

# Does Media Coverage Drive Public Support for UKIP or Does Public Support for UKIP Drive Media Coverage?\*

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**Abstract:** Previous research suggests media attention may cause support for populist right-wing parties, but extant evidence is mixed and mostly limited to proportional representation systems in which such an effect would be most likely. At the same time, in the United Kingdom's first-past-the-post system, an ongoing political and regulatory debate revolves around whether the media give disproportionate coverage to the populist right-wing UK Independence Party (UKIP). We use a mixed-methods approach to investigate the causal dynamics of UKIP support and media coverage as an especially valuable case. Vector autoregression (VAR) using monthly, aggregate time-series data from January 2004 to February 2016 provides new evidence consistent with a model in which media coverage drives party support, but party support does not drive media coverage. Additionally, we identify and explore two key periods in which stagnating or declining support for UKIP is followed by increases in media coverage and subsequent increases in public support. Overall the findings show that media coverage may drive public support for right-wing populist parties, in a substantively non-trivial fashion irreducible to previous levels of public support, even in a national institutional environment least supportive of such an effect. The findings have direct and troubling implications for contemporary political and regulatory debates in the United Kingdom and potentially liberal democracies more generally.

*Keywords:* UKIP, media, public opinion, political parties, right-wing populism

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## Introduction

If the visibility of a political party in the media shapes the public support it receives, then the degree to which the media gives attention to different political parties can have significant implications for democracy. In the United Kingdom, critics allege that the media pays disproportionate attention to the populist, right-wing UK Independence Party (UKIP) but media elites claim that media coverage of UKIP is driven by increasing public support for the party. Descriptively, media attention to UKIP is greater than that given to other, similarly sized parties on the right as well as the left (Goodwin and Ford, 2013; Stevenson, 2014; Soussi, 2014), but UK media regulator Ofcom as well as the BBC have publicly defended the

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attention paid to UKIP on grounds of public support for the party (Sweeney, 2015; Wintour, 2015). Implied in this elite reasoning is a causal model, namely that public support drives media coverage rather than vice-versa.

Yet previous research from proportional representation systems suggests that public support does not drive media coverage for populist right-wing parties, but rather media coverage drives their public support (Boomgaarden and Vliegenthart, 2007, 2009; Vliegenthart, Boomgaarden and Spanje, 2012). By leveraging this insight to investigate the causal dynamics of UKIP support and media coverage, we fill an important gap in current research on the visibility-support nexus and contribute pragmatically relevant insights to a contentious public policy debate of broad social significance (Gerring, 2015). First, we contribute to current research on the visibility-support nexus by testing a key insight from this research in a new institutional context where the hypothesized relationship should be less likely. Because proportional representation systems are associated with a greater number of small parties (Duverger, 1972) and they tend to produce more diverse news (Benson, 2009; Sheaffer and Wolfsfeld, 2009; Kumlin, 2001; Strömbäck and Dimitrova, 2006; Baum, 2012), research confined to such systems is arguably most likely to reflect a model in which media coverage generates support for populist right-wing parties. In a first-past-the-post system, where we typically expect only two parties and media to be less diverse, these institutional pressures make it more difficult for the media to generate support for smaller populist, right-wing parties. Thus, testing this theory with time-series data from a first-past-the-post system contributes to either refining the scope conditions of previous research (in the case of unexpected findings) or else extending and strengthening our confidence in the media-support relationship. Secondly, we contribute to a pressing regulatory question in UK national politics, as the democratic quality of UK media regulation with respect to political party favouritism, especially regarding populist right-wing parties, remains on public trial. This article lends insight into the causal dynamics implied but rarely if ever tested within such popular policy debates.

The article begins by outlining the theory before moving to a discussion of our data, method and research strategy. We then present quantitative and qualitative analyses of the relationship between UKIP support and UKIP media coverage. A final section concludes.

## Theory

A large body of research suggests that mass media coverage, as the primary channel through which the electorate receives information about politicians and parties, affects many different aspects of electoral politics (Norris, 2000; Paletz, 1996; Beck et al., 2002; Dalton, Beck and Huckfeldt, 1998). If media coverage of political parties is driven by public support for the parties—even if media coverage then increases public support further—it could be argued that media are facilitating popular sovereignty. On the other hand, if media coverage independently changes public support rather than reflects it, this would represent a point of crucial possible distortion in the functioning of a democracy. The latent normative motivation for the present investigation is whether the quantity of UKIP’s media coverage represents a form of media bias which generates rather than reflects public opinion, or if the media’s fascination with UKIP is a democratically appropriate effect of public opinion.

One current of previous research on the dynamics of media coverage and party support

finds evidence consistent with the argument that the quantity of media coverage given to a political party drives public support for that party. Walgrave and De Swert (2004) find that, in time-series data from Belgium, the evidence reflects a model in which newspapers and television stations helped to increase the electoral results of the Vlaams Blok by emphasizing political issues owned by the extreme right-wing party. Boomgaarden and Vliegenthart (2007; Vliegenthart and Boomgaarden, 2010) find that in the Netherlands, quantity of media coverage on immigration-related topics is associated with a subsequent increase in the vote-share for anti-immigrant parties, controlling for objective factors such as levels of immigration. Boomgaarden and Vliegenthart (2009) also find, using time-series from Germany, that media coverage of immigrant actors is associated with subsequent change in public attitudes toward immigration, conditional on objective factors such as immigration levels. While much of the previous research above considers the political implications of issue coverage in the media, Vliegenthart, Boomgaarden, and Van Spanje (2012) advance this current further by analyzing time-series on the coverage of parties and public support for anti-immigrant parties per se in Belgium, Netherlands, and Germany. That study finds evidence suggesting that party and party leader visibility is associated with the electoral outcomes of the parties, but not vice-versa. In another study, media coverage was found to be one of the best predictors of electoral success in the 2007 Dutch election (Hopmann et al., 2010). Finally, it has been shown that in the Netherlands, media coverage of Fortuyn appears to have improved polling performance of the party before the 2002 election (Koopmans and Muis, 2009).

Considering research at the individual level, panel data from the Netherlands suggests that media coverage drives perceptions of right-wing populist politicians as well as mainstream politicians (Bos, van der Brug and de Vreese, 2011). Media coverage has also been found to help explain individual-level party preferences in Germany (Semetko and Schoenbach, 1994) and the Netherlands (Oegema and Kleinnijhuis, 2009). Based on this previous research, we test the following hypothesis.

*H1: Increases in media coverage of UKIP will be associated with increases in public support for UKIP, controlling for previous changes in public support.*

It is also theoretically plausible, as some scholars have argued, that changes in party support lead to changes in media coverage (Pauwels, 2010). As Vliegenthart and Boomgaarden (2010) consider, quantity of media coverage may be driven by the power and position of political figures. This pattern has been observed, in some cases, in America (Sellers and Schaffner, 2007) and Switzerland (Tresch, 2009). Sellers (2007) finds that the types of events U.S. Senators hold, and the guests of those events, affects the number of news stories written. Tresch (2009) finds that the amount of coverage given to Swiss legislators is most importantly a function of leadership and authority criteria related to the individual politicians. Although both of these studies focus on politicians rather than political parties per se, they suggest that variable aspects of political entities have predictable effects on media visibility. In a study on the diffusion of populist discourse in the media, Rooduijn (2014) argues from a study of five Western European countries (Italy, France, Germany, Netherlands, and United Kingdom) the electoral success of populist parties affects the degree of populism in the media.<sup>1</sup> There has been surprisingly little scholarship in this field of research in relation

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<sup>1</sup>Interestingly, in the study by Rooduijn, UKIP is classified as the least successful case of a populist party,

to either the UK or UKIP. As a rare example, Deacon and Wring (2015) offer a case study of newspaper coverage of UKIP over a similar time period covered in this article. They conclude that when media coverage did increase, this was because UKIP’s political standing made them hard to ignore. Therein, they offer a causal logic that it was the political support which drove media coverage rather than the reverse.

In line with this current of research, British media and media regulators have publicly argued media coverage given to political parties is based on public support for the parties. In its draft electoral guidelines published in January 2015, the BBC classified UKIP as deserving a degree of coverage comparable to the “larger parties,” because they “demonstrated a substantial increase in electoral support,” as measured by electoral and polling results, between 2010 and 2015 (Sweeney, 2015; BBC, 2015). Ofcom, the UK broadcast regulator, also included UKIP as a “major party” for the purposes of the 2015 General Election and local elections in England and Wales (Ofcom, 2015), also explicitly on the grounds of improved electoral and polling results since 2010 (Wintour, 2015). Based on this current of previous research and the stated reasoning of elite entities with uniquely strong influence on media agendas, we propose the following additional hypothesis opposite to H1.

*H2: Increases in public support for UKIP will be associated with increases in media coverage of UKIP, controlling for previous changes in media coverage.*

The remainder of the paper sets out to investigate these two hypotheses. The following section discusses the data and method we pursue before we then present our findings.

## **Data, Method, and Research Strategy**

To measure public support for UKIP, we gathered monthly aggregate polling data on vote intentions from Ipsos MORI (Ipsos-MORI, N.d.). Specifically, we constructed the variable *Support* from the percentage of respondents reporting an intention to vote for UKIP according to the Ipsos MORI polling for each month. For most months, this was straightforward because the Ipsos MORI poll is approximately monthly. For months with multiple polls, we used the poll closest to the middle of the month.<sup>2</sup> For the very few months with no poll or a poll at the border between the previous or following month, the value was counted as missing and then all missing values were linearly interpolated. To measure media coverage of UKIP, we gathered monthly counts of all UK national newspaper reports mentioning either “UKIP” or “UK Independence Party” from the database Nexis.<sup>3</sup> This resulted in 65,416 articles over

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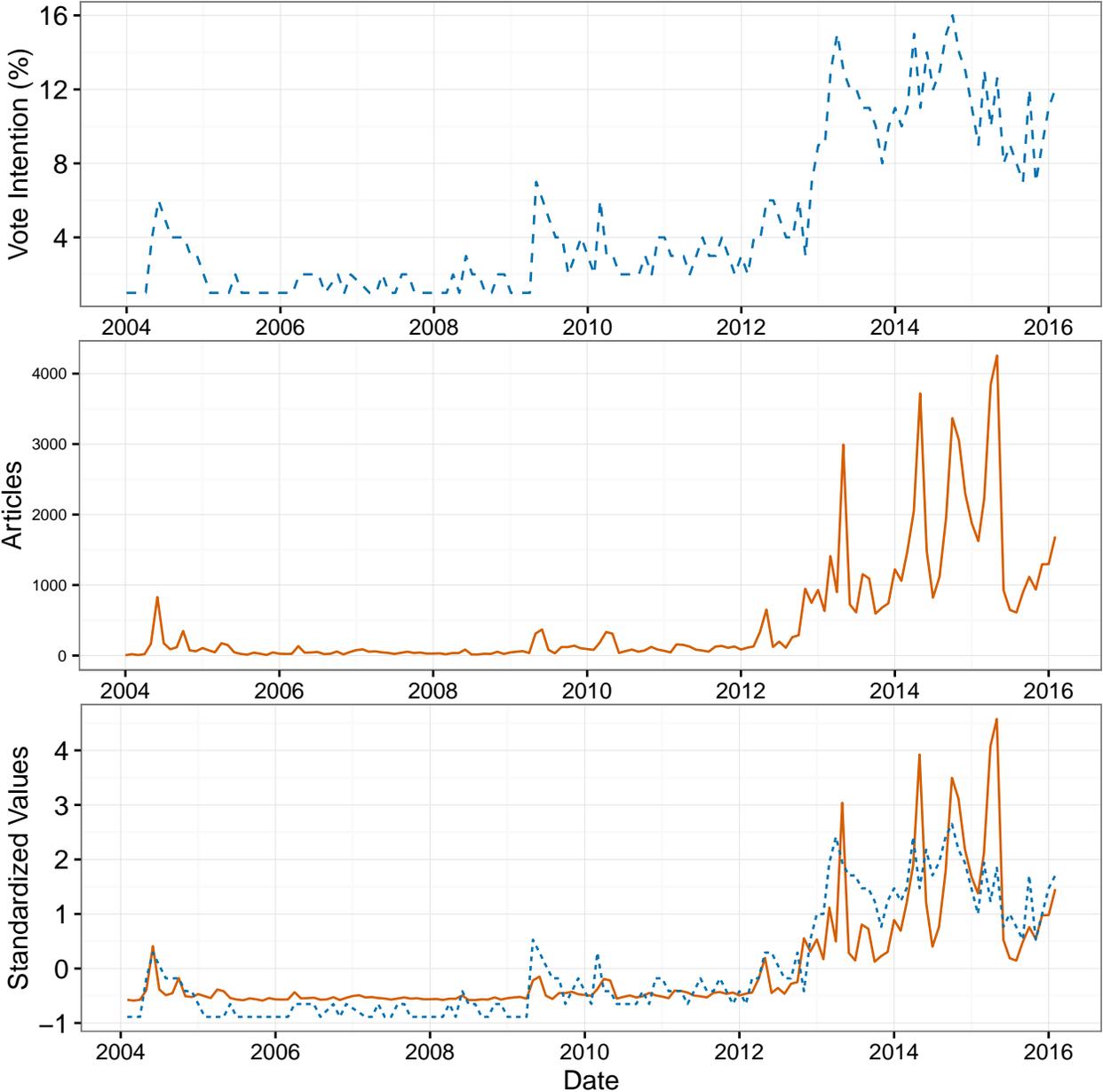
based on their electoral results as of 2005, yet populism in British newspapers in 2005 is near that found in Netherlands and Germany and greater than that found in France. Although the findings are interpreted as electoral politics driving media content, Rooduijn’s data show that in the UK at least, populism in the media was comparatively high in cross-national perspective before UKIP rose to its recent prominence.

<sup>2</sup>A drawback of this choice is that some polling information is lost, as some polls were not integrated into the dataset. An alternative would be to average all the polls for each month, but this would lead each monthly average to reflect different parts of each month (for instance, if one month has two polls only in the first half, and another month has two polls only in the second half). Because our main interest relates to dynamics, it seems more important to have consistent measures reflecting as close as possible the middle of each month, at the cost of some information loss, than to include more polls but inconsistently reflect different parts of each month.

<sup>3</sup>Duplicate articles defined by Nexis’s definition of high similarity were excluded.

the time period covered. There have been criticisms of such computer-assisted approaches, mostly notably by Althaus et al (2001), but we follow Boomgaarden and Vliegenthart (2007) in believing that, for these types of study, this is a reasonable and valuable way of measuring media coverage. This is the most efficient way to analyse large amounts of media content over a long period of time, an approach which is especially suitable for our present purposes given that we are only looking at quantity or intensity of coverage (i.e., the number of articles each month).

### Dynamics of UKIP Support and Media Coverage



The variable *Articles* reflects the number of articles Nexis returns from the first day of each month until the last day of each month. Figure 1 provides a summary view of the two main variables of interest. The dotted line represents *Support* and the solid line represents *Articles*. Raw values are displayed in the first two (top) panels. For ease of direct comparison

the bottom panel displays standardized scores in which each value is derived by subtracting the mean of the particular time-series and dividing by one standard deviation.

It is also plausible that elections have an independent effect on coverage and support due to general increased media attention and campaigning. For this reason, we have included eponymous dummy variables for the months of each national and European election within the sampling period. The elections included are three European elections (June 2004, June 2009 and May 2014) and three general elections (May 2005, May 2010, and May 2015). European elections coincide with local elections in the UK.

In the present analysis we do not consider public opinion on particular political issues, measures of objective political or policy dynamics, or the visibility of party leaders in the media, for several reasons. The first and main reason is dictated by our problem-driven approach. Because our contribution to the literature is motivated by a particular debate in the politics of British media, we focus on the parameters of that debate, which have revolved around party coverage. Although UKIP’s controversial leader Nigel Farage is likely a significant aspect of UKIP’s media visibility, coverage of Farage is almost certainly highly correlated with coverage of the party, as Vliegenghart, Boomgaarden, and Van Spanje find of party and leader coverage in multiple other Western European countries. Second, Vliegenghart, Boomgaarden, and Van Spanje also find that media coverage of parties is, overall, more relevant than party leader as a predictor of party support (Vliegenghart, Boomgaarden and Spanje, 2012, 333). While it is possible that phenomena such as objective immigration levels, media coverage of immigration, and/or public opinion on immigration may affect both UKIP party coverage and public support for UKIP, it is not theoretically straightforward that they should affect one of our main variables more, or sooner, than the other. Because we lack any particular theoretical perspective on such possibilities, and there are many additional causal factors which could arguably be included in this system, we refrain from proliferating additional variables (Achen, 2006).

We first use econometric techniques to test for, and distinguish the ordering of, potential causal dynamics between media coverage and public support for UKIP. An ideal approach to testing the presented hypotheses is vector autoregression (VAR) with Granger causality tests (Brandt and Williams, 2007; Vliegenghart, Boomgaarden and Spanje, 2012). Specifically, we estimate a VAR by OLS per equation, using the following form:

$$y_t = A_1 y_{t-1} + \dots + A_p y_{t-p} + D_t + u_t \tag{1}$$

where  $y_t$  is a  $K \times 1$  vector of endogenous variables and  $u_t$  is the error term. In our case the endogenous variables are *Support* and *Articles*. The coefficient matrices  $A_1, \dots, A_p$  are of dimension  $K \times K$ . By convention  $p$  denotes the “order” of the VAR, or the number of lags used. Typically this is determined empirically, as we do below. In addition,  $D_t$  refers to a vector of exogenous regressors. In our case the exogenous regressors include a constant term, a trend term, the dummy variable for UK General Election months, and the dummy variable for European election months. We then use the conventional F-type Granger-causality test for each of the two endogenous variables in the system. The vector of endogenous variables  $y_t$  is divided into two vectors  $y_{1t}$  and  $y_{2t}$  of dimensionality  $(K_1 \times 1)$  and  $(K_2 \times 1)$  with  $K = K_1 + K_2$  (Pfaff, 2008). The null hypothesis is that no lags of variable  $y_{1t}$  are significant in the equation for variable  $y_{2t}$ . If  $\alpha_{21,i} = 0$  for  $i = 1, 2, \dots, p$ , we say that  $y_{1t}$  does not

“Granger-cause”  $y_{2t}$ .

Additionally, a brief qualitative historical analysis of the dynamics is conducted to further probe any potential causal process(es). It is arguably a blindspot of quantitative time-series research to neglect inquiry into the substantive historical processes corresponding to the statistical properties of time-series data. In particular, the substantive nature of the puzzle at hand requires the identification of a historical narrative which would not necessarily follow from a statistical fact such as Granger causality. Even with econometric evidence suggesting an association in one direction or the other, it would not necessarily follow that a substantively and historically significant process has occurred in the particular and contingent history behind the time-series. For instance, it could be the case that, formally, media coverage Granger-causes public support *and* that exogenous increases in media coverage have played no particularly important role in the rise of UKIP support. This is because statistical properties of time-series in no way preclude the fact that the historically key moments of UKIP’s rise could have been random or contingent consequences of other factors. Also, it is always possible in any particular historical process that  $Y_1$  has an average effect on  $Y_2$  which is statistically significant but in key, contingent moments certain shifts in  $Y_2$  may explain unique changes in  $Y_1$  in a fashion which happens not to be statistically distinguishable. In the latter case, media-caused increases in public support might themselves be responding to, and amplifying, contingent but exogenous increases in public support in an arguably democracy-consistent fashion, even if increases in support do not statistically predict increases in media coverage.

To provide the strongest possible investigation of a possibly dynamic relationship between media coverage and UKIP support, we will need to assess the degree to which increases in media coverage have been followed by increases in public support for UKIP following *stag-nant or decreasing* levels of support in preceding months. We will then also need to assess the degree to which such identifiable historical moments were related to the relatively few key moments in which support for UKIP rises most dramatically. We explore these substantive questions with a brief narrative of the political events and media topics which lie behind our time-series data.

## Findings and Discussion

Because both variables are non-stationary, vector autoregression is estimated with first differences of each variable. Optimal lag length is determined by the Aikeke Information Criterion to be VAR(3). The model includes a constant and a trend term. Diagnostics suggest that using the log of each variable before differencing reduces heteroskedasticity and serial correlation of errors. The models displayed here all pass the standard ARCH-LM and Portmanteau tests for non-constant error variance and serial correlation of errors, respectively. Finally, diagnostics show no evidence of significant temporal instability (see Supplementary Information).

Initial VAR results show little evidence that changes in public support predict media coverage, but statistically significant evidence that media coverage drives public support. As the numerical results in Table 1 show, there is no statistically discernable correlation between past changes in public support and changes in media coverage, whereas past changes in media coverage have a statistically significant correlation with future changes in public support,

Table 1: Vector Autoregression

	<i>Dependent variable:</i>	
	$\Delta Support$	$\Delta Articles$
	(1)	(2)
$\Delta Articles_{t-1}$	0.100* (0.054)	-0.380*** (0.092)
$\Delta Support_{t-1}$	-0.500*** (0.100)	-0.025 (0.180)
$\Delta Articles_{t-2}$	0.091* (0.053)	-0.340*** (0.091)
$\Delta Support_{t-2}$	-0.260** (0.100)	-0.140 (0.170)
$\Delta Articles_{t-3}$	0.091* (0.052)	-0.190** (0.089)
$\Delta Support_{t-3}$	-0.110 (0.095)	-0.160 (0.160)
Constant	0.004 (0.070)	0.026 (0.120)
Trend	0.0001 (0.001)	0.0001 (0.001)
General Elections	-0.098 (0.240)	0.270 (0.420)
EU Elections	0.430 (0.260)	1.400*** (0.450)
Observations	142	142
R <sup>2</sup>	0.150	0.230
Adjusted R <sup>2</sup>	0.097	0.180
Residual Std. Error (df = 132)	0.400	0.680
F Statistic (df = 9; 132)	2.700***	4.400***

*Note:*

\*p&lt;0.1; \*\*p&lt;0.05; \*\*\*p&lt;0.01

as the coefficients for each distributed lag of  $\Delta Articles$  in Equation 1 are positive and significant. Because our endogenous variables are first differences of the natural logarithm, the coefficients can be interpreted as elasticities. That is, the coefficients in Equation 1 and Equation 2 are approximations of the expected growth rate in  $Y_2$  associated with a one percent increase in  $Y_1$  at each of its lagged values. To gain a sense of how *Support* responds to *Articles* after three periods, a simple approach would be to sum the coefficients for each distributed lag of  $\Delta Articles$  in Equation 1. A better approach is to use impulse response functions, which trace the effect of a random one-unit shock in one variable on future values of a second variable in the system.

In Figure 2 and Figure 3, we generate orthogonalized impulse response plots. We consider orthogonalized or uncorrelated shocks because we are most interested in what happens when one variable changes for reasons that do not also lead to changes in the other variable. The x-axis reflects time periods following on an initial shock in the error term of one variable, while the y-axis reflects the expected changes in the other variable. As reported in Table 2, Granger causality tests support H1 that changes in media coverage are associated with future changes in public support while they do not support the reverse relationship hypothesized in H2, as the true coefficients for the lags of  $\Delta Articles$  in Equation 1 are very unlikely to all be zero ( $p \leq .05$ ) while we fail to reject the possibility that all of the coefficients for  $\Delta Support$  in Equation 2 are zero ( $p = .74$ ).

Table 2: Granger Causality Tests

	Support	Articles
P-value	0.054	0.740
DF1	3	3
DF2	264	264
F-test	2.600	0.410

To interpret the estimated effect media coverage has on UKIP support, consider the impulse response function plotted in Figure 3. The maximum number of monthly articles observed in the sample is 4256, therefore a one-percent increase in articles is equal to a monthly increase of about 43 articles. The maximum value of *Support* is 16, so the first period of the impulse response (0.19) suggests that in response to a 43-article increase, *Support* would increase by about 19% of 1% of 16%. This amounts to an increase of roughly 0.03% of the population reporting an intention to vote for UKIP. While this hypothetical effect of a small increase in coverage is minute, the history of UKIP's media coverage contains several months of exceptionally large increases in reporting. 1% of months in the sample were characterized by article growth of 1649 articles or greater, that is, a growth rate of 38.75% or greater. By the preceding calculations, a 38.75% increase in articles would be associated with a 7.25% growth rate in *Support*, equivalent to a 1.16-point increase in the percentage of the population reporting an intention to vote for UKIP.

How does the statistical model help us to understand the historical rise of public support for UKIP? We can use the model to compare the actual, observed levels of UKIP support to the levels of UKIP support the model would predict under the hypothetical condition that

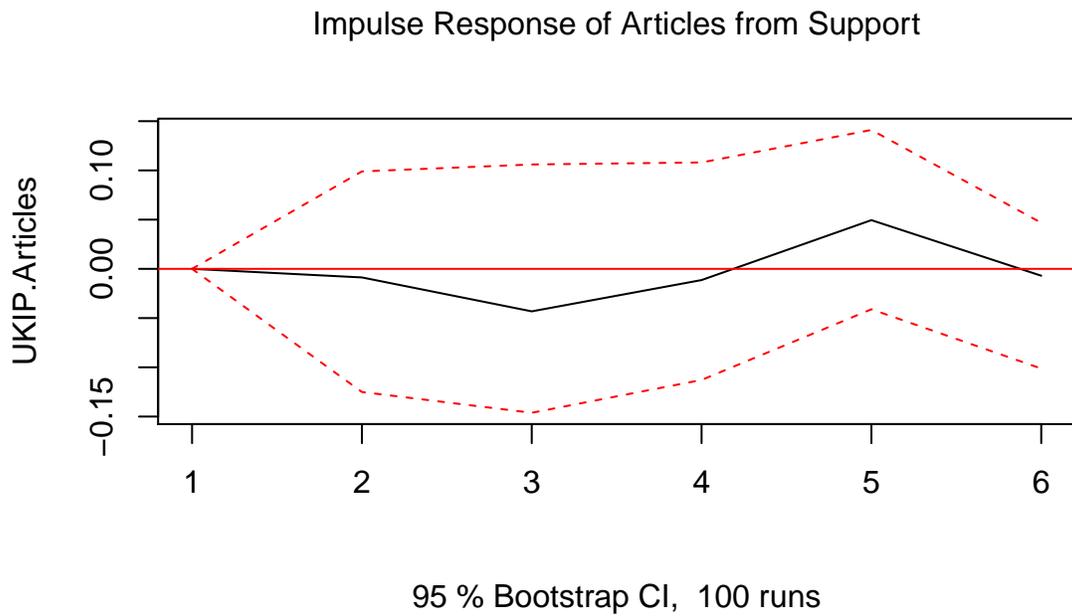


Figure 1: Impulse Response Plot Shows Effect on Articles from an Exogenous Increase in Support

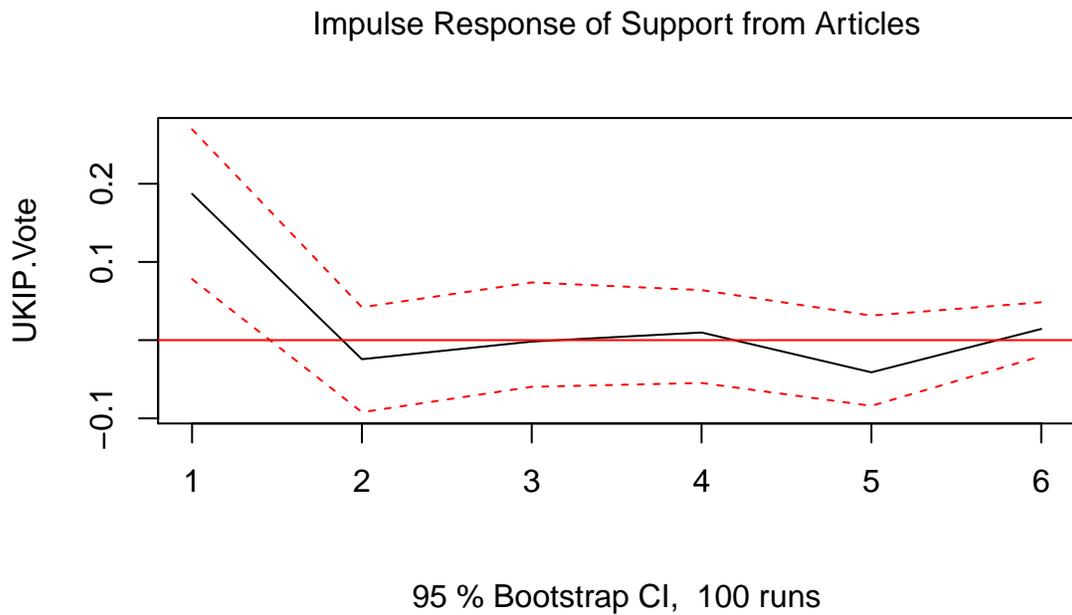


Figure 2: Impulse Response Plot Shows Effect on Support from an Exogenous Increase in Articles

UKIP received less media coverage over the past several years. To explore this counterfactual, we begin by estimating a traditional ordinary least-squares regression equivalent to Equation 1 with  $\Delta Support$  as the dependent variable. We then generate fake data exactly the same as that used in Equation 1 but we assign to *Articles* a monthly value equal to half of the observed value for each month between June 2012 and February 2016. After re-estimating Equation 1 on this counterfactual dataset, we then generate predicted values of the dependent variable. We then calculate the cumulative sum of these values and exponentiate the series to arrive at predicted unlogged levels of UKIP support. This gives us the time-series of *Support* we would expect to observe under the hypothetical condition that media coverage decreased by 50% (relative to each observed month) beginning in June 2012 until the end of the sample.

Given the counterfactual scenario of 50% less media coverage in all months from June 2012, Figure 4 plots the levels of UKIP support we would expect alongside the levels we have observed in the party's history. In the counterfactual scenario, support for UKIP still increases from June 2012 to February 2016 but more slowly, and to notably lower levels, than has been observed. UKIP support rose to more than 14% in UKIP's best months of 2013 and 2014, but if UKIP received 50% less media coverage we would not expect UKIP to exceed even 8% support until the end of 2014. Under the counterfactual scenario, UKIP support would rise no higher than 11.1% in May 2015 before dropping to 6.8% by February 2016, 5.8 points less than the last observed level of support.

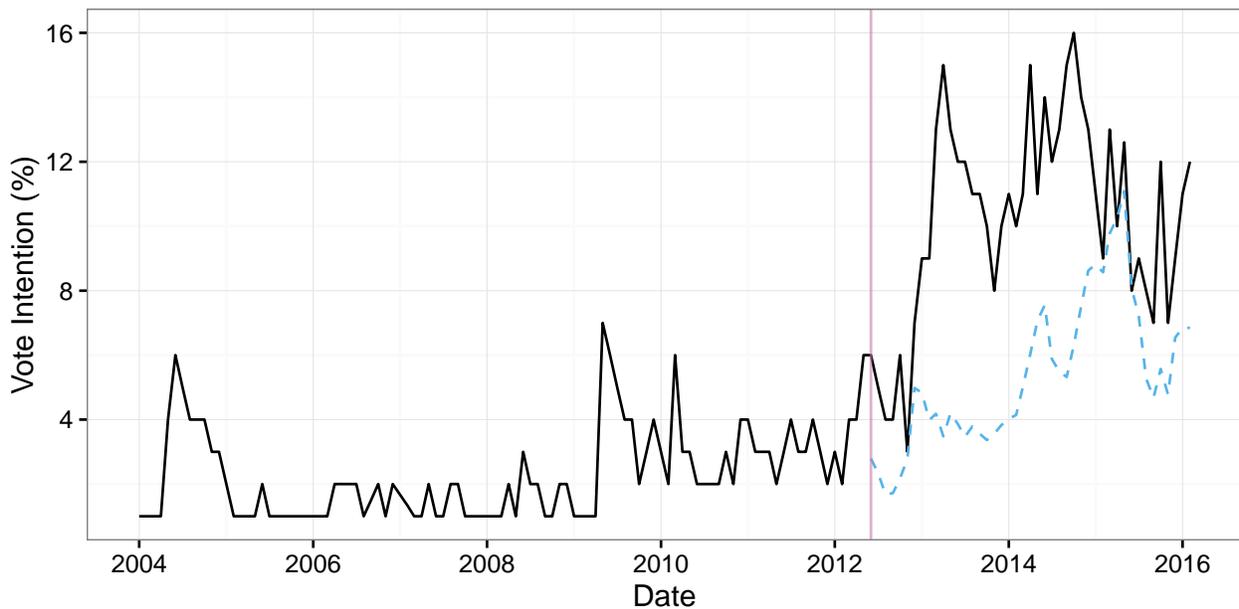


Figure 3: Observed vs. Predicted UKIP Support (Dashed Line) Given a Counterfactual 50% Less Coverage from June 2012 (Vertical Line) to February 2016

Finally with respect to the statistical modeling, we note there are limitations of the data which may make it difficult to identify the full range of causal effects in a VAR approach. First, it is possible that monthly measures are too infrequent to capture causal effects if the real lag between effects is shorter than one month. Also, importantly, structural tests on all models suggest strong evidence of instantaneous causality. Thus, the VAR results

suggest clear but imperfect and, for reasons discussed above, inherently limited evidence for Hypothesis 1 that increases in media coverage lead to increases in public support. Simulating counterfactuals shows that the dynamics of UKIP’s public support would likely have been notably less impressive given quantities of media coverage comparable to that typically received by other parties. The VAR results provide no evidence for Hypothesis 2, that increases in public support lead to increases in media coverage. Given the problem of instantaneous causality, we cannot rule out the possibility that both variables drive each other in periods shorter than one month or that both variables are driven by some third unobserved variable. Nonetheless, an empirical fact of our data is that media coverage Granger-causes public support and not vice-versa.

## Qualitative Analysis

To what extent are the statistical regularities identified by the vector autoregression historically significant causal factors in the rise of public support for UKIP? To facilitate a qualitative investigation of the dynamics, we quantitatively identified months which meet criteria similar to the concept of Granger causality. Any month ( $t$ ) that is immediately preceded by two months ( $t - 1, t - 2$ ) of stagnating or declining public support but increased media coverage, we designate as a month of “uncaused” media increase or media “bias” for short. Symmetrically, any month that is immediately preceded by two months of stagnating or declining media coverage but increasing public support, we consider a month of “uncaused” or exogenously increasing public support. To mitigate the probability we will be counting mere noise as meaningful increases, we count as increases only those greater than .05 standard deviations and all other months as “stagnating or decreasing.” Figure 4 presents the standardized values of each time series with dot-dash vertical lines indicating months of uncaused media ‘bias’ and long-dash vertical lines indicating months of uncaused increases in public support. A first consideration of Figure 4 reveals that increases in media coverage unwarranted by public support are not only roughly as frequent as uncaused increases in public support, but they are found at multiple pivotal months in periods of the most dramatic increases in UKIP’s public support. To be clear, we are not claiming to pinpoint key moments of causal effect; in any particular point of the time-series, it is impossible to know whether a particular pattern represents a random or systematic component. Rather, we take the evidence from the VAR to be our warrant for exploring the qualitative data in search of examples whereby the substantive significance of the statistical evidence may either be better illustrated or possibly discounted due to untheorized contingencies. Based on our preliminary explorations summarized in Figure 4, we focus especially on two key periods: from July to September of 2012, and the second half of 2013.

UKIP, formed in 1993, began fielding European parliamentary candidates in 1994 and British parliamentary candidates in 1997. Since then, the party has enjoyed mixed but notable increases in public support and in electoral outcomes, particularly in the European parliament where the party was the largest in the 2014 election. Until the 2015 general election, UKIP’s domestic electoral success had been much less impressive, receiving just 3.1% of the vote in 2010. Like other small or new parties, it has a history of infighting, changes of direction and leadership, and problems with financial mismanagement (Whitaker and Lynch, 2011). As recently as 2011, a lack of media attention was cited as a factor in

UKIP's poor performance, as well as credibility and relatively few activists (Ford, Goodwin and Cutts, 2012). Indeed, the historical pattern of both media coverage and public support for UKIP over much of its recent history, from 2004 to 2009, was a series of small increases which consistently returned to low baseline quantities of little political consequences.

The party experienced its first bump in both coverage and voting intention in 2004 with the European election, in which they received 16% of the vote, where coverage reached 829 articles in a single month, their record amount of coverage at the time and the greatest amount of coverage the party would experience until 2012. During this spike, both media coverage and voting intention increase proportionately and as would be expected if coverage was driven by public opinion: Figure 2 indicates no bias or exogenous increases of support in this instance. Following this, both coverage and support decay and return to politically negligible levels. Over the next eight years, there are a range of events that do not attract very much media attention or public support; indeed, events occur between these years that are similar to those that will occur in later years but they fail to generate the extraordinary media attention gained by such events in later years. The vast majority of coverage is "in passing," such as everyday reports of election results, or else it is negative, regarding claims of fraud and infighting. Indeed, Figure 2 shows that this period was characterised by exogenous increases of support not tracked by media coverage, supporting the claim that a lack of media coverage failed to facilitate public support through this period (Ford, Goodwin and Cutts, 2012). In some ways, the identification of the two series following each other without any 'bias' and of exogenous increases of support gives us some confidence in the findings of bias discussed earlier.

Apart from the 2005 election, in which UKIP received little coverage and performed poorly (receiving just 149 articles in that month) (*Election 2005: UKIP and Greens fail to make gains*, 2005; Morris, 2005), UKIP saw little change in public support or media coverage until the European elections of 2009. There is a small boost in both support and coverage in April 2006, when David Cameron calls the party 'fruitcakes, loonies' and 'closet racists' (White and Watt, 2006). Interestingly, this rise in media coverage was followed by a small but sustained boost in public support, which persisted for three months. In April 2008, Conservative MP Bob Spink defected, giving UKIP their first MP which generated very little coverage, despite being called a coup (Winnett and Prince, 2008). Even the European election in 2009, in which UKIP came in second place, generated far less coverage than the 2005 European election, where the party came in third place (829 to 320 articles in a month, respectively). Despite this, it was still hailed as a 'political earthquake' (Watt and Taylor, 2009) and garnered coverage for UKIP's leader Nigel Farage.

Following this, there are at least two sets of months in which increased media coverage is not caused by changes in UKIP's public support but is followed by some of UKIP's most historically crucial increases in public support. Using Figure 4 as a guide, we consider in greater detail the two months of "uncaused" increases in coverage near the middle of 2012 (July and September) and the second half of 2014 (August and November). Readers may refer to Supplementary Information for an additional plot that magnifies this particular section of Figure 4. This period includes a three by-elections (Corby, Middlesbrough and Rotherham), with many being controversial (Wainwright, 2012), as well as the UKIP party conference. All three of these by-elections occurred in November 2012; UKIP placed second in two and third in Corby, with the Rotherham by-election's 21% vote share being the party's

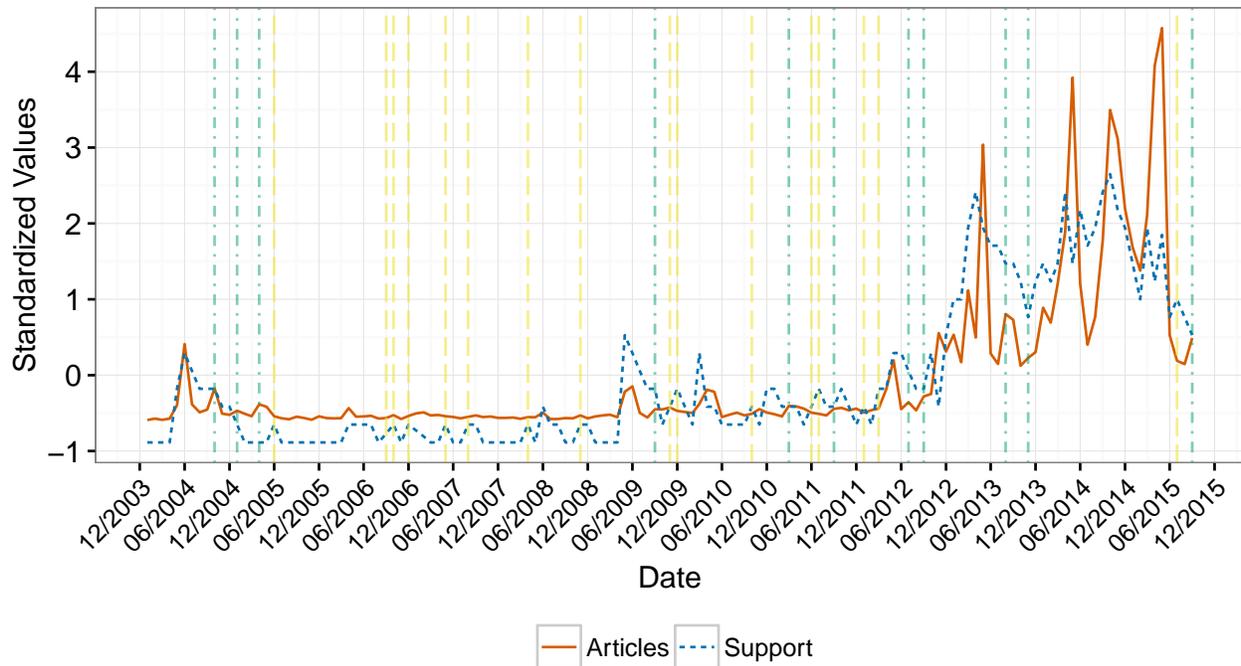


Figure 4: Standardized Time-Series, Green Dot-Dash Lines Indicate Media “Bias” and Yellow Long-Dash Lines Indicate Exogenous Increases in Support

highest up to that point. In July 2012 UKIP’s public support was unremarkably near its average and was declining from June, after it had been stagnant since May. But media coverage held relatively steady, slightly decreasing once but slightly increasing twice (and slightly increasing overall) from June to September, from 123 to 261 articles. It is only at this point that public support increases notably from September to October and is followed by a spike in media coverage that likely represented a moment of positive feedback ending in the first truly significant rise of UKIP into mainstream public consciousness - up to 15% support in April 2013.

Between August and November 2012, the amount of articles covering UKIP increased from 198 to 948, the most they had ever received in one month at the time, beyond three standard deviations from their long-term mean. To be clear, this dramatic surge of UKIP support appears to launch with a moment of positive feedback between support and media coverage, beginning with a notable spike in public support. However, the months of July and September 2012 are months in which media coverage is slightly increasing despite stagnant or declining levels of public support, and it is these dynamically unresponsive months of media coverage that precede the spike in support observed in October. Of course, it is impossible to distinguish these slight increases in media coverage in July and September from random noise in the polling; but from the statistical analysis we have reason to believe such moments of unresponsively increasing media coverage are at least comparatively more likely to be predictive of changes in support than vice versa. Thus, while it would be impossible to demonstrate conclusively that these months of media coverage played a causal role in the dramatic rise of support achieved by November, our model suggests it is more likely these unresponsively stable and slightly increasing months of media coverage played a causal role

in the increased support of October, than it is that the increased support in October played a causal role in the then-highest level of media coverage seen in November. In turn, the unprecedentedly high levels of media coverage in November likely played more of a role in the following spike of support than the October spike in support played in the November spike in media coverage. This interpretation is enhanced by the additional fact that after the spike in support of October, November returned to the lowest level of support observed in several months. Again, while we cannot confidently read causal dynamics in particular data points, the point is that the increase in support of October, which ostensibly seems to be followed by a spike in media coverage ultimately leading to UKIP's real debut, is a less plausible interpretation of the data than one based on Hypothesis 1.

Now consider the period between July 2013 and December 2014. Despite public support declining rapidly and steadily from its high point in April 2013, media coverage from July to August increases considerably, from 613 to 1154 articles in the month. Public support continues to decline through August until November, decreasing from 11% to 8%. While media coverage appears to adjust dynamically downward after its "uncaused" increase of August, yet again in November media coverage stabilizes and slightly increases. It is only at this point in November that support ends its long and steady decline and yet again begins another substantial increase until it returns back to the high levels of April 2013. Again, in these two months we identify apparently minor but potentially crucial non-dynamically-responsive levels of media coverage which may be functioning as a floor preventing support from continuing to decline and making possible the surge beginning from November 2013. While of course these spikes and drops in support may just be volatility around UKIP's new, higher mean levels of support, the key point here is only to explore and give possible instances of the statistical findings. Unlike the previous instance of "bias" explored above, where political events such as by-elections and the party conference season may have played roles, in this case there are no obvious and directly party-related events shaping the dynamics in this period. However, one key event which may have played a role at this time is the lifting of work restrictions on Romanian and Bulgarian nationals which occurred in January 2014 (Martin, 2013), with media coverage intensifying in the months leading up to January. The increased salience of issues related to migration and the European Union may help to explain changes in media coverage independent of UKIP's support. Interestingly, considerable coverage also surrounded Farage's comment, in December 2013, that Britain should accept Syrian refugees (Goodman, 2013).

Previous studies have relied on statistical models similar to the one we have presented here. However, this may ignore interesting dynamics hidden within the data about what is happening in the relationship between media coverage and public opinion. A qualitative appreciation of the data indicates at least two key examples where increased media coverage unwarranted by changes in public support take place in key periods of UKIP's rise.

## Conclusion

This study has made three contributions. Firstly, to our knowledge this is one of the first articles to study the dynamics of right-wing populist party support and quantity of media coverage in the context of a majoritarian system and the UK in particular; previous research has primarily focused on other Western European democracies such as Belgium, the Nether-

lands and Germany. Despite the change in political system, our findings support those of (Vliegenthart and Boomgaarden, 2010; Vliegenthart, Boomgaarden and Spanje, 2012), as we find quantitative and qualitative evidence that media coverage may have played a unique causal role in increasing support for UKIP, in a fashion irreducible to previous levels of support or election outcomes.

Second, these findings are of significance to contemporary public debate in the UK concerning the perception that unfair quantities of media coverage are given to UKIP. Some have argued that extensive media coverage of UKIP is justified due to public support for the party. The findings here, on the other hand, are inconsistent with this argument: the extraordinary media coverage which has been given to UKIP cannot be explained or defended on grounds of public support. We find that media coverage has no reliable relationship to public support in the one month, two months, or three months before a particular month of coverage. Indeed, we find that coverage may have independently and uniquely driven some of the very public support which media regulators would later point to as their justification for the extraordinary coverage given to UKIP. Our findings therefore raise serious questions for the function of media coverage in a democratic political system, because they suggest that unelected and unrepresentative actors (the media) may be systematically shaping public opinion toward, and the fortunes of, certain political parties in contradiction to organic levels of public support for those parties.

Third, this article contributes to currently on-going efforts to advance the methodological aspects of research on media and public opinion (Vliegenthart, 2014). Unlike many quantitative studies, we provide an analytically sophisticated qualitative investigation of our statistical findings. Most previous research on the visibility-support nexus relies primarily on statistical evidence, which cannot necessarily address important questions relating to the substantive historical narrative of a particular political party. We find that, in two periods, increases in media coverage came after two months of stagnating or declining public support but was then followed by historically pivotal increases in support. While we cannot claim these periods are definitive instances of causality, they show that the particular and contingent historical unfolding of UKIP is consistent with the inference, suggested by our statistical analysis, that media coverage played a unique and important causal role in the rise of public support for UKIP.

As with all studies, there are limitations to the present study and certain areas for future research may be indicated. We have left aside the question of leader effects, given previously ambiguous findings. We do not undertake any form of content analysis to address the actual content of the coverage in question, but only look at the quantity of articles. It is possible that, by disaggregating the coverage further, different types of coverage may have different effects; it would also be interesting to see whether the positivity or negativity of coverage matters for future levels of public support. Similarly, we do not disaggregate between types of newspapers, such as broadsheet or tabloid, which may offer different types of coverage and have different effects. We also only focus on print media. This means that we have not accounted for the effect of visual and social media which may play a role in dynamics of party support.

Supplementary Information

Diagram of fit and residuals for UKIP.Vote

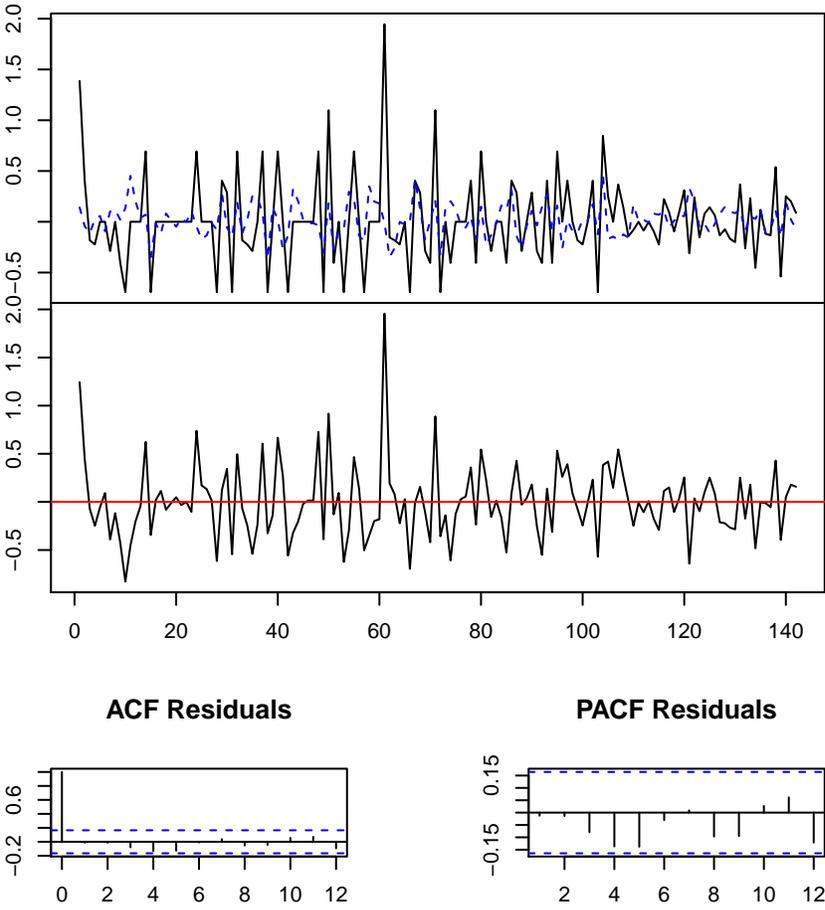


Figure 5: VAR Diagnostics for Support

### Diagram of fit and residuals for UKIP.Articles

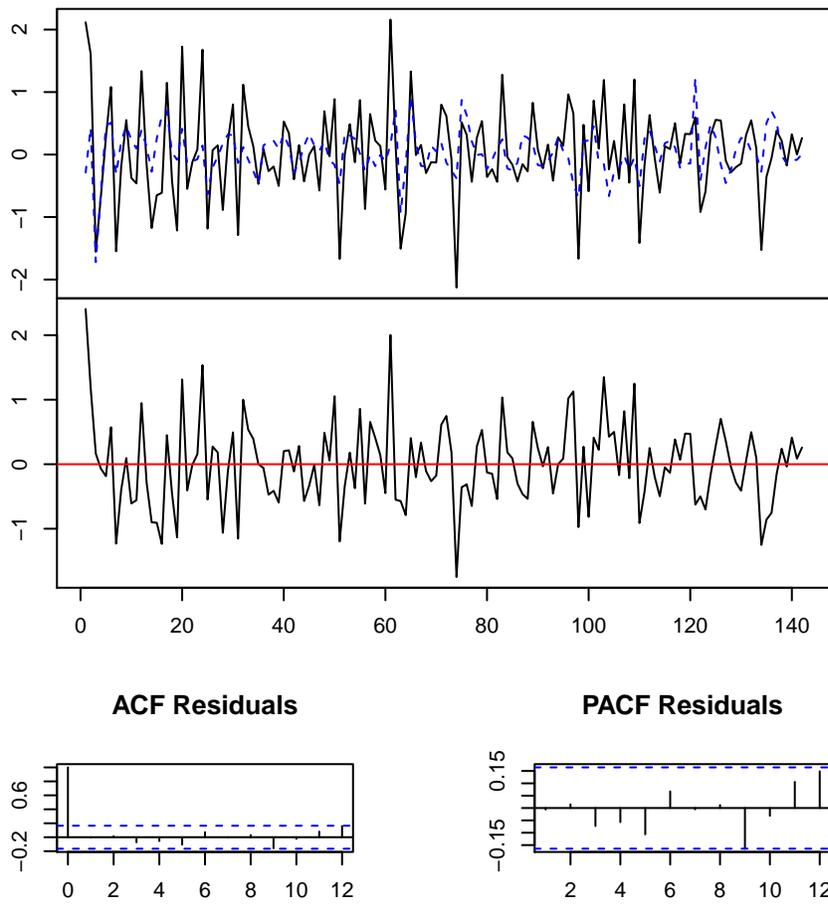


Figure 6: VAR Diagnostics for Articles

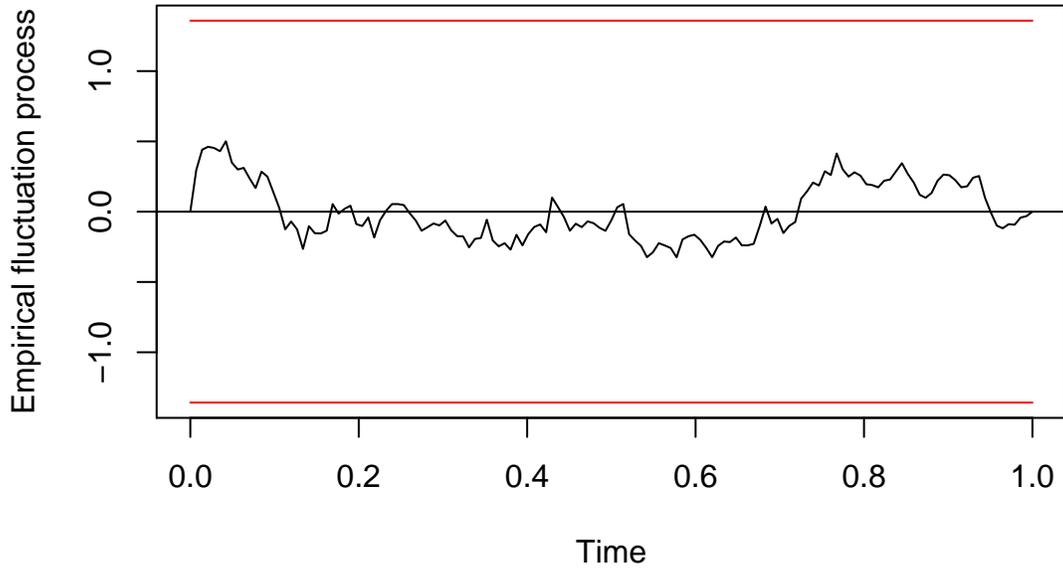
*Breusch-Godfrey Test of serially correlated errors for VAR model*

```
##  
## Breusch-Godfrey LM test  
##  
## data: Residuals of VAR object varmodel  
## Chi-squared = 20, df = 20, p-value = 0.2
```

*Multivariate ARCH-LM test for heteroskedasticity in Var model*

```
##  
## ARCH (multivariate)  
##  
## data: Residuals of VAR object varmodel  
## Chi-squared = 40, df = 40, p-value = 0.8
```

### OLS-CUSUM of equation UKIP.Articles



### OLS-CUSUM of equation UKIP.Vote

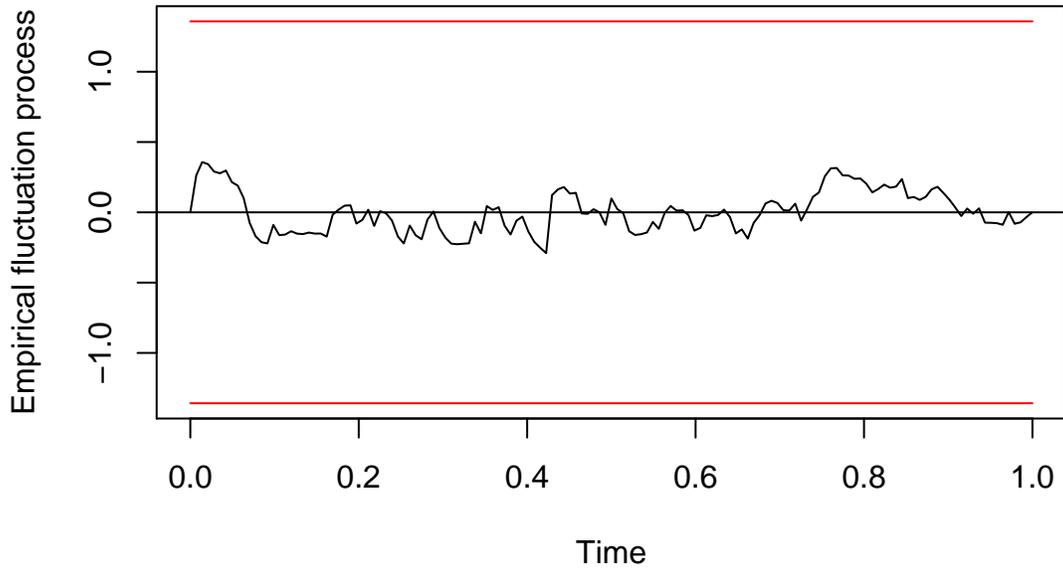


Figure 7: Checking temporal stability of VAR model with cumulative sums of residuals

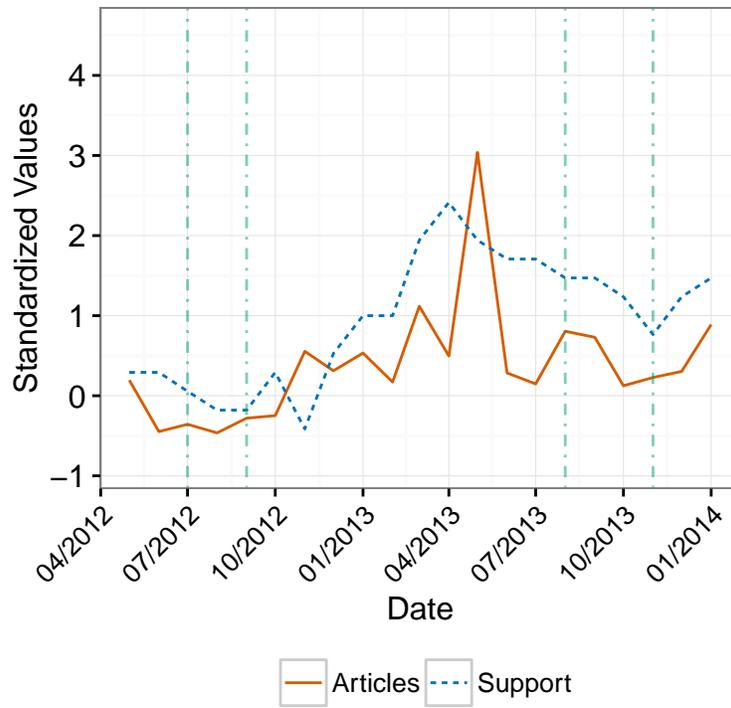


Figure 8: Standardized Time-Series with Green Dot-Dash Lines Indicating Non-Responsively Increasing Media Coverage, April 2012 to January 2014

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