

# Mid-Victorian Voting: Party Orientation and Class Alignment Revisited<sup>†</sup>

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May 31, 2016

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## Abstract

Using individual elector level panel data from the 19<sup>th</sup> century UK poll books we reassess the development of a party centred electorate in the United Kingdom. In line with findings of Cox, we find that the British electorate was party centred by the time of the major late Victorian institutional reforms. Going further, we show that the decline in candidate centred voting is largely attributable to changes in the behaviour of the English working class. The observed party orientation of the working classes is familiar: The working classes, at least those skilled enough to vote prior to 1868 aligned with the left. Our analysis suggests that class alignment in British politics may have occurred much earlier than previously thought.

**Keywords:** Candidate-oriented voting, Party oriented-voting, Working class

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<sup>†</sup> We thank Daniel Rubenson and seminar audiences at HECER and LSE Historical political economy workshop for helpful comments.

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## 1 Introduction

In party-oriented systems, voters are loyal to their preferred party and vote for the candidate according to their party affiliation, regardless of personal characteristics or beliefs of the candidates. In Britain, it is widely accepted that such a system superseded a candidate-oriented one, in which candidates' personal characteristics or policy determine vote allocation, by the end of the nineteenth century. In a sequence of papers and a seminal monograph (*the Efficient Secret*), Cox (1984, 1986 and 1987) establishes, and against the conventional wisdom at the time, that the party orientation of the British electorate occurred a decade or so before the defining institutional changes of the Victorian era, namely the establishment of the Second Reform Act 1867; and so before the Corrupt Practices Act of 1883 (that made it harder for candidates to "treat" voters) and the development of disciplined political parties in the 1870s. Cox showed, instead, that the key stimulus was the (informal) centralisation of decision-making authority in a cabinet that ushered in a new age of executive dominance replacing an earlier "golden age" during which power to initiate policy rested with individual members. A party oriented electorate developed as voters used their votes to control the executive and choose between rival teams: an incumbent government and (Her Majesty's Loyal) opposition. Thus Cox argues that, with respect to the development of a party oriented electorate, the crucial change "was the decline in the Parliamentary stature of the individual MP."

In this article, we revisit and renew this classic debate concerning the timing of the emergence of a party oriented electorate. We do so using individual level data of actual voting behaviour. Before the establishment of secret voting with the introduction of the Ballot Act in 1872, voting in British Parliamentary elections was public. Often the name of each voter and how they voted was recorded in the so called poll books, sometimes along with other information such as the electors' address and occupation. Due to recent work by historians some of these poll books have become available electronically, thus providing a unique opportunity to study actual individual level voting behaviour. In order to exploit this opportunity, here we construct voter level panel data from 19th century borough constituencies of Ashford, Guildford and Sandwich.

The main empirical evidence in Cox (1986) is based on descriptive analysis of a long (and wide) panel of aggregate (district) level data on the share of split votes. The argument is that in a party-oriented system, voters would not split their two votes between liberals and conservatives. Split votes do not affect the seat allocation between parties. They do, however, affect which candidates are elected within a party. Cox shows that split level voting (his key indicator of a candidate centred electorate) declined dramatically during 1857-68, and so before the first election under the new extended franchise in 1868. In our first main result, we show that regression analysis of individual electors' voting behaviour corroborates those findings.

However, our micro-level analysis allows us to go further in exploring which voters cast split level votes. The results are surprising. Exploring aggregate level party votes by district reveals (unsurprisingly) that the working class tended to give more split votes. As has been widely documented, individual MPs controlled campaign finances in the absence of party machines and used agents who "worked in parallel with religious and charitable organizations to offer voters social insurance" (Stokes et al., Chapter 8). Our econometric analysis reveals, however, that the probability of casting a split vote declined far more rapidly amongst working class voters. Indeed, and already by 1865, the critical election before the introduction of the Second Reform Act, the level of split voting was somewhat lower among the working than the middle class. The results based on our small sample of constituencies suggest then that the orientation of British voters toward parties was driven especially by changes in voting behaviour amongst the British working classes.

Finally, we address the class basis of partisan voting. A vast literature, based on aggregate data and individual level surveys, documents the alignment of the working classes with the British Labour Party in the decades after the Second World War that subsequently declined in more recent times. It is reasonable to expect that this alignment occurred much earlier, and possibly as early as the first decades of the twentieth century during which the Labour Party replaced the Liberals as the main opposition to the Conservatives. Our analysis reveals, in fact, that the left orientation of the working classes can be traced back much earlier. The probability of left (Liberal) voting was already significantly higher amongst working class voters in 1865, prior to the introduction of the Second Reform Act. Thus we find that not

only the party orientation of voters, but also that the class basis of party voting predates the defining institutional changes of the Victorian era.

Our paper is organized as follows. In the following section we discuss the institutional setting and introduce and describe our novel micro-level data. In Section 3, we present the econometric results before concluding in Section 4.

## **2 Institutional setting and data**

### **2.1 Victorian era British political landscape**

Elections in Britain in the Victorian period under investigation took place under the first-past-the-post voting system that is still in place. Whilst some constituencies were single-member districts, most constituencies elected two candidates and a few elected three and four. From around 1850 constituency elections were contested by candidates who aligned with one of two major parties, the Conservatives and the Liberals. The Liberals brought together a loose coalition of (mainly) Whigs, Radicals, and Peelites (a faction that had broken from the Conservatives) and by 1860 formed a cohesive parliamentary block. The Whigs were far from being a "party" in the sense of having a clear programme. Nevertheless, candidates who stood on a platform of reducing crown patronage, expressed sympathy towards nonconformists and supported the interests of merchants and bankers were labelled as Whigs. For convenience, for our analysis of the years prior to the formation of a cohesive Liberal Party identity we refer to candidates who are either Whig or Radical as Liberal.

In the period of analysis, the key institutional reforms were the Great Reform Acts. The first of these, introduced in 1832, introduced several measures that mitigated malapportionment: increasing representation in the industrialized cities, and taking away seats from the so-called rotten boroughs with small voting populations. The act also increased the male franchise to around 650,000. The Representation of the Peoples Act, otherwise known as the Second Reform Act, was passed by Parliament on August 15th, 1867. The Second Reform Act, that became law in England and Wales in 1867, extended the franchise in the boroughs to all males over the age of 21 who were inhabitant occupiers, whether house-owners or tenants, and to male lodgers whose rent was at least 10 pounds

per year. A residence of at least one year in the borough was required and women were still unable to vote. In counties, the franchise was extended to holders of life interests, copyholds and leases of sixty years and more worth 5 pounds per annum (from a previous threshold of 10) and to tenants occupying land worth 12 pounds (from a previous threshold of 50 pounds per annum).

## **2.2 Poll book data**

Prior to the next major reform, The Ballot Act of 1872, individual voting records of registered voters were public and recorded in so called poll books. This historical fact provides a novel and reliable window into actual individual political behaviour. Using these data, we can answer questions previously addressed using less detailed aggregate or less reliable survey data. While Andrews (1998) shows that poll book data may contain some errors, they are so rare that they will be insignificant to any empirical analysis. The main limitations are, in fact, that the information content of the poll books are somewhat limited and that they are currently available electronically only for a very few districts. Therefore, the generalizability of the analysis is limited. However, the fact that we can confirm the very general findings of Cox (1984, 1986, 1987) alleviates these concerns.

Previously, these poll book data have been used mainly in historical research (see e.g. Drake 1971, Speck and Gray 1970 and Mitchell and Cornford 1977), where the empirical analysis has been very elementary in nature. Accordingly, in a more recent work Andrews (1998) states that “Some work has been done on poll books but in general this has been confined to an overview of poll books, or as illustration of a point in another argument”. As a rarity, the study by Andrews (1998) utilizes the data in detail and shows that voters in Sandwich change the party they vote quite often over time. He supplements this with evidence from other historical records such as candidates’ account books to conclude that extensive vote buying took place. However, the empirical analysis even in Andrews (1998) is rather crude, for example, no statistical inference is conducted. Surprisingly, we have not been able to find more recent examples nor any research at all in the political science using the poll books.

We focus on the period after the First Reform Act of 1832 and before The Ballot Act of 1872. We use only poll books that contain information on occupation and cover the transition period from candidate to party oriented system, that is, 1857-1868 as discussed by Cox (1986). Given these restriction, we make use of poll books for a varying number of general elections held only in three boroughs: Ashford (four elections in 1852-1868), Sandwich (eight elections in 1832-1868) and Guildford (eight elections in 1833-1868). Digitized versions of the poll book content are provided by the UK Data Archive (Ashford, UK Data Archive Study Number 2948; Sandwich, 4170; Guildford, 977). All poll books record voters' names and votes. Moreover, Sandwich and Guildford poll books include also occupations of the voters. For Ashford, we obtain the occupation information for a fraction of the voters by linking the data with censuses conducted around the period, directories that also contain occupational information for some of the voters and lists of landowners.<sup>4</sup> We were not able to track other poll books that would both contain information on occupation and cover more than one election during our period of interest. An example of the typical content included in our poll books is illustrated below in Figure 1 which shows two pages from Sandwich poll book for parliamentary elections held in 1857.

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<sup>4</sup> We use a fuzzy merging algorithm, allowing minor differences in spelling of the first and last names, to link three censuses (1841, 1851 and 1861), directories from 1851, 1855, 1867 and 1874 and lists of land owners to the poll book data. After this, we assign each voter occupational and class information from the closest available source.

REMARKS	NAME.	PROFESSION.	RESIDENCE.	P.	H.	M.	L.
	James, Thomas	Clerk	Deal				
	Jarvis, Luke	Publican	do				
	Job, Thomas	Pilot	do				
	Jones, Edward	Chemist	do				
	Jones, Wm. Bentick	Pilot	do				
	Kelsey, James H. G.	Gardener	do				
	Kemball, Joseph Bird	Draper	do				
	Kennett, John	Hair Dresser	do				
	Kent, Frederick	Inn Keeper	do				
	Keys, Richard	Gentleman	do				
	Kidner, Thomas	Victualler	do				
	King, James Jordan	Hair Dresser	do				
	King, Stephen	Schoolmaster	do				
	Kingsford, William	Baker	do				
	Knight, James	Minister	do				
	Ladd, William	Farmer	do				
	Langley, Morris	Auctioneer	do				
	Lawrence, George	Clerk	do				
	Leeson, Jas. Seymour	Surgeon	do				
	Long, George	Cordwainer	do				
	Long, Edmund F.	Shoemaker	do				
	Lovnds, Robt. Ramll.	Victualler	do				
	Lush, James Robert	Schoolmaster	do				
	Mackie, William B.	Pilot	do				
	Mackie, Robert Moon	Painter	do				
	Malcome, Russell	Banker's Clerk	do				
	Marsh, Willm. Bailey	Baker	do				
	Marsh, William	Gentleman	do				
	Marsh, Simon	Victualler	do				
	Marsh, Henry W. G.	Ship Agent	do				
	Marsh, James	Victualler	do				
	Martin, James C.	Law Clerk	do				
	Mac Diamond, John B.	Chemist	do				
	McLeod, Beutley	Bracer	do				
	Mercer, George	Solicitor	do				
	Millen, John Bullock	Pilot	do				
	Moat, George Manger	Carpenter	do				
	Moat, Thomas	Blacksmith	do				
	Mockett, Thos. H. W.	Gardener	do				
	Mockett, Joshua	Victualler	do				
	Mockett, Stn. Foster	Victualler	do				
	Moon, George Wm.	Pilot	do				
	Morse, Edward Geo.	Chemist & Surgeon	do				
	Mose, William James	Coach Maker	do				
	Moses, Joseph	Gentleman	do				
	Moulton, Morris	Pilot	do				
	Mourilyan, Joseph	Gentleman	do				
	Mowle, Richard	Pilot	do				
	Mowle, Thomas Ralph	Pilot	do				
	Mowll, Richard	Pilot	do				
	Mauuncry, Wm. R.	Carrier	do				
	Munday, George	Gentleman	do				

REMARKS	NAME.	PROFESSION.	RESIDENCE.	P.	H.	M.	L.
	Myhill, Wm. Popkiss	Baker	Deal				
	Myhill, Valentine C.	Pilot	do				
	Myhill, George	Baker	do				

BOOTH B, COMPARTMENT, No. 2.—Voters in respect of Property occupied within the Parish of Deal, whose surnames commence with the letters from N to Y, (both inclusive) :—and for Voters in respect of Property occupied within the Parish of Walmer.

REMARKS	NAME.	PROFESSION.	RESIDENCE.	P.	H.	M.	L.
	Neal, Robert	Gentleman	Deal				
	Nethersole, William	Wine Merchant	do				
	Nethersole, John	Wine Merchant	do				
	Newing, John	Labourer	do				
	Newing, Willm. Harb.	Gardener	do				
	Newing, Steph. Danl.	Baker	do				
	Newton, James	Pilot	do				
	Norman, J. Henry	Gentleman	do				
	Norris, Tom	Pilot	do				
	Norris, Stephen	Pilot	do				
	Norris, Thos. Dixon	Pilot	do				
	Norris, James	Pilot	do				
	Norris, Leonard Patta.	Victualler	do				
	Norris, James Henry	Draper	do				
	Norris, Stephen, senr.	Gentleman	do				
	Notl, Edw. Banberry	Capt R. N.	do				
	Oatridge, William	Mariner	do				
	Packer, Osmond	Draper	do				
	Pain, Luke	Baker	do				
	Pain, John	Pilot	do				
	Pain, Thomas	Clothier	do				
	Pain, Edmund	Gentleman	do				
	Pain, Thomas Henry	Cowper	do				
	Pain, Edmund	Clothier	do				
	Palmer, George	Pilot	do				
	Parker, Stephen Edw.	Victualler	do				
	Parker, David	Butcher	do				
	Parker, Thomas	Gentleman	do				
	Parker, Thomas	Butcher	do				
	Parsons, Henry Wm.	Gentleman	do				
	Parsons, Henry Saml.	Baker	do				
	Paul, Beuact	Gentleman	do				
	Paul, Thomas	Minister	do				
	Payne, Iden	Gentleman	do				
	Pearce, William	Watchmaker	do				
	Pezden, Vincent	Gentleman	do				
	Petley, Robert	Schoolmaster	do				
	Pettit, William	Gentleman	do				
	Philpott, William	Victualler	do				
	Philpot, George	Butcher	do				
	Pittock, Wm. Edgar	Tailor	do				
	Portidge, Robert	Pilot	do				

Figure 1. Pages from Sandwich pollbook, 1857.

We have further classified the occupations in working and middle classes in order to evaluate class differences in voting behaviour. Our classification follows Best (1972) and Clapham (2009), where the main classification criteria is a typical income of each occupation. Table 1 illustrates the occupational composition of the working and middle classes by showing ten most common professions within each class in our data. These ten professions always account for at least half of the voters in the respective group and hence provide fairly comprehensive picture of the classification and the occupations in the data. While all possible classifications may have their issues and one may need to compromise for example between income and social criteria, Table 1 does not reveal any striking misclassifications, at least from purely subjective and intuitive perspective.

**Table 1.** Ten most common occupations by class and district.

Ashford				
Middle class ( <i>N</i> = 245)			Working class ( <i>N</i> = 332)	
Rank	Occupation	<i>N</i>	Occupation	<i>N</i>
1	Grocer	30	Farmer	31
2	Gentry	17	Draper	24
3	Clerk	14	Carpenter	21
3	Merchant	13	Labourer	18
5	Engineer	12	Butcher	16
6	Doctor	11	Shoe maker	16
7	Lawyer	11	Tailor	15
8	Religion	11	Baker	14
9	Chemist	10	Cabinet maker	11
10	House proprietor	9	Coach builder	10

Guildford				
Middle class ( <i>N</i> = 1208)			Working class ( <i>N</i> = 2099)	
Rank	Occupation	<i>N</i>	Occupation	<i>N</i>
1	Gentleman	230	Carpenter	174
2	Dealer	150	Shoe maker	157
3	Grocer	133	Baker	123
3	Merchant	72	Tailor	119
5	Doctor	50	Labourer	105
6	Lawyer	48	Butcher	92
7	Innkeeper	46	Blacksmith	72
8	Victualler	43	Brick layer	71
9	Publican	40	Brewer	61
10	Clerk	39	Gardener	56

Sandwich				
Middle class ( <i>N</i> = 3140)			Working class ( <i>N</i> = 4128)	
Rank	Occupation	<i>N</i>	Occupation	<i>N</i>
1	Gentry	935	Pilot	379
2	Victualler	305	Mariner	327
3	Grocer	290	Labourer	260
3	Army	211	Shoe maker	208
5	Dealer	128	Carpenter	204
6	Publican	108	Farmer	201
7	Merchant	103	Butcher	187
8	Doctor	95	Gardener	173
9	Clerk	85	Tailor	162
10	Education	83	Painter	137

Table 2 summarizes the voting behaviour by class and district. In Sandwich and Guildford working class tends to give more split votes but party preferences are similar across the classes. In Ashford, the working class gives less split votes and votes more for the liberals than the middle class. However, this difference between constituencies will turn out to be mainly a result of different election years rather than within election year geographic differences.



**Table 2.** Aggregate level party votes by district and class.

	Middle class		Working class		Difference
	Mean	Std. dev.	Mean	Std. dev.	
Ashford, parliamentary county elections (1852-1868)					
Liberal	0.433	0.496	0.578	0.495	-0.146***
Conservative	0.216	0.413	0.157	0.364	0.060*
Split	0.196	0.398	0.154	0.361	0.042
No vote	0.155	0.363	0.111	0.315	0.044
<i>N</i>	245		332		
Guildford, parliamentary borough elections (1833-1868)					
Liberal	0.392	0.488	0.368	0.482	0.024
Conservative	0.357	0.479	0.299	0.458	0.058***
Split	0.251	0.434	0.333	0.471	-0.082***
No vote			N/A		
<i>N</i>	1208		2099		
Sandwich, parliamentary borough elections (1832-1868)					
Liberal	0.456	0.498	0.442	0.497	0.014
Conservative	0.333	0.471	0.362	0.481	-0.029**
Split	0.078	0.269	0.118	0.323	-0.040***
No vote	0.132	0.339	0.075	0.264	0.057***
<i>N</i>	3140		4128		
Notes: Class is unknown for 238, 95 and 46 voters in Ashford, Guildford and Sandwich, respectively. *, ** and *** denote statistically significant difference in means at 10 %, 5 % and 1 % level, respectively.					

### 3 Econometric analysis

In this section, we turn to our regression analysis. The unit of observation is an individual voter in one election. Most voters are observed and identified over many elections. We begin our analysis by focusing on the question of split voting at individual voter level and then analyse party alignment.

#### 3.1 Split voting

In table 3, the outcome variable gains value one if the vote is split between Liberal and Conservative candidates and value zero in all other possible cases, including split vote within a party. Depending on the specification, we either have no control variables, or we include fixed effects at two levels. Election year fixed effects control for overall over time changes in

the popularity of split voting. Voter fixed effects focus the identification only on the variation arising from individual voters changing their class status over time.

The results in Table 3 show that For Sandwich and Guildford, working class predicts split voting positively and correlation is quite robust and significant with the exception of the voter fixed effect model. There does not seem to be enough voters changing their class to precisely estimate the coefficient of interest in that specification. For Ashford, there is no robust pattern, which is not surprising given it contains the smallest sample of voters.

**Table 3.** Regression results on the association between working class status and splitting the vote between the liberals and conservatives.

Ashford			
	(1)	(2)	(3)
Working class	-0.0089 [0.0327]	0.0175 [0.0268]	0.1189 [0.1848]
Constant	0.1750*** [0.0228]	0.4986*** [0.0539]	1.0163*** [0.1040]
<i>N</i>	655	655	655
<i>R</i> <sup>2</sup>	0.00	0.34	0.77
Guildford			
	(4)	(5)	(6)
Working class	0.0815*** [0.0174]	0.0910*** [0.0166]	0.0781 [0.0765]
Constant	0.2867*** [0.0135]	0.3897*** [0.0531]	0.4141*** [0.0972]
<i>N</i>	4316	4316	4316
<i>R</i> <sup>2</sup>	0.01	0.12	0.14
Sandwich			
	(8)	(9)	(10)
Working class	0.0460*** [0.0088]	0.0368*** [0.0086]	0.0118 [0.0229]
Constant	0.0960*** [0.0063]	0.2727*** [0.0232]	0.2769*** [0.0296]
<i>N</i>	6943	6943	6943
<i>R</i> <sup>2</sup>	0.00	0.05	0.04
Election FE	No	Yes	Yes
Voter FE	No	No	Yes

Notes: Only general elections are included. Outcome is a dummy for splitting the vote between candidates from two parties. Estimates are conditional on voting. Robust standard errors clustered by voter are reported in brackets. \*, \*\* and \*\*\* denote statistical significance at 10 %, 5 % and 1 % levels, respectively.

In table 4, we revisit the classic concerns of Cox using our micro-level data. Using aggregate data, Cox's main finding was that split level voting had declined already by 1865 almost to the low level that persisted from 1868 onwards, and so prior to the major institutional changes at 1867 documented earlier. However, during the election year 1857 split voting was as common as in the previous era. In 1859 split voting was lower than in 1857, but still within the variation of the previous era. We use these findings to split our sample into two periods. The first period contains elections before 1865 and the second period those during and after 1865. We use this classification to conduct difference-in-difference estimation (DID) to see whether the working class responded differently to the switch from the candidate oriented to party oriented system than the middle class. From this perspective, working class be seen as the treatment group and middle class as the control group in the DID.

While the main interest of this paper is to present descriptive results on the timing of changes in political behaviour of different classes, one could give a causal interpretation to the main results if the standard DID assumptions are met. The common trend assumption means that absent of any switch from the candidate oriented to party oriented system the outcome of interest for the working class and middle class would have evolved with the same trends. Moreover, causal interpretation would require that any change in the behaviour of the working class in the post-treatment period did not cause a response in the behaviour of the middle class, i.e. there should be no spillovers caused by the effect of interest. Even if it is not entirely clear that both of these assumptions would hold in our case, DID regressions and graphical illustrations typical to the DID are a very useful way to describe the phenomenon of interest here. Therefore, we estimate following regressions

$$(1) \quad y_{it} = \alpha_t + \beta_1 Working\ class_{it} + \beta_2 1[Year \geq 1865]_t + \beta_3 1[Year \geq 1865]_t Working\ class_{it} + \varepsilon_{it}$$

We estimate (1) either separately for each constitution or using a pooled data from all of them. We use either no controls or election year fixed effects. For Guildford, we also observe more detailed location (parish) information within the constituency and therefore

include that locality fixed effect. With the pooled data, we also use election year times constituency fixed effects.

The DID results for split voting are presented in Table 4. From the separate regressions we find that working class status is strong and robust predictor of split voting prior to the 1865 elections (the coefficient related to the *Working class* variable). In Guildford and Sandwich this result is highly significant but imprecise in Ashford. However, in elections during and subsequent to 1865 that split voting goes down for all voters (the coefficient related to the  $1[Year \geq 1865]$  variable). This result is highly significant in all the constituencies and exactly in line with the Cox aggregate level results.

The novel contribution of our paper is that our data allows us to go further in assessing heterogeneous effects. In particular, we observe that subsequent to 1865, the split voting goes down even more for the working class than the middle class (the coefficient related to the  $1[Year \geq 1865]Working\ class$  variable). This main effect of interest is present and robust within all constituencies, but statistically significant only for Sandwich. The pooled analysis confirms these findings and all the results are highly significant in the pooled analysis.

As to the interpretation of the coefficients, let's look at, e.g., specification (6). Prior to 1865 10.24% percent (Constant=0.1024) of the non-working class voters gave split votes and 14.86% of the working class did so (Constant + 0.0462). After and during 1865, 5.65% of the non-working class voters gave split votes (Constant – 0.0459) and 5.99% of the working class did the same (sum of all the reported coefficients). Therefore, the reduction in working class split voting was large enough to take them to the same level as the other classes despite them also reducing their split voting.

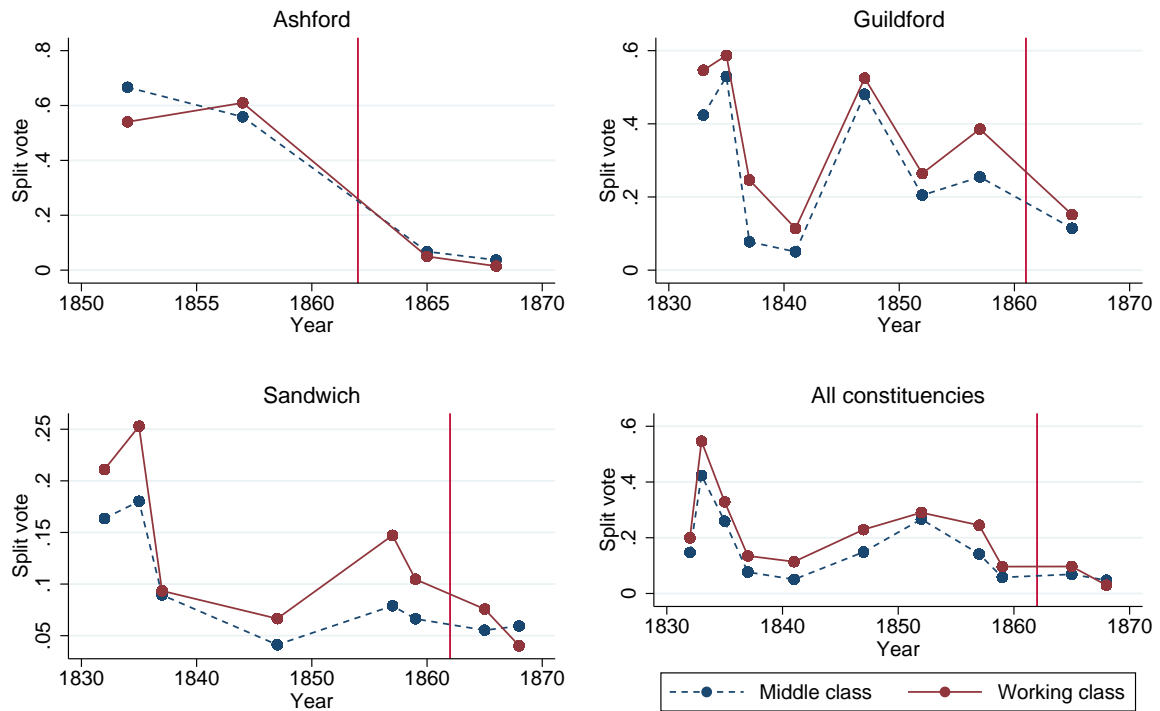
**Table 4.** DID results on splitting the vote.

		Ashford			
		(1)	(2)		
Working class		0.1085 [0.0780]	0.1083 [0.0782]		
1[Year>=1865]		-0.4323*** [0.0550]	-0.4372*** [0.0637]		
1[Year>=1865] x Working class		-0.1169 [0.0789]	-0.1177 [0.0790]		
Constant		0.4685*** [0.0541]	0.4615*** [0.0626]		
<i>N</i>		655	655		
<i>R</i> <sup>2</sup>		0.34	0.34		
		Guildford			
		(3)	(4)	(5)	
Working class		0.0831*** [0.0199]	0.0848*** [0.0196]	0.0835*** [0.0195]	
1[Year>=1865]		-0.1674*** [0.0255]	-0.3302*** [0.0373]	-0.3394*** [0.0377]	
1[Year>=1865] x Working class		-0.0496 [0.0334]	-0.0514 [0.0332]	-0.0442 [0.0330]	
Constant		0.2858*** [0.0154]	0.4486*** [0.0310]	0.2600*** [0.0666]	
<i>N</i>		3402	3402	3402	
<i>R</i> <sup>2</sup>		0.03	0.14	0.14	
		Sandwich			
		(6)	(7)		
Working class		0.0462*** [0.0105]	0.0427*** [0.0104]		
1[Year>=1865]		-0.0459*** [0.0112]	-0.1195*** [0.0177]		
1[Year>=1865] x Working class		-0.0428*** [0.0157]	-0.0394** [0.0156]		
Constant		0.1024*** [0.0075]	0.1664*** [0.0145]		
<i>N</i>		6556	6556		
<i>R</i> <sup>2</sup>		0.01	0.04		
		All constituencies			
		(8)	(9)	(10)	(11)
Working class		0.0604*** [0.0106]	0.0609*** [0.0102]	0.0572*** [0.0098]	0.0589*** [0.0096]
1[Year>=1865]		-0.1122*** [0.0104]	-0.1208*** [0.0165]	-0.1647*** [0.0177]	-0.1119*** [0.0172]
1[Year>=1865] x Working class		-0.0473*** [0.0142]	-0.0499*** [0.0139]	-0.0457*** [0.0141]	-0.0515*** [0.0135]
Constant		0.1763*** [0.0078]	0.1552*** [0.0146]	0.1575*** [0.0145]	0.1564*** [0.0145]
<i>N</i>		10613	10613	10613	10613
<i>R</i> <sup>2</sup>		0.03	0.08	0.12	0.15
Election FE		No	Yes	Yes	Yes
Parish FE		No	No	Yes	Yes
Election-Constituency FE		No	No	No	Yes

Notes: Only general elections are included. Outcome is a dummy for casting a split vote. Estimates are conditional on voting. Robust standard errors clustered by voter are reported in brackets. \*, \*\* and \*\*\* denote statistical significance at 10 %, 5 % and 1 % levels, respectively.

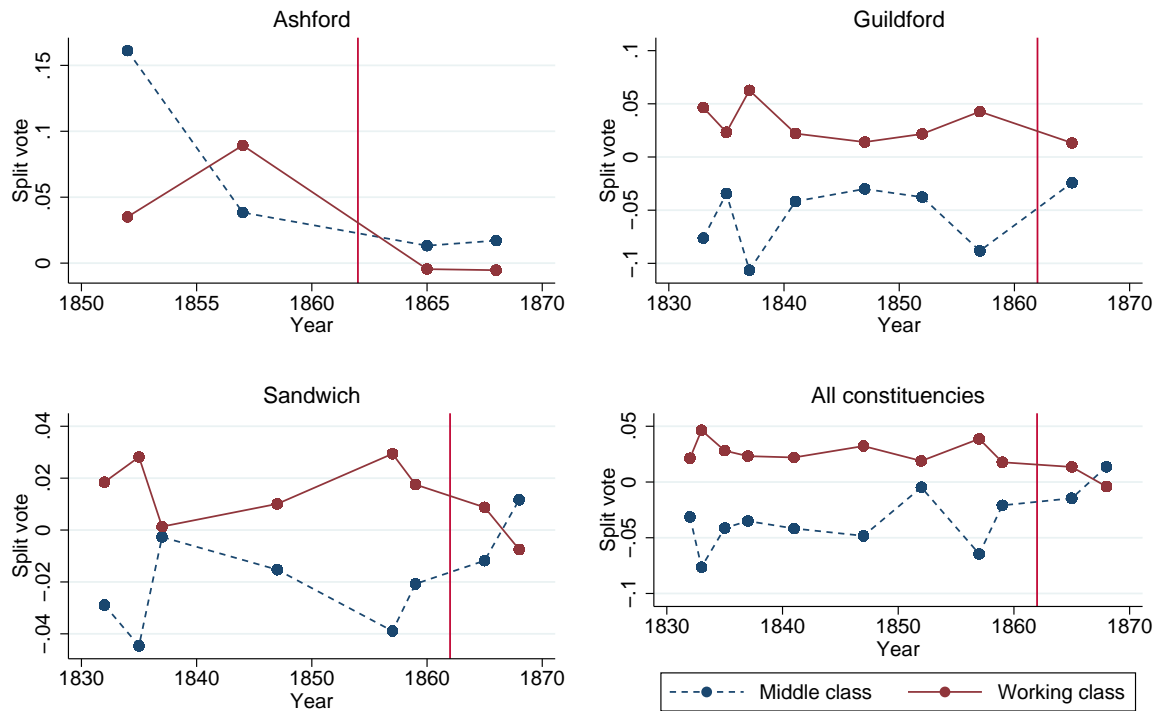
We visualize the estimation exercise of Table 4 in Figure 2. We plot the share of split votes among the two classes over time. We discuss these results mainly based on the bottom-right graph that uses the pooled data. The report the separate individual constituency graphs reported for the sake of completeness.

The individual graphs deliver the same main message although they are somewhat noisier for obvious sample size reasons. The first observation is that the split vote share has reasonably common pre-treatment trends for both the working class and the other classes prior to the 1865 elections. This indirectly implies that the common trend assumption may be realistic. This pattern may give some causal claims to the main association of interest reported in Table 4. The second key observation is that prior to 1865 the split voting is always more common among the working class than the middle class. The third key observation is that in 1865 election the split voting is about as common in both the groups and in 1868 even a bit less common among the working class than the middle class. Finally, the decrease in the split vote share among the working class took partly place already in 1865 and not only in 1868. This is important because the 1868 elections were affected by the franchise extension reform of 1867 (see e.g. Berlinski et al. 2014). It seems likely that the Cox argument of moving from candidate-oriented system to party-oriented system rather than the franchise extension explains the change in voter behaviour.



**Figure 2.** Graphical representation of the DID analysis on split voting.

In Figure 3, we illustrate the same findings further by plotting over time the class means of the residuals from a regression where split voting is predicted with only the election year fixed effects. The graphs focus on the relative differences between the class while cleaning out the overall over time variation in occurrence of split voting. The conclusion remains the same as in the context of Figure 2.



**Figure 3.** Graphical representation of the DID analysis on split voting residuals.

Our results thus corroborate Cox’s findings while allowing us to go further in showing that the development of a party centred electorate in Victorian England owes much to the change in behaviour of the English working classes. But what form did this party orientation take? In our next analysis we consider the partisan alignment of working class voters.

### 3.2 Party alignment

In Table 5, we study the left alignment of workers assessing the probability of voting for the liberals. Correspondingly, for this analysis, the outcome variable takes value one if the vote goes only to liberals and the value zero in the cases of split vote between the parties, vote for conservatives or not voting at all. Depending on the specification, we either have no control variables, or we include election year fixed effects and voter fixed effects.

The results in Table 5 show that For Sandwich and Guildford, working class predicts split voting negatively and this correlation is quite robust even for including the voter fixed effects. The correlation is statistically significant for Sandwich in all the specification and for



none in Guildford. For Ashford, the pattern is not robust to voter level fixed effects, which is not surprising given it contains the smallest sample of voters. However, in models (1) and (2) the correlation is positive and significant for Ashford. This difference between Ashford and others is driven by the different election years in the data.

**Table 5.** Regression results on the association between working class status and voting for the liberals.

Ashford			
	(1)	(2)	(3)
Working class	0.1592*** [0.0491]	0.1371*** [0.0454]	-0.0423 [0.2160]
Constant	0.4917*** [0.0342]	0.1985*** [0.0463]	-0.1468 [0.0973]
<i>N</i>	655	655	655
<i>R</i> <sup>2</sup>	0.03	0.17	0.87
Guildford			
	(4)	(5)	(6)
Working class	-0.0290 [0.0245]	-0.0196 [0.0244]	-0.0493 [0.0768]
Constant	0.3971*** [0.0202]	0.4059*** [0.0325]	0.4197*** [0.0540]
<i>N</i>	3402	3402	3402
<i>R</i> <sup>2</sup>	0.00	0.08	0.20
Sandwich			
	(8)	(9)	(10)
Working class	-0.0464** [0.0187]	-0.0393** [0.0185]	-0.0622** [0.0260]
Constant	0.5243*** [0.0147]	0.5118*** [0.0205]	0.5433*** [0.0257]
<i>N</i>	6556	6556	6556
<i>R</i> <sup>2</sup>	0.00	0.04	0.07
Election FE	No	Yes	Yes
Voter FE	No	No	Yes

Notes: Only general elections are included. Outcome is a dummy for voting for the liberal candidates. Estimates are conditional on voting. Robust standard errors clustered by voter are reported in brackets. \*, \*\* and \*\*\* denote statistical significance at 10 %, 5 % and 1 % levels, respectively.

In Table 6, we turn to analyse how party voting behaviour changes over time. We ask whether working class voted liberal more often than other classes prior to 1865 elections and whether they did so in 1865 and 1868 elections. The analysis is identical to the previous DID analysis on split voting with only difference being the outcome variable. Again, the main coefficient of interest relates to the interaction variable between the working class status

and the latter time period. This can be seen as a difference-in-differences estimate of the working class voting left in a new era.

Consistent with Table 5, we find that during the earlier period, working class status predicts positively voting right rather than left for Guildford and Sandwich. For Ashford the correlation is again the opposite but not significant. In 1865 and 1868 elections, the liberal party became much more popular among the middle class than in the earlier period in Ashford. This change is statistically significant. In Sandwich and Guildford there is not much change in the popularity of the liberals among the middle class. In all the three constituencies, the popularity of the liberals among the working class increased in the latter period. This effect of main interest is robust to including controls within all the constituencies and of somewhat similar magnitude across the constituencies.

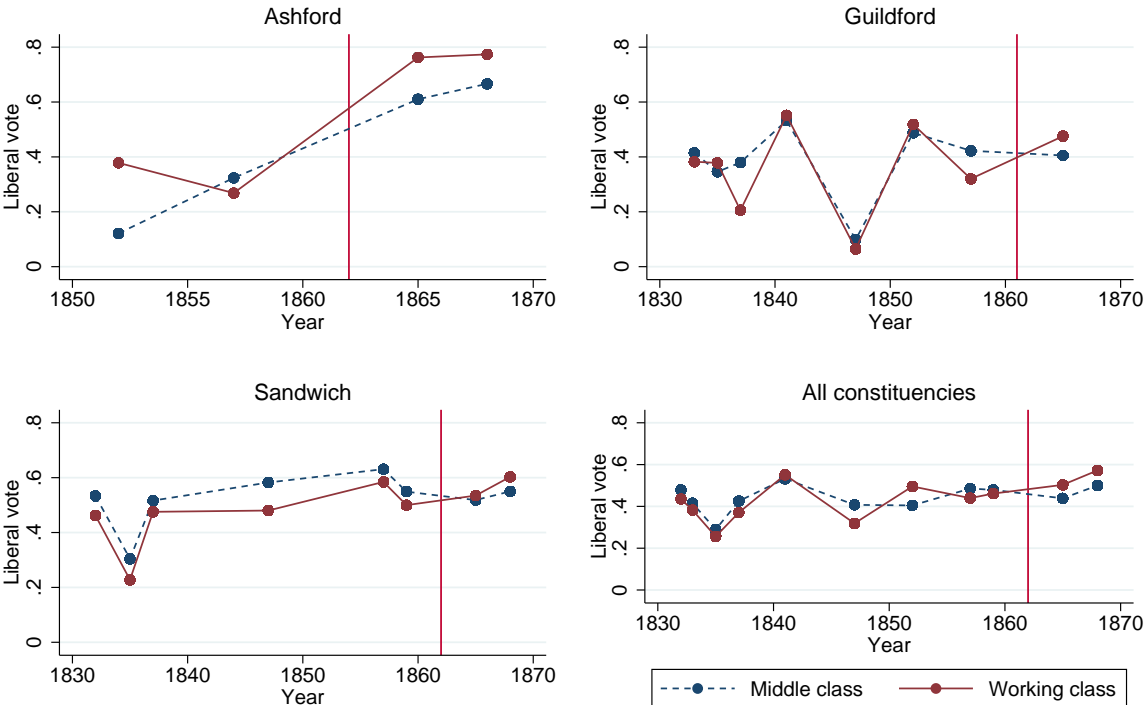
As to the interpretation of the coefficients, let's look at specification (6). Prior to 1865 52.14% (Constant) of the middle class voters voted liberals in Sandwich and 45.14% of the working class did so (Constant - 0.07). After and during 1865, 53.25% of the non-working class voters voted liberals (Constant + 0.0111). Therefore, the middle class behaviour stayed exactly the same as the entire group. However, now also 56.56% of the working class did the same (sum of all the reported coefficients). Therefore, the working class seems to have found liberal preferences in the latter part of the era, whereas the other classes did not change their behaviour.

**Table 6.** Regression results on the association between working class status and voting for the liberals for pre- and post-1865 elections.

Ashford				
	(1)	(2)		
Working class	0.0953 [0.0695]	0.0950 [0.0697]		
1[Year>=1865]	0.3852*** [0.0515]	0.4138*** [0.0576]		
1[Year>=1865] x Working class	0.0639 [0.0789]	0.0655 [0.0789]		
Constant	0.2252*** [0.0441]	0.2141*** [0.0487]		
<i>N</i>	655	655		
<i>R</i> <sup>2</sup>	0.17	0.17		
Guildford				
	(3)	(4)	(5)	
Working class	-0.0491* [0.0265]	-0.0387 [0.0264]	-0.0371 [0.0264]	
1[Year>=1865]	0.0078 [0.0352]	-0.0140 [0.0440]	-0.0158 [0.0459]	
1[Year>=1865] x Working class	0.1212*** [0.0449]	0.1108** [0.0449]	0.1022** [0.0450]	
Constant	0.3957*** [0.0221]	0.4175*** [0.0332]	0.7944*** [0.1009]	
<i>N</i>	3402	3402	3402	
<i>R</i> <sup>2</sup>	0.01	0.08	0.09	
Sandwich				
	(6)	(7)		
Working class	-0.0700*** [0.0202]	-0.0631*** [0.0200]		
1[Year>=1865]	0.0111 [0.0243]	0.0337 [0.0311]		
1[Year>=1865] x Working class	0.1031*** [0.0323]	0.0965*** [0.0322]		
Constant	0.5214*** [0.0160]	0.5264*** [0.0210]		
<i>N</i>	6556	6556		
<i>R</i> <sup>2</sup>	0.01	0.04		
All constituencies				
	(8)	(9)	(10)	(11)
Working class	-0.0585*** [0.0159]	-0.0548*** [0.0159]	-0.0509*** [0.0158]	-0.0508*** [0.0156]
1[Year>=1865]	0.0548*** [0.0188]	0.0647** [0.0267]	0.0757*** [0.0278]	0.0241 [0.0286]
1[Year>=1865] x Working class	0.1089*** [0.0248]	0.1096*** [0.0247]	0.1091*** [0.0247]	0.1153*** [0.0246]
Constant	0.4692*** [0.0128]	0.5213*** [0.0196]	0.5189*** [0.0196]	0.5189*** [0.0195]
<i>N</i>	10613	10613	10613	10613
<i>R</i> <sup>2</sup>	0.01	0.03	0.05	0.08
Election FE	No	Yes	Yes	Yes
Parish/Constituency FE	No	No	Yes	Yes
Election-Constituency FE	No	No	No	Yes

Notes: Only general elections are included. Outcome is a dummy for voting for the liberal candidates. Estimates are conditional on voting. Robust standard errors clustered by voter are reported in brackets. \*, \*\* and \*\*\* denote statistical significance at 10 %, 5 % and 1 % levels, respectively.

We visualize the estimation exercise of Table 6 in Figure 4. The first observation is that in all the constituencies the liberal vote share has less clear common pre-treatment trends between the classes than the split vote share had in Figure 2. This makes any causal claims somewhat difficult to defend. The second key observation is that typically the liberals were more popular among the middle class than the working class in the earlier period whereas in all constituencies the opposite was true in the latter period. The increase in the liberal vote share among the working class took place already in 1865 and not only in 1868, that is, already before the 1867 reform.



**Figure 4.** Graphical representation of the DID analysis on voting for liberals.

In Figure 5, we illustrate the same findings further by plotting over time the class means of the residuals from a regression where liberal vote is predicted with only the election year fixed effects. The graphs focus on the relative differences between the class while cleaning out the overall over time variation in occurrence of the liberal. The conclusion remains the same as in the context of Figure 4. However, Figure 5 underlines that the relative change in the behaviour of different classes is particularly striking in Sandwich. In Ashford and

Guildford, the change in the latter behaviour is not particularly different from the typical variation in the time series in the earlier era.

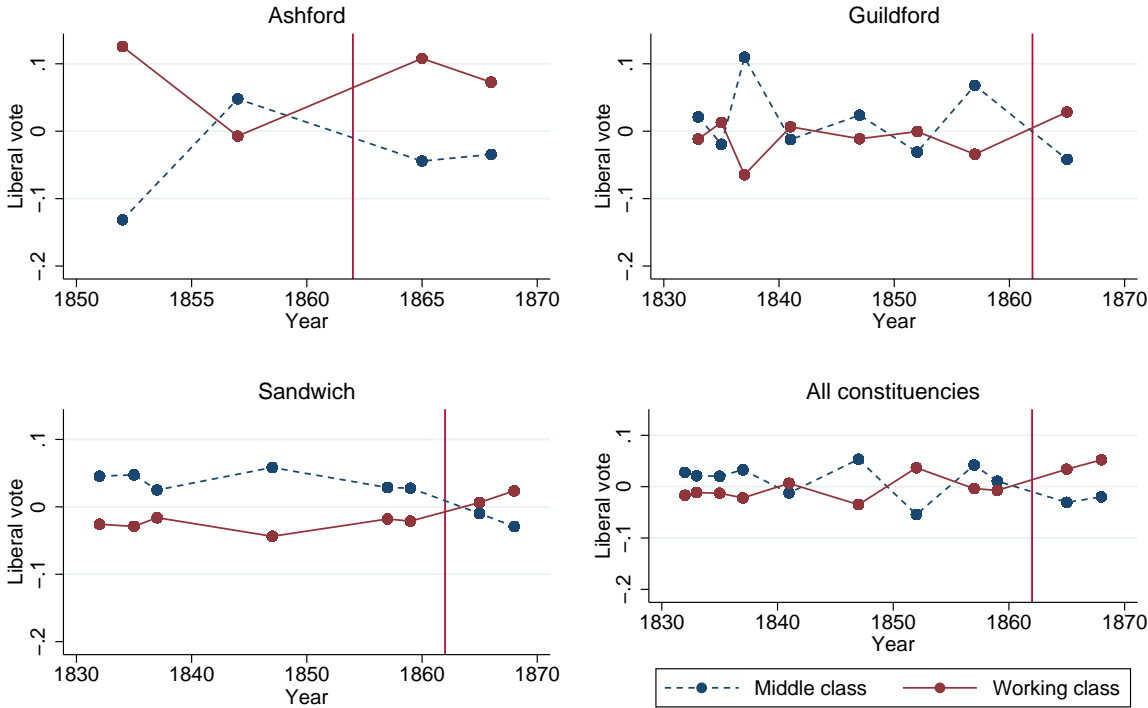


Figure 5. Graphical representation of the DID analysis on voting for liberals residuals.

#### 4 Additional sensitivity analysis

In Table 7, we formally test for the common pre-treatment trends for both the outcomes using the pooled data from all the constituencies. We achieve this by estimating model (2). In Table 7, we report only the  $\beta_{3t}$  coefficients for each  $t$ . The last two coefficients (1856 and 1868) relate to actual treatment period of interest. That actual result of interest seems to be robust to allowing a different coefficient for each year, because three out of the four coefficients are statistically significant. If the coefficients related to years prior to 1865 are statistically significant, then the pre-treatment trends are not common. One out of 16 of these coefficients is statistically significant. While this may be an indication of potential issues, it could also easily be due to multiple testing: It is very likely that one coefficient among so many is significant just due to chance.

$$(2) \quad y_{it} = \alpha + \beta_1 \text{Working class}_{it} + \sum_t \beta_{2t} \text{Year}_t + \sum_t \beta_{3t} \text{Year}_t \text{Working class}_{it} + \varepsilon_{it}$$

**Table 7.** Formal pre-treatment common trends tests

	All constituencies	
	Split vote	Liberal vote
	(1)	(2)
1[Year=1833] x Working class	0.0691 [0.0644]	0.0399 [0.0675]
1[Year=1835] x Working class	0.0143 [0.0369]	0.0231 [0.0358]
1[Year=1837] x Working class	0.0076 [0.0321]	-0.0166 [0.0402]
1[Year=1841] x Working class	0.0149 [0.0382]	0.0881 [0.0630]
1[Year=1847] x Working class	0.0230 [0.0353]	-0.0516 [0.0431]
1[Year=1852] x Working class	-0.0216 [0.0459]	0.1264** [0.0541]
1[Year=1857] x Working class	0.0266 [0.0346]	0.0194 [0.0432]
1[Year=1859] x Working class	-0.0105 [0.0326]	0.0201 [0.0485]
1[Year=1865] x Working class	-0.0220 [0.0303]	0.1169*** [0.0430]
1[Year=1868] x Working class	-0.0624** [0.0296]	0.1350*** [0.0463]
<i>N</i>	10613	10613
<i>R</i> <sup>2</sup>	0.08	0.04

Notes: Only general elections held in or after 1832 are included. Estimates are conditional on voting and do not include additional covariates. Robust standard errors clustered by voter are reported in brackets. \*, \*\* and \*\*\* denote statistical significance at 10 %, 5 % and 1 % levels, respectively.

In Table 8, we study whether the results are robust to excluding those voters from the sample who voted for the first time in 1868 elections in Ashford or Guildford. Therefore, we exclude all those voters enfranchised by the 1867 reform and some other voters who were eligible to vote before but who did not use their right to vote. The results remain the same. This implies that the results should not be attributed to the reform.

**Table 8.** Results for both the outcomes excluding first-time voters in 1868.

	All constituencies							
	Split vote				Liberal vote			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Working class	0.0604*** [0.0106]	0.0609*** [0.0102]	0.0577*** [0.0097]	0.0589*** [0.0096]	-0.0585*** [0.0159]	-0.0548*** [0.0159]	-0.0516*** [0.0157]	-0.0508*** [0.0156]
1[Year>=1865]	-0.1101*** [0.0107]	-0.1206*** [0.0169]	-0.1559*** [0.0178]	-0.1152*** [0.0174]	0.0450** [0.0198]	0.0471* [0.0285]	0.0652** [0.0289]	0.0348 [0.0297]
1[Year>=1865] x Working class	-0.0437*** [0.0147]	-0.0456*** [0.0145]	-0.0425*** [0.0147]	-0.0471*** [0.0140]	0.1015*** [0.0260]	0.1002*** [0.0259]	0.0991*** [0.0260]	0.1035*** [0.0258]
Constant	0.1763*** [0.0078]	0.1552*** [0.0146]	0.1572*** [0.0145]	0.1564*** [0.0145]	0.4692*** [0.0128]	0.5213*** [0.0196]	0.5193*** [0.0196]	0.5189*** [0.0195]
<i>N</i>	10364	10364	10364	10364	10364	10364	10364	10364
<i>R</i> <sup>2</sup>	0.03	0.07	0.12	0.15	0.01	0.03	0.05	0.07
Election FE	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Constituency FE	No	No	Yes	Yes	No	No	Yes	Yes
Election-Constituency FE	No	No	No	Yes	No	No	No	Yes

Notes: Only general elections are included. Voters who vote for the first time after the Reform Act of 1867 are omitted. Estimates are conditional on voting. Robust standard errors clustered by voter are reported in brackets. \*, \*\* and \*\*\* denote statistical significance at 10 %, 5 % and 1 % levels, respectively.

In Tables 9-11, we report the available candidates for each election. For Ashford we report the results from the entire constituency of Kent Eastern, of which, Ashford is part of. In all the constituencies there are either three or four candidates in every election. There is no striking difference between the pre- and post-treatment years, and thus, changes in available candidates are unlikely to explain our findings.

**Table 9.** Available candidates in Ashford for each election.

Kent, Eastern (Ashford)				
Election	Electors	Candidate	Party	Votes
1852	7119	Sir E. C. Dering, Bt.	L	3063
		W. Deedes	C	2879
		Sir B. W. Bridges, Bt.	C	2356
1857	8000	Sir B. W. Bridges, Bt.	C	2379
		Sir E. C. Dering, Bt.	L	2358
		W. Deedes	C	2216
		E. A. Acheson	L	127
1865	8250	Sir B. W. Bridges, Bt.	C	3208
		Sir E. C. Dering, Bt.	L	3195
		Sir N. J. Knatchbull, Bt.	C	2919
1868	13107	E. L. Pemberton	C	5231
		Hon. G. W. Milles	C	5104
		H. J. Tufton	L	4685
		Sir J. Croft, Bt.	L	4579

Notes: C = conservative, L = liberal, Hon. = honourable, Bt. = baronet. Source: Craig (1977).



**Table 10.** Available candidates in Guildford for each election.

Guildford				
Election	Electors	Candidate	Party	Votes
1832	342	J. Mangles	L	299
		C. B. Wall	C	180
		Hon. C. F. Norton	L	138
1835	537	J. Mangles	L	299
		C. B. Wall	C	214
		H. A. C. Austen	L	131
1837	425	C. B. Wall	C	252
		Hon. J. Y. Scarlett	C	188
		J. Mangles	L	159
1841	486	R. D. Mangles	L	242
		C. B. Wall	L	221
		Hon. J. Y. Scarlett	C	177
		H. Currie	C	161
1847	585	H. Currie	C	336
		R. D. Mangles	L	242
		T. L. Thurlow	C	184
1852	648	R. D. Mangles	L	370
		J. Bell	L	251
		T. L. Thurlow	C	184
1857	666	R. D. Mangles	L	349
		W. Bovill	C	338
		J. Bell	L	167
1865	667	G. J. H. M. E. Onslow	L	333
		W. Bovill	C	318
		W. W. Pocock	L	228

Notes: C = conservative, L = liberal, Hon. = honourable. Source: Craig (1977).

**Table 11.** Available candidates in Sandwich for each election.

Sandwich				
Election	Electors	Candidate	Party	Votes
1832	916	J. Marryat	L	495
		Sir. E. T. Troubridge, B.t.	L	485
		S. G. Price	C	361
		Sir. E. W. C. R. Owen	C	265
1835	934	S. G. Price	C	551
		Sir E. T. Troubridge, Bt.	L	405
		Sir E. W. C. R. Owen	C	389
1837	911	Sir E. T. Troubridge, Bt.	L	416
		Sir J. R. Carnac, Bt.	L	401
		S. G. Price	C	370
		Sir B. W. Bridges, Bt.	C	330
1847	943	Lord Clarence Paget	L	459
		C. W. Grenfell	L	437
		Lord Charles Clinton	C	392
1857	1008	E. H. K Hugessen	L	547
		Lord Clarence Paget	L	503
		J. McGregor	C	322
		J. Lang	L	24
1859	1030	E. H. K Hugessen	L	497
		Lord Clarence Paget	L	458
		Sir J. Fergusson, Bt.	C	404
		W. D. Lewis	C	328
1865	1054	E. H. K Hugessen	L	494
		Lord Clarence Paget	L	477
		C. Capper	C	413
1868	1906	E. H. K Hugessen	L	933
		H. A. Brassey	L	923
		H. Worms	C	710

Notes: C = conservative, L = liberal, Bt. = baronet. Source: Craig (1977).

In Table 12, we regress the change in individual voters vote decision (liberal, split or conservative in specification (1)-(4), only liberal or conservative in specifications (5)-(8)) relative to the previous elections on change in the individual voters class status relative to the previous elections. We find that a change in vote status is strongly correlated with a change in class status. This result is informative for two reasons. First, it suggests that we are measuring something meaningful with our class status variable, because it has predictive power beyond individual voter fixed effect. Second, it suggests that voter preferences are

not stable but may rather relate to the current occupational or economic situation of the voter.

**Table 12.** The association between changing the vote decision and changing class.

All constituencies, vote-splitters included				
	(1)	(2)	(3)	(4)
Change in class	0.0873*** [0.0095]	0.0816*** [0.0092]	0.0813*** [0.0092]	0.0793*** [0.0092]
Constant	0.1545*** [0.0069]	0.2012*** [0.0137]	0.1900*** [0.0146]	0.2590*** [0.0166]
<i>N</i>	9363	9363	9363	9363
<i>R</i> <sup>2</sup>	0.01	0.04	0.04	0.05
All constituencies, vote-splitters excluded				
	(5)	(6)	(7)	(8)
Change in class	0.0628*** [0.0081]	0.0583*** [0.0079]	0.0574*** [0.0078]	0.0552*** [0.0078]
Constant	0.0991*** [0.0056]	0.1761*** [0.0139]	0.1708*** [0.0144]	0.2094*** [0.0164]
<i>N</i>	8088	8088	8088	8088
<i>R</i> <sup>2</sup>	0.01	0.03	0.03	0.05
Election FE	No	Yes	Yes	Yes
Parish/Constituency FE	No	No	Yes	Yes
Election-Constituency FE	No	No	No	Yes

Notes: Only general elections are included. Outcome is a dummy for change in vote from previous election. Estimates are conditional on voting. Robust standard errors clustered by voter are reported in brackets. \*, \*\* and \*\*\* denote statistical significance at 10 %, 5 % and 1 % levels, respectively.

## 5 Conclusions

Using new micro data from elections in Victorian England provides a unique insight into actual voting behaviour. Analysis of that data corroborates the key finding in Cox's seminal work, namely that the development of a party oriented electorate in England arose prior to the key institutional reforms of the late Victorian era. Specifically, the decline in split level voting, a key characteristic of a candidate centred electorate, was already declining rapidly prior to the introduction of the Second Reform Act.

Using the micro-level data allows us to go further in exploring the patterns of voting behaviour underpinning this development. We find that the development of a party centred electorate in Victorian England owes much to a change in behaviour amongst the English working classes. Furthermore we show that party orientation takes a specific and familiar form: An alignment of working class voters with the then left party, the Liberals. This

alignment has been shown previously only with survey data from the post war period. To our knowledge this is the first such study that shows a corresponding relationship using actual voting returns. While it is certainly plausible, indeed likely, that the class basis of left voting was established by the turn of the twentieth century when the British Labour Party came into existence, our analysis reveals that this alignment was already in place much earlier.

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