More Votes Than Interactions: Romanian Parties and Politicians on Facebook, 2011 to 2020

Tristan Hotham*

2026

Preprint, not peer reviewed

Abstract

The Social Democratic Party (PSD) won 45% of the vote in Romania's parliamentary election of December 2016, more than the National Liberal Party (PNL) and the new Save Romania Union (USR) together. I use 36,922 posts from eight Romanian political pages, 2011 to September 2020, collected through CrowdTangle, to compare engagement on the three party pages with the vote. In the 30 days before the 2016 election, the PSD page drew 7% of the three party pages' interactions against 61% of the three parties' vote, a ratio of 0.11, while the PNL page drew 2.8 times its share and the USR page 1.6 times. The PSD page drew less than its vote share at every election from 2014 to 2020, but the gap narrowed as its vote fell and its page grew more active, to a ratio of 0.70 at the local elections of September 2020. While the PSD led the government in 2017 and 2018, a period of large protests, its page drew 4% of the three pages' interactions and USR's 38%; in opposition from November 2019 the PSD drew 18%. Where page sizes are recorded, from 2019, the PSD page had the fewest likes but its posts drew more interactions per like, so its small share goes with a smaller audience and, at times, less posting. A May 2015 change in CrowdTangle's capture is documented. The list has no PSD leaders' pages, so this compares party pages with votes, not parties' whole presence on Facebook.

Keywords: Facebook; political parties; elections; Romania; PSD; USR; protests; engagement; CrowdTangle

1 Introduction

Engagement on Facebook is often read as a sign of a party's strength. Romania offers a clear test of that reading. From 2012 to 2019 the Social Democratic Party (PSD) was the largest party at most national elections, and in December 2016 it won 45.5% of the vote for the Chamber of Deputies, against 20.0% for the National Liberal Party (PNL) and 8.9% for the Save Romania Union (USR), a party formed that year from a Bucharest civic movement (Wikipedia 2026c,o). The PSD then led three coalition governments with ALDE until a motion of no confidence in October 2019, and the PNL formed a government in November 2019 (Wikipedia 2026k,p,i,j). The PSD-led years included the largest protests in Romania since 1989. They began in January 2017 over government plans for pardons and grew after the government adopted an emergency ordinance amending the criminal codes on the night of 31 January 2017 (Wikipedia 2026d).

*Independent researcher. ORCID 0000-0003-4931-9349. Correspondence: contact@tristanhotham.com. The views expressed are the author's own and do not represent those of any employer.

This paper follows the Facebook pages of the three parties, and of five politicians and state figures, through these years. It asks three descriptive questions. **RQ1.** How did each party page's share of interactions compare with the party's share of the vote at the elections from 2014 to 2020? **RQ2.** How did the shares move between elections, through the protests and the change of government in 2019? **RQ3.** Does the PSD's small share reflect a smaller audience, less posting or less engaging posts? Earlier work shows that parties use Facebook continuously, not only at elections (Larsson 2016), and that engagement relative to the vote varies widely between parties and countries (Hotham 2026).

2 Data and method

Pages and posts. The data are all posts from a CrowdTangle list of Romanian political pages, exported on 28 October 2020 for my doctoral research (CrowdTangle Team 2020; Hotham 2021). The list has eight pages: the PNL, PSD and USR party pages; Raluca Turcan, a PNL deputy who was the party's acting leader from December 2016 to June 2017 and deputy prime minister from November 2019 (Wikipedia 2026n); Klaus Iohannis, president from December 2014 (Wikipedia 2026b); Nicolae Ciucă, chief of the general staff from 2015 to October 2019 and defence minister from November 2019 (Wikipedia 2026l); Raed Arafat, head of the Department for Emergency Situations (Wikipedia 2026m); and Victor Costache, health minister from November 2019 to March 2020 (Wikipedia 2026j). The export has 37,602 posts. I removed 28 duplicates (same page, time and text) and 652 posts from October 2020, leaving 36,922 posts with 58.9 million interactions (Table 1). I kept 43 posts without text that share a page and time with another post. Interactions are reactions plus comments plus shares; times are Romanian time. The "From" dates in Table 1 are the first posts in the export, not the dates the pages were created. The list has no pages for PSD politicians, USR leaders or other parties, so the election comparison uses the three party pages. This matters: leaders' pages can draw much of a party's attention, and the PSD's leaders and candidates, among them Victor Ponta, Liviu Dragnea and Viorica Dăncilă, are not in the data, while the PNL-backed president is. The comparison is between each party's own page and its vote; it cannot show whether the PSD's attention sat on its leaders' pages.

Table 1. Pages in the sample, to September 2020. Page likes are the median recorded in September 2020 (not recorded for Costache).

Page	From	Posts	Interactions (m)	Median per post	Page likes, Sep 2020
National Liberal Party (PNL)	May 2011	16,973	22.57	313	346k
Social Democratic Party (PSD)	Jul 2013	3,966	4.25	292	109k
Save Romania Union (USR)	Sep 2016	5,132	4.61	481	145k
Raluca Turcan (PNL)	May 2012	4,873	2.72	181	109k
Klaus Iohannis	May 2014	1,205	22.18	11,847	1,881k
Raed Arafat	Nov 2014	744	1.38	798	227k
Nicolae Ciucă	Oct 2014	3,933	1.14	195	30k
Victor Costache	Mar 2016	96	0.02	116	n/a

A change in capture in May 2015. The number of photo posts collected jumps in May 2015. Across the four pages active on both sides of that date (PNL, PSD, Turcan and Iohannis), photo posts rose from 63 in April 2015 to 159 in May, while link posts fell slightly, from 99 to 79. Over the six months before and after, photo posts rose 2.8 times, about 8.5 times on the PNL page, 4.7 times on Turcan's and 5.8 times on Iohannis's, but not on the PSD page (198 before, 132 after). A jump this size in the same month on three separately run pages more likely reflects CrowdTangle's collection than posting, though I cannot be

sure. I therefore do not compare post counts across May 2015, and I treat the two 2014 elections, which fall before it, as a separate, less reliable comparison. If the PNL's photo posts were undercounted before May 2015 while the PSD's were not, the 2014 comparisons, if anything, understate the PNL's share.

Elections. For each election, I compare each party page's share of the three pages' interactions in the 30 days before polling day with the party's share of the vote among the same parties, and report the ratio of the two. The elections are those of the European Parliament on 25 May 2014 and 26 May 2019, the first rounds of the presidential elections on 2 November 2014 and 10 November 2019, the parliamentary election of 11 December 2016 (Chamber of Deputies) and the local elections of 27 September 2020 (county councils), taken from Wikipedia (all Wikipedia articles cited were accessed in October 2026) (Wikipedia 2026a,b,c,e,f,g). The December 2020 parliamentary election falls after the data end; I leave out 2012, before the PSD page is in the data, and the 2016 local elections. Presidential votes are those of each party's candidate: Ponta (PSD alliance) and Iohannis (PNL and PDL alliance) in 2014; Iohannis (backed by the PNL), Dăncilă (PSD) and Dan Barna (USR and PLUS) in 2019. Alliance votes are counted in full for the party in the list: the PSD ran with two smaller parties at the 2014 European election, and the USR ran with PLUS, which has no page in the list, at the 2019 European and presidential elections and the 2020 local elections. This lowers those ratios. Vote shares are recomputed among the parties compared, which won 53 to 75% of the national vote, so the ratios depend on that set. As checks, I use windows of 14 and 60 days, add Turcan's page to the PNL and, for the presidential elections, add Iohannis's page to the PNL. The last check is one-sided, since no candidate page of the other parties is in the data.

Between elections. I compute each party page's monthly share of the three pages' interactions from September 2016, when the USR page begins. I mark the PSD-led governments (4 January 2017 to 4 November 2019) and the PNL government (from 4 November 2019) (Wikipedia 2026k,i,j). To compare the same page in and out of government, I regress the log of one plus each post's interactions on an indicator for the party being in government, with page and calendar-month fixed effects, using party-page posts from January 2016. With only three pages, clustering by page is not possible, so I cluster standard errors by calendar month. This ignores correlation within a page over time, so the intervals are likely too narrow. As a check, I fit the same model to page-month totals, controlling for the log number of posts. Percentage differences are $100(e^b - 1)$.

3 Results

3.1 The largest party drew the least

The PSD page drew less than the PSD's share of the vote at every election (Table 2). It had the smallest share of the party pages' interactions in the windows before the 2014 and 2016 elections and the 2019 European election, though not before the 2019 presidential and 2020 local elections, when the USR page drew less. In the month before the parliamentary election of December 2016, it drew 6.9% of the three party pages' interactions, against the PSD's 61% of the three parties' vote, a ratio of 0.11. The PNL page drew 75% against 27% (2.77 times its share), and the USR page, which enters the data in September 2016, drew 18% against 12% (1.55 times). The pattern was the same, and less reliable, in 2014: the PSD page drew 0.20 times its share at the European election and 0.11 times at the presidential election, when Iohannis's own page, not counted here, drew about eight times as many interactions as the PNL page. The page of the PSD candidate, Ponta, is not in the data, so the PSD's ratio here is likely understated

Table 2. Party pages' share of interactions in the 30 days before each election, vote share among the parties compared, and their ratio. The range covers windows of 14 and 60 days, adding Turcan's page to the PNL and, for presidential elections, adding Iohannis's page to the PNL. *Before the May 2015 change in capture.

Election	Party	Posts	Facebook %	Vote %	Ratio	Range in checks
EP 2014 *	PSD	31	14.2	71.5	0.20	0.16 to 0.20
	PNL	164	85.8	28.5	3.01	3.01 to 3.11
Presidential 2014 *	PSD	31	6.1	57.1	0.11	0.01 to 0.11
	PNL	91	93.9	42.9	2.19	2.18 to 2.31
Parliament 2016	PSD	72	6.9	61.1	0.11	0.11 to 0.18
	PNL	131	74.6	26.9	2.77	2.57 to 2.80
	USR	179	18.5	11.9	1.55	1.50 to 1.92
EP 2019	PNL	223	72.9	37.6	1.94	1.73 to 2.12
	PSD	37	6.4	31.3	0.21	0.19 to 0.29
	USR	151	20.6	31.1	0.66	0.46 to 0.83
Presidential 2019	PNL	201	76.1	50.4	1.51	1.49 to 1.57
	PSD	144	14.1	29.6	0.48	0.39 to 0.48
	USR	131	9.8	20.0	0.49	0.42 to 0.58
Local 2020	PNL	422	65.8	51.5	1.28	1.26 to 1.33
	PSD	181	26.0	37.4	0.70	0.61 to 0.72
	USR	217	8.2	11.1	0.73	0.70 to 0.77

most of all.

After 2016 the gap narrowed from both ends. The PSD's vote fell, to 31% of the three parties' vote at the European election of 2019 and 30% at the 2019 presidential election, while its page's share rose from 6% before the European election to 14% before the presidential election and 26% before the 2020 local elections, against 37% of the vote. Its ratio rose from 0.11 in 2016 to 0.21, 0.48 and 0.70, and stayed between 0.11 and 0.72 across all checks from 2016. The PNL page drew more than its vote share at every election (1.28 to 3.01). The USR drew more than its share in 2016 but less from 2019 (0.49 to 0.73), when it ran with PLUS, whose page is not counted.

3.2 Protest, government and opposition

While the PSD led the government in 2017 and 2018 (Figure 1), its page drew 3.8% of the three pages' interactions, and less than 5% in most months. The USR page drew 38% over the same two years. Its share was 47 to 59% in nine months, including February 2017, the month of the largest protests (59%), and June to October 2018, which included the protest of 10 August 2018 (52% in August). Over the whole PSD-led period, from January 2017 to October 2019, the shares were 66% for the PNL, 25% for the USR and 9.5% for the PSD. The PSD's share rose in early 2019, to 37% in January, when it posted much more than before (167 posts in the first quarter, against 41 to 66 a quarter in 2017 and 2018). In opposition, from November 2019 to September 2020, the PSD drew 18%, the PNL 74% and the USR 8%.

Being in government did not go the same way for both parties. Comparing each page with itself out of government, and with the other pages in the same month, the PSD's posts drew about 57% fewer interactions while it governed, relative to the USR page (95% confidence interval 43 to 68% fewer; 8,020 posts). The PNL's posts drew about 190% more once it governed, relative to the USR page (133 to 266% more; 15,252 posts). Pooling all three pages gives +35% (18 to 54%), driven by the PNL, but on

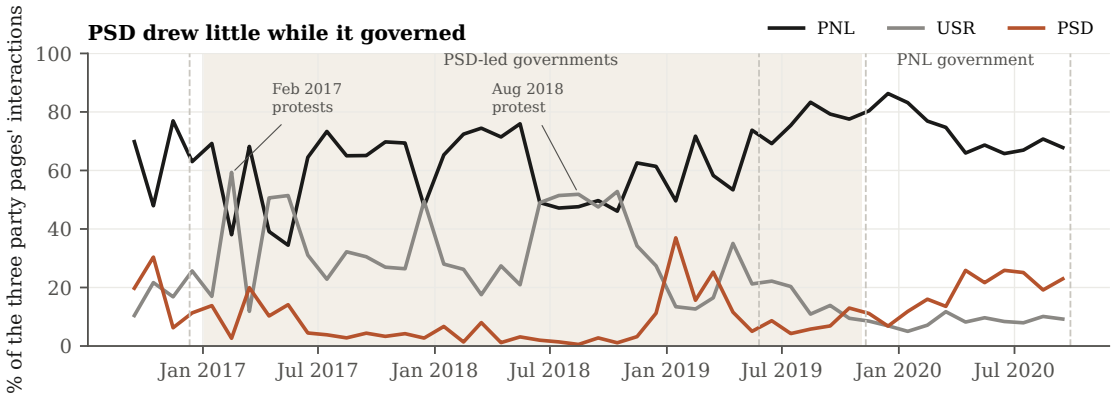


Figure 1. Monthly share of the interactions on the PNL, PSD and USR pages, September 2016 to September 2020. Dashed lines mark the parliamentary election of 2016, the European and presidential elections of 2019 and the local elections of 2020.

page-month totals, controlling for the number of posts, the pooled difference is +9% (−15 to +39%; 163 page-months). The estimates rest on two changes of government, the PNL's rise began earlier in 2019 and the USR's engagement fell, and the intervals are likely too narrow, so these describe the pages' paths, not effects of office.

3.3 Audience, posting and posts

From 2019, the PSD's small share goes with a smaller audience and, at some elections, less posting, not with less engaging posts. CrowdTangle records the PSD page's likes only from 29 January 2019, so its audience before then is unknown. In the 2019 and 2020 windows, the PSD page had 86,000 to 109,000 likes, against 290,000 to 346,000 for the PNL and 123,000 to 145,000 for the USR. Per 1,000 page likes, the median PSD post drew 21 interactions before the 2019 European election, 12 before the presidential election and 11 before the 2020 local elections, against 3 to 9 for the PNL and 2 to 7 for the USR. As engagement per like usually falls as pages grow, this is partly expected. Posting volume differed too: before the 2019 European election the PSD page posted 37 times, against 223 for the PNL and 151 for the USR; by the 2020 local elections it posted 181 times. In 2016, when page likes are not recorded for the PSD or USR, the PSD posted 72 times against 131 and 179, and its median post drew 308 interactions, against 848 for the PNL and 360 for the USR, so in that election its posts also drew less in absolute terms. The PSD page posted about 28 times a month while the party governed from 2017 to 2019 and 127 times a month in opposition.

3.4 Beyond the parties

Iohannis's page was the largest in the list, with about 1.9 million likes in 2020, and drew 22.2 million interactions from 1,205 posts, almost as many as the PNL page drew from 16,973. Its share of all eight pages' interactions fell from 87% in 2014 to 11% in 2020. Arafat's page drew 181,000 interactions in March 2020, when the Covid-19 state of emergency began (Wikipedia 2026h), against 27,000 a month from July 2019 to February 2020, and its likes rose from about 101,000 to 227,000 between February and September 2020.

4 Discussion

On Romanian Facebook, the party that won the most votes in 2014 and 2016 drew the least engagement on its party page. From 2019, when page likes are recorded, the gap reflects audience and activity more than the appeal of individual posts: the PSD page had the fewest likes and posted least, while its posts drew more per like. Before 2019 its audience size is unknown.

The protests are visible in the data: in the months of the largest demonstrations, the USR, which opposed the government's changes to the justice laws (Wikipedia 2026o), drew more than half of the three pages' interactions, and the governing PSD very little.

The design has clear limits. Eight pages are a small, uneven list, with no pages for the PSD's leaders, most PNL and USR leaders, PLUS or other parties. The list leans to the PNL side, with the PNL-backed president and PNL ministers but no PSD politician; if the PSD's attention sat on its leaders' pages, the party-page comparison overstates its gap. Vote shares are recomputed among three parties, with alliance votes counted in full. CrowdTangle's historical coverage is not guaranteed to be complete; the capture change of May 2015 shows that it changed at least once, and the 2014 comparisons are less reliable for that reason. Interactions are not support: they include opponents, people outside Romania and possibly paid promotion. The government comparison rests on two changes of government and three pages, its intervals are likely too narrow, and nothing here shows causation in either direction.

5 Conclusion

From 2014 to 2020 the PSD, Romania's largest party for most of the period, drew far less engagement on its party page than its share of the vote, and the PNL drew far more. In 2016 the PSD drew a tenth of its vote share; by 2020, with a lower vote and a more active page, it drew seven-tenths. While it governed during the protests of 2017 and 2018, the new USR out-drew it about ten times over. On these party pages, engagement was a poor guide to the vote, and where audiences are recorded it followed the size and activity of a page's audience. Whether the PSD's leaders' pages made up the difference cannot be judged from these data.

Data and code

The posts were exported from CrowdTangle in October 2020. CrowdTangle's terms do not permit sharing the raw posts. The analysis code, the list of pages and aggregate data by page, month and election window are available from the author.

Provenance and AI use

The data were exported from CrowdTangle in October 2020 for my doctoral research. This paper builds on my doctoral thesis (Hotham 2021). The analysis and writing were completed in 2026.

I designed the study and am responsible for the analysis and conclusions. I wrote the text, with drafting and editing assistance from Claude (Anthropic), which also helped prepare the analysis code and compile the election results and dates. I reviewed and checked all text and results.

Ethics

Not applicable: the study involves no human participants. The data are public posts by the official Facebook pages of political parties, politicians and public officials, analysed only as counts of posts and interactions aggregated by page, month and election window. No post content is quoted or reproduced, and no data on individual users are used.

Funding

I received no specific funding for this work. It builds on my doctoral research, which was funded by the Economic and Social Research Council (ESRC).

References

CrowdTangle Team (2020). CrowdTangle. Facebook, Menlo Park, CA.

Hotham, T. (2021). *How Do Political Parties Use Facebook and What Does It Offer to Their Campaigns*. PhD thesis, University of Bath. https://doi.org/10.5281/zenodo.23300282.

Hotham, T. (2026). Do populists win on Facebook? The engagement premium of populist parties in Europe, 2010 to 2020. Preprint, Zenodo. https://doi.org/10.5281/zenodo.23270349.

Larsson, A. O. (2016). Online, all the time? A quantitative assessment of the permanent campaign on Facebook. *New Media & Society*, 18(2):274–292.

Wikipedia (2026a). 2014 European Parliament election in Romania. https://en.wikipedia.org/wiki/2014_European_Parliament_election_in_Romania.

Wikipedia (2026b). 2014 Romanian presidential election. https://en.wikipedia.org/wiki/2014_Romanian_presidential_election.

Wikipedia (2026c). 2016 Romanian parliamentary election. https://en.wikipedia.org/wiki/2016_Romanian_parliamentary_election.

Wikipedia (2026d). 2017–2019 Romanian protests. https://en.wikipedia.org/wiki/2017%E2%80%932019_Romanian_protests.

Wikipedia (2026e). 2019 European Parliament election in Romania. https://en.wikipedia.org/wiki/2019_European_Parliament_election_in_Romania.

Wikipedia (2026f). 2019 Romanian presidential election. https://en.wikipedia.org/wiki/2019_Romanian_presidential_election.

Wikipedia (2026g). 2020 Romanian local elections. https://en.wikipedia.org/wiki/2020_Romanian_local_elections.

Wikipedia (2026h). COVID-19 pandemic in Romania. https://en.wikipedia.org/wiki/COVID-19_pandemic_in_Romania.

Wikipedia (2026i). Dăncilă Cabinet. https://en.wikipedia.org/wiki/D%C4%83ncil%C4%83_Cabinet.

Wikipedia (2026j). First Orban Cabinet. https://en.wikipedia.org/wiki/First_Orban_Cabinet.

Wikipedia (2026k). Grindeanu Cabinet. https://en.wikipedia.org/wiki/Grindeanu_Cabinet.

Wikipedia (2026l). Nicolae Ciucă. https://en.wikipedia.org/wiki/Nicolae_Ciuc%C4%83.

Wikipedia (2026m). Raed Arafat. https://en.wikipedia.org/wiki/Raed_Arafat.

Wikipedia (2026n). Raluca Turcan. https://en.wikipedia.org/wiki/Raluca_Turcan.

Wikipedia (2026o). Save Romania Union. https://en.wikipedia.org/wiki/Save_Romania_Union.

Wikipedia (2026p). Tudose Cabinet. https://en.wikipedia.org/wiki/Tudose_Cabinet.