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Issue cross-pressures and time of voting decision

QingQian He

Department of Public Administration, School of Management and Governance, University of Twente, P.O. Box 217, Enschede 7500 AE, The Netherlands

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ABSTRACT

Undecided voters are often regarded by political parties and candidates as the group that determines the outcome of an election. This paper discusses the concept and measurement of issue cross-pressures and explores to what extent they influence the time of voting decision in different political systems. Using survey data from national election studies in the Netherlands (1994–2012), Germany (1994–2013) and the United Kingdom (1992–2010), this study finds that issue cross-pressures do influence the time of voting decision regardless of voters' personal consideration set size, demographic background and political attribute. The effect of issue cross-pressures in the Netherlands is most pronounced. In the United Kingdom it is more moderate, while it is least prevalent in Germany. This partially demonstrates that party systems may constrain the role of issue cross-pressures.

1. Introduction

Since the era of democratization, there has been a long-term trend of electors delaying their voting decisions until the election campaign, or often even the final polling day. The proportion of late-deciding voters has increased considerably in recent decades in all 12 democracies analyzed by Dalton et al. (2000), except in Denmark. The Netherlands, the United Kingdom and Germany are no exception to this rule. With respect to the Netherlands, the share of late deciders has increased from 10 percent in 1971 to more than 40 percent in 2006 (Irwin and Van Holsteyn, 2008a). The most recent Dutch election studies (2010, 2012) even point to a majority of voters who made up their mind in the last week of the campaign. In the United Kingdom, only 12 percent of voters in 1970 reported that they made their decision in the final days before Election Day, while the figure was 26 percent in 1997 (McAllister, 2002). The trend is similar in Germany: between the federal elections of 1965 and 2009, the proportion of voters making up their minds in the latter stages of the campaign increased from less than 5% to 40% (Schmitt-Beck and Partheymüller, 2012).

With the increasing number of people who delay their voting decisions, the study of who these late-deciding voters are has attracted the attention of many scholars (Gopoian and Hadjiharalambous, 1994; Fournier et al., 2004; Irwin and Van Holsteyn, 2008a; Nir and Druckman, 2008; Kosmidis and Xezonakis, 2010; M^{c}Gregor, 2012; Schmitt-Beck and Partheymüller, 2012; Orriols and Martinez, 2014). Late deciders are found to be less partisan, less interested in politics and more easily persuaded by campaign information and media coverage. As a result, late-deciding voters are regarded by political actors - especially parties and candidates - as the group that determines the outcome of the election (Lazarsfeld et al., 1968; Wolfinger and Rosenstone, 1980).

This paper attempts to study voters' time of voting decision by focusing on the effect of cross-pressures emerging from holding policy preferences across various issues that push a person in different directions politically: the so-called issue cross-pressures (Therriault et al., 2011). Going back in history, the decline of party identification and social cleavages has been confirmed by various scholars since the 1970s (Dalton, 1984; De Graaf et al., 2001; Berglund et al., 2005; Oskarson, 2005; Arzheimer, 2006; Irwin and Van Holsteyn, 2008b; Franklin et al., 2009). General models of political behavior perform increasingly poorly in understanding and explaining the way in which voters make their voting choices. Political scientists responded by turning their attention to short-term cues, especially issues (Borre, 2001; Van Wijnen, 2001; Clarke et al., 2004; Aardal and Van Wijnen, 2005; Wessels, 2014). Although the findings with regard to the extent of issue voting are inconsistent, the consensus is that issues are significant motives behind voting choice, at least for some particular voters. It is in this context that issue cross-pressures get their meaning in understanding voting behavior.

The important role of issue cross-pressures in determining the time of voting decision can be deduced from two dominant schools

E-mail address: q.he-1@utwente.nl.

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in voting behavior. In the sociological model of electoral behavior, Lazarsfeld et al. (1968) suggested that individual voting choice was largely determined by socio-demographic factors. Simultaneously, they argued that if a person's social group affiliation was the predominant factor influencing his/her voting choice, conflicts and inconsistencies among these variables would make the person's voting choice more difficult. With respect to the Michigan school, scholars developed a socio-psychological model in which party identification was assumed to be in the core position. They also argued that, if party identification was most important to voters' voting decision, individuals with varying levels of party identification would differ considerably in the time of voting decision. According to the reasoning of both the Columbia School and the Michigan School, we can expect that, if a person's issue positions are the principal motivations behind voting, conflicts among these stances (i.e., pushing people towards different political objects) may lead to late decision. However, scholars have seldom paid attention to the aforementioned question. This paper discusses the concept and measurement of issue cross-pressures and explores to what extent they influence the time of voting decision.

Before continuing the study, it is important to bear in mind that the effect of issue cross-pressures on time of voting decision is not necessarily the same in different contexts. This study observes three different countries, using survey data from the Dutch Parliamentary Election Study (DPES) (1994–2012), the British Election Study (BES/BGES) (1992–2010), and the German Election Study (GES/GLES) (1994–2013). On the one hand, with the number of parties increasing, voters may be more likely to experience higher issue cross-pressures. On the other hand, when political contexts are equally dominated by several parties, those who suffer from issue cross-pressures may hesitate more between two or more parties. Due to the varying average effective number of parties from the 1990s to the 2010s in the Netherlands (5.5), Germany (3.8) and the United Kingdom (2.3), these three countries are ideal cases to demonstrate whether the role of issue cross-pressures in time of voting decision is conditioned by political systems or not.

In order to answer the research questions, this study will be divided into five sections. The first section discusses the factors that influence people's time of voting decision. The next part elaborates on the concept and measurement of issue cross-pressures. In the third section, data and methods are presented. The fourth section provides the results of the empirical analysis. The final section concludes with the implications of the findings.

2. Background: what factors influence voters' time of voting decision?

Undecided voters are often regarded by political parties and candidates as the group that determines the outcome of an election. When the election are close, those who vote during the later stages of a political campaign, or even on polling day, can determine who wins the election. As Hillygus and Shields (2008) said, “as many elections are decided at the margins, moving even a few votes during the campaign can make all the difference” (p.8). In this regard, political scientists have never questioned the importance of late deciders and have long examined the factors that determine if voters make their decisions late in the campaign.

Lazarsfeld et al. (1968) were the pioneers in studying why individuals make their voting decisions when they do. Based on the survey data from the 1940 US presidential election in Erie, Ohio, Lazarsfeld et al. found that voters' time of voting decision differed significantly. While exploring possible explanations for this phenomenon, Lazarsfeld et al. focused on cross-pressures arising from multiple socio-demographic affiliations. Their findings showed that voters exposed to cross-pressures were more likely to delay their voting decisions. In the landmark book: *The American Voter*, Campbell et al. (1960) contended that those who decided early differed from those who decided late primarily in the degree to which they experienced cross-pressures. In the Michigan school, the cross-pressures stem from holding conflicting attitudes towards candidates, issues and groups.

Yet in the late 1960s, as negative evidence regarding the effects of cross-pressures on voting behavior increased (Pool et al., 1965; Horan, 1971; Wolfinger and Rosenstone, 1980; Knoke, 1990), its explanation of the time of voting decision waned. Instead, scholars started focusing their attention on the other attributes of late deciders. Among these, partisanship was the main concern. Party identification has been a central factor in understanding and explaining voters' voting behavior. Therefore, many researchers argued that voters' time of voting decision was mainly determined by their partisanship; voters with partisan identities would make their decisions earlier, before the campaign, even. By contrast, those without or with weak party identification would make up their minds at a very late stage in an election (Gopoian and Hadjiharalambous, 1994; Fournier et al., 2004).

However, since the 1970s, partisan dealignment has set in. One remarkable feature of dealignment is the decreasing number of party identifiers. With younger generations being less partisan than older generations, the proportion of non-partisans is likely to further increase in the future (Dalton, 2014). It can thus be expected that party identification will perform increasingly worse as a predictor of citizens' voting behavior. For that reason, it is worthwhile to look elsewhere for insight into voters' time of voting decision. This paper attempts to study voters' time of voting decision from the perspective of issue cross-pressures. As a response to dealignment, scholars in political science concentrated on the significant role of issues, and highlighted individual issue positions as one of the most predominant factors for voting choice. When voters' issue positions lead them to different candidates or parties, we can expect these conflicts to point to a late decision. However, this phenomenon was seldom studied.

Nevertheless, some of the literature concerning individuals' inner psychological conflict imply that issue cross-pressures may be an important factor influencing people's time of voting decision. Firstly, researchers on political ambivalence have found that people with ambivalent views were less stable (Armitage and Conner, 2000; Conner and Sparks, 2002), more easily persuaded (Armitage and Conner, 2000), and their behavior was harder to predict (Conner et al., 2002). These results suggest that, compared to unambivalent individuals, those who hold competing attitudes towards a candidate or party are more likely to change their minds during the election campaign, which by definition makes them late deciders.

Secondly, inspired by the work of Lazarsfeld et al. on socio-demographic cross-pressures, scholars focusing on cross-pressures stemming from heterogeneous discussion networks found that cross-pressures had a negative effect on the time of voting decision. Based on two representative national surveys from the 1992 election, Mutz (2002) found that people whose network involved greater political disagreement were more likely to make up their minds later on in the campaign. By conceptualizing political disagreement in a person's social network as exposed to two conflicting points of view, Nir (2005) found that mixed messages from network discussants affected the time of voting decision but said influence would be moderated by ambivalence.

Thirdly, political scientists working on campaign effects have contributed to an understanding of how issue cross-pressures may affect a person's decision time as well. Nir and Druckman (2008) studied the role of cross-pressures coming from mass-mediated contexts in people's time of voting decision based on data from

the 2000 Minnesota Senate campaign. Their findings showed that, when ambivalent voters had been exposed to mixed campaign information, their voting decisions were delayed. By stating that cross-pressures came not only from external heterogeneous information, but also from counter-attitudinal coverage, Matthes (2012) demonstrated that people who held uncertain initial views and were then exposed to news that opposed their own opinions would delay their voting decisions.

As was mentioned before, issue cross-pressures stem from holding policy preferences across various issues that push people in opposite directions politically. Although there are differences between the concepts of socio-demographic cross-pressures, attitude conflict, political ambivalence, network heterogeneity pressures, mass-mediated pressures and issue cross-pressures, they are all related to a person's inner psychological inconsistency. We therefore expect that issue cross-pressures may delay the time of vote decision. The resulting hypothesis is that the more issue cross-pressures a person suffers from, the later his/her voting decision will be. The next part elaborates on the concept and discusses the measurement of issue cross-pressures.

3. Issue cross-pressures: concept and measurement

3.1. Concept

The definition of issue cross-pressures is commonly based on the initial work by Lazarsfeld et al. (1968). Imagine an individual whose Catholic identity makes him/her more likely to vote Democratic in the US, while belonging to the middle class pushes him/her towards voting Republican. This middle-class Catholic is cross-pressured by Lazarsfeld et al.'s definition. Following the work of the Columbia school, Campbell et al. (1960) described cross-pressures as attitude conflicts, which they defined as inconsistencies among individuals' attitudes towards various political objects. In Campbell et al.'s sense, attitude diversity could create psychological conflict within an individual. As an example, they said that those who liked Eisenhower but disliked the Republican position on foreign policy were cross-pressured. The other important concept we can refer to is political ambivalence, which also generates conflict within an individual's psychological field. When a person holds both positive and negative feelings, evaluations, beliefs, or emotions about political objects, such as candidates, parties, or issues, we can describe him/her as being politically ambivalent (McGraw et al., 2003). From the above description, we can draw the conclusion that there are several dimensions in people's minds, and when these dimensions point in different directions, people will experience conflicting feelings. According to the same logic of these three concepts, it is safe for us to expect that, when issues push voters to inconsistent candidates or parties, they will suffer inner psychological conflicts, the so-called issue cross-pressures.

There are two modern definitions that fit the expectation of what issue cross-pressures are. The first one is from Hillygus and Shields (2008), who defined policy cross-pressures as that which comes from disagreement with people's affiliated party across a range of issues. For example, in the context of the United Kingdom, imagine a voter who is a Conservative identifier. On the taxation issue, however, he/she approves Labour's position rather than his own party's stance. By definition, this voter will experience policy cross-pressures. The obvious limitation of Hillyus and Shields' definition is that it excludes those who do not identify with a party. With the widespread decline of partisan affiliation in contemporary western democracies, this exclusion would confine studies to a very small group of voters. The second definition is from Therriault et al. (2011). They defined issue cross-pressures as emerging from holding policy preferences across various issues that push one in different directions politically. Taking the example of the United Kingdom again, on the issue of taxes, a voter's position leads him/her to the Conservative party, while on the immigration issue, the voter prefers Labour. In this situation, such a voter is regarded by Therriault et al. as an issue cross-pressured citizen. This study follows the definition of Therriault et al. The most important reason is that this definition is only concerned with individuals' issue positions, and has no preconditions for who can be studied.

After defining the concept of issue cross-pressures, one question still remains: how do issue cross-pressures arise? Why do some people suffer from issue cross-pressures while others do not? Two possible explanations exist. The first one results from a psychological perspective. Many scholars have suggested that core values play an important role in structuring people's policy preferences (Hurwitz and Peffley, 1987; Feldman, 1988; Feldman and Zaller, 1992; Peffley and Hurwitz, 1993; Sniderman and Piazza, 1993). Feldman and Zaller (1992) found that core beliefs about humanitarianism, individualism, and the proper role of government contributed significantly to voters' views on social welfare issues. Hurwitz and Peffley (1987) suggested that core beliefs about militarism and authoritarianism were significant factors in shaping citizens' attitudes towards foreign affairs and defense. Since values are assumed to be chronic and stable cognitions, it is safe to say that core values in citizens' minds are hard to change. In this regard, when a citizen's core values structure his/her views on specific political issues which, in turn, lead him/her towards different candidates or parties, we would say that such a voter may suffer from inner conflicts or, according to our definition, issue cross-pressures.

The second explanation comes from Downs (1957). Assuming that voters are rational and tend to pursue the maximization of self-interest, when making their voting choices, they will examine the utility that they would gain from each of the candidates or parties, and vote for the one that benefits them the most. Imagine a voter, in the Dutch context who, on the issue of tax, wants to vote for the PvdA, as this party offers him/her the most benefits. However, on the issue of immigration, for the same reason, this voter prefers to vote for the PVV. In this situation, if this voter votes for the PvdA, he/she can get what he/she wants on the tax issue but will lose what is offered by PVV on the issue of immigration, and vice versa. In short, for this voter, getting one kind of benefit comes at the cost of foregoing the other. This benefit conflict results in discomfort for individuals, resulting in what we term issue cross-pressures.

3.2. Calculating issue cross-pressures

Defining issue cross-pressures is one thing, but clarifying how to calculate them is quite another. In this study, the measurement of issue cross-pressures is deduced from the approach used by Brader et al. (2014) in estimating cross-pressures emerging from people's social group memberships. As we described in the previous section, issue cross-pressures are those that emerge from citizens' policy preferences across various issues. Individuals may feel attracted or pushed to vote for one political party or another when it comes to their positions on specific issues. For instance, if a person's positions on more than two issues lead to a similar direction politically, the voter is more likely to experience reinforcing pressures. Conversely, if the person's positions on various issues point to different directions politically, the individual is more likely to feel conflicting pressures. The issue cross-pressures score, as measured through the next four steps, indicates the extent to which a person's issue positions is likely to generate reinforcing or conflicting feelings.

The process is as follows: (1) Regressing individuals' party preferences on their positions on various issues.[1] This step is the foundation to estimate whether an individual's issue positions generate consistent or inconsistent partisan pressures. After this step, we can see which issues are important to the whole electorate and which are not, and which issues are more important on average and which are less important. More specifically, after running a regression, we can get a regression function in which each issue will have a different coefficient. These coefficients, as we know, indicate the average importance of each issue to voters' party preferences. As a result, these coefficients can tell us which issues are important or unimportant on average (coefficients are statistically significant or not) and which issues are more important or less important on average (different values of coefficients). These different average degrees of importance of each issue are applied to the whole electorate and used to calculate their issue cross-pressures. (2) Based on the results of step 1, generating predicted probabilities of supporting each party for each respondent based on their positions on various issues. The distribution of probabilities tells us the extent to which an individual's particular issue positions lead him/her to different party preferences. When probabilities are aggregated at one particular party, for example, it suggests that the voter's issue positions point in same direction, thus implying reinforcing pressures. Conversely, when probabilities are aggregated at two or more parties, it suggests the presence of conflicting pressures. (3) In order to capture the variation among predicted probabilities, step 3 calculates the absolute difference in predicted probabilities across each party for each respondent. This step will vary depending on the party system. For two-party systems, since there are only two parties or candidates, all that needs to be done is to subtract one probability from the other, and take the resulting absolute value. In multi-party systems, there are more than two parties. In this situation, according to Brader et al. (2014), there are several choices. The first one is the so-called “top-2 variance” method, determining the two highest predicted probabilities for each respondent across all predicted probabilities, then calculating the absolute difference between them. The second one is the “top-3 variance method”, determining the three highest predicted probabilities for each respondent across all predicted probabilities, then taking the standard deviation across them. The third one, the “full variance method”, takes the standard deviation across all parties' predicted probabilities for each respondent. The smaller the difference, the more a person's issue positions push them to two or more parties, which means they experience more issue cross-pressures as well. (4) Subtracting the difference/deviation in step 3 from “1” so that a higher score correspondents to greater issue cross-pressures. This result is the respondent's issue cross-pressures score.

4. Data and method

4.1. Case selection

This paper aims to explore the influence of issue cross-pressures on voters' time of voting decision. In addition, the study attempts to examine whether or not the effect of issue cross-pressures on decision time is conditioned by different political systems. The political system is expected to influence the role of issue cross-pressures in time of voting decision through two different elements. The first one is the number of parties. On the one hand, more parties indicate stronger competition. One important characteristic of party competition in contemporary Western Europe is issue competition (Green-Pedersen, 2007). With an increasing number of parties, it is reasonable to expect that the number of salient issues in electoral campaigns will increase as well, and voters therefore might face more issues during an election. On the other hand, more parties imply more available alternatives and a higher likelihood for voters to find a corresponding party on a specific issue. Therefore, voters with different policy preferences on various issues are more likely to potentially find themselves in a situation in which their issue positions lead them towards different parties. In this regard, we can expect that voters in multi-party systems have a greater chance to experience issue cross-pressures than those in a two-party system.

Although people may experience more issue cross-pressures with the increasing number of parties, we cannot conclude that the effect of issue cross-pressures on time of voting decision is more notable in a multi-party system. We should pay attention to the second element of political systems, namely the distribution of parties. This distribution is expected to moderate the relationship between issue cross-pressures and time of voting decision. When political contexts are dominated by several parties, each party has similar opportunities to win a seat in parliament. Therefore, voters who suffer issue cross-pressures may be more hesitant and may struggle between choosing from among two or more parties until the last moment. Conversely, when political contexts are mainly dominated by two parties, parties need to get a relatively high percentage of votes in order to gain a seat, and small parties therefore have little chance to win. Voters whose policy preferences simultaneously push them towards a large party and a small party may make a decision more quickly: vote for the large party, as it has a better chance of getting executive power. In summary, this study expects that the role of issue cross-pressures in the time of voting decision may be more pronounced in multi-party dominated contexts than in two-party dominated contexts.

The Netherlands, the United Kingdom and Germany are all highly suitable cases for answering the research questions. From 1990s to 2010s, the average effective number of parties[2] in elections in the United Kingdom was 2.3. In Germany, the average effective number of parties was 3.8. In the Netherlands, across seven elections from 1994 to 2012, the average number was 5.5. Comparing the average effective number of parties in these three countries, in the context of what was discussed previously, this study expects that the role of issue cross-pressures in time of voting decision will be most pronounced in the Netherlands, more moderate in Germany and least prevalent in the United Kingdom.

4.2. Data

This paper attempts to study the influence of issue cross-pressures on voters' time of voting decisions. In the Netherlands, this can be examined with the survey data from the Dutch Parliamentary Election Studies (1994–2012), which include measures of

[1] As will be demonstrated in the next section, this paper only focuses on position issues. Therefore, independent variables are citizens' stances on several position issues in this step.

[2] Effective number of parties is an adjusted number of political parties taking account of voting support. Voting support is calculated by vote share (effective number of parties at the electoral level) and seat share (effective number of parties at the parliamentary level) (Kaakso and Taagapera, 1979). Here I use the effective number of parties because I think this concept captures not only the number of parties in a political context, but also the distribution of parties. This means it is possible to compare the difference among these three countries. In this case, I am focusing on the effective number of parties at the parliamentary level. I have obtained these figures from Trinity College Dublin: Electoral systems. http://www.tcd.ie/Political_Science/staff/michael_gallagher/ElSystems/index.php.

Table 1
Time of voting decision in the Netherlands, the United Kingdom and Germany.

	The Netherlands (1994–2012) (%)							United Kingdom (1992–2010) (%)					Germany (1994–2013) (%)			
	1994	1998	2002	2003	2006	2010	2012	1992	1997	2001	2005	2010	1998	2002	2009	2013
Election day		8	9	7	12	14	15						2	1	2	3
Last few days	25	17	20	14	23	28	25	24	26	23	33	34	4	4	6	7
Last few weeks	18	15	17	17	18	18	20	9	9	13	12	12	10	12	14	16
Last few months	14	13	15	11	10	9	6	7	8	8	9	9	19	17	27	21
Much earlier	43	47	39	52	37	31	35	60	57	55	46	45	65	65	51	53
N	1390	1646	1501	1203	2314	2024	1414	3066	2845	2193	3074	2376	1338	1202	1523	1467

Data source: DPES (1994–2012), BES/BGES (1992–2010), GES/GLES (1994–2013).

time of voting decision, issue positions, and voting choice. With respect to the United Kingdom, the analysis will be based on the British Election Study (1992–2010), which includes similar data of the same concepts. Finally, for Germany, this study focuses on four parliamentary elections from 1994 until 2013.[3] The data set of the 1998 election was obtained from the German Election Studies 1949–2009.[4] The other three data sets were obtained from the German Longitudinal Election Study.[5] The survey data from these four elections provide all the information necessary for the purpose of this study.

4.3. Method

The dependent variable in this study is voters' time of voting decision. With respect to the Netherlands, respondents were asked: "When did you decide to vote for this party?" The answers included "much earlier" "Last months", "Last weeks", "Last days", and "Election Day" (coded from 5 to 1).[6] The percentage of people who made their voting choice during earlier stages of the election decreased from 43% in 1994 to 35% in 2012. Simultaneously, the number of people who did not make up their mind until the last few days/election day increased from 25% to 40% (see Table 1 left). In the United Kingdom, the question was worded as follows: "How long ago did you decide to vote the way you did?" Answers included "A long time ago", "Sometime last year", "Sometime this year", and "During the campaign" (coded from 4 to 1). The percentage of people who made their final decision in the later stages of the election ranged from 24% in 1992 to 34% in 2010. While the percentage of those who made their voting choice a long time ago was as high as 60% in 1992, this number decreased to 45% in 2012 (see Table 1 center). In Germany, the question about voters' time of voting decisions was "When did you decide how to vote in these federal elections?" Respondents replied with "a long time ago", "a few months ago", "in the last weeks before the elections", "in the last days before the elections", and "on election day" (coded from 5 to 1). The trend of people's time of voting decision in Germany is similar to that in the Netherlands and the United Kingdom. The number of late deciders increased every year from 1998 to 2013. By contrast, those who made their voting choice a long time before the election decreased from 65% to 53% (see Table 1 right).

People may doubt the reliability of time-of-voting-decision recall. However, Fournier et al. (2001) found it was quite reliable in the context of Canada. They argued that, if respondents' answers to time-of-voting-decision questions were accurate, it was reasonable to expect that there would be more stability in vote choice (pre and post-election: vote intention vs. vote choice) among those who were interviewed after the reported time of decision than among those who were interviewed before that time. Analyzing data from the 1997 Canadian Election Study, their findings supported this argument. The results showed only little stability in vote choice (below 50 percent) among those who were interviewed before the time of decision. Conversely, this number was over 80 percent among those who were interviewed after the reported time of decision. Given the similarities between the Netherlands, the United Kingdom, Germany and Canada in terms of their parliamentary electoral systems and short campaign periods, we can conclude that the time-of-voting-decision recall is reliable.[7]

The independent variable is the issue cross-pressures score. The calculation of individuals' issue cross-pressures is based on the approach described in the previous section. Out of the four different steps, we can observe that the first step is fundamental. Therefore, information about voters' policy preferences regarding various issues and party preferences, which are independent variables and dependent variables respectively in step 1, is necessary. As a result, the first step to measure issue cross-pressures is to select issues. Generally, there are two kinds of issues. There are position issues, on which several controversial standpoints exist, and there are valence issues on which citizens share the same view, though their evaluations of the parties' competency to deal with said issues differs (Stokes, 1963). This paper focuses on position issues and attempts to examine to what extent individuals' stances on various position issues will lead them to different parties which, in turn, influence their time of voting decision. The selection of issues is based on two considerations: (1) their salience in society in each of the three countries mentioned. (2) The surveys in the three countries from the 1990s to the 2010s, which include these issues, as

[3] The 1994 election and the 2005 election omitted, since the survey data from 1994 election and 2005 election (ZA3065:Political Attitudes, Political Participation and Voter Conduct in United Germany 1994; ZA4332: Citizens and Parties in a Changed World 2005; ZA5321: long-term Panel 2005-2009-2013 (2005 wave)) does not include position issues or time of voting decision which are the main variables in this study.

[4] The name of the data set is ZA3066: Political Attitudes, Political Participation and Voter Conduct in United Germany 1998.

[5] The names of the data sets are ZA532: long-term Panel 2002-2005-2009(2002 wave is used), ZA5302: Pre- and Post-election Cross-Section 2009, ZA5702: Pre- and Post-election Cross-Section 2013.

[6] In the survey data of 1994, there is no option of "Election day".

[7] I replicated the cross-table analysis of Fournier et al. (2001) by using survey data from 1994, 1998, 2002, 2006 and 2010 DPES and 2001, 2005 and 2010 BES (I did not replicate the other data sets used in this paper, since they do not have information on vote intention before elections, which is necessary in order to examine validation of time-of-voting-decision recall). In all cases, the stability of vote choice among those who were interviewed after their time of decision is far greater than that among those who were interviewed before/during their reported time of voting decision. Therefore, we can be confident in the reliability of time-of-voting-decision recall. For detailed information, see Online Appendix II.

well as measurements of respondents' positions.[8]

Secondly, with respect to voters' party preferences, Brader et al. (2014) mentioned that party preferences would be vote choice/intention and partisanship. In this paper, vote choice was chosen, because many people do not have any party identification, especially in a European context. Consequently, choosing partisanship as the dependent variable in the first step would have resulted in the exclusion of a large number of people. In Germany, citizens have two votes in every election: one for the candidate, the other for the party. However, since the party vote is more essential in determining the distribution of parties in parliament, this study only concentrates on the party vote. In addition, this choice makes the analysis consistent with that in the Netherlands and the United Kingdom, namely party choice rather than candidate choice.

With the above information, we can now calculate a person's issue cross-pressures score based on the approach discussed in the previous section. Since the variables of vote choice in all three countries have more than two options, a nominal regression model has been chosen in step 1. We also need to pay close attention to step 3. After obtaining the predicted probabilities of each party for each individual in step 2, there are three choices to capture the variation among these predicted probabilities, namely selecting the two highest predicted probabilities, the three highest predicted probabilities, or all parties' predicted probabilities. In this study, the first option was chosen, because people's issue cross-pressures score measured based on different choices are highly correlated,[9] and the final findings have not changed[10]. In order to remain concise, this study calculates people's issue cross-pressures scores based only on the two strongest voting dispositions.

In order to make the examinations regarding the relationship between issue cross-pressures and time of voting decision more convincing, several other variables should be controlled. One important factor among them is the consideration set,[11] meaning the parties that citizens are aware of and are considering voting for (Schmitt-Beck and Partheymüller, 2016; Vassil et al., 2016). Several studies showed that, with the increasing number of choices in people's minds, people will delay their decisions (Greenleaf and Lehmann, 1995). In addition, this study also controls demographic variables: age, gender, social class and education, and political variables: party identification and political interest.[12]

5. Findings

The main aim of this paper is to try to answer the question of whether or not issue cross-pressures affect voters' time of voting decision. The hypothesis is that the more issue cross-pressures a person suffers from, the later his/her voting decision will be. This study first focuses on the Dutch Parliamentary elections. In order to test the hypothesis, the study generates voters' issue cross-pressures scores based on their issue positions and voting choices. It then estimates two ordered logistic regression models[13] with citizens' time of voting decision as the dependent variable (Table 2). Model 1 only includes an independent variable: a person's issue cross-pressures score. The results in the first model clearly live up to the prediction, that is, higher issue cross-pressures linked to a later time of voting decision. Model 1 demonstrates that, for six elections (1994, 1998, 2002, 2006, 2010, 2012), the coefficients on the issue cross-pressures score are negative and strongly significant. In the subsequent rows, estimated outcomes are provided if all voters were at the 10th, 50th and 90th percentiles in terms of issue cross-pressures score. When focusing on these margins, the results clearly show that electoral decisions are delayed by 11.09%, 2.44%, 2.24%, 2.47%, 4.40% and 5.78% respectively in moving from the 10th to the 90th percentile of the issue cross-pressures score. All these show that issue cross-pressures lead to a delayed time of voting decision.

In order to ensure that the relationship between issue cross-pressures and the time of voting decision shown in the first model is not spurious, respondents' consideration set size, demographic background and political attribute are controlled (Table 2). The results are reported in model 2. In the 2002 and 2006 elections, the coefficients of issue cross-pressures score are in the expected direction, but they are not significant. However, the coefficients of the issue cross-pressures score in the other four election years (1994, 1998, 2010 and 2012) are still highly significant, and all point in the predicted direction. The margins shown in the following rows also meet expectations. Voting decisions are delayed when moving from the 10th to the 90th percentile of the issue cross-pressures score. In summary, in 4 out of 7 elections, issue cross-pressures have a significant effect on voters' time of voting decision regardless of whether or not control variables are added. This implies that the effect of issue cross-pressures on the time of voting decision of Dutch voters is robust, and is not mediated by consideration set size, or demographic and political variables.

We will now turn our attention to the British general election to see if the role of issue cross-pressures in a different political system can be observed. Our hypothesis, namely that a person's voting decision is delayed as issue cross-pressures increase, is strongly supported by the data shown in model 3 (Table 3). The coefficients for four elections (1992, 1997, 2005 and 2010) all meet

[8] With respect to the Netherlands, the issues chosen in this paper include: income differences, European unification, crime fighting, foreigners' adaptation, nuclear plants, euthanasia, asylum seekers, minorities, social benefits. In the United Kingdom, the issues are about taxes, crime right, EU membership, EU currency, blacks and Asians, unemployment and inflation, nationalization and privatization, income redistribution, women's rights, jobs and standard of living. In Germany, they are socio-economic, Libertarian-authoritarian, climate change, nuclear power, immigration, European unification. In all three countries, there are some differences in specific issues chosen in each election. In the Appendix, there is an example of how the questions regarding these issues are worded.

[9] Only in 1 out of 16 elections; the correlations between issue cross-pressures calculated by the "top-2 variance method", the "top-3 variance method" and the "full variance method" are less than 0.5. In other elections, the correlations are all between 0.7 and 0.99. For detailed information, see Online Appendix III.

[10] Once the issue cross-pressures score has been calculated based on the "top-2 variance method", the "top-3 variance method", and the "full variance method", in the Netherlands, there are 4 out of 7 elections, 5 out of 7 elections, and 5 out of 7 elections, respectively, in which the issue cross-pressures score is highly significant at 0.05. This is the case in 2 out of 5 elections, 3 out of 5 elections and 3 out of 5 elections, respectively, in the United Kingdom. In Germany, the score is highly significant in 1 out of 4 elections in all cases. For detailed information, see Online Appendix IV.

[11] Only elections in the Netherlands and partial elections in United Kingdom have this variable. Nevertheless, the results presented in Tables 2 and 4 show that the influence of issue cross-pressures in time of voting decision is not mediated by consideration set size.

[12] Coding of control variables, see Appendix at the end of the paper.

[13] As the results in Tables 2–4 demonstrate, with respect to models without control variables, Brant tests are passed in 14 out of 16 elections. By contrast, once control variables are added, only 7 out of 16 elections meet the assumption of proportional odds. Therefore, for models with control variables, I performed a generalized ordered logistic regression analysis. The results are not very different compared to those from ordered logistic regression analysis. More specifically, once the issue cross-pressures score is not significant in the ordered logistic model, it is not significant in most cases in the generalized ordered logistic model either. On the contrary, if it is significant in the ordered logistic model, it is also significant in most cases in the generalized ordered logistic model. In addition, the final findings and conclusions do not change when relying on results from the generalized ordered logistic regression analysis. In order to remain concise and to keep the results more straightforward, this paper will use ordered logistic regression. For detailed information about the results from the generalized ordered logistic regression analysis, see Online Appendix V.

Table 2
Issue cross-pressures and time of voting decision in the Netherlands: ordered logistic regression analyses of data sets from Dutch parliamentary election studies.

Issue cross-pressures and time of voting decision														
	Model 1							Model 2						
	1994	1998	2002	2003	2006	2010	2012	1994	1998	2002	2003	2006	2010	2012
Issue cross-pressures score (ICP score)	−1.540***	−0.803**	−0.752*	−0.652	−1.057*	−0.934***	−1.209***	−1.259***	−0.897**	−0.275	−0.755	−0.511	−0.797**	−1.272***
	(0.37)	(0.28)	(0.35)	(0.45)	(0.43)	(0.28)	(0.33)	(0.38)	(0.30)	(0.37)	(0.46)	(0.45)	(0.29)	(0.34)
Age								0.013***	0.018***	0.015***	0.020***	0.023***	0.019***	0.024***
								(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Gender								0.375***	0.197+	0.213*	0.192+	0.309***	0.371***	0.631***
								(0.12)	(0.11)	(0.10)	(0.12)	(0.09)	(0.09)	(0.11)
Education								0.041	−0.035	−0.014	−0.031	−0.013	−0.028	−0.123*
								(0.06)	(0.02)	(0.02)	(0.02)	(0.05)	(0.05)	(0.06)
Social class								−0.044	0.056	0.047	−0.001	0.001	−0.063	−0.057
								(0.06)	(0.06)	(0.06)	(0.07)	(0.05)	(0.05)	(0.06)
Political identification								1.384***	1.636***	1.344***		1.418***	1.650***	1.364***
								(0.15)	(0.13)	(0.11)		(0.10)	(0.11)	(0.14)
Political interest								−0.087	−0.062	−0.045	−0.288*	−0.029	−0.016	−0.160
								(0.11)	(0.11)	(0.10)	(0.12)	(0.09)	(0.09)	(0.11)
Consideration set size								−0.100*	−0.097***	−0.181***	−0.247***	−0.015	−0.066***	−0.106***
								(0.04)	(0.03)	(0.04)	(0.05)	(0.02)	(0.02)	(0.03)
Predictive margins														
10th ICP score percentile	19.19%	6.52%	7.39%	6.31%	9.62%	11.56%	11.51%	20.28%	6.40%	8.15%	6.25%	10.30%	11.83%	11.39%
50th ICP score percentile	25.87%	7.90%	8.94%	6.99%	11.27%	14.65%	14.78%	25.29%	7.87%	8.71%	7.02%	11.07%	14.32%	14.47%
90th ICP score percentile	30.28%	8.96%	9.63%	7.62%	12.09%	15.96%	17.29%	28.47%	9.00%	8.95%	7.74%	11.44%	15.34%	16.99%
Brant test (chi2)	4.19	2.07	4.12	7.90*	1.03	0.17	0.59	44.00***	41.81*	23.75	41.96**	52.90***	46.13**	37.70*
McKelvey-Zavoina R^2	0.017	0.006	0.003	0.002	0.003	0.007	0.012	0.130	0.228	0.165	0.075	0.189	0.217	0.213
N	1115	1402	1330	1149	1803	1736	1165	1115	1402	1330	1149	1803	1736	1165

Notes: Issue Cross-Pressures Score has been calculated into a format with values ranging from 0 to 1. Time of voting decision ranges from 1 (on the election day) to 5 (a long time ago). Negative coefficients indicate that, if the value of the independent variable increases, the voters' time of voting decision will be delayed.
Empty fields in the controlled model mean that there is no specific variable in a particular election.
Std.Err. in parentheses.
$^{+}p \leq 0.1$, $^{*}p \leq 0.05$, $^{**}p \leq 0.01$, $^{***}p \leq 0.001$.
Data source: DPES (1994–2012).

Table 3
Issue cross-pressures and time of voting decision in the United Kingdom: ordered logistic regression and generalized ordered logistic analyses of data sets from British election/general election study.

Issue cross-pressures and time of voting decision										
	Model 3					Model 4				
	1992	1997	2001	2005	2010	1992	1997	2001	2005	2010
Issue cross-pressures score	−0.966***	−1.876***	−0.296	−0.877*	−0.904*	−0.820***	−1.664***	−0.226	−0.397	−0.722+
	(0.23)	(0.21)	(0.52)	(0.36)	(0.40)	(0.24)	(0.22)	(0.54)	(0.37)	(0.42)
Age						0.032***	0.021***	0.026***	0.027***	0.026***
						(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Gender						0.146	0.155+	0.176+	0.079	0.307*
						(0.11)	(0.08)	(0.11)	(0.09)	(0.12)
Education						−0.066*	−0.036+	−0.453***	−0.408***	−0.388*
						(0.03)	(0.02)	(0.12)	(0.11)	(0.16)
Social class									−0.395***	−0.287*
									(0.09)	(0.12)
Political identification						1.553***	1.364***	1.171***	0.401***	1.308***
						(0.21)	(0.14)	(0.15)	(0.09)	(0.17)
Political interest							−0.114**	−0.107+	−0.125**	0.081
							(0.04)	(0.06)	(0.05)	(0.07)
Consideration set size								−0.070	0.027	0.062
								(0.07)	(0.05)	(0.07)
Predictive margins										
10th ICP score percentile	18.39%	17.27%	23.06%	30.47%	30.63%	19.21%	18.33%	23.10%	31.87%	31.58%
50th ICP score percentile	23.13%	23.92%	23.13%	33.54%	36.12%	22.92%	23.95%	23.15%	33.29%	35.43%
90th ICP score percentile	29.30%	35.34%	24.22%	36.11%	38.34%	27.56%	33.17%	23.89%	34.44%	36.95%
Brant test (chi2)	0.84	4.30	0.79	4.55	0.22	21.81*	16.81	15.44	34.25**	22.26
McKelvey-Zavoina R^2	0.015	0.036	0.000	0.003	0.005	0.155	0.129	0.141	0.119	0.170
N	1364	2542	1482	1982	1054	1364	2542	1482	1982	1054

Notes: Issue Cross-Pressures Score has been calculated into a format with values ranging from 0 to 1. Time of voting decision ranges from 1 (during campaign) to 4 (a long time ago). Negative coefficients indicate that, if the value of the independent variable increases, the voters' time of voting decision will be delayed.
Std.Err. in parentheses.
Empty fields in the controlled model mean that there is no specific variable in a particular election.
$^{+}p \leq 0.1$, $^{*}p \leq 0.05$, $^{**}p \leq 0.01$, $^{***}p \leq 0.001$.
Data source: BES/BGES (1992–2010).

expectations, in that they are negative and highly significant. The margins reported in the following rows also point in the predicted directions. For the time of voting decision, when moving from the 10th to the 90th percentile of the issue cross-pressures score, the effect is delayed by 10.91%, 18.07%, 5.64% and 7.71% respectively.

The next test is whether the effect of issue cross-pressures in the time of voting decision is remarkable by adding control variables to the model (Table 3, Model 4). Observing the coefficients of the issue cross-pressures score displayed in model 4, we can find that three of them (1992, 1997 and 2010) are still significant and point in the expected direction. The margins reported in the following rows are also in line with those in model 3. Time of voting decision is delayed by 8.35% in 1992, 14.84% in 1997, and 5.37% in 2010 when moving from the 10th to the 90th percentile of the issue cross-pressures score. Overall, the coefficients of the issue cross-pressures score in 3 out of 5 elections always remain significant, which shows that issue cross-pressures influence British citizens' time of voting decision.

Regarding Germany, the question is whether we are able to observe a similar effect of issue cross-pressures on the time of voting decision From Model 5 (Table 4), we can see that some of the results reported meet the original prediction. In the election of 2009, the coefficient of individuals' issue cross-pressures scores is significant and related to people deciding late, as expected, even though the magnitude of the estimated effects are quite modest. Time of voting decision is delayed by 0.64% when moving from the 10th to the 90th percentile of the issue cross-pressures score. By contrast, voters' issue cross-pressures scores in 1998, 2002 and 2013 appear irrelevant for the time of voting decision. The coefficients in these three models are all insignificant. After adding control variables to the analysis, the results from model 6 are similar to those in model 5. The coefficients of voters' issue cross-pressures scores in 2009 are still significant and negative. However, in 1998, 2002 and 2013, the role of issue cross-pressures cannot be observed. All of this information suggests that the effect of issue cross-pressures on the time of electoral decision in Germany is not as great as is the case in the Netherlands and the United Kingdom.

Following the discussion in the previous section, this study expects that, with the increasing effective number of parties in a system, the influence of issue cross-pressures might become even more pronounced. The findings partially support the expectation. Firstly, with respect to the Netherlands and Germany, it is expected that the role of issue cross-pressures in time of voting decision is more pronounced in the Netherlands than in Germany. The results in Tables 2 and 4 confirm this prediction. The effects of issue cross-pressures are significant in 4 out of 7 elections in the Netherlands after controlling consideration set size, demographic and political variables. However, this is the case in only 1 out of 4 elections in Germany.

Secondly, the results from the Dutch parliamentary election and the British general election also support expectations. The effects of issue cross-pressures are notable in 3 out of 5 elections in the United Kingdom, which are a little bit larger compared to those in the Netherlands (4 out of 7). However, in the Netherlands, the coefficients of the issue cross-pressures score in those 4 elections are all significant at the 0.01 level. With respect to the United Kingdom, one of them is significant at the 0.1 level, and the other two are significant at the 0.01 level. In addition, comparing the coefficients of the issue cross-pressures scores in model 2 to those in model 1, the directions of their changes are mixed. The coefficient increases in the elections of 1998 and 2012, and decreases in elections of 1994 and 2010. However, after adding control variables into model 4, we can find that the absolute value of the issue cross-pressures score's coefficients all decrease in 1992, 1997 and 2010 when compared to

Table 4
Issue Cross-Pressures and Time of Voting Decision in Germany: ordered logistic regression analyses and generalized ordered logistic of data sets from German Election/ Longitudinal Election Studies.

Issue cross-pressures and time of voting decision								
	Model 5				Model 6			
	1998	2002	2009	2013	1998	2002	2009	2013
Issue cross-pressures score	−0.387	−0.117	−1.544**	−0.412	−0.257	−0.151	−1.545**	−0.555
	(0.56)	(0.45)	(0.53)	(0.37)	(0.58)	(0.46)	(0.56)	(0.38)
Age					0.014***	0.013*	0.026***	0.020***
					(0.00)	(0.01)	(0.00)	(0.00)
Gender					0.079	−0.293*	−0.133	0.224*
					(0.13)	(0.13)	(0.11)	(0.11)
Education					−0.234***	−0.061	−0.060	−0.200***
					(0.06)	(0.04)	(0.06)	(0.06)
Social class					0.085	−0.016	0.064	−0.051
					(0.12)	(0.13)	(0.07)	(0.06)
Political identification					1.095***	−0.003+	1.715***	1.312***
					(0.13)	(0.00)	(0.13)	(0.13)
Political interest					−0.169*	−0.377***	−0.148*	−0.190**
					(0.07)	(0.08)	(0.07)	(0.07)
Consideration set size								
Predictive margins								
10th ICP score percentile	1.88%	1.28%	1.35%	2.33%	1.91%	1.27%	1.37%	2.25%
50th ICP score percentile	1.99%	1.32%	1.60%	2.60%	1.98%	1.32%	1.62%	2.61%
90th ICP score percentile	2.08%	1.34%	1.99%	2.71%	2.05%	1.34%	2.00%	2.74%
Brant test (chi2)	7.66+	3.04	1.19	0.31	33.75*	11.14	19.44	18.92
McKelvey-Zavoina R^2	0.001	0.000	0.007	0.001	0.112	0.053	0.216	0.155
N	1210	1066	1287	1329	1210	1106	1287	1329

Notes: Issue Cross-Pressures Score has been calculated into a format with values ranging from 0 to 1. Time of voting decision ranges from 1 (on the election day) to 5 (a long time ago). Negative coefficients indicate that if the value of the independent variable increases, the voters' time of voting decision will be delayed.
Empty fields in the controlled model mean that there is no specific variable in a particular election.
Std.Err. in parentheses.
$^{+}p \leq 0.1$, $^{*}p \leq 0.05$, $^{**}p \leq 0.01$, $^{***}p \leq 0.001$.
Data source: GES/GLES (1994–2013).

model 3. These results imply that the effect of issue cross-pressures on time of voting decision in the Netherlands is slightly stronger than is the case in the United Kingdom.

Thirdly, in the United Kingdom and Germany the results do not support the hypothesis. The results in Table 4 show that issue cross-pressures have a significant effect on people's time of voting decision in only 1 out of 4 elections in Germany, regardless of whether control variables are added or not. However, in the United Kingdom, the effect is significant in 4 out of 5 elections without controlling variables. And it is significant in 3 out of 5 elections when control variables are added. This comparison illustrates that the role of issue cross-pressures in decision time in Germany is more moderate than in the United Kingdom.

6. Discussion

Since the late 1970s, the electorate among the long-standing European democracies has become less stable than before. One of the reasons is the increasing number of people who make their voting decisions at a very late stage in the campaign. Due to the important role of undecided voters in determining the outcome of an election, political scholars have long worked on the question of what factors influence voters' time of voting decisions.

This paper attempts to examine to which extent the time of voting decisions are affected by issue cross-pressures, and to see whether or not this process is conditioned by political systems. In order to achieve this goal, this study uses the survey data from the Dutch Parliamentary Election Study, the British Election Study, and the German Election Study. Analyses of seven Dutch parliamentary elections (1994–2010), five British general elections (1992–2010) and four German parliamentary elections (1994–2013) have shown that issue cross-pressures do influence people's time of voting decisions regardless of their consideration set size, demographic background and political attribute. In the model without control variables, individuals' issue cross-pressures scores in 11 out of 16 elections are strongly related to late deciding, as expected. When control variables are added, the role of issue cross-pressures disappears in some elections; however, it remains significant in 8 out of 16 elections.

One thing to note is that *McKelvey-Zavoina* R-square[14] is not very high across Tables 2–4. This implies that, even though issue cross-pressures have a significant influence, they do not explain much of the variations in voters' time of voting decisions. However, there are a number of reasons as to why issue cross-pressures should not be expected to explain a great deal. Firstly, the issue cross-pressures score in this paper is a political variable, in the sense that it is based on political content (policy issues, ideological differences), while the dependent variable is not about political content. Furthermore, after including party identification in the analysis, the value of *McKelvey-Zavoina* R-square [2] is still only about 0.15, while partisanship is considered a strong influence on virtually all elements of electoral behavior. So, apparently, time of voting decision is a phenomenon that is just difficult to explain. In addition, several measures of the issue cross-pressures score exist. The one used in this paper is based on the regression model, making deductions from the procedure proposed by Brader et al. (2014). It is possible for the Pseudo-R^2 to be different with another measurement of issue cross-pressures.

The findings partially confirmed that the influence of issue cross-pressures might be conditioned by party systems. This study expects that the role of issue cross-pressures in time of voting decision is the largest in the Netherlands, followed by Germany and finally the United Kingdom. However, the results only partially support this prediction. Looking at the models with control variables, we find that, in Germany, citizens' issue cross-pressures scores are significantly related to late deciding in only 1 out 4 elections. By contrast, this figure in the United Kingdom is 3 out of 5, and 4 out of 7 in the Netherlands. Additionally, the coefficients of the issue cross-pressures score in the Netherlands are all significant at the 0.01 level in those 4 elections. In the United Kingdom, only two are significant at the 0.01 level. These findings suggest that the effect of issue cross-pressures in the Netherlands is most pronounced, a little bit more moderate in the United Kingdom, and weakest in Germany. This implies that variations in the effect of issue cross-pressures on the time of voting decision in different political contexts can be partially explained by party systems.

This study provides several contributions. Firstly and most importantly, it provides us with a new perspective in understanding voters' voting behavior: the decision time of voters. Because of dealignment, party identification is losing its appeal in predicting citizens' political behavior. In this regard, if we only focus on partisanship, we may not fully understand and explain the political behavior of voters in the future. Therefore, turning our attention to short-term factors is worthwhile. Issue cross-pressures is one of these factors.

Secondly, this study develops the concept and measurement of issue cross-pressures. Earlier studies of political behavior, such as studies on social cross-pressures of the Columbia school and attitude conflicts of the Michigan school remind us of the possible existence of issue cross-pressures. However, political scholars pay comparatively little attention to it. This paper overviews the existing definitions of issue cross-pressures in recent years and discusses how issue cross-pressures arise in greater detail. In addition, based on the approach of Brader et al. (2014) in calculating social cross-pressures, this paper develops a measure of issue cross-pressures. Altogether, this gives us a deeper understanding of issue cross-pressures and ultimately promotes further exploration into the effect of issue cross-pressures.

Furthermore, the present study suggests several follow-up questions. Firstly, as was found in this paper, variations in the effect of issue cross-pressures on time of voting decision in different political contexts can only be partially explained by party systems. This implies that we need to look into why the role of issue cross-pressures in different political systems differs. Electoral rule would need to be taken into account. The German electoral system is distinct from those in the Netherlands and the United Kingdom. The members of Bundestag are elected in two separate ways. Half of the members (299) are elected based on a proportional representation rule by using party lists, while the other half are elected directly from 299 constituencies based on a First-Past-The-Post rule. As a result, each voter has two votes in the German parliamentary election. The first vote is cast for a candidate, choosing which candidate is sent to parliament on the behalf of their local constituencies. The second vote, allowing voters to vote for a party list, determines the allocation of seats in parliament. Since both votes count, it provides an opportunity for voters to split their voting when they feel attracted to two parties simultaneously. This might be a reason why the influence of issue cross-pressures is weakest in Germany compared to the Netherlands and the United Kingdom.

Secondly, we can observe that the role of issue cross-pressures in time of voting decision not only varies among countries, but also among elections within a country. As the long-term tie between voters and parties is waning, issues are increasingly important for voters' voting choices. In this regard, we would expect that

[14] *McKelvey-Zavoina* R^2 is one kind of Pseudo-R^2 for ordinal outcomes, which has been agreed by scholars is most closely approximates the R^2 in liner regression model (Hagle and Mitchell, 1992; Windmeijer, 1995; Long and Freese, 2005).

the role of issue cross-pressures on time of voting decision will continuously increase in each country. However, our findings suggest otherwise. More specifically, in the Netherlands the coefficient of issue cross-pressures was not significant in the 2002, 2003 and 2006 elections, but it was significant in the 1994, 1998, 2010 and 2012 elections. In the United Kingdom, issue cross-pressures had an effect on decision time in the 1992, 1997 and 2010 elections, but they did not influence a person's motivation to postpone his/her voting decision in the 2001 and 2005 elections. In Germany, in the 2009 election, issue cross-pressures played a role, while in the 1998, 2002 and 2013 elections, they were not significant. Future studies should therefore examine under what kinds of conditions issue cross-pressures will influence voters' time of voting decision.

Thirdly, political scholars have spent a great deal of time studying late deciders from the perspective of what they are waiting for. Generally, the common wisdom is that they are waiting for more information related to the candidates and/or parties. This study shows that issue cross-pressured citizens are late deciders. It is therefore possible that (1) those late deciders are waiting for nothing, but just keep on hesitating which party or candidate to vote for until the last moment and make a choice randomly. (2) On the other hand, it is also possible that when people suffer from issue cross-pressures, they will seek to reduce the feeling of inconsistency. There are several possible ways of doing so, such as understating the importance of some issues for themselves, re-evaluating the candidates' or parties' issue positions, adding other attributes which they adore to parties/candidates, like leadership. All in all, this study gives us some other ideas about what late deciders are waiting for other than just additional information concerning the parties or candidates.

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Appendix. Description of variables

The wording of issue questions:

As an example, with respect to the Netherlands, five issue variables were chosen in 2012. They are **V106** (Income difference- Some people think that the differences in income in our country should be increased. Others think that they should be decreased. Where would you place yourself on a scale of 1–7, where 1 means differences in income should be increased and 7 means that differences in income should be decreased?); **V113** (European Unification- Some people and parties think that the European unification should go further. Others think that the European unification has already gone too far. Where would you place yourself on a scale of 1–7, where 1 means that the European unification should go even further, and 7 means that the unification has already gone too far?). **V114** (Crime fighting- People think differently about the way the government fights crime. Where would you place yourself on a scale of 1–7, where the beginning of the line entails the parties that think the government is acting too tough on crime, and the end of the scale entails the parties that think the government should be tougher on crime?); **V115** (Foreigner adaptation- In the Netherlands, some think that foreigners should be able to live in the country while preserving their own culture. Others think that they should fully adapt to Dutch culture. Where would you place yourself on a scale of 1–7, where 1 means preservation of own culture for foreigners, and 7 means that they should fully adapt?); **V116** (Nuclear plants- Some people think that nuclear power plants are the solution to a shortage of energy in the future. Others think nuclear power plants should not be built, because the dangers are too great. Where would you place yourself on a scale of 1–7, where 1 means nuclear power plants should be built quickly, and 7 means that they should not be built?). For other specific information about the issues and how their questions are worded in each of the three countries, see Online Appendix I.

Coding of control variables

Consideration set

Based on the question of propensity-to-vote (PTV), "I will now name some parties for you. Please indicate on a scale of 1–10 how likely it is that you will ever vote for that party. 1 means that you will never vote for this party, 10 means that you will certainly vote for this party sometime. How likely is it that you will ever vote for xxx (a specific party name)". A party which gets a PTV score of 8 or higher is regarded as having high probability to receive votes, which is why it is included in respondents' consideration sets. Thus the value of the consideration set size is the number of parties with a PTV score of 8 or above.

Gender

--- "1" male, "0" female---.

Social class

This paper uses self-image of social class to measure individuals' social status. In the Netherlands, it ranges from "1" (upper class) to "5" (working class). In Germany, in the 2009 and 2013 elections, it ranges from "1" (upper class) to "6" (under class). In the 1998 and 2002 elections, it is coded from "1" (upper class) to "3" (working class). In the United Kingdom, only the 2005 and 2010 elections have this variable, and it is coded as "0" (not belonging to a social class), "1" (belonging to a social class).

Education

In the Netherlands, education is coded from lower level to higher level, varying from "1" to "5/10/11". In the United Kingdom, in the 1992 and 1997 elections, it is coded from "1" (no qualification) to "7" (higher degree qualification); In the 2001, 2005, and 2010 elections, it is coded as "1" (have education or work qualification) and "0" (do not have education or work qualification). In Germany, it is coded from "0/1" (still a student, lowest certification) to "5" (university degree).

Party identification

"1" have party identification, "0" do not have party identification (In the United Kingdom and Germany, since there are many miss cases, those who refuse and do not know are regarded as non-partisan).

Political interest

It ranges from "1" (very interested) to "3/5" (not interested at all).

Appendix A. Supplementary data

Supplementary data related to this article can be found at http://dx.doi.org/10.1016/j.electstud.2016.08.017.

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