 | 2 | 0 | 5 | 4 | 0 |
| Rentner Partei DE | Sing.Issue | neutral | 2002 | Minor Frin. | 8 | 1 | 0 | 4 | 24 | 1 | 1 |
| PBC DE | Sing.Issue | neutral | 1989 | Minor Frin. | 11 | 1 | 0 | 3 | 18 | 0 | 0 |
| BuSo DE | Sing.Issue | neutral | 2007 | Minor Frin. | 14 | 13 | 9 | 23 | 572 | 41 | 234 |
| Familien-Partei DE | CENTER | pro_EU | 1981 | Minor Frin. | 78 | 1 | 5 | 13 | 2003 | 367 | 410 |
| PSG DE | LEFT | pro_EU | 1997 | Minor Frin. | 0 | 2 | 0 | 20 | 148 | 14 | 43 |
| Venstre DK | RIGHT | pro_EU | 1910 | Major Parl. | 5 | 12 | 0 | 11 | 4709 | 1282 | 484 |
| Socialdemokraterne DK | LEFT | pro_EU | 1871 | Major Parl. | 12 | 2 | 0 | 3 | 4780 | 585 | 1019 |
| Dansk Folkeparti DK | RIGHT | anti_EU | 1995 | Minor Parl. | 4 | 1 | 0 | 20 | 3227 | 303 | 699 |
| SF DK | LEFT | pro_EU | 1959 | Minor Parl. | 23 | 5 | 0 | 19 | 6501 | 571 | 548 |
| Radikale Venstre DK | LEFT | pro_EU | 1905 | Minor Parl. | 5 | 2 | 0 | 20 | 2334 | 316 | 250 |
| Enhedslisten DK | LEFT | pro_EU | 1989 | Minor Parl. | 18 | 7 | 1 | 13 | 11446 | 676 | 2078 |
| Liberal Alliance DK | CENTER | pro_EU | 2007 | Minor Parl. | 10 | 2 | 1 | 2 | 4958 | 396 | 435 |
| Reform EE | RIGHT | pro_EU | 1994 | Major Parl. | 24 | 9 | 1 | 15 | 2797 | 125 | 201 |
| Keskerakond EE | CENTER | pro_EU | 1991 | Major Parl. | 10 | 7 | 0 | 2 | 359 | 44 | 69 |
| IRL EE | CENTER | pro_EU | 2006 | Major Parl. | 13 | 3 | 0 | 35 | 1195 | 131 | 88 |
| SOTSDEM EE | LEFT | pro_EU | 1990 | Minor Parl. | 9 | 8 | 0 | 13 | 876 | 38 | 70 |
| Erakond EE | LEFT | pro_EU | 2005 | Major Frin. | 1 | 1 | 11 | 12 | 105 | 38 | 36 |
| PP ES | RIGHT | pro_EU | 1989 | Major Parl. | 73 | 15 | 33 | 58 | 107870 | 12465 | 16704 |
| PSOE ES | LEFT | pro_EU | 1879 | Major Parl. | 45 | 19 | 1 | 20 | 52776 | 6694 | 18717 |
| Izquierda Unida ES | LEFT | pro_EU | 1986 | Minor Parl. | 6 | 0 | 0 | 2 | 20 | 0 | 41 |
| UPyD ES | CENTER | pro_EU | 2007 | Minor Parl. | 15 | 9 | 2 | 23 | 15080 | 769 | 3238 |
| CIU ES | Sing.Issue | neutral | 1978 | Minor Parl. | 17 | 4 | 0 | 0 | 12516 | 1133 | 5890 |
| AMAIUR ES | Sing.Issue | neutral | 2011 | Minor Parl. | 54 | 94 | 1 | 5 | 8146 | 282 | 6202 |
| EAJ-PNV ES | Sing.Issue | neutral | 1895 | Minor Parl. | 186 | 27 | 0 | 32 | 4281 | 69 | 379 |
| Esquerra ES | Sing.Issue | neutral | 1931 | Minor Parl. | 104 | 11 | 0 | 15 | 49417 | 1901 | 14212 |
| Coalicion Canaria ES | Sing.Issue | neutral | 1993 | Minor Parl. | 37 | 5 | 16 | 20 | 666 | 19 | 189 |
| ICV-EUiA ES | LEFT | pro_EU | 1998 | Minor Parl. | 35 | 0 | 0 | 14 | 1479 | 39 | 933 |
| Coalició <br> Compromís ES | Sing.Issue | neutral | 2010 | Minor Parl. | 61 | 16 | 2 | 22 | 49518 | 2136 | 16722 |
| Foro Asturias ES | Sing.Issue | anti_EU | 2011 | Minor Parl. | 0 | 9 | 1 | 58 | 1152 | 55 | 231 |
| UPN ES | Sing.Issue | neutral | 1979 | Minor Parl. | 3 | 0 | 0 | 1 | 31 | 2 | 1 |
| Podemos ES | LEFT | pro_EU | 2014 | Minor Frin. | 20 | 7 | 2 | 12 | 126461 | 6565 | 53485 |


| Vox Espana ES | RIGHT | neutral | 2013 | Minor Frin. | 33 | 5 | 19 | 14 | 11401 | 584 | 2730 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kokoomus FI | CENTER | pro_EU | 1918 | Major Parl. | 27 | 7 | 0 | 49 | 5669 | 312 | 236 |
| KD FI | LEFT | neutral | 1958 | Minor Parl. | 2 | 4 | 0 | 22 | 850 | 61 | 113 |
| Keskusta FI | CENTER | pro_EU | 1908 | Minor Parl. | 79 | 2 | 4 | 19 | 5767 | 264 | 574 |
| SFP FI | Sing.Issue | pro_EU | 1906 | Minor Parl. | 22 | 5 | 1 | 16 | 4191 | 156 | 509 |
| SDP FI | LEFT | pro_EU | 1899 | Major Parl. | 35 | 1 | 5 | 22 | 5498 | 376 | 365 |
| Vasemmisto FI | LEFT | pro_EU | 1990 | Minor Parl. | 18 | 2 | 7 | 33 | 4629 | 121 | 438 |
| Vihreat FI | LEFT | pro_EU | 1987 | Minor Parl. | 61 | 4 | 1 | 66 | 8954 | 414 | 1244 |
| Itsenaisyyspuolue FI | Sing.Issue | anti_EU | 1994 | Minor Frin. | 0 | 2 | 3 | 15 | 498 | 39 | 39 |
| SKP FI | LEFT | neutral | 2006 | Minor Frin. | 11 | 0 | 1 | 35 | 444 | 45 | 113 |
| Piraattipuolue FI | LEFT | anti_EU | 2008 | Minor Frin. | 4 | 1 | 1 | 29 | 1019 | 77 | 159 |
| Muutos 2011 FI | Sing.Issue | anti_EU | 2009 | Minor Frin. | 1 | 5 | 1 | 20 | 149 | 31 | 46 |
| PCF FR | LEFT | anti_EU | 1921 | Minor Parl. | 5 | 6 | 0 | 7 | 1337 | 77 | 1192 |
| PdG FR | LEFT | anti_EU | 2008 | Minor Parl. | 22 | 32 | 0 | 164 | 9550 | 749 | 2345 |
| PS FR | LEFT | pro_EU | 1969 | Major Parl. | 86 | 19 | 1 | 29 | 18598 | 1401 | 5098 |
| PRdG FR | LEFT | pro_EU | 1998 | Minor Parl. | 2 | 2 | 27 | 20 | 181 | 4 | 42 |
| EE FR | LEFT | pro_EU | 2010 | Minor Parl. | 0 | 0 | 0 | 3 | 139 | 72 | 60 |
| MoDem FR | CENTER | pro_EU | 2007 | Minor Parl. | 0 | 1 | 0 | 9 | 330 | 18 | 89 |
| UDI FR | RIGHT | pro_EU | 2012 | Minor Parl. | 12 | 5 | 0 | 17 | 2374 | 158 | 636 |
| UMP FR | RIGHT | pro_EU | 2002 | Major Parl. | 9 | 5 | 6 | 26 | 15142 | 1991 | 3058 |
| CNIP FR | RIGHT | neutral | 1951 | Minor Parl. | 1 | 0 | 0 | 0 | 7 | 0 | 4 |
| MPF FR | RIGHT | anti_EU | 1994 | Minor Parl. | 0 | 2 | 2 | 5 | 72 | 4 | 7 |
| FN FR | RIGHT | anti_EU | 1972 | Minor Parl. | 7 | 2 | 8 | 58 | 49857 | 6358 | 3706 |
| NC FR | RIGHT | neutral | 2007 | Minor Parl. | 0 | 0 | 4 | 11 | 42 | 1 | 26 |
| Parti Radical FR | LEFT | neutral | 1901 | Minor Parl. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NPA FR | LEFT | neutral | 2009 | Minor Frin. | 14 | 4 | 0 | 37 | 452 | 55 | 131 |
| MRC FR | Sing.Issue | anti_EU | 2003 | Minor Parl. | 4 | 1 | 0 | 10 | 264 | 26 | 533 |
| ND GR | RIGHT | pro_EU | 1974 | Major Parl. | 37 | 16 | 1 | 2 | 23687 | 2487 | 1910 |
| SYRIZA GR | LEFT | neutral | 2004 | Major Parl. | 72 | 16 | 0 | 33 | 61188 | 1653 | 6789 |
| PASOK GR | LEFT | pro_EU | 1981 | Minor Parl. | 12 | 10 | 24 | 38 | 2910 | 144 | 284 |
| Anexartitoiellines GR | RIGHT | neutral | 2012 | Minor Parl. | 1 | 0 | 4 | 57 | 1255 | 26 | 164 |
| DIM-AR GR | LEFT | pro_EU | 2010 | Minor Parl. | 3 | 23 | 0 | 16 | 157 | 8 | 44 |
| To Potami GR | LEFT | pro_EU | 2014 | Minor Frin. | 23 | 27 | 13 | 36 | 12330 | 670 | 1558 |
| ECOGREENS GR | LEFT | pro_EU | 2002 | Minor Frin. | 13 | 3 | 0 | 13 | 365 | 7 | 106 |
| Demokratski <br> Centar HR | RIGHT | anti_EU | 2000 | Minor Parl. | 0 | 0 | 0 | 3 | 3 | 0 | 0 |
| HMDK HR | Sing.Issue | neutral | 1993 | Minor Frin. | 1 | 0 | 0 | 3 | 32 | 1 | 3 |
| HDSSB HR | Sing.Issue | pro_EU | 2006 | Minor Parl. | 27 | 2 | 5 | 10 | 2652 | 107 | 479 |
| SDP HR | LEFT | pro_EU | 1994 | Major Parl. | 1 | 1 | 0 | 3 | 461 | 56 | 82 |
| HNS HR | LEFT | pro_EU | 1990 | Minor Parl. | 38 | 3 | 3 | 21 | 1568 | 68 | 203 |
| IDS HR | Sing.Issue | neutral | 1990 | Minor Parl. | 28 | 1 | 3 | 14 | 2853 | 116 | 150 |
| HSU HR | Sing.Issue | neutral | 1991 | Minor Parl. | 4 | 0 | 0 | 3 | 40 | 10 | 13 |
| HDZ HR | RIGHT | pro_EU | 1990 | Major Parl. | 15 | 6 | 0 | 30 | 9562 | 291 | 903 |
| Hrvatski laburisti HR | LEFT | pro_EU | 2010 | Minor Parl. | 8 | 10 | 5 | 35 | 3342 | 457 | 423 |
| SDSS HR | LEFT | neutral | 1997 | Minor Parl. | 0 | 2 | 5 | 0 | 32 | 6 | 3 |
| ORaH HR | LEFT | pro_EU | 2013 | Minor Frin. | 17 | 6 | 21 | 36 | 4721 | 308 | 438 |
| MSZP HU | LEFT | pro_EU | 1989 | Minor Parl. | 19 | 24 | 1 | 24 | 36275 | 3265 | 12335 |
| JOBBIK HU | RIGHT | anti_EU | 2003 | Minor Parl. | 48 | 18 | 0 | 1 | 146709 | 9887 | 53351 |
| KDNP HU | RIGHT | neutral | 1989 | Minor Parl. | 20 | 3 | 0 | 50 | 6402 | 170 | 594 |
| Fidesz HU | RIGHT | pro_EU | 1988 | Major Parl. | 32 | 5 | 0 | 44 | 172922 | 10685 | 20064 |
| DKP HU | LEFT | pro_EU | 2011 | Minor Parl. | 91 | 42 | 12 | 78 | 70765 | 4308 | 15650 |


| Parbeszed HU | LEFT | pro_EU | 2013 | Minor Parl. | 40 | 6 | 1 | 3 | 15652 | 1139 | 4295 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LMP HU | LEFT | pro_EU | 2009 | Minor Parl. | 74 | 13 | 1 | 25 | 9977 | 552 | 2267 |
| Labour Party IE | LEFT | pro_EU | 1912 | Major Parl. | 9 | 4 | 1 | 16 | 516 | 284 | 61 |
| Fianna Fail IE | RIGHT | pro_EU | 1926 | Minor Parl. | 0 | 2 | 6 | 0 | 594 | 128 | 175 |
| Sinn Fein IE | LEFT | anti_EU | 1905 | Minor Parl. | 9 | 12 | 0 | 12 | 23993 | 1155 | 5384 |
| United Left IE | LEFT | neutral | 2013 | Minor Frin. | 0 | 4 | 0 | 5 | 22 | 3 | 0 |
| Socialist Party IE | LEFT | anti_EU | 1996 | Minor Parl. | 0 | 1 | 0 | 3 | 20 | 1 | 2 |
| People Before Profit IE | LEFT | neutral | 2005 | Minor Parl. | 13 | 22 | 4 | 42 | 748 | 75 | 273 |
| Green Party IE | LEFT | pro_EU | 1981 | Major Frin. | 17 | 7 | 0 | 15 | 1190 | 116 | 267 |
| RSF IE | Sing.Issue | neutral | 1986 | Minor Frin. | 14 | 1 | 12 | 16 | 1177 | 21 | 140 |
| EIRIGI IE | LEFT | pro_EU | 2006 | Minor Frin. | 43 | 0 | 1 | 2 | 2066 | 61 | 442 |
| Movimento Cinque Stelle IT | Sing.Issue | anti_EU | 2009 | Minor Parl. | 269 | 14 | 6 | 21 | 138914 | 11995 | 28047 |
| Partito Democratico IT | LEFT | pro_EU | 2007 | Major Parl. | 331 | 9 | 0 | 1 | 124458 | 25324 | 34389 |
| Forza Italia IT | RIGHT | pro_EU | 2013 | Minor Parl. | 22 | 4 | 0 | 86 | 74014 | 6372 | 11862 |
| Scelta Civica IT | CENTER | pro_EU | 2012 | Minor Parl. | 33 | 11 | 0 | 6 | 2576 | 946 | 1003 |
| Matteo Salvini IT | RIGHT | anti_EU | 1989 | Minor Parl. | 110 | 41 | 113 | 4 | 718503 | 102910 | 86457 |
| Sinistra Ecologia Liberta IT | LEFT | neutral | 2010 | Minor Parl. | 54 | 11 | 6 | 5 | 45634 | 2511 | 29647 |
| Nuovo Centrodestra IT | RIGHT | pro_EU | 2013 | Minor Frin. | 17 | 8 | 54 | 74 | 8013 | 384 | 2633 |
| Popolari per l'Italia IT | CENTER | pro_EU | 2014 | Minor Frin. | 0 | 0 | 4 | 25 | 89 | 2 | 107 |
| Fratelli d'Italia IT | RIGHT | pro_EU | 2012 | Minor Parl. | 147 | 49 | 1 | 90 | 71807 | 2521 | 18287 |
| LSDP LT | LEFT | pro_EU | 2001 | Major Parl. | 9 | 5 | 2 | 67 | 2124 | 110 | 227 |
| TS LKD LT | RIGHT | pro_EU | 1993 | Major Parl. | 10 | 3 | 0 | 45 | 1340 | 45 | 79 |
| Darbo partija LT | CENTER | pro_EU | 2003 | Major Parl. | 3 | 1 | 1 | 12 | 679 | 44 | 115 |
| Liberalai LT | RIGHT | pro_EU | 2006 | Minor Parl. | 27 | 17 | 1 | 9 | 11571 | 825 | 653 |
| Tvarka LT | RIGHT | pro_EU | 2002 | Minor Parl. | 3 | 0 | 0 | 0 | 6 | 0 | 1 |
| AWPL LT | Sing.Issue | pro_EU | 1994 | Minor Parl. | 2 | 4 | 1 | 34 | 758 | 24 | 118 |
| LVLS LT | Sing.Issue | neutral | 2001 | Minor Parl. | 11 | 3 | 0 | 5 | 446 | 15 | 162 |
| LZP LT | Sing.Issue | neutral | 2011 | Minor Frin. | 16 | 3 | 0 | 27 | 401 | 6 | 53 |
| ADR LU | RIGHT | pro_EU | 1987 | Minor Parl. | 0 | 4 | 0 | 6 | 47 | 8 | 10 |
| CSV LU | RIGHT | pro_EU | 1944 | Major Parl. | 40 | 5 | 0 | 12 | 3810 | 254 | 386 |
| DP LU | CENTER | pro_EU | 1955 | Major Parl. | 13 | 8 | 2 | 14 | 785 | 23 | 60 |
| dei greng LU | LEFT | pro_EU | 1983 | Minor Parl. | 11 | 0 | 0 | 3 | 1977 | 172 | 366 |
| Dei Lenk LU | LEFT | pro_EU | 1999 | Minor Parl. | 7 | 9 | 0 | 8 | 833 | 26 | 435 |
| LSAP LU | LEFT | pro_EU | 1902 | Major Parl. | 28 | 12 | 0 | 8 | 1221 | 104 | 78 |
| Piratepartei Letzebuerg LU | LEFT | pro_EU | 2009 | Minor Frin. | 12 | 1 | 0 | 4 | 510 | 46 | 57 |
| Saskanas Centrs LV | LEFT | pro_EU | 2010 | Major Parl. | 2 | 0 | 2 | 2 | 45 | 0 | 17 |
| VIENOTIBA LV | RIGHT | pro_EU | 2011 | Major Parl. | 30 | 3 | 0 | 10 | 393 | 45 | 114 |
| PCTVL LV | Sing.Issue | pro_EU | 2007 | Minor Frin. | 4 | 4 | 0 | 13 | 63 | 7 | 5 |
| PN MT | RIGHT | pro_EU | 1926 | Major Parl. | 4 | 2 | 1 | 107 | 2954 | 1522 | 552 |
| MPL MT | LEFT | pro_EU | 1921 | Major Parl. | 24 | 39 | 1 | 2 | 7627 | 656 | 1255 |
| Alternattiva Demokratika MT | CENTER | pro_EU | 1989 | Minor Frin. | 96 | 24 | 21 | 63 | 1435 | 72 | 138 |
| VVD NL | RIGHT | neutral | 1948 | Major Parl. | 5 | 3 | 0 | 1 | 3393 | 2008 | 947 |
| PvDa NL | LEFT | pro_EU | 1946 | Major Parl. | 13 | 1 | 0 | 0 | 6491 | 1929 | 1529 |
| PVV NL | RIGHT | anti_EU | 2004 | Minor Parl. | 0 | 0 | 0 | 22 | 1616 | 356 | 330 |
| SP NL | LEFT | neutral | 1972 | Minor Parl. | 10 | 2 | 1 | 5 | 9734 | 1634 | 3737 |
| CDA NL | RIGHT | pro_EU | 1980 | Minor Parl. | 12 | 3 | 0 | 3 | 1751 | 259 | 655 |
| D66 NL | Sing.Issue | pro_EU | 1966 | Minor Parl. | 15 | 1 | 0 | 0 | 9628 | 907 | 2235 |
| Christen Unie NL | RIGHT | neutral | 2001 | Minor Parl. | 7 | 1 | 0 | 2 | 1217 | 67 | 230 |


| Groen Links NL | LEFT | pro_EU | 1991 | Minor Parl. | 18 | 6 | 0 | 3 | 6059 | 559 | 2193 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Partij voor de Dieren NL | Sing.Issue | anti_EU | 2002 | Minor Parl. | 36 | 22 | 8 | 51 | 44165 | 3383 | 8594 |
| PO PL | CENTER | pro_EU | 2001 | Major Parl. | 34 | 6 | 1 | 3 | 25951 | 4679 | 4466 |
| PiS PL | RIGHT | pro_EU | 2001 | Major Parl. | 4 | 0 | 0 | 2 | 2447 | 728 | 101 |
| Twój Ruch PL | LEFT | pro_EU | 2011 | Minor Parl. | 19 | 18 | 0 | 14 | 10113 | 2387 | 1414 |
| PSL PL | CENTER | pro_EU | 1990 | Minor Parl. | 3 | 3 | 0 | 14 | 105 | 45 | 22 |
| SLD PL | LEFT | pro_EU | 1999 | Minor Parl. | 111 | 37 | 19 | 107 | 14835 | 1169 | 1730 |
| Polska Razem PL | RIGHT | pro_EU | 2013 | Minor Parl. | 18 | 17 | 2 | 11 | 4130 | 1637 | 1169 |
| KNP PL | RIGHT | anti_EU | 2011 | Major Frin. | 37 | 40 | 7 | 16 | 185629 | 10401 | 33004 |
| PR PL | RIGHT | neutral | 2007 | Minor Frin. | 13 | 10 | 7 | 16 | 1779 | 180 | 1037 |
| UPR PL | RIGHT | anti_EU | 1990 | Minor Frin. | 56 | 16 | 8 | 54 | 651 | 148 | 252 |
| Solidarna Polska PL | RIGHT | anti_EU | 2011 | Minor Parl. | 12 | 15 | 3 | 39 | 2414 | 532 | 814 |
| MAS PT | LEFT | anti_EU | 2000 | Minor Frin. | 23 | 13 | 2 | 29 | 1721 | 35 | 765 |
| Esquerda Net PT | LEFT | pro_EU | 1999 | Minor Parl. | 23 | 4 | 0 | 220 | 6626 | 217 | 4161 |
| Coligacao <br> Democratica <br> Unitaria PT | LEFT | anti_EU | 1921 | Minor Parl. | 66 | 22 | 5 | 60 | 7639 | 100 | 3262 |
| PCTP/MRPP PT | LEFT | anti_EU | 1970 | Major Frin. | 5 | 10 | 7 | 28 | 350 | 10 | 41 |
| Os Verdes PT | LEFT | pro_EU | 1982 | Minor Parl. | 19 | 26 | 23 | 90 | 1051 | 25 | 213 |
| PS PT | LEFT | pro_EU | 1973 | Minor Parl. | 87 | 9 | 1 | 40 | 22916 | 1122 | 4264 |
| A Nossa Europa PT | CENTER | neutral | 1979 | Minor Frin. | 112 | 18 | 6 | 15 | 1266 | 45 | 226 |
| PSD PT | CENTER | pro_EU | 1974 | Major Parl. | 15 | 5 | 9 | 1 | 4213 | 151 | 442 |
| PSD RO | LEFT | pro_EU | 2001 | Minor Parl. | 173 | 3 | 0 | 21 | 33433 | 787 | 1181 |
| PNL RO | CENTER | pro_EU | 1990 | Minor Parl. | 70 | 13 | 0 | 47 | 40899 | 2009 | 4570 |
| PDL RO | RIGHT | pro_EU | 1993 | Minor Parl. | 115 | 28 | 1 | 77 | 58783 | 1602 | 13606 |
| RMDSZ RO | Sing.Issue | pro_EU | 1989 | Minor Parl. | 53 | 14 | 1 | 63 | 17149 | 517 | 6552 |
| PMP RO | RIGHT | pro_EU | 2013 | Minor Frin. | 82 | 23 | 1 | 28 | 38761 | 3045 | 4573 |
| Forta Civica RO | RIGHT | pro_EU | 2004 | Minor Parl. | 52 | 16 | 6 | 31 | 8507 | 611 | 1387 |
| Socialdemokraterna SE | LEFT | pro_EU | 1889 | Major Parl. | 34 | 4 | 3 | 15 | 75487 | 2689 | 6902 |
| Nya Moderaterna SE | RIGHT | pro_EU | 1904 | Major Parl. | 14 | 3 | 2 | 17 | 23451 | 1806 | 3554 |
| MP SE | LEFT | neutral | 1981 | Minor Parl. | 24 | 4 | 0 | 2 | 63356 | 2157 | 4825 |
| Folkpartiet SE | CENTER | pro_EU | 1934 | Minor Parl. | 87 | 13 | 1 | 38 | 9514 | 459 | 833 |
| Centerpartiet SE | CENTER | pro_EU | 1913 | Minor Parl. | 13 | 12 | 4 | 31 | 15967 | 1158 | 2210 |
| Piratpartiet SE | LEFT | pro_EU | 2006 | Minor Frin. | 23 | 11 | 3 | 34 | 33530 | 2139 | 5118 |
| Kristdemokraterna SE | RIGHT | pro_EU | 1964 | Minor Parl. | 29 | 2 | 1 | 9 | 5723 | 266 | 628 |
| Vansterpartiet SE | LEFT | neutral | 1917 | Minor Parl. | 24 | 4 | 0 | 28 | 59537 | 2145 | 5535 |
| Feministiskt initiativ SE | LEFT | neutral | 2005 | Major Frin. | 69 | 10 | 0 | 51 | 203338 | 5417 | 16399 |
| Pozitivna Slovenija SI | LEFT | pro_EU | 2011 | Major Frin. | 44 | 10 | 3 | 24 | 1565 | 272 | 114 |
| SDS SI | RIGHT | pro_EU | 1989 | Major Parl. | 99 | 18 | 0 | 82 | 12678 | 692 | 535 |
| SD SI | LEFT | pro_EU | 1992 | Minor Parl. | 58 | 0 | 0 | 4 | 4812 | 361 | 346 |
| SLS SI | RIGHT | pro_EU | 1988 | Major Frin. | 36 | 13 | 1 | 59 | 613 | 34 | 30 |
| Most-Híd SK | CENTER | pro_EU | 2009 | Minor Parl. | 11 | 8 | 0 | 45 | 92 | 5 | 21 |
| Strana TIP SK | RIGHT | pro_EU | 2014 | Minor Frin. | 29 | 12 | 1 | 8 | 1839 | 205 | 527 |
| Igor Soltes SI | LEFT | pro_EU | 2014 | Minor Frin. | 34 | 10 | 7 | 6 | 6957 | 912 | 228 |
| Zdruzena levica SI | LEFT | pro_EU | 2014 | Minor Parl. | 52 | 9 | 4 | 18 | 3480 | 327 | 1214 |
| Solidarnost SI | LEFT | neutral | 2013 | Minor Frin. | 26 | 5 | 4 | 20 | 1681 | 187 | 273 |
| KDH SK | RIGHT | pro_EU | 1990 | Minor Parl. | 5 | 16 | 0 | 4 | 484 | 26 | 78 |
| Obycajní Ludia SK | RIGHT | pro_EU | 2011 | Minor Parl. | 4 | 3 | 0 | 7 | 245 | 45 | 33 |
| SDKÚ-DS SK | RIGHT | pro_EU | 2000 | Minor Parl. | 3 | 4 | 1 | 8 | 678 | 113 | 46 |
| SNS SK | RIGHT | anti_EU | 1990 | Major Frin. | 9 | 0 | 2 | 36 | 2058 | 165 | 579 |


| Magyar Koalício <br> Partja SK | LEFT | pro_EU | 2009 | Minor Parl. | 29 | 4 | 2 | 61 | 2114 | 136 | 222 |
| :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| NOVA SK | RIGHT | pro_EU | 2012 | Minor Frin. | 10 | 6 | 0 | 10 | 1584 | 381 | 419 |
| Conservatives UK | RIGHT | pro_EU | 1832 | Major Parl. | 21 | 3 | 1 | 8 | 19434 | 8759 | 4214 |
| The Labour Party <br> UK | LEFT | pro_EU | 1906 | Major Parl. | 33 | 7 | 0 | 8 | 36526 | 20563 | 24085 |
| Liberal Democrats <br> UK | LEFT | pro_EU | 1988 | Minor Parl. | 19 | 4 | 0 | 13 | 6994 | 4772 | 3531 |
| UKIP UK | RIGHT | anti_EU | 1993 | Major Frin. | 30 | 3 | 10 | 17 | 333732 | 65979 | 69158 |
| BNP UK | RIGHT | anti_EU | 1982 | Major Frin. | 58 | 18 | 44 | 12 | 134081 | 21410 | 107255 |
| SNP UK | LEFT | pro_EU | 1934 | Minor Parl. | 37 | 4 | 0 | 115 | 71499 | 9330 | 16402 |
| Green Party UK | LEFT | pro_EU | 1990 | Minor Parl. | 10 | 8 | 0 | 65 | 65346 | 5466 | 17661 |
| DUP UK | RIGHT | anti_EU | 1971 | Minor Parl. | 5 | 1 | 0 | 0 | 381 | 51 | 153 |
| Plaid Cymru UK | Sing.Issue | pro_EU | 1936 | Minor Parl. | 72 | 17 | 0 | 53 | 4799 | 174 | 1612 |
| English Democrats <br> UK | LEFT | anti_EU | 2002 | Minor Frin. | 67 | 21 | 31 | 84 | 5728 | 818 | 1980 |
| Alliance Party of <br> Northern Ireland <br> UK | LEFT | pro_EU | 1970 | Minor Frin. | 36 | 1 | 2 |  | 6 | 1043 | 120 |

TableB2 . Information per country


| PL | 10 | 51 | 23.82 | no | yes | P | 24940902 | . 65 | 9863380 | 323368 | 381727 | 58359 | 792 | 162 | 307 | 276 | 47 | 245860 | 24457 | 45094 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PT | 10 | 21 | 33.67 | no | yes | CL | 6715390 | . 62 | 4663060 | 179990 | 182411 | 2421 | 983 | 110 | 343 | 482 | 48 | 45756 | 2014 | 13048 |
| RO | 6 | 32 | 32.44 | no | yes | CL | 10812784 | . 50 | 5374980 | 78047 | 115036 | 36989 | 738 | 71 | 440 | 220 | 7 | 180235 | 9380 | 30022 |
| SE | 9 | 20 | 51.07 | no | no | P | 9216226 | . 95 | 4950160 | 296083 | 325735 | 29652 | 495 | 53 | 254 | 174 | 14 | 271470 | 13716 | 23997 |
| SI | 8 | 8 | 24.55 | no | yes | P | 1445091 | . 73 | 730160 | 17642 | 24245 | 6603 | 560 | 58 | 302 | 179 | 21 | 29580 | 3321 | 2041 |
| SK | 10 | 13 | 13.05 | no | yes | P | 4337868 | . 79 | 2032200 | 83964 | 85273 | 1309 | 268 | 43 | 84 | 135 | 6 | 8884 | 1005 | 1767 |
| UK | 26 | 73 | 35.4 | no | yes | CL | 57266690 | . 90 | 32950400 | 784341 | 860723 | 76382 | 1627 | 119 | 649 | 645 | 214 | 661066 | 138755 | 245206 |

Table B3. Negative binomial regressions model with party fixed effects (full print)

|  | LIKES |  | SHARES |  | COMMENTS |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |
| Reciprocal communication | 0.379 | $* * *$ | 0.607 | $* * *$ | 1.048 |
|  | $* * *$ |  |  |  |  |
| PHOTO | $(0.056)$ |  | $(0.087)$ |  | $(0.078)$ |
|  | 0.767 | $* * *$ | 0.597 | $* *$ | 0.257 |
| STATUS | $(0.117)$ |  | $(0.253)$ |  | $(0.108)$ |
|  | -1.030 | $* * *$ | -3.000 | $* * *$ | -1.281 |


| h11 $12 \mathrm{a} . \mathrm{m}$. | 0.289 |  | 0.814 | ** | 0.748 | *** |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (0.176) |  | (0.331) |  | (0.276) |  |
| h12_1 p.m. | 0.278 | * | 0.786 | ** | 0.811 | *** |
|  | (0.162) |  | (0.316) |  | (0.270) |  |
| h1 2 p.m. | 0.290 | * | 0.709 | ** | 0.821 | *** |
|  | (0.173) |  | (0.310) |  | (0.267) |  |
| H 2_3 p.m. | 0.245 |  | 0.737 | ** | 0.703 | *** |
|  | (0.159) |  | (0.318) |  | (0.267) |  |
| H3 4 p.m. | 0.232 |  | 0.698 | ** | 0.888 | *** |
|  | (0.161) |  | (0.332) |  | (0.300) |  |
| H4 5 p.m. | 0.246 |  | 0.726 | ** | 0.829 | *** |
|  | (0.163) |  | (0.326) |  | (0.277) |  |
| H5 6 p.m. | 0.298 | * | 0.758 | ** | 0.728 | *** |
|  | (0.158) |  | (0.340) |  | (0.263) |  |
| H6 7 p.m. | 0.283 | * | 0.661 | ** | 0.780 | *** |
|  | (0.158) |  | (0.323) |  | (0.267) |  |
| H7 8 p.m. | 0.404 | ** | 0.715 | ** | 0.733 | *** |
|  | (0.171) |  | (0.330) |  | (0.272) |  |
| H8 9 p.m. | 0.360 | ** | 0.648 | * | 0.777 | *** |
|  | (0.160) |  | (0.331) |  | (0.274) |  |
| H9 10 p.m. | 0.400 | ** | 0.645 | ** | 0.886 | *** |
|  | (0.165) |  | (0.321) |  | (0.271) |  |
| H10 11 p.m. | 0.364 | ** | 0.676 | * | 0.651 | ** |
|  | (0.160) |  | (0.357) |  | (0.272) |  |
| H11 $12 \mathrm{p} . \mathrm{m}$. | 0.280 |  | 0.702 | ** | 0.437 | * |
|  | (0.171) |  | (0.354) |  | (0.249) |  |
| AU BZO | reference |  |  |  |  |  |
|  |  |  |  |  |  |  |
| AU_Grunen | 2.892 | *** | 1.406 | *** | 2.748 | *** |
|  | (0.075) |  | (0.078) |  | (0.084) |  |
| AU_NEOS | 2.205 | *** | 0.117 |  | 2.589 | *** |
|  | (0.074) |  | (0.094) |  | (0.085) |  |
| AU_OVP | 1.990 | *** | -0.827 | *** | 2.483 | *** |
|  | (0.082) |  | (0.097) |  | (0.091) |  |
| AU REKOS | 1.213 | *** | 0.870 | *** | 1.663 | *** |
|  | (0.050) |  | (0.074) |  | (0.059) |  |
| AU_SPO | 3.525 | *** | 1.905 | *** | 3.587 | *** |
|  | (0.088) |  | (0.101) |  | (0.109) |  |
| AU TStronach | 1.798 | ** | 0.374 | *** | 2.195 | *** |
|  | (0.061) |  | (0.074) |  | (0.088) |  |
| BE CD\&V | 2.082 | *** | 1.169 | *** | 1.069 | *** |
|  | (0.050) |  | (0.072) |  | (0.065) |  |
| BE_CDH | 1.795 | *** | 2.296 | *** | 0.893 | *** |
|  | (0.065) |  | (0.112) |  | (0.079) |  |
| BE Ecolo | 1.769 | *** | 2.095 | *** | 1.152 | *** |
|  | (0.039) |  | (0.049) |  | (0.051) |  |
| BE_Groen | 3.070 | *** | 1.456 | *** | 1.576 | *** |
|  | (0.164) |  | (0.062) |  | (0.079) |  |
| BE LCR SAP | -0.067 | * | 1.764 | *** | -0.241 | *** |
|  | (0.037) |  | (0.063) |  | (0.046) |  |
| BE_MR | 2.406 | *** | 2.176 | *** | 2.108 | *** |
|  | (0.071) |  | (0.074) |  | (0.071) |  |
| BE_N-VA | 3.926 | *** | 3.251 | *** | 3.832 | *** |
|  | (0.109) |  | (0.106) |  | (0.134) |  |
| BE_Open Vld | 3.146 | ** | 2.186 | *** | 2.229 | *** |
|  | (0.089) |  | (0.108) |  | (0.096) |  |
| BE_PPirate | 2.159 | *** | 2.015 | *** | 1.716 | *** |
|  | (0.086) |  | (0.111) |  | (0.087) |  |
| BE PS | 3.555 | *** | 4.010 | *** | 3.382 | *** |
|  | (0.127) |  | (0.172) |  | (0.125) |  |
| BE_PVDA | 2.142 | *** | 1.857 | *** | 1.234 | *** |
|  | (0.068) |  | (0.077) |  | (0.077) |  |
| BE Pro Brux | 0.423 | *** | 0.217 | *** | -0.294 | *** |
|  | (0.020) |  | (0.050) |  | (0.038) |  |
| BE_SPA | 3.342 | *** | 2.823 | *** | 2.466 | *** |
|  | (0.094) |  | (0.090) |  | (0.113) |  |
| BE_Socialisme | -0.235 | *** | -0.181 | *** | -1.576 | *** |
|  | (0.042) |  | (0.069) |  | (0.052) |  |
| BE Vlaams | 2.767 | *** | 1.097 | *** | 2.761 | *** |
|  | (0.077) |  | (0.093) |  | (0.079) |  |
| BG_ATAKA | 4.113 | *** | 2.786 | *** | 4.269 | *** |
|  | (0.105) |  | (0.167) |  | (0.131) |  |


| BG GERB | 1.402 | * | -0.098 |  | 0.240 | ** |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (0.090) |  | (0.128) |  | (0.079) |  |
| BG_NDSV | 1.095 | *** | -0.346 | *** | -0.071 |  |
|  | (0.046) |  | (0.055) |  | (0.046) |  |
| BG UoR | 0.978 | *** | -0.357 | *** | -0.613 | *** |
|  | (0.067) |  | (0.096) |  | (0.073) |  |
| CY_AKEL | 1.493 | *** | 0.153 | ** | -0.079 |  |
|  | (0.051) |  | (0.064) |  | (0.059) |  |
| CY_DISY | 0.429 | *** | -1.300 | *** | -0.618 | *** |
|  | (0.052) |  | (0.079) |  | (0.066) |  |
| CY EDEK | 1.613 | *** | -0.005 |  | 0.042 |  |
|  | (0.043) |  | (0.071) |  | (0.084) |  |
| CY ERASCY | 0.718 | *** | 0.425 | *** | -0.135 | ** |
|  | (0.055) |  | (0.095) |  | (0.065) |  |
| CY GREEN | -2.305 | *** | -15.111 | *** | -16.079 | *** |
|  | (0.141) |  | (1.025) |  | (1.011) |  |
| CY_MoH | 2.163 | *** | 1.562 | *** | 1.321 | *** |
|  | (0.079) |  | (0.132) |  | (0.113) |  |
| CY NEDACY | -3.670 | *** | -16.381 | *** | -25.302 | *** |
|  | (0.070) |  | (1.007) |  | (1.005) |  |
| CY PSM | 1.961 | *** | 1.412 | *** | 3.168 | *** |
|  | (0.054) |  | (0.095) |  | (0.086) |  |
| CZ_ANO | -23.583 | *** | -34.873 | *** | -43.398 | *** |
|  | (1.003) |  | (1.004) |  | (1.003) |  |
| CZ_CSSD | 2.697 | *** | 2.315 | *** | 3.468 | *** |
|  | (0.086) |  | (0.096) |  | (0.113) |  |
| CZ_Hnutu Usvit | 1.938 | *** | 0.533 | *** | 2.539 | *** |
|  | (0.045) |  | (0.075) |  | (0.078) |  |
| CZ_KDU | 2.047 | *** | 0.877 | *** | 2.568 | *** |
|  | (0.056) |  | (0.071) |  | (0.091) |  |
| CZ_KSCM | 1.623 | *** | 0.144 | ** | 1.871 | *** |
|  | (0.047) |  | (0.071) |  | (0.067) |  |
| CZ_ODS | 2.492 | *** | 1.229 | *** | 3.200 | *** |
|  | (0.075) |  | (0.086) |  | (0.112) |  |
| CZ PIRATI | -1.522 | *** | -1.612 | *** | -3.377 | *** |
|  | (0.059) |  | (0.101) |  | (0.053) |  |
| CZ_SNK | -0.259 | *** | -0.438 | ** | -1.053 | *** |
|  | (0.085) |  | (0.196) |  | (0.100) |  |
| CZ_SVOBODNI | 3.873 | *** | 3.215 | *** | 3.764 | *** |
|  | (0.108) |  | (0.112) |  | (0.127) |  |
| CZ_St._Zel. | -1.254 | ** | -1.964 | *** | -1.292 | *** |
|  | (0.086) |  | (0.130) |  | (0.082) |  |
| CZ_TOP 09 | 3.191 | *** | 1.430 | *** | 3.731 | *** |
|  | (0.097) |  | (0.133) |  | (0.110) |  |
| CZ_VECI | 0.572 | *** | -0.043 |  | 0.940 | *** |
|  | (0.051) |  | (0.072) |  | (0.061) |  |
| DE_AfD | 4.948 | *** | 3.388 | *** | 4.487 | *** |
|  | (0.134) |  | (0.147) |  | (0.185) |  |
| DE BUNDNIS | 3.935 | *** | 3.751 | ** | 4.091 | *** |
|  | (0.105) |  | (0.119) |  | (0.152) |  |
| DE Bayernpartei | 2.224 | *** | 1.418 | *** | 1.529 | *** |
|  | (0.107) |  | (0.151) |  | (0.123) |  |
| DE_BuSo | 0.445 | *** | 0.251 | *** | -0.502 | ** |
|  | (0.036) |  | (0.049) |  | (0.054) |  |
| DE_CDU | 3.559 | *** | 2.497 | *** | 4.411 | *** |
|  | (0.102) |  | (0.107) |  | (0.123) |  |
| DE_CSU | 3.218 | *** | 1.783 | *** | 3.189 | *** |
|  | (0.087) |  | (0.105) |  | (0.100) |  |
| DE_Die_Linke | 4.457 | *** | 3.204 | *** | 3.909 | *** |
|  | (0.089) |  | (0.113) |  | (0.111) |  |
| DE_Die_PARTEI | 4.912 | *** | 3.528 | ** | 3.945 | ** |
|  | (0.105) |  | (0.119) |  | (0.131) |  |
| DE_FDP | 2.715 | *** | 1.296 | *** | 2.666 | *** |
|  | (0.084) |  | (0.096) |  | (0.079) |  |
| DE_Familien_Par | 1.274 | *** | 0.452 | *** | 2.283 | ** |
|  | (0.126) |  | (0.102) |  | (0.143) |  |
| DE_NPD | 4.335 | *** | 3.885 | *** | 4.792 | *** |
|  | (0.102) |  | (0.142) |  | (0.117) |  |
| DE_ODP | 1.226 | ** | 0.740 | ** | 0.719 | *** |
|  | (0.047) |  | (0.073) |  | (0.063) |  |
| DE_PBC | -1.628 | *** | -16.012 | *** | -46.587 | *** |
|  | (0.088) |  | (1.013) |  | (1.006) |  |


| DE PSG | 0.381 | *** | -0.350 | *** | -0.105 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (0.051) |  | (0.080) |  | (0.065) |  |
| DE_Piraten | 2.505 | *** | 2.187 | *** | 2.308 | *** |
|  | (0.059) |  | (0.061) |  | (0.078) |  |
| DE_REPUBLIKANER | 3.135 | *** | 2.102 | *** | 3.501 | *** |
|  | (0.094) |  | (0.101) |  | (0.109) |  |
| DE_Rentner_Par | -1.214 | *** | -3.115 | *** | -29.654 | *** |
|  | (0.094) |  | (0.148) |  | (1.006) |  |
| DE_SPD | 3.541 | *** | 2.913 | *** | 4.225 | *** |
|  | (0.088) |  | (0.130) |  | (0.105) |  |
| DE_Tierschutz | 2.586 | *** | 2.387 | *** | 2.246 | * |
|  | (0.066) |  | (0.077) |  | (0.100) |  |
| DK_Enhedslisten | 3.369 | *** | 2.200 | *** | 2.417 | *** |
|  | (0.066) |  | (0.093) |  | (0.086) |  |
| DK_Folkeparti | 3.221 | *** | 2.562 | *** | 3.108 | * |
|  | (0.075) |  | (0.122) |  | (0.097) |  |
| DK_LA | 3.541 | *** | 1.437 | *** | 2.921 | *** |
|  | (0.099) |  | (0.132) |  | (0.144) |  |
| DK Radikale | 2.379 | *** | 0.464 | *** | 2.223 | *** |
|  | (0.071) |  | (0.079) |  | (0.086) |  |
| DK SF | 2.683 | *** | 0.947 | *** | 2.486 | *** |
|  | (0.067) |  | (0.084) |  | (0.088) |  |
| DK_Socialdemo | 3.087 | *** | 2.316 | *** | 3.287 | * |
|  | (0.093) |  | (0.136) |  | (0.112) |  |
| DK Venstre | 3.144 | *** | 1.326 | *** | 3.854 | *** |
|  | (0.104) |  | (0.115) |  | (0.116) |  |
| EE Erakond | -0.167 | ** | -0.927 | *** | 0.033 |  |
|  | (0.065) |  | (0.094) |  | (0.087) |  |
| EE IRL | 0.917 | *** | -0.800 | *** | 1.032 | *** |
|  | (0.046) |  | (0.065) |  | (0.051) |  |
| EE_Keskerakond | 0.982 | ** | -0.409 | *** | 0.852 | *** |
|  | (0.044) |  | (0.088) |  | (0.074) |  |
| EE_Reform | 1.820 | *** | -0.100 |  | 0.868 | *** |
|  | (0.052) |  | (0.091) |  | (0.066) |  |
| EE_SOTSDEM | 1.290 | *** | -0.601 | *** | 0.292 | *** |
|  | (0.053) |  | (0.080) |  | (0.067) |  |
| ES_AMAIUR | 1.928 | *** | 2.357 | *** | 0.687 | *** |
|  | (0.049) |  | (0.111) |  | (0.067) |  |
| ES CCanaria | 0.334 | *** | -0.143 | * | -0.984 | *** |
|  | (0.027) |  | (0.045) |  | (0.035) |  |
| ES CCompromÃ-s | 3.664 | *** | 3.267 | *** | 2.768 | *** |
|  | (0.084) |  | (0.091) |  | (0.114) |  |
| ES_CIU | 3.820 | *** | 3.709 | *** | 3.662 | *** |
|  | (0.092) |  | (0.115) |  | (0.123) |  |
| ES EAJPNV | 1.216 | *** | -0.387 | *** | -0.246 | *** |
|  | (0.083) |  | (0.098) |  | (0.061) |  |
| ES_Esquerra | 3.109 | *** | 2.545 | *** | 2.054 | *** |
|  | (0.080) |  | (0.089) |  | (0.097) |  |
| ES ForoAsturias | 1.178 | *** | 0.309 | *** | 0.199 | *** |
|  | (0.051) |  | (0.067) |  | (0.058) |  |
| ES_ICV_EUiA | 1.159 | *** | 1.292 | * | -0.372 | * |
|  | (0.035) |  | (0.056) |  | (0.058) |  |
| ES_Izquierda_U | -0.545 | *** | 0.368 | *** | -17.773 | *** |
|  | (0.112) |  | (0.123) |  | (1.004) |  |
| ES_PP | 4.239 | *** | 3.455 | *** | 4.406 | *** |
|  | (0.104) |  | (0.130) |  | (0.122) |  |
| ES_PSOE | 4.184 | *** | 3.838 | *** | 4.385 | *** |
|  | (0.107) |  | (0.114) |  | (0.125) |  |
| ES Podemos | 5.069 | *** | 5.137 | *** | 4.180 | *** |
|  | (0.115) |  | (0.136) |  | (0.142) |  |
| ES_UPN | 0.184 |  | -1.891 | *** | 0.047 |  |
|  | (0.145) |  | (0.182) |  | (0.135) |  |
| ES_UPyD | 3.311 | *** | 2.395 | *** | 2.432 | *** |
|  | (0.082) |  | (0.096) |  | (0.114) |  |
| ES_Vox_Espana | 2.988 | *** | 2.425 | *** | 2.173 | *** |
|  | (0.067) |  | (0.097) |  | (0.093) |  |
| FI Itsenaisyy | 1.343 | *** | -0.844 | *** | 0.873 | *** |
|  | (0.068) |  | (0.107) |  | (0.088) |  |
| FI_KD | 1.477 | *** | -0.110 |  | 0.839 | *** |
|  | (0.061) |  | (0.098) |  | (0.070) |  |
| FI_Keskusta | 2.102 | *** | 0.503 | *** | 1.390 | *** |
|  | (0.067) |  | (0.067) |  | (0.075) |  |


| FI Kokoomus | 1.904 | *** | -0.258 | *** | 1.863 | *** |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (0.050) |  | (0.087) |  | (0.065) |  |
| FI_Muutos2011 | -0.051 |  | -0.610 | *** | 0.322 | *** |
|  | (0.050) |  | (0.083) |  | (0.064) |  |
| FI Piraatti | 1.226 | *** | 0.055 |  | 0.316 | *** |
|  | (0.066) |  | (0.102) |  | (0.071) |  |
| FI_SDP | 2.238 | *** | 0.196 | *** | 1.882 | *** |
|  | (0.057) |  | (0.073) |  | (0.074) |  |
| FI_SFP | 2.039 | *** | 1.091 | *** | 1.278 | *** |
|  | (0.063) |  | (0.103) |  | (0.066) |  |
| FI SKP | 0.602 | *** | -0.296 | *** | 0.344 | *** |
|  | (0.043) |  | (0.056) |  | (0.059) |  |
| FI_Vasemmisto | 2.060 | *** | 0.776 | *** | 0.816 | *** |
|  | (0.065) |  | (0.081) |  | (0.073) |  |
| FI Vihreat | 2.050 | *** | 0.588 | *** | 1.223 | *** |
|  | (0.044) |  | (0.067) |  | (0.064) |  |
| FR_EE | 1.822 | *** | 2.287 | *** | 2.646 | *** |
|  | (0.141) |  | (0.175) |  | (0.150) |  |
| FR_FN | 4.789 | *** | 3.239 | *** | 4.341 | *** |
|  | (0.111) |  | (0.158) |  | (0.132) |  |
| FR_MPF | 0.236 | *** | -1.350 | *** | -1.180 | *** |
|  | (0.069) |  | (0.093) |  | (0.094) |  |
| FR_MRC | 1.012 | *** | 2.077 | *** | 0.684 | * |
|  | (0.059) |  | (0.084) |  | (0.073) |  |
| FR_MoDem | 1.774 | *** | 0.981 | *** | 0.398 | *** |
|  | (0.068) |  | (0.094) |  | (0.089) |  |
| FR NC | -0.505 | *** | 0.015 |  | -32.429 | *** |
|  | (0.076) |  | (0.101) |  | (1.005) |  |
| FR_NPA | 0.353 | *** | -0.610 | *** | 0.287 | *** |
|  | (0.035) |  | (0.069) |  | (0.044) |  |
| FR_PCF | 2.380 | *** | 2.884 | *** | 1.612 | *** |
|  | (0.087) |  | (0.100) |  | (0.098) |  |
| FR_PRdG | -0.111 | * | -0.691 | *** | -1.924 | *** |
|  | (0.061) |  | (0.099) |  | (0.084) |  |
| FR_PS | 2.799 | *** | 2.243 | *** | 2.535 | *** |
|  | (0.062) |  | (0.084) |  | (0.084) |  |
| FR_PdG | 2.063 | *** | 1.464 | *** | 1.693 | *** |
|  | (0.074) |  | (0.107) |  | (0.075) |  |
| FR UDI | 2.101 | *** | 1.504 | *** | 1.380 | *** |
|  | (0.065) |  | (0.082) |  | (0.074) |  |
| FR_UMP | 3.642 | *** | 2.578 | *** | 3.647 | *** |
|  | (0.097) |  | (0.100) |  | (0.124) |  |
| GR_Anexartitoi | 1.596 | *** | 0.420 | *** | -0.059 |  |
|  | (0.083) |  | (0.115) |  | (0.089) |  |
| GR_DIMAR | -0.345 | *** | -0.806 | *** | -2.026 | *** |
|  | (0.065) |  | (0.098) |  | (0.070) |  |
| GR_ECOGREENS | 0.679 | *** | 0.666 | *** | -0.585 | *** |
|  | (0.081) |  | (0.107) |  | (0.132) |  |
| GR_ND | 3.678 | *** | 1.926 | *** | 3.739 | *** |
|  | (0.092) |  | (0.110) |  | (0.131) |  |
| GR_PASOK | 1.714 | *** | 0.190 | ** | 0.800 | *** |
|  | (0.054) |  | (0.070) |  | (0.062) |  |
| GR_SYRIZA | 3.886 | *** | 2.518 | *** | 2.745 | *** |
|  | (0.102) |  | (0.104) |  | (0.116) |  |
| GR_To Potami | 2.734 | *** | 1.481 | *** | 2.087 | *** |
|  | (0.073) |  | (0.077) |  | (0.090) |  |
| HR_DC | -13.131 | *** | -15.530 | *** | -14.571 | *** |
|  | (1.025) |  | (1.022) |  | (1.017) |  |
| HR _ HDSSB | 1.917 | *** | 1.152 | *** | 0.897 | *** |
|  | (0.049) |  | (0.087) |  | (0.073) |  |
| HR_HDZ | 3.164 | *** | 2.157 | *** | 1.944 | *** |
|  | (0.100) |  | (0.162) |  | (0.099) |  |
| HR_HL | 2.027 | *** | 0.768 | *** | 1.819 | *** |
|  | (0.070) |  | (0.086) |  | (0.073) |  |
| HR_HMDK | 0.410 | ** | -1.141 | *** | -15.670 | *** |
|  | (0.162) |  | (0.255) |  | (1.013) |  |
| HR_HNS | 1.042 | *** | -0.269 | *** | 0.050 |  |
|  | (0.040) |  | (0.045) |  | (0.045) |  |
| HR_HSU | -0.095 |  | -0.880 | *** | 0.211 | *** |
|  | (0.082) |  | (0.106) |  | (0.070) |  |
| HR_IDS | 1.999 | *** | -0.224 | *** | 0.907 | *** |
|  | (0.055) |  | (0.067) |  | (0.072) |  |


| HR ORaH | 2.190 | *** | 0.835 | *** | 1.706 | *** |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (0.074) |  | (0.092) |  | (0.080) |  |
| HR_SDP | 2.408 | *** | 0.032 |  | 1.540 | *** |
|  | (0.085) |  | (0.128) |  | (0.109) |  |
| HR SDSS | 0.233 | ** | -0.857 | *** | -0.958 | *** |
|  | (0.109) |  | (0.145) |  | (0.145) |  |
| HU_DKP | 3.517 | *** | 2.977 | *** | 3.142 | *** |
|  | (0.093) |  | (0.106) |  | (0.100) |  |
| HU_Fidesz | 5.238 | *** | 3.942 | *** | 4.843 | *** |
|  | (0.141) |  | (0.137) |  | (0.152) |  |
| HU JOBBIK | 5.096 | *** | 4.620 | *** | 4.719 | ** |
|  | (0.115) |  | (0.126) |  | (0.159) |  |
| HU KDNP | 2.285 | *** | 0.927 | *** | 0.975 | *** |
|  | (0.081) |  | (0.086) |  | (0.081) |  |
| HU_LMP | 2.365 | *** | 1.550 | *** | 1.851 | *** |
|  | (0.061) |  | (0.066) |  | (0.073) |  |
| HU MSZP | 4.029 | *** | 3.605 | *** | 3.926 | *** |
|  | (0.107) |  | (0.102) |  | (0.122) |  |
| HU Parbeszed | 3.355 | *** | 2.576 | *** | 2.922 | *** |
|  | (0.076) |  | (0.090) |  | (0.120) |  |
| IE EIRIGI | 1.673 | *** | 0.590 | *** | 0.499 | *** |
|  | (0.042) |  | (0.071) |  | (0.083) |  |
| IE_FF | 2.239 | *** | 1.696 | *** | 2.264 | *** |
|  | (0.137) |  | (0.159) |  | (0.150) |  |
| IE GP | 1.400 | *** | 0.575 | *** | 0.850 | *** |
|  | (0.050) |  | (0.089) |  | (0.070) |  |
| IE LP | 0.912 | *** | -0.461 | *** | 1.911 | *** |
|  | (0.069) |  | (0.082) |  | (0.063) |  |
| IE PBP | 1.164 | *** | 0.905 | *** | 1.052 | *** |
|  | (0.084) |  | (0.101) |  | (0.095) |  |
| IE_RSF | 1.487 | *** | 0.184 | *** | -0.341 | *** |
|  | (0.048) |  | (0.071) |  | (0.061) |  |
| IE SF | 4.217 | *** | 3.291 | *** | 3.400 | *** |
|  | (0.107) |  | (0.116) |  | (0.137) |  |
| IE SP | -0.951 | *** | -1.747 | * | -0.498 | *** |
|  | (0.067) |  | (0.106) |  | (0.092) |  |
| IE UL | -0.762 | *** | -16.589 | *** | -1.863 | *** |
|  | (0.060) |  | (1.007) |  | (0.082) |  |
| IT FI | 4.801 | *** | 3.856 | *** | 4.599 | *** |
|  | (0.133) |  | (0.150) |  | (0.155) |  |
| IT FdI | 3.590 | *** | 3.697 | *** | 3.009 | *** |
|  | (0.107) |  | (0.158) |  | (0.127) |  |
| IT MCS | 3.696 | *** | 3.018 | *** | 3.857 | *** |
|  | (0.109) |  | (0.112) |  | (0.106) |  |
| IT NC | 2.227 | *** | 2.193 | *** | 1.382 | *** |
|  | (0.077) |  | (0.102) |  | (0.085) |  |
| IT_PD | 4.063 | *** | 3.748 | *** | 4.903 | *** |
|  | (0.115) |  | (0.160) |  | (0.120) |  |
| IT PPI | -0.361 | *** | 0.490 | *** | -2.216 | *** |
|  | (0.056) |  | (0.084) |  | (0.063) |  |
| IT_SC | 1.800 | *** | 1.050 | *** | 3.045 | *** |
|  | (0.038) |  | (0.048) |  | (0.041) |  |
| IT SEL | 3.942 | *** | 4.090 | *** | 3.388 | *** |
|  | (0.089) |  | (0.099) |  | (0.130) |  |
| IT Salvini | 5.796 | * | 4.943 | ** | 6.094 | ** |
|  | (0.167) |  | (0.202) |  | (0.225) |  |
| LT AWPL | 1.168 | *** | 0.296 | *** | -0.383 | *** |
|  | (0.073) |  | (0.100) |  | (0.082) |  |
| LT DP | 1.833 | *** | 0.451 | *** | 0.999 | *** |
|  | (0.057) |  | (0.082) |  | (0.075) |  |
| LT_LSDP | 1.645 | *** | 0.473 | *** | 1.054 | *** |
|  | (0.067) |  | (0.111) |  | (0.083) |  |
| LT LVLS | 1.089 | *** | 0.812 | *** | -0.119 |  |
|  | (0.058) |  | (0.085) |  | (0.087) |  |
| LT LZP | 0.382 | *** | -0.926 | *** | -1.592 | *** |
|  | (0.037) |  | (0.059) |  | (0.041) |  |
| LT Liberalai | 2.939 | *** | 0.869 | *** | 2.512 | *** |
|  | (0.080) |  | (0.081) |  | (0.097) |  |
| LT TS LKD | 1.298 | *** | -0.781 | *** | 0.172 | ** |
|  | (0.049) |  | (0.063) |  | (0.073) |  |
| LT Tvarka | -15.116 | *** | -17.079 | *** | -15.185 | *** |
|  | (1.008) |  | (1.020) |  | (1.009) |  |


| LU ADR | 0.109 | * | -1.466 | *** | 0.029 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (0.060) |  | (0.082) |  | (0.073) |  |
| LU_CSV | 1.766 | *** | 0.042 |  | 1.013 | ** |
|  | (0.041) |  | (0.062) |  | (0.079) |  |
| LU_DP | 1.354 | *** | -0.006 |  | 0.004 |  |
|  | (0.065) |  | (0.113) |  | (0.076) |  |
| LU_Dei_Lenk | 1.554 | *** | 1.281 | *** | 0.223 | *** |
|  | (0.050) |  | (0.076) |  | (0.083) |  |
| LU_LSAP | 1.251 | *** | -0.511 | *** | 1.167 | *** |
|  | (0.045) |  | (0.080) |  | (0.061) |  |
| LU_PL | 1.035 | * | -0.600 | *** | 0.642 | *** |
|  | (0.050) |  | (0.103) |  | (0.111) |  |
| LU_dei_greng | 2.838 | *** | 1.660 | *** | 2.523 | *** |
|  | (0.065) |  | (0.078) |  | (0.088) |  |
| LV PCTVL | -0.611 | *** | -2.020 | *** | -0.686 | *** |
|  | (0.078) |  | (0.130) |  | (0.083) |  |
| LV_SC | 0.839 | *** | 0.683 | *** | -16.580 | *** |
|  | (0.113) |  | (0.149) |  | (1.008) |  |
| LV VIENOTIBA | 0.597 | *** | -0.186 | *** | 0.668 | *** |
|  | (0.087) |  | (0.066) |  | (0.073) |  |
| MT AD | -0.001 |  | -1.566 | *** | -0.863 | *** |
|  | (0.041) |  | (0.063) |  | (0.060) |  |
| MT MPL | 2.724 | *** | 2.015 | *** | 2.838 | *** |
|  | (0.144) |  | (0.196) |  | (0.139) |  |
| MT PN | 1.603 | *** | 0.672 | *** | 3.054 | *** |
|  | (0.057) |  | (0.067) |  | (0.060) |  |
| NL_CDA | 2.233 | *** | 1.860 | *** | 2.152 | *** |
|  | (0.083) |  | (0.103) |  | (0.097) |  |
| NL_CU | 2.214 | *** | 0.147 |  | 0.703 | *** |
|  | (0.069) |  | (0.114) |  | (0.115) |  |
| NL D66 | 4.039 | *** | 2.986 | ** | 3.751 | *** |
|  | (0.086) |  | (0.097) |  | (0.117) |  |
| NL_GL | 3.029 | *** | 2.551 | *** | 2.758 | *** |
|  | (0.072) |  | (0.090) |  | (0.091) |  |
| NL PDieren | 3.430 | ** | 2.804 | * | 3.014 | *** |
|  | (0.092) |  | (0.098) |  | (0.106) |  |
| NL_PVV | 2.573 | *** | 1.812 | *** | 2.905 | *** |
|  | (0.082) |  | (0.119) |  | (0.096) |  |
| NL_PvDa | 3.604 | ** | 2.295 | * | 3.845 | *** |
|  | (0.125) |  | (0.132) |  | (0.143) |  |
| NL_SP | 3.866 | *** | 3.923 | *** | 4.445 | *** |
|  | (0.145) |  | (0.165) |  | (0.129) |  |
| NL VVD | 3.604 | *** | 2.472 | *** | 4.639 | *** |
|  | (0.122) |  | (0.136) |  | (0.151) |  |
| PL_KNP | 4.858 | *** | 3.852 | *** | 4.346 | *** |
|  | (0.119) |  | (0.123) |  | (0.141) |  |
| PL_PO | 3.727 | *** | 2.518 | *** | 3.973 | *** |
|  | (0.114) |  | (0.114) |  | (0.143) |  |
| PL_PR | 1.639 | *** | 1.713 | *** | 1.456 | *** |
|  | (0.050) |  | (0.062) |  | (0.065) |  |
| PL_PSL | 0.469 | ** | 0.230 |  | 1.950 | *** |
|  | (0.124) |  | (0.179) |  | (0.128) |  |
| PL_PiS | 3.678 | *** | 1.267 | *** | 4.430 | *** |
|  | (0.112) |  | (0.152) |  | (0.120) |  |
| PL_Polska Razem | 2.195 | *** | 1.463 | *** | 2.930 | *** |
|  | (0.077) |  | (0.071) |  | (0.093) |  |
| PL_SLD | 2.086 | *** | 0.844 | *** | 1.802 | *** |
|  | (0.060) |  | (0.079) |  | (0.079) |  |
| PL_SP | 1.792 | *** | 1.305 | *** | 2.418 | *** |
|  | (0.059) |  | (0.062) |  | (0.061) |  |
| PL_Tw ${ }^{3} \mathrm{j}$ _Ruch | 2.937 | *** | 1.815 | *** | 3.704 | *** |
|  | (0.086) |  | (0.114) |  | (0.091) |  |
| PL_UPR | -0.141 | *** | 0.252 | * | 0.479 | ** |
|  | (0.040) |  | (0.139) |  | (0.057) |  |
| PT_CDU | 1.821 | *** | 1.676 | *** | -0.289 | *** |
|  | (0.051) |  | (0.072) |  | (0.073) |  |
| PT Esquerda | 1.801 | *** | 2.849 | *** | 0.802 | *** |
|  | (0.085) |  | (0.176) |  | (0.084) |  |
| PT MAS | 1.537 | *** | 1.620 | *** | -0.117 |  |
|  | (0.065) |  | (0.107) |  | (0.097) |  |
| PT Nossa Europa | 0.199 | *** | -0.797 | *** | -1.049 | *** |
|  | (0.031) |  | (0.051) |  | (0.052) |  |


| PT Os Verdes | 0.782 | *** | 0.342 | ** | -0.596 | *** |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (0.094) |  | (0.136) |  | (0.099) |  |
| PT_PCTP/MRPP | 0.206 | *** | -1.306 | *** | -1.310 | *** |
|  | (0.046) |  | (0.062) |  | (0.053) |  |
| PT PSD | 2.682 | *** | 1.505 | *** | 1.692 | *** |
|  | (0.073) |  | (0.116) |  | (0.136) |  |
| RO_Forta_Civica | 2.214 | *** | 1.655 | *** | 1.863 | *** |
|  | (0.088) |  | (0.116) |  | (0.098) |  |
| RO_PDL | 3.436 | *** | 2.843 | *** | 2.445 | *** |
|  | (0.091) |  | (0.118) |  | (0.101) |  |
| RO_PMP | 3.701 | *** | 2.086 | *** | 3.304 | * |
|  | (0.027) |  | (0.046) |  | (0.033) |  |
| RO_PNL | 3.548 | *** | 2.062 | *** | 2.778 | *** |
|  | (0.084) |  | (0.100) |  | (0.112) |  |
| RO_PSD | 3.295 | *** | 1.137 | *** | 2.470 | *** |
|  | (0.138) |  | (0.182) |  | (0.158) |  |
| RO_RMDSZ | 2.765 | *** | 2.367 | *** | 1.526 | *** |
|  | (0.064) |  | (0.067) |  | (0.077) |  |
| SE CenterP | 3.234 | *** | 1.699 | *** | 2.332 | *** |
|  | (0.087) |  | (0.087) |  | (0.106) |  |
| SE FemIni | 4.635 | *** | 2.659 | *** | 3.072 | *** |
|  | (0.089) |  | (0.090) |  | (0.117) |  |
| SE Folkpartiet | 2.107 | *** | 0.372 | *** | 1.105 | * |
|  | (0.045) |  | (0.057) |  | (0.063) |  |
| SE_Kristdemo | 2.443 | *** | 1.065 | *** | 1.359 | *** |
|  | (0.067) |  | (0.075) |  | (0.102) |  |
| SE MP | 4.252 | *** | 2.471 | *** | 2.825 | *** |
|  | (0.103) |  | (0.116) |  | (0.150) |  |
| SE_NM | 4.101 | *** | 2.770 | *** | 3.702 | *** |
|  | (0.101) |  | (0.106) |  | (0.128) |  |
| SE_Pirat | 3.703 | *** | 2.689 | *** | 3.099 | *** |
|  | (0.096) |  | (0.099) |  | (0.104) |  |
| SE_SD | 4.808 | *** | 3.038 | *** | 3.354 | *** |
|  | (0.125) |  | (0.133) |  | (0.153) |  |
| SE VansterP | 4.470 | *** | 3.019 | *** | 3.538 | *** |
|  | (0.109) |  | (0.127) |  | (0.133) |  |
| SI_Igor_Soltes | 2.408 | *** | -0.131 |  | 2.333 | *** |
|  | (0.065) |  | (0.083) |  | (0.076) |  |
| SI_Pozitivna | 0.916 | *** | -1.040 | *** | 1.344 | *** |
|  | (0.037) |  | (0.038) |  | (0.040) |  |
| SI SD | 2.010 | *** | 0.277 | *** | 1.898 | *** |
|  | (0.061) |  | (0.107) |  | (0.080) |  |
| SI_SDS | 2.071 | *** | -0.197 | *** | 1.657 | *** |
|  | (0.061) |  | (0.071) |  | (0.076) |  |
| SI_SLS | -0.045 |  | -2.176 | *** | -0.732 | *** |
|  | (0.041) |  | (0.067) |  | (0.043) |  |
| SI_Solidarnost | 1.382 | *** | 0.113 | * | 1.236 | *** |
|  | (0.030) |  | (0.061) |  | (0.044) |  |
| SI ZL | 1.418 | *** | 0.890 | *** | 0.792 | *** |
|  | (0.028) |  | (0.045) |  | (0.048) |  |
| SK_KDH | 0.952 | *** | -0.500 | *** | 0.347 | *** |
|  | (0.090) |  | (0.071) |  | (0.103) |  |
| SK_MOST | 1.843 | *** | 0.960 | *** | 1.595 | *** |
|  | (0.091) |  | (0.133) |  | (0.111) |  |
| SK Most-HÃ-d | -0.956 | *** | -1.636 | *** | -1.893 | *** |
|  | (0.050) |  | (0.081) |  | (0.058) |  |
| SK_NOVA | 1.937 | *** | 1.241 | *** | 2.326 | *** |
|  | (0.065) |  | (0.082) |  | (0.087) |  |
| SK_OL | 0.982 | *** | -0.272 | ** | 0.822 | *** |
|  | (0.063) |  | (0.115) |  | (0.079) |  |
| SK_SDKU-DS | 1.992 | *** | 0.167 |  | 2.338 | *** |
|  | (0.082) |  | (0.108) |  | (0.102) |  |
| SK_SNS | 1.970 | *** | 1.446 | *** | 1.661 | *** |
|  | (0.078) |  | (0.099) |  | (0.071) |  |
| SK_Strana_TIP | 1.383 | *** | 0.643 | *** | 1.151 | *** |
|  | (0.046) |  | (0.063) |  | (0.062) |  |
| T PS | 2.962 | *** | 2.261 | *** | 2.340 | *** |
|  | (0.067) |  | (0.100) |  | (0.102) |  |
| UK_ALLIANCE | 1.166 | *** | 0.173 | *** | 1.081 | *** |
|  | (0.047) |  | (0.064) |  | (0.075) |  |
| UK BNP | 4.517 | *** | 4.672 | *** | 4.877 | *** |
|  | (0.093) |  | (0.112) |  | (0.111) |  |


| UK CPOB | 0.791 | *** | -0.049 |  | 0.142 | ** |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (0.053) |  | (0.100) |  | (0.067) |  |
| UK_ChPA | -0.067 |  | -1.741 | *** | 1.707 | *** |
|  | (0.099) |  | (0.154) |  | (0.121) |  |
| UK_Con | 3.911 | * | 3.121 | *** | 5.124 | *** |
|  | (0.123) |  | (0.124) |  | (0.157) |  |
| UK_DUP | 2.080 | *** | 1.178 | *** | 1.664 | *** |
|  | (0.110) |  | (0.153) |  | (0.144) |  |
| UK_ED | 1.380 | *** | 0.962 | *** | 1.535 | *** |
|  | (0.049) |  | (0.067) |  | (0.064) |  |
| UK_GPiNI | 0.879 | *** | 0.124 | ** | 0.160 | *** |
|  | (0.041) |  | (0.055) |  | (0.055) |  |
| UK_Green_Party | 4.268 | *** | 4.094 | *** | 4.254 | *** |
|  | (0.106) |  | (0.115) |  | (0.120) |  |
| UK_LP | -0.129 |  | -0.392 | * | -14.977 | *** |
|  | (0.151) |  | (0.222) |  | (1.014) |  |
| UK_Labour | 4.163 | *** | 4.240 | *** | 5.710 | *** |
|  | (0.127) |  | (0.148) |  | (0.157) |  |
| UK LibDem | 3.073 | *** | 2.973 | *** | 4.637 | *** |
|  | (0.092) |  | (0.083) |  | (0.110) |  |
| UK Mebyon | 0.270 | ** | -0.204 | ** | -0.387 | *** |
|  | (0.065) |  | (0.077) |  | (0.061) |  |
| UK NF | 1.033 | *** | 1.923 | *** | 1.524 | *** |
|  | (0.081) |  | (0.163) |  | (0.154) |  |
| UK Pirate | 0.545 | *** | 0.160 | ** | 0.067 |  |
|  | (0.054) |  | (0.065) |  | (0.087) |  |
| UK Plaid_Cymru | 1.569 | *** | 1.077 | *** | 0.615 | *** |
|  | (0.039) |  | (0.052) |  | (0.055) |  |
| UK_RP | 0.579 | *** | -0.327 | *** | 0.085 |  |
|  | (0.044) |  | (0.080) |  | (0.060) |  |
| UK_SGP | 2.028 | *** | 1.667 | *** | 0.877 | *** |
|  | (0.059) |  | (0.057) |  | (0.079) |  |
| UK_SNP | 4.036 | *** | 3.384 | *** | 4.264 | *** |
|  | (0.102) |  | (0.108) |  | (0.118) |  |
| UK_SSP | 1.226 | *** | 1.188 | *** | 0.640 | *** |
|  | (0.054) |  | (0.088) |  | (0.073) |  |
| UK_UKIP | 6.031 | *** | 5.379 | *** | 6.656 | *** |
|  | (0.171) |  | (0.190) |  | (0.198) |  |
| CONSTANT | -1.041 | ** | -2.983 | *** | -3.454 | *** |
|  | (0.438) |  | (0.546) |  | (0.476) |  |
|  |  |  |  |  |  |  |
| N | 16218 |  | 16218 |  | 16218 |  |
| Dispersion - Pearson | 1.8945 |  | 1.9220 |  | 1.7351 |  |
|  |  |  |  |  |  |  |
| * $\mathrm{p}<0.10, ~ * * \mathrm{p}<0.05, ~ * * * \mathrm{p}<0.01$ |  |  |  |  |  |  |

Table B4. Effects of main independent variables on Dependent variables

| LIKES | Predicted count | Std. Err | z-statistic |  |
| :---: | :---: | :---: | :---: | :---: |
| At means of all variables | 262.0 | 2.9 | 89.0 |  |
| Continuous variables | Predicted count | Std. Err | z-statistic | \% difference wrt predicted count at means of all variables |
| Min of Photo*Length of thread (In) | 310.5 | 22.1 | 14.0 | 19\% |
| (Mean + Sd) of Photo*Length of thread (In) | 239.6 | 7.9 | 30.4 | -9\% |
| Min of Status*Length of thread (In) | 251.3 | 3.3 | 76.1 | -4\% |
| (Mean + Sd) of Status*Length of thread (In) | 318.8 | 28.5 | 11.2 | 22\% |
| Min of Video*Length of thread (In) | 261.1 | 4.9 | 53.3 | 0\% |
| (Mean + Sd) of Video*Length of thread (In) | 264.8 | 12.9 | 20.5 | 1\% |
| Min of Day of campaign | 218.3 | 6.5 | 33.7 | -17\% |
| (Mean + Sd) of Day of campaign | 287.0 | 5.5 | 52.5 | 10\% |
| Min of Number of posts within a 1 hour window | 261.1 | 5.2 | 49.8 | 0\% |
| (Mean + Sd) of Number of posts within a 1 hour window | 266.5 | 19.0 | 14.0 | 2\% |
| Min of Sq Number of posts within a 1 hour window | 268.9 | 3.1 | 87.4 | 3\% |
| (Mean + Sd) of Sq Number of posts within a 1 hour window | 184.5 | 8.4 | 22.0 | -30\% |
| Dichotomous variables | Predicted count | Std. Err | z-statistic |  |
| Response owner = 0 | 251.1 | 2.8 | 88.7 |  |
| Response owner = 1 | 366.9 | 19.5 | 18.8 |  |
| Predicted percentage increase with the response of owner | 46\% |  |  |  |


| SHARES | Predicted count | Std. Err | z-statistic |  |
| :---: | :---: | :---: | :---: | :---: |
| At means of all variables | 61.0 | 1.3 | 46.1 |  |
| Continuous variables | Predicted count | Std. Err | z-statistic | \% difference wrt predicted count at means of all variables |
| Min of Photo*Length of thread (In) | 60.7 | 8.2 | 7.4 | -1\% |
| (Mean + Sd) of Photo*Length of thread (In) | 61.2 | 3.9 | 15.5 | 0\% |
| Min of Status*Length of thread (In) | 59.0 | 1.4 | 42.6 | -3\% |
| (Mean + Sd) of Status*Length of thread (In) | 114.5 | 21.3 | 5.4 | 88\% |
| Min of Video*Length of thread (In) | 61.6 | 2.7 | 22.9 | 1\% |
| (Mean + Sd) of Video*Length of thread (In) | 60.3 | 3.6 | 16.7 | -1\% |
| Min of Day of campaign | 50.0 | 2.6 | 19.3 | -18\% |
| (Mean + Sd) of Day of campaign | 67.7 | 2.4 | 27.9 | 11\% |
| Min of Number of posts within a 1 hour window | 61.1 | 1.7 | 36.1 | 0\% |
| (Mean + Sd) of Number of posts within a 1 hour window | 60.5 | 6.3 | 9.6 | -1\% |
| Min of Sq Number of posts within a 1 hour window | 62.5 | 1.4 | 45.3 | 2\% |
| (Mean + Sd) of Sq Number of posts within a 1 hour window | 40.7 | 2.4 | 16.9 | -33\% |
| Dichotomous variables | Predicted count | Std. Err | z-statistic |  |
| Response owner $=0$ | 56.6 | 1.2 | 47.5 |  |
| Response owner = 1 | 103.9 | 8.7 | 12.0 |  |
| Predicted percentage increase with the response of owner | 83\% |  |  |  |


| COMMENTS | Predicted count | Std. Err | z-statistic |  |
| :---: | :---: | :---: | :---: | :---: |
| At means of all variables | 29.5 | 0.6 | 46.8 |  |
| Continuous variables | Predicted count | Std. Err | z-statistic | \% difference wrt predicted count at means of all variables |
| Min of Photo*Length of thread (In) | 29.6 | 1.7 | 17.9 | 1\% |
| (Mean + Sd) of Photo*Length of thread (In) | 29.4 | 1.3 | 22.1 | 0\% |
| Min of Status*Length of thread (In) | 27.3 | 0.6 | 48.9 | -8\% |
| (Mean + Sd) of Status*Length of thread (In) | 38.3 | 5.5 | 6.9 | 30\% |
| Min of Video*Length of thread (In) | 29.2 | 0.8 | 35.4 | -1\% |
| (Mean + Sd) of Video*Length of thread (In) | 30.4 | 2.0 | 15.1 | 3\% |
| Min of Day of campaign | 24.8 | 1.0 | 23.9 | -16\% |
| (Mean + Sd) of Day of campaign | 32.1 | 1.0 | 33.1 | 9\% |
| Min of Number of posts within a 1 hour window | 29.8 | 1.2 | 25.2 | 1\% |
| (Mean + Sd) of Number of posts within a 1 hour window | 27.9 | 3.8 | 7.4 | -5\% |
| Min of Sq Number of posts within a 1 hour window | 30.3 | 0.6 | 52.9 | 3\% |
| (Mean + Sd) of Sq Number of posts within a 1 hour window | 19.0 | 1.4 | 13.4 | -36\% |
| Dichotomous variables | Predicted count | Std. Err | z-statistic |  |
| Response owner $=0$ | 25.9 | 0.5 | 49.7 |  |
| Response owner = 1 | 74.0 | 5.5 | 13.3 |  |
| Predicted percentage increase with the response of owner | 185\% |  |  |  |

Table B5. Negative binomial regression model with instrumental variable (in response to Heiss et al 2018 model)

Explanation for Table B5 For instruments to model the current owner response, the functional transformations of: average daily length of posts, average number of comments per post, average number of owner responses daily, and the number of posts in the last 12 hours, were used. All were calculated based on previous values in comparison to the current post. The negative binomial regressions with instrumental variables is run by using the qvf command in STATA

|  | LIKES |  | SHARES |  | COMMENTS |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| Reciprocal communication | 2.044 | ** | 3.687 | ** | 3.595 | ** |
|  | (1.033) |  | (1.707) |  | (1.539) |  |
| PHOTO | 0.873 | *** | 0.741 | ** | 0.371 | ** |
|  | (0.161) |  | (0.357) |  | (0.145) |  |
| STATUS | -0.797 | * | -2.786 | *** | -0.887 |  |
|  | (0.465) |  | (0.737) |  | (0.693) |  |
| VIDEO | 0.342 | * | 1.203 | *** | 0.214 |  |
|  | (0.176) |  | (0.356) |  | (0.224) |  |
| Length of the thread (ln) | 0.037 | * | 0.131 | *** | 0.068 | *** |
|  | (0.020) |  | (0.044) |  | (0.023) |  |
| Photo*Length of thread (ln) | -0.086 | ** | -0.043 |  | -0.050 |  |
|  | (0.034) |  | (0.068) |  | (0.031) |  |
| Status*Length of thread (ln) | 0.111 |  | 0.371 | *** | 0.149 |  |
|  | (0.074) |  | (0.122) |  | (0.104) |  |
| Video*Length of thread (ln) | -0.049 |  | -0.136 | * | -0.033 |  |
|  | (0.037) |  | (0.071) |  | (0.047) |  |
| Likes for last post (ln) | 0.067 | *** | -0.058 | * | -0.015 |  |
|  | (0.017) |  | (0.032) |  | (0.035) |  |
| Comments for last post (ln) | -0.010 |  | 0.053 | ** | -0.017 |  |
|  | (0.010) |  | (0.021) |  | (0.016) |  |
| Shares for last post (ln) | -0.002 |  | 0.032 |  | 0.069 | ** |
|  | (0.014) |  | (0.031) |  | (0.027) |  |
| Day of campaign | 0.022 | *** | 0.021 | ** | 0.019 | *** |
|  | (0.005) |  | (0.009) |  | (0.007) |  |
| Time since last post (ln) | 0.077 |  | 0.171 | * | 0.172 | ** |
|  | (0.049) |  | (0.088) |  | (0.067) |  |
| Time till next post (ln) | 0.083 | * | 0.083 |  | 0.071 |  |
|  | (0.048) |  | (0.093) |  | (0.056) |  |
| Time since last post (ln) squared | -0.004 |  | -0.010 | * | -0.010 | ** |
|  | (0.003) |  | (0.005) |  | (0.004) |  |
| Time till next post (ln) squared | -0.003 |  | -0.003 |  | 0.000 |  |
|  | (0.003) |  | (0.006) |  | (0.004) |  |
| Number of posts within a 1 hour window | 0.019 |  | -0.045 |  | -0.024 |  |
|  | (0.012) |  | (0.033) |  | (0.022) |  |
| Number of posts within a 1 hour window squared | -0.003 | *** | -0.001 |  | -0.001 |  |
|  | (0.001) |  | (0.002) |  | (0.001) |  |
| Weekend (dummy) | 0.065 |  | -0.052 |  | 0.029 |  |
|  | (0.041) |  | (0.067) |  | (0.069) |  |
| Campaign silence 48h | -0.173 |  | -0.387 | ** | -0.340 |  |
|  | (0.128) |  | (0.153) |  | (0.214) |  |
| Campaign silence 24h | -0.314 | *** | -0.448 | ** | -0.065 |  |
|  | (0.113) |  | (0.183) |  | (0.147) |  |
| h1_2 a.m. | 0.805 | *** | 0.581 | * | 1.038 | *** |
|  | (0.245) |  | (0.326) |  | (0.320) |  |
| h2_3 a.m. | 0.599 |  | 1.972 | ** | 0.377 |  |
|  | (0.386) |  | (0.952) |  | (0.368) |  |
| h3_4 a.m. | -0.207 |  | -0.457 |  | 0.299 |  |
|  | (0.422) |  | (0.654) |  | (0.695) |  |
| h4_5 a.m. | 0.630 | ** | 1.206 | *** | 1.155 | *** |
|  | (0.272) |  | (0.410) |  | (0.292) |  |
| h5_6 a.m. | 0.566 | ** | 1.085 | *** | 1.037 | *** |
|  | (0.241) |  | (0.338) |  | (0.270) |  |
| h6_7 a.m. | 0.813 | *** | 1.089 | *** | 1.256 | *** |
|  | (0.249) |  | (0.328) |  | (0.270) |  |
| h7_8 a.m. | 0.580 | *** | 0.913 | *** | 1.082 | *** |
|  | (0.220) |  | (0.307) |  | (0.274) |  |
| h8_9 a.m. | 0.573 | *** | 1.000 | *** | 1.132 | *** |



Table B6. Negative binomial regression with IRR (same statistical model as in Table 1)

|  | LIKES |  | SHARES |  | COMMENTS |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reciprocal communication | 1.461 | *** | 1.834 | *** | 2.851 | *** |
|  | (0.081) |  | (0.160) |  | (0.224) |  |
| PHOTO | 2.154 | *** | 1.817 | ** | 1.293 | ** |
|  | (0.251) |  | (0.459) |  | (0.140) |  |
| STATUS | 0.357 | *** | 0.050 | *** | 0.278 | ** |
|  | (0.134) |  | (0.033) |  | (0.167) |  |
| VIDEO | 1.129 |  | 1.937 | *** | 1.039 |  |
|  | (0.173) |  | (0.428) |  | (0.202) |  |
| Length of the thread (ln) | 1.029 | * | 1.146 | *** | 1.067 | *** |
|  | (0.015) |  | (0.034) |  | (0.018) |  |
| Photo*Length of thread (ln) | 0.938 | *** | 1.002 |  | 0.998 |  |
|  | (0.023) |  | (0.048) |  | (0.023) |  |
| Status*Length of thread (ln) | 1.158 | ** | 1.503 | *** | 1.232 | ** |
|  | (0.067) |  | (0.165) |  | (0.111) |  |
| Video*Length of thread (ln) | 1.007 |  | 0.990 |  | 1.021 |  |
|  | (0.031) |  | (0.045) |  | (0.041) |  |
| Previous activity |  |  |  |  |  |  |
| Likes for last post (ln) | 1.116 | *** | 1.018 |  | 1.008 |  |
|  | (0.022) |  | (0.026) |  | (0.029) |  |
| Shares for last post (ln) | 0.982 | ** | 1.039 | ** | 0.981 |  |
|  | (0.009) |  | (0.017) |  | (0.012) |  |
| Comments for last post (ln) | 0.998 |  | 1.025 |  | 1.104 | *** |
|  | (0.016) |  | (0.024) |  | (0.025) |  |
| Time specificity |  |  |  |  |  |  |
| Time since last post (ln) | 1.236 | *** | 1.298 | *** | 1.244 | *** |
|  | (0.078) |  | (0.083) |  | (0.062) |  |
| Time since last post (ln) squared | 0.988 | *** | 0.986 | *** | 0.988 | *** |
|  | (0.004) |  | (0.004) |  | (0.003) |  |
| Time till next post (ln) | 1.207 | *** | 1.176 | ** | 1.065 |  |
|  | (0.069) |  | (0.078) |  | (0.065) |  |
| Time till next post (ln) squared | 0.991 | ** | 0.996 |  | 1.003 |  |
|  | (0.004) |  | (0.004) |  | (0.004) |  |
| Number of posts within a 1 hour window | 1.003 |  | 0.999 |  | 0.992 |  |
|  | (0.011) |  | (0.016) |  | (0.022) |  |
| Number of posts within a 1 hour window squared | 0.998 | *** | 0.998 | *** | 0.998 | *** |
|  | (0.000) |  | (0.000) |  | (0.000) |  |
| Weekend (dummy) | 1.052 |  | 0.945 |  | 0.959 |  |
|  | (0.036) |  | (0.048) |  | (0.055) |  |
| Day of campaign | 1.025 | *** | 1.028 | *** | 1.024 | *** |
|  | (0.004) |  | (0.007) |  | (0.005) |  |
| Campaign silence 48h | 0.906 |  | 0.713 | *** | 0.806 |  |
|  | (0.081) |  | (0.080) |  | (0.127) |  |
| Campaign silence 24h | 0.843 | ** | 0.773 | ** | 1.112 |  |
|  | (0.066) |  | (0.101) |  | (0.141) |  |
| h1_2 a.m. | 1.287 |  | 1.246 |  | 1.624 |  |
|  | (0.243) |  | (0.406) |  | (0.518) |  |
| h2_3 a.m. | 0.957 |  | 3.946 |  | 0.721 |  |
|  | (0.340) |  | (3.523) |  | (0.340) |  |
| h3_4 a.m. | 0.844 |  | 0.984 |  | 1.345 |  |
|  | (0.184) |  | (0.405) |  | (0.529) |  |
| h4_5 a.m. | 1.310 |  | 2.547 | ** | 1.994 | ** |
|  | (0.281) |  | (1.022) |  | (0.592) |  |
| h5_6 a.m. | 1.321 |  | 2.332 | ** | 1.882 | ** |
|  | (0.226) |  | (0.791) |  | (0.517) |  |




[^0]:    ${ }^{1}$ This work was supported by an Audencia Foundation research grant Innovation and stability

[^1]:    ${ }^{2}$ We partially control for this by collecting the data on the daily basis and producing a final archive of data the day after the election.

[^2]:    ${ }^{3}$ Sotrender.com is an academic-led company running the application analyzing social media. For the purpose of the project the data delivered is a real time archive of the posts and reactions to them by the public. The data were archived just after the election, thus any changes made after the campaign are not taken into account (e.g. additional likes clicked after the campaign). Sotrender does not control for the possible bots or so called 'likes farms' but makes a scan of official party profiles as they are visible to the follower.

[^3]:    ${ }^{4}$ As a robustness check of the time slots we also propose to look at a measure that counts the number of posts by the party within a 1 hour window (measured backward and forward in time). The variable is again logged and squared. See Appendix Table A1 for the full results.

[^4]:    ${ }^{5} \mathrm{http}: / / \mathrm{www} . e u r o p a r l . e u r o p a . e u / e l e c t i o n s-2014 / \mathrm{en} / \mathrm{in}-$ the-member-states (accessed 06.05.2015)

[^5]:    ${ }^{6}$ Among the ten longest posts, five originated from the non-parliamentary German party BüSo.

