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Political cleavages, party voter linkages and the impact of voters' socio-economic status on vote-choice in Iceland, 1983-2016/17

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Abstract

In the research presented in this paper, we analyse whether the structure of the political cleavage system in Iceland has changed since 1983, as well as whether the impacts of party-voter linkages and the social structure of the vote have changed between 1983 and 2016/2017. Based on official data and the Icelandic National Election Study (ICENES), we find that the rural-urban cleavage and left-right cleavage, which are reflected in party polarisation on the left-right spectrum, are as important today as previously. Our main results regarding the impacts of party-voter linkages and the social-structure of the vote is that the core bonds of party identification, left-right distances and the social structure of the vote have weakened over time, whereas the impact of party sympathy has become stronger. This, we argue, reflects that while there has been a gradual change in the impact of party-voter linkages and the social structure of the vote, opening up a space for new parties to succeed, the political cleavage system has remained intact. The major change has thus occurred in the bond between voters and parties and not in the structure of party competition in Iceland.

Keywords: Political cleavages; party-voter linkages; voters' socio-economic status; vote-choice.

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Introduction

In this paper, we analyse the importance of the rural-urban and left-right cleavages in the electoral connection between parties and voters in Iceland, as well as whether those cleavages are as present today as they once were. Furthermore, we analyse whether the effects of party-voter linkages and voters' socio-economic status on vote choice has changed in Iceland over time. Regarding the rural-urban cleavage, we analyse whether support for various parties in the capital area has changed between 1983 and 2017 using official data. The main data source we make use of otherwise in another analysis is the Icelandic National Election Study (ICENES), which covers ten elections. In our analysis of the left-right cleavage, we use party polarisation on the left-right scale as an indicator of the importance of the left-right cleavage because the more important this left-right cleavage is, the more polarised parties will be on the left-right scale (Freire 2008). Regarding party-voter linkages, we focus on the impact of left-right distances, party identification and party sympathy on the vote. Furthermore, we analyse whether the impact of voters' socio-economic status on vote-choice has changed in Iceland.

After 1983, politics in Iceland remained quite stable until 2009, with four established parties receiving around 85-90% of the vote. The global credit crunch hit the Icelandic economy with great force in 2008, causing a collapse of the financial system and protests, and since then, politics have been turbulent (e.g. Önnudóttir et al. 2017). A number of research projects have focused on the impact of the financial crisis on politics in Iceland, for example, on electoral behaviour (Indriðason et al. 2017; Önnudóttir et al. 2017), protest participation (Bernburg 2016) and trust in politics and society (Vilhelmsdóttir & Kristinsson 2018). In this paper, our focus is different. We are, first and foremost, interested in analysing and understanding long-term gradual changes in electoral behaviour during both the pre-crisis and post-crisis periods. We do take into consideration, as a context, whether the financial crisis in 2008-09 has accelerated long-term changes in party-voter linkages in Iceland – but this is not the main focus of our analysis.

1. Parties and voters in Iceland 1983–2016

Historically, there have been four main parties in Iceland, the right-wing Independence Party; the Progressive Party, which is a centre party and a former agrarian party; the left-centre Social Democratic Alliance and the left-socialist Left-Green Movement. In addition to those four parties, there have usually been one or, at most, two smaller parties represented in the parliament. Table 1 shows an overview of the vote-share of Icelandic parliamentary parties from 1983 to 2017. Until the 2013 election, the four established parties usually received a combined share of 85–90% of the vote in national elections, but that changed in 2013. In that election, the established parties received a combined vote of 75%, followed by 63% in 2016 and 65% in 2017 (Statistics Iceland 2017a).

Even if the focus in this paper is long-term gradual changes in electoral behaviour, the fact that politics have been turbulent during the post-crisis period cannot be ignored. There have been huge swings in the vote share of the established parties, and out of the

Table 1. Vote share of Icelandic parliamentary parties, 1983–2017

	% of vote										
	1983	1987	1991	1995	1999	2003	2007	2009	2013	2016	2017
The four established parties:											
Independence Party	38.7	27.2	38.6	37.1	40.7	33.7	36.6	23.7	26.7	29.0	25.2
Peoples' Alliance / Left-Green Movement	17.3	13.3	14.4	14.3	9.1	8.8	14.3	21.7	10.9	15.9	16.9
Progressive Party	19.0	18.9	18.9	23.3	18.4	17.7	11.7	14.8	24.4	11.5	10.7
Social Democratic Party / Social Democratic Alliance	11.7	15.2	15.5	11.4	26.8	31.0	26.8	29.8	12.9	5.7	12.1
The sum for the four established parties	86.7	74.7	87.4	86.1	95.0	91.2	89.5	90.0	74.9	62.1	64.9
Other parties:											
Alliance of Social Democrats	7.3										
Women's Alliance	5.5	10.1	8.3	4.9							
Citizens' Party		10.9									
People's Movement				7.2							
Liberal Party					4.2	7.4	7.3				
Civic Movement								7.2			
Bright Future									8.2	7.2	
Pirate Party									5.1	14.5	9.2
Reform										10.5	6.7
People's Party											6.9
Center Party											10.9
Others and outside parties (not elected)	0.5	4.2	4.3	1.9	0.8	1.4	3.3	2.8	11.8	5.7	1.5

*Source: Statistice Iceland, see on:
http://px.hagstofa.is/pxen/pxweb/en/Ibuar/Ibuar__kosningar__althingi__althurslit/KOS02121.px

four elections held since 2008, three have been early elections. Net volatility (Pedersen's index) in 2009 was 21%, followed by 38% in 2013, 31% in 2016 and 22% in 2017, while the corresponding figures from 1971 to 2007 were typically between 10 and 15%. Data from the Icelandic National Election Study (n.d.) (ICENES) show that in 2016, a record number of voters switched parties. In fact, more than half of them did so.

The first early election was held in 2009, when the government was forced to resign after the economic crash and months of protest activity. The next government managed to finish its four-year term, which lasted until the 2013 election. The two latter early elections, in 2016 and 2017, were both triggered by political scandals. In 2016, it was revealed by the so-called Panama Papers that the Prime Minister at the time and his wife had large sums of money in offshore companies, a fact that he attempted to lie about when interviewed about the subject by Swedish National TV (Önnudóttir 2017). The scandal that led to the 2017 election was related to an ex-convict's application for a restored honour (Önnudóttir & Harðarson 2017). It was revealed that the father of Bjarni Benediktsson, the Prime Minister and leader of the Independence Party, had recommended in 2016 that an ex-convict, a child-molester, be granted a restored honour. Bright Future, one of the coalition parties in the government, left the coalition on the grounds of a breach of confidence when it was revealed that Benediktsson had known about this for some time without informing his coalition partners.

Seemingly, the four established parties lost their dominant status after 2009, opening up a space for new parties to win elections (Table 1). As already stated there were usually, before 2009, one or two smaller parties represented in the parliament, together with the four established parties. Only one new party, the Women's Alliance, managed to survive through four elections from 1983 to 1999, and only two other parties managed to survive two elections, the Liberal Party and the Pirate Party. Since the 2009 election, six new parties have managed to win elections, with four of them, the Pirate Party (centre-left), the Peoples' Party (centre-left), the Center Party (centre) and Reform (centre right) winning elections in 2017, resulting in eight parties being represented in the parliament, which represents a record number of parliamentary parties in Iceland.

2. Political cleavages and party-voter linkages in Iceland 1983–2016/2017

The number of new parties that have entered the stage (with some of them having ceased to exist) since the 2009 election, begs the question whether those new parties are mobilising along the same political cleavages as established parties and whether they can therefore be viewed as add-ons to the established cleavage system in Icelandic politics. The political cleavages we focus on in this paper are the *urban-rural cleavage* and the *economic left-right cleavage,* which have been found to be the main cleavages in Icelandic politics (e.g. Kristinsson 2007; Valen et al. 2000; Hardarson 1995). The success of new parties also indicates that party-voter linkages with the established parties are weaker than previously, which may be a result of both a gradual decline in the strength of party-voter linkages since 1983 and a potential realignment of the party system since the financial crisis in 2008-09 (Önnudóttir et al. 2017).

Party identification, party sympathy and ideological congruence on the left-right spectrum all reflect party-voter linkages (e.g. Schmitt 2009; Lachat 2008). Furthermore, voters' socio-economic status has been found to predict vote-choice, reflecting the underlying social structure's impact on the vote, even if that impact has seemingly weakened over time (e.g. Dalton 2006). Indeed, the question posed in this paper is whether the impact of these factors on vote-choice has changed. To some extent, political cleavages, party-voter linkages and social structure do overlap, meaning that party-voter linkages and social structure may be based on the underlying structure of political cleavages. However, we find it useful to discuss each separately because each reflects a different focus on the dynamics of politics. Political cleavages affect party competition, while party-voter linkages and social structure focus on the relationship between party voters and the party they vote for. Even if party-voter linkages and voters' socio-economic status can be based on the structure of political cleavage system, a change in party-voter linkages and the impact of social structure on the vote does not necessarily indicate that there has been a change in the political cleavage system. In other words, the political cleavage system may remain stable, even if the bonds between party-voters and the parties competing across those cleavages change over time.

2.1 Political cleavages in Iceland

The urban-rural cleavage is a conflict between the interests of urban and rural areas, with the largest urban area being in and surrounding the capital, in the South-West of Iceland. In 2016, 63% of Iceland's sparse voter population (332,529) resided in the greater capital area (Statistics Iceland 2017b), with the remainder of the voters being scattered around the country in smaller towns, villages and rural areas. The electoral system for national elections plays an important role in sustaining a conflict between urban and rural areas. The six constituencies in Iceland are equally divided between the capital area, with three geographically small constituencies (Reykjavik North, Reykjavik South and South West), and the countryside, with three constituencies (North West, North East and South), which covers most of the country. Historically, the countryside has been overrepresented in the Icelandic parliament. After the latest changes in the electoral system, which came into the effect with the 2003 election, this disproportionality between the capital area and the countryside was reduced to some extent but not eliminated. Since then, the 35–36% of voters living in the countryside have elected between 44 and 48% of the MPs (e.g. in 2017, 35% of voters living in the peripheral constituencies elected 44% of the MPs) (Statistics Iceland 2017c). The 2003 change in the electoral law was intended to eliminate the disproportionality between the parties, but in recent elections, this has not been the case, because the number of supplementary seats[1] is too low.

Table 2 shows the proportion of voters living in the capital area, the electoral support of parliamentary parties in the capital area and, in brackets, the difference in the proportions between capital-area voters and the voters for each party from 1983 to 2017. In general, the patterns of party support in the capital area seem to have been rather stable, with some fluctuations, indicating that no major changes in the rural-urban profile of party voters have taken place over this time period. Since 1983, the Progressive Party has, in general, received proportionally fewer votes in the capital area given their support in that area. For example, in 1983 the difference in the support for the Progressive Party in the capital areal and the proportion of voters' residing there is -27.2 percentage points, while the corresponding figures for the three other established parties are between -0.8 to 7.4. In earlier years, directly after 1983, the Independence Party and the Social Democratic Alliance generally received more support in the capital area, whereas the Left-Green Movement received less there. However, the general trend for those three parties in later years, moving closer to 2016, has been that their support in the capital area roughly reflects the proportions of voters living there. In general, the smaller parties that have been elected have received more support in the capital area, with the exception of the Liberal Party in 2003 and 2007, as well as the Center Party in 2017.

The other main cleavage, an economic left-right cleavage, concerns national issues regarding the extent to which the government should interfere with the economy and the size of the welfare system (e.g. Bengtsson et al. 2014; Valen et al. 2000; Hardarson 1995). It is debated whether the traditional left-right cleavage is less important than it

Table 2. Parties' support in the capital area

	% voters of parties living in the capital area										
	1983	1987	1991	1995	1999	2003	2007	2009	2013	2016	2017
	% (diff.)1	% (diff.)1	% (diff.)1	% (diff.)[1]	% (diff.)1	% (diff.)1	% (diff.)1	% (diff.)1	% (diff.)1	% (diff.)1	% (diff.)1
% of voters living in the capital area[2]	61.3	62.4	63.9	65.6	66.9	63.3	63.5	63.7	64.1	64.9	64.9
The four established parties:											
Independence Party	68.8	66.6	73.3	72.2	74.4	70.2	68.8	65.8	65.9	64.6	67.6
	(7.5)	(4.2)	(9.4)	(6.6)	(7.5)	(7.0)	(5.3)	(2.1)	(1.8)	(-0.4)	(2.7)
Peoples' Alliance / Left-Green Movement	60.6	60.8	56.0	62.6	58.4	59.8	62.1	61.6	67.0	65.8	66.6
	(-0.8)	(-1.6)	(-7.9)	(-3.0)	(-8.5)	(-3.5)	(-1.4)	(-2.1)	(2.9)	(0.8)	(1.7)
Progressive Party	34.1	44.2	39.1	48.2	46.1	45.5	35.2	44.9	49.0	39.5	43.9
	(-27.2)	(-18.1)	(-24.7)	(-17.3)	(-20.8)	(-17.8)	(-28.3)	(-18.8)	(-15.1)	(-25.4)	(-21.0)
Social Democratic Party / Social Democratic Alliance	64.1	68.8	74.4	74.8	71.5	69.5	68.4	69.8	69.7	57.8	67.7
	(2.8)	(6.4)	(10.5)	(9.3)	(4.6)	(6.3)	(4.9)	(6.1)	(5.6)	(-7.1)	(2.8)
Other parties:											
Alliance of Social Democrats	75.5										
	(14.1)										
Women's Alliance	88.9	74.8	77.6	79.1							
	(27.6)	(12.4)	(13.7)	(13.6)							
Citizens' Party		77.4									
		(15.0)									
People's Movement				70.5							
				(4.9)							
Liberal Party					69.8	54.3	57.8				
					(2.9)	(-9.0)	(-5.6)				
Civic Movement								80.3			
								(16.6)			
Bright Future									77.3	78.4	
									(13.2)	(13.5)	
Pirate Party									73.9	72.5	75.4
									(9.8)	(7.6)	(10.5)
Reform										77.3	86.4
										(12.4)	(21.5)
Center Party											49.2
											(-15.7)
People's Party											67.2
											(2.3)

*Source: Statistics Iceland, see on: https://statice.is/statistics/population/elections/general-elections/. From 1983 to 1999 the capital area are voters in Reykjavik constiuency and Reykjanes constituencey. From 2003 to 2016 the capital area are voters living in Reykjavik North constituency, Reykjavik South constituency and South-West constituency.

1 Difference between % of total voters living in capital area and % of voters of the party in the capital area

2 With the change of the electoral system which came into effect in 2003, some of the areas which had been part of the greater capital area between 1983 and 1999, became part of the rural South constituency from 2003.

once was in terms of explaining both the electoral behaviour of voters (e.g. Hellwig 2008) and party politics in modern societies (e.g. Schmitt & Freire 2012). It has been argued that other ideological cleavages, such as a liberal-authoritarian cleavage, a multicultural vs. socially-conservative cleavage or an environmentalist cleavage (e.g. Rosset et al. 2016; Bengtsson et al. 2014) have either replaced or supplemented the traditional left-right cleavage. Even if the left-right cleavage may not be as significant as it once was, it is still meaningful. It symbolically unites the elected and the electors (Belchior 2013), and there are differences in the political values of voters depending on whether they are on the left or the right (e.g. Jost et al. 2008). Furthermore, it has been established that voters' perceptions of the left-right positions of parties are associated with the policy content of electoral manifestos (van der Eijk & Schmitt 2010). The issue-space may very well have become more complex recently, with the left-right ideology being one important layer and additional issues that do not fit the left-right ideological paradigm also being on the agenda. Thus, the left-right cleavage is important, but it competes with other ideological cleavages.

The extent of polarisation on the left-right scale is one indicator of the degree to which parties differentiate themselves along the left-right scale. One argument is that, up to a certain extent, the greater party polarisation will make it easier for voters to sort out the parties in terms of left and right and cast their votes for parties that matches their own ideological preferences (Schmitt & Freire 2012). Another argument is that the importance of the left-right cleavage could be reflected in the degree of party polarisation. The greater importance of the left-right cleavage electorally could provide an incentive for parties to diverge along the left-right scale and create a more polarised party system (Freire 2008). There are several ways to estimate the degree of party polarisation (e.g. Vegetti 2014; Önnudóttir 2014; Esteban & Ray 1994), and one can use various types of data (e.g. voter surveys, candidate surveys or expert surveys). In Figure 1, we plot party polarisation in Iceland between 1987 and 2016, using data from the post-election voter surveys of the Icelandic National Election Study[2]. Voters were asked to place the parties on an 11-point scale from left (0) to right (10). To make this calculation for party polarisation, which as an aggregate measure for the party system in each election, we use a formula based on Dalton (2008), in which each party's score is weighted by the vote share of that party[3]. Figure 1 shows that party polarisation was on a gradual decline, with some fluctuations, between 1987 and 2013, but increased again in 2016. This indicates that the Icelandic party system was converging in terms of left and right until 2013, which could reflect that the left-right cleavage was weakening in Icelandic politics. However, the trend reversed in 2016, when party polarisation increases again. This could indicate that the number of new parties and the weakened status of the four established parties after the 2009 election led to an increase in party polarisation, indicating that the left-right cleavage in Icelandic politics has regained its former importance.

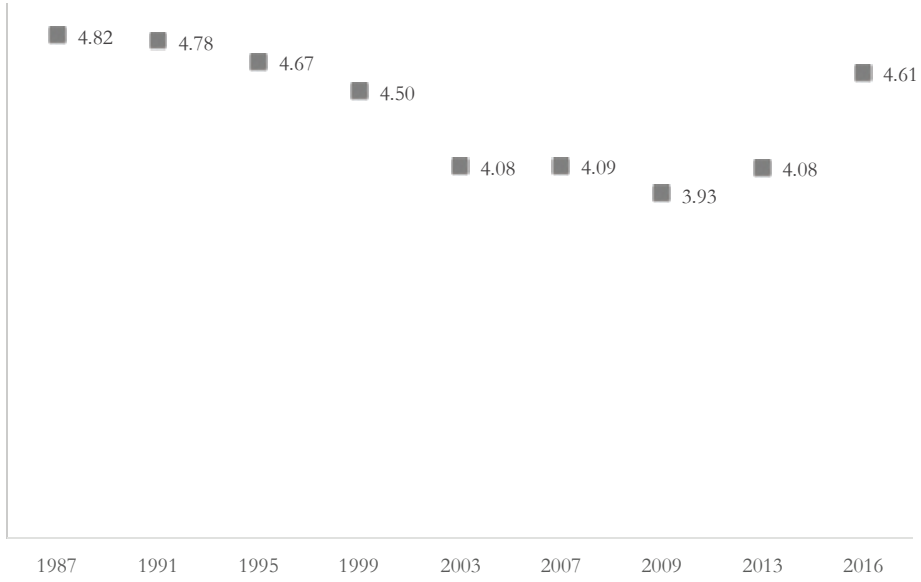

Figure 1. Party polarisation in Iceland, 1987 to 2016

Taken together, the impact of residency on party vote share seems to have been rather stable between 1983 and 2017, indicating that the rural-urban cleavage is as important today as it was previously. The curvilinear trend in party system polarisation indicates that the left-right cleavage in Icelandic politics is as strong as it was previously, even if it may have decreased to some extent between 1999 and 2009. It can be argued that today, parties do compete across those two cleavages to a similar extent that they did before. If that is true, the question is why the established parties have lost their former dominant status, which was a combined vote share of around 90%. Additionally, why has there been an increase in the number of new parties in parliament? This could be due to a gradual change in the strength of the impact of party-voter linkages and social structure on the vote, which we will examine in the next section.

2.2 Party-voter linkages

Party-voter linkages are reflected in the impact of the left-right distances between parties and voters, party identification with parties, party sympathy and the impact of voters' socio-economic status, on vote choice. As already discussed, these four factors have been shown to impact vote-choice, and here, we discuss each one in turn.

Given that left-wing voters vote for parties to the left and right-wing voters vote for parties to the right, the impact of ideology on the vote can be understood in terms of the congruence between voters and parties on the ideological left-right scale. This means that the importance of left-right ideology on the vote should be reflected in the

impact of the ideological distances between parties and voters. In multi-party systems, such as in Iceland, which have a number of parties on the left and a number parties on the right, ideological distances can determine party choice on each side of the spectrum. To consider one example, given that a left-wing voter can choose from two or more left-wing parties, the ideological distance between the voter and the parties on the left side of the spectrum may mobilise the voter to choose a certain party. For the sake of this argument, if ideology were the only factor determining vote choice, the voter should vote for the party that he or she is closest to on the left-right scale.

Rohrschneider and Whitefield (2012) argue that the increasing complexity of the issue-space and the growing number of independent voters, meaning voters who shift their alliances between parties from one election to the next, has created representational strain. They find that loyal partisan voters (those who identify with their chosen party) are closer to their parties on the left-right scale than non-partisan voters. Rohrschneider and Whitfield argue that this representational strain is caused by the pressure that parties are faced with about how to represent both loyal, ideologically close voters and independent, non-partisan voters. Furthermore, they find that non-partisan voters are less likely to be congruent with their party on the left-right scale. Based on this representational strain and that the left-right ideology may be of less importance in modern politics, we should find that the impact of left-right congruence on vote choice is weaker today than previously. We hypothesise as follows:

> *H1: The impact of left-right distances between parties and party voters on vote-choice is weaker today than previously.*

The other two factors in party-voter linkages that we take into consideration are the extent to which voters identify with a party, or partisanship, and the degree to which they sympathise with certain parties. Of these two, party identification and party sympathy, the former can be considered to reflect the core of how an individual voter views politics, and once a voter forms a bond with a party in terms of party identification, a partisan voter will be loyal to that party throughout his or her life (Campbell et al. 1960). It is not a given that all voters will identify with a party, but those who do will typically remain loyal to that party.

In ICENES, two questions have been asked regarding whether voters identify with a party, one since 1983 (with the exception of 2007) and another since 1999. Both show that the proportion of partisan voters has been on a gradual decline, with some fluctuations, since the questions were first asked (Table 3). In 1983, the proportion of respondents who considered themselves to be supporters of a party was 50.2%, but in 2016, only 29.5% said so. When respondents were asked whether they were close to a party, 51.6% said so in 1999, but in 2016, this percentage had fallen to 44.1%.

Table 3. The proportion of voters who identify with a party, 1983 to 2016

	Party identification	
	Supporter of party	Close to a party
1983	50.2	
1987	45.8	
1991	40.6	
1995	39.2	
1999	36.1	51.6
2003	39.0	54.2
2007		50.0
2009	39.2	50.9
2013	34.7	45.7
2016	29.5	44.1

*In ICENES, there are two questions regarding party identification. Since 1983, with the exception of 2007, all respondents have been asked whether they consider themselves to be supporters of a party, as follows: 'Many people consider themselves supporters of political parties while others do not feel solidarity with any party. Do you in general consider yourself as a supporter of any political party or organization?'. Since 1999, as part of the Comparative Study of Electoral Systems that ICENES is a part of, all respondents have been asked whether they consider themselves to be close a certain party, as follows: 'Do you usually think of yourself as close to any particular party?'

Party sympathy differs from party identification in the sense that it should be less resistant to change and can serve as a guide to vote choice for all voters, regardless of whether they identify with a party. Given Rohrschneider and Whitefield's (2012) argument that the number of non-partisan voters has increased and the issue space is more complex than previously, one could expect that party identification now impacts the vote to a lesser extent than previously. Instead, party sympathy may have become more important in predicting the vote. This could be due to the fact that even if partisanship has declined in importance, voters still make use of a guide regarding whether they like a party or not when making their voting decisions. This could mean that the decline in the impact of party identification on the vote has occurred in tandem with an increase in the impact of party sympathy on the vote. We hypothesise as follows:

> *H2: The impact of party identification on vote choice is weaker today as compared to previously.*
>
> *H3: The impact of party sympathy on vote choice is stronger today as compared to previously.*

The final factor we take into consideration in this paper is the impact of voters' socio-economic status on the vote, focusing on whether its impact has changed over time. Prior research on the impact of voters' socio-economic status on the vote in Iceland finds that in general, socio-economic status has had only a weak impact on the vote (Bengtsson et al. 2014; Hardarson 1995; Þórðarson 2006). However, there are some notable trends. First, women were more likely to vote for left-wing parties in 1999 and 2003 and

for the Women's Alliance in 1987, 1995 and 1999 (Þórðarson 2006). Secondly, there have been differences in voting patterns between rural and urban voters (e.g. Bengtsson et al. 2014), a point we have already discussed in terms of an urban-rural cleavage.

In all studies that have been published regarding the impact of voter socio-economic status on the vote in Iceland, the impacts of specific socio-economic indicators (e.g. gender, age, income, occupation, rural-urban residency and education) have been analysed separately for each party. Given that there are differences between parties in terms of the impacts of some of these factors (for example, some parties have a clear gender profile but small or no differences in terms of education, while voters of another party might have a clear profile in terms of education but not gender), this could indicate that the impact of voters' socio-economic status on the vote could have been underestimated in earlier research. In our analysis, we use a new and innovative approach in which we combine the impacts of voters' socio-economic status, more specifically gender, age, marital status, education, occupation, sector, income and rural-urban residency, into one indicator of socio-economic status. In this way, we can estimate the impact of the social structure, specifically voters' socio-economic status, on vote choice independently from the different voter profiles of the different parties (e.g. some parties have more support among women, while others have more support among those living in rural areas). Given that a number of research projects have established that there has been a general decline in the strength of the relationship between social characteristics, including voter socio-economic status, and vote choice (e.g. Dalton 2006), we assume that a similar trend has occurred in Iceland. Thus, we hypothesise as follows:

> *H4: The impact of voters' socio-economic status on vote choice is weaker today as compared to previously.*

3. The impact of party-voter linkages and voter socio-economic status on vote choice

In this section, we test our hypotheses regarding the impact of party voter linkages and voter socio-economic status on vote-choice. We start by describing the research design, data and method, and then, we present our results.

3.1 Research design, data and method

To test our hypotheses, we use data from the ICENES post-election voter surveys, which cover ten elections from 1983 to 2016. The data are stacked (as explained below), and we adopt a multilevel binary regression model with two levels. Voters' evaluations of parties and the impact of their socio-economic status on the vote is considered at the micro-level (the first level), and the election is considered at the macro-level (the second level). In each survey, the respondents were asked where they would place themselves and the parties on a left-right scale. In 1983, this question was answered using a 3-point scale (1=left, 2=middle, and 3=right), and from 1987 onwards, this question was answered using an 11-point scale (0=left, 10=right). In all surveys, the respondents were asked whether they identified with a certain party, to what extent they liked (0) or dis-

liked (10) the parties and about their socio-economic background. For all years, except 1983, we include all parties that were elected to parliament. In 1983, two parliamentary parties, the Women's alliance and the Social Democrats, are not included the analysis, because respondents to ICENES were not asked to place those parties on a left-right scale or how much they liked those parties.

For left-right distances we compute the distances between a voter's self-placement on the left-right scale and his or her placement of the parties. As a part of this procedure, we rescale the left-right placement to a scale that ranges from 0 (minimum distance) to 1 (maximum distance). For respondents' party identification, we use two question batteries. For data from 1983 to 1995, we use the questions regarding whether the respondents consider themselves to be supporters of a certain party and, if so, how strongly they support that party. From 1999 to 2016, we use the questions whether respondents consider themselves to be close to a certain party and, if so, how close they are to that party[4]. The follow-up questions regarding the strength of the support/closeness are used to sort out strong party identifiers, who are contrasted with those who have a weak party identification, some party identification or no party identification[5]. The reason we contrast these strong party identifiers with the rest is that those who report no, weak or some party identification can be considered to "lean" towards a certain party, while those who report a strong party identification can be considered to be the "true" identifiers with their party. Regarding party sympathy, we used a question battery in which the respondents were asked about the extent to which they liked or disliked a party. In our model, we rescaled the data from an 11-point scale to a scale that ranged from 0 (dislike) to 1 (like). Regarding respondents' socio-economic status, we use data (registered or asked) concerning their gender, age, marital status, education, occupation, income and rural-urban residency, as well as whether they work in the private sector or the public sector.

In our analysis, we are interested in explaining whether the impacts of party-voter linkages and voter socio-economic status on vote-choice have changed in recent years. Our interest is not in explaining what impacts support for certain parties. Rather, our interest is to analyse what impacts vote-choice in general, regardless of what party voters choose. In order to be able to analyse such impacts on vote-choice, we must reconstruct our data and use a stacked data-matrix to test our hypotheses.

Figure 2 shows a hypothetical example of the transformation of an original rectangular data matrix with three respondents as cases into a stacked data matrix with respondents' party evaluations as cases. In our example, there are three parties, A, B and C, as well as data about respondents' ages, the distances between their left-right self-placement and the placement of three parties (low numbers mean smaller distances) and what party they voted for.

Transforming an original dataset into a stacked dataset means that respondents' evaluation of all the relevant parties is used to predict their vote choice (e.g., van der Eijk et al. 1996; van der Brug et al. 2007). In the hypothetical example shown in Figure 2, the three parties form three party stacks in the transformed data set — one stack for each

Original data set

Respondent id	Age	Left-right distance from party A	Left-right distance from party B	Left-right distance from party C	Vote choice
1	59	1.5	2.7	2.8	A
2	40	1.4	1.2	1.6	B
3	22	2.2	2.1	1.8	C

Stacked data set

Respondent id	Age	Y-hat for age	Party id	Left-right distance	Vote choice (0=no. 1=yes)
1	59	.33	A	1.5	1
1	59	.02	B	2.7	0
1	59	.12	C	2.8	0
2	40	.30	A	1.4	0
2	40	.45	B	1.2	1
2	40	.03	C	1.6	0
3	22	.02	A	2.2	0
3	22	.01	B	2.1	0
3	22	.10	C	1.8	1

Figure 2. Example of a stacked data matrix

party. Other party variables, in our example left-right distances, are stacked as well. In the stacked data example, the data are sorted by respondent, and there are three rows for each respondent (because there are three party stacks). We see that in the original dataset, Respondent 1 has the shortest distance (1.5) from party A, which is the part that the hypothetical respondent voted for, and longer distances from parties B (2.7) and C (2.8). In the stacked example, the variable vote choice has been added, which would be the response variable if our goal was to predict vote choice. This new variable (vote choice) indicates whether the respondent voted (1) or did not vote (0) for the stack party reported in the party ID. Respondent 1 is coded as 1 for vote choice for the row showing, based on party ID, that he voted for Party A, and as 0 for vote choice for Parties B and C (also based on Party ID). In the stacked version, Respondent's 1 left-right distances are listed in each row for Parties A, B and C, with the shortest distance being that to Party A. By stacking the data in this way, using a single model, we can analyse how respondents' party evaluations, which are nested within each respondent, such as the left-right distances from each of the relevant parties, affect respondents' vote choices. Instead of limiting the model to estimate the effect of left-right distances on the choice of only one party at the time, as in an unstacked data matrix, in the environment of a stacked data matrix, we can analyse whether and to what extent left-right distances between voters and parties can predict vote choice in general.

In our models, party identification and party sympathy are processed into a stacked data-set in the same way as left-right distances. We can do this for our three indicators of party-voter linkages (left-right distances, party identification and party sympathy) because the respondents evaluated each party separately. Regarding other variables that are not party evaluations, such as voters' socio-economic background, we must adopt a different approach. Age, for example, does not vary across party stacks, as can be seen in our hypothetical example shown in Figure 2. Respondent 1 is 59 years old regardless of what party he or she voted for. In order to examine the impact of age on vote choice, we must transform it so that it will fit the stacked data matrix. Our approach is to predict the likelihood of voting for the party that belongs to each party stack in separate regressions for each party stack. This is accomplished by regressing age on vote choice (whether the respondent voted for the stack party or not) and saving the result of each of these regressions as a predicted vote probability (y-hat) that represents each respondent's probability of voting for one of the stack parties. In our hypothetical example, shown in Figure 2, three regressions are performed, one for each party, and the y-hat for the impact of age on vote-choice is saved as a new variable. In this way, Respondent 1 is listed with three different y-hats for age, each reflecting the impact of age on his or her vote choice (with the highest impact being on party A, for which he or she voted).

In our models, we combine the effects of respondent gender, age, marital status, education, occupation, income and rural or urban residency, as well as whether respondents work in the private sector or public sector, on party-choice into one y-hat. Given that voters of different parties may have different socio-economic backgrounds, with some parties mobilising a rural vote and others receiving more support from those who are more highly educated, we obtain a better estimate of the impact of voter socio-economic status on the vote by combining all socio-economic indicators into one y-hat instead of running them separately[6]. The results of these regressions can be seen in Appendix I. In 1983, no questions about income were asked, and thus, income is not a part of our analysis for that year[7]. Because the y-hats have different intercepts, we centre them around the party means for each year. By centring these y-hats on the party means, we have transformed the measure, allowing it to capture the effect of social and economic status on vote choice and preventing the difference in the intercepts from having an effect.

To sum up, our micro-level variables are the left-right distances between voters and parties, party identification, party sympathy and the impact of voters' socio-economic status on vote choice. We include two variables at the macro level, the year of the election and party age, measured as the number of years since the party was first elected into parliament. Party age is included in order to control for potential bias due to an increase in the success of new parties, which have not had the same opportunity as older parties to deepen their bond with voters in terms of party-voter linkages. In order to test our hypotheses regarding whether the impacts of left-right distances, party identification, party sympathy and voter socio-economic background on vote-choice have changed, we allow each micro-level indicator to interact with the year of the election. A statistically significant interaction indicates that such impacts have, in fact, changed.

3.2 Party-voter linkages, voter socio-economic status and vote-choice

Given the structure of the data, with voters nested within ten elections, we run multilevel binary logistic regressions with two levels: voters' evaluations and the impact of the social structure on the vote at the micro level and the year of the election and party age at the macro level. We run three random intercept models. The first model is an empty model (Model 1), the second model includes all the main effects (Model 2) and, in the third model (Model 3), we add the cross-level interactions between the year of the election and, on the one hand, party-voter linkages and, on the other hand, the impact of voter socio-economic status on vote choice (Table 4). Concerning the model fit, using BIC as an indicator, a lower BIC indicates a better model fit (Raftery 1995). An absolute change of more than 10 points in BIC between models is a strong evidence that the preferred model is that with the lower BIC. The difference in BIC between Model 2 and 3 is -56.077, indicating that Model 3, which tests whether the impacts of party-voter linkages and voter socio-economic status on vote-choice have changed, is the better fit. In our discussion, we focus on the results of the cross-level interactions observed in Model 3.

Table 4. Changes in impacts on vote choice over time

	Model 1 **B** (st.dev.)	**Model 2** **B** (st.dev.)	**Model 3** **B** (st.dev.)
(Intercept)	-1.601*** (0.010)	-25.804*** (3.683)	94.510*** (16.743)
Micro-level predictors:			
Left-right distances1		-3.397*** (0.116)	62.819*** (21.380)
Party identification2		3.147*** (0.216)	167.427*** (48.374)
Party sympathy3		7.804*** (0.115)	-173.582*** (21.700)
Socio-economic status (y-hats)4		4.533*** (0.201)	102.867** (40.788)
Macro-level predictors:			
Year5		0.010*** (0.002)	-0.051*** (0.008)
Party age6		0.008*** (0.001)	0.008*** (0.001)
Cross-level interactions			
Year*left-right distances			-0.033*** (0.011)
Year*party identification			-0.082*** (0.024)
Year*party sympathy			0.091*** (0.011)
Year*socio-economic status			-0.049** (0.020)
BIC	62003.326	20218.995	20162.918
AIC	61994.191	20159.101	20068.799
Log Likelihood	-30996.096	-10072.551	-10023.400
Deviance	61992.191	20145.101	20046.799
Num. obs.	68494	38417	38417

Note: Multilevel binary logistic model. Dependent variable is vote choice. Significance levels: ***p < 0.01, **p < 0.05, *p < 0.1. Programme: R 3.3.2.

[1] On an 11-point scale from 0 (no distance) to 1 (maximum distance).

[2] On a 2-point scale, 0=no or weak to some party identification and 1=strong party identification

[3] On an 11-point scale from 0 (dislike) to 1 (like)

[4] Y-hats for the impact of voters' socio-economic status on vote-choice, including gender, age, marital status, education, occupation, whether they work in the private sector or public sector, income (not included in 1983) and rural urban residency.

[5] Ten years: 1983, 1987, 1991, 1995, 1999, 2003, 2007, 2009, 2013 and 2016

[6] Years since party was first elected into parliament

In Model 3, the cross-level interactions, which test whether the impacts of party-voter linkages and voter socio-economic status have changed over the years, are all statistically significant. Comparing the Z-values (B/st.dev.), the largest impact is the change in the impact of party sympathy on vote-choice, with a Z-value of 8.27, and the smallest change is seen in the impact of voter socio-economic status, with a Z-value of -2.45. The Z-values for the remaining two cross-level interactions are -3.00 for left-right distances and -3.42 for party identification. The signs of the B's (and the Z-values) indicate the directions of the changes, with a negative sign indicating a weaker impact over time and a positive sign indicating a stronger impact. Next, for ease of interpretation, in Figures 3–6, we plot the predicted vote-choice probabilities for each cross-level interaction.

Figure 3 shows the changes in the impact of left-right distances on vote choice from 1983 to 2016, specifically that the impact of left-right distances weakens over time. The probability of respondents voting for the party closest to them (e.g. no distance between the respondent and the placement of the party on the left-right scale) was lower in 2016 than it was in 1983. Even if this change does not seem to be very substantial, it still supports our hypothesis (H1) that the impact of left-right distances on vote-choice has weakened over time.

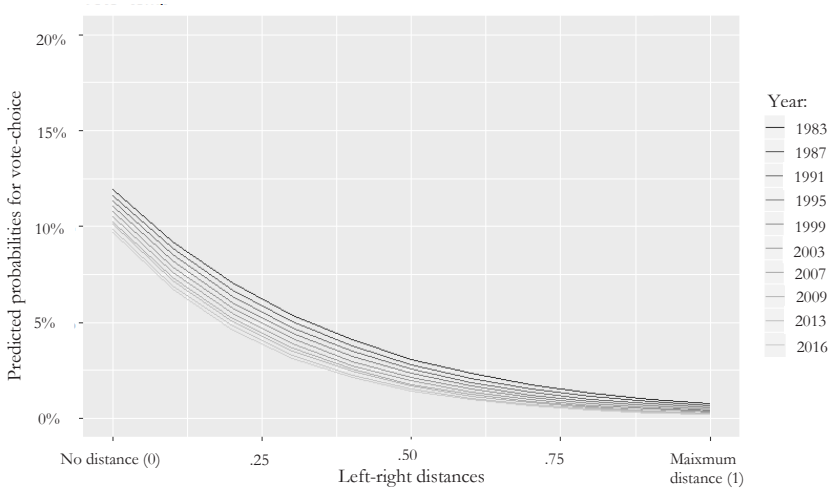

Figure 3. Changes in impact of left-right distances on vote choice

When contrasting those who have a strong party identification with those who have no, weak or some party identification, the impact of strongly identifying with a party appears to weaken over time (Figure 4), supporting our hypothesis regarding a decrease in the impact of party identification (H2). In 1983, the probability of a respondent voting for a party which he or she strongly identified was over 75%, whereas by 2016, this value had fallen beneath 25%. At the same time and unsurprisingly, the impact of having no, weak or some party identification on vote choice remained weak over the time period covered in our analysis.

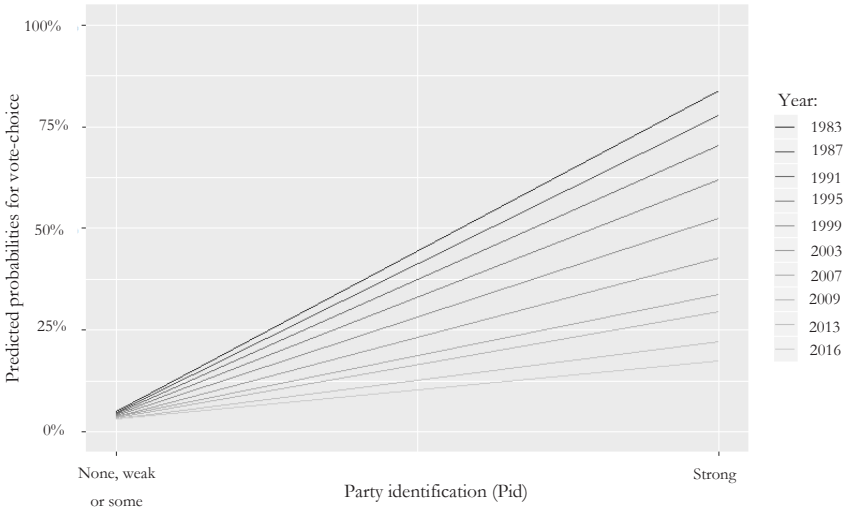

Figure 4. Changes in the impact of party identification on vote choice

The last variable we tested regarding party-voter linkages is party sympathy. We find that its impact also changed over time, but in the opposite direction as that of left-right distances and party identification. The impact of party sympathy on the vote became stronger over time, whereas the impacts of left-right distances and party identification became weaker. In Figure 5, eyeballing the change in predicted probabilities based on the impact of party sympathy, depending on the year of the election, we see that such change occurred among those who either strongly liked a party or were close to strongly liking it, while no change seems to have taken place among those who do not strongly like a party.

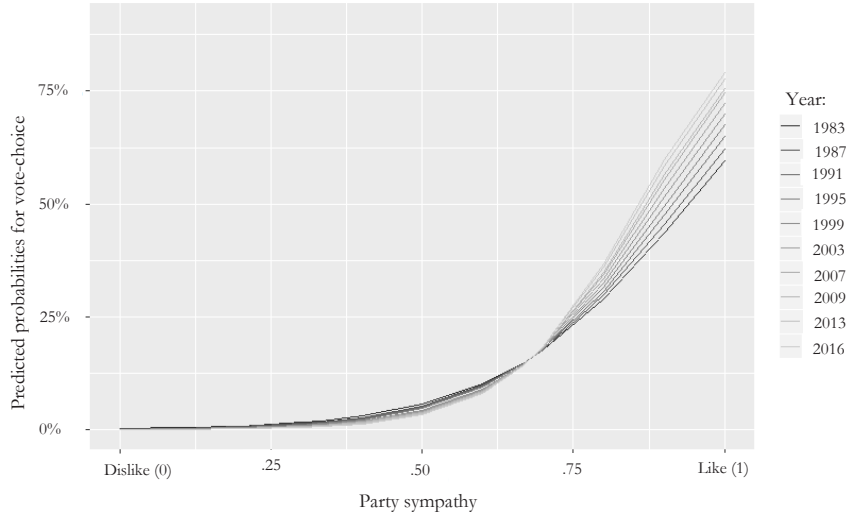

Figure 5. Changes in the impact of party sympathy on vote choice

Plotting the changes in the effect of voters' socio-economic status on vote choice, we contrast the low impacts of socio-economic status (which are one standard deviation below the mean impacts), the mean impacts and the high impacts (one standard deviation above the mean) over time (Figure 6). Recalling that in our models, the impact of voter socio-economic status on vote choice is based on the predicted probabilities of voter socio-economic background on party choice, which are combined into one y-hat for each respondent for each year, the interpretation of the data becomes slightly more cumbersome as compared to interpreting the impacts of voter socio-economic status in general. Figure 6 shows that the differences in the impacts of the socio-economic profiles of party-voters, become smaller over time. In 1983, the differences in the predicted probabilities of voting for a certain party depending on the impacts of voters' socio-economic background on party choice, are bigger compared to 2016. We also see that the largest change seems to have occurred among those for whom the impact of socio-economic status is above average (high impact), with a steeper downward slope as compared voters experiencing a mean or low impact on the part of socio-economic status. Our focus here is on whether, in general, the impact of voter socio-economic status on vote-choice has changed, not changes in individual indicators. However, we did repeat the model (Model 3 in Table 4), testing whether the impact of each factor (gender, age, marital status, education, occupation, whether the respondent worked in the private or public sector, income and rural or urban residency) on vote-choice had changed over the years. We found that those factors whose impacts have changed, have changed in the same direction as our combined indicator. That is, they have become weaker. The results of those models are presented in Appendix III. However, we conclude here that Figure 6 clearly shows that in general, the impact of voter socio-economic status on vote choice has weakened over time, as we hypothesised (H4).

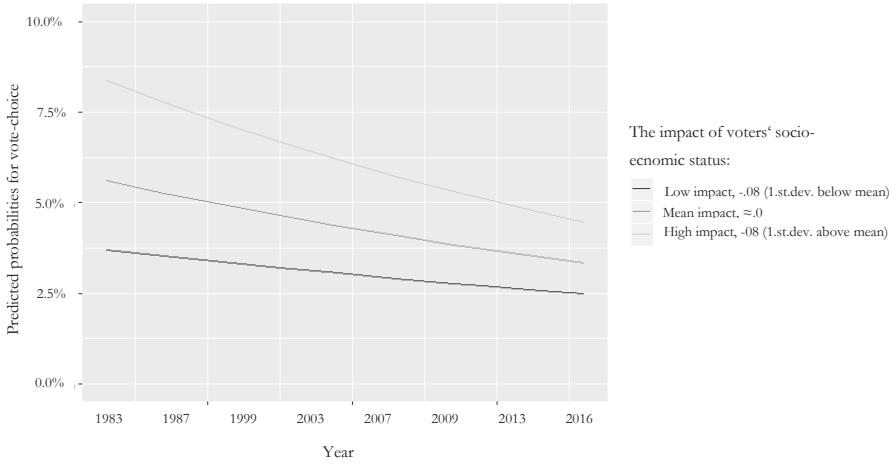

Figure 6. Changes in the impact of voter socio-economic status on vote choice

4. Discussion

The question raised in this paper is whether the decrease observed in support for the four established parties (the Left-Green Movement, Social Democratic Alliance, Progressive Party and Independence Party) and following increase in the number of new parliamentary parties can be explained by a gradual change in the structure of political cleavages and/or a gradual change in party-voter linkages and the social structure of the vote. Covering the time period from 1983 to 2016/2017, our main results suggest that the structure of the political cleavage system, in terms of the rural-urban cleavage and the left-right cleavage, as reflected in party polarisation, has not changed to a considerable extent, whereas we find that the effect of party-voter linkages and voter socio-economic status on vote choice has changed.

In terms of party-voter linkages, we find that the impacts of left-right distances between voters and parties, as well as party identification, on the vote have weakened. This indicates several things. First, it may be that even if the left-right cleavage is as important in politics as it once was (at least in terms of party polarisation), voters' ideological bonds with the parties they can vote for have become weaker. This could also indicate that voters today are more willing to vote for a party that is not necessarily close to them on the left-right scale. Another potential explanation for the weaker effect on the part of left-right distances, which offers a clear avenue for a future research, is the increase in the number of new parties, which means that voters are less familiar with the placement of those parties on the left-right scale and thus such placement has a weaker impact. The weakening impact of party identification on vote choice means that parties cannot count on the support of loyal partisan voters to the same extent as they previously could. It can be argued that this, together with the change in the impact of left-right distances on the vote, reflects representational strain, as discussed by Rohrschneider and Whitfield (2012), meaning that the Icelandic parties are faced the challenge of representing both their loyal partisan voters and, at the same time, mobilising the votes of an increasing number of independent voters.

Partisan voters are thought to be those who form strong bonds with their parties in terms of party identification and typically remain loyal to these parties throughout their lives. As elsewhere (e.g. Rohrschneider & Whitfield 2012), we find indicators that lower proportion of voters are forming these strong bonds with a party. For this reason, we argue that party sympathy, or the extent to which voters like or dislike a party, has replaced party identification as a determinant of the vote to some extent. This argument is two-fold. First, party sympathy does necessarily reflect a strong partisan bond between voters and parties, even if it is almost a given that partisan voters like their parties. Second, those voters who do not strongly identify with a party still form some type of bond with a party or some parties. Given our findings that the number of partisan voters (those who are strong party identifiers) is decreasing and the impact of strong party identification on vote-choice has weakened over time, an increase in the impact of party sympathy on the vote was possible, and this is exactly what we find. Thus, we argue that

the increase in the effect of party sympathy on vote choice is, among other things, due to it replacing the impact of party identification on vote-choice.

We also analysed whether the social structure of the vote, as in the impacts of voter socio-economic status on vote-choice, changed between 1983 and 2016. Our findings indicate that socio-economic status is less important today than it was previously in this regard. As discussed in our paper, prior research has found that voter socio-economic status has, in general, had a weak impact on the vote in Iceland. Using a different approach, one based on the argument that voters of different parties have different socio-economic profiles (e.g., with some parties mobilising the rural vote, while others have a clear gender profile), we combined the effects of various socio-economic status variables into one indicator reflecting the social structure of the vote. By using this approach, we could analyse whether the impact of the social structure on the vote has changed, and as already stated, we find that in Iceland, it has decreased. However, in order to unpack exactly what drives these changes, e.g., whether it is residency, education or age or whether some specific events may have impacted these changes, one would need to analyse each indicator and consider each election separately, which is beyond the scope of this paper.

Our findings indicate that party-voter linkages and the impact of social-structure on the vote have changed over the 33 years (1983 to 2016) covered in this paper. However, the political cleavage system seems to have remained rather stable given that the main cleavages are the rural-urban cleavage and the left-right cleavage. That indicates that the changes in the link between parties and voters are not due to a change in the structure of the cleavage system. Party competition is structured based on the underlying rural-urban and left-right cleavages to a similar extent today as before. Even if we do not exclude the possibility that the issue-space has become more complex, the rural-urban and left-right cleavages still structure party competition in Iceland. Thus, old and new parties alike face the challenge of mobilising both partisan and independent voters along those cleavages and perhaps operating within an issue-space that has become more multi-layered.

Notes

1 The number of parliamentary representatives allocated to constituencies are partly based on the number of inhabitants in each constituency, however there can be no fewer than six MPs (Kristinsson 2007). Supplementary seats are allocated to make the number of parliamentary seats proportional to the party's share of national vote, but are linked to constituencies by law (Hardarson & Kristinsson 2010).The allocation of supplementary seats have not eliminated disproportionality between the capital area and the rest of the country, even if that would be possible to do by law.

2 Respondents were asked to place the parties on an 11-point scale from left (0) to right (10). In 1983, the question about the left-right placement of the parties was posed using a different scale, specifically a 3-point scale from left (1) to right (3), and for that reason, we leave that year out of the calculation of party polarisation in Iceland.

3 The polarisation of the party system is calculated using the following formula derived from Dalton (2008): SQRT $\{(\text{party vote share}_i)*([\text{party L-R score}_i - \text{party system average L-R score}]/5^2\}$, where i represents individual parties and L-R stands for left-right.

4 There are two reasons for using these two questions, the 'support question' from 1983 to 1995 and

the 'closeness question' from 1999 and onwards. First, from 2007 onwards, the follow-up question about the strength of support was omitted. Second, the question regarding how close the respondent is to a party has only been asked since 1999. Thus, regarding the strength of party identification, we were forced to use the two separate questions for those two time periods (1983 to 1995 and 1999 to 2016).

5 The follow-up questions for both types of questions ('supporter of a party' and 'close to a party') were posed using a three-point scale, from low support/not very close to strong support/very close. Based on these question batteries, we create a new variable to represent the strength of party identification on a 2-point scale, in which 1 indicates those who strongly identify with a party and 0 indicates those how either have no, weak or some party identification).

6 By combining the predictive power of all the socio-economic indicators, we sum together the effects of respondents' socio-economic status, instead of analysing each indicator in turn. In this way, we prevent the piling up of error terms that could occur if we created one y-hat for each socio-economic indicator.

7 We repeat the analysis presented in Model 3 in Table 4 with an indicator of the impact of voters' socio-economic status, excluding income, on vote-choice for all years, and the results are similar (see Appendix II).

References

Belchior, A.M. (2013). "Explaining Left-right Party Congruence Across European Party Systems: A Test of Micro, Meso and Macro Level Models", *Comparative Political Studies* 46(3), 352-386.

Bernburg, J.G. (2016). *Economic Crisis and Mass Protest: The Pots and Pans Revolution in Iceland.* Oxon: Routledge.

Campbell, A., Converse, P., and Miller, W. (1960). *The American Voter*. New York: John Wiley & Sons, Inc.

Dalton, R. (2006). *Citizen Politics: Public Opinion and Political Parties in Advanced Industrial Democracies* (4th ed.). Washington DC: CQ Press.

Dalton, R. (2008). "The Quantity and the Quality of Party Systems: Party System Polarization, its Measurement, and its Consequences", *Comparative Political Studies* 41(7), 899-920.

Esteban, J., and Ray, D. (1994). "On the Measurement of Polarization", *Econometrica* 62, 819–851.

Freire, A. (2008). "Party Polarization and Citizens' Left-right Orientations", *Party Politics* 14(2), 189-209.

Hardarson, Ó.Th. (1995). *Parties and Voters in Iceland: A Study of the 1983 and 1987 Althingi Elections.* Reykjavik: Social Science Research Institute University Press.

Hardarson, O.Th., and Kristinsson, G.H. (2010). "Iceland", in D. Nohlen and P. Stöver (eds.), *Elections in Europe* (pp. 947-986). Baden Baden: Nomos.

Hellwig, T. (2008). "Explaining the Salience of Left-right Ideology in Post Industrial Democracies: The Role of Structural Economic Change", *European Journal of Political Research* 47, 687-709.

Indriðason, I.H., Önnudóttir, E.H., Þórisdóttir, H., and Harðarson, Ó.Þ. (2017). "Re-electing the Culprits of the Crisis? Elections in the Aftermath of a Recession", *Scandinavian Political Studies* 40(1), 28-60.

Icelandic National Election Study (n.d.). "Icelandic National Election Study – (ICENES)". Retrived from http://fel.hi.is/icelandic_national_election_study_icenes

Jost, J.T., Nosek, B.A., and Gosling, S.D. (2008). "Ideology its Resurgence in Social, Personality, and Political Psychology", *Perspectives on Psychological Science* 3(2), 126-136.

Kristinsson, G.H. (2007). *Íslenska stjórnkerfið* (2nd ed.). Reykjavík: University of Iceland.

Lachat, R. (2008). "The Impact of Party Polarization on Ideological Voting", *Electoral Studies* 27, 687-698.

Önnudóttir, E.H. (2014). "Policy Congruence and Style of Representation: Party Voters and Political Parties", *West European Politics* 37(3), 538-563.

Önnudóttir, E.H. (2017). "Iceland 2016: Politics as Usual, a new Centre-right Government Takes Over". Viewed 11 May 2018 at: https://whogoverns.eu/iceland-2016-politics-as-usual-a-new-centre-right-government-takes-over/

Önnudóttir, E.H., and Harðarson, Ó.Þ. (2017). "Iceland 2017: A new Government from Left to Right". Viewed 11 May 2018 at: https://whogoverns.eu/iceland-2017-a-new-government-from-left-to-right/

Önnudóttir, E.H., Schmitt, H., and Harðarson, Ó.Þ. (2017). "Critical Election in the Wake of an Economic and Political Crisis: Realignment of Icelandic Party Voters?", *Scandinavian Political Studies* 40(2), 157-181.

Raftery, A.E. (1995). "Bayesian Model Selection in Social Research", *Sociological Methodology* 25, 111-163.

Rohrschneider, R., and Whitefield, S. (2012). *The Strain of Representation: How Parties Represent Diverse Voters in Western and Eastern Europe.* Oxford: Oxford University Press.

Rosset, J., and Lutz, G. (2016). "Representation of Political Opinions: Is the Structuring Pattern of Policy Preferences the Same for Citizens and Elites?", in M. Bühlmann and J. Fivaz (eds.), *Political representation: Roles, representatives and the represented* (pp.117-134). Oxon: Routledge.

Schmitt, H. (2009). "Partisanship in Nine Western Democracies: Causes and Consequences", in J. Bartle and P. Bellucci (eds.), *Political Parties and Partisanship: Social Identity and Individual Attitudes* (pp.75-87). Oxon: Routledge.

Schmitt, H., and Freire, A. (2012). "Ideological Polarization: Different Worlds in East and West", in D. Sanders, P. Magalhães and G. Toka (eds.), *Citizens and the European polity: Mass Attitudes Towards the European and National Polities.* Oxford: Oxford University Press.

Statistics Iceland (2017a). "Results of General Elections to the Althingi 1986-2017". Viewed 11 2018 May at: http://px.hagstofa.is/pxen/pxweb/en/Ibuar/Ibuar__kosningar__althingi__althurslit/KOS02121.px

Statistics Iceland (2017b). "Votes Cast, Voters on the Electoral Eoll and Participation by Municipality and Sex 2003-2017". Viewed 11 May 2018 at: http://px.hagstofa.is/pxen/pxweb/en/Ibuar/Ibuar__kosningar__althingi__althkjosendur/KOS02101.px

Statistics Iceland (2017c). "Voters on the Electoral Roll in General Elections per Member of the Althingi 2003-2017". Viewed 11 May 2018 at: http://px.hagstofa.is/pxen/pxweb/en/Ibuar/Ibuar__kosningar__althingi__althkjosendur/KOS02102.px

Valen, H., Narud, H.M., and Hardarson, Ó.Th. (2000). "Geography and Political Representation", in P. Esaiasson and K. Heidar (eds.), *Beyond Westminster and Congress: The Nordic Experience* (pp.107-131). Columbus: Ohio State University Press.

Van der Brug, W., van der Eijk, C., and Franklin, M. (2007). *The Economy and the Vote: Economic Conditions and Elections in Fifteen Countries.* Cambridge: Cambridge University Press.

Van der Eijk, C., and Schmitt, H. (2010). "Party Manifestos as a Basis of Citizens' Left-right Perceptions". Paper presented at the 106th Annual Meeting of the American Political Science Association, Marriott Wardman Park, the Omni Shoreham and the Hilton Washington, Washington DC.

Van der Eijk, C., Franklin, M., and Marsh, M. (1996). 'What Voters Teach us About Europe-wide Elections: What Europe-wide Elections Teach us About Voters', *Electoral Studies* 15(2), 149-166.

Vegetti, F. (2014). "From Political Conflict to Partisan Evaluations: How Citizens Assess Party Ideology and Competence in Polarized Elections", *Electoral Studies* 35, 230-241.

Vilhelmsdóttir, S., and Kristinsson, G.H. (2018). "Political Trust: Performance or Politics?", *Icelandic Review of Politics & Administration* 14(1).

Þórðarson, E.M. (2006). "Kynjabil í kosningum: Er kosningahegðun karla og kvenna ólík?", in Ú. Hauksson (ed.), *Rannsóknir í félagsvísindum VII: Félagsvísindadeild* (pp.401-410). Reykjavik: Félagsvísindastofnun Háskóla Íslands.

Appendix I

In Tables A1 to A10 we present the results of the binary logistic regressions we used to create the indicator (predicted probabilities) for the impact of voters' socio-economic status on party-choice. The regressions are done for each party and within each election year. Gender is coded as 1 if male and 0 of female. Age and income (income not asked in 1983) are continuous variables. Marital status is coded as 1 if respondent is married or living as married and 0 if else. For education we use two dummy variables where we contrast those who have primary education with those who have either completed secondary education or university education. For occupation we create three dummy variables with those who are manual-workers are contrasted with farmers/farm workers, non-manual workers and those who are or have not been in the workforce. For sector we contrast those who work in the public sector with those who work in the private sector or are not working – however see footnote for A3 how sector is handled in 1991. For residency we contrast those who live outside the capital area (the rural constituencies) with those who live in the capital area constituencies.

A1. Voters' socio-economic status and party-choice in 1983

	Social Democratic Party		Progressive Party		Independence Party		Peoples' Alliance	
	Z	Sig.	Z	Sig.	Z	Sig.	Z	Sig.
Male	0.15	.881	0.64	.520	0.59	.558	1.51	0.132
Age	-1.00	.317	1.61	.107	2.74	.006	0.77	0.439
Married/living as married	0.94	.348	-1.59	.113	0.89	.375	-1.22	0.222
Education, reference category: University education								
Primary education	-0.60	.551	0.53	.598	0.44	.663	0.37	0.714
Secondary education	-0.76	.444	1.45	.146	-0.52	.603	-1.84	0.066
Occupation, reference category: manual workers								
Farmers / farm workers	-1.52	.129	4.82	.000	-3.17	.001	-0.96	0.336
Non-manual workers	0.83	.408	0.48	.631	-2.88	.004	0.42	0.674
Not in the workforce	0.12	.904	0.02	.986	0.00	.999	-0.01	0.995
Sector, reference category: public sector								
Private sector	2.15	.031	-2.05	.040	2.84	.005	-2.57	0.010
Not in the workforce	0.23	.818	-0.11	.912	0.00	.999	-0.16	0.877
Lives outside capital area	1.84	.066	5.51	.000	-0.76	.448	-1.22	0.221
Constant	-4.22	.000	-5.06	.000	-3.09	.002	-3.29	0.001
N	851		851		851		851	
Nagelkerke R Square	.04		.19		.05		.05	

*Response variable: voted for party in model

A2. Voters' socio-economic status and party-choice in 1987

	Social Democratic Party		Progressive Party		Independence Party		Peoples' Alliance		Citizen Party		Womens' Alliance	
	Z	Sig	Z	Sig	Z	Sig	Z	Sig	Z	Sig	Z	Sig
Male	0.21	.831	0.03	.979	2.56	.010	0.85	0.393	0.82	0.41	-5.57	.000
Age	1.01	.314	0.96	.336	1.22	.222	0.18	0.856	0.56	0.57	-1.74	.082
Married/living as married	0.44	.660	0.36	.717	0.01	.989	-0.05	0.960	0.12	0.91	-0.08	.933
Education, reference category: University education												
Primary education	1.13	.259	0.38	.703	-0.29	.771	-2.40	0.017	2.35	0.02	-1.69	.090
Secondary education	0.33	.740	0.57	.572	-0.63	.531	-1.41	0.159	0.53	0.60	0.42	.672
Occupation, reference category: manual workers												
Farmers / farm workers	-2.03	.042	3.43	.001	-1.45	.146	-1.18	0.237	0.62	0.54	-0.79	.431
Non-manual workers	0.77	.439	1.08	.281	-2.33	.020	1.43	0.153	-0.06	0.95	-0.66	.509
Not in the workforce	0.40	.691	1.23	.217	-2.12	.034	0.69	0.493	1.22	0.22	0.60	.548
Sector, reference category: public sector												
Private sector	0.91	.365	0.39	.696	2.16	.031	-3.00	0.003	0.52	0.61	-1.36	.174
Not in the workforce	0.30	.762	-0.42	.673	2.87	.004	-1.29	0.196	-1.51	0.13	-1.21	.227
Income, reference category: third tercile of income (highest)												
First tercile of income (lowest)	-1.17	.240	0.26	.797	-1.78	.076	1.63	0.102	-0.89	0.37	0.93	.354
Second tercile of income (middle)	-0.46	.643	0.90	.370	-0.92	.359	-0.41	0.679	-0.17	0.86	1.09	.278
Lives outside capital area	-0.30	.762	4.81	.000	-1.85	.064	0.94	0.346	-2.63	0.01	-3.10	.002
Constant	-5.18	.000	-5.98	.000	-3.10	.002	-3.14	0.002	-5.02	0.00	-0.37	.709
N	1105		1105		1105		1105		1105		1105	
Nagelkerke R Square	.03		.09		.05		.04		.06		.17	

*Response variable: voted for party in model

A3. Voters' socio-economic status and party-choice in 1991

	Social Democratic Party		Progressive Party		Independence Party		Peoples' Alliance		Womens' Alliance	
	Z	Sig.	Z	Sig.	Z	Sig.	Z	Sig.	Z	Sig.
Male	0.27	.789	0.29	.774	3.58	.000	0.70	0.484	-6.10	0.00
Age	0.07	.941	1.18	.239	1.32	.186	0.35	0.727	-1.70	0.09
Married/living as married	-0.50	.614	0.09	.930	0.13	.896	1.11	0.267	-1.27	0.20
Education, reference category: University education										
Primary education	1.18	.239	2.45	.014	0.47	.642	-2.29	0.022	-1.83	0.07
Secondary education	1.14	.254	2.49	.013	-0.10	.920	-1.46	0.144	-1.38	0.17
Occupation, reference category: manual workers										
Farmers / farm workers	0.00	.998	1.90	.057	-1.97	.049	0.55	0.582	-1.83	0.07
Non-manual workers	0.47	.642	0.44	.663	-2.48	.013	1.37	0.171	-1.38	0.17
Not in the workforce	-0.06	.954	-0.83	.406	1.15	.251	1.24	0.215	0.47	0.64
Private sector[1]	-0.84	.398	0.35	.728	1.81	.071	0.91	0.364	-0.23	0.82
Income, reference category: third tercile of income (highest)										
First tercile of income (lowest)	-1.13	.259	0.29	.773	-1.90	.057	2.59	0.010	0.24	0.81
Second tercile of income (middle)	-1.33	.184	0.86	.390	-2.53	.012	1.98	0.047	1.81	0.07
Lives outside capital area	-1.39	.166	5.17	.000	-5.01	.000	3.31	0.001	-1.98	0.05
Constant	-3.51	.000	-6.27	.000	-1.61	.108	-5.68	0.000	0.55	0.58
N	906		906		906		906		906	
Nagelkerke R Square	.03		.11		.10		.05		.19	

*Response variable: voted for party in model

[1] In the reference group are those who work in the public sector or are not part of the workforce.

A4. Voters' socio-economic status and party-choice in 1995

	Social Democratic Party		Progressive Party		Independence Party		Peoples' Alliance		Peoples' Movement		Womens' Alliance	
	Z	Sig.	Z	Sig.	Z	Sig.	Z	Sig.	Z	Sig.	Z	Sig.
Male	3.38	.001	0.48	.630	0.21	.836	0.85	0.398	-2.06	0.04	-4.83	.000
Age	-0.61	.544	-0.33	.738	1.01	.310	0.19	0.847	-0.28	0.78	0.54	.588
Married/living as married	-0.97	.333	0.81	.417	0.84	.398	-0.28	0.780	-1.01	0.31	1.82	.068
Education, reference category: University education												
Primary education	0.06	.951	1.81	.071	-0.09	.925	-0.37	0.708	-0.18	0.86	-2.46	.014
Secondary education	0.15	.878	1.20	.229	-0.07	.943	-0.31	0.753	-1.29	0.20	-0.54	.586
Occupation, reference category: manual workers												
Farmers / farm workers	-0.73	.463	1.43	.154	-1.00	.316	0.04	0.965	0.00	1.00	0.49	.626
Non-manual workers	-0.57	.569	-0.55	.584	-0.67	.505	0.71	0.478	0.24	0.81	0.33	.744
Not in the workforce	0.00	.999	0.00	.999	0.00	.999	0.00	0.999	0.00	1.00	0.00	.999
Sector, reference category: public sector												
Private sector	-1.01	.312	1.34	.180	1.46	.144	-2.95	0.003	-1.56	0.12	0.63	.531
Not in the workforce	0.00	.999	0.00	.999	0.00	.999	0.00	0.999	0.00	1.00	0.00	1.000
Income, reference category: third tercile of income (highest)												
First tercile of income (lowest)	-1.94	.052	0.40	.689	0.12	.908	1.36	0.173	0.37	0.71	1.06	.289
Second tercile of income (middle)	-0.20	.838	0.11	.911	-0.61	.540	0.77	0.439	-0.04	0.97	1.05	.294
Lives outside capital area	-4.06	.000	5.12	.000	-1.91	.056	1.32	0.188	1.28	0.20	-3.65	.000
Constant	-3.05	.002	-5.69	.000	-3.02	.003	-4.47	0.000	-3.29	0.00	-3.80	.000
N	1113		1113		1113		1113		1113		1113	
Nagelkerke R Square	.07		.07		.02		.03		.05		.16	

*Response variable: voted for party in model

A5. Voters' socio-economic status and party-choice in 1999

	Social Democratic Alliance		Progressive Party		Independence Party		Left Green Movement		Liberal Party	
	Z	Sig.	Z	Sig.	Z	Sig.	Z	Sig.	Z	Sig.
Male	-4.31	.000	1.21	.226	1.98	.048	-0.11	0.909	2.58	0.01
Age	3.06	.002	-1.79	.074	-1.78	.076	0.13	0.895	2.46	0.01
Married/living as married	-0.50	.618	-0.59	.555	1.30	.194	-0.65	0.518	0.30	0.76
Education, reference category: University education										
Primary education	-3.75	.000	1.70	.089	2.13	.033	-0.07	0.942	0.40	0.69
Secondary education	-3.44	.001	2.50	.012	1.94	.052	-0.33	0.745	-0.26	0.80
Occupation, reference category: manual workerse										
Farmers / farm workers	-1.79	.073	2.13	.033	-1.41	.158	1.31	0.191	-0.15	0.88
Non-manual workers	2.20	.028	-0.34	.733	-2.19	.028	0.10	0.924	0.25	0.80
Not in the workforce	0.70	.487	0.00	.998	0.66	.512	-0.13	0.898	0.00	1.00
Sector, reference category: public sector										
Private sector	-2.22	.026	1.90	.058	1.24	.216	-1.57	0.117	1.69	0.09
Not in the workforce	-1.30	.195	0.00	.998	-1.70	.089	1.19	0.235	0.00	1.00
Income, reference category: third tercile of income (highest)										
First tercile of income (lowest)	1.79	.073	1.07	.284	-2.35	.019	-0.99	0.323	0.45	0.65
Second tercile of income (middle)	1.55	.120	1.56	.118	-2.08	.037	-1.56	0.119	1.54	0.12
Lives outside capital area	-0.06	.952	6.04	.000	-4.52	.000	1.35	0.178	-1.18	0.24
Constant	-2.80	.005	-6.45	.000	-0.28	.781	-4.09	0.000	-7.18	0.00
N	1019		1019		1019		1019		1019	
Nagelkerke R Square	.10		.14		.09		.04		.09	

*Response variable: voted for party in model

A6. Voters' socio-economic status and party-choice in 2003

	Social Democratic Alliance		Progressive Party		Independence Party		Left Green Movement		Liberal Party	
	Z	Sig.	Z	Sig.	Z	Sig.	Z	Sig.	Z	Sig.
Male	-4.20	.000	0.79	.431	2.78	.005	-0.12	0.905	1.72	0.09
Age	-0.10	.916	-0.29	.770	0.38	.703	-1.56	0.119	0.65	0.52
Married/living as married	0.83	.407	-0.32	.750	-0.62	.533	-0.50	0.618	0.45	0.65
Education, reference category: University education										
Primary education	-1.56	.120	1.12	.265	1.34	.181	-0.93	0.352	0.11	0.91
Secondary education	-0.03	.974	-0.49	.625	1.48	.140	-1.24	0.216	-0.94	0.35
Occupation, reference category: manual workers										
Farmers / farm workers	-1.75	.081	3.55	.000	-2.17	.030	2.15	0.031	0.00	1.00
Non-manual workers	0.99	.322	-0.01	.991	-2.55	.011	1.14	0.253	0.25	0.80
Not in the workforce	0.00	1.000	0.00	1.000	0.00	1.000	0.00	1.000	0.00	1.00
Sector, reference category: public sector										
Private sector	-1.94	.053	0.96	.339	2.69	.007	-3.06	0.002	0.24	0.81
Not in the workforce	0.00	1.000	0.00	1.000	0.00	1.000	0.00	1.000	0.00	1.00
Income, reference category: third tercile of income (highest)										
First tercile of income (lowest)	0.38	.701	-1.08	.280	-1.84	.066	2.02	0.043	1.86	0.06
Second tercile of income (middle)	1.13	.259	0.62	.538	-2.50	.013	1.01	0.312	0.69	0.49
Lives outside capital area	-1.98	.047	4.25	.000	-1.81	.070	0.14	0.892	-0.57	0.57
Constant	-0.43	.666	-4.88	.000	-2.92	.004	-2.94	0.003	-5.88	0.00
N	843		843		843		843		843	
Nagelkerke R Square	.08		.11		.07		.09		.04	

*Response variable: voted for party in model

A7. Voters' socio-economic status and party-choice in 2007

	Social Democratic Alliance		Progressive Party		Independence Party		Left Green Movement		Liberal Party	
	Z	Sig.	Z	Sig.	Z	Sig.	Z	Sig.	Z	Sig.
Male	-4.53	.000	0.31	.755	4.40	.000	-2.27	0.023	3.00	0.00
Age	1.74	.082	-0.84	.399	0.68	.497	-2.11	0.035	1.02	0.31
Married/living as married	1.46	.143	0.38	.703	-2.00	.045	0.13	0.895	0.31	0.76
Education, reference category: University education										
Primary education	-2.61	.009	2.95	.003	1.55	.121	-1.77	0.076	0.27	0.79
Secondary education	-2.46	.014	-0.48	.635	2.99	.003	0.14	0.888	0.09	0.93
Occupation, reference category: manual workers										
Farmers / farm workers	-0.79	.428	1.19	.233	-0.64	.522	1.29	0.197	0.00	1.00
Non-manual workers	1.80	.072	-0.38	.701	-1.36	.173	0.09	0.926	1.27	0.20
Not in the workforce	0.00	1.000	0.00	1.000	0.00	1.000	0.00	1.000	0.00	1.00
Sector, reference category: public sector										
Private sector	-0.63	.528	-1.41	.159	1.87	.061	-1.01	0.315	0.54	0.59
Not in the workforce	0.00	1.000	0.00	1.000	0.00	1.000	0.00	1.000	0.00	1.00
Income, reference category: third tercile of income (highest)										
First tercile of income (lowest)	0.54	.591	0.27	.787	-3.50	.000	2.83	0.005	0.82	0.41
Second tercile of income (middle)	0.21	.835	0.54	.590	-3.59	.000	1.93	0.053	2.30	0.02
Lives outside capital area	-1.43	.153	6.11	.000	-0.70	.486	-1.07	0.285	-1.53	0.13
Constant	-2.45	.014	-6.32	.000	-2.20	.028	-2.21	0.027	-6.47	0.00
N	808		808		808		808		808	
Nagelkerke R Square	.07		.19		.10		.08		.15	

*Response variable: voted for party in model

A8. Voters' socio-economic status and party-choice in 2009

	Social Democratic Alliance		Progressive Party		Independence Party		Left Green Movement		Civic Movement	
	Z	Sig.	Z	Sig.	Z	Sig.	Z	Sig.	Z	Sig.
Male	-1.92	.054	1.84	.066	0.34	.733	-0.31	0.756	0.56	0.57
Age	2.09	.037	0.34	.735	0.23	.820	-1.07	0.286	-2.32	0.02
Married/living as married	0.55	.585	-0.47	.636	-0.72	.469	-0.49	0.626	1.46	0.14
Education, reference category: University education										
Primary education	-0.12	.906	1.08	.279	-0.03	.974	-0.83	0.407	-1.73	0.08
Secondary education	-0.74	.457	0.71	.475	0.16	.873	-0.89	0.373	0.14	0.89
Occupation, reference category: manual workers										
Farmers / farm workers	0.00	.998	0.05	.962	0.35	.728	1.85	0.064	0.00	1.00
Non-manual workers	-0.09	.932	-0.52	.602	-0.60	.547	0.56	0.576	1.05	0.29
Not in the workforce	0.43	.666	0.47	.641	0.41	.681	0.16	0.870	-1.96	0.05
Sector, reference category: public sector										
Private sector	-0.26	.792	1.66	.097	2.46	.014	-2.91	0.004	0.33	0.74
Not in the workforce	-1.26	.209	-0.58	.560	0.19	.853	0.79	0.429	1.54	0.12
Income, reference category: third tercile of income (highest)										
First tercile of income (lowest)	0.13	.899	-1.62	.105	-1.19	.233	-1.07	0.283	1.80	0.07
Second tercile of income (middle)	0.42	.677	-0.09	.925	-0.64	.525	0.00	0.999	1.53	0.13
Lives outside capital area	-2.62	.009	4.61	.000	0.12	.902	-1.35	0.178	-2.87	0.00
Constant	-3.32	.001	-6.11	.000	-4.29	.000	-1.75	0.081	-3.47	0.00
N	926		926		926		926		926	
Nagelkerke R Square	.05		.08		.02		.05		.09	

*Response variable: voted for party in model

A9. Voters' socio-economic status and party-choice in 2013

	Social Democratic Alliance		Progressive Party		Independence Party		Left Green Movement		Bright Future		Pirate Party	
	Z	Sig.	Z	Sig.	Z	Sig.	Z	Sig.	Z	Sig.	Z	Sig.
Male	0.11	.911	0.38	.701	1.60	.110	-2.60	0.009	0.27	0.79	1.82	.069
Age	2.30	.022	-1.96	.050	1.40	.160	0.65	0.517	-1.43	0.15	-2.47	.014
Married/living as married	0.76	.450	-0.30	.766	1.69	.091	0.33	0.744	-0.32	0.75	-1.56	.118
Education, reference category: University education												
Primary education	-2.28	.022	3.39	.001	0.20	.844	-2.10	0.036	-1.20	0.23	-0.34	.735
Secondary education	-2.15	.032	1.80	.071	1.11	.265	-1.24	0.215	-1.38	0.17	0.09	.926
Occupation, reference category: manual workers												
Farmers / farm workers	-1.00	.315	1.69	.090	-2.57	.010	2.38	0.018	0.00	1.00	0.00	.998
Non-manual workers	0.42	.672	1.64	.101	-2.65	.008	-0.49	0.625	0.86	0.39	-0.08	.935
Not in the workforce	1.29	.196	-0.05	.963	-1.41	.158	0.07	0.944	0.54	0.59	0.90	.369
Sector, reference category: public sector												
Private sector	-2.42	.016	0.11	.911	3.44	.001	-1.72	0.085	0.91	0.36	-0.83	.408
Not in the workforce	-1.44	.149	0.01	.993	1.73	.084	-0.35	0.724	-0.20	0.84	-1.14	.253
Income, reference category: third tercile of income (highest)												
First tercile of income (lowest)	0.52	.606	-1.03	.304	-1.17	.240	0.72	0.472	0.47	0.64	1.31	.189
Second tercile of income (middle)	0.34	.732	-0.49	.625	-3.44	.001	1.73	0.084	0.99	0.32	0.78	.435
Lives outside capital area	-1.61	.106	5.20	.000	1.41	.158	0.34	0.736	-4.02	0.00	-1.28	.200
Constant	-4.49	.000	-3.85	.000	-5.25	.000	-3.65	0.000	-3.01	0.00	-2.40	.016
N	874		874		874		874		874		874	
Nagelkerke R Square	.06		.13		.11		.07		.10		.13	

*Response variable: voted for party in model

A10. Voters' socio-economic status and party-choice in 2016

	Social Democratic Alliance		Progressive Party		Independence Party		Left Green Movement		Bright Future		Pirate Party		Reform	
	Z	Sig	Z	Sig	Z	Sig	Z	Sig	Z	Sig	Z	Sig	Z	Sig
Male	0.66	.510	1.57	.117	1.42	.155	-3.38	0.001	-1.16	0.25	2.61	.009	-1.01	.310
Age	2.97	.003	1.96	.050	1.18	.240	-0.06	0.953	-1.04	0.30	-5.25	.000	1.73	.084
Married/living as married	-0.34	.735	1.15	.248	1.91	.056	-1.28	0.200	1.70	0.09	-0.36	.719	-0.09	.932
Education, reference category: University education														
Primary education	-2.71	.007	2.22	.027	0.72	.470	-0.89	0.372	-1.51	0.13	0.02	.982	-0.06	.954
Secondary education	-1.59	.112	0.65	.514	1.77	.077	-0.02	0.987	-1.93	0.05	-0.18	.857	0.04	.972
Occupation, reference category: manual workers														
Farmers / farm workers	0.00	.998	0.14	.886	-0.69	.490	-0.23	0.815	1.78	0.08	-0.62	.536	0.53	.597
Non-manual workers	-0.87	.382	-1.94	.052	-0.36	.715	-0.74	0.458	1.54	0.12	1.43	.154	-0.33	.744
Not in the workforce	0.31	.753	-2.07	.039	0.20	.841	-0.29	0.773	1.94	0.05	0.15	.878	-1.13	.258
Sector, reference category: public sector														
Private sector	-0.50	.620	0.37	.710	-3.35	.001	2.40	0.016	-0.11	0.92	0.18	.855	-0.68	.494
Not in the workforce	-0.64	.520	1.52	.129	-0.94	.348	-0.07	0.941	-1.90	0.06	1.19	.233	-0.40	.686
Income, reference category: third tercile of income (highest)														
First tercile of income (lowest)	-0.60	.545	0.45	.655	-1.09	.276	0.82	0.414	0.02	0.99	0.27	.785	-1.47	.141
Second tercile of income (middle)	-0.32	.752	0.68	.496	-1.54	.122	1.20	0.230	0.81	0.42	0.98	.325	-1.13	.259
Lives outside capital area	0.92	.359	3.74	.000	2.90	.004	-0.92	0.359	-3.32	0.00	-1.38	.167	-1.49	.135
Constant	-5.13	.000	-7.40	.000	-5.02	.000	-2.46	0.014	-2.84	0.00	-1.04	.300	-3.67	.000
N	705		705		705		705		705		705		705	
Nagelkerke R Square	.10		.12		.10		.09		.11		.11		.06	

*Response variable: voted for party in model

Appendix II

In A11 are the results of a multilevel binary logistic regression model. This is the same model as in Model 3 in Table 4, but with income excluded all years from the indicator about the impact of voters' socio-economic status on vote-choice.

A11. Multilevel binary logistic regression with income excluded from the indicator about the impact of voters' socio-economic status on vote-choice, 1983-2016

	Model 1
(Intercept)	89.904***
	(15.277)
Micro-level predictors:	
Left-right distances[1]	45.701**
	(19.727)
Party identification[2]	138.904***
	(41.732)
Party sympathy[3]	-165.395***
	(19.823)
Socio-economic status (y-hats)[4]	111.541***
	(39.690)
Macro-level predictors:	
Year[5]	-0.048***
	(0.008)
Party age[6]	0.008***
	(0.001)
Cross-level interactions:	
Year*left-right distances	-0.025**
	(0.010)
Year*party identification	-0.068***
	(0.021)
Year*party sympathy	0.087***
	(0.010)
Year*socio-economic status	-0.053***
	(0.020)
BIC	24077.856
AIC	23981.752
Log Likelihood	-11979.876
Deviance	23959.752
Num. obs.	46016

Note: Multilevel binary logistic model. Dependent variable is vote-choice. Significance levels: ***p < 0.01, **p < 0.05, *p < 0.1. Programme: R 3.3.2.

[1] On an 11 point scale from 0 (no distance) to 1 (maximum distance).

[2] On a 2 point scale, 0=no or weak to some party identification and 1=strong party identification

[3] On an 11 point scale from 0 (dislike) to 1 (like)

[4] Y-hats for the impact of voters' socio-economic status on vote-choice, including gender, age, marital status, education, occupation, whether they work in the private sector or public sector and rural urban residency.

[5] Ten years: 1983, 1987, 1991, 1995, 1999, 2003, 2007, 2009, 2013 and 2016

[6] Years since party was first elected into parliament

Appendix III

A12 lists the results of multilevel binary logistic regressions, where the impacts of each factor in voters' socio-economic status is tested separately.

A12. Impacts of separate indicators of voters' socio-economic status on vote-choice, 1983 to 2016

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
(Intercept)	108.162*** (14.423)	108.192*** (14.422)	108.120*** (14.427)	106.619*** (14.463)	104.220*** (14.481)	100.384*** (14.575)	108.707*** (14.430)	110.383*** (14.458)
Micro-level predictors:								
Left-right distances[1]	51.199*** (18.618)	51.206*** (18.619)	51.189*** (18.620)	51.522*** (18.619)	50.563*** (18.640)	50.753*** (18.664)	49.272*** (18.611)	49.786*** (18.666)
Party identification[2]	140.118*** (41.299)	140.127*** (41.297)	140.023*** (41.308)	139.053*** (41.151)	136.815*** (41.135)	138.685*** (40.876)	140.294*** (41.307)	137.745*** (40.925)
Party sympathy[3]	-189.589*** (18.777)	-189.614*** (18.777)	-189.563*** (18.778)	-188.457*** (18.788)	-190.777*** (18.797)	-187.286*** (18.846)	-194.140*** (18.980)	-192.080*** (18.814)
Gender[4]	-0.044 (0.179)							
Age[4]		-0.077 (0.206)						
Married/living as married[4]			0.005 (0.040)					
Education[4]				0.020 (0.018)				
Occupation[4]					0.025*** (0.008)			
Sector (public, private or else)[4]						0.032*** (0.007)		
Income[4]							0.010 (0.007)	
Lives outside capital area[4]								13.473 (71.137)
Macro-level predictors:								
Year[5]	-0.057*** (0.007)	-0.057*** (0.007)	-0.057*** (0.007)	-0.057*** (0.007)	-0.055*** (0.007)	-0.053*** (0.007)	-0.058*** (0.007)	-0.058*** (0.007)
Party age[6]	0.008*** (0.001)	0.008*** (0.001)	0.008*** (0.001)	0.008*** (0.001)	0.008*** (0.001)	0.008*** (0.001)	0.008*** (0.001)	0.008*** (0.001)
Cross-level interactions:								
Year*left-right distances	-0.027*** (0.009)	-0.027*** (0.009)	-0.027*** (0.009)	-0.028*** (0.009)	-0.027*** (0.009)	-0.027*** (0.009)	-0.026*** (0.009)	-0.027*** (0.009)
Year*party identification	-0.068*** (0.021)	-0.068*** (0.021)	-0.068*** (0.021)	-0.068*** (0.021)	-0.067*** (0.021)	-0.068*** (0.020)	-0.068*** (0.021)	-0.067*** (0.020)
Year*party sympathy	0.099*** (0.009)	0.099*** (0.009)	0.099*** (0.009)	0.098*** (0.009)	0.099*** (0.009)	0.098*** (0.009)	0.101*** (0.009)	0.100*** (0.009)
Year*gender	≈0.000 (≈0.000)							
Year*age		≈0.000 (≈0.000)						
Year*married			≈-0.000 (≈0.000)					
Year*education				≈-0.000 (≈0.000)				
Year*occupation					≈-0.000*** (≈0.000)			
Year*sector						≈-0.000*** (≈0.000)		
Year*income							≈-0.000 (≈0.000)	
Year*lives outside capital area								≈-0.005 (0.036)
BIC	26937.741	26937.822	26938.219	26935.031	26925.568	26907.325	26935.714	26729.440
AIC	26840.670	26840.752	26841.149	26837.960	26828.498	26810.254	26838.643	26632.385
Log Likelihood	-13409.335	-13409.376	-13409.574	-13407.980	-13403.249	-13394.127	-13408.322	-13305.193
Deviance	26818.670	26818.752	26819.149	26815.960	26806.498	26788.254	26816.643	26610.385
Num. obs.	50242	50242	50242	50242	50242	50242	50242	50168

Note: Multilevel binary logistic model. Dependent variable is vote-choice. Significance levels: ***p < 0.01, **p < 0.05, *p < 0.1. Programme: R 3.3.2.

2 On a 2 point scale, 0=no or weak to some party identification and 1=strong party identification

3 On an 11 point scale from 0 (dislike) to 1 (like)

4 Y-hats for the impact of separate indicators for voters' socio-economic status on vote-choice, gender, age, marital status, education, occupation, whether they work in the private sector or public sector, income (not asked in 1983) and rural urban residency.

5 Ten years: 1983, 1987, 1991, 1995, 1999, 2003, 2007, 2009, 2013 and 2016

6 Years since party was first elected into parliament