

# The Effect of Voters' Economic Perception, Brexit and Campaigns on the Evaluation of Party Leaders over Time.

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*When and why do voters change their evaluation of party leaders? Voters' evaluations of party leaders are an increasingly important determinant of electoral behaviour. Which factors influence these evaluations of party leaders? Do voters evaluate party leaders who hold the office of prime minister differently from other party leaders, and do electoral campaigns and issues change these evaluations? I use a multilevel growth model with panel data from the United Kingdom to analyse effects over time. I find that campaigns play a significant role and that voters' stance on Brexit has a considerable effect that varies over time. In addition, voters hold party leaders holding the office of prime minister accountable for bad economic performance. This effect is stronger during election campaigns. These findings have important implications for the personalisation of politics and further explain campaign dynamics in the 2017 general election.*

Keywords: personalisation of politics, party leader, prime minister, campaign, Brexit, 2017 general election

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## Introduction

Why do voters change their evaluation of party leaders? The electoral impact of voters' perception of party leaders in parliamentary elections has been extensively covered (Aarts

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et al., 2011; Garzia, 2014; Lobo and Curtice, 2014; Mughan, 2015) and the influence of party leaders in elections may further increase as established democracies are becoming more and more personalised (Wattenberg, 1991; Poguntke and Webb, 2005; Rahat and Sheaffer, 2007). Scholars have argued that such a personalisation of parliamentary democracies may endanger democracy. Voters may no longer hold parties accountable for their behaviour in office, but rather rely on their feelings towards party leaders (Curtice and Hunjan, 2011; Huber, 2014). These concerns would be less pressing if voters' changes in this evaluation are caused by political issues. In this study I address these concerns by studying voters' evaluations of party leaders over time. Until now electoral studies have mainly focused on the between-person-effect of party identification (King, 2002; Oscarsson and Holmberg, 2011) to explain differences in voters' feelings towards party leaders. These studies argue that voters who identify with a party are also more likely to evaluate the leader of that party more positively. In contrast the within-person-effect of changes in party identification on the evaluation of party leaders has received less attention. Naturally, many electoral studies have focused on the evaluation of party leaders at the time of parliamentary elections. In consequence they only provide a cross-sectional view on the evaluation of party leaders by the electorate. A longitudinal analysis will foster our understanding of how voters form and change their evaluation of party leaders.

In addition, this study also explains campaign dynamics in the recent 2017 general election. Mellon et al. (2018) have shown that the 2017 general election campaign was characterised by considerable changes in voters' perception of the two party leaders, Theresa May and Jerney Corbyn. A longitudinal analysis of will be able to explain these dynamics. In electoral campaigns parties seek to present their party leaders in the best way possible (Milazzo and Hammond, 2017). Do these campaigns persuade voters to change their evaluation of party leaders? In this study I analyse the effect of several factors on voters' evaluations of party leaders: that of campaigns as well as the within- and between-person-

effects of voters' party identification, and their stance on Brexit. I furthermore analyse if voters hold party leaders who hold the office of prime minister accountable for the state of the economy.

The rest of the paper is structured as follows: Firstly, I discuss potential causes of voters' evaluations toward party leaders. Secondly, I provide a descriptive analysis on how voters' evaluations of the party leaders under study developed over time. Following this analysis I identify relevant events and the specification of each party leaders multilevel growth model. Thirdly, I discuss my findings, their robustness and how further studies may depart from unanswered questions.

I find that the feelings of voters towards the respective parties and voters' stance on Brexit have a significant impact on their evaluation of party leaders. The effect of Brexit furthermore increases over time as the issue itself becomes more salient. Voters' perception of the economy mostly matters for the two party leaders who held the office of prime minister (Theresa May and David Cameron). The effect voters' economic perception is negligible for other party leaders.

## **Causes of Party Leaders Evaluations**

What causes voters to evaluate some party leaders more positively than others? In this section I discuss two potential mechanisms behind voters' evaluation of party leaders: Firstly, as a result of voters' partisan attachment. Secondly, based on the future utility voters expect to receive from the party leader's actions.

A frequent argument levelled against the electoral impact of party leaders is the hypothesis that voter's evaluation of party leaders heavily depends on their feelings towards the party as a whole (King, 2002; Oscarsson and Holmberg, 2011). Voters who identify with a party tend to also evaluate the respective party leader positively. Especially the party

identification of voters is considered to influence their evaluation of party leaders (Campbell et al., 1966) and to be unaffected by short-term factors like voters' feelings towards party leaders. Partisans are likely to evaluate the leaders of their party more positively than non-partisans. However, this relationship has mostly been described with between-person-differences in party identification and party leader evaluation. Analysing the effect of within-person changes of party identification on the evaluation of party leaders will provide further insight and reduce the change of biases due to other between-person-differences. Party identification as a cause of party leader evaluation has also been critically examined (Garzia, 2011, 2012; Garzia and De Angelis, 2016) and causality could run in both directions. Some voters may feel attached to certain parties because of their emotional attachment to the leaders, and some voters may feel more positively about these leaders, simply because they belong to a certain party. In electoral studies, party identification is an important factor of political behaviour and omitting the party identification of individuals may bias results when analysing the evaluation of party leaders. In addition, parties overwhelmingly exist for longer periods than politicians lead those parties which eventually limits the effect of a party leader on partisan attachment. Since party leader evaluations are conceptualised as a short-term factor and party identifications still remain a more stable mid-term factor (Johnston, 2006) I formulate the following hypothesis:

*H1: Voters who identify with a party evaluate a party leader of said party more positively.*

Voters' party identification alone will likely be insufficient to describe their perceptions of party leaders. While the measure captures psychological and emotional attitudes towards the political group to which a party leader belongs, it does not capture that voters may infer future behaviour in governmental affairs from the personal characteristics of candidates (Miller et al., 1986). From this point of view, voters' evaluation of party leaders may also

reflect the utility voters expect to receive from a party leaders actions. If the personal characteristics of party leaders signal whether they will make competent decisions, then this will influence voters' perception of the utility a party leader provides. After all, party leaders may influence their party. In office, as minister or prime minister ministers, they take government decisions and thereby influence the utility voters might receive. However, why should voters change their evaluation of party leaders in the first place? I argue that voters who behave in such a rational fashion should also update their evaluation of party leaders in light of their actual utility provided. Voters should therefore evaluate the performance of party leaders retrospectively (Fiorina, 1981). This should especially be the case for party leaders who hold the office of prime minister. These 'incumbent' party leaders are broadly responsible for government actions and the general state of the economy and may be held personally accountable. I therefore formulate a second hypothesis:

*H2: Party leaders who hold the office of prime minister are evaluated more positively if voters perceive the state of the economy to be good.*

While voters are likely to constantly evaluate the state of the economy and hold an incumbent party leader accountable, this effect may be especially strong during electoral campaigns. During those time periods voters are most likely to re-evaluate party leaders as they make up their vote choice. Electoral campaigns may therefore moderate the effect of voters' perception of the economy:

*H3: The effect of voters' perception of the economy on the evaluation of party leaders is larger during election campaigns.*

Hypothesis 2 and 3 only pertain to a small portion of party leaders, but voters' eval-

uation of opposition party leaders should, equal to incumbent party leaders, express an expected utility and should consequently be updated over time. In addition to the state of the economy, voters may also change their evaluation of party leaders depending on political issues. King (2002) has argued that party leaders may be particularly relevant to voters if the stance of a party leader on political issues differs from the stance of the respective party. Following this argument voters who agree with party leaders on a political issue (e.g. Brexit) should also expect an increased utility from them (Downs, 1957) and should, therefore, evaluate them more positively. Voters may then change their evaluation of party leaders if they themselves or the party leaders change their position on a political issue:

*H4: Voters who hold the same issue position as a party leader evaluate the party leader more positively.*

For the present study the United Kingdom's referendum on leaving the EU provides a highly visible issue to test if beside ideology, and therefore a broad general measurement of issue distance, specific issues matter as well. I hypothesise that voters who hold a stance on Brexit similar to party leader, also have more positive feelings toward these party leaders.

Lastly, the importance of major events should not be neglected. The decision to call a snap election may influence voters' expectations of a government's future performance (Smith, 2004). Election campaigns seek to paint candidates in the best possible light and may influence the evaluation of party leaders by voters on their own. I will therefore include election campaigns, as well as resignations into my analysis; the descriptive analysis in the next section will also discuss the necessity to include such events to model the change in voters' evaluations over time. I will furthermore control for socio-economic variables (age, gender and education level) which may also influence voters' evaluation of party leaders.

In this section I have identified and discussed possible causes of voters' evaluations of

party leaders. Firstly, as voters' emotional attachment to a party leader's party. Secondly, as the utility voters expect a party leader may provide. However the discussed list of causes may not be exhaustive since, the direct personal appeal, i.e. the charisma, of party leaders is difficult to measure empirically. It is therefore likely that a good portion of unexplained variance will remain. The next sections provide a descriptive examination of voters' evaluations of party leaders over time. I furthermore discuss the necessary specifications of my statistical model with regard to specific party leaders and insights from the descriptive analysis.

## Research Design & Model Specification

I use panel data from the British Election Study (Fieldhouse et al., 2017) to study voters' evaluations of party leaders over time.<sup>1</sup> I chose Britain since over the four years under study two parliamentary elections and a referendum on the withdrawal of the United Kingdoms from the European Union took place, which allows me to observe the influence of campaigning and of a highly visible issue on voters' evaluations over time. I limit my analysis to the party leaders of the major national parties Labour, Conservatives and Liberal Democrats; leading to a total of six party leaders over the period of the study. I employ multilevel growth models, as described by Singer and Willett (2003), for each party leader. The models allow for individuals ( $i$ ) to vary in their intercepts and in their slopes in change over time ( $j$ ). I furthermore use the Within-Between formulation provided by Bell and Jones (2015) to avoid omitted-variable bias for within-person effects: I include a time-invariant person mean ( $\bar{X}$ ) for every person-mean centred time-varying covariate in the covariate matrix ( $X$ ) alongside other time-invariant covariates ( $W$ ), therefore, I obtain

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<sup>1</sup>The politicians under study are formal heads of their respective parties. The exception being Theresa May before 11.06.2016. However this study is concerned with party leaders not only because they are formal heads of their respective parties, but because they are individual actors who have considerable weight in the political process, especially when they hold government posts.

the same within effects as in a fixed effects approach:

$$Evaluation_{ij} = \pi_{0i} + \pi_{1i}TIME_{ij} + \pi_{2i}X_{ij} + \varepsilon_{ij}$$

$$\pi_{0i} = \gamma_{01} + \pi_{3i}W_i + \pi_{4i}\bar{X}_i + \zeta_{0i}$$

$$\pi_{1i} = \gamma_{10} + \zeta_{1i}$$

where  $\varepsilon_{ij} \sim N(0, \sigma_\varepsilon^2)$ ,  $\zeta_{0i} \sim N(0, \sigma_0^2)$  and  $\zeta_{1i} \sim N(0, \sigma_1^2)$

as well as the covariance  $\rho\sigma_0\sigma_1$

Given this structure the models also reduce potential biases of between-person effects since they include respondents who only took part in a portion of waves. Are such a longitudinal models necessary? Before I discuss my data in greater detail, I give a descriptive assessment on how much leader evaluations actually change over time. Figure 1 shows how the evaluation of British party leaders changed over the course of the four years under analysis: Voters' evaluations of party leaders change considerably over time; the only exception being Tim Farron. The evaluations of Theresa May, Jeremy Corbyn and Nick Clegg show the greatest volatility. For the period under study Theresa May reaches the highest aggregated evaluation of all party leaders. Followed by Jeremy Corbyn whose evaluation becomes more favourable during the 2017 general election campaign. Overall, voters seem to potentially change their evaluation of party leaders at any point in time. They also developed more positive feelings toward May after she was elected prime minister, while voters' feelings toward Corbyn become more negative until the recent election campaign. I scrutinize randomly selected samples of respondents' evaluation over time and confirm that some voters change their evaluation by several points over the time of the study, some of them from liking a party leader, to disliking the leader.<sup>2</sup> However, some voters do not alter their evaluation throughout the panel study. I find that most strong

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<sup>2</sup>Examples of such individual level change over time are presented in the supplementary section, figure S2 & S3.



changes in party leader evaluation, and especially changes in slope, seem to be associated with electoral campaigns which tend to focus on the competing party leaders. Figure 1 leads me to conclude that the evaluation of party leaders changes over time, which makes a growth model appropriate.<sup>3</sup> I will provide more information on the portion of within-person change and between-person differences in party leader evaluation later in this section and in the supplementary tables S1 & 2.

[Figure 1 here]

I use voters' evaluations of party leaders assessed on an eleven-point thermometer scale (0 strongly dislike, 10 strongly like) as dependent variable in the aforementioned growth models. As control variables I include the age of respondents at the time of entry to the panel, their gender and education level (0 no qualifications, 5 Postgraduate). I furthermore include the retrospective general economic perception of respondents (1 very dissatisfied, 5 very satisfied).<sup>4</sup> I also include a variable that measures if respondents identified with a party leader's party<sup>5</sup> and how strong they identify with the party (1 not very strong, 3 very strong).

I furthermore control for a dichotomous time-varying variable that captures how respondents would vote at a referendum to exit the EU, and how they actually voted at the referendum, to track the influence of Brexit as a highly visible issue. On this issue, the party leaders under study significantly differ in their position. While Cameron campaigned for Britain to remain in the EU, May became prime minister to deliver on the result of the

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<sup>3</sup>Figure S1 in the supplementary material shows the aggregated level of voters' evaluations of the respective political parties over time. In comparison aggregated party evaluation do not always move in the same direction as party leader evaluation and also show less frequent changes.

<sup>4</sup>Respondents' retrospective perception of the economy was not included in waves five and nine of the BES. I use respondents lagged economic perception from the respective previous wave to fill these gaps. I apply the same solution on a variable measuring how respondents would vote in a referendum on leaving the EU which was not included in wave five.

<sup>5</sup>The variable is missing in wave five of the BES. I impute missing values with the following strategy: For respondents with identical values in wave four and wave six the same value was imputed for wave five. For respondents which changed their party identification between wave four and six I randomly impute their previous value from wave four to carry forward with a 50% probability.

referendum and leave the EU's single market (hard Brexit). In contrast Farron, and his party wanted to remain in the single market (soft Brexit), and sought a second referendum on Britain's final deal with the EU (Hobolt, 2018). Corbyn's position on Brexit matches the ambiguous (Hobolt, 2018) position of Labour during the 2017 general election. While Corbyn stated before the 2016 referendum that Labour wanted to remain in the EU, his previous eurosceptic positions signalled some uncertainty. In addition, members of his party criticised him for lack of engagement in the referendum. He also did not share the remain platform with Tony Blair and Ed Miliband during the referendum. Even after the recent general election, Corbyn's ambiguity on Brexit has been mentioned in political commentaries (Menon, 2018; Malik, 2018). Although Corbyn's position on Brexit is not as clear as the position of other party leaders, he at least offers some sort of 'softer' alternative which should appeal to remainers. In terms of utility a soft Brexit would provide a higher utility to voters who want to remain in the EU, while a hard Brexit would provide a higher utility to voters who want to leave the EU.

Lastly, I include time as a central variable that measures the real time between the start of the panel and the date respondents' interviews. The variable is a ratio on which the value one represents the passing of six months.<sup>6</sup>

I fit unconditional means models to quantify the amount of interpersonal differences in the evaluation of party leaders and find that between 61–84% of the variation in the data could be explained by such differences. I also fit unconditional growth models with linear change over time. I find that 3–21% of variation in voters' evaluations of party leaders could be explained by linear change over time.<sup>7</sup> This would only be a meaningful amount of change for some party leaders. However, the graphical analysis of voters' evaluations of

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<sup>6</sup>It would be desirable to measure time as a ratio of three-month-units, to match the applied definition of campaign length. However measuring time in six-month-units avoids convergence issues, due to gaps between panel waves, when computing some of the models.

<sup>7</sup>The appendix provides more information on these unconditional means and growth models, tables S1 & S2.

party leaders over time in figure one has shown that the change of voters' feelings toward party leaders may not be strictly linear. Upon further inspection of individual-level variation over time I come to the conclusion that the change in voters' evaluations of party leaders can be approximated in a linear form if the models allow for changes in slope and elevation determined by political events. I include Cameron's resignation as prime minister as a possible elevation in voters growth curves. In addition I include two variables which identify the time period of election campaigns. Firstly, a dichotomous measure that spans the two months before a general election and the month immediately after the general election. Secondly, a variable that measures the elapsed time from two months before the election. I also consider that the importance of Brexit as an issue has gained salience over time and I therefore include interactions of Brexit with measures of time. Furthermore, all variables which measure time in addition to the general time variable allow for a change in voters' trajectories of change. I also allow for a change in slope for voters' evaluations of Cameron after he announced the results of his negotiations with the EU and that a referendum would be held in the following year.

I discuss the results of these in the coming section and focus on analysing interactions.

## **Findings**

In this section I present and debate the findings of my statistical models. I display my results graphically and provide detailed regression results in the appendix (tables A1–A6). Figure two plots the effects of interests, while I discuss the interaction between voters' perception of the economy and campaigns and the effect of voters' stance on Brexit over time in greater detail in figure three and four.

Figure two shows the effect of voters' party identification, their stance on Brexit and the perception of the general state of the economy on the evaluation of the party leaders

under study. I omit the effects of the control variables age, gender and education-level to focus on the effects of interest. I find that between-person effects are considerably larger than the within-person effects, which are not biased by unobserved heterogeneity. Party identification shows the largest effect on the evaluation of party leaders. Those voters whose identification with their party weakens, also evaluate the party leader less favourably. The respective effect sizes of within- and between-person effects are quite similar for all party leaders. In comparison with voters' party identification, their stance on Brexit and their perception of the economy show smaller effects, although still significant effects on the evaluation of party leaders. Effects also work in the hypothesised directions. Voters who support Brexit hold a higher evaluation of May, while their evaluation of other party leaders decreases. It is notable that the difference from between- to within-person effect of Brexit is the smallest for Cameron and that the direction of the effect changes direction. In the between-person-effect remainers evaluate Cameron less favourably, while the within-person-effect shows the opposite. The within-person effect of voters' economic perception works in the hypothesised direction as well. Voters who perceive the economy to be in a better state also evaluate both party leaders who hold the office of prime minister more positively. There is no effect of economic perception on the evaluation of Corbyn and Miliband, while I find some non-hypothesised effect of economic perception on the evaluation of Clegg and Farron. The effects work in opposite directions, but coincide with differences in incumbency. The effect of economic perception on the evaluation of Clegg who held the office of deputy prime minister is positive, while the effect on the evaluation of Farron as part of the opposition is negative. The between-person effect of economic perception also follows this divide between party leaders with government offices and opposition party leaders.

[Figure 2 here]

The presented findings support H1, H2 and H4. In addition I also find that the effect of voters' economic perception and stance on Brexit are not constant over time. I will discuss

differences in these effects over time by turning to my interactions shown in figure 3 and 4.

I have theorised in the end of section two, that the salience of Brexit as an issue is likely to have increased. I therefore tested interactions of the within-effect of voters' stance on Brexit and time measuring variables for the four party leaders under study. I omitted interactions in the models for Miliband and Clegg since it is unlikely that the salience of Brexit significantly increased before the general election in 2015.

[Figure 3 here]

Figure 3 shows the interaction between respondents' stance on Brexit with elapsed time on the evaluation of Cameron, May, Corbyn and Farron. The first upper-left plot shows that respondents' stance on Brexit had no significant influence on their evaluation of Cameron before his negotiations with the EU finished. After these negotiations, as the referendum drew closer, Cameron's stance on Brexit, in which he differed from the majority in his party became more influential for voters' evaluation of him. Over time, respondents who shared Cameron's stance and who answered that they would not vote for Britain to leave the EU viewed him increasingly positively compared to voters who wanted to leave the EU. The other plots show the interaction between voters' stance on Brexit and elapsed time after May had called a snap election in 2017. The referendum on Britain leaving the EU had already taken place, negotiations between the UK and the EU had started and May sought to fortify her party's majority in parliament. At this point in time Brexit already was a salient issue, as is visible in its significant effect on voters feelings towards May and Farron. However, in contrast to Cameron, there is no significant interaction between Brexit and time for May and Farron. Voters who support Brexit evaluate May more positively than voters who want to remain in the EU. The opposite is the case for Farron. The effect of voters' Brexit stance on their evaluation of May does slightly increase over the span of the election campaign, but the increase is relatively minor. In comparison, to May the effect of Brexit on voters' feelings towards Corbyn is negligible before May called a snap

election. After the announcement of the snap election, however, the effect of voters' Brexit stance on the evaluation of Corbyn shows a pattern similar to that of Cameron. Over time voters who wanted to remain in the EU held more and more positive feelings towards Corbyn compared to voters who wanted to leave. This development further supports the conclusion that campaign dynamics may lead voters to re-evaluate party leaders in light of their campaign activity and the leaders stance on important campaign issues. In addition, issues that were once insignificant for voters' feelings towards party leaders may become significant over time.

[Figure 4 here]

Voters' stance on Brexit is not the only effect that might vary over time. I have hypothesised that the effect of voters' perception of the economy may be stronger around elections. During this time voters make up their choice and retrospectively evaluate party leaders who lead the government. Figure 4 tests this hypothesis and shows the interaction between economic perception and a dichotomous campaign measure. The bottom axis of the plots depicts respondents' retrospective economic perception from 'worse' to 'better' while the plot-lines show the effect during and between electoral campaigns. These results re-emphasise that economic perception matters for party leaders who hold the office of prime minister. In contrast, effects are smaller or insignificant for other party leaders. The results also show that the effect of voters' economic perception on the evaluation of May and Cameron is larger around elections. Around the general election in 2015 and 2017 the effect of economic perception increases. This change is most pronounced for May where the effect is three times larger during the campaign. In case of other party leaders, the effects stay relatively similar between and around elections. The effect of economic perception becomes significant in case of Miliband and the effect size decreases in case of Farron. There are no significant for Clegg or Corbyn. These findings support the hypotheses that voters differentiate between party leaders who are broadly responsible for government performance,

and other party leaders. The effect of economic perception on voters' feelings towards these party leaders furthermore increases around parliamentary elections.

In conclusion, Brexit, party identifications, and economic perception do matter for voters' evaluation of party leaders. The same holds true for election campaigns. Not only does the effect of Brexit and the effect of economic perception vary over time. I also find considerable effects of elapsed campaign time on the evaluation of May, Corbyn and Clegg. These time-effects likely point toward changes in voters' evaluation of party leaders that are not explained by voters' changes in economic perception, party identification and position on Brexit, as the mere passing of time should not significantly affect voters' feelings towards party leaders. It may therefore be worthwhile to explore additional salient issues. Lastly, it may also be the case that electoral campaigns provide voters with more frequent information on the personal characteristics of party leaders. The appearance and performance of leaders in mass media during campaigns may provide these additional information.

Overall, the majority of empirical findings match my hypothesised relationships. Established factors of electoral behaviour, like issues, economic perception and party identification are able to explain why voters change their feelings towards party leaders. Campaigns moderate some of these effects. The next section describes checks I performed to test the robustness of my findings and discusses limitations of the presented evidence.

## **Robustness Checks**

I test the robustness of my findings by refitting two additional models for each party leader. I report these robust models in the appendix (Tables A1–A6). Firstly, I employ a model that tests whether differences in the effect of economic perception during election campaigns are caused by differences in political attention. Voters' may simply pay more attention to economic details during election campaigns. Changes in the effect of economic perception

may therefore be driven by changes in voters' attention and not because the economy becomes a more influential factor when voters make up their vote choice. Political attention is measured on a scale from 0 (no attention) to 10 (a great deal of attention). I test for a possible interaction between political attention and economic perception and find no significant interaction or changes in the effect of economic perception during and between campaigns. Secondly, I estimate models in which I replace voters' party identification with their thermometer evaluation of the party leader's party (0 strongly dislike, 10 strongly like). This measure captures a wider range of voters' feelings towards political parties than party identification. On the downside the causal relationship between voters' thermometer evaluation of parties and party leaders is less clear than for party identification. The inclusion of party thermometers reduces the effects of economic perception and stances on Brexit, but the presented findings remain robust. Voters' thermometer feelings also considerably reduce the difference in between- and within-person effects. This suggests that party identification may indeed not fully capture voters' emotional connection to the political parties.

These tests show that the presented findings remain robust to alternative specification and additional explanatory variables. Nevertheless, the results are limited by covering party leaders from one country only. Empirical findings on economic voting have been shown to be consistent across electoral systems (Dassonneville and Lewis-Beck, 2017), therefore, the presented relation between economic perception on the evaluation of party leaders is likely to be stable across countries. However, since the institutional setting and power of prime ministers differs between countries, the effect of economic perception on the evaluation of party leaders who hold the office of prime minister could still systematically differ between countries. With these limitations in mind, I draw my conclusion and discuss how future studies may depart from the presented findings.



## Conclusion

When and why do voters change their evaluation of party leaders? In this article I provided answers to both of those questions. Firstly, voters change their evaluation of party leaders at any point in time, but most strong changes and changes in trajectory are associated with parliamentary election campaigns. Secondly, I find the strongest effects on voters' evaluations of party leaders in established factors of electoral behaviour: perception of the economy, party identification and Brexit as a salient issue. Parliamentary elections may have become more personalised over the past decades. Yet, the presented findings suggest that voters' feelings towards party leaders do not simply reflect a 'beauty contest' (Curtice and Hunjan, 2011). Insofar the personalisation of elections may endanger the democratic function of elections to a lesser extent than is commonly feared.

With regard to electoral campaigns the results suggest that campaigns may be crucial for party leaders to change the electorate's feeling towards them. Nonetheless, changes during campaigns do not work independently of issues and economic perceptions. Additional studies should explore the role of electoral campaigns further. Hart (2016) has shown that candidates can deactivate economic voting by means of campaign strategy. It may also be possible for party leaders to deactivate the presented effect of voters' economic perception. This should be the primary interest of party leaders in the position of prime minister. To explore the existence of such potential strategies additional and different types of campaigns should be analysed to make inferences. In general, the fact that voters punish or reward party leaders who hold the office of prime ministers for the state of the economy is a positive finding. Yet, the opposition party leaders under study do not seem to be able to gain positive feelings from voters dissatisfied with the economy. This asymmetry in behaviour could lead to situations in which party leaders who hold the office of prime ministers enjoy advantages over their opponents.

Mellon et al. (2018) find that the 2017 general election campaign was dominated by strong vote switching along positions on Brexit and significant changes in voters' feelings towards May and Corbyn. The presented findings support their conclusion that the recent general election was dominated by voters' attitudes towards Brexit, as the issue also explains changes in voters' feelings towards the two party leaders.

In this study I have extended established findings on party leaders by performing a longitudinal analysis of voters' evaluations of them. The feelings voters have toward party leaders vary considerably over time. A cross-sectional view on feelings towards party leaders, especially in election surveys, may overestimate their stability and underestimate the impact of electoral campaigns to change these feelings. Overall voters seem to include rational considerations in their feelings towards party leaders.

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## Appendix

Table A1: Evaluation Cameron

	Main Model	Attention Model	Party-like Model
<i>Fixed effects</i>			
(Intercept)	-0.64 (0.05)	0.11 (0.06)	0.30 (0.04)
Time	0.10 (0.01)	0.10 (0.01)	0.02 (0.02)
Time after EU negot.	-0.24 (0.13)	-0.23 (0.13)	-0.45 (0.11)
Time election campaign	-0.19 (0.04)	-0.19 (0.04)	-0.02 (0.04)
Election campaign	0.06 (0.02)	0.06 (0.02)	0.07 (0.03)
Resignation	0.42 (0.04)	0.42 (0.04)	0.44 (0.03)
<i>Within</i>			
Vote leave EU	-0.05 (0.03)	-0.05 (0.03)	-0.02 (0.04)
Economic percept.	0.17 (0.01)	0.17 (0.01)	0.11 (0.01)
PID strength	0.41 (0.01)	0.41 (0.01)	
Pol. attention		0.01 (0.01)	0.01 (0.01)
Eval. Conservatives			0.50 (0.01)
<i>Between</i>			
Vote leave EU	0.16 (0.03)	0.12 (0.03)	-0.42 (0.02)
Economic percept.	1.17 (0.01)	1.16 (0.01)	0.22 (0.01)
PID strength	1.71 (0.02)	1.73 (0.02)	
Eval. Conservatives			0.83 (0.00)
Male	-0.30 (0.02)	-0.21 (0.02)	-0.09 (0.02)
Age	-0.01 (0.01)	-0.01 (0.01)	0.01 (0.01)
Education level	-0.04 (0.01)	-0.02 (0.01)	-0.00 (0.01)
Pol. attention		-0.11 (0.01)	-0.02 (0.00)
<i>Interactions</i>			
Election campaign x economic percept.	0.08 (0.02)	0.08 (0.02)	0.02 (0.03)
Time after EU negot. x vote leave EU	-0.64 (0.13)	-0.64 (0.13)	-0.54 (0.14)
Economic percept. x pol. attention		-0.02 (0.01)	-0.01 (0.01)
<i>Random effects</i>			
Var: id (Intercept)	3.49	3.46	0.75
Var: id Time	0.07	0.07	0.04
Cov: id (Intercept) Time	-0.13	-0.14	-0.06
Var: Residual	1.41	1.41	1.19
AIC	383198.03	382917.63	211281.51
BIC	383397.79	383145.93	211498.35
Log Likelihood	-191578.02	-191434.82	-105616.75
Num. obs.	99936	99936	62020
Num. groups: id	28259	28259	24372

Standard errors in parentheses

Table A2: Evaluation May

	Main Model	Attention Model	Party-like Model
<i>Fixed effects</i>			
(Intercept)	-0.20 (0.06)	0.32 (0.08)	0.17 (0.06)
Time	1.06 (0.04)	1.04 (0.04)	0.61 (0.04)
Time election campaign	-5.07 (0.08)	-5.06 (0.08)	-3.93 (0.07)
Election campaign	-0.58 (0.04)	-0.56 (0.04)	-0.32 (0.04)
<i>Within</i>			
Economic percept.	0.11 (0.03)	0.11 (0.03)	0.06 (0.03)
PID strength	0.44 (0.02)	0.44 (0.02)	
Vote leave EU	0.39 (0.10)	0.40 (0.10)	0.37 (0.09)
Pol. attention		-0.01 (0.01)	-0.00 (0.01)
Eval. Conservatives			0.51 (0.01)
<i>Between</i>			
Economic percept.	1.11 (0.02)	1.10 (0.02)	0.29 (0.01)
PID strength	1.33 (0.02)	1.35 (0.02)	
Vote leave EU	1.19 (0.03)	1.17 (0.03)	0.58 (0.02)
Pol. attention		-0.08 (0.01)	-0.01 (0.00)
Eval. Conservatives			0.75 (0.00)
Male	-0.49 (0.03)	-0.43 (0.03)	-0.30 (0.02)
Age	0.02 (0.00)	0.02 (0.00)	0.01 (0.00)
Education level	-0.06 (0.01)	-0.04 (0.01)	-0.03 (0.01)
<i>Interactions</i>			
Election campaign x economic percept.	0.17 (0.04)	0.17 (0.04)	0.16 (0.03)
Time election campaign x vote leave EU	0.94 (0.65)	0.87 (0.65)	-0.38 (0.53)
Economic percept. x pol. attention		0.01 (0.03)	0.01 (0.02)
<i>Random effects</i>			
Var: id (Intercept)	5.01	5.02	3.56
Var: id Time	1.03	1.03	0.81
Cov: id (Intercept) Time	-1.27	-1.28	-1.44
Var: Residual	1.69	1.69	1.46
AIC	214237.92	214133.83	188564.32
BIC	214405.69	214328.09	188758.37
Log Likelihood	-107099.96	-107044.92	-94260.16
Num. obs.	50495	50495	50036
Num. groups: id	24038	24038	23841

Standard errors in parentheses

Table A3: Evaluation Corbyn

	Main Model	Attention Model	Party-like Model
<i>Fixed effects</i>			
(Intercept)	6.33 (0.06)	5.99 (0.07)	1.63 (0.06)
Time	-0.41 (0.02)	-0.40 (0.02)	-0.37 (0.01)
Time election campaign	4.27 (0.07)	4.28 (0.07)	3.43 (0.06)
Election campaign	0.18 (0.03)	0.17 (0.03)	0.13 (0.02)
<i>Within</i>			
Economic percept.	-0.03 (0.02)	-0.02 (0.02)	-0.02 (0.02)
PID strength	0.47 (0.02)	0.47 (0.02)	
Vote leave EU	-0.11 (0.05)	-0.11 (0.05)	-0.04 (0.05)
Pol. attention		0.05 (0.01)	0.03 (0.01)
Eval. Labour			0.47 (0.01)
<i>Between</i>			
Economic percept.	-0.70 (0.02)	-0.70 (0.02)	-0.37 (0.01)
PID strength	1.31 (0.02)	1.29 (0.02)	
Vote leave EU	-1.31 (0.03)	-1.31 (0.03)	-0.35 (0.03)
Pol. attention		0.05 (0.01)	0.07 (0.01)
Eval. Labour			0.76 (0.00)
Male	-0.23 (0.03)	-0.27 (0.03)	-0.09 (0.02)
Age	-0.03 (0.00)	-0.03 (0.00)	-0.01 (0.00)
Education level	0.08 (0.01)	0.07 (0.01)	0.05 (0.01)
<i>Interactions</i>			
Election campaign x economic percept.	-0.03 (0.03)	-0.03 (0.03)	-0.02 (0.02)
Time election campaign x vote leave EU	-2.91 (0.43)	-2.87 (0.43)	-1.93 (0.38)
Economic percept. x pol. attention		-0.02 (0.02)	-0.02 (0.02)
<i>Random effects</i>			
Var: id (Intercept)	4.54	4.53	2.71
Var: id Time	0.19	0.19	0.09
Cov: id (Intercept) Time	-0.11	-0.11	-0.20
Var: Residual	1.97	1.97	1.73
AIC	306513.39	306441.58	282134.84
BIC	306687.75	306643.47	282336.57
Log Likelihood	-153237.70	-153198.79	-141045.42
Num. obs.	71459	71459	70942
Num. groups: id	28568	28568	28385

Standard errors in parentheses



Table A4: Evaluation Miliband

	Main Model	Attention Model	Party-like Model
<i>Fixed effects</i>			
(Intercept)	4.05 (0.05)	4.03 (0.07)	0.39 (0.06)
Time	-0.18 (0.01)	-0.19 (0.01)	-0.17 (0.02)
Time election campaign	-2.91 (0.62)	-2.82 (0.62)	-2.79 (0.80)
Election campaign	0.53 (0.02)	0.53 (0.02)	0.42 (0.03)
<i>Within</i>			
Vote leave EU	-0.08 (0.04)	-0.07 (0.04)	-0.06 (0.05)
Economic percept.	0.02 (0.01)	0.12 (0.04)	0.03 (0.06)
PID strength	0.30 (0.02)	0.30 (0.02)	
Pol. attention		0.03 (0.01)	0.03 (0.01)
Eval. Labour			0.42 (0.01)
<i>Between</i>			
Vote leave EU	-1.17 (0.03)	-1.17 (0.03)	-0.29 (0.03)
Economic percept.	-0.20 (0.01)	-0.20 (0.01)	-0.09 (0.01)
PID strength	1.60 (0.01)	1.60 (0.01)	
Pol. attention		0.00 (0.01)	0.05 (0.01)
Eval. Labour			0.78 (0.00)
Male	-0.20 (0.03)	-0.21 (0.03)	-0.08 (0.02)
Age	-0.01 (0.00)	-0.01 (0.00)	0.00 (0.00)
Education level	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)
<i>Interactions</i>			
Election campaign x economic percept.	-0.08 (0.03)	-0.09 (0.03)	-0.05 (0.04)
Economic percept. x pol. attention		-0.01 (0.01)	-0.01 (0.01)
<i>Random effects</i>			
Var: id (Intercept)	3.30	3.30	1.19
Var: id Time	0.20	0.20	0.11
Cov: id (Intercept) Time	-0.17	-0.17	-0.13
Var: Residual	1.50	1.50	1.32
AIC	292801.12	292800.39	132086.36
BIC	292967.08	292994.01	132265.26
Log Likelihood	-146382.56	-146379.20	-66022.18
Num. obs.	74609	74609	37005
Num. groups: id	23132	23132	14833

Standard errors in parentheses

Table A5: Evaluation Clegg

	Main Model	Attention Model	Party-like Model
<i>Fixed effects</i>			
(Intercept)	1.22 (0.05)	1.84 (0.07)	-0.37 (0.05)
Time	0.04 (0.01)	0.04 (0.01)	-0.00 (0.02)
Time election campaign	7.47 (0.64)	7.52 (0.64)	4.58 (0.81)
Election campaign	0.44 (0.02)	0.43 (0.02)	0.20 (0.03)
<i>Within</i>			
Vote leave EU	-0.13 (0.04)	-0.13 (0.04)	-0.06 (0.05)
Economic percept.	0.07 (0.01)	0.07 (0.01)	0.01 (0.02)
PID strength	0.38 (0.03)	0.38 (0.03)	
Pol. attention		0.02 (0.01)	0.03 (0.01)
Eval. Lib Dems			0.45 (0.01)
<i>Between</i>			
Vote leave EU	-0.73 (0.03)	-0.77 (0.03)	0.09 (0.02)
Economic percept.	0.72 (0.01)	0.72 (0.01)	0.22 (0.01)
PID strength	1.65 (0.03)	1.65 (0.03)	
Pol. attention		-0.09 (0.01)	-0.00 (0.01)
Eval. Lib Dems			0.85 (0.00)
Male	-0.49 (0.03)	-0.41 (0.03)	-0.08 (0.02)
Age	-0.01 (0.00)	-0.01 (0.00)	0.00 (0.00)
Education level	0.01 (0.01)	0.03 (0.01)	-0.02 (0.01)
<i>Interactions</i>			
Election campaign x economic percept.	-0.03 (0.03)	-0.03 (0.03)	0.06 (0.04)
Economic percept. x pol. attention			0.01 (0.02)
<i>Random effects</i>			
Var: id (Intercept)	3.53	3.48	0.83
Var: id Time	0.20	0.20	0.10
Cov: id (Intercept) Time	-0.14	-0.13	-0.10
Var: Residual	1.62	1.62	1.36
AIC	298405.65	298247.66	129594.62
BIC	298571.62	298432.07	129773.48
Log Likelihood	-149184.82	-149103.83	-64776.31
Num. obs.	74670	74670	36941
Num. groups: id	23143	23143	14812

Standard errors in parentheses

Table A6: Evaluation Farron

	Main Model	Attention Model	Party-like Model
<i>Fixed effects</i>			
(Intercept)	4.45 (0.05)	4.31 (0.07)	1.09 (0.05)
Time	-0.04 (0.02)	-0.04 (0.02)	-0.12 (0.02)
Time election campaign	-0.23 (0.08)	-0.23 (0.08)	-0.02 (0.07)
Election campaign	-0.14 (0.03)	-0.14 (0.03)	-0.11 (0.03)
<i>Within</i>			
Vote leave EU	-0.20 (0.06)	-0.20 (0.06)	-0.05 (0.06)
Economic percept.	-0.12 (0.02)	-0.12 (0.02)	-0.10 (0.02)
PID strength	0.46 (0.04)	0.46 (0.04)	
Pol. attention		0.01 (0.01)	0.00 (0.01)
Eval. Lib Dems			0.46 (0.01)
<i>Between</i>			
Vote leave EU	-1.46 (0.03)	-1.46 (0.03)	-0.24 (0.02)
Economic percept.	0.05 (0.02)	0.05 (0.02)	0.00 (0.01)
PID strength	1.33 (0.03)	1.33 (0.03)	
Pol. attention		0.02 (0.01)	0.03 (0.00)
Eval. Lib Dems			0.70 (0.00)
Male	-0.29 (0.03)	-0.30 (0.03)	-0.03 (0.02)
Age	-0.01 (0.00)	-0.01 (0.00)	0.00 (0.00)
Education level	0.06 (0.01)	0.06 (0.01)	-0.02 (0.01)
<i>Interactions</i>			
Election campaign x economic percept.	0.05 (0.03)	0.05 (0.03)	0.04 (0.03)
Time election campaign x vote leave EU	-0.16 (0.51)	-0.15 (0.51)	-0.27 (0.45)
Economic percept. x pol. attention		0.01 (0.02)	0.01 (0.02)
<i>Random effects</i>			
Var: id (Intercept)	3.28	3.28	1.44
Var: id Time	0.42	0.42	0.23
Cov: id (Intercept) Time	-0.46	-0.46	-0.32
Var: Residual	2.07	2.07	1.91
AIC	243305.28	243323.21	220939.37
BIC	243475.48	243520.27	221136.28
Log Likelihood	-121633.64	-121639.60	-110447.68
Num. obs.	57388	57388	56983
Num. groups: id	24514	24514	24335

Standard errors in parentheses

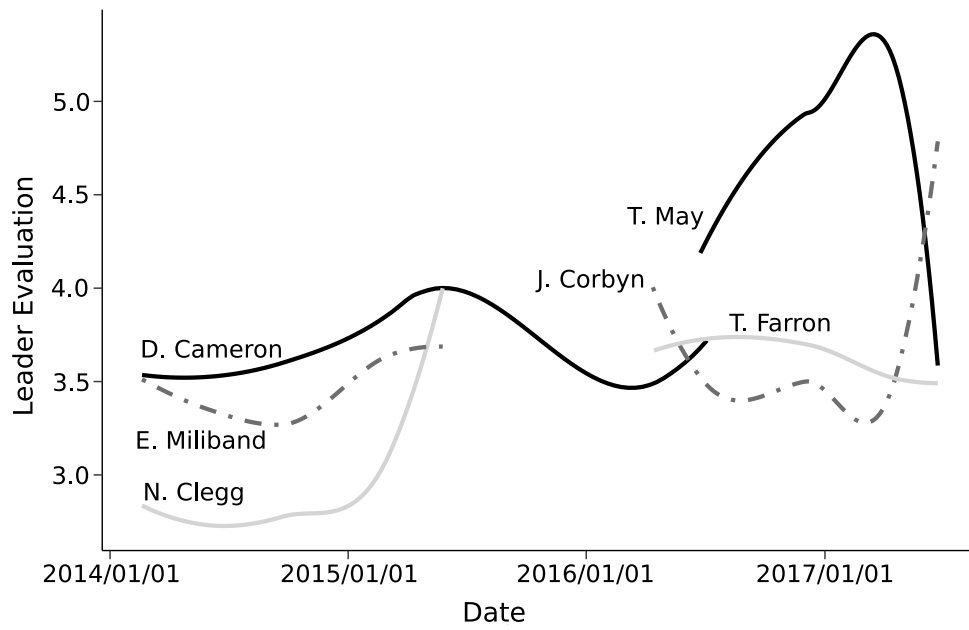


Figure 1: Voters' evaluations of British party leaders, locally weighted scatter-plot smoothing (0 strongly dislike, 10 strongly like). Data: BES (Fieldhouse et al., 2017).

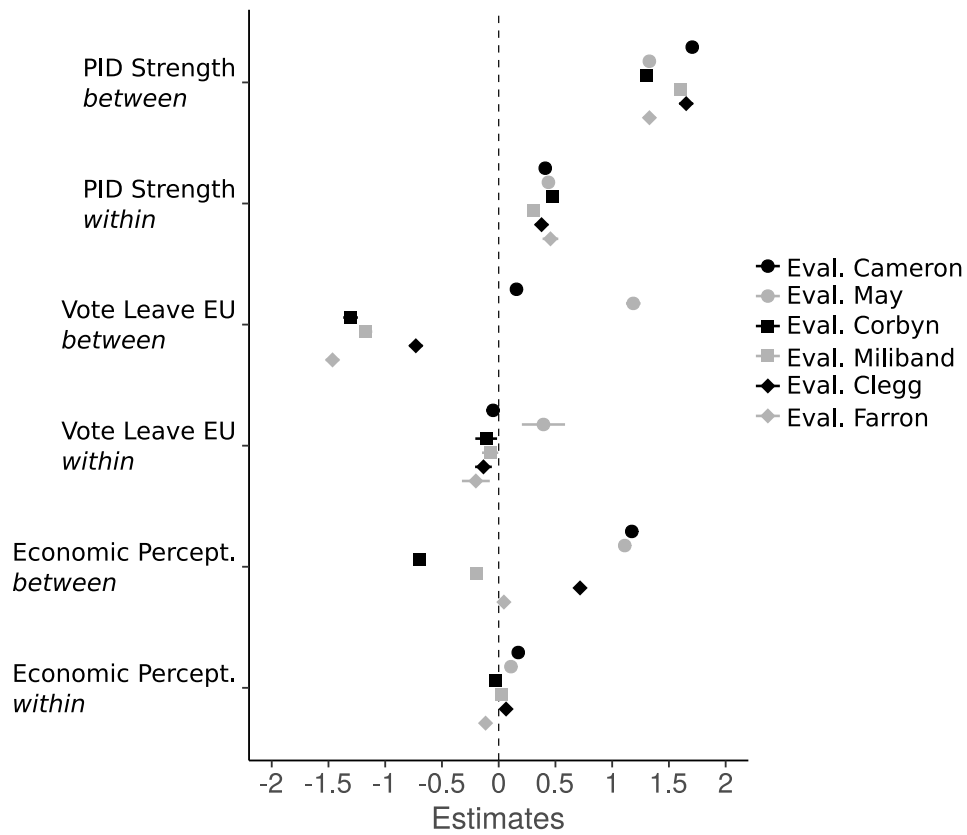


Figure 2: Within- and between-person effect of voters' PID, stance on Brexit and economic perception on the evaluation of party leaders (95% confidence-intervals, approximation with Wald-statistics). Other covariates not shown.

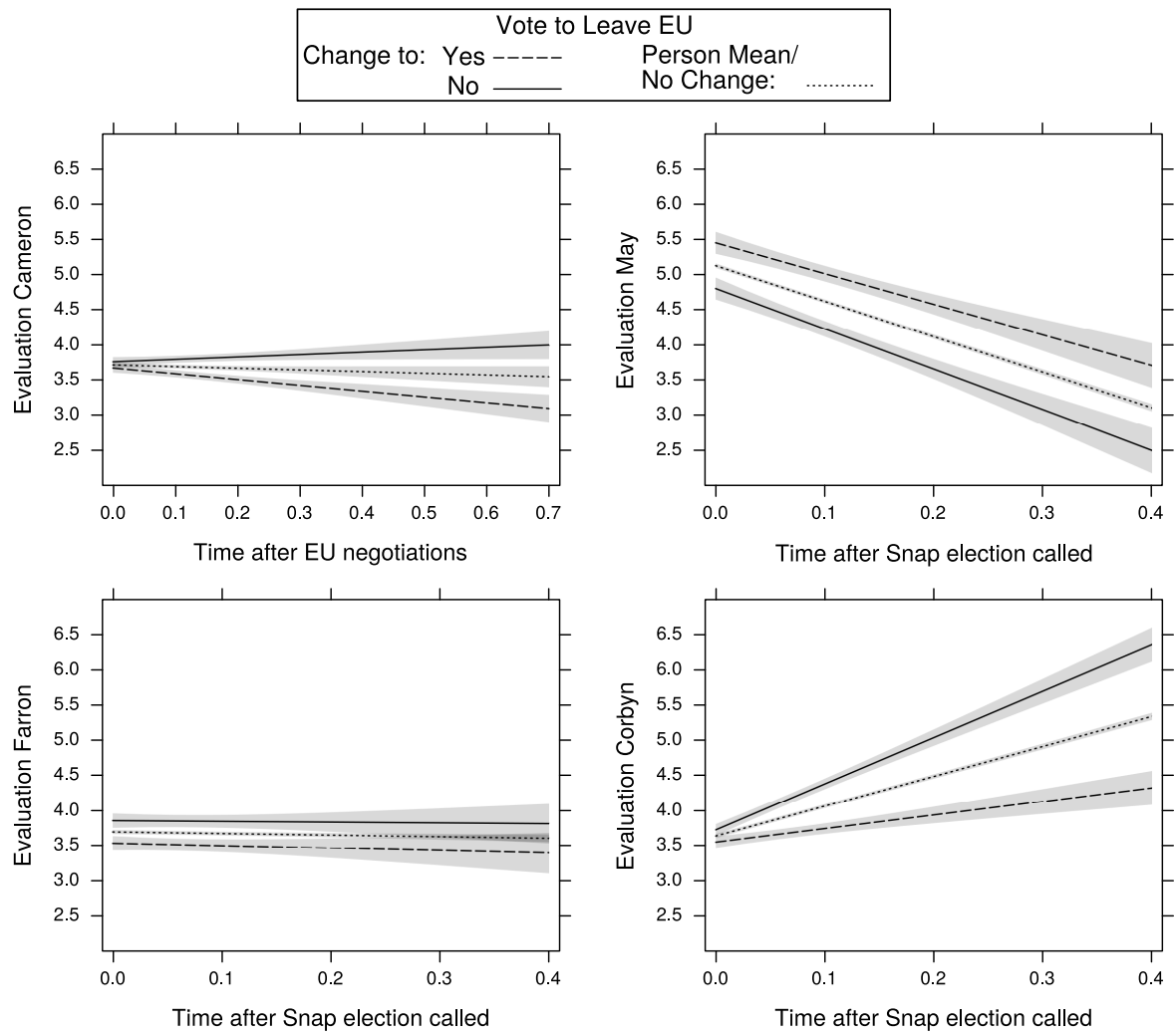


Figure 3: Interaction effect plots (predicted values) of respondents' stance on Brexit and time on the evaluation of party leaders (95% confidence-intervals). The figure displays values for respondents who held a clear leave- or remain-position over time in order to facilitate graphical clarity. A figure which included values for respondents whose stance on Brexit was mixed is provided in supplementary figure S4.

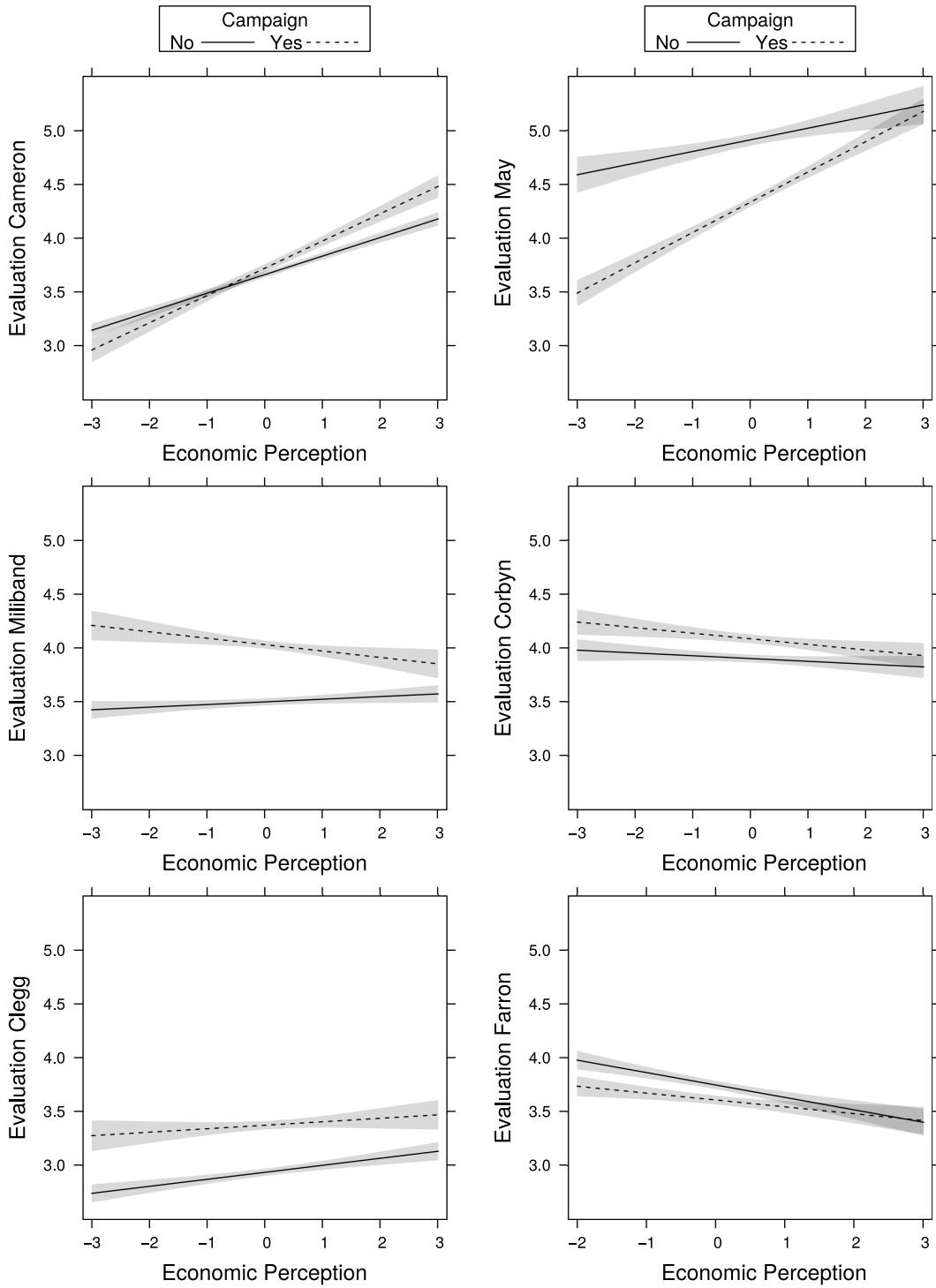


Figure 4: Interaction effect plots (predicted values) of respondents' retrospective perception of the UK's economy during and out of election campaigns on the evaluation of party leaders (95 % confidence-intervals).

## Supplementary Graphs & Tables

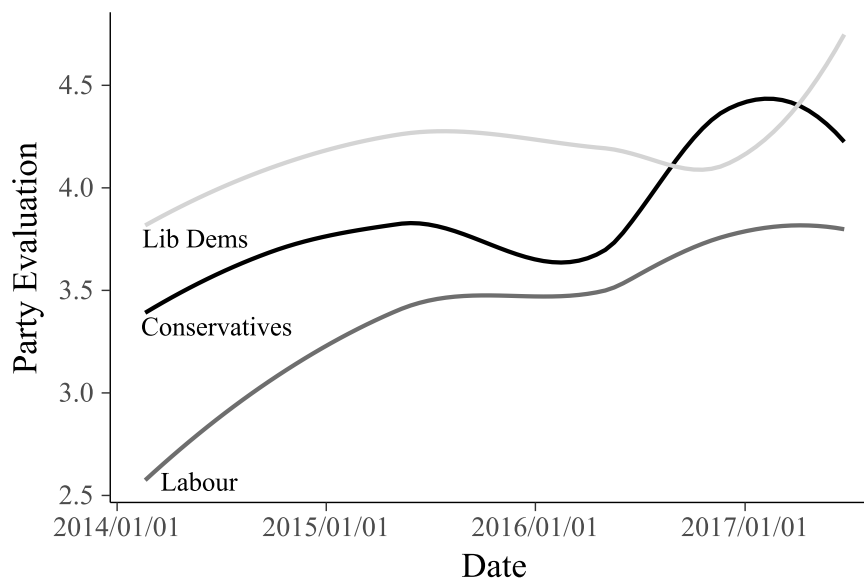


Figure S1: Voters' evaluations of British parties, locally weighted scatter-plot smoothing (0 strongly dislike, 10 strongly like). Data: BES (Fieldhouse et al., 2017).



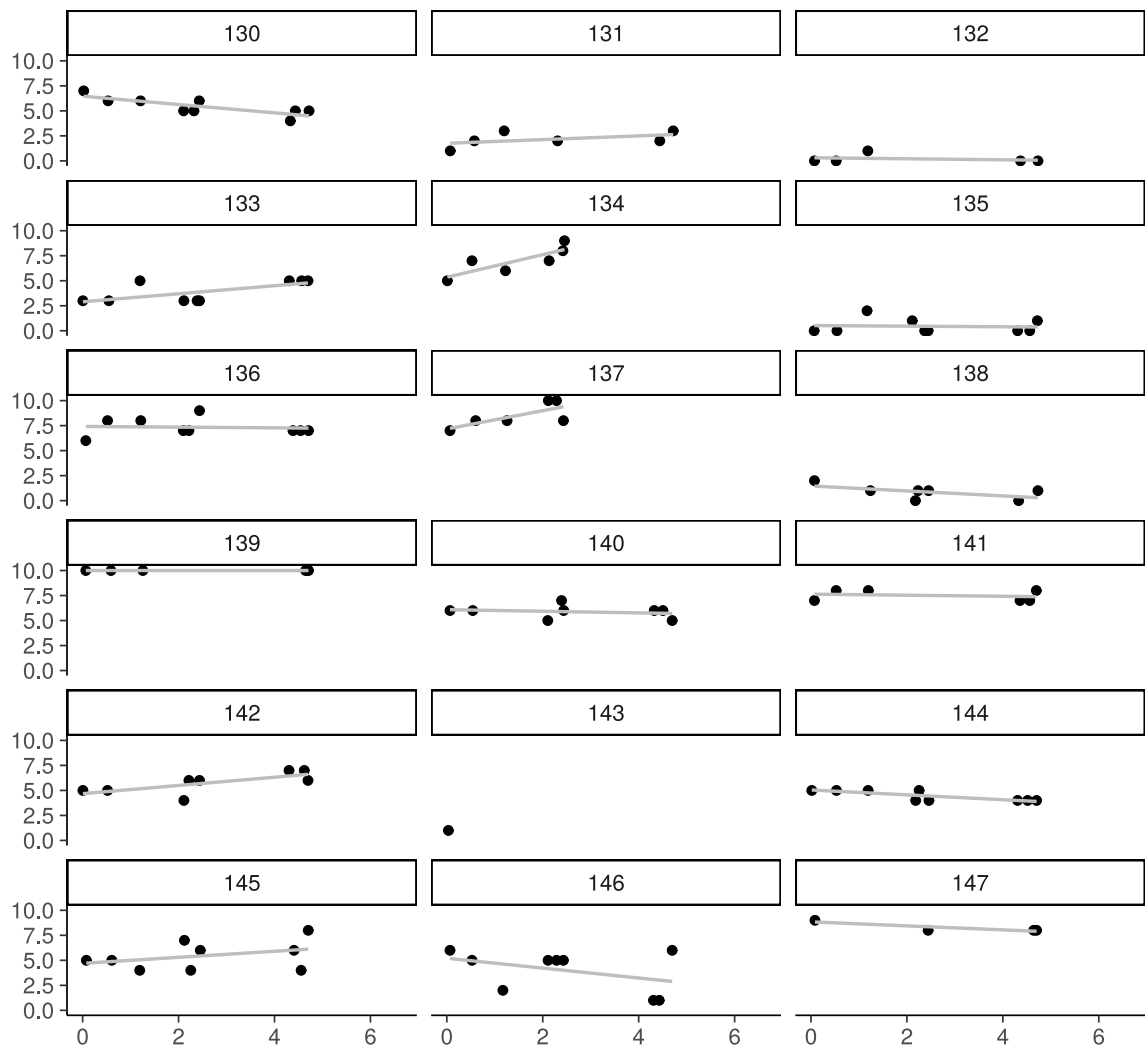


Figure S2: Scatter-plots with linear fit of individual voters' evaluation of Cameron from 0 (dislike) to 10 (like) over time (each unit on the x-axis represents 6 months).

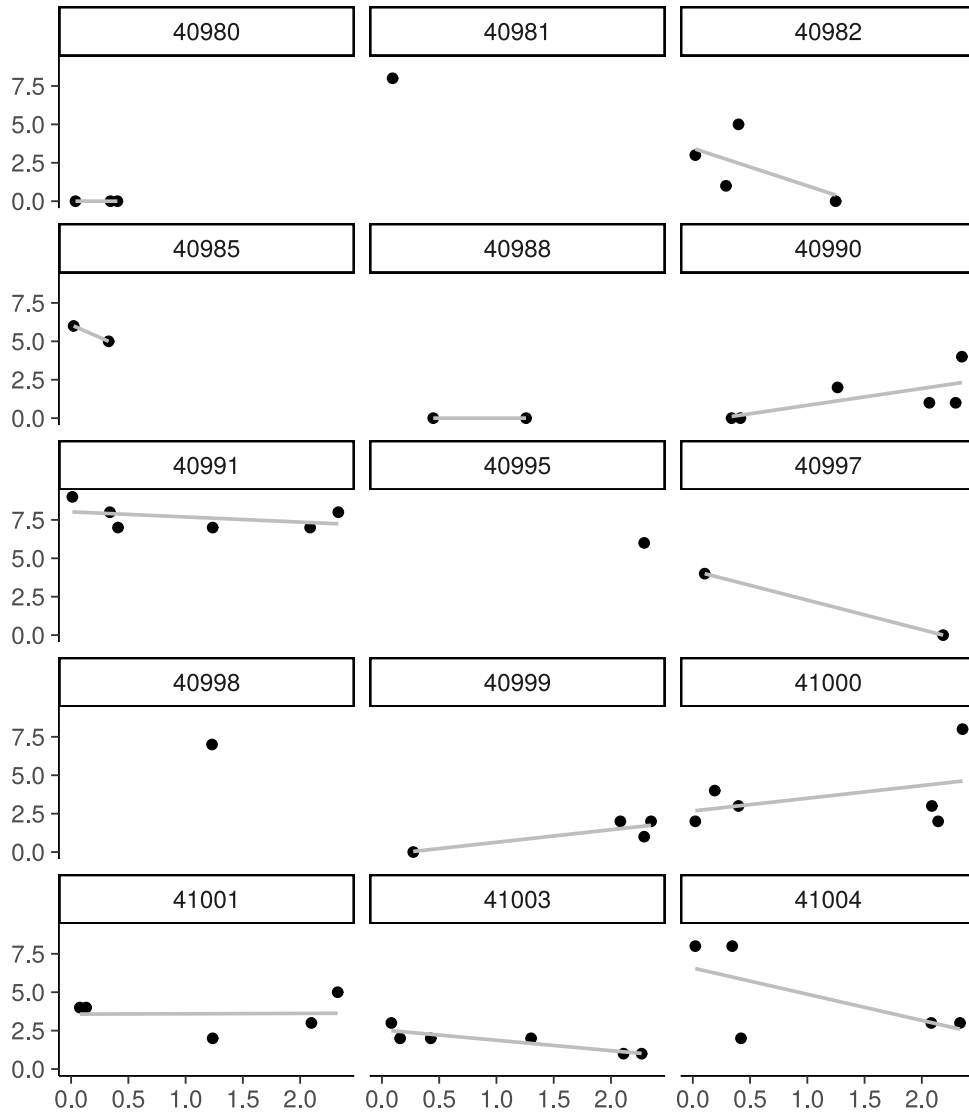


Figure S3: Scatter-plots with linear fit of individual voters' evaluation of Corbyn from 0 (dislike) to 10 (like) over time (each unit on the x-axis represents 6 months).

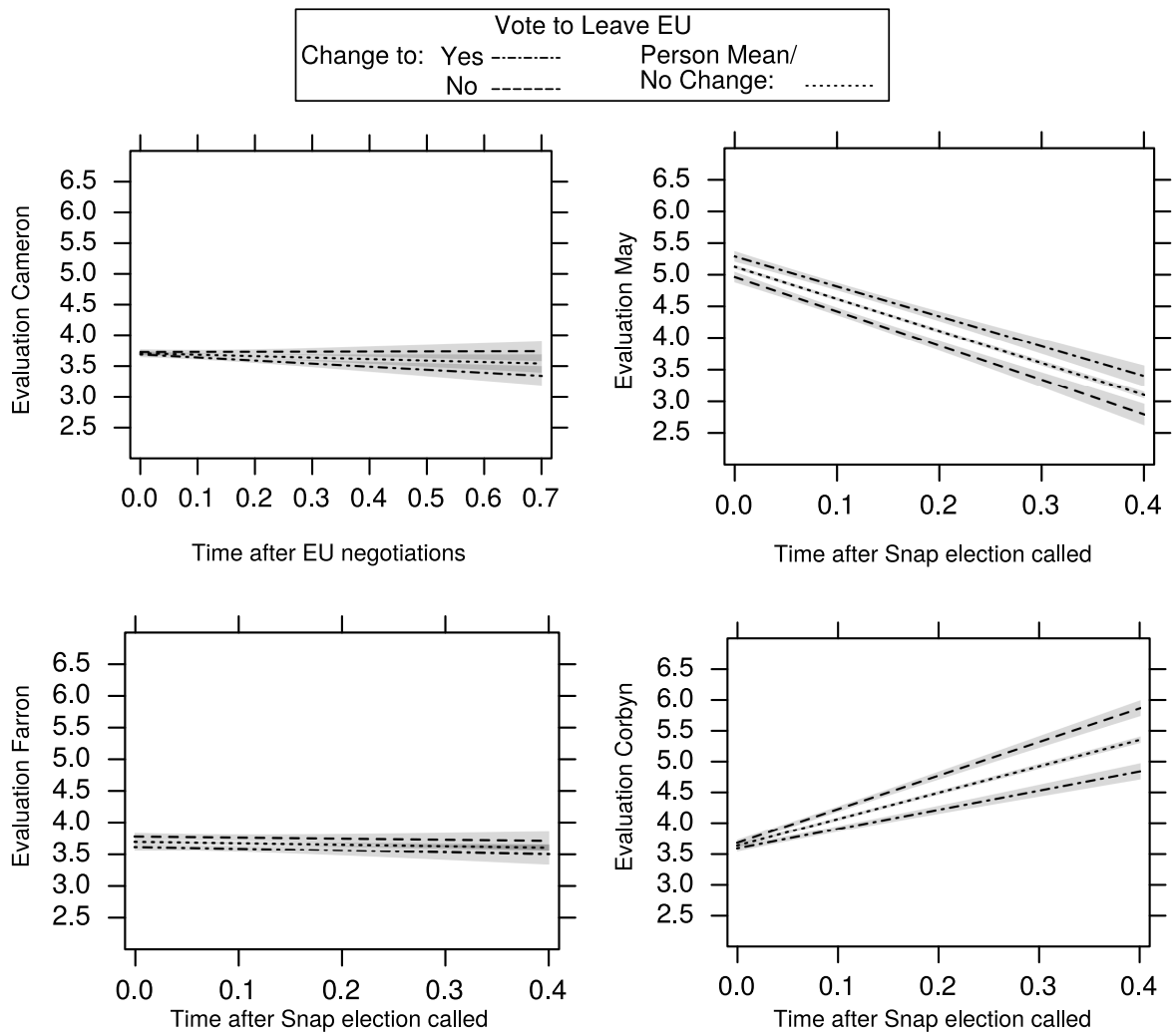


Figure S4: Interaction effect plots (predicted values) of respondents' stance on Brexit and time on the evaluation of party leaders (95% confidence-intervals). The figure displays values for respondents who do not hold a clear remain or leave position over the timespan of the panel.

Unconditional means model:

$$Evaluation_{ij} = \pi_{0i} + \varepsilon_{ij}$$

$$\pi_{0i} = \gamma_{00} + \zeta_{0i}$$

$$\varepsilon_{ij} \sim N(0, \sigma_\varepsilon^2) \text{ and } \zeta_{0i} \sim N(0, \sigma_0^2)$$

Table S1: Unconditional Means Models

	Cameron	May	Corbyn	Miliband	Clegg	Farron
Fixed effects						
(Intercept)	3.64 (0.02)	4.51 (0.02)	4.04 (0.02)	3.72 (0.02)	3.13 (0.02)	3.69 (0.01)
Fixed effects						
Var: id (Intercept)	8.06	8.16	8.58	6.77	4.96	4.03
Var: Residual	1.65	2.56	2.42	1.70	1.87	2.47
Num. groups: id	28259	24038	28568	23132	23143	24514
Num. obs.	99936	50495	71459	74609	74670	57388
Log Likelihood	-205113.53	-118928.84	-163983.82	-154691.14	-154215.79	-125529.77
BIC	410261.60	237890.17	328001.16	309415.95	308465.24	251092.42
AIC	410233.06	237863.68	327973.63	309388.28	308437.58	251065.55
Standard errors in parentheses						

Unconditional growth model:

$$Evaluation_{ij} = \pi_{0i} + \pi_{1i}TIME_{ij} + \varepsilon_{ij}$$

$$\pi_{0i} = \gamma_{00} + \zeta_{0i}$$

$$\pi_{1i} = \gamma_{10} + \zeta_{1i}$$

$\varepsilon_{ij} \sim N(0, \sigma_\varepsilon^2)$ ,  $\zeta_{0i} \sim N(0, \sigma_0^2)$  and  $\zeta_{1i} \sim N(0, \sigma_1^2)$  as well as  $\rho\sigma_0\sigma_1$ .

Table S2: Unconditional Growth Models

	Cameron	May	Corbyn	Miliband	Clegg	Farron
Fixed effects						
(Intercept)	3.68 (0.02)	5.06 (0.03)	3.86 (0.02)	3.61 (0.02)	2.76 (0.02)	3.86 (0.02)
Time	-0.02 (0.00)	-0.38 (0.02)	0.14 (0.01)	0.08 (0.01)	0.29 (0.01)	-0.12 (0.01)
Var: id (Intercept)	8.48	7.03	7.98	6.37	4.82	4.00
Var: id Time	0.08	0.86	0.15	0.21	0.20	0.43
Var: Residual	1.46	2.13	2.27	1.52	1.64	2.07
AIC	408626.06	236250.34	327283.94	308187.41	305564.35	249782.49
BIC	408683.13	236303.32	327339.00	308242.73	305619.67	249836.23
Log Likelihood	-204307.03	-118119.17	-163635.97	-154087.71	-152776.17	-124885.24
Num. obs.	99936	50495	71459	74609	74670	57388
Num. groups: id	28259	24038	28568	23132	23143	24514

Standard errors in parantheses

August 26, 2018

Word count: 8287