Issue ownership in the online campaign for Dutch general elections

A topic modeling approach

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Abstract

Online political campaigns are often opaque, among other reasons because political parties often target their advertising to specific groups. Therefore, it is challenging for citizens, journalists, and academics to understand what political parties talk about in their campaigns, diminishing the public accountability of political parties. Through the lens of issue ownership theory, this study explores which issues Dutch political parties advertised on Meta during the 2021 national election. The study uses a relatively novel topic modeling process that is meant to limit human bias. We built a model that assigns issues to each ad (based on the ad text), creating a dataset of ad-issues matchings. The study is one of the first to present insights into the issues Dutch political parties communicated about during the national elections of 2021. Our findings show that issue owners are not the biggest advertisers on their issues and reveal that private gifts enable some political campaigns to claim ownership of many issues.

Keywords: political advertising; issue ownership; political communication; topic modeling

1. Introduction

Political campaigns use online advertising to communicate to prospective voters. Online advertising comes with several downsides such as privacy violations, potential for manipulation, and a lack of transparency (Zuiderveen Borgesius et al., 2018). Focusing on this latter downside, the opacity around online political advertising means that it is unclear to citizens, journalists, and academics which issues political parties talk about. Social platforms offer ad libraries, but these are limited (Leerssen et al., 2021; Leerssen et al., 2019). As a result, public accountability is slim, as campaigners could falsely present themselves as one-issue parties (Zuiderveen Borgesius et al., 2018), or make electoral promises to narrow electoral groups (Dobber & De Vreese, 2022). In this study, we aim to shed light onto this opaque realm of online political communication by examining the issues communicated through online political advertising by Dutch political parties in the national election campaign of 2021.

Research on online political advertising so far has focused on the effectiveness of online political advertising (e.g., Haenschen & Jennings, 2018; Haenschen, 2022; Zarouali et al., 2020; Endres, 2019; Lavigne, 2020; Coppock et al., 2020), on the circumstances that lead to the use of online advertising (Kreiss, 2016; Anstead, 2017; Dobber et al., 2017; Kruschinski & Haller, 2017), or on citizen perceptions of online political advertising (Turow et al., 2012; Dobber et al., 2018). Few studies have focused on the content of online political advertisements and those that did (Kruikemeier et al., 2022; Fowler et al., 2020) either focused on the United States, or had a narrow scope (Dobber & De Vreese, 2022). This study takes a broad approach, focusing on all parties and all advertisements on Meta that include a policy element, and focuses on the Netherlands, a European multiparty context. The Netherlands is a somewhat extreme example of a country with a multi-party system, as 17 parties gained at least one seat in parliament after the 2021 elections. Hence, the Netherlands stands in clear contrast to the often-studied United States, with two leading parties.

Political parties benefit from online advertising because it affords political campaigns more control over their message, and less reliant on the agenda-setting news coverage of the traditional media (McCombs & Shaw, 1972). Online advertising can be understood as an alternative communication channel, next to the traditional media, that can help political campaigns reach potential voters on the issues that they own. Issue ownership theory (Petrocik et al., 2003) suggests that "some political parties are affiliated with specific issues and considered best able to deal with them" (Walgrave et al., 2015, p. 778). In other words, voters see certain problems (or issues) as a typical focus point for certain parties, and may think that those parties can best address those problems. Reaching out to potential voters on owned issues seems beneficial for parties, as this strategy could improve party support (Endres, 2019 Hillygus & Shields, 2008; Abbe et al., 2003) and might increase the vote share among volatile voters (Geers & Bos, 2017). US-focused research has indeed shown that political campaigns focus on their owned issues in their online campaigns (Kruikemeier et al., 2022).

However, Zuiderveen Borgesius et al. (2018) warn that the opacity of online advertising could enable political parties to falsely present themselves as one-issue parties to different voters. In other words, through online advertising, political parties could emphasize issue A to voters who are thought to find issue A important, and then repeat this process for issue B, and for voters who care about issue B. This makes it difficult for voters to understand which issues are important to political parties and which issues are less important.

Catering to different voter groups by emphasizing different types of issues also makes it more difficult for political parties to interpret their mandate once elected (Jamieson, 2013). For example, when a party campaigns solely on an immigration platform, it is easy for the voters to understand the policy priorities of that party. Once elected, politicians from that party have a clear mandate. But when that party campaigns on immigration, education, environmentalism, security, fiscal responsibility, and ten other different issues, the priorities and mandate of that party are less clear-cut.

The few studies that focused on the content of online political advertisements examined the United States (Kruikemeier et al., 2022; Fowler et al., 2020). However, there are clear contextual differences between de facto two-party systems such as the US and multiparty systems that are often found in Europe, especially through the lens of issue ownership theory (Petrocik et al., 2003). Most importantly, in the US, only two parties divide and contest the issues among each other, but in European multiparty systems the issues are divided and contested among many more political parties. Especially in the Netherlands, where since 2021 the national parliament counts 17 political parties (Kiesraad, 2021), the issues are much more contested (see Appendix A for an overview of Dutch political parties).

Analyzing the issues communicated in online political campaigns is crucial to understanding parties' policy positions. However, identifying these issues is challenging because online ads come in many forms that range from just a few words to multi-paragraph articles. Often, researchers use topic modeling to identify topics on a large scale; however, such techniques often "require the additional step of attaching meaningful labels to estimated topics". Therefore, topic modeling is sometimes critiqued for the human

bias it introduces (Béchara et al., 2021, p. 1). This current study builds upon Béchara et al. (2021) and Kruikemeier et al. (2022) and assigns issues to political ads using a pre-defined list of words that are relevant to an issue based on expert codebooks. Through the lens of issue ownership theory, this study explores which issues Dutch political parties advertised on Meta during the 2021 national election certain issues. In doing so, the study applies a relatively novel topic modeling process to limit the human bias often found in topic modeling.

The paper combines insights from different fields, including communication science, political science, and methods from computer science.

2. Theoretical framework

Issue proximity theorists (e.g., Downs, 1957) argue that citizens vote for the parties or politicians that most closely resemble their own issue positions. However, it becomes increasingly challenging for citizens to compare their own issue positions with those of political parties. Although political parties generally publish manifestos on their websites, manifestos are often difficult to comprehend for citizens (Bischof & Senninger, 2018). Therefore, few citizens read manifestos (Adams et al., 2014; Adams et al., 2011; Andersen et al., 2005). Encountering information about issue positions in the mainstream media is challenging because the mainstream media tend to cover the larger parties (Kostadinova, 2017), and focus on horse race, conflict and campaign strategy news (Ergün & Karsten, 2019).

Online advertising techniques might enable political campaigns to communicate directly to the electorate, without interference from critical journalists, but these advertising techniques also enable campaigns to target and tailor their ads to the issue preferences of the targeted subsegments of the electorate. Since the online advertising infrastructure is opaque, it is unclear to the citizen to what extent a political party genuinely prioritizes a specific issue, or whether that party pretends to prioritize that issue because data analysis reveals that the targeted audience cares for that issue (see Zuiderveen Borgesius et al., 2018).

According to issue ownership theory "some political parties are affiliated with specific issues and considered best able to deal with them" (Walgrave et al., 2015, p. 778). Political parties campaign use issue ownership cues and issue position cues (Banda, 2016). An issue ownership cue can be a Green Party advertisement about how the environment is in good hands with them, and an issue position cue signals to the citizen what their stance is within that issue: the Green Party suggesting closing all coal-fueled power plants, for instance. In the Netherlands, the largest party VVD ran a campaign in 2012 stating that 'the economy could use some VVD', which is a clear issue ownership cue.

Issues ownership can change over time, and issue ownership can also be contested. This occurs when citizens do not clearly perceive one party most competent to handle a specific issue (Geys, 2012). It rarely happens that a party has complete issue ownership and over time, parties might emphasize certain issues more than they did before. The environment, for instance, used to be an issue clearly owned by green party GroenLinks, but over time this issue is likely to be also emphasized and claimed by other types of political parties (i.e., issue trespassing (e.g., Walgrave et al, 2009; Bos et al., 2016). Indeed, Walgrave et al. (2009) found that issue ownership is subject to change and can be contested through news coverage. Scholars do not agree about when a party 'owns' an issue. Petrocik (1996) employs a 50% threshold, but this is in a US context. In a 17-party democracy such as the Netherlands, it is unlikely that any party is seen by over 50% of the electorate as most competent to handle any issue. Walgrave and De Swert (2017) identified strong issue ownership, which occurs when one party is seen by around 50% of the electorate as most competent, and intermediate issue ownership, which occurs when ownership is shared between parties or with one "slightly dominating party" (p. 43).

Political parties can also claim previously unclaimed issues through the news cycle. Claiming issues and running campaigns on owned issues can be a useful strategy. In a rationalistic conception of voting behavior, people are expected to vote for parties that 'own' the issue found most salient (e.g., Downs,

1957). Some empirical evidence suggests that contacting or cross-pressuring citizens on a (personally) salient or owned issue increases candidate or party support (Endres, 2019 Hillygus & Shields, 2008; Abbe et al., 2003; Walgrave & De Swert, 2010). Research by Geers and Bos (2017) shows that volatile voters are more likely to vote for issue owners, especially when these parties are visible in the media and covered positively.

On the other hand, there is a risk in campaigning on unimportant or niche issues. Reaching out to a large and heterogeneous group with ads about owned issues that are perceived too niche can be counterproductive. For instance, the Orthodox Calvinist Christian party in the Netherlands might campaign to bring back the Christian oath for public servants. However, when the majority of potential voters cares about abortion, the former issue-ad might backfire, because voters might think that the party neglects their most salient issue (similar to Chou & Lien, 2010).

This study aims to extend issue ownership theory (Petrocik, 1996), by applying it to the online advertising context. The affordances of online advertising enable campaigns to run highly differentiated campaigns. For example, campaigns can reach out to a certain subset of voters for which issue a is deemed most salient, and simultaneously reach out to voters for which issues b or c are most salient. This is different from traditional advertising, which does not afford granular opportunities to differentiate messages among audiences. As a result, traditional advertising would need to rely much more on the salient issues than online advertising would. In other words: through online advertising, campaigns or no longer confined to the salient issues and they can advertise on many more issues compared to traditional advertising. This is especially pressing in light of the issue competition between parties in Europe in general (Green-Pedersen, 2007), but particularly in the politically fragmented Dutch context. Especially in the Netherlands, with many competing parties, parties can use online advertising to talk about more different issues. Where parties using traditional channels are incentivized to focus on the most salient issues, in online advertising they do not need to focus on salience perceptions alone because they can diversify their messages among different audiences' issue preferences. However, this could happen in such an opaque way that it is challenging to get a comprehensive overview of a party's viewpoints (Zuiderveen Borgesius et al., 2018). This study attempts to provide a comprehensive overview, starting by answering the following research questions.

RQ1. On how many different issues does each party communicate, and what is the total number of impressions per issue per party?

2.1 Issues owned versus issues claimed

After the national election of 2021, the Dutch parliament counted 17 political parties. Based on an opinion poll conducted one month before the election, not one party was an undisputed issue owner (I&O Research, 2021). However, when we focus on parties that were perceived as issue owners by a majority of the people, we see that only two parties are issue owners.1 The largest party in the Netherlands, the VVD, owns the issue 'economy' (according to 58% of the respondents). The PVV owns the issue 'migration' (59%).

Van der Meer and Damstra (2022) measured associative issue ownership. They asked people which party they associated with specific issues, regardless of perceived competence. Hence, they did not ask which party people deemed most competent to address a certain issue, as was the case in the opinion poll of I&O Research (2021). Van der Meer and Damstra (2022) found that VVD owns economy (according to 70% of respondents), the PVV owns migration (55%), and GroenLinks owns climate change (60%). However, prominent issues such as housing are much less unequivocally owned (Van der Meer &

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1 Provided that we use the golden standard CAP issue list. If we use the issue list provided by the pollster, we see that the VVD also owns 'government finance' (53%) and the Animal Party owns 'animal welfare' (80%).

Damstra, 2022), which is in line with the opinion polls that measured issue ownership based on competence perceptions (I&O Research, 2021).

Since issue ownership perceptions have been shown beneficial for voter support and even voter behavior, especially when combined with visibility (Geers & Bos, 2017), one can expect issue owners to communicate strongly on 'their' issues. However, many issues remain challenged (as identified by the Comparative Agendas Project). Moreover, since the 2021 election saw three new political parties arise (BBB, Volt, and JA21), there is ample opportunity to reshuffle the board.

This leads to the following hypothesis and research question.

H1a. Compared to other topics in VVD ads, the VVD spends the most money on ads on the economy and gets the most impressions on ads about the economy.

H1b. Compared to other parties, the VVD spends the most money on ads on the economy and gets the most impressions on ads about the economy.

H2a. Compared to the other topics in GroenLinks ads, GroenLinks spends the most money on ads on the environment, and gets the most impressions on ads about the environment.

H2b. Compared to other parties, GroenLinks spends the most money on ads on the environment and gets the most impressions on ads about the environment.[2]

RQ2. Which parties claim which issues in terms of ad spending and number of impressions?

2.2 Issue ownership per consideration set

Citizens in multiparty systems do not consider all political parties when determining their vote choice. Rather, undecided citizens have a consideration set of potential political parties they consider voting for. Citizens may not vote for the same party each election, but they are likely to vote for a party within their consideration sets (Rekker & Rosema, 2019).

According to panel survey research done in the Netherlands (Rekker & Rosema, 2019), there is a leftist camp of parties that consists of SP, GroenLinks, PvdA and D66. There is a Christian camp consisting of CDA, ChristenUnie and SGP. There is a rightist camp (VVD, D66, CDA). And a radical right camp that, in 2019, consisted of the PVV, but would now likely also include FvD and potentially JA21. D66 is placed in both the rightist camp and the leftist camp: this is because D66 is a center party and consideration sets are based on citizen perceptions.

Because citizens are unlikely to vote for a party outside of their consideration set (Rekker & Rosema, 2019), political parties are unlikely to target their advertisements to people who hold different consideration sets. For example, rightist parties are unlikely to target leftist voters and vice versa. This would suggest that we should not only examine issue ownership on the scale of all political parties, but also that we should take the consideration sets into account. Since a leftist party does not target rightist voters, the leftist party could claim issue ownership within the consideration set. As the rightist party VVD is considered the overall issue owner on economy, it is unlikely that the other parties in the rightist camp will run ads on the economy because the VVD will target the same voters and do this more convincingly when it comes to the economy. But the VVD is less likely to target voters in the leftist camp, leaving a vacuum in which the economy can be claimed by a leftist party within that consideration set. This leads to the following research question:

RQ3. Which parties claim which issues in terms of number of ads and number of impressions within consideration sets?

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[2] We know in advance that the PVV has placed only one issue advertisement on Meta's platform, so we did not formulate a hypothesis for the PVV.

3. Method

In this study, we analyze ads that ran on Meta (i.e. Facebook and Instagram) during the political campaigns leading up to the 2021 elections. We built a model that assigns issues to each ad (based on the ad text), creating a dataset of ad-issues matchings. This dataset allows us to aggregate data from ads about specific issues.

3.1 The Meta ad library

The Meta Ad Library, released in 2019, provides all (political) ads published on Facebook and Instagram. We chose to focus on the Meta Ad Library as it provides more detailed information on the content and targeting of ads than other social media ad repositories (e.g. Google's Ads Transparency Center or the TikTok Ad Library). This limits our research to ads that ran on Meta's platforms. However, we do not consider this a significant limitation, as most political parties heavily advertise on Facebook and Instagram.

Table 1. The number of Facebook ads per party

Party	# of Ads
CDA	11,463
VVD	4,461
PvdA	4,425
D66	1,527
VOLT	1,180
GL	444
SP	424
DENK	414
FvD	283
PvdD	276
CU	228
BIJ1	186
50+	162
JA21	115
SGP	104
BBB	60
PVV[3]	9
Total	**25,761**

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3 As the PVV is a controversial party, they get ample natural online attention from both proponents and opponents. This might explain why the PVV spends little on online advertising.

A Meta ad consists of three elements: a main body of text, an image or video and a call to action (e.g., a link to a website of a political party). Not all these elements must be present (e.g., an ad can have a body but no image).

The Meta Ad Library provides an API for programmatic extraction of ad data. For each ad, Meta provides its content (i.e. the body, image and call to action) and metadata about the demographics of the audience the ad was shown to (i.e. gender, age bracket and geographical region) and statistics on how the ad performed (i.e. impressions, potential audience and spending). In this study, we focus on the content of the ads.

The large disparity between the number of ads between parties reflects the structure and digital marketing strategy of the parties. Parties that have many local branches tend to run more ads, as each local branch runs its own ads. In general, this means that ads by parties with local branches get lower impressions than ads by other parties, as the local branch ads are meant for smaller audiences. It does not mean that parties with fewer ads get fewer impressions overall.

Some parties prefer to run ads with larger texts that cover multiple issues and talking points, while other parties prefer multiple smaller ads that each cover a single issue.

We limit the impact of this disparity on the results by designing the model for ads with larger bodies (covering multiple issues) and smaller bodies (covering only a single issue).

3.2 Issues

The Comparative Agendas Project (n.d.) is a research project that provides codebooks for issues (and sub-issues) that cover the broad public debate. Following the issues, listed in the Netherlands-specific codebooks, we created the following list of 14 issues that cover a broad spectrum of the Dutch political debate:

Agriculture	Government
Civil Rights	Healthcare
Climate	Housing
Defense	Law & Order
Economy	Migration
Education & Culture	Social Welfare
Foreign Affairs	Transportation

As not all issues provided by the codebook are distinct from one another (in the context of Dutch political campaigns), we merged similar issues (e.g., international affairs and foreign trade).

3.3 Matching ads and issues

To match an ad to one or multiple issues, we compare the text[4] in the ad (both the body of text and text provided in the call to action) to each issue word list, by computing the intersection between the ad text and each issue word list. We consider an ad to be about an issue if one of the following conditions is true:

1. The issue word list has the largest intersection with the ad text and the cardinality of the intersection is larger than one.
2. The cardinality of the intersection between the issue word list and the ad text is larger than five.

Consequently, an ad can be matched to no issues, one issue or multiple issues. We allow for this flexibility to accommodate as many types of ads as possible, as ad texts are not uniform and range from a few words about a single issue to multi-paragraph texts covering a broad range of issues.

We give an example of this approach based on two simplified issue word lists (Table 2) and three example ads:

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4 Specifically, the lemmatized forms of the nouns, proper nouns and adjectives in texts.

Table 2. Two example issue word lists for the housing and climate issues

Housing	Climate
House	Sustainable
Starter	Green
Building	Climate
City	Energy
Mortgage	Windmill
Rent	Environment
Housing	Clean
Residence	Solar

Example ad 1: "There are far too few houses in the Netherlands, especially for starters. That is why we are going to build 1 million new houses together."

Example ad 1 has the largest intersection with the issue word list of housing, because the ad text has three words in common with the housing issue word list and zero with the climate issue word list. As such, is mapped to the issue housing.

Example ad 2: "Come to our congress on the 2nd of October! Buy your tickets now."
Example ad 2 does not discuss a specific issue and consequently does not have any words in common with the issue word lists. It is not mapped to either issue.

Example ad 3: "We will invest heavily in the development of new sustainable housing. Future-oriented projects, sustainable alternatives and new green technologies, we ensure that they can be set up and developed in the regions. We focus on windmills and solar panels, to ensure a clean future with clean energy in clean cities. This will ensure cheaper rents and lower mortgage rates, especially for starters looking to buy their first house."

Example ad 3 has the largest intersection with the issue word list of climate (eight words), meaning it will be mapped to the issue climate. However, because it also has six words in common with the issue word list of housing, it is also mapped to housing.

As the Comparative Agendas Codebook codebooks are not tailored to a specific election, they contain words that are not relevant to the 2021 election and miss words that are. We solved this by manually updating the issue word lists with common words from the ads matched to each issue. We iterated this process until we could not find any new relevant words in the matched ads. The final word lists can be found in Appendix C.

In total, we matched 11,336 ads to at least one issue. If an ad was matched to at least one issue, we consider it "matched". If an ad was not matched to at least one issue, we consider it "unmatched". Appendix F shows the distribution of matched and unmatched ads per party. As we can see, a large percentage of ads are unmatched. This is expected, as political parties do not only run ads about political issues, but also run ads about organizational matters (e.g. "come to our party congress next month") and ads about party representatives (e.g. "Please meet the candidate representative from your city."). Some ads were not matched to any issue, because they contain too little text for the model to match the ad to a specific issue with a level of certainty.

Appendix G shows the distribution of issues per party and the total of ads per issue.

To validate the dataset created by our model, we computed an inter-coder reliability measure of a human coder and our model for a random sample of 300 ads. One human coder manually went over each ad in the sample and noted which issues they considered the ad to be about (either zero, one or multiple

issues). We compared the manual encodings with the encodings of our model for the same sample of ads, by computing the Krippendorff's alpha.

Because ads can have multiple issues, the coders can have a partial agreement (e.g. they agree that an ad is about an issue but disagree that the ad is about another issue). To take partial agreements into account, we computed the multi-label Krippendorff's alpha, using the MASI distance function (Passonneau et al., 2006). This resulted in a score of .84. Scores above .8 are generally considered reliable enough for meaningful interpretation (Krippendorff, 2004).

In appendix D, we provide the Krippendorff's alpha for each individual issue.

3.4 Analysis

Besides text, the Meta Ad Library also provides statistics on each ad. The most important statistics that the Ad Library provides are money spent, impressions (i.e., the number of times an ad was shown) and potential reach (i.e., how many users could have seen the ad). Meta does not give these statistics as absolute numbers, but as ranges (e.g., between €2000, - and €3000, - was spent on an ad). We aggregated the data on ads about each issue to analyze the ad data on an issue-level (e.g., the number of impressions for agriculture).

4. Results

4.1 Issues and impressions per party

The first research question asked: on how many different issues does each party communicate, and what is the total number of impressions per party? Appendix B shows that center-right party CDA is an outlier in terms of total issue-related ad impressions (over 46 million impressions). By contrast, the issue-campaign of the biggest party in terms of parliamentary seats VVD received over 10.5 million impressions. This latter number is more in line with the other 'larger' parties that cater to a larger and more heterogeneous section of the electorate. The smaller parties such as Calvinist party SGP (over 600.000 impressions) and immigrant party DENK (over 1.2 million impressions) in general received fewer impressions than the larger parties. Another outlier is the PVV, which is the third party of the Netherlands in terms of size. The PVV only received 2.500 impressions and only ran one ad on the issue climate. In terms of issue diversity of the online campaign, Green Party GroenLinks was the only party that campaigned on all fourteen issues. Only five parties campaigned on the issue foreign affairs, making this the issue contested by the least number of parties. Climate, housing and healthcare were campaigned on by fifteen parties (out of 17). Appendix E shows the spending per issue, per party.

4.2 Issue ownership VVD

The first hypothesis expected that VVD spends the most on ads on the economy and gets the most impressions on ads about the economy in comparison with a) the other VVD ads and compared with b) the other political parties. Focusing first on the first part of H1, Figure 1 shows that VVD runs the most ads on housing (34%), followed by economy (14%), healthcare (13%), and climate (11%). Figure 1 shows that VVD also spent most on issue-ads relating to housing (EU 22,000), followed by climate (EU 9,500), and healthcare (EU 7,500). VVD spent slightly under 4,500 euro on ads about the economy. In terms of impressions, housing ads make up for 24% of total impressions and economy ads receive 5% of the total impressions, even though 14% of ads are about the economy. This means that hypothesis 1a is not supported. In fact, the VVD runs the most ads on housing, spent the most on housing ads and also receives the highest number of impressions on housing-related ads.

Figure 1 shows, for instance, that the VVD spends a lot of money on ads about healthcare (third place in the list at the left), but the VVD ads on civil rights receive more impressions. The difference between

the ranking in "money spent per issue by VVD" and "impressions per issue by VVD", could have several reasons. For instance, some more expensive ads could be less engaging, or targeted at more expensive audiences. Unfortunately, the ad delivery algorithm is opaque, and a definitive explanation is beyond the scope of this study.
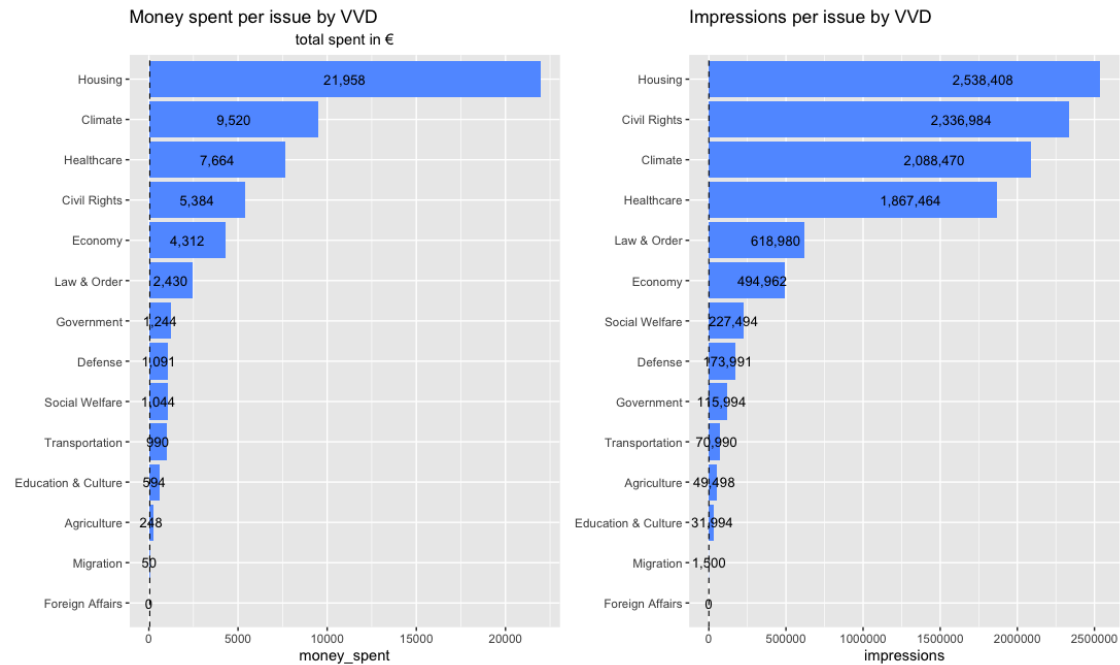
Figure 1. Money spent (in EUR), and impressions gained per issue

Moving on to the second part of H1, figure 2 shows that VVD does not pay the most for ads related to the economy and does not gain the most impressions on these ads. This means that H1b is not supported. In terms of the number of ads about the economy, it is evident that CDA dominates the online space. Of all economy-related ads, 73% are from the CDA. CDA also paid over 89,000 euro for economy ads (compared to slightly under 4,500 euro for VVD). In terms of impressions, however, CDA is less dominant: of all the impressions related to economy ads, 39% are for CDA ads. The economy ads of (radical) rightist parties JA21 and FvD perform strongly: both parties spend less than 1% of the total amount spent on economy-related ads, but both receive 10% of the total number of economy-related ad impressions.
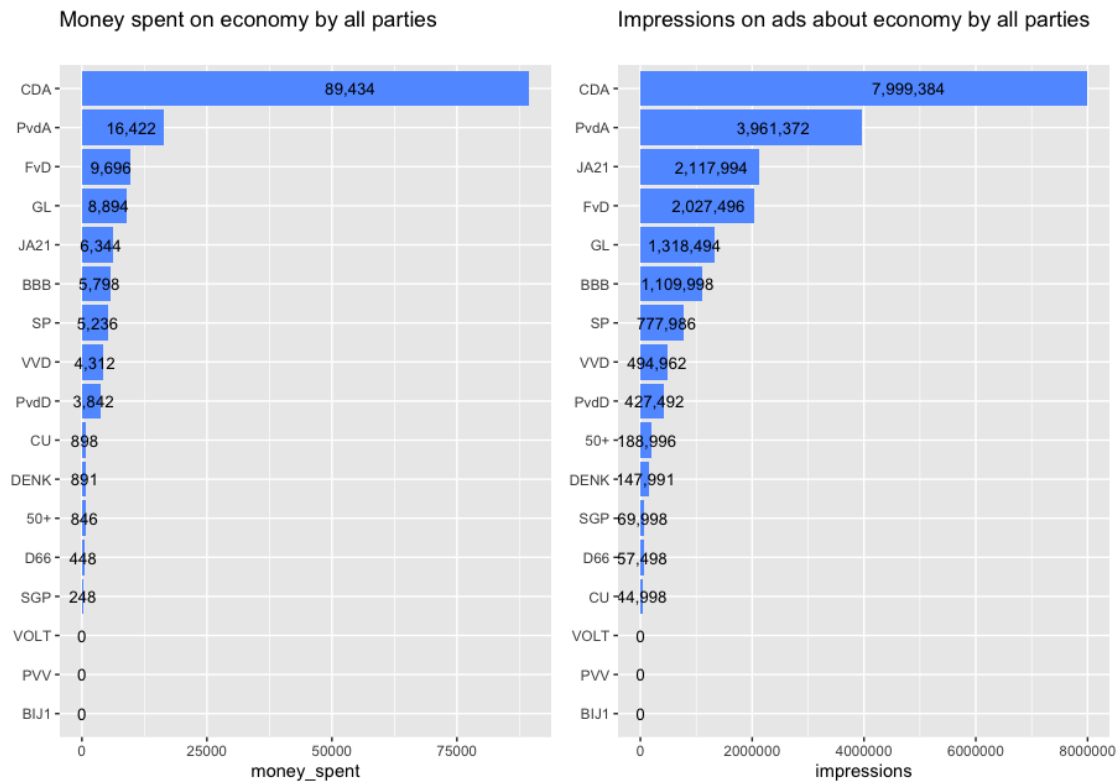
Figure 2. Money spent (in EUR) and impressions gained by ads about the economy

4.3 Issue ownership GroenLinks

The second hypothesis expected a) that GroenLinks, as issue owner on climate, would spend the most on climate ads, and b) would get the most impressions relative to the other GroenLinks issue ads on Meta. Figure 3 shows that, in terms of spending, this is clearly the case: GroenLinks spent 79,390 euro on issue ads. Almost 24,500 euro, so 31% of all the money that GroenLinks spent on issue ads went to ads about climate change, followed by healthcare (€10,290 or 13%). The data paints a similar picture in terms of impressions. GroenLinks' issue ads were displayed just over 13 million times (13,099,890). Almost 4 million impressions went to climate ads (30%), followed by healthcare (slightly over 2 million impressions, 16.5%).

The second hypothesis also expected that GroenLinks would spend more on climate change ads and get more impressions than each individual other party. Figure 4 shows that this is not the case. PvdD is the biggest spender (€ 54,943), followed by GroenLinks € 24,467). In terms of impressions, PvdD (5,534,443 impressions) also trumps Groenlinks (3.965.967).

Money spent per issue by GL

Impressions per issue by GL
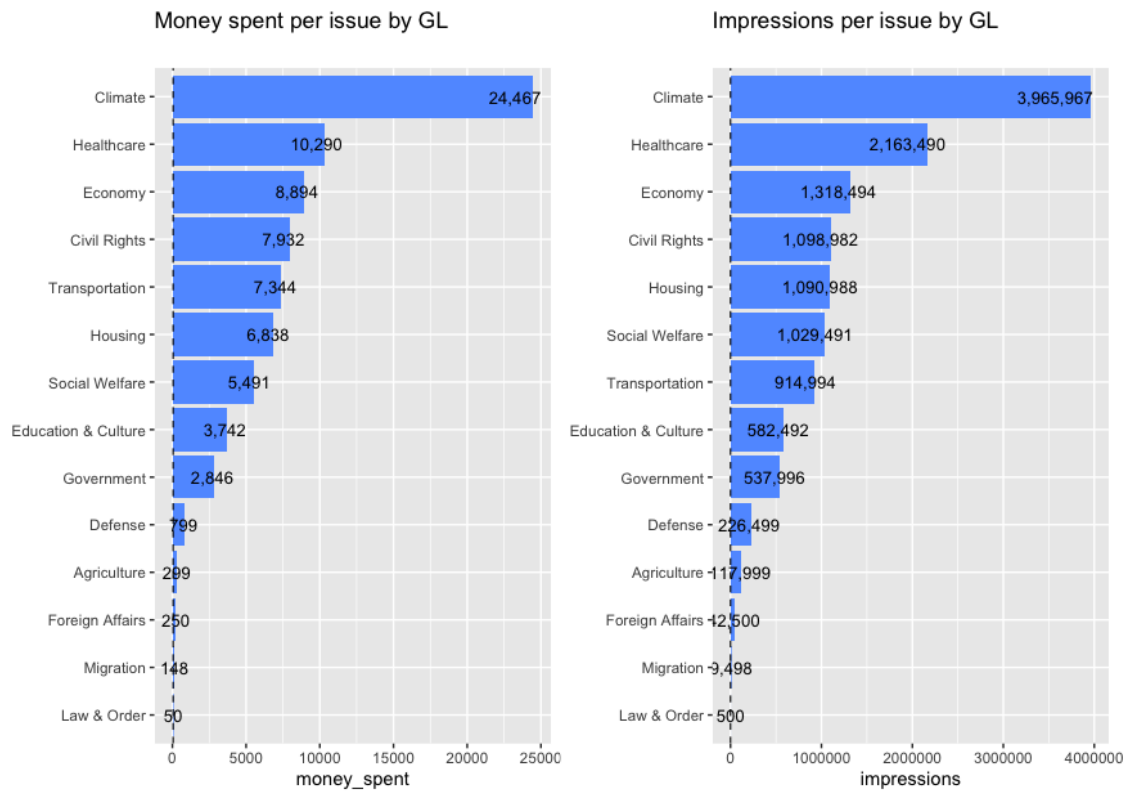
Figure 3. Money spent (in EUR) and impressions gained per issue GroenLinks

Money spent on climate by all parties

Impressions on ads about climate by all parties

Figure 4. Money spent (in EUR) and impressions gained by ads about the climate

4.4 Which parties claim which issues?

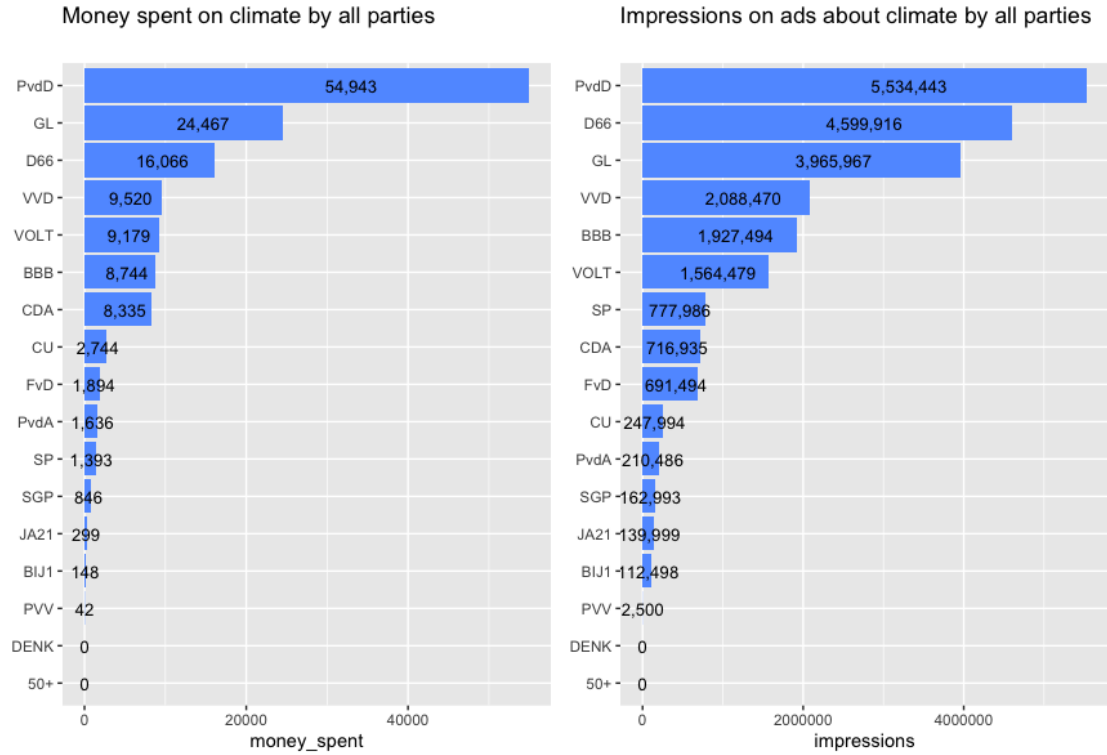Research question 2 asked which parties claim which issues in terms of ad spending and number of impressions. Figure 5 shows that major party VVD does not claim any issues in terms of advertising spending. In fact, center-right party CDA is the biggest claimer of issues in terms of spending. CDA spends more than the other parties on civil rights, economy, government, housing, and social welfare. Remarkably, CDA used to be known as the 'farmer's party', but CDA was challenged strongly by BBB and PvdD on the issue agriculture in terms of money spent and impressions reached (see Appendix B). The most strongly contested issues in terms of money spent and impressions reached are civil rights (claimed strongest by CDA), social welfare (CDA), housing (CDA), and economy (CDA). Surprisingly, climate was claimed strongest by PvdD and not GroenLinks in terms of money spent and impressions reached. Remarkably, while PvdA spent more than the other parties on education-related ads, D66 reached the most impressions with their education-related ads. Similarly, while PvdA spent more than other parties on healthcare ads, anti-lockdown party FvD reached the most impressions with their healthcare ads.
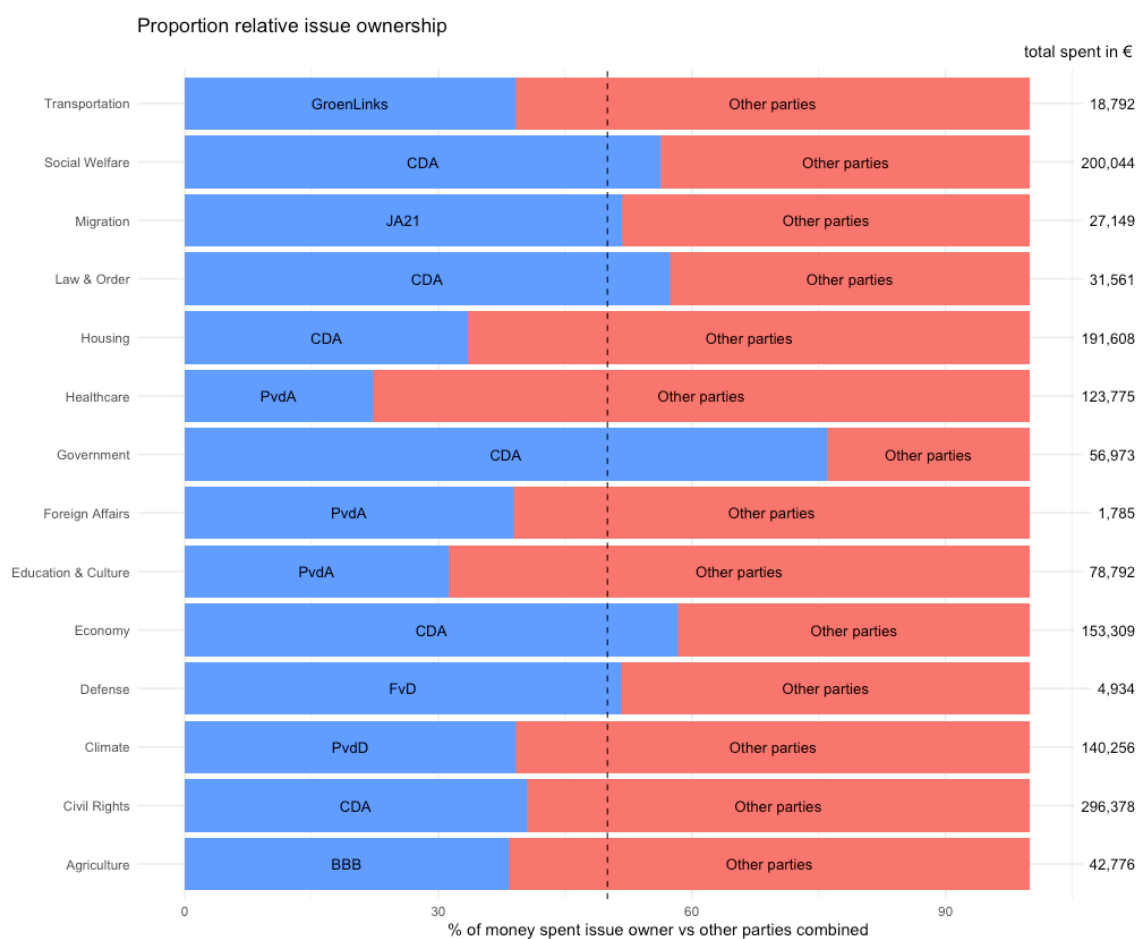
Figure 5. Issue claims in terms of money spent (in EUR) for all parties

Note. This figure displays alphabetically the degree to which each issue is owned by a specific party. In other words: the biggest spender is shown on the left, in blue, and the amount spent by this party is contrasted by the combined spending of the remaining parties (on the right). The dashed line denotes 50%, which means that the biggest spending was 50% of the total amount spent on ads about a specific issue. The further the left-hand bar passes the dashed line, the stronger that party has claimed the issue in terms of online advertising.

4.5 Which parties claim which issues within consideration sets?

We distinguish four consideration sets: the leftist parties (D66, GroenLinks, PvdA, SP, Bij1, PvdD, Volt, Denk), Christian parties (CDA, ChristenUnie, SGP), rightist parties (D66, CDA, VVD, BBB, Volt), and radical right parties (PVV, FvD, JA21). We compare claims on issue ownership for each consideration set. For the leftist consideration set we find that climate and civil rights are the most contested issues. For climate PvdD claims this issue by spending slightly more than 50% of the total sum spent on this issue by all leftist parties. Civil rights are claimed strongest by PvdA, by spending 55% of the total sum spent in the leftist consideration set. PvdA did not strongly claim issues when we look at all parties combined, but in the leftist consideration set, the PvdA is the dominant party with regard to spending (see Figure 6). In the Christian consideration set, CDA dominated strongly on all issues in terms of spending. For the rightist consideration set, CDA was the biggest spender on all issues except agriculture (BBB), climate (D66) and defense (VVD). See Figure 6. In the radical right consideration set, FvD claimed most issues. But on key radical right issues migration and law and order, JA21 held the strongest claim in terms of ad spending (see Figure 6).
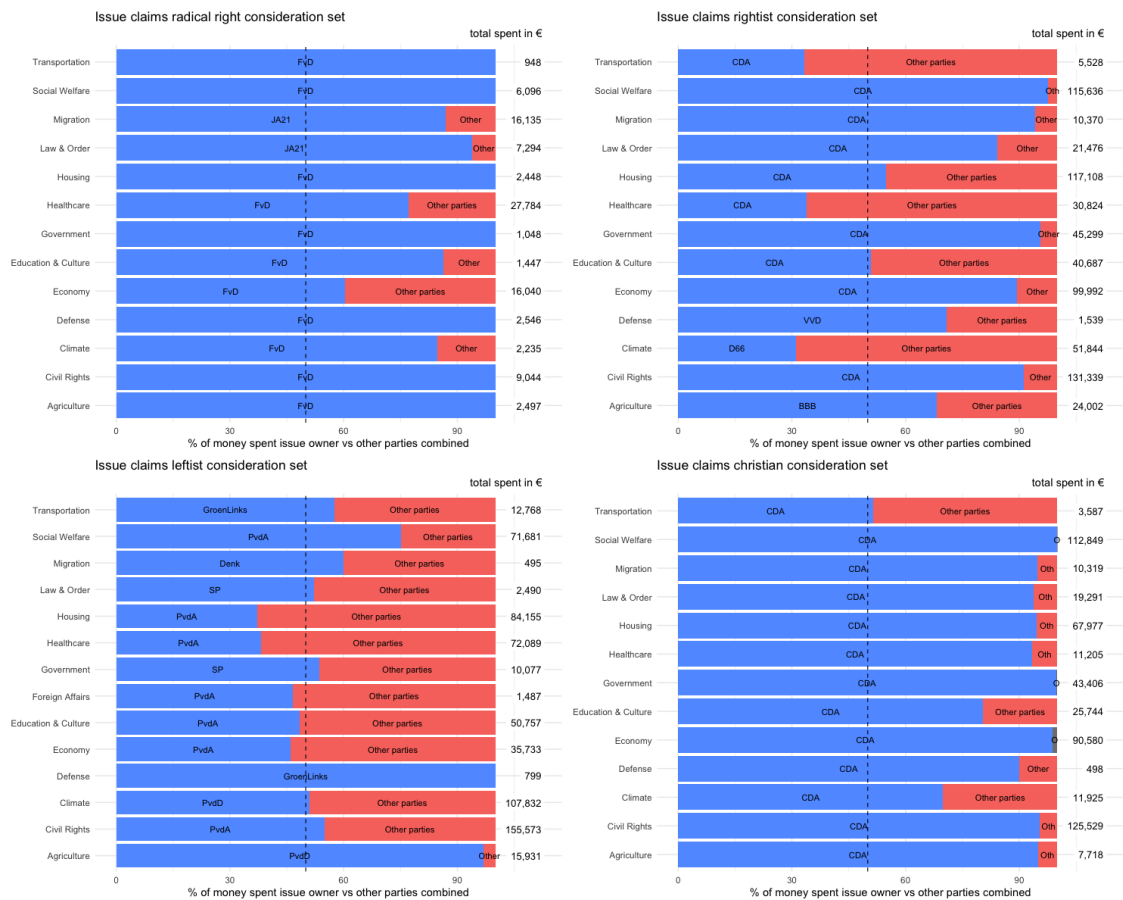
Figure 6. Issue claims in terms of money spent (in EUR) per consideration set

5. Discussion

In this study we explored which issues Dutch political parties advertised on Meta in the run-up to the 2021 national election. Interpreting the findings through the lens of issue ownership theory (Petrocik, 1996), we see that the affordances of online advertising indeed drive issue trespassing as well as issue competition. The owned issue economy (owned by VVD) was claimed by CDA, who spent most money

on this issue and reached most impressions. Similarly, the owned issue climate (owned by GroenLinks) was claimed by Partij voor de Dieren, who spent most money on this issue and reached most impressions.

In terms of competition, we see that political parties do not limit their communication to only a few salient issues since each issue was contested by a number of parties (see Figure 5). Hence, this study suggests that political parties use online advertising to appeal to voters in a differentiated way. Where traditional advertising confines parties to only the salient issues, online advertising affords parties the opportunity to reach out to voters on less salient issues.

We found that social welfare, housing, healthcare, economy and climate were the most hotly debated issues in the online campaign on Meta. Since the data pertain to the 2021 election, when covid19 was still prominent, it is not surprising the health care was among the top-debated issues in this campaign. However, in the 2023 election campaign, healthcare is still a salient issue in the minds of the aging Dutch population (Kanne & Van de Koppel, 2023).

We approached this study through the lens of issue ownership theory and found that the issue owner regarding economy, the VVD, was strongly outspent by CDA and 7 other parties. The issue owner of climate, GroenLinks, was strongly outspent by small party PvdD. This is striking because when Dutch citizens were asked about important societal problems, there was most agreement about climate change being an important problem (Van der Meer & Damstra, 2022).

The fact that both issue owners were outspent on their owned issues can be partly explained by the impact of individual benefactors on the relatively underfunded Dutch election campaigns. In the run-up to the 2021 campaign, CDA received a gift of 1 million euro from one entrepreneur (NOS, 2021). Similarly, D66 received 1 million euro and PvdD received 350,000 euro as a gift from an entrepreneur (Parool, 2021). Dutch election campaigns are underfunded in comparison with similar European campaigns (Andeweg et al., 2008). For example, the largest party VVD spent 2,718,325 euro on their entire campaign for the 2021 national election (NPO Radio 1, 2021). Therefore, such large gifts can tilt the playing field toward receiving parties. Parties reassure that benefactors do not buy political influence (e.g., NOS, 2021). Nevertheless, one can question whether such large gifts do not give the donor too much influence.

The Dutch government has recently adopted a law on party finance (Rijksoverheid, 2022). Individuals are no longer allowed to give more than 100,000 euro a year to one political party. As an electoral cycle takes four years, this culminates in 400,000 euro a year. Moreover, a benefactor seems to be able to give 200,000 to two parties annually. Such gifts can happen; for instance, D66 and PvdD received their gift from the same entrepreneur (Parool, 2021).

The data show that new parties were able to claim certain issues. Farmers' party BBB claimed agriculture, and spent more on this topic than the CDA, which is traditionally popular among farmers. Radical rightwing party JA21 claimed the issue of migration, largely because issue owner PVV does not buy many online advertisements. Finally, the new VOLT party was less successful in claiming issues. Volt was the fifth biggest spender on ads about climate. In line with Dobber et al. (2017), the data show how social media advertising can play an empowering role for smaller parties that struggle to get visibility through the traditional media. For example, smaller parties often struggle to get attention on TV in The Netherlands. Smaller parties are rarely invited for debates on national television. In some cases, smaller parties were ignored, and in other cases smaller parties had their own debates. However, new parties were not invited to these smaller party debates. Moreover, research has shown that news coverage favors the larger parties (Kostadinova, 2017), and is subject to horse race, conflict and campaign strategy news (Ergün and Karsten, 2019). New parties thus partly rely on social media advertising for visibility, however our data do not allow us to interpret the exact objectives for why parties advertise on these issues.

When we zoom in to the level of consideration set our data suggest that there are few contested issues: parties within such sets rarely aim to distinguish themselves from the other parties in the set. In the radical right consideration set, there are no contested issues. In the rightist consideration set, only climate, healthcare and transportation are contested. In the Christian consideration set, CDA owns each issue. In

the leftist consideration set, finally, housing and healthcare are clearly contested. Economy, education and foreign affairs are contested to a lesser extent. Remarkably, where social democrat party PvdA claims no issue on the national stage, it is relatively unchallenged on issues of civil rights and social welfare in the leftist consideration set.

Research has shown that on the national level, Dutch citizens perceive housing and healthcare as two of the most important societal problems (only trumped by climate; Van der Meer & Damstra, 2022). Moreover, Dutch citizens rarely associate housing, and to a lesser degree healthcare, with any party (Van der Meer & Damstra, 2022). Indeed, our study shows that housing is one of the most prominent issues in terms of spending, but no party was able to claim that issue on the national level.

Lastly, we give some suggestions for further research. This study is limited in scope, as it focuses only on advertisements about one or multiple issues. Political parties also bought ads on Meta that were not about an issue. Thus, the results of this study cannot be used to make inferences about the general campaign. Moreover, as this study focuses on Meta, it does not discuss potential issue ads on other social media platforms. Future research might want to include other online platforms that enable political advertising. Moreover, online advertising does not occur in a vacuum: campaigns also advertise via traditional channels, and news media report on political parties and their issues throughout the campaign.

In addition, future studies could research issue ads while also researching the targeting strategies of the parties. As Meta (and to a lesser degree Google) provides political advertising with far-reaching targeting options, combining information about the issues advertised with the people targeted (i.e. gender, age brackets and geographical region) could present insights not only into what parties are communicating about, but also to whom. Future research could also investigate the issues of political ads further by looking at how political parties frame issues in their ads, in relation to their issue ownership. Such insights help us understand the online campaign, and monitor and flag potential undue influence, such as the influence of rich benefactors on the Dutch national election campaign. Finally, since the findings of this study suggest that political campaigns have different strategies for online advertising than traditional advertising, future research could compare traditional advertising with online advertising through the lens of issue ownership theory.

Funding and conflicts of interests

References

Abbe, O.G., Goodliffe, J., Herrnson, P.S., Patterson and K.D. (2003) 'Agenda Setting in Congressional Elections: The Impact of Issues and Campaigns on Voting Behavior', Political Research Quarterly, 56(4), pp. 419–430. Available at: https://doi.org/10.1177/106591290305600404.

Adams, J., Ezrow, L. and Somer-Topcu, Z. (2011) 'Is Anybody Listening? Evidence That Voters Do Not Respond to European Parties' Policy Statements During Elections', American Journal of Political Science, 55(2), pp. 370–382. Available at: https://doi.org/10.1111/j.1540-5907.2010.00489.x.

Adams, J., Ezrow, L. and Somer-Topcu, Z. (2014) 'Do voters respond to party manifestos or to a wider information environment? An analysis of mass-elite linkages on European integration', American Journal of Political Science, 58(4), pp. 967–978. Available at: https://doi.org/10.1111/ajps.12115.

Andersen, R., Tilley, J. and Heath, A.F. (2005) 'Political knowledge and enlightened preferences: Party choice through the electoral cycle', British Journal of Political Science, 35(2), pp. 285–302. Available at: https://doi.org/10.1017/S0007123405000153.

Andeweg, R.B., De Winter And, L. and Müller, W.C. (2008) 'Parliamentary Opposition in Post-Consociational Democracies: Austria, Belgium and the Netherlands', The Journal of Legislative Studies, 14(1–2), pp. 77–112. Available at: https://doi.org/10.1080/13572330801921034.

Anstead, N. (2017) 'Data-Driven Campaigning in the 2015 United Kingdom General Election', International Journal of Press/Politics, 22(3), pp. 294–313. Available at: https://doi.org/10.1177/1940161217706163.

Banda, K.K. (2016) 'Issue Ownership, Issue Positions, and Candidate Assessment', Political Communication, 33(4), pp. 651–666. Available at: https://doi.org/10.1080/10584609.2016.1192569.

Béchara, H., Herzog, A., Jankin, S. and John, P. (2021) 'Transfer learning for topic labeling: Analysis of the UK House of Commons speeches 1935–2014', Research & Politics, 8(2), p. 20531680211022210. Available at: https://doi.org/10.1177/20531680211022206.

Bischof, D. and Senninger, R. (2018) 'Simple politics for the people? Complexity in campaign messages and political knowledge', European Journal of Political Research, 57(2), pp. 473–495. Available at: https://doi.org/10.1111/1475-6765.12235.

Bos, L., Lefevere, J. M., Thijssen, R., & Sheets, P. (2017). The impact of mediated party issue strategies on electoral support. Party Politics, 23(6), 760–771. Available at: doi.org/10.1177/1354068815626603

Chou, H.-Y. and Lien, N.-H. (2011) 'What does a negative political ad really say? The effects of different content dimensions', Journal of Marketing Communications, 17(4), pp. 281–295. Available at: https://doi.org/10.1080/13527260903546213.

Comparative Agendas Project (n.d.). https://www.comparativeagendas.net/netherlands

Coppock, A., Hill, S.J. and Vavreck, L. (2020) 'The small effects of political advertising are small regardless of context, message, sender, or receiver : Evidence from 59 real-time randomized experiments', pp. 1–7.

Dobber, T., Trilling, D. Helberger, N. and de Vreese, C. (2017) 'Two crates of beer and 40 pizzas: the adoption of innovative political behavioural targeting techniques', Internet Policy Review, 6(4), pp. 1–25. Available at: https://doi.org/10.14763/2017.4.777.

Dobber, T., Trilling, D. Helberger, N. and de Vreese, C. (2018) 'Spiraling downward: The reciprocal relation between attitude toward political behavioral targeting and privacy concerns', New Media & Society, 21, pp. 1–20. Available at: https://doi.org/10.1177/1461444818813372.

Dobber, T. and Vreese, C. de (2022) 'Beyond manifestos: Exploring how political campaigns use online advertisements to communicate policy information and pledges', Big Data & Society, 9(1), p. 20539517221095430. Available at: https://doi.org/10.1177/20539517221095433.

Downs, A. (1957) An Economic Theory of Democracy.

Endres, K. and Panagopoulos, C. (2019) 'Cross-pressure and voting behavior: Evidence from randomized experiments', Journal of Politics, 81(3), pp. 1090–1095. Available at: https://doi.org/10.1086/703210.

Ergün, E. and Karsten, N. (2019) 'Media logic in the coverage of election promises: comparative evidence from the Netherlands and the US', Acta Politica [Preprint], (0123456789). Available at: https://doi.org/10.1057/s41269-019-00141-8.

Fowler, E.F., Franz, M.M, Martin, G.J, Peskowitz, Z. and Ridout, T.N. (2020) 'Political Advertising Online and Offline', American Political Science Review, pp. 1–20. Available at: https://doi.org/10.1017/S0003055420000696.

Geers, S. and Bos, L. (2017) 'Priming Issues, Party Visibility, and Party Evaluations: The Impact on Vote Switching', Political Communication, 34(3), pp. 344–366. Available at: https://doi.org/10.1080/10584609.2016.1201179.

Geys, B. (2012) 'Success and failure in electoral competition: Selective issue emphasis under incomplete issue ownership', Electoral Studies, 31(2), pp. 406–412. Available at: https://doi.org/10.1016/j.electstud.2012.01.005.

Green-Pedersen, C. (2007). The Growing Importance of Issue Competition: The Changing Nature of Party Competition in Western Europe. Political Studies, 55(3), 607–628. Available at: https://doi.org/10.1111/j.1467-9248.2007.00686.x

Haenschen, K. (2022) 'The Conditional Effects of Microtargeted Facebook Advertisements on Voter Turnout', Political Behavior, pp. 409–433. Available at: https://doi.org/10.1215/03616878-8893529.

Haenschen, K. and Jennings, J. (2019) 'Mobilizing Millennial Voters with Targeted Internet Advertisements: A Field Experiment', Political Communication, 36, pp. 357–375. Available at: https://doi.org/10.1080/10584609.2018.1548530.

Hillygus, D.S. and Shields, T.G. (2009) The persuadable voter: Wedge issues in presidential campaigns. Princeton: Princeton University Press.

Jamieson, K.H. (2013) 'Messages, micro-targeting, and new media technologies', Forum (Germany), 11(3), pp. 429–435. Available at: https://doi.org/10.1515/for-2013-0052.

Kanne, P. & Van de Koppel, M. (2023, 16 September). I&O-zetelpeiling: NSC, PvdA/GL en VVD samen aan kop. I&O Research. Retrieved from https://www.ioresearch.nl/actueel/verkiezingsstrijd-ligt-open-nsc-pvda-gl-en-vvd-samen-aan-kop/

Kiesraad (2021). Officiële uitslag Tweede Kamerverkiezing 17 maart 2021. 26 March, https://www.kiesraad.nl/actueel/nieuws/2021/03/26/officiele-uitslag-tweede-kamerverkiezing-17-maart-2021

Kostadinova, P. (2017) 'Party pledges in the news: Which election promises do the media report?', Party Politics, 23(6), pp. 636–645. Available at: https://doi.org/10.1177/1354068815611649.

Kreiss, D. (2016) Prototype Politics: Technology-intensive campaigning and the data of democracy.

Krippendorff, K.H. (2004) Content Analysis: An Introduction to Its Methodology.

Kruikemeier, S., Vermeer, S. Metoui, N., Dobber, T. and Zarouali, B. (2022) '(Tar)getting you: The use of online political targeted messages on Facebook', Big Data & Society, 9(2), p. 20539517221089624. Available at: https://doi.org/10.1177/20539517221089626.

Kruschinski, S. and Haller, A. (2017) 'Restrictions on data-driven political microtargeting in Germany', Internet Policy Review, 6(4), pp. 1–23. Available at: https://doi.org/10.14763/2017.4.780.

Lavigne, M. (2020) 'Strengthening ties: The influence of microtargeting on partisan attitudes and the vote', Party Politics, (August 2019), p. 135406882091838. Available at: https://doi.org/10.1177/1354068820918387.

Leerssen, P., Ausloos, J., Zarouali, B., Helberger, N. and de Vreese, C. (2019) 'Platform ad archives: Promises and pitfalls', Internet Policy Review, 8(4), pp. 1–21. Available at: https://doi.org/10.14763/2019.4.1421.

Leerssen, P., Dobber, T., Helberger, N. and de Vreese, C. (2021) 'News from the ad archive: how journalists use the facebook ad library to hold online advertising accountable', Information, Communication & Society, 0(0), pp. 1–20. Available at: https://doi.org/10.1080/1369118x.2021.2009002.

McCombs, M.E. and Shaw, D.L. (1972) 'The Agenda-Setting Function of Mass Media', The Public Opinion Quarterly, 36(2), pp. 176–187.

van der Meer, T. and Damstra, A. (2022) 'Associative issue ownership in a highly fragmented multiparty context: The Netherlands (2021)', Acta Politica [Preprint]. Available at: https://doi.org/10.1057/s41269-022-00274-3.

NOS (2021). Donatie van 1,2 miljoen aan CDA door ondernemer Van der Wind roept vragen op. https://nos.nl/artikel/2385144-donatie-van-1-2-miljoen-aan-cda-door-ondernemer-van-der-wind-roept-vragen-op

NPO Radio (2021). Politieke partijen afhankelijker van donaties in 2021. https://www.nporadio1.nl/nieuws/politiek/25f3609a-d18b-4ea6-8166-8d4e2da00a5d/politieke-partijen-afhankelijker-van-donaties-in-2021

Parool (2021). Techondernemer schenkt D66 miljoen euro, PvdD krijgt meer dan 3 ton. https://www.parool.nl/nederland/techondernemer-schenkt-d66-miljoen-euro-pvdd-krijgt-meer-dan-3-ton~b9044379/

Passonneau, R., Habash, N.Y. and Rambow, O.C. (2006) 'Inter-annotator agreement on a multilingual semantic annotation task'. Available at: https://doi.org/10.7916/D8FB5BDX.

Petrocik, J.R. (1996) 'Issue Ownership in Presidential Elections , with a 1980 Case Study', American Journal of Political Science, 40(3), pp. 825–850.

Petrocik, J.R., Benoit, W.L. and Hansen, G.J. (2003) 'Issue Ownership and Presidential Campaigning, 1952-2000', Political Science Quarterly, 118(4), pp. 599–626.

Rekker, R. and Rosema, M. (2019) 'How (often) do voters change their consideration sets?', Electoral Studies, 57(October 2017), pp. 284–293. Available at: https://doi.org/10.1016/j.electstud.2018.08.006.

Rijksoverheid (2022). Wet financiering politieke partijen. https://wetten.overheid.nl/BWBR0033004/2023-01-01

Turow, J., Carpini, M.X.D., Draper, N. and Howard-Williams, R., (2012) Americans Roundly Reject Tailored Political Advertising, Annenberg School for Communication, University of Pennsylvania.

Votta, F., Noroozian, A., Dobber, T., Helberger, N. and de Vreese, C. (2023) 'Going Micro to Go Negative?: Targeting Toxicity using Facebook and Instagram Ads', Computational Communication Research, 5(1), pp. 1–50. Available at: https://doi.org/10.5117/CCR2023.1.001.VOTT.

Walgrave, S. and De Swert, K. (2004) 'The Making of the (Issues of the) Vlaams Blok', Political Communication, 21(4), pp. 479–500. Available at: https://doi.org/10.1080/10584600490522743.

Walgrave, S., Lefevere, J. and Nuytemans, M. (2009) 'Issue Ownership Stability and Change: How Political Parties Claim and Maintain Issues Through Media Appearances', Political Communication, 26(2), pp. 153–172. Available at: https://doi.org/10.1080/10584600902850718.

Walgrave, S., Tresch, A. and Lefevere, J. (2015) 'The Conceptualisation and Measurement of Issue Ownership', West European Politics, 38(4), pp. 778–796. Available at: https://doi.org/10.1080/01402382.2015.1039381.

Zarouali, B., Dobber, T., De Pauw, G. and de Vreese, C. (2020) 'Using a Personality-Profiling Algorithm to Investigate Political Microtargeting: Assessing the Persuasion Effects of Personality-Tailored Ads on Social Media', Communication Research, pp. 1–26. Available at: https://doi.org/10.1177/0093650220961965.

Zuiderveen Borgesius, F.J., Möller, J., Kruikemeier, S., Fathaigh, R.Ó., Irion, K., Dobber, T., Bodo, B. and de Vreese, C (2018) 'Online political microtargeting: Promises and threats for democracy', Utrecht Law Review, 14(1), pp. 82–96. Available at: https://doi.org/10.18352/ulr.420.

Appendix A. Party Information

Table 3. List of Dutch Political Parties that gained at least one seat in the 2021 Dutch general election

Party	Ideology	Political leader[5]	Website
50+	Pensioners' interests	Liane den Haan	https://50pluspartij.nl/
BBB	Agrarianism	Caroline van der Plas	https://boerburgerbeweging.nl/
BIJ1	Intersectionality	Sylvana Simons	https://bij1.org/
CDA	Christian democracy	Wopke Hoekstra	https://www.cda.nl/
ChristenUnie	Christian democracy	Gert-Jan Segers	https://www.christenunie.nl/
D66	Progressive liberalism	Sigrid Kaag	https://d66.nl/
DENK	Multiculturalism	Farid Azarkan	https://www.bewegingdenk.nl/
FvD	National conservatism	Thierry Baudet	https://fvd.nl/
GroenLinks	Green politics	Jesse Klaver	https://www.groenlinks.nl/
JA21	Conservative liberalism	Joost Eerdmans	https://ja21.nl/
PvdA	Social democracy	Lilianne Ploumen	https://www.pvda.nl/
PvdD	Animal rights	Esther Ouwehand	https://www.partijvoordedieren.nl/
PVV	Right-wing populism	Geert Wilders	https://pvv.nl/
SGP	Conservative Calvinism	Kees van der Staaij	https://sgp.nl/
SP	Socialism	Lilian Marijnissen	https://www.sp.nl/
Volt	Progressive liberalism	Laurens Dassen	https://voltnederland.org/
VVD	Conservative liberalism	Mark Rutte	https://www.vvd.nl/

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5 During the 2021 Dutch general election.

Table 4. Issues and impressions per party

	50+	**BBB**	**BIJ1**	**CDA**	**CU**	**D66**
Agriculture	0	4024982	0	886472	0	9500
Civil Rights	0	172498	753984	9749245	400992	870982
Climate	0	1927494	112498	716935	247994	4599916
Defense	0	0	0	187498	500	0
Economy	188996	1109998	0	7999384	44998	57498
Education & Culture	0	65000	251498	2410852	463494	3707892
Foreign Affairs	17500	0	0	0	6498	0
Government	0	89999	5500	3678758	61997	35998
Healthcare	514991	42500	82997	1098908	275494	2346452
Housing	920484	3345482	57997	6318088	34996	1491480
Law & Order	17500	75000	44999	1558848	91499	43998
Migration	0	137500	0	835420	5999	0
Social Welfare	1627482	264998	25999	10652300	182994	129494
Transportation	0	314998	0	161494	11494	197496
Total	3286953	11570449	1335472	46254202	1828949	13490706

	DENK	**FvD**	**GL**	**JA21**	**PVV**	**PvdA**
Agriculture	0	678497	117999	0	0	8498
Civil Rights	494484	1913494	1098982	0	0	7699250
Climate	0	691494	3965967	139999	2500	210486
Defense	0	1216996	226499	0	0	0
Economy	147991	2027496	1318494	2117994	0	3961372
Education & Culture	184984	438998	582492	30999	0	2121796
Foreign Affairs	48494	0	42500	0	0	145993
Government	0	384998	537996	0	0	275990
Healthcare	111994	5412490	2163490	2117994	0	3565773
Housing	128991	889998	1090988	0	0	3889239
Law & Order	0	244998	500	2123496	0	17496
Migration	45997	769997	9498	4361488	0	8500
Social Welfare	16997	1539996	1029491	0	0	5341562
Transportation	51494	342498	914994	0	0	76993
Total	1231426	16551950	13099890	10891970	2500	27322948

	PvdD	SGP	SP	VOLT	VVD
Agriculture	2353484	68996	0	0	49498
Civil Rights	878994	84992	5833476	159980	2336984
Climate	5534443	128996	162993	1564479	2088470
Defense	0	0	0	0	173991
Economy	427492	69998	777986	0	494962
Education & Culture	52498	59498	6498	9999	31994
Foreign Affairs	0	0	0	0	0
Government	3498	27500	1064496	0	115994
Healthcare	1364992	73995	1919991	0	1867464
Housing	686984	66997	3597976	2500	2538408
Law & Order	0	17500	446497	0	618980
Migration	0	8500	0	0	1500
Social Welfare	17500	4999	1267488	0	227494
Transportation	256992	32500	242499	0	70990
Total	11576877	644471	15319900	1736958	10616729

Appendix B. Money pent per issue

Table 5. Money spent per issue per party (in EUR)

	50+	BBB	BIJ1	CDA	CU	D66	DENK	FvD	GL
Agriculture	0,00	16.382,00	0,00	7.322,00	0,00	50,00	0,00	2.497,00	299,00
Civil Rights	0,00	848,00	5.634,00	119.745,00	4.592,00	3.232,00	2.734,00	9.044,00	7.932,00
Climate	0,00	8.744,00	148,00	8.335,00	2.744,00	16.066,00	0,00	1.894,00	24.467,00
Defense	0,00	0,00	0,00	448,00	50,00	0,00	0,00	2.546,00	799,00
Economy	846,00	5.798,00	0,00	89.434,00	898,00	448,00	891,00	9.696,00	8.894,00
Education & Culture	0,00	250,00	948,00	20.702,00	4.594,00	19.042,00	1.584,00	1.248,00	3.742,00
Foreign Affairs	150,00	0,00	0,00	0,00	148,00	0,00	544,00	0,00	250,00
Government	0,00	599,00	50,00	43.258,00	497,00	198,00	0,00	1.048,00	2.846,00
Healthcare	1.791,00	250,00	797,00	10.458,00	3.044,00	12.452,00	594,00	21.440,00	10.290,00
Housing	3.234,00	14.382,00	597,00	64.238,00	596,00	16.480,00	1.091,00	2.448,00	6.838,00
Law & Order	150,00	550,00	399,00	18.098,00	499,00	398,00	0,00	448,00	50,00
Migration	0,00	550,00	0,00	9.770,00	99,00	0,00	297,00	2.097,00	148,00
Social Welfare	5.932,00	848,00	99,00	112.700,00	1.644,00	1.044,00	297,00	6.096,00	5.491,00
Transportation	0,00	1.348,00	0,00	1.844,00	644,00	1.346,00	644,00	948,00	7.344,00

	JA21	PVV	PvdA	PvdD	SGP	SP	VOLT	VVD
Agriculture	0,00	0,00	148,00	15.434,00	396,00	0,00	0,00	248,00
Civil Rights	0,00	0,00	85.442,00	7.194,00	1.192,00	41.275,00	2.130,00	5.384,00
Climate	299,00	42,00	1.636,00	54.943,00	846,00	1.393,00	9.179,00	9.520,00
Defense	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1.091,00
Economy	6.344,00	0,00	16.422,00	3.842,00	248,00	5.236,00	0,00	4.312,00
Education & Culture	199,00	0,00	24.546,00	548,00	448,00	248,00	99,00	594,00
Foreign Affairs	0,00	0,00	693,00	0,00	0,00	0,00	0,00	0,00
Government	0,00	0,00	1.440,00	148,00	250,00	5.395,00	0,00	1.244,00
Healthcare	6.344,00	0,00	27.473,00	11.792,00	695,00	8.691,00	0,00	7.664,00
Housing	0,00	0,00	31.339,00	4.634,00	597,00	23.126,00	50,00	21.958,00
Law & Order	6.846,00	0,00	346,00	0,00	50,00	1.297,00	0,00	2.430,00
Migration	14.038,00	0,00	50,00	0,00	50,00	0,00	0,00	50,00
Social Welfare	0,00	0,00	53.812,00	150,00	99,00	10.788,00	0,00	1.044,00
Transportation	0,00	0,00	893,00	1.742,00	250,00	799,00	0,00	990,00

Appendix C. Issue word lists

Table 6. Issue word lists

Agriculture	Civil Rights	
platteland	eerlijk	genderidentiteit
boer	samenleving	grondrecht
landbouw	gelijk	journalist
bos	waarde	religieus
voedsel	norm	islam
boerenbedrijf	vrouw	integratie
veehouderij	burger	meningsuiting
agrarisch	vrijheid	mensenrechten
koe	fatsoen	geestelijk
wei	recht	queer
bestrijding	ongelijkheid	seks
boerennatuur	rechtvaardig	nationaliteit
visser	openbaar	trans
noaberschap	kansengelijkheid	etnisch
product	leeftijd	minderheid
weer	intimidatie	stemrecht
voeding	discriminatie	non-binair
landbouwgrond	traditie	antisemitisme
visserij	behandeling	transgender
vlees	racisme	zelfbeschikkingsrecht
dierenwelzijn	afkomst	kiesrecht
halal	religie	regenboogvlag
kip	toeslagenaffaire	gehandicapt
bestemmingsplan	gelijkwaardigheid	antiracisme
transport	seksueel	menswaardig
intensief	geaardheid	godsdienst
verkoop	emancipatie	seksualiteit
milieuvriendelijk	diversiteit	extremisme
oogst	cultureel	vrouwenemancipatie
stal	islamitisch	oeigoeren
voedselproductie	commercieel	gendergerelateerd
appel	rechtvaardigheid	lhbtqia+-gemeenschap
boerin	taal	lhbtqia+-kwestie
melkveehouderij	medisch	blind
veestapel	vrouwendag	openbaarheid
stankoverlast		privacy
varken		
biologisch		
import		
ingredient		
keurmerk		
plattelandsbeleid		
plattelandspartij		
voedselproducent		
boerenfamilie		
boerenkeukentafel		
boerenpartij		
koeienboer		
landbouwbeleid		
slachterij		
vee		

Climate			Defense
duurzaam	luchtkwaliteit	milieuprobleem	defensie
groen	plastic	gas	vrede
klimaat	vervuilende		dreiging
wereld	transport		landmacht
natuur	klimaatdoelstelling		oud-commandant
klimaatverandering	klimaatbedrog		oorlog
energie	stikstofwet		aanval
schoon	otter		missie
gebied	stroom		militair
kernenergie	klimaatvriendelijk		kernwapen
omgeving	windmolenpark		leger
planeet	klimaataanpak		conflict
duurzaamheid	droogte		materieel
klimaatakkoord	brandstof		kazerne
windmolen	zonne-energie		bondgenoot
milieu	klimaatproblem		krijgsmacht
klimaatcrisi	stikstofuitstoot		vn
leefomgeving	vergroening		veteraan
grond	chemisch		soldaat
boom	klimaatplan		afghanistan
bodem	energieopwekking		uitrusting
klimaatbeleid	kust		wereldoorlog
lucht	elektriciet		libie
zee	zoutkoepel		Wapen
landschap	fijnstof		herbewapening
biomassa	natuurbeheer		ontwapening
energietransitie	kernafval		wapenwedloop
water	nucleair		ontwapening
park	stikstofdebat		kernbom
klimaatactie	beschermen		agressor
afval	olie		joegoslavie
verkeer	stikstofregel		irak
bescherming	alcohol		defensie-industrie
zonnepaneel	energievoorziening		officierenvereniging
mega-zonnepark	gaswinning		wapenembargo
ruimtelijk	radioactief		vn-raad
natuurgebied	energiebesparing		vliegbasis
beek	groenstrook		alliantie
zonnepark	milieubeleid		corps
plant	milieuvervuiling		infiltratie
energiemix	onbewoonbaar		jihadistenstrijder
controle	overstroming		navo-bondgenoot
windpark	stikstofdiscussie		veiligheidssector
klimaatalarm	duurzaamheidsagenda		veteranendag
energiebron	uranium		somalie
klimaatwet	luchtvervuiling		knil-militair
terrein	bestrijdingsmiddel		defensieplek
co2	broeikasgas		
vervuiling	carpool		
waterschap	energiebehoefte		
klimaatverkiezing	grondwater		
stikstof	habitat		
klimaatoplossing	leefklimaat		
uitstoot	mega0zonnepark		
rivm	milieubeweging		
klimaatneutraal	ontbossing		
experiment	recycling		
diersoort	regen		
stof	watervoorziening		
klimaatplann	co2-probleem		
windenergie	klimaatdoemdenker		
bestemmingsplan	energiebeleid		

Economy		Education & Culture	
betaalbaar	bank	onderwijs	museum
economie	industrie	leenstelsel	erfgoed
ondernemer	werkloosheidsuitkering	school	radio
salaris	verlies	basisbeurs	vmbo
belasting	sluiting	cultuur	kunstenaar
baan	bedrijventerrein	student	basisonderwijs
geld	ozb	openbaar	cursus
minimumloon	zzp'er	studieschuld	techniek
loon	handel	technologie	schooljaar
bedrijf	investeerder	onderzoek	onderwijshuisvesting
armoede	winkelier	docent	televisie
investering	eigendom	leerling	communicatie
ontwikkeling	bedrijfsleven	media	scholier
economisch	zzp	kerk	immigrant
middeninkomen	werkloosheid	innovatie	ek
kost	winkelstraat	stage	sportvereniging
arbeidsmarkt	klant	internet	collegegeld
schuld	ondernemersklimaat	leerkracht	pers
herstel	kleinbedrijf	sport	middelbaar
winkel	commercieel	studie	lerarentekort
goedkoop	retail	ondersteuning	mobiel
werknemer	aandeelhouder	god	onderwijsplann
begroting	aandeel	krant	cultuursector
speculant	onderneming	religie	beroepsonderwijs
financiel	toezicht	geloof	eindexamen
portemonnee	ondernemend	moslim	schoolbestuur
markt	verkoop	basisschool	universitair
groeifonds	vastgoed	kerst	klaslokaal
schuldenvrij	dividend	universiteit	examenleerling
mkb	btw	christen	joods
financieel	faillissement	bibliotheek	scholing
belegger	onderneemster	klas	godsdienst
hypotheek	consument	mbo	cultuurbeleid
belastinggeld	fraude	opleiding	technologisch
werkgarantie	ondernemersspreekuur	cultureel	digitalisering
groei	accijns	moslimhaat	glasvezel
belastingverlaging	bv	islamitisch	expertise
last	btw-verhoging	kunst	vwo
staatsschuld	klantenkring	taal	cbs
bezuiniging	koopkracht	theater	ict
winst	verzekeraar	oranje	wetenschappelijk
werkgelegenheid	ondernemersprij	wetenschapper	duo
marktwerking	krediet	christelijk	allochtoon
budget	vestigingsklimaat	katholiek	cijferlijst
werkgever	fiscaal	voetbal	collecte
krimpgebied	investeringsruimte	hbo	computer
eigenaar	overheidssteun	religieus	cultuuraanbod
toerisme	overname	instelling	cultuurhistorisch
ondernemerschap	groeiregio	islam	havo
		kerstdag	kersttoespraak
		kerstboodschap	loting
		asielzoeker	ruimtevaart
		les	sportbeleid

Foreign Affairs	Government
europees	overheid
vluchteling	burger
internationaal	minister
trump	rechtsstaat
terrorisme	regering
amerikaans	provincie
donald	rijk
eu	referendum
ontwikkelingsland	grondwet
diplomaat	burgemeester
zuid-europa	bestuur
turkije	parlement
midden-oosten	bestuurlijk
rusland	transparantie
azerbeidzjan	publiek
joe	stadsbestuur
biden	bezuiniging
buitenlands	bestuurder
brussel	feestdag
oorlog	bureaucratie
armenie	stemadvies
onderdrukking	verkiezingstijd
armeens	grondrecht
europarlementarier	minister-president
humanitair	brandweer
us	staatssecretaris
israel	koning
handel	ambtenaar
ontwikkelingssamenwerking	kandidaatstelling
mensenrechten	koninklijk
conflict	ramp
duitsland	koningsdag
griekenland	koninkrijk
buitenland	grondwettelijk
oost-europa	overheidsdienst
kruis	commissaris
ambassadeur	kamerkandidat
afrika	gemeentewet
turks	begrafenis
diplomatie	bestuurslaag
erdogan	koningin
sanctie	decentralisatie
chinees	gemeentefonds
syrie	rampenbestrijding
japan	staatkundig
kanaalzone	staking
presidentsverkiezing	
koninkrijksrelaties	
import	
eu-lidmaatschap	
groot-brittannie	
dictatuur	
handelsakkoord	
israelisch	
ontwikkelingshulp	
ambassade	

Healthcare		Housing	
crisis	experiment	woning	huurcrisi
zorg	arbeidsvoorwaarde	huis	wooncorporatie
kind	covid	betaalbaar	huurstijging
coronacrisi	coronaregel	straat	dakloos
corona	drug	regio	woonplicht
voorziening	medicijn	volkshuisvesting	kantoor
zorgpremie	vaccinatiestrategie	stad	ozb
gezond	lichamelijk	inwoner	huurbevriezing
lockdown	familielid	belasting	leegstand
kwetsbaar	verpleeghuis	wijk	woningbouwplan
abortus	langdurig	ruimte	woonlast
gezondheidszorg	zorgkosten	bouw	woningcrisi
mantelzorger	corona-herstelfonds	starter	bestemmingsplan
bijdrage	geboorte	dorp	verzorgingstehuis
behandeling	gehandicapt	platteland	dakloosheid
sport	coronafonds	gebied	verhuizing
gezondheid	vaccinatiepaspoort	woningmarkt	flat
ziekenhuis	vaccinatieplicht	huisjesmelker	huurhuis
volksgezondheid	specialist	wooncrisi	kamerverhuur
seksueel	overgewicht	omgeving	brandveilig
coronaviru	avondklokrell	bewoner	elektriciteit
vaccinatie	psychiatrisch	woningnood	vestiging
zorgverlener	who	huur	woningprijz
versoepeling	alcohol	prijs	verpaupering
patient	zorgverzekeraar	huurwoning	huurteam
preventie	aandoening	woningbouw	appartementengebouw
besmetting	ambulancepost	huurder	onleefbaarheid
ambulance	zorgtoeslag	leefomgeving	registratie
vaccin	ggd	randstad	stedeling
medisch	ic-capaciteit	leefbaarheid	verhuurdersvergunning
huisarts	operatie	gemeenschap	huurcontract
zorgmedewerker	verslaving	woningtekort	huurdersraadpleging
welzijn	verwijzing	hypotheek	binnenstedelijk
ziekte	verzekeraar	koopwoning	verhuurgedrag
wachtlijst	zorginstelling	nieuwbouwwoning	bejaardenhuis
persconferentie	intensive	premie	huisvestingsbeleid
personeel	thuiszorg	huisvesting	huurbescherming
psychisch	tandarts	binnenstad	huurdersbescherming
test	ambulancestandplaats	huurverhoging	huurplafond
vaccinatieprogramma	ambulancezorg	gebouw	middenhuurwoning
voeding	bloeddonatie	huurprijs	premiewoning
donatie	dienstverlening	woonplaats	stadsvernieuwing
mondkap	reikwijdte	dakloze	studentenwoning
voorlichting	revalidatie	starterswoning	woningvoorraad
coronacrisis	schadevergoeding	stedelijk	
abortuskliniek	hygiene		
rivm	vergoeding		
drank	virus		

Law & Order		Migration
drugscriminaliteit	drug	migratie
rechtsstaat	juridisch	grens
geweld	justitie	asiel
criminaliteit	onveiligheid	arbeidsmigratie
rechtvaardig	verkrachting	immigratie
veiligheid	drugsproductie	asielbeleid
vernieling	gerechtshof	immigratiebeleid
intimidatie	misbruik	integratie
geweldsincident	rechtszaak	asielzoeker
grondwet	om	migratieachtergrond
drugsafval	legaal	marrakesh
liquidatie	huwelijk	immigrant
steekpartij	cel	inburgering
terrorisme	misleiding	vreemdelingenzaak
overlast	fraude	asielsysteem
boete	loverboy	asielzoekerscentrum
politie	radicalisering	allochtoon
jeugdzorg	rechterlijk	remigratie
straatintimidatie	awb	niet-westers
preventie	advocatuur	immigratiepact
speed	bodycam	polen
xtc	bevoegdheid	midden-oosten
kraker	rechtspraak	afrika
rechtvaardigheid	wapenstok	moria
dreiging	wijkagent	vluchtelingenkamp
prostitutie	draagmoederschap	vluchteling
crimineel	gevangenis	pardon
straf	vrijlating	instroom
grondrecht	bordeel	migratiecrisis
uitbuiting	burgerlijk	moria-deal
kraak	drugsgeld	migratiepact
coffeeshop	drugshandel	selectiecentrum
onveilig	jeugdgevangenis	asielbelofte
inbreker	opsporing	libie
illegaal	taakstraf	turkije
extreem	veelpleger	azc
diefstal	wapenbezit	opvangplek
woningoverlast	wetboek	
agent	strafblad	
bedreiging	tuig	
cameratoezicht	gevangenisstraf	
camera	gebiedsverbod	

Social Welfare		Transportation	
samenleving	ziekte	weg	parkeerbeleid
werk	opvang	bereikbaar	verkeersprobleem
salaris	multinational	openbaar	randweg
sociaal	voedselbank	vervoer	rotonde
contract	werkloosheidsuitkering	verbinding	verkeersplan
minimumloon	vakbond	snelweg	buslijn
loon	armoedebestrijding	zee	verkeersdeelnemer
bedrijf	arbeidsvoorwaarde	lijn	fietsenstalling
armoede	werkloosheid	auto	tram
pensioen	verzorgingstehuis	trein	oversteekplaats
middenklasse	thuiswerk	luchtvaart	waterstaat
voorziening	vrijwilligerswerk	verkeer	dienstregeling
arbeid	bonus	bereikbaarheid	luchthaven
hulp	onderneming	ov	truckchauffeur
middeninkomen	basisinkomen	binnenstad	jachthaven
inkomen	samenhang	haven	verkeershufter
handicap	gehandicapt	kilometer	a27
compensatie	loopbaan	omwonende	hogesnelheidstrein
arbeidsmarkt	werkloos	fiets	infrastructureel
schuld	bijbaan	station	metro
leeftijd	pensioenfonds	mobiliteit	vertraging
aow	vrijwilligersorganisatie	knelpunt	scooter
tekort	tolerant	verkeersveiligheid	parkeerproblematiek
flexcontract	zieken	tarief	sneltrein
arbeidsmigratie	jeugdloon	infrastructuur	verkeersdrukte
vaardigheid	nabestaande	snelheid	verkeersstroom
stage	omscholing	maximumsnelheid	voertuig
werknemer	vergrijzing	km	vrachtwagen
zelfstandig	werkplek	verbindingsweg	sanering
financieel	ouderenbeleid	rondweg	scheepvaart
pensioenstelsel	zomerkamp	vliegtuig	intercity
ww	allochtoon	bus	130km/u
ondersteuning	bedrijfstak	reiziger	a35
maatschappelijk	beschuldiging	vliegveld	apk
arbeidsongeschiktheid	bouwwerkzaamheid	brug	autoparkeerplaats
uitkering	cao	schip	busdienst
schuldenvrij	huishouding	fietser	busmaatschappij
loonkloof	jeugdwerkloosheid	tunnel	dienstverlening
kinderopvang	overwerk	voetganger	foutparkerend
bijstand	schuldsanering	parkeerplaats	n209
jeugd	seizoensarbeid	vervoersteun	parkeermogelijkheid
jeugdzorg	staking	automobilist	parkeerruimte
topinkomen	werkomstandigheid	verkeersslachtoffer	perron
fnv	ziektekosten	verbreding	sneltram
subsidie	zwangerschapsverlof	fusie	tolheffing
werkgelegenheid	sollicitatie	ov-idee	verkeerschaos
premie	werkvloer	transport	verkeersveiligheidsoogpunt
werkgever	weeskind	parkeergarage	
welzijn		ontsluitingsweg	verkeersveiligheidsprobleem
		ramp	
		ongeluk	busvervoer
		parkeerplek	parkeerbelasting
		file	spoortunnel
		asfalt	garage
			parkeergeld

Appendix D. Krippendorff's Alpha for each theme

In the method section, we discussed the validation of the model. We computed the multi-label Krippendorff's alpha to measure the inter-coder reliability. In this appendix, we provide an inter-coder reliability measurement for each individual issue.

For each issue, we computed the Krippendorff's alpha (using a nominal distance function).

As not all issues were significantly represented in the random sample of 300 ads used for validation, we only computed the Krippendorff's alpha for an issue if at least 15 ads (i.e. 5% of the sample) were considered to be about the issue by either coder (the total is provided in the "# ads" column).

Issue	# ads	Krippendorff's Alpha
Agriculture	10	-
Civil Rights	101	0.9
Climate	21	0.88
Defense	1	-
Economy	46	0.85
Education & Culture	20	0.84
Foreign Affairs	1	-
Government	17	0.82
Healthcare	35	0.83
Housing	54	0.76
Law & Order	12	-
Migration	2	-
Social Welfare	58	0.83
Transportation	7	-

Appendix E. Spending per Issue per Party

Figure 7. Spending per Issue by CDA & 50Plus (in EUR)

Money spent per issue by CDA

Money spent per issue by 50plus
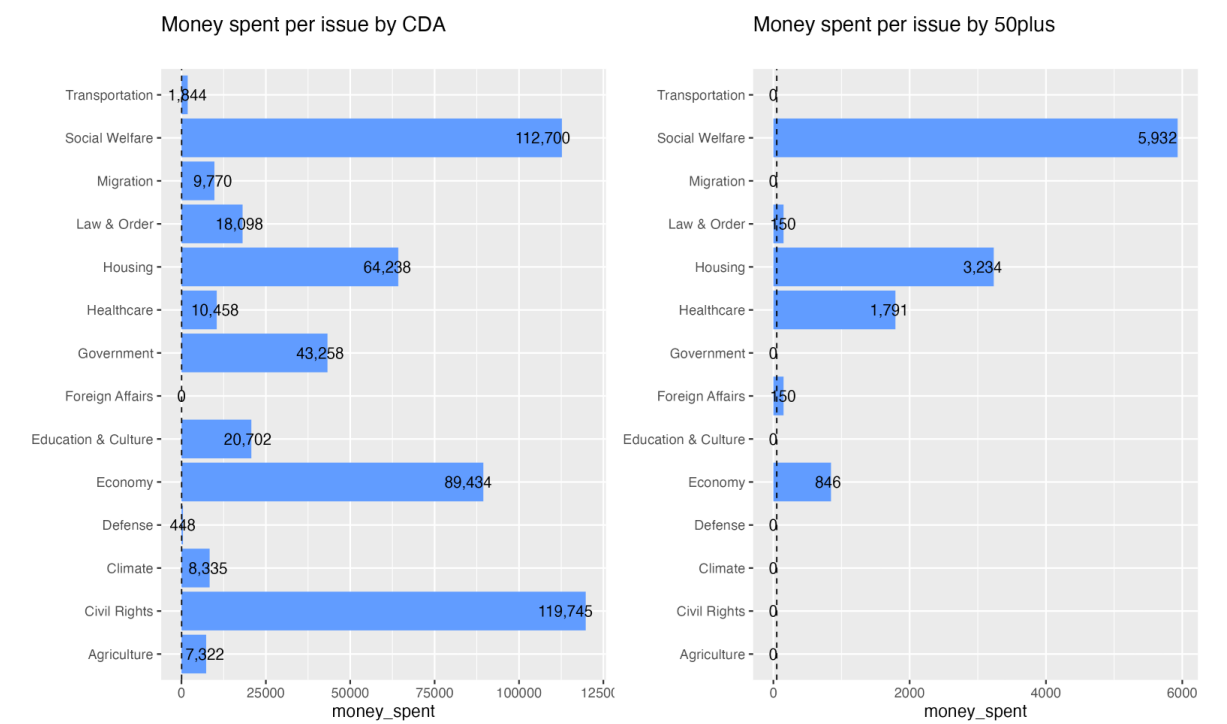
Figure 8. Spending per Issue by BBB & Bij1 (in EUR)

Money spent per issue by BBB

Money spent per issue by Bij1
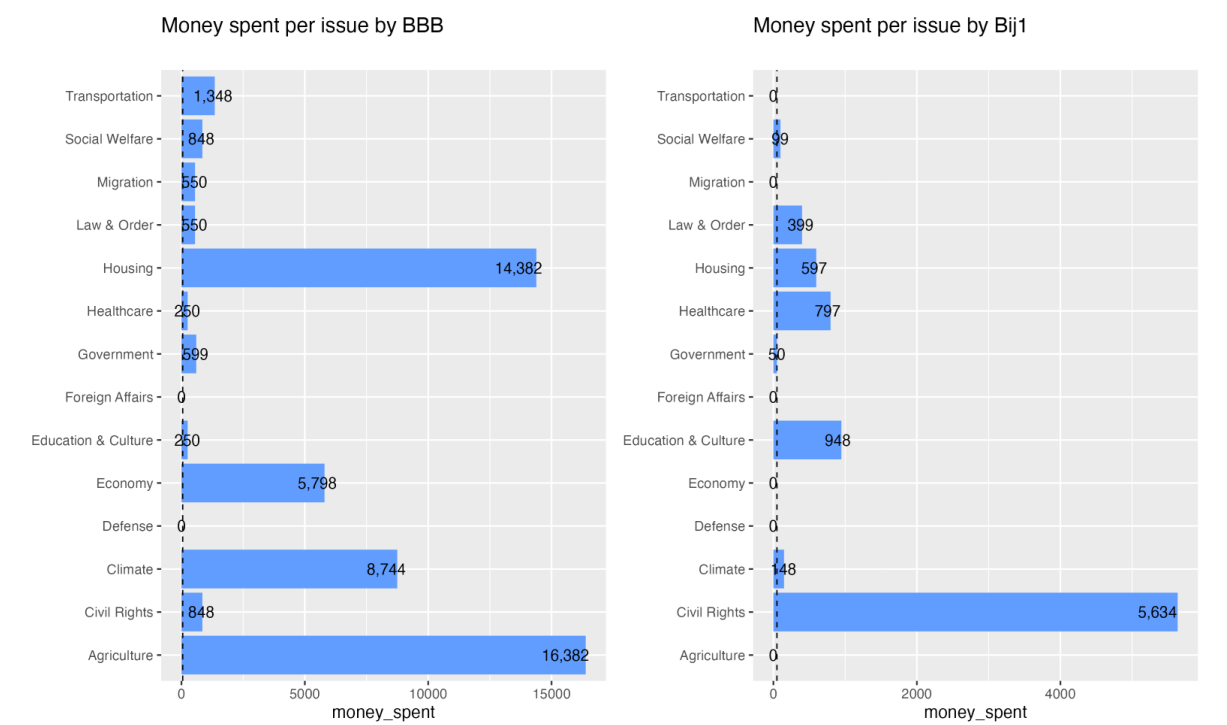
Figure 9. Spending per Issue by ChristenUnie & D66 (in EUR)

Money spent per issue by ChristenUnie

Money spent per issue by D66

Figure 10. Spending per Issue by Denk & FvD (in EUR)

Money spent per issue by DENK

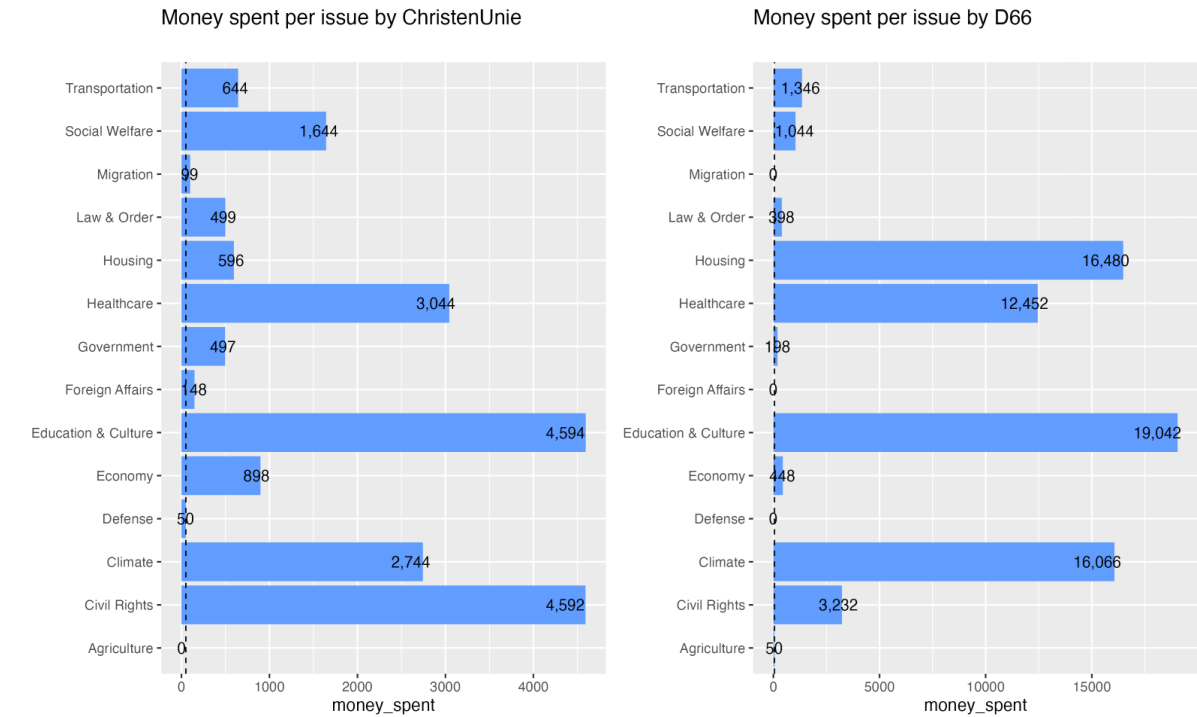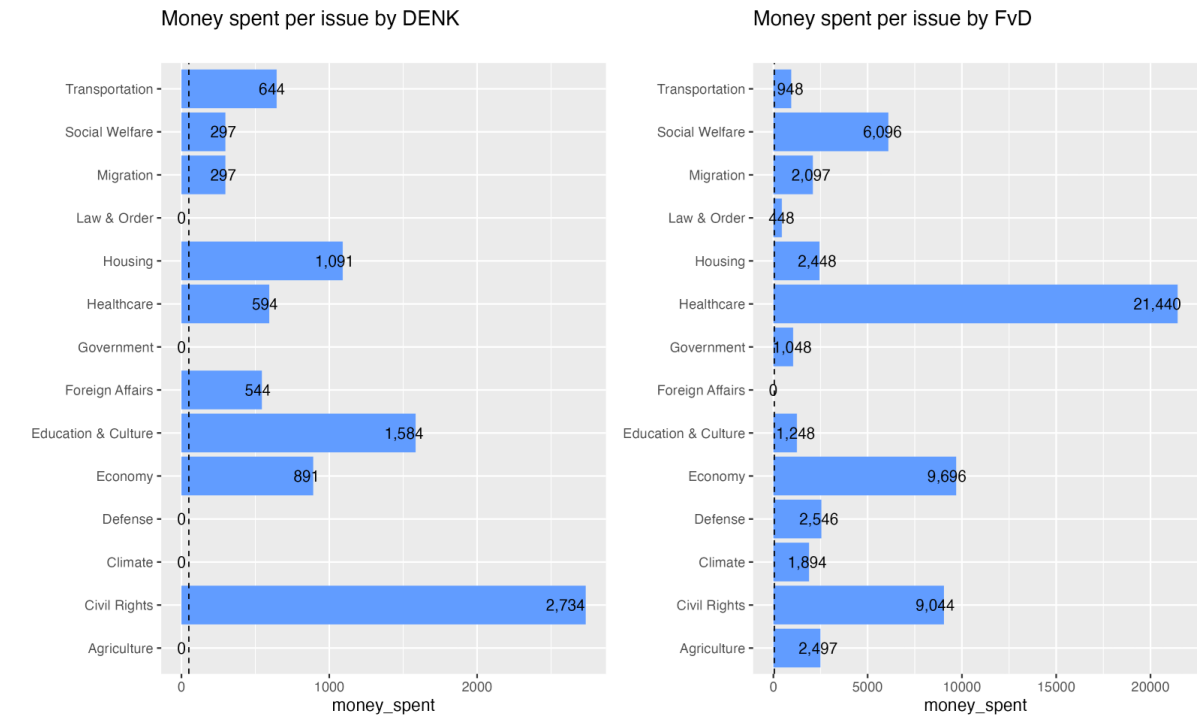Money spent per issue by FvD

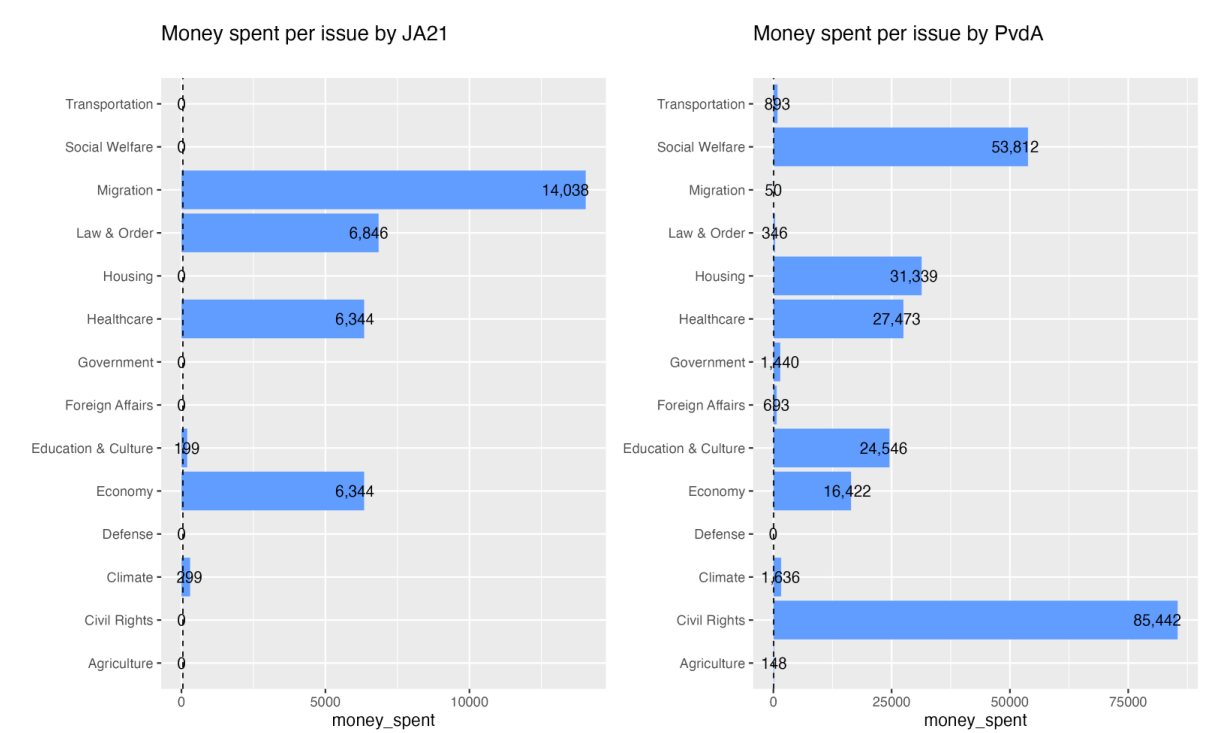**Figure 11.** Spending per Issue by JA21 & PvdA (in EUR)

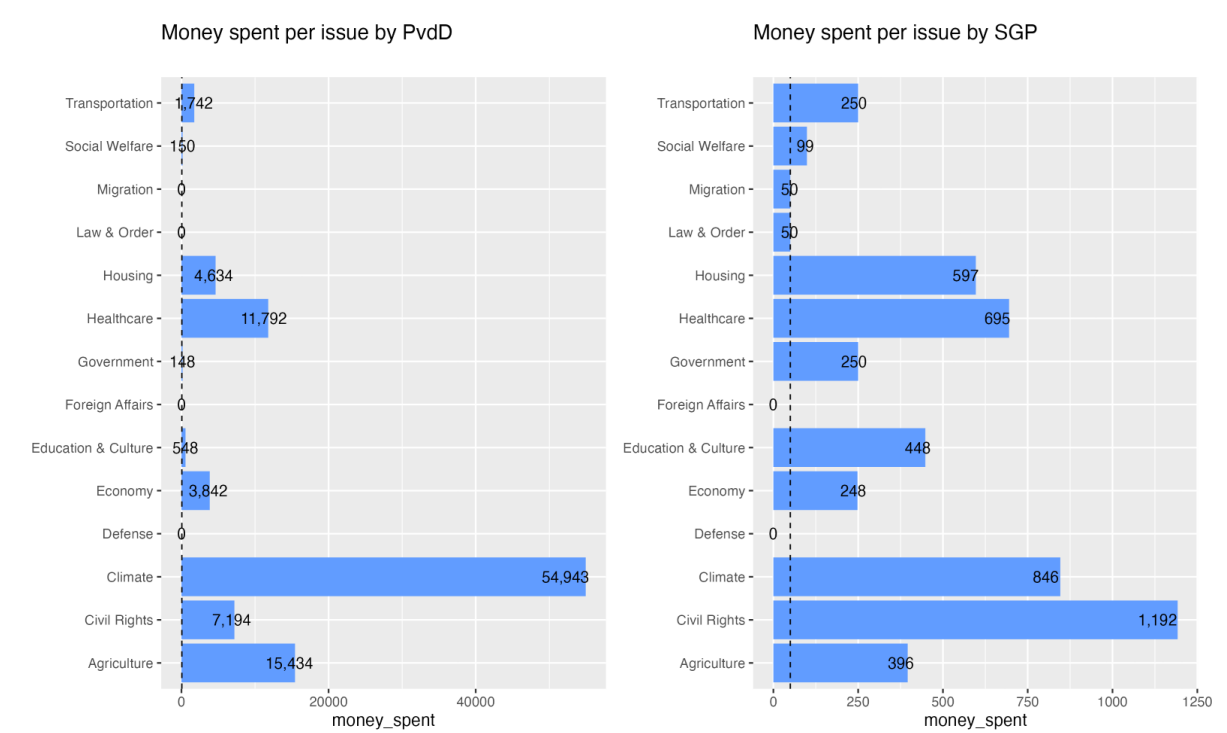**Figure 12.** Spending per Issue by PvdD & SGP (in EUR)
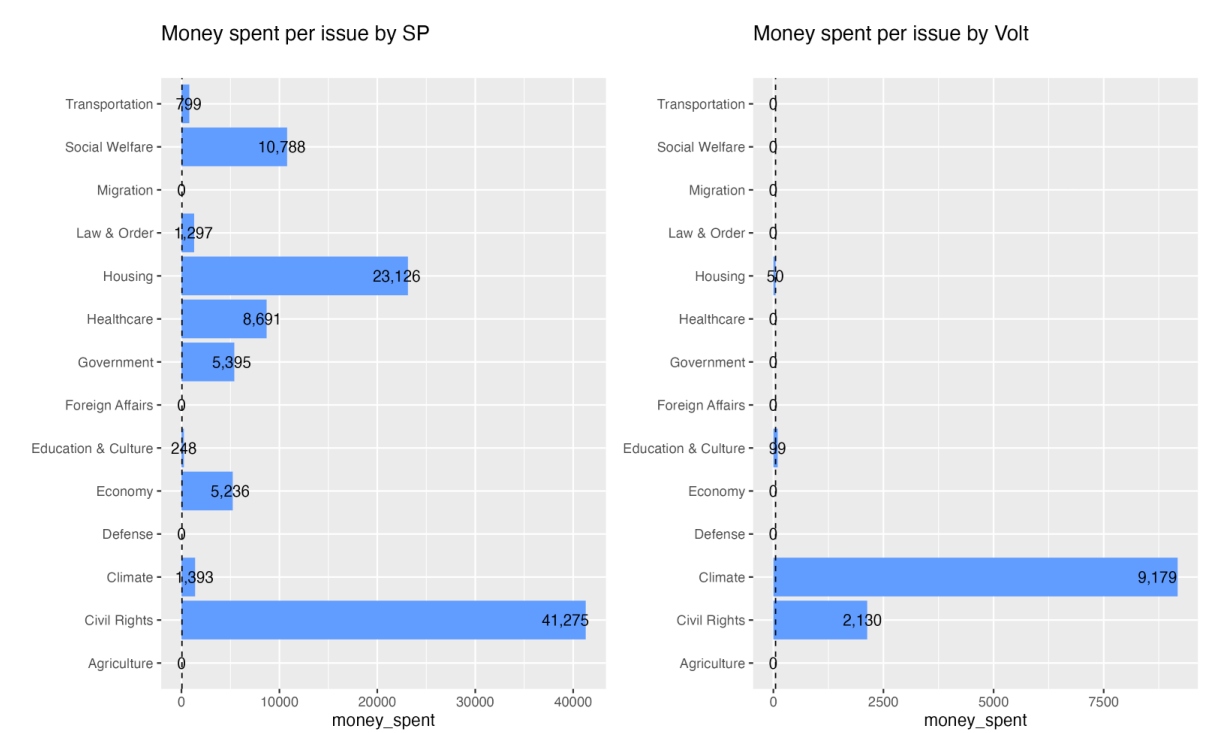
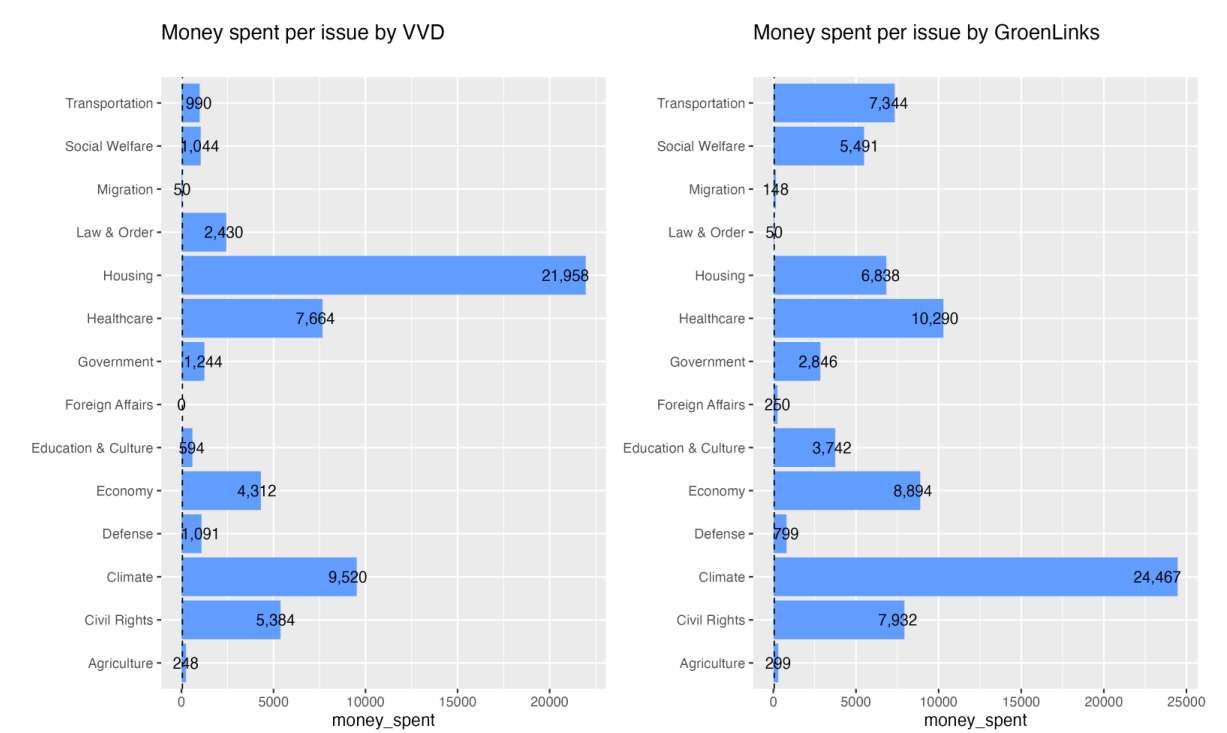**Figure 13.** Spending per Issue by SP & Volt (in EUR)

Figure 14. Spending per Issue by VVD & GroenLinks (in EUR)

Appendix F. The number of matched ads per party

Table 7. The number of matched ads per party

Party	# of matched	# of unmatched
50+	96 (59.26%)	66 (40.74%)
BBB	51 (85.00%)	9 (15.00%)
BIJ1	51 (27.42%)	135 (72.58%)
CDA	5,631 (49.12%)	5,832 (50.88%)
CU	83 (36.40%)	145 (63.60%)
D66	558 (36.54%)	969 (63.46%)
DENK	109 (26.33%)	305 (73.67%)
FvD	90 (31.80%)	193 (68.20%)
GroenLinks	174 (39.19%)	270 (60.81%)
JA21	47 (40.87%)	68 (59.13%)
PVV	1 (11.11%)	8 (88.89%)
PvdA	3,455 (78.08%)	970 (21.92%)
PvdD	201 (72.83%)	75 (27.17%)
SGP	54 (51.92%)	50 (48.08%)
SP	165 (38.92%)	259 (61.08%)
VOLT	84 (7.12%)	1,096 (92.88%)
VVD	486 (10.89%)	3,975 (89.11%)
Total	11,336 (44.00%)	14,425 (56.00%)

Appendix G. The number of ads per issue per party

Table 8. The number of ads per issue per party

Party	Ag	CV	Cl	De	Ec	EC	FA	Go	He	Ho	LA	Mi	SW	Ta
50+	0	0	0	0	9	0	1	0	18	31	1	0	37	0
BBB	36	3	11	0	4	1	0	2	1	36	1	1	3	3
BIJ1	0	31	3	0	0	3	0	1	6	6	2	0	2	0
CDA	57	1510	130	3	1231	297	0	484	185	823	305	161	1400	11
CU	0	26	13	1	4	12	3	6	11	8	2	2	11	13
D66	1	35	167	0	5	217	0	4	96	41	4	0	13	7
DENK	0	33	0	0	18	32	11	0	12	18	0	6	6	13
FvD	6	11	12	9	7	5	0	3	21	5	3	6	8	3
GL	2	35	66	2	12	17	1	7	20	23	1	3	18	11
JA21	0	0	2	0	11	2	0	0	11	0	7	25	0	0
PVV	0	0	1	0	0	0	0	0	0	0	0	0	0	0
PvdA	3	1500	29	0	255	407	14	19	454	522	7	1	876	14
PvdD	33	12	114	0	17	5	0	3	16	31	0	0	1	15
SGP	8	16	7	0	3	5	0	1	10	6	1	1	2	1
SP	0	50	14	0	27	5	0	10	18	48	6	0	25	2
VOLT	0	39	42	0	0	2	0	0	0	1	0	0	0	0
VVD	3	32	60	18	75	12	0	11	72	183	39	1	13	20
Total	149	3323	671	33	1678	1022	30	551	951	1782	379	207	2415	113