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#### Abstract

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und Arbeitsbeziehungen in der Europäischen Union

# IAAEU Discussion Paper Series in Economics No. 12/2013 

# It's the occupation, stupid! Explaining candidates' success in low-information elections 

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## September 2013

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# It's the occupation, stupid! Explaining candidates' success in low-information elections 

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September 3, 2013


#### Abstract

Do voters use ballot paper information on the personal characteristics of political candidates as cues in low-information elections? Using a unique dataset containing 4423 political candidates from recent elections in Germany, we show that candidates' occupations do play an important role in their electoral success. The occupational impact is far greater than gender or doctoral degree effects for a large number of occupations. We discuss three possible explanations for these "occupational effects": (a) an occupation's public reputation, (b) the extent to which individuals carrying out certain occupations are known within their communities, and (c) occupation specific competence related to issues relevant for local politics. Looking at polls on the reputation/prestige of certain jobs, we find a strong correlation between an occupation's reputation and the electoral success of a candidate carrying out this occupation. Therefore, voters appear to use occupational reputation as a cue in low-information elections.


Keywords: political economy; low-information elections; informational shortcuts; occupational reputation

JEL: D72, D7

[^1]
## 1 Introduction

Previous research has shown that voters tend to look for information shortcuts when forming their electoral decisions (Bartels, 1996; Conover and Feldman, 1982, 1989; Goodman and Murray, 2007; Riker and Ordeshook, 1968; Stokes and Miller, 1963). Scholars have often argued that information on a candidate's characteristics serves as a shortcut of this kind especially in low-information elections ${ }^{1}$ (see, e.g., McDermott, 2005). In such elections, any information on a candidate's characteristics might help voters as cues. ${ }^{2}$ The aim of this paper is to answer the question of whether candidates' occupations serve as an information shortcut and, if yes, how different occupations influence candidates' electoral success.

More specifically, we use the fact that voters are provided with detailed information about candidates' occupations on the ballot paper in local elections in the German state of Baden-Württemberg. This allows us to improve the literature in several dimensions. First, we use real election results to analyze the influence of cues on the candidates' performance. This stands in contrast to a great number of existing papers on information shortcuts which use opinion polls or experimental data. Using a detailed dataset containing information on 4423 political candidates in local elections ("Gemeinderatswahlen") in Baden-Württemberg, Germany's third largest state, for the year 2009, we are able to analyze information effects in real elections. Second, all other papers dealing with occupational effects either look at very specific elections (e.g. judicial offices in the US), or take into account only a very restricted number of occupations. However, we include more than 50 different occupations/occupational groups in the analysis in order to obtain a more detailed picture of occupational effects. Third, we do not only show that occupations can have an effect on the outcomes of low-information elections, but also provide three explanations for the existence of these "occupational effects". Fourth, this paper is to our knowledge the first to consider the effects of information shortcuts in local elections in Germany and the first to analyze in detail the specific effects of occupational information in European elections. However, there are a number of countries with similar electoral systems including candidate lists (and often also information on candidates' occupations) - such as Belgium, Cyprus, Czech Republic,

[^2]Estonia, Finland, France, Great Britain, Norway, Sweden, Switzerland, and others. Additionally, several local offices in the US are allocated via elections. Our inferences regarding occupational effects might therefore also be relevant for various other countries and elections.

The regression results show that candidates' occupations play an important role. It emerges that bakers/butchers, farmers, and policemen have the strongest advantage. In contrast, occupational disadvantages are strongest for salespeople, employees in the financial/insurance sector, management consultants, and secretaries. While women and candidates holding a doctoral degree are more successful, candidates with foreign names turn out to be less successful in the elections. For a large number of occupations, the occupational impact is far greater than gender, doctoral degree, and foreign name effects. We control for the effect of some occupations potentially having qualification advantages regarding issues particularly important for local politics. By additionally taking into account the fact that individuals carrying out a specific occupation might be better known to the public (such as physicians and craftsmen with their own surgery/craft enterprise), we isolate the "basic effect" of an occupation on the electoral outcome from this "renown effect", i.e. the effect of a candidate enjoying a certain degree of renown within a community due to her occupation. There is a striking positive correlation between an occupation's "basic effect" and its prestige/public reputation according to surveys in Germany and the US. We thus interpret the "basic effect" as a reputation/prestige effect.

The paper is organized as follows. We discuss the related literature in section 2. Section 3 then provides the empirical analysis using data from the German state of BadenWürttemberg. Basic information on the 2009 local elections in Baden-Württemberg is provided in 3.1; section 3.2 gives a detailed overview of our data; and section 3.3 outlines our empirical approach. Results are described in section 3.4. We conduct several robustness checks in section 3.5 and provide explanations for our findings with respect to occupation effects in section 3.6 , before section 4 finally concludes.

## 2 Related Literature

How do voters respond to electoral candidates' characteristics and political messages? On the one hand, this question has been investigated by scholars focusing on "objective" information such as gender, a candidate's name, ethnicity, and occupation. Some papers, on the other hand, have focused on aspects such as a candidate's political messages and also a can-
didate's beauty in order to explain her electoral success. Both strands of the literature find that candidates' characteristics affect election results. Whereas the first focuses on information which can be found on the ballot papers, this is (usually) not the case as regards the information examined in the latter. Druckman (2004), Druckman and Holmes (2004), and Chong and Druckman (2010) focus on political messages. Druckman and Holmes (2004) find evidence for priming effects, indicating that incumbents are able to influence their own approval ratings using different rhetorical devices. Interestingly, Chong and Druckman (2010) find that when receiving competing messages about political issues over time, the most recent messages count more than previous ones, indicating that individuals give greater weight to the latest messages. Given the aim of our paper, this finding is particularly important as it should emphasize the importance of information provided directly on the ballot paper.

Rosenberg et al. (1986), Antonakis and Dalgas (2009), Berggren et al. (2010a, 2010b), and Rosar et al. (2007) use ratings of candidates' beauty as predictor of electoral outcomes. By showing candidates' pictures to survey participants (both children and adults) and asking them to rate candidates according to their beauty, trustworthiness, intelligence, and competence, they develop a measure for these items. Regression results show that predicting electoral outcomes using this information on candidates' faces does work: the better the beauty rating, the better a candidate's electoral prospects. The work of Rosar et al. (2007) uses data from the state elections in the German state of North Rhine-Westphalia. It is the first article to analyze the effects of candidate attractiveness on electoral success in Germany. Their results show that, the lower the average level of attractiveness of the candidates in the respective constituency, the higher the positive beauty effect. However, due to differences between the electoral systems of North Rhine-Westphalian state elections and local elections in Baden-Wuerttemberg, the number of candidates per constituency is far smaller in the former. Most importantly, election posters showing photographs of the candidates are often used in state elections (with one candidate per party in each constituency), but are not that common in local elections where the number of candidates per party is much higher. Our paper therefore does not analyze beauty effects (which stem from information not presented on the ballot paper, such as election posters), but focuses on additional information that is provided directly on the ballot paper.

The smaller the amount of information about political candidates available to voters, the more important information shortcuts provided on the ballot paper might be. Buckley et al. (2007) base their analysis on a feature of local elections in the Republic of Ireland:
since 1999, photographs of the candidates have been placed on the ballot papers. Using experimental results, they find that candidates' looks are a good predictor of the election outcome under such circumstances. Similar results are obtained by Banducci (2008) who use data from elections for community partnership boards in Britain and find that more attractive candidates are more successful in the elections.

As there are few elections with ballot paper photographs, other researchers focus on different cues. Candidates' party affiliations are found to have an influence according to Klein and Baum (2001). The effects of candidates' gender and race are examined by McDermott (1998) using quasi-experimental data from the Los Angeles Times Poll. Her results show that voters who characterize themselves as more conservative (liberal) are more likely to vote for male (female) candidates, which can, according to McDermott's explanation, be explained on the basis of gender stereotypes. Her results also indicate that the probability of voting for a black candidate is higher for voters who perceive themselves as being more liberal. Using data from the 1986 to 1994 American National Election Studies, McDermott (1997) finds that female Democratic candidates perform better than male Democratic candidates among more liberal voters and worse among conservative voters. However, Fox and Oxley (2003) do not find clear-cut gender stereotype effects. Analyzing data from state executive office elections in the US, they conclude that the likelihood of winning as a woman does not vary substantially across office types. Hence, their results indicate that women are not perceived to be more qualified for specific offices per se. Focusing on gender and academic or honorary titles, Kelley and McAllister (1984) find that females are at a disadvantage in elections in Britain and Australia. Holding an honorary title turns out to be an advantage in Britain, while holding an academic title does not.

The question of how information on candidates' occupations affects electoral results has been investigated in a small number of papers for different types of elections. Mueller (1970) analyzes the effects of candidate information on the ballot paper, using data for the 1969 election to the Junior College Board of Trustees in the Los Angeles area. In this election, 133 candidates ran for 7 seats and each voter had 7 votes. The results show that the candidates' ballot position and ethnic identification had a strong impact on the number of votes received. To explore occupational effects, which are only pronounced weakly, Mueller uses three dummy variables and differentiates between education-related occupations, attorneys/lawyers, and candidates who had no occupation listed. The results show that candidates with an education-related job gained more votes, whereas candidates classi-
fied as an attorney/lawyer or providing no occupational information gained fewer. However, these effects remain rather small in comparison to the ballot position and ethnic identification effects. Byrne and Pueschel (1974) test for occupational effects in Democrat and Republican county central committee elections in California between 1948 and 1970. They find professors, engineers, and lawyers to be rather successful, whereas real estate brokers, salespeople, and housewives perform worse than one would expect if the votes were randomly distributed. As in Mueller's study, the ethnicity of the surname plays an important role in a candidate's performance: candidates with a Scandinavian name have an advantage; candidates with Jewish, East European, and Italian names are at a disadvantage. Dubois (1984) focuses on judicial elections in California and finds that candidates with a "judicial" occupation label have a higher probability of being elected. McDermott (2005) shows that voters are more likely to support candidates who have a qualification advantage. She uses data from the Los Angeles Times Poll prior to the 1994 statewide office elections in California (Lieutenant Governor, Attorney General, Controller, Treasurer, Secretary of State, Insurance Commissioner). Half of the participants were given a list with only the candidates' names and party affiliations, while the other half were additionally given the candidates' official occupational ballot designations. McDermott finds that candidates with a qualification advantage performed significantly better in the sample of voters who had information about candidates' occupations. Although Berggren et al. (2010a) focus on the effects of candidates' looks on their electoral success, they also control for occupational effects and include 13 occupation dummies in their regressions. Their coefficients mainly remain insignificant, with some exceptions.

## 3 Empirical Analysis

### 3.12009 Local Elections in Baden-Württemberg

We use the 2009 local elections in Baden-Württemberg, Germany's third largest state, to test whether and, if so, how candidates' characteristics influence election outcomes. Elections were held on 7 June 2009 and voters had to decide on the composition of local councils ("Gemeinderat"). The electoral law in Baden-Württemberg allows the voters not only to choose between parties in local elections, but also between candidates on the parties' lists. A party can list, at maximum, as many candidates as there are seats in the respective
council, and each voter has as many votes as there are seats in the council. A voter can cumulate votes for specific candidates on a party's list - with a maximum of three votes per candidate ("kumulieren"). Additionally, it is possible to divide one's votes between candidates from different party lists - once again with a maximum of three votes per candidate ("panaschieren"). Hence, although the parties set up their party lists prior to the elections, voters can influence the outcome not only in terms of the number of a party's seats, but also with respect to the final order of candidates entering the council. ${ }^{3}$ In Baden-Württemberg, the ballot paper in local elections contains information on each candidate's forename and surname, occupation, academic title, and address. An example for the Social Democratic Party ("Sozialdemokratische Partei Deutschlands (SPD)") in the city of Ulm is provided in Figure 1 in Appendix A.

There are a number of reasons to assume that this type of election can be classified as a low-information election with voters being relatively uninformed about specific candidates (on average). First, there are a lot more candidates than in, for example, the elections to the federal parliament (German Bundestag). In our dataset, there are on average 163.81 candidates per town running for the "Gemeinderat". As these elections are accompanied by elections of two further councils ("Ortschaftsrat" and "Kreistag"), there are in total more than 300 candidates, in comparison to less than ten candidates per election district in a federal parliament election. Hence, it is far less likely that a voter will have detailed information about a particular candidate in a local election than in a federal election. Second, local parliaments have only a relatively small budget responsibility, as in Germany they are not allowed to make decisions regarding such matters as tax rates. ${ }^{4}$ This means that financial consequences for the individual voter are small, c.p. lowering the incentives to gather information. Third, it is far easier to ascribe the consequences of a specific policy measure to a federal chancellor or minister than to a member of a local parliament, as media coverage is far greater. Although local newspapers feature candidates and some candidates also write in local newspapers, this only holds for some of the top candidates. Given the large number of candidates per party, there are, contrary to federal elections, hardly any local posters announcing specific candidates. In comparison to a national candidate, there are thus good reasons to assume that the average candidate in a local election is less wellknown. Fourth, voter turnout is relatively small in local elections in Germany, indicating that

[^3]voters are (on average) not particularly interested in local politics. Voter turnout in BadenWürttemberg was $72.4 \%$ in the 2009 election of the German Bundestag, but only $50 \%$ in the 2009 local elections. Fifth, in order to test whether voters systematically gather information on political candidates, we used Google Insights (http://www.google.com/insights/search/) and requested the number of Google queries for the three front runners on each list in the three months before the elections. It turns out that there are hardly any significant numbers of search queries which strongly supports our low-information election argument.

### 3.2 Data

As argued in section 2, information about candidates' characteristics may serve as a cue to help voters in making their decision in low-information electoral situations. We therefore consider only towns with at least 40, 000 inhabitants in our analysis. In small towns with, for instance, 5,000 inhabitants, it is far more likely that voters will know some of the candidates. Data are provided from the towns' electoral offices, and in total we have the ballot papers and electoral results for 27 towns. ${ }^{5}$ From the whole list of towns with at least 40, 000 inhabitants, we do not include Aalen, Böblingen, Heidenheim a.d.B., Nürtingen, Rastatt, Ravensburg, Schwäbisch Gmünd, Sindelfingen, Singen, and Weinheim as they all have an electoral system which differs from the one described above with regard to important details. ${ }^{6}$

We consider only the five parties which are represented in the German Bundestag, because their party lists contain the greatest number of candidates, giving us the best opportunity to exploit the specific electoral law. These parties are the Christian Democratic Union (CDU), the Social Democratic Party of Germany (SPD), the Free Democratic Party (FDP), the Green Party (Grüne), and the Left Party (Linke). ${ }^{7}$ In total, we have information on 120 party lists with 4570 candidates. We know each candidate's party affiliation, name,

[^4]occupation, gender, position on the original party list, final position on the party list after the election, number of votes, and whether the candidate claims to hold an academic degree.

The composition of a party's list of candidates is typically the result of an internal selection process which takes place several months before the election date. There are no formal rules regarding party list composition. In most cases, internal committees and/or party executives prepare a list which is then decided on by the party members. This is not a public process and hence there is no public information on the process itself. ${ }^{8}$ However, we observe four party lists on which all candidates are given in alphabetical order. As established candidates can usually be found in the first positions on a list, we drop these four lists in order to ensure homogeneity in the dataset. ${ }^{9}$ We therefore lose 147 observations, and are left with 4423 observations in our dataset.

As we have a large number of different occupations, we need to classify them into groups in order to guarantee a sufficient number of observations per occupation. One way of doing this would be to use the ILO's International Standard Classification of Occupations (ISCO-88, ISCO-08). However, using this classification scheme has disadvantages, as some classifications seem somewhat problematic given our dataset. For instance, lawyers and judges are classified within the same category - although both occupations may be perceived as very different in public opinion. Therefore, we do not use a standard classification. Instead, we take an approach similar to that of Byrne and Pueschel (1974) and take those occupations as "groups" which are represented most often. Occupations which resemble those of particular groups are assigned accordingly. We are finally left with 51 occupations/occupational groups. The classifications of occupations, the number of observations in each group, and descriptive statistics can be found in Table 1 in Appendix B.

The classification of candidates with respect to gender, holding a doctoral degree, and having a double name is straightforward. Descriptive statistics for these characteristics for the five parties are shown in Table 2. We classify candidates' names as foreign names for (1) the combination of a not typically German forename and a German surname and (2) the combination of both a forename and surname that are not typically German. ${ }^{10}$ Descriptive

[^5]statistics are provided in Table 2 in Appendix B.

### 3.3 Empirical Model

Besides the number of seats a party receives in the respective council, it is important to consider whether different occupations lead to improvements or deteriorations in candidates' positions on the party list, as this determines the composition of the party's parliamentary group. In order to investigate how occupational information affects candidates' performance, we use the number of list positions candidate $i$ won/lost in comparison to her position on the initial party list as the dependent variable: $\Delta$ party list position ${ }_{i}=$ initial party list $^{\text {pit }}$ position $_{i}$ - position on party list after the election. Occupational effects are captured using a set of occupation-specific dummy variables as regressors. Our dependent variable is a good measure of a candidate's electoral success in comparison to the other candidates on her party's list and can be easily interpreted.

Given our measure of candidates' electoral success, it is important to rule out that candidates carrying out a certain occupation could be in systematically better/worse positions on the initial party lists and could, therefore, be restricted in terms of their chances of winning/losing positions. The descriptive statistics (see Table 1) show that the occupations' average positions on the initial party lists vary between 10 (career politician) and 27 (secretary). For $88 \%$ of the occupations, the average positions on the initial party lists are in the interval $[17 ; 23]$. Given the average list length of 38.13 candidates and the standard deviation of candidates' gains and losses of 8.68 , one cannot say that candidates carrying out a certain occupation are systematically restricted in winning/losing positions. Furthermore, there is no correlation between the occupation dummies and the candidates' positions on the initial lists. The largest correlation coefficient in absolute terms is for career politicians, showing a value of -0.077 . The overwhelming majority of correlation coefficients is smaller than 0.02 in absolute values. From the whole set of candidates, 232 occupied the first/last position of their party's list - and were, therefore, restricted in a way that it was not possible to win/lose positions. The average shares of "restricted" candidates per occupation turn out to be $2.8 \%$ (first position) and $2.7 \%$ (last position). Hence, there is no "hard restriction"

[^6]in the sense that it is impossible to win/lose positions for the overwhelming majority of candidates. Table 3 in Appendix B shows each occupation's share of restricted candidates occupying first/last positions on the list. The correlation coefficient between an occupation's share of candidates listed in the first (last) position and the average amount by which that occupation changes position is 0.02 (0.10), and both correlation coefficients turn out to be statistically insignificant. Looking at the election result, only those candidates occupying the first and last positions of their party's list might be bounded by this restriction. To test whether this is the case and whether this influences our results, we additionally estimate our empirical model again dropping all candidates who were in the first and last positions on their party's list after the elections. It emerges out that the exclusion of these candidates does not change the results (see section 3.5). We therefore conclude that there is no problem with systematic differences between the different occupations in terms of restrictions with respect to winning/losing positions.

Our econometric model reads as follows:

$$
\begin{align*}
& \Delta \text { party list position }= \\
& \alpha_{0}+\sum_{j} \beta_{j} \text { occupation }_{i j}+\alpha_{1} \text { female }_{i} \\
&+\alpha_{2} \text { doctoral degree }_{i}+\alpha_{3} \text { female }_{i} * \text { doctoral degree }_{i} \\
&+\alpha_{4} \text { double name }_{i}+\alpha_{5} \text { female }_{i} * \text { double name }_{i} \\
&+\alpha_{6} \text { foreign name } \\
& i \tag{1}
\end{align*} \alpha_{7} \text { female }_{i} * \text { foreign name }_{i} .
$$

with candidate $i, i=1, \ldots, 4423$, occupation $j, j=1, \ldots, 51$, and party list $k=1, \ldots, 116$. occupation $_{i j}$ are dummy variables indicating the allocation of candidate $i$ to occupation $j$. Each of the 51 occupations is represented by one dummy variable taking the value of 1 whenever the ballot paper revealed the respective candidate carrying out this occupation, and 0 otherwise. The reference category is candidates without any occupational declaration on the ballot paper. ${ }^{11} \lambda_{k}$ represent party list dummy variables.

[^7]As discussed in section 2, previous research has pointed out the importance of information shortcuts such as gender, having a doctoral degree and whether a candidate has a foreign name. The dummy variable doctoral degree ${ }_{i}$ takes the value of 1 whenever candidate $i$ holds a doctoral degree, and 0 otherwise. female ${ }_{i}$ is a dummy variable representing candidate $i$ 's gender. As holding a doctoral degree might have different effects depending on a candidate's gender, we additionally interact both dummy variables. In Germany, married couples can decide whether to take the wife's surname, the husband's surname, or a combination of both surnames, resulting in a "double name". To check whether having a double name affects the election outcome, we add a dummy variable double name $i_{i}$ which takes the value of 1 in the case of a candidate having a double name, and 0 otherwise. We additionally interact the gender dummy variable with the double name dummy variable. Furthermore, like Byrne and Pueschel (1974), we also test for effects of a candidate's name's length, taking the sum of the number of letters in the candidate's forename and surname. In order to account for foreign name effects, we include a dummy variable (foreign name ${ }_{i}$ ), which takes the value of 1 whenever a candidate's name matches the criteria defined in section 3.2 , and 0 otherwise. We additionally include the interaction terms between foreign name ${ }_{i}$ and female $e_{i}$ and letters (full name) $_{i}$ and female ${ }_{i} .^{\text {. }}$

In addition, we control for a candidate's initial position on her party's list, because this will obviously have an impact on the candidate's ability to win/lose positions. The number of seats in the councils is not the same in all towns (most of the Gemeinderäte have 40 members, with some exceptions) and some parties do not exploit the maximal number of candidates on their list. As the length of a list certainly has an impact on our dependent variable, we also control for this factor using the variable list length ${ }_{k}$.

In contrast to other contributions (Goodman and Murray, 2007), we do not control for incumbency effects. There are two main reasons for this. First and most strikingly, there is no information about incumbency provided on the ballot paper in local elections in BadenWürttemberg. Second, there are on average 39.15 members in the local parliament, which makes it unlikely that voters will know many incumbents' names. It may be the case that voters do know some of the incumbents, as some of them might be more visible in the election campaign, for example the prime candidate who is likely to be incumbent. However, in order to test for incumbency effects, we ran ten additional regressions dropping the candidates in the first $x, x=1, \ldots, 10$ positions as robustness checks. Our inferences with respect to occupation effects remain unchanged.

Most papers investigating electoral cues look at races between two candidates and apply probit or logit estimators, which is obviously not appropriate here. The papers which are concerned with candidate lists use different measures for electoral outcomes as dependent variables. Mueller (1970) takes the number of votes a candidate receives, whereas Byrne and Pueschel (1974) and Kelley and McAllister (1984) use the candidates' vote share. Berggren et al. (2010a, 2010b) develop a measure for a candidate's success relative to the electoral success of the average candidate on her party's list. We could, of course, also use the number of votes each candidate receives as an alternative to our dependent variable (as done by Mueller, 1970). However, this measure does not give us the full story on candidates' success with respect to winning or losing party list positions (which is decisive for whether a candidate enters the council or not). Additionally, the interpretation of these results would be less clear because some parties gain significantly more votes than others, and towns differ in size (and, thus, the number of voters). Although these effects could be captured in the econometric model, the outcome "a candidate carrying out occupation $x$ wins on average two positions" is more meaningful than "a candidate carrying out occupation $x$ receives on average 250 more votes". For similar reasons, we do not use a candidate's vote share or her relative success in comparison to other candidates in the same party as the dependent variable, as done by Byrne and Pueschel (1974), Kelley and McAllister (1984), and Berggren et al. (2010a, 2010b). However, we use all these different measures of candidates' electoral success for robustness checks. Our results with respect to occupational effects turn out to be independent from the choice of the dependent variable. We therefore feel justified in choosing the position on the party list after the election as the dependent variable.

### 3.4 Results

We estimate our econometric model (1) using OLS with heteroskedasticity-robust standard errors clustered at the list level to account for list-specific correlation in the error terms (see, for example, Cameron and Trivedi, 2005, p. 834), as is common in the literature using data of this structure (see, for example, Berggren et al., 2010a, 2010b). The results can be found in Table 4 (column 1).

Table 4 about here

It emerges that 33 of the 51 occupation dummy variables have significant coefficients. The value of an occupation dummy variable's coefficient in Table 4 can be interpreted as the improvement/deterioration in terms of list positions. For example, the first coefficient tells us that architects gain, all other things being equal, 3 party list positions.

From the set of occupations that lead to a statistically significant deterioration in terms of positions on the party list, salespeople ( -7 positions), individuals in the financial/insurance sector $(-5)$, management consultants $(-5)$, and secretaries $(-5)$ are found to perform worst. Statistically significant positive effects can be found for 26 occupations, with the most pronounced effects for bakers/butchers ( +11 positions), farmers $(+10)$, and policemen $(+9)$. We additionally find large and statistically significant positive effects for several other occupations.

The occupational effects are not homogeneous in terms of characteristics such as educational levels. For instance, we hardly find any differences in the positive occupation effects between nurses and physicians. Furthermore, policemen perform better than, say, professors. This indicates that the effects of occupations on candidates' electoral success really are occupation-specific effects and are not driven by skill levels. Voters even tend to differentiate between occupations which might cursorily be perceived as rather similar: whereas management consultants on average lose 5 positions, there is no statistically significant effect for the two groups "entrepreneurs" and "directors/general managers".

Our results contrast with the findings of Byrne and Pueschel (1974) with respect to gender effects. We find that female candidates have an advantage and are able to win approximately 3 positions. The coefficient of the doctoral degree dummy variable is also positive and highly significant: holding a doctoral degree improves a candidate's performance by 4 positions. We do not find any statistically significant differences between male and female candidates with respect to the impact of the doctoral degree effect. Our results show the expected positive effect of a candidate's position on the original party list on the dependent variable. The worse a candidate's position on the original list, the better her chances to win positions. There is no significant effect of the length of a candidate's name on that candidate's performance, and the same holds for double names, regardless of whether the candidate is female or male. ${ }^{12}$ However, we find that having a foreign name has a statistically significant negative effect. Its numerical impact is slightly smaller than the gender effect.

[^8]Thus there are a number of occupational effects on candidates' electoral performance which we can identify using our set of occupational dummies. The particularly useful feature of our analysis is that we only look at within-list variation. Due to the structure of our data, we can thus interpret our results as the causal effects of candidates' occupations on their electoral success, given the initial party list position. We can therefore conclude that candidates' occupations do indeed serve as cues for the voters in local elections in Baden-Württemberg. Carrying out the "right" job might have an important influence on a candidate's electoral success and on the question of whether that candidate is able to receive a seat in the council. The occupational impact is far greater than gender or the doctoral degree effects for a large number of occupations.

Our results suggest then, in a nutshell, that the ideal candidate is female, holds a doctoral degree, does not have a name of foreign origin and works as a baker or butcher. Being male, holding no doctoral degree, having a foreign name and working as a salesperson does not, in contrast, seem to be too helpful with respect to one's chances in an election.

### 3.5 Robustness Checks

As discussed above, one could argue that incumbents have a better position on the party lists, that voters might know some top candidates from campaign advertising, and that candidates at the top of the party lists might have an advantage due to the electoral law ${ }^{13}$. We therefore ran the regressions again, dropping candidates in party list position 1, positions $1-2, \ldots$ until $1-10$. The results of the estimation without candidates in positions $1-5$ are depicted in column 1 of Table 5 (Appendix E). ${ }^{14}$ Our inferences remain highly robust.

To capture the potential problem of candidates being restricted in winning or losing positions, which we discussed in section 3.3, we dropped all candidates in the first and last positions on their party's list after the election. The regression results remain unchanged with respect to the signs and significance levels of occupational dummies and other explanatory variables (column 2 of Table 5).

As a further check for the robustness of our results, we ran our regressions again, using the dependent variables proposed by other authors. As described in section 3.3, the inter-

[^9]pretation of our dependent variable is straightforward and leads to clearer conclusions with respect to electoral success than those measures used in other papers. However, we apply measures of the candidates' success used in other articles to test whether our results depend on the choice of the dependent variable. We start with the number of votes each candidate received, used by Mueller (1970). In our dataset, the candidates in the first positions on a party list after the election often receive a disproportionately greater number of votes than the next candidates, which is a result of the specific electoral law (see Appendix A). We therefore did not use the total number of votes per candidate as the dependent variable, but their log. The results are reported in column 2 of Table 6 in Appendix E. As can be seen from this table, the results are virtually the same as in our basic model. ${ }^{15}$ As a further robustness check, we ran the regressions using the absolute number of votes per candidate as the dependent variable, dropping the first five candidates on the party lists after the election. The results remain highly robust with respect to occupation effects. ${ }^{16}$ We additionally used a candidate's vote share (the absolute number of votes the candidate received divided by the total number of votes for all candidates on the party list) and the log of the vote share as the dependent variable, as done by Byrne and Pueschel (1974) and Kelley and McAllister (1984). As there are hardly any changes in the results, we do not present any tables for these regressions in the paper. As a further robustness check, we applied the relative success measure developed by Berggren et al. (2010a, 2010b). Once again, due to the significantly greater number of votes for the top candidates, we used the log of the relative success measure (column 3 of Table 5 in Appendix E). Applying this alternative measure of electoral success, 28 of the occupation dummies turn out to be statistically significant and 7 of the coefficients that are significant in our basic model become insignificant. However, we hardly observe any changes with respect to the relative size of the occupation dummies' coefficients. The regression results are very similar when using Berggren et al.'s relative success measure and dropping the top 5 candidates (column 1 of Table 6).

Given our discussion on how to classify a candidate's name as "foreign" (see section 3.2), we used the definition by Byrne and Pueschel (1974), focusing on a candidate's surname as a further check for the robustness of our results. Column 3 of Table 6 shows that the definition of our foreign name control variable does not influence our results.

[^10]We have already discussed the reasons for not using standard occupation classifications such as the ILO's International Standard Classification of Occupations in section 3.2. In order to test whether our results remain robust, we applied a different and more detailed classification, which resulted in 70 different occupation dummies. None of the statistically significant occupation dummies in our basic model becomes insignificant when applying the alternative classification. Additionally, we then have 9 more significant occupation effects. However, we did not choose the 70 occupations classification as a basic classification because the number of individuals carrying out an occupation is rather low for some of the 70 . As can be seen from Table 1, the number of observations is relatively small for some occupations. When aggregating occupational groups, there is a clear trade-off between having a larger number of different (disaggregated) occupations and a larger number of observations for each occupation. In the basic econometric analysis, we classified the occupations such that there was no occupation with less than 20 observations. As a test for the robustness of our findings, we dropped all occupations with less than 40 observations because these occupations are of course more prone to outliers. The respective candidates were re-classified accordingly. Re-estimating the econometric model based on the remaining 34 occupational groups shows a pattern very similar to the main model.

The next robustness check tests whether occupational effects differ between leftwing and rightwing party camps. We therefore estimated the model for leftwing (SPD, Grüne, Linke) and rightwing (CDU, FDP) parties separately. For a large number of occupations, the results are very similar to those presented above. In particular, this holds for occupations with a high public reputation. However, there are also some differences between the two party camps, and we especially find them for occupations which are not on the top of the public reputation rankings. Given the scope of the present paper (identifying the overall importance of occupations for candidates' electoral success), we do not present the regression results in detail here. Furthermore, we ran split sample estimations for women and men. This sample split of course reduces the number of observations for each of the occupational categories, ending up with, e.g., a small number of female computer scientists and pastors in the dataset. Overall, the occupational effects remain stable.

As stated in section 3.2, we exclude four lists with candidates in alphabetical order. However, to be sure that this does not influence our results, we include these lists in a further robustness check. The results remain unchanged: none of the statistically significant occupation effects changes with respect to its significance levels. The regression results for
all robustness checks not reported in detail are available upon request.
Given the series of robustness checks, we can conclude that our results are very robust to changes in the variables. We tested a number of potentially crucial points such as alternative dependent variables, the classification of occupational groups, and the foreign name control variable and the results did hardly change.

### 3.6 Explaining the occupational effects

In the following, we aim to explain our results with respect to occupational effects. We thereby focus on (a) occupational reputation, (b) candidates being well-known to the public due to their occupations, and (c) certain occupations' expertise in fields highly relevant for local politics. First, electoral success of a candidate with a certain occupation could be explained by the occupation's public reputation (reputation effect). Surveys show that the public has varying perceptions of occupations' reputations. In Germany, polling research institutes such as forsa periodically try to investigate the public reputation of (a range of) occupations. For example, they ask individuals the following question: "Here are some occupations. Please evaluate them according to your assessment of their degree of reputation." (Germany, forsa, 2009). The results show that physicians, pastors, and professors are highly respected, while politicians, trade union leaders, and agents command a much lesser degree of respect. Turning to the US, one finds very similar results; for example, using data from The Harris Poll. Participants are asked:"I am going to read off a number of different occupations. For each, would you tell me if you feel it is an occupation of very great prestige, considerable prestige, some prestige or hardly any prestige at all?" (USA, Corso, 2009). A comparison between the results for Germany and the US is provided in Figure 2. The correlation between the results turns out to be positive and significant at the $1 \%$ level with a correlation coefficient of 0.89 .

Figure 2 about here

We expect a positive correlation between an occupation's prestige according to polls and the electoral success of a candidate carrying out this occupation, as voters might try to compensate for their lack of information in low-information elections by using candidates'
occupations as cues, and vote for candidates whose occupation has a good reputation.
Our second approach to explaining an occupation's electoral success focuses on the question of whether individuals in some occupations are generally better known to the public (renown effect). In this case, electoral success of a certain occupation might not be driven by a high public reputation but by the fact that a number of voters simply know the candidates personally and therefore give them their votes. A candidate owning a bakery might, for example, be well-known in her town. Looking at the list of occupations in our dataset, such an effect might be present for bakers/butchers, caterers, craftspeople, farmers, gardeners, pharmacists, and physicians.

However, not every candidate claiming to be baker owns a bakery. We argue that the renown effect is relevant only for a baker who owns a bakery in the town where she is candidate. In order to separate the reputation effect from the renown effect, we employ web search via google.de to check whether a candidate classified as a baker owns a bakery in the respective town, a physician owns a medical practice in the town, and so on. ${ }^{17}$ Whenever we find a clear verification of, say, a baker owning a bakery, we assign the candidate to the group of candidates who are known in the public. ${ }^{18}$ For each of the $m, m=1, \ldots, 7$, occupations listed above, we have one dummy variable renown ${ }_{\text {im }}$ taking the value of 1 whenever the candidate owns a shop/farm/surgery/..., and 0 otherwise. These dummy variables enter our empirical model in order to identify whether electoral success is driven by the occupation itself or the extent to which a candidate is renowned due to her occupation.

Third, we follow the suggestion of a referee and account for certain occupations' specific skills (competence effect). Local councils, for example, decide about the towns' budgets, new building areas or business parks. Having a profound knowledge about business, economics, and law might therefore be a potential advantage in dealing with these issues. To account for a potential "competence bonus", we create the dummy variable competence ${ }_{i}$ that takes the value of 1 for business economists, economists, jurists, judges, civil servants, and career

[^11]politicians. ${ }^{19}$
Our modified empirical model takes the following form:
\[

$$
\begin{align*}
& \Delta \text { party list position }{ }_{i}=\alpha_{0}+\sum_{j} \beta_{j} \text { occupation }_{i j}+\sum_{m} \delta_{m} \text { renown }_{i m}+\alpha_{1} \text { competence }_{i} \\
& +\alpha_{2} \text { female }_{i}+\alpha_{3} \text { doctoral degree }_{i}+\alpha_{4} \text { female }_{i} * \text { doctoral degree }{ }_{i} \\
& +\alpha_{5} \text { double } \text { name }_{i}+\alpha_{6} \text { female }_{i} * \text { double name }{ }_{i} \\
& +\alpha_{7} \text { foreign name }{ }_{i}+\alpha_{8} \text { female }_{i} * \text { foreign name }{ }_{i} \\
& +\alpha_{9} \text { letters }(\text { full name })_{i}+\alpha_{10} \text { female }_{i} * \text { letters (full name) }{ }_{i} \\
& +\alpha_{11} \text { initial party list } \text { position }_{i}+\alpha_{12} \text { list length }_{k}+\sum_{k=1}^{115} \gamma_{k} \lambda_{k}+\epsilon_{i} \text {. } \tag{2}
\end{align*}
$$
\]

The results of the OLS estimation of (2) are depicted in column 2 of Table 4. Each occupation's first line in column 2 indicates the number of positions won for individuals carrying out the respective occupation (the occupation dummy's coefficient in the extended empirical model (2)). Based on our considerations above, we may interpret this effect as the reputation effect. To capture the renown effect, the respective coefficients in column 2 of Table 4 tell us how many positions a candidate carrying out the respective occupation and having her own shop/farm/surgery won.

The results show that, for example, being a physician yields an average positive effect on the position on the party's list of 6 positions. Having one's own surgery in the town leads to an additional positive effect of 4 positions. Additionally, we find that there is a positive and highly significant competence effect. Candidates carrying out occupations classified as being competent according to the above definition on average win 4 positions. Hence, voters appear to use occupations also as a signal of competence regarding the specific tasks which council members have to fulfill. In contrast to the basic model, business economists, economists, and jurists now have statistically significant negative coefficients. This suggests that their coefficients in the basic model were driven by the competence effect.

There is, of course, a strong correlation between the occupational dummy variables and

[^12]the renown dummy variables (with correlation coefficients ranging from 0.65 to 0.86 for the different occupations). Caution must therefore be exercised when looking at the significance levels reported in column 2 of Table 4. A non-statistically-significant coefficient thus does not necessarily mean that there is no corresponding reputation/renown effect, but that we are not able to isolate this effect due to the structure of our data. What we can definitely say is that we find that both reputation and renown do play a role in a candidate's performance. For 3 of the 7 occupations, we find both significant reputation and renown effects (craftspeople, farmers, and physicians).

For gardeners and bakers/butchers, only the reputation effect emerges as statistically significant, while for pharmacists this only holds true for the renown effect. However, the statistical insignificance of the renown effects in particular does not necessarily mean economic insignificance, as the dummy variable's estimated coefficient is relatively large, and as there is a high correlation between the reputation and renown dummy variables as discussed above. We did not find a statistically significant occupation effect on the electoral outcome for caterers in model (1), and do not find significant reputation or renown effects in the extended empirical model either.

Besides the explanations for candidates' job-related electoral success discussed above, it might be the case that some occupations facilitate receiving information about citizens' interests and local issues. This appears to be plausible for bakers/butchers, caterers, farmers, gardeners, journalists, doctor's receptionists, barbers, nurses/elderly care nurses, pastors, pharmacists, physicians, and policemen. As a test for the robustness of our results, we introduced the dummy variable local knowledge ${ }_{i}$ that takes the value of 1 for each of these occupations. However, irrespective of whether we include the explanatory variables from the basic model or also the newly added variables, the coefficient of local knowledge ${ }_{i}$ is far from being statistically significant.

Having separated the occupational reputation effect for several of the occupations shown in Table 4, Figure 3 depicts our results (considering only the reputation effect) in comparison to the 2009 poll by the forsa institute in Germany. The results of the forsa poll depict the shares of individuals evaluating an occupation as having a large degree of reputation. Taking our results and comparing them to occupational reputation polls, we find an overwhelmingly strong positive correlation. The correlation coefficient between our measure of occupational reputation and the polls turns out to be 0.71 and is statistically significant at the $1 \%$ level. We therefore feel justified in interpreting the "basic" occupational effects as reputation effects:
voters appear to use occupational reputation as cues for their voting decisions. ${ }^{20}$

Figure 3 about here

## 4 Conclusion

We analyze how candidates' characteristics, functioning as information shortcuts, influence election results in low-information elections in Germany. The dataset consists of 4423 candidates running for the councils of the largest towns in Baden-Württemberg in the 2009 local elections. Our results show that voters use candidates' occupational information as cues. We find that 33 of our 51 different occupational groups have significant effects on the election outcome. From the set of occupations that lead to a statistically significant deterioration in terms of positions on the party list, salespeople, employees in the financial/insurance sector, management consultants, and secretaries turn out to perform worst. The most pronounced statistically significant positive effects can be found for bakers/butchers, farmers, and policemen. Furthermore, our results show that women have better chances of improving their position than men. We also find holding a doctoral degree to exert a significant positive effect on a candidate's election outcome. Candidates with foreign names perform worse. Our results show that the numerical impact of occupation effects is far greater than that of gender, holding a doctoral degree, or having a foreign name for a large number of occupations.

We can explain the results with respect to occupational effects using three approaches: first, an occupation's public reputation; second, the extent to which individuals in certain occupations are renowned within their local community; and third, some occupations' specific competence in fields important for local politics. Our results concerning the occupational reputation effects are strongly correlated with polls on occupational reputation/prestige in

[^13]Germany and the US. Voters appear to use occupational reputation as a cue for their voting decisions.

The significant impact of occupational effects on candidates' electoral success induces several questions for future research. Given voters' use of such shortcuts, it would be interesting to analyze whether voters' decisions would be different in situations in which they are well-informed. Similar to, e.g., Lupia (1994), one could compare situations in which voters have detailed information on candidates' characteristics (and maybe also their manifestos) with situations in which they only receive some shortcuts. It would then be interesting to test whether election results would differ when low-informed voters rely on shortcuts. If this were the case, it would indicate that using shortcuts might not be efficient in terms of choosing similar candidates while minimizing information costs. If both situations yield the same result, providing shortcuts for candidates' characteristics on the ballot paper might however be a possibility to improve electoral systems in an "(opportunity-)cost-efficient" way. To analyze this question, one would probably have to apply experimental methods as it appears to be difficult to have a natural variation of voters' information level that allows using field data.

Furthermore, it might be worthwhile to test for changes in occupations' electoral effects over time using data from different elections in the same territorial entity. Using such data, it might be possible to test for effects of specific events on occupational success - such as, for example, the consequences for employees in the financial sector after the financial crisis. Future research might as well focus on parties' selection process and test if political parties strategically exploit occupational effects when nominating their candidates.

## References

Antonakis, J., Dalgas, O., 2009. Predicting elections: child's play!. Science 323, 1183.
Banducci, S.A., Karp, J.A., Thrasher, M., Rallings, C., 2008. Ballot photographs as cues in low-information elections. Political Psychology 6, 903-917.

Bartels, L.M., 1996. Uninformed votes: information effects in presidential elections. American Journal of Political Science 40, 194-231.
Berggren, N., Jordahl, H., Poutvaara, P., 2010a. The looks of a winner: beauty and electoral success. Journal of Public Economics 94, 8-15.

Berggren, N., Jordahl, H., Poutvaara, P., 2010b. The right look: conservative politicians look better and their voters reward it. CESifo Area Conference on Public Sector Economics Working Paper.

Buckley, F., Collins, N., Reidy, T. 2007. Ballot paper photographs and lowinformation elections in Ireland. Politics 27(3), 174-181.
Byrne, G.C., Pueschel, J.K., 1974. But who should I vote for for county coroner?. The Journal of Politics 36(3), 778-784.

Cameron, A.C., Trivedi, P.K., 2005. Microeconometrics: methods and applications. Cambridge University Press.
Chong, D., Druckman, J.N., 2010. Dynamic public opinion: Communication effects over time. American Political Science Review 104(4), 663-680.

Conover, P.J., Feldman, S., 1982. Projection and the perceptions of candidates' issue positions. Western Political Quarterly 35, 228-244.
Conover, P.J., Feldman, S., 1989. Candidate perception in an ambiguous world: campaigns, cues and inferences processes. American Journal of Political Science 33, 912-939.
Corso, R.A., 2009. The Harris Poll 86. Harris Interactive.
Dubois, P.L., 1984. Voting cues in nonpartisan trial court elections: a multivariate assessment. Law \& Society Review 18(3), 395-436.

Druckman, J.N., 2004. Political preference formation: Competition, deliberation, and the (ir)relevance of framing effects. American Political Science Review 98(4), 671-686.
Druckman, J.N., Holmes, J.W., 2004. Does presidential rhetoric matter? Priming and presidential approval. Presidential Studies Quarterly 34(4), 755-778.
forsa, 2009. Bürgerbefragung öffentlicher Dienst. forsa Gesellschaft für Sozialforschung und statistische Analysen mbH.

Fox, R.L., Oxley, Z.M., 2003. Gender stereotyping in state executive elections: candidate selection and success. The Journal of Politics 65(3), 833-850.
Goodman, C., Murray, G.R., 2007. Do you see what I see? Perceptions of party differences and voting behavior. American Politics Research 35(6), 905-931.
Kelley, J., McAllister, I., 1984. Ballot paper cues and the vote in Australia and Britain: alphabetic voting, sex, and title. Public Opinion Quarterly 48(2), 452-466.
Klein, D., Baum, L., 2001. Ballot information and voting decisions in judicial elections. Political Research Quarterly 54(4), 709-728.
Lupia, A., 1994. Shortcuts versus encyclopedias: Information and voting behavior in california insurance reform elections. American Political Science Review 88(1), 63-76.
McDermott, M., 1997. Voting cues in low-information elections: candidate gender as a social information variable in contemporary United States elections. American Journal of Political Science 41(1), 270-283.
McDermott, M., 1998. Race and gender cues in low-information elections. Political Research Quarterly 51(4), 895-918.
McDermott, M., 2005. Candidate occupations and voter information shortcuts. The Journal of Politics 67(1), 201-219.
Mueller, J.E., 1970. Choosing among 133 candidates. Public Opinion Quarterly 34(3), 395402.

Riker, W.H., Ordeshook, P.C., 1968. A theory of the calculus of voting. American Political Science Review 62(1), 25-42.
Rosar, U., Klein, M., Beckers, T., 2008. The frog pond beauty contest: Physical attractiveness and electoral success of the constituency candidates at the North Rhine-Westphalia state election auf 2005. European Journal of Political Research 47(1), 64-79.
Rosenberg, S.W., Bohan, L., McCafferty, P., Harris, K., 1986. The image and the vote: the effect of candidate presentation on voter preference. American Journal of Political Science 30(1), 108-127.
Stokes, D.E., Miller, W.E., 1963. Party government and the saliency of Congress. Public Opinion Quarterly 26(4), 531-546.

## Appendix

## A Electoral Law in Baden-Württemberg

In local elections in Baden-Württemberg, voters have as many votes as there are seats in the respective council. They can elect a single party list and/or vote for different candidates from different parties.

If a voter checks a party list, this party receives the full number of votes. The votes are allocated to the candidates based on a rather simple mechanism: the candidate who is listed first receives the first vote, the second candidate receives the second, the third candidate receives the third, and so on. As the maximal number of candidates on a party list equals the number of seats in the respective council and, thus, the number of votes a voter has, this leads to one vote for each candidate whenever the party exploits the maximal number of candidates. If a party has fewer candidates than there are seats in the council, the remaining votes are allocated to the candidates based on the same mechanism until each candidate has received the maximum number of individual votes, which is 3 . If there are, for example, 48 seats in a council and a voter checks the party list of a party with 22 candidates, the candidates in the first 4 positions of the party's list receive 3 votes, whereas all other candidates receive 2. As we can see from this example, candidates at the top of the list have an advantage whenever the party has less candidates than there are seats in the council. We therefore controlled for the initial position on the party list in our econometric analysis.

A voter might not only check the list of a party, but also give up to 3 votes (per candidate) to single candidates from this party or other parties. In this case, these single votes are subtracted from the total number of votes, with the remainder then allocated to the party list. If the voter, for example, checks a party list and additionally gives 3 votes per candidate to 4 candidates from another party, the remaining $48-12=36$ votes are distributed to the candidates of the party whose list the voter checked. The voter might also give votes to candidates from the party whose list she checked. In this case, the remaining votes are allocated to the party's candidates according to the mechanism described above. In the event that a candidate on the list has already received the maximum of 3 votes, she comes away empty-handed in this process of allocating party votes.

Voters do not in fact have to check party lists at all. They might give their votes to single candidates from different party lists (once again with a maximum of 3 votes per candidate),
as long as they do not allocate more votes than there are seats in the respective council.
After the election, the number of seats are allocated to the total number of votes each party has received. Subsequently, the seats from a party list are allocated to its candidates according to the number of votes the candidates have received.

## Amtlicher Stimmzettel für die Wahl des Gemeinderats in Ulm am 07. Juni 2009

Sie haben insgesamt 40 Stimmen.
Bitte beachten Sie:

- Kein Bewerber/kine Bewerberin dart mehr als drei Stimmen erhalten.
- Auch wenn Sie mehrere Stimmzettei verwenden, düffen Sie insgesamt nicht mehr als 40 Stimmen abgeben.
- Wenn Sie mehr als insgesamt 40 Stimmen abgeben, sind alle von Ihnen verwendeten Stimmzettel ungültigl
- Bitte lesen Sie vor der Stimmabgabe unbedingt das Merkblatt „Wichtige Hinweise für die Stimmabgabee! \& Wahlvorschlag


## Sozialdemokratische Partei Deutschlands <br> SPD

| 0201 Kühne Dorothee, Fraktionsgeschäftsführerin, Ochsensteige 90 | 0201 |
| :---: | :---: |
| 0202 Rivoir Martin, Dipl.-Ingenieur u. Landtagsabgeordneter, Suizbachweg 31 | 0202 |
| 0203 Dr. Grimm Susanne, Ärtin, Gartenhalde 24, Mähringen | 0203 |
| 0204 Bergmann Ingo, Poilitikwissenschaftler, Brunnenstr. 39, Unterweiler | 0204 |
| 0205 Schanz Lisa-Barbara, Medizinisch-Technische Assistentin, Rechbergweg 24 | 0205 |
| 0206 Pflüger Hartmut, Freier Architekt, Griesbadgasse 7 | 0206 |
| 0207 Adler Katja, Rechtsanwältin, Zeppelinstr. 7 | 0207 |
| 0208 Kriechbaum Jürgen, Kriminalbeamter, Dullisbrunnen 2, Lehr | 0208 |
| 0209 Dr. Süslü Haydar, Allgemeinarrt, Blauäcker $2 / 1$ | 0209 |
| 0210 Doll Dieter, Internet-Sicherheitsbeauffragter, Gartenweg 7 | 0210 |
| 0211 Ansbacher Martin, Jurist, Schlossergasse 22 | 0211 |
| 0212 Hofmann Nick, Buchhändler, Deinselsgasse 12 | 0212 |
| 0213 Schulze Bettina, Verwaltungsangestellte, Trollingerweg 66 | 0213 |
| 0214 Giannopoulos Georgios, Informatiker, Königstr. 26 | 0214 |
| 0215 Wimmer Therese, Verwaltungsleiterin, Böfinger Weg 30/3 | 0215 |
| 0216 Dr. Dahlbender Brigitte, Biologin u. Geographin, Schlehdornweg 1, Einsingen | 0216 |
| 0217 Turath-Schröder Angelika, Dipl.-Verwaltungswirtin, Thymianweg 2, Einsingen | 0217 |
| 0218 Herrmann Marc, Moderator, Seflerweg 11 | 0218 |
| 0219 Ullemeyer Renate, Sachbearbeiterin, König-Wilheim-Str. 15/6 | 0219 |
| 0220 Obermeier Peter, Architekt, Beim Haslachkreuz 26, Donaustetten | 0220 |
| 0221 Takac Sabine, Hausfrau, Biberacher Str. 51 | 0221 |
| 0222 Lud Susann, Sozialfachwirtin u. Krankenschwester, Am Sudhaus 10 | 0222 |
| 0223 Lambacher Michae!, Industriemechaniker, Wörthstr. 74 | 0223 |
| 0224 Bender Claudia, Kaufmännische Angestellte, Höhenblick 37, Einsingen | 0224 |
| 0225 Schanz Otmar, Rentner, Soldatenstr. 23 | 0225 |
| 0226 Yelen Fadime, Zahnarzthelferin, Silcherweg 27 | 0226 |
| 0227 Stiffel Günter, Kaufmännischer Angestellter, Königstr. 12 | 0227 |
| 0228 Filius Christine, Tagesstättenleiterin, Riedleinweg 29 | 0228 |
| 0229 Schleicher-Rövenstrunck Hermann, Sozialarbeiter, Im Grünen Winkel 49 | 0229 |
| 0230 Bogdashkin Eugen, Sozialpädagoge, Thomas-Dehler-Weg 23 | 0230 |
| 0231 Dr. Klump Elisabeth, Hausfrau, Zwischen den Wegen 48, Jungingen | 0231 |
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| 0233 Schiele Andrea, Verwaltungsangestellte, Veitsbrunnenweg 1 | 0233 |
| 0234 Wecker Gert, Lehrer, Stuifenweg 29 | 0234 |
| 0235 Gabsi Fathi, Arbeiter, Karistr. 67 | 0235 |
| 0236 Braun-Vogt Leonore, Dipl.-Őkonomin i.R., Ruländerweg 52 | 0236 |
| 0237 Syburra Christel, Sekreärin, St.-Gallener-Str. 27 | 0237 |
| 0238 Haciok Michaela, Hausfrau, Klosterstr. 25 | 0238 |
| 0239 Sprandel Horst, Rektor a.D., Heidenheimer Str. 99 | 0239 |
| 0240 Gnahm Bernhard, Oberstudienrat, Jörg-Syrlin-Str 141 | 0240 |

Figure 1: Ballot paper: Social Democratic Party, Ulm, local elections 2009.

## B Descriptive statistics

| Occupation | Obs. | Mean | Std. Dev. | Min. | Max. |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Architect | 73 | 17.80822 | 11.79531 | 1 | 56 |
| Artist/Designer | 39 | 22.87179 | 12.15076 | 3 | 55 |
| Athlete/Physiotherapist | 32 | 19.71875 | 11.92242 | 1 | 41 |
| Baker/Butcher | 23 | 18.65217 | 13.75635 | 4 | 47 |
| Banker | 54 | 18.96296 | 11.61158 | 1 | 44 |
| Biologist/Chemist | 50 | 21.8 | 12.53566 | 1 | 41 |
| Business economist | 183 | 21.17486 | 13.01571 | 1 | 60 |
| Career politician | 33 | 9.515152 | 14.36385 | 1 | 48 |
| Caterer | 45 | 21.42222 | 11.66675 | 3 | 48 |
| Civil servant/Civil service employee | 148 | 20.01351 | 11.9118 | 1 | 47 |
| Commercial occupation | 288 | 22.0625 | 11.82699 | 1 | 59 |
| Computer scientist | 74 | 21.32432 | 12.54811 | 2 | 54 |
| Craftsperson | 156 | 20.45513 | 12.14607 | 1 | 59 |
| Director/General manager | 128 | 19.92188 | 12.41133 | 1 | 47 |
| Economist | 40 | 15.375 | 10.55799 | 1 | 36 |
| Engineer | 241 | 19.38589 | 12.59218 | 1 | 60 |
| Entrepreneur | 48 | 23.3125 | 13.8259 | 1 | 58 |
| Farmer | 45 | 17.44444 | 13.97816 | 1 | 60 |
| Gardener | 31 | 20.29032 | 11.98942 | 3 | 45 |
| Housewife/Househusband | 95 | 21.01053 | 13.23317 | 2 | 56 |
| Humanist | 27 | 21 | 10.84506 | 2 | 40 |
| Interpreter | 24 | 19.20833 | 11.78053 | 1 | 40 |
| Journalist | 59 | 20.52542 | 13.45408 | 1 | 48 |
| Jurist | 215 | 19.39535 | 13.54249 | 1 | 57 |
| Management consultant | 23 | 18.04348 | 9.412169 | 1 | 35 |
| Mathematician/Physicist | 33 | 25.69697 | 13.68732 | 2 | 59 |
| Musician | 24 | 20.45833 | 7.912451 | 4 | 39 |
| Nurse/Elderly care nurse | 101 | 20.07921 | 11.84203 | 2 | 57 |
| Other | 20.68 | 12.45561 | 1 | 60 |  |
| Other executive employee | 250 | 19.01818 | 12.78525 | 1 | 60 |
| Other financial/insurance sector | 55 | 25.28125 | 14.43167 | 2 | 54 |
| Other high-skilled | 159 | 20.36478 | 11.3363 | 1 | 49 |
| Other low-skilled | 65 | 22.67692 | 11.84154 | 3 | 48 |
| Other medium-skilled | 145 | 20.29655 | 12.50396 | 1 | 52 |
| Pastor | 27 | 19.81481 | 12.70686 | 1 | 51 |
| Pedagogue | 216 | 20.05093 | 12.08082 | 1 | 58 |
| Pharmacist | 25 | 17.4 | 11.78276 | 1 | 39 |
| Physician | 151 | 21.04636 | 12.9354 | 1 | 58 |
| Policeman | 17.35714 | 12.38308 | 1 | 59 |  |
| Professor | 22.7451 | 13.58653 | 1 | 48 |  |
| Pupil | 23.4 | 10.76986 | 4 | 54 |  |
|  | 51 |  |  | 4 | 1 |

... to be continued on next page ...

| Occupation | Obs. | Mean | Std. Dev. | Min. | Max. |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | $\ldots$ | continuation from previous page $\ldots$ |  |  |  |
| Retiree | 347 | 22.89625 | 13.34061 | 1 | 58 |
| Salesperson/Agent | 29 | 22.34483 | 11.77247 | 5 | 53 |
| Secretary | 21 | 26.71429 | 10.7431 | 2 | 46 |
| Self-employed | 177 | 22.88701 | 13.25959 | 1 | 60 |
| Social scientist | 29 | 12.27586 | 8.786746 | 1 | 33 |
| Student | 182 | 21.63736 | 12.0299 | 2 | 57 |
| Tax advisor | 26 | 22.88462 | 11.92418 | 2 | 47 |
| Teacher | 392 | 20.0051 | 12.71485 | 1 | 57 |
| Technician | 97 | 20.23711 | 10.96944 | 1 | 52 |
| Works council/Union official | 47 | 15.68085 | 11.19026 | 1 | 41 |

Table 1: Descriptive statistics: number of observations per occupational group, average position in party list, standard deviation, minimum, and maximum of party list position.

|  | CDU | SPD | FDP | Grüne Linke |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Observations | 950 | 1,057 | 964 | 986 | 466 | 4,423 |
| Gender |  |  |  |  |  |  |
| Female | 283 | 402 | 268 | 492 | 153 | 1,598 |
| Male | 667 | 655 | 696 | 494 | 313 | 2,825 |
| Doctoral degree |  |  |  |  |  |  |
| Yes | 87 | 77 | 152 | 78 | 15 | 409 |
| No | 863 | 980 | 812 | 908 | 451 | 4,014 |
| Double name |  |  |  |  |  |  |
| Yes | 41 | 69 | 49 | 97 | 27 | 283 |
| No | 909 | 988 | 915 | 889 | 439 | 4,140 |
| Foreign name |  |  |  |  |  |  |
| Yes | 41 | 72 | 42 | 58 | 64 | 277 |
| No | 909 | 985 | 922 | 928 | 402 | 4,146 |

Table 2: Descriptive statistics: candidates' gender, doctoral degrees, double names, and foreign names.

| Occupation | Share first position. | Share last position |
| :---: | :---: | :---: |
| Architect | 2.74 | 1.37 |
| Artist/Designer | 0.0 | 5.13 |
| Athlete/Physiotherapist | 3.13 | 3.13 |
| Baker/Butcher | 0.0 | 8.70 |
| Banker | 3.70 | 3.70 |
| Biologist/Chemist | 6.00 | 2.00 |
| Business economist | 1.09 | 4.37 |
| Career politician | 18.18 | 9.09 |
| Caterer | 0.0 | 2.22 |
| Civil servant/Civil service employee | 3.38 | 1.35 |
| Commercial occupation | 2.08 | 3.47 |
| Computer scientist | 0.0 | 4.05 |
| Craftsperson | 1.92 | 4.49 |
| Director/General manager | 3.91 | 3.91 |
| Economist | 7.50 | 0.0 |
| Engineer | 2.49 | 2.07 |
| Entrepreneur | 2.08 | 0.0 |
| Farmer | 6.67 | 4.44 |
| Gardener | 0.0 | 0.0 |
| Housewife/Househusband | 0.0 | 1.05 |
| Humanist | 0.0 | 3.70 |
| Interpreter | 8.33 | 4.17 |
| Journalist | 3.39 | 6.78 |
| Jurist | 6.98 | 2.33 |
| Management consultant | 8.70 | 0.0 |
| Mathematician/Physicist | 0.0 | 3.03 |
| Musician | 0.0 | 0.0 |
| Nurse/Elderly care nurse | 0.0 | 1.98 |
| Other | 2.40 | 4.00 |
| Other executive employee | 1.82 | 3.64 |
| Other financial/insurance sector | 0.0 | 6.25 |
| Other high-skilled | 3.77 | 0.0 |
| Other low-skilled | 0.00 | 0.0 |
| Other medium-skilled | 4.14 | 1.38 |
| Pastor | 3.70 | 1.38 |
| Pedagogue | 1.85 | 0.46 |
| Pharmacist | 4.00 | 0.0 |
| Physician | 2.65 | 3.31 |
| Policeman | 4.76 | 0.0 |
| Professor | 1.96 | 5.88 |
| Pupil | 0.0 | 0.0 |
| Retiree | 1.44 | 3.46 |
| Salesperson/Agent | 0.0 | 3.45 |
| Secretary | 0.0 | 0.0 |
| Self-employed | 2.26 | 3.39 |
| Social scientist | 6.90 | 0.0 |
| Student | 0.0 | 1.65 |
| Tax advisor | 0.0 | 3.85 |
| Teacher | 4.08 | 2.81 |
| Technician | 1.03 | 4.12 |
| Works council/Union official | 314.26 | 2.13 |

Table 3: Censored candidates: share of candidates per occupation listed first (last) on the ballot paper.

C Regression results

|  | (1) <br> OLS <br> Basic model | (2) <br> OLS <br> Augmented model |
| :---: | :---: | :---: |
| Architect | $3.154^{* * *}$ (2.86) | $3.401^{* * *}$ (3.15) |
| Artist/Designer | 2.013 (1.23) | 2.044 (1.25) |
| Athlete/Physiotherapist | $1.793 *$ (1.79) | 1.977* (1.95) |
| Baker/Butcher | $10.776^{* * *}$ (6.15) | $6.726^{*}$ (1.9) |
| Baker/Butcher renown effect |  | 5.786 (1.39) |
| Banker | 1.03 (0.90) | 1.231 (1.08) |
| Biologist/Chemist | 1.519 (1.27) | 1.624 (1.37) |
| Business economist | -0.803 (-1.01) | -4.559*** (-3.89) |
| Career politician | $9.317^{* * *}$ (6.11) | $5.641^{* * *}$ (3.48) |
| Caterer | 2.072 (1.5) | 2.2 (1.06) |
| Caterer renown effect |  | -0.05 (-0.02) |
| Civil servant/Civil service employee | $-2.637^{* * *}(-2.67)$ | -6.86 *** (-4.65) |
| Commercial occupation | $-2.003^{* *}(-2.41)$ | $-1.838^{* *}(-2.21)$ |
| Computer scientist | -1.591* (-1.81) | -1.504* (-1.72) |
| Craftsperson | $5.474^{* * *}(6.73)$ | $3.289^{* * *}$ (3.4) |
| Craftsperson renown effect |  | $4.207^{* * *}$ (3.71) |
| Director/General manager | -0.929 (-1.0) | -0.768 (-0.83) |
| Economist | 0.72 (0.65) | $-3.613^{* *}(-2.43)$ |
| Engineer | $1.547^{* *}$ (2.17) | $1.7 * *(2.38)$ |
| Entrepreneur | 2.01 (1.41) | 2.09 (1.45) |
| Farmer | $9.77^{* * *}$ (5.47) | $6.009^{* * *}$ (3.32) |
| Farmer renown effect |  | 7.418** (2.45) |
| Gardener | $8.046^{* * *}(4.66)$ | $6.447^{* * *}(2.64)$ |
| Gardener renown effect |  | 4.043 (1.37) |
| Housewife/Househusband | $3.563^{* * *}(3.46)$ | $3.672^{* * *}$ (3.55) |
| Humanist | 1.606 (0.98) | 1.694 (1.04) |
| Interpreter | -1.869 (-1.59) | -1.819 (-1.53) |
| Journalist | $3.024^{* *}$ (2.36) | $3.091^{* *}$ (2.41) |
| Jurist | 1.284* (1.68) | $-2.918^{* *}(-2.46)$ |
| Management consultant | $-4.847^{* * *}(-3.27)$ | -4.638*** (-3.11) |
| Mathematician/Physicist | $2.934^{* *}$ (2.22) | $3.10{ }^{* *}$ (2.34) |
| Musician | $6.429^{* * *}$ (3.47) | $6.507 * * *(3.47)$ |
| Nurse/Elderly care nurse | $7.235^{* * *}$ (9.09) | $7.302^{* * *}$ (9.15) |
| Other | -0.993 (-1.33) | -0.863 (-1.15) |
| Other executive employee | 0.301 (0.24) | 0.46 (0.37) |
| Other financial/insurance sector | $-5.092^{* * *}(-3.5)$ | -4.954*** (-3.42) |
| Other high-skilled | 0.531 (0.63) | 0.317 (0.38) |

... to be continued on next page ...

|  | (1) <br> OLS <br> Basic model | (2) <br> OLS <br> Augmented model |
| :---: | :---: | :---: |
| ... continuation from previous page ... |  |  |
| Other low-skilled | 1.385 (1.16) | 1.487 (1.26) |
| Other medium-skilled | 0.475 (0.65) | 0.582 (0.8) |
| Pastor | 8.056*** (4.66) | $8.229^{* * *}$ (4.69) |
| Pedagogue | $4.388^{* * *}$ (5.5) | $4.428^{* * *}$ (5.46) |
| Pharmacist | $3.488^{* *}$ (2.34) | 0.967 (0.54) |
| Pharmacist renown effect |  | $5.547^{* * *}(3.74)$ |
| Physician | 8.039*** (7.61) | $6.19 * * *$ (5.62) |
| Physician renown effect |  | $4.229^{* * *}$ (3.13) |
| Policeman | $9.445^{* * *}$ (13.24) | $9.659 * * *$ (13.31) |
| Professor | $5.602^{* * *}$ (5.51) | $6.012^{* * *}$ (6.01) |
| Pupil | $3.762^{* * *}(3.36)$ | $3.821^{* * *}$ (3.4) |
| Retiree | -0.755 (-1.02) | -0.784 (-1.06) |
| Salesperson/Agent | $-6.763^{* * *}(-4.56)$ | $-6.599^{* * *}(-4.46)$ |
| Secretary | $-4.712^{* * *}(-3.28)$ | -4.629*** (-3.25) |
| Self-employed | 1.302* (1.94) | 1.04 (1.61) |
| Social scientist | $3.397^{* * *}$ (3.49) | $3.5 * * *$ (3.61) |
| Student | $1.889^{* *}$ (2.32) | $1.967^{* *}$ (2.42) |
| Tax advisor | -0.37 (-0.25) | -0.133 (-0.09) |
| Teacher | $3.269^{* * *}$ (5.29) | $3.377^{* * *}$ (5.4) |
| Technician | 0.119 (0.13) | 0.297 (0.31) |
| Works council/Union official | $4.212^{* * *}(2.85)$ | $4.265^{* * *}$ (2.91) |
| Competence |  | $4.446^{* * *}$ (4.15) |
| Female | $2.763^{* * *}(2.64)$ | 2.92 *** (2.77) |
| Doctoral degree | $3.797^{* * *}$ (6.0) | $3.714^{* * *}$ (5.86) |
| Female * Doctoral degree | -0.449 (-0.54) | -0.357 (-0.43) |
| Double name | -0.046 (-0.05) | -0.07 (-0.07) |
| Double name * Female | -0.356 (-0.3) | -0.363 (-0.31) |
| Foreign name | $-1.879^{* *}(-2.45)$ | $-1.778^{* *}(-2.34)$ |
| Foreign name * Female | 1.024 (0.98) | 0.869 (0.84) |
| Letters (full name) | 0.033 (0.69) | . 033 (0.7) |
| Letters (full name) * Female | -0.136* (-1.77) | -0.14* (-1.8) |
| Position on party list | 0.295*** (27.17) | .296*** (26.85) |
| Party list length | $-0.113^{* * *}(-7.94)$ | $-0.117^{* * *}(-8.13)$ |
| Constant | $-1.829^{* *}(-2.23)$ | $-1.912^{* *}(-2.31)$ |
| Observations | 4423 | 4423 |
| R-Squared | 0.31 | 0.32 |

Notes: t-statistics in brackets; * significant at 10\%;
${ }^{* *}$ sign. at $5 \%$; $^{* * *}$ sign. at $1 \%$
Table 4: OLS Regression results with list dummies cont'd. Heteroskedasticity-robust standard errors clustered at list level. Dependent马yariable: $\Delta$ party list position ${ }_{i}$.

## D Occupational reputation surveys and our empirical results



Figure 2: Source: forsa (2009); The Harris Poll \#86 (2009).


Figure 3: Source: Own calculations; forsa (2009).

## E Robustness checks

|  | (1) <br> Without top 5 | (2) <br> Without restricted | (3) <br> $\ln$ (rel. <br> success) candidates |
| :---: | :---: | :---: | :---: |
| Architect | $3.804^{* * *}$ (3.0) | $3.114^{* * *}$ (2.76) | $0.116^{* *}(2.52)$ |
| Artist/Designer | 2.772 (1.58) | 2.026 (1.22) | 0.06 (1.06) |
| Athlete/Physiotherapist | 1.789 (1.64) | 1.758* (1.73) | 0.048 (0.89) |
| Baker/Butcher | $12.196{ }^{* * *}$ (6.36) | $9.95{ }^{* * *}$ (6.03) | $0.436 * * *$ (5.41) |
| Banker | 1.287 (1.0) | 0.897 (0.76) | 0.062 (1.03) |
| Biologist/Chemist | 1.643 (1.18) | 1.112 (0.89) | $0.088^{*}(1.8)$ |
| Business economist | -0.885 (-1.06) | -0.73 (-0.91) | -0.012 (-0.37) |
| Career politician | $16.584^{* * *}$ (4.42) | $10.733^{* * *}$ (4.02) | 0.632*** (8.46) |
| Caterer | $2.664^{*}$ (1.78) | 1.795 (1.25) | 0.033 (0.56) |
| Civil servant/Civil service employee | $-3.215^{* * *}(-2.98)$ | $-2.568^{* *}(-2.4)$ | $-0.089 * *(-2.23)$ |
| Commercial occupation | $-1.841^{* *}(-2.11)$ | $-1.588^{*}(-1.85)$ | $-0.074^{* *}(-2.09)$ |
| Computer scientist | -1.417 (-1.44) | $-1.614^{*}(-1.81)$ | $-0.099^{* *}(-2.52)$ |
| Craftsperson | $6.164^{* * *}$ (6.99) | $5.482^{* * *}$ (6.53) | 0.197*** (5.34) |
| Director/General manager | -1.19 (-1.16) | -0.603 (-0.63) | 0.0003 (0.01) |
| Economist | -0.003 (-0.0) | 0.558 (0.48) | . 062 (0.74) |
| Engineer | $1.663 * *(2.04)$ | $1.546^{* *}$ (2.16) | .059* (1.97) |
| Entrepreneur | 1.751 (1.06) | 1.802 (1.24) | 0.095 (1.51) |
| Farmer | $11.959^{* * *}$ (5.4) | $10.424^{* * *}$ (5.34) | $0.438^{* * *}$ (6.14) |
| Gardener | 8.86*** (5.03) | $7.822^{* * *}$ (4.28) | $0.332^{* * *}$ (4.8) |
| Housewife/Househusband | $4.05 * * *$ (3.79) | $3.471^{* * *}$ (3.34) | $0.092 * *(2.13)$ |
| Humanist | 1.833 (1.04) | 1.857 (1.13) | 0.023 (0.4) |
| Interpreter | -1.834 (-1.52) | $-2.12^{*}(-1.75)$ | -0.044 (-0.67) |
| Journalist | $3.177^{* *}$ (2.13) | $3.598 * * * ~(3.04)$ | 0.145*** (3.05) |
| Jurist | 1.523* (1.82) | 1.071 (1.35) | $0.103 * * * ~(2.96) ~$ |
| Management consultant | $-5.009^{* * *}(-3.2)$ | $-4.928^{* * *}(-3.16)$ | $-0.171^{* *}(-2.42)$ |
| Mathematician/Physicist | $3.179 * *(2.24)$ | $2.966^{* *}$ (2.24) | 0.07 (1.33) |
| Musician | $7.623^{* * *}$ (3.85) | $6.376^{* * *}$ (3.44) | 0.151* (1.93) |
| Nurse/Elderly care nurse | 8.062*** (9.47) | $7.18^{* * *}$ (9.12) | 0.23 *** (6.31) |
| Other | -0.671 (-0.83) | -0.837 (-1.09) | -0.047 (-1.57) |
| Other executive employee | 0.245 (0.18) | 1.416 (1.21) | 0.031 (0.51) |
| Other financial/insurance sector | $-5.988^{* * *}(-3.74)$ | $-4.239^{* *}(-2.33)$ | $-0.162 * *(-2.4)$ |
| Other high-skilled | 0.545 (0.56) | 0.723 (0.84) | 0.018 (0.53) |

... to be continued on next page ...

|  | (1) <br> Without top 5 | (2) <br> Without restricted | (3) $\ln$ (rel. success) candidates |
| :---: | :---: | :---: | :---: |
|  | ... continuation from previous page |  |  |
| Other low-skilled | 1.718 (1.34) | 1.632 (1.35) | 0.004 (0.1) |
| Other medium-skilled | 0.217 (0.27) | 0.245 (0.33) | 0.061* (1.75) |
| Pastor | $9.173^{* * *}$ (5.01) | $7.872^{* * *}$ (4.37) | $0.338^{* * *}(4.34)$ |
| Pedagogue | $5.051^{* * *}$ (5.49) | $4.444^{* * *}$ (5.5) | $0.145^{* * *}$ (4.7) |
| Pharmacist | $4.243^{* *}$ (2.45) | $3.406^{* *}$ (2.17) | $0.15 *$ (1.85) |
| Physician | $9.072^{* * *}$ (7.76) | $7.934^{* * *}$ (7.18) | $0.327^{* * *}$ (7.08) |
| Policeman | $10.621^{* * *}(14.25)$ | $9.491^{* * *}$ (12.86) | $0.384^{* * *}$ (8.77) |
| Professor | $6.185^{* * *}$ (5.31) | $5.364^{* * *}$ (5.25) | $0.196{ }^{* * *}$ (4.08) |
| Pupil | $4.489^{* * *}(3.85)$ | $3.736 * * *(3.28)$ | $0.121^{* * *}(2.8)$ |
| Retiree | -0.934 (-1.15) | -0.85 (-1.1) | 0.009 (0.31) |
| Salesperson/Agent | $-6.341^{* * *}(-4.22)$ | $-5.315^{* * *}(-3.04)$ | $-0.288^{* * *}(-4.19)$ |
| Secretary | $-5.204^{* * *}(-3.47)$ | $-4.492 * * *(-2.68)$ | $-0.199^{* * * ~(-3.5) ~}$ |
| Self-employed | 1.258* (1.74) | 1.149* (1.67) | 0.06 ** (2.31) |
| Social scientist | $3.39 * * * ~(2.75) ~$ | $3.318^{* * *}$ (3.29) | 0.08 (1.32) |
| Student | $2.707^{* * *}$ (3.17) | $1.934^{* *}$ (2.36) | 0.025 (0.81) |
| Tax advisor | -0.785 (-0.52) | -0.181 (-0.12) | -0.005 (-0.08) |
| Teacher | $3.473^{* * *}$ (4.98) | $3.074^{* * *}$ (4.8) | $0.143^{* * *}$ (5.25) |
| Technician | 0.071 (0.07) | 0.316 (0.32) | -0.024 (-0.59) |
| Works council/Union official | $5.186^{* * *}$ (3.03) | 4.671*** (3.08) | 0.107 (1.65) |
| Female | $2.531^{* *}$ (2.12) | $2.811^{* *}$ (2.59) | $0.118 * * *(2.65)$ |
| Doctoral degree | $4.165^{* * *}$ (5.74) | $3.837^{* * *}(5.66)$ | $0.136 * * *(5.09)$ |
| Female * Doctoral degree | -0.236 (-0.25) | -0.58 (-0.68) | -0.024 (-0.6) |
| Double name | 0.202 (0.17) | -0.934 (-0.9) | -0.008 (-0.19) |
| Double name * Female | -1.014 (-0.76) | 0.754 (0.63) | -0.028 (-0.6) |
| Foreign name | -1.938** (-2.45) | -1.936*** (-2.64) | $-0.108^{* * *}(-3.41)$ |
| Foreign name * Female | 1.207 (1.05) | 1.226 (1.17) | 0.024 (0.56) |
| Letters (full name) | 0.028 (0.54) | 0.057 (1.15) | 0.003 (1.34) |
| Letters (full name) * Female | -0.112 (-1.27) | -0.149* (-1.86) | $-0.007^{* *}(-2.23)$ |
| Position on party list | 0.379*** (27.05) | $0.322^{* * *}$ (27.0) | $-0.027^{* * *}(-25.2)$ |
| Party list length | $-0.095^{* * *}(-4.59)$ | -0.301*** (-19.79) | 0.009*** (10.99) |
| Constant | $-4.637^{* * *}(-4.81)$ | 0.449 (0.55) | $4.555^{* * *}$ (125.85) |
| Observations | 3843 | 4191 | 4423 |
| R-Squared | 0.36 | 0.33 | 0.58 |

Notes: t-statistics in brackets; * significant at 10\%; ** sign. at 5\%; *** sign. at $1 \%$
Table 5: Robustness checks: OLS regressions with list dummies. Heteroskedasticity-robust standard errors clustered at list level.

|  | (1) <br> Rel. success without top 5 cand. | (2) <br> $\ln$ (no. of votes) | (3) <br> alt. foreign name def. |
| :---: | :---: | :---: | :---: |
| Architect | 7.381 (1.65) | $0.116^{* *}(2.52)$ | $3.164^{* * *}(2.86)$ |
| Artist/Designer | 6.396 (1.31) | 0.06 (1.06) | 2.026 (1.23) |
| Athlete/Physiotherapist | 3.028 (0.63) | 0.048 (0.89) | $1.913^{*}$ (1.87) |
| Baker/Butcher | $51.39^{* * *}$ (4.47) | $0.436 * * *$ (5.41) | $10.771^{* * *}$ (6.13) |
| Banker | 1.216 (0.29) | 0.062 (1.03) | 1.106 (0.96) |
| Biologist/Chemist | 4.499 (0.96) | 0.088* (1.8) | 1.544 (1.3) |
| Business economist | -1.709 (-0.63) | -0.012 (-0.37) | -0.803 (-1.0) |
| Career politician | $84.952^{* * *}(2.77)$ | $0.632^{* * *}$ (8.46) | $9.329^{* * *}$ (6.13) |
| Caterer | 3.114 (0.68) | 0.033 (0.56) | 2.028 (1.48) |
| Civil servant/Civil service employee | -9.36*** (-2.71) | $-0.089^{* *}(-2.23)$ | $-2.541 * *(-2.54)$ |
| Commercial occupation | $-6.473^{* *}(-2.31)$ | $-0.074^{* *}(-2.09)$ | $-1.972^{* *}(-2.37)$ |
| Computer scientist | $-7.242^{* *}(-2.33)$ | $-0.099^{* *}(-2.52)$ | $-1.601^{*}(-1.81)$ |
| Craftsperson | $15.842^{* * *}$ (4.73) | $0.197^{* * *}$ (5.34) | $5.507^{* * *}$ (6.75) |
| Director/General manager | -4.007 (-1.24) | 0.0003 (0.01) | -0.906 (-0.98) |
| Economist | -2.329 (-0.32) | 0.062 (0.74) | 0.845 (0.75) |
| Engineer | 2.553 (1.0) | 0.059* (1.97) | $1.539^{* *}$ (2.15) |
| Entrepreneur | 7.38 (1.21) | 0.095 (1.51) | 2.073 (1.46) |
| Farmer | $37.695 * * *$ (5.1) | $0.438{ }^{* * *}$ (6.14) | $9.781^{* * *}$ (5.46) |
| Gardener | $32.942^{* * *}$ (4.6) | $0.332^{* * *}$ (4.8) | $8.017^{* * *}(4.65)$ |
| Housewife/Househusband | $6.838 * *(2.04)$ | $0.092^{* *}$ (2.13) | 3.618*** (3.51) |
| Humanist | 2.928 (0.53) | 0.023 (0.4) | 1.624 (0.99) |
| Interpreter | -7.506** (-2.06) | -0.044 (-0.67) | -1.886 (-1.59) |
| Journalist | $9.476 * *(2.21)$ | $0.145^{* * *}$ (3.05) | $3.087^{* *}$ (2.41) |
| Jurist | 5.117 (1.62) | $0.103^{* * *}(2.96)$ | 1.321* (1.74) |
| Management consultant | $-16.662^{* * *}(-3.81)$ | $-0.171^{* *}(-2.42)$ | $-4.748^{* * *}(-3.26)$ |
| Mathematician/Physicist | 3.061 (0.87) | 0.07 (1.33) | $3.004^{* *}(2.27)$ |
| Musician | 12.009* (1.95) | 0.151* (1.93) | $6.392 * * * ~(3.42) ~$ |
| Nurse/Elderly care nurse | $19.883^{* * *}$ (6.23) | $0.23 * * *(6.31)$ | 7.31 *** (9.25) |
| Other | -3.734 (-1.42) | -0.047 (-1.57) | -0.967 (-1.29) |
| Other executive employee | 0.789 (0.14) | 0.031 (0.51) | 0.418 (0.34) |
| Other financial/insurance sector | $-11.653^{* *}(-2.32)$ | $-0.162^{* *}(-2.4)$ | $-5.019 * * *(-3.47)$ |
| Other high-skilled | -1.705 (-0.56) | 0.018 (0.53) | 0.55 (0.66) |

... to be continued on next page ...

|  | (1) <br> Rel. success without top 5 cand. | (2) <br> $\ln$ (no. of votes) | (3) <br> alt. foreign name def. |
| :---: | :---: | :---: | :---: |
|  | ... continuation from previous page |  |  |
| Other low-skilled | -2.183 (-0.59) | 0.004 (0.1) | 1.462 (1.25) |
| Other medium-skilled | 0.819 (0.27) | 0.061* (1.75) | 0.521 (0.71) |
| Pastor | $31.408^{* * *}(3.8)$ | $0.338^{* * *}(4.34)$ | $8.042^{* * *}$ (4.65) |
| Pedagogue | $10.537^{* * *}$ (3.66) | 0.145*** (4.7) | $4.39 * * *$ (5.53) |
| Pharmacist | $9.814^{* *}$ (2.02) | 0.15* (1.85) | $3.484^{* *}$ (2.32) |
| Physician | $33.903^{* * *}$ (6.83) | $0.327^{* * *}$ (7.08) | 8.074*** (7.61) |
| Policeman | $34.568^{* * *}(7.82)$ | $0.384^{* * *}$ (8.77) | $9.453^{* * *}(13.27)$ |
| Professor | $14.492^{* * *}$ (2.94) | $0.196 * * *$ (4.08) | $5.607^{* * *}$ (5.46) |
| Pupil | $9.371 * *$ (2.47) | $0.121^{* * *}(2.8)$ | $3.783^{* * *}$ (3.39) |
| Retiree | 0.293 (0.11) | 0.009 (0.31) | -0.753 (-1.02) |
| Salesperson/Agent | $-19.81 * * *(-4.82)$ | -0.288*** (-4.19) | $-6.675^{* * *}(-4.48)$ |
| Secretary | $-12.96{ }^{* * *}(-3.57)$ | $-0.199 * * *(-3.5)$ | $-4.674^{* * *}(-3.29)$ |
| Self-employed | 4.467* (1.87) | 0.06 ** (2.31) | 1.284* (1.92) |
| Social scientist | -3.271 (-1.06) | 0.08 (1.32) | $3.511^{* * *}$ (3.62) |
| Student | 1.719 (0.67) | 0.025 (0.81) | 1.933 ** (2.37) |
| Tax advisor | -6.594 (-1.53) | -0.005 (-0.08) | -0.402 (-0.27) |
| Teacher | $8.247^{* * *}$ (3.31) | $0.143^{* * *}$ (5.25) | $3.291 * * *$ (5.31) |
| Technician | -3.815 (-1.1) | -0.024 (-0.59) | 0.164 (0.18) |
| Works council/Union official | 7.866 (1.55) | 0.107 (1.65) | $4.204^{* * *}$ (2.87) |
| Female | 7.415* (1.75) | $0.118^{* * *}$ (2.65) | $2.735^{* *}$ (2.6) |
| Doctoral degree | $9.731^{* * *}$ (3.73) | $0.136 * * * ~(5.09) ~$ | $3.802^{* * *}$ (5.98) |
| Female * Doctoral degree | 0.24 (0.05) | -0.024 (-0.6) | -0.478 (-0.58) |
| Double name | 0.474 (0.1) | -0.008 (-0.19) | -0.017 (-0.02) |
| Double name * Female | -3.311 (-0.66) | -0.028 (-0.6) | -0.333 (-0.29) |
| Foreign name | $-7.808^{* * *}(-3.32)$ | $-0.108^{* * *}(-3.41)$ | $-1.644^{* *}(-2.54)$ |
| Foreign name * Female | 2.878 (0.93) | 0.024 (0.56) | 0.453 (0.51) |
| Letters (full name) | 0.32 (1.55) | 0.003 (1.34) | 0.035 (0.74) |
| Letters (full name) * Female | -0.54* (-1.78) | $-0.007 * *(-2.23)$ | -0.133* (-1.73) |
| Position on party list | $-1.86{ }^{* * *}(-25.26)$ | $-0.027^{* * *}(-25.2)$ | $0.294^{* * *}$ (27.1) |
| Party list length | $1.252^{* * *}(15.65)$ | $0.027^{* * *}$ (32.05) | $-0.166^{* * *}(-13.42)$ |
| Constant | $70.944^{* * *}$ (18.98) | $6.755^{* * *}$ (186.62) | $-1.665 * *(-2.08)$ |
| Observations | 3843 | 4423 | 4423 |
| R-Squared | 0.47 | 0.91 | 0.32 |

Notes: t-statistics in brackets; * significant at 10\%; ** sign. at 5\%; *** sign. at $1 \%$
Table 6: Robustness checks: OLS regressions with list dummies. Heteroskedasticity-robust standard errors clustered at list level.

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[^2]:    ${ }^{1}$ Typically, low-information elections are defined as elections where voters lack detailed information on candidates' characteristics and/or parties' manifestos. For a more detailed discussion on the term and its application to the data used in this article, see section 3.1.
    ${ }^{2}$ Our understanding of a cue or a shortcut in this context is that voters receive some piece of information about (potential) characteristics of a candidate which they then use when forming their decisions. Both terms are used interchangeably here.

[^3]:    ${ }^{3}$ A more detailed description of the electoral law in Baden-Württemberg is provided in Appendix A.
    ${ }^{4}$ There are some exceptions concerning local business taxes and a kind of real estate tax. However, the former does not affect many voters and the amount of the latter is more or less negligible.

[^4]:    ${ }^{5}$ Albstadt, Baden-Baden, Bietigheim-Bissingen, Bruchsal, Esslingen, Fellbach, Filderstadt, Freiburg, Friedrichshafen, Heidelberg, Heilbronn, Karlsruhe, Konstanz, Lahr, Leonberg, Lörrach, Ludwigsburg, Mannheim, Offenburg, Pforzheim, Reutlingen, Rottenburg, Stuttgart, Tübingen, Ulm, VillingenSchwenningen, and Waiblingen.
    ${ }^{6}$ In these towns, each district is represented by a certain number of representatives in the local council ("unechte Teilortswahl"). This has an impact on the parties' lists and on the voters' degrees of freedom.
    ${ }^{7}$ One could, of course, include all party lists in the analysis. However, many smaller parties do not exploit the maximum number of candidates on their list. Voters not only have the option of giving their votes to single candidates, but also to a full party lists. When doing so, the votes are assigned to the party list's candidates according to a specific mechanism which benefits candidates in the first ballot positions to a greater extent. As this might lead to a bias in the results, we do not include the lists of the smallest parties and regional voters' associations in our analysis.

[^5]:    ${ }^{8}$ As will be pointed out in section 3.3, there is no evidence for occupation effects in the party lists' composition (except for career politicians).
    ${ }^{9}$ We drop the CDU candidate lists in Bruchsal, Filderstadt, and Offenburg and the FDP list in Offenburg. However, as a robustness check, regression results including these four lists are provided in section 3.5 and it turns out that dropping these lists does not influence our results with regard to occupational effects.
    ${ }^{10}$ The classification is somewhat arbitrary in some cases. However, as there is no clear-cut definition of a "German name", we see our approach as a second-best solution. We explicitly do not follow Byrne and

[^6]:    Pueschel (1974), who consider surnames only because, for example, a woman with the "traditional" German forename "Gerlinde" is certainly less likely to be perceived to be foreign, even if her surname was Arabic. However, we additionally use Byrne and Pueschel's definition as a robustness check, classifying candidates with a foreign surname as "foreign". The regression results turn out to be robust against this change in definition (see section 3.5).

[^7]:    ${ }^{11}$ As a robustness check, we re-estimated our model 51 times, using each different occupation as the reference group one time. This obviously leads to small changes in the coefficients of the occupational dummies, but does neither systematically change significance levels nor the ranking of occupational effects.

[^8]:    ${ }^{12}$ The interaction term of female and length of name is statistically significant at the $10 \%$ level but negligible in size.

[^9]:    ${ }^{13}$ In the case of a list with fewer candidates than seats in the council, the candidates at the top of the list might have an advantage if a voter gives all her votes to that list, see Appendix A.
    ${ }^{14} \mathrm{We}$ do not present the results of the other robustness checks dropping the top 10 candidates here. The results are very similar to those presented in the paper. Tables are available upon request.

[^10]:    ${ }^{15} \mathrm{~A}$ greater number of votes is associated with a better position on the party list after the election. Therefore, the signs of the coefficients change when using the number of votes as the dependent variable.
    ${ }^{16}$ Tables including the absolute number of votes per candidate as the dependent variable are available upon request.

[^11]:    ${ }^{17}$ Our search queries have the following format: "'forename surname' + town".
    ${ }^{18}$ There might, however, be different approaches to classifying a candidate as "known to the public". It might be the case that media coverage is significant for a specific candidate due to several possible reasons. This might then lead to greater public interest and, perhaps, to a greater number of Google search queries for the candidate's name. In order to develop an indicator for this and as stated above, we used Google Insights and requested the number of Google queries for the three front runners on each list. As we found hardly any significant numbers of search queries before the elections, we conclude that voters did not gather information via Google, which supports our low-information election argument. We therefore do not refer to the number of Google search requests in our analysis, but concentrate on the measure of renown described above.

[^12]:    ${ }^{19}$ We should expect jurists, judges and also civil servants and career politicians to have a profound knowledge of the relevant laws.

[^13]:    ${ }^{20}$ Note that the number of occupations ranked in these opinion polls is significantly smaller than the number of occupations included in our analysis. Including a variable directly capturing occupational reputation in the econometric model would therefore yield to the exclusion of most occupations. As an approach for testing the reputation effect directly, we estimated a model using all explanatory variables as in the basic model (except for the occupation dummies) and added an occupational reputation control variable constructed out of the opinion polls. In this estimation based on 15 occupations, the reputation variable has a highly significant positive effect on a candidate's success which supports our interpretation of the results.

