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POLITICAL DONATIONS AND POLITICAL RISK IN THE UK: EVIDENCE FROM A CLOSELY-FOUGHT ELECTION

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Abstract

UK regulation discourages corporate political donations but is relatively benign in respect of individual donations. Few UK listed companies make political donations but many more company directors do. We use a unique, hand-collected dataset of political donations to examine whether UK corporate political connections are perceived as being created indirectly *via* directors' personal donations. Basing our tests on the sensitivity of company returns to opinion polls preceding the 2010 General Election we find that, on average, firms in industries which donate only to the Conservative Party exhibit higher sensitivity to the electoral success of the Conservatives. However, within industries, there is no consistent evidence that the firms which employ directors who make these donations exhibit higher sensitivity than firms which do not. We justify basing our inferences on return sensitivity to polls by confirming that UK domestic political risk, as proxied by opinion poll changes, is priced around General Elections.

JEL classifications: G12, G14

Keywords: political risk; political donations; event studies

POLITICAL DONATIONS AND POLITICAL RISK IN THE UK: EVIDENCE FROM A CLOSELY-FOUGHT ELECTION

1. Introduction

The existence of ties between politicians and the corporate world is not a new phenomenon and there is a growing body of research which investigates links between politics and stock markets. Early work, such as Jayachandran (2006), suggests that domestic political risk is priced, evidence supported by subsequent research such as Boutchkova *et al*. (2012) and Belo *et al*. (2013), which links the cash flow variability of individual firms or industries to government activities. More recently, attention has turned to the sources and value of corporate political connections.

One of the most frequently analysed sources of connection, particularly in the US, is corporate political donations. Such donations represent a significant proportion of political finance in the US and there is mounting evidence that they contribute to corporate value. For example, Cooper *et al*. (2010) find that corporate donations to political candidates and parties affect both share returns and future profitability (see also Claessens *et al*., 2008 and Akey, 2015).

The US political finance framework contrasts sharply with that of the UK, where regulation discourages corporate political contributions: UK companies must obtain shareholder approval for political donations above £5,000 during any 12-month period and all political contributions over £200 must be disclosed in the annual financial statements. Conversely, the UK system is relatively benign in respect of individual contributions: while US federal law restricts the amounts that individuals can contribute to each political party or candidate, there is no such limit in the UK. Only 6% of the 300 largest listed UK companies donated to the two main political parties – Conservatives and Labour – in the period between 2005 and

2010, but 17% of these companies employed at least one director who made a personal contribution. While total corporate political donations from these 300 companies amounted to less than £500,000 over the period, their directors donated about £2.4 million.[1] These amounts may seem small but, unlike in the US, campaign expenditure in the UK is capped, potentially increasing the salience of a large individual donation: in 2010 the maximum expenditure during the year preceding the polling date was £19.5 million per party (Electoral Commission, 2011, p2). In addition, whereas in the US company managers might make donations as a group *via* corporate PACs, in the UK the value of an individual director's political donations is more transparent.

An intriguing question is whether the different regulatory frameworks that apply to political finance in the US and UK have implications for the roles played by corporate and individual donations. In particular, since the contribution made by UK listed companies is so slight, might it be that political donations made by their directors are viewed as surrogate corporate donations? This paper investigates these questions and, to our knowledge, is the first to do so.

Although some of our results suggest that directors' donations could be perceived as associated with the company on whose board they sit, we find no fully convincing evidence that this is the case. However, it does appear that political donations, either by the company or by a director, do indicate an *industry-wide* political affiliation. Our most consistent results suggest that industries which, in our sample, donate exclusively to the Conservative Party, comprise of companies which are particularly sensitive to the electoral fortunes of the Conservatives.

[1] Contributions from privately-held companies were higher than from listed companies and their directors, potentially giving these firms an influential role in the political process.

Our empirical analysis exploits a unique, hand-collected dataset of political contributions made by directors of UK companies, data available only since 2001. Figure 1 summarises the sources of political finance for the two main UK parties between 2005 and 2010, and shows that the Conservatives, traditionally more pro-business, have greater access to funds. Almost half of their donations (£65 million out of £133 million) came from individuals, a higher level of donations than any other group. The trades unions were the major source of funding for the Labour Party (£49 million out of £84 million), potentially creating indirect political links for companies in highly-unionised sectors. We therefore augment our political donations data with industry-level measures of worker unionisation rates.

[Figure 1]

We base our identification strategy around the 2010 UK General Election. Following Acker and Duck (2015) we use the high-frequency reporting of opinion poll data during election campaigns to obtain firm-level measures of political affiliation and sensitivity. The response of share prices to changes in the polls allows us to identify companies as being either pro-Conservative or pro-Labour.[2] Unlike a standard event study approach, which would examine stock price reactions to the announcement of the election outcome, the technique does not rely on the outcome's unexpectedness, or on the precision with which the event date is determined. This is a particularly attractive feature in the case of the 2010 election, the

[2] Related papers in the political science literature (e.g. Herron, 2000 and Knight, 2007) first identify firms which they predict should be sensitive to particular election outcomes due to director political connections, and then examine the accuracy of the prediction. We allow the data to identify firms' sensitivities. Similarly, Coulomb and Sangnier (2014) find share prices of companies connected to the French presidential candidate Sarkozy react positively to an increase in the perceived probability of his election, whereas those of companies connected to his main rival react negatively.

outcome of which – a Conservative-led coalition government – was unclear for several days following polling day.

Before analysing the role of political donations, we first confirm that our measure of political sensitivity captures the sign and size of individual companies' political affiliation. To do this we examine the relationship between our measure and post-polling day abnormal returns for five UK General Election campaigns from 1992 to 2010. Using multiple elections allows us to sharpen our tests, contrasting the results for closely-fought elections where the outcome was highly uncertain with those for elections which involved much less political risk. The results strongly suggest that a priced political factor does exist around elections, and that our poll-based measure is a suitable proxy for firms' general political sensitivity.

We then use our political sensitivity measure for 2010 to address our main question: whether political finance derived from directors of UK listed companies appears to have implications for the companies themselves. We examine the relationships between the political finance sources and both the sign and the size of the political sensitivities but find no consistent evidence that firms with Conservative director-donors exhibit higher political sensitivity than those without.

However, we also compare different groups of industries, focusing on a set where we observe donations – whether direct corporate donations or *via* directors – going *only* to the Conservative Party. We contrast these with a set of 'mixed donor' industries, which either donate to both parties or which do not donate at all. We find that firms in the Conservative-only donating industries exhibit, on average, higher sensitivity to a Conservative victory than do firms in the mixed donor industries. Robustness checks using cumulative abnormal returns and share prices from the Intrade prediction market confirm these results. By contrast, we find no evidence of a relationship between our industry-level measure of the degree of worker union membership and political sensitivity.

Our results suggest that any links that might exist between political donations and corporate value in the UK are more tenuous than in the US. While it is possible that political donations are made by directors in the expectation of a tangible benefit, and that there are spillover benefits from donating firms and directors to entire industries, our findings are open to other interpretations. For example, a positive relationship between firm value and the presence of donating directors could be driven by assortative matching between firms, directors and political parties due to a common unobserved ideology, irrespective of any influence of the donation on government policy. So, while positive findings are consistent with the view that donations are made to support a party which either has historically espoused policies which benefit the industry, or which appears open to adopting such policies, they may simply suggest that directors who donate to these parties are typically recruited to these firms and make political donations primarily for purely personal reasons.

Director donations may be made either for consumption value as suggested by Ansolabere *et al*. (2003) in the US context, or as an individual investment. While differences in regulation might lie behind the divergent findings between the UK and the US, it is possible that the individual investment motive is stronger in the UK. This is due to another distinct feature of the UK political system: political parties can nominate individuals for political appointments in the form of a peerage, and a seat in the House of Lords. Indeed, we find that directors who make political donations are on average older and more likely to be UK nationals, consistent with them seeking a UK political appointment in the later stages of their career (Mell *et al*., 2015).

The paper is set out as follows. Section 2 explores motives for making individual political donations. In section 3 we outline our estimation approach. Section 4 discusses the data and section 5 presents the results. Section 6 concludes. We include three appendices: Appendix A giving background on the UK election system and on the five elections which we investigate;

Appendix B detailing our tests on the poll-based political sensitivity measures; and Appendix C containing additional results.

2. Motives for making individual political donations

Political donations can be categorised as either consumption or investment goods, depending on the motivation for the donation (see, for example, Ansolabehere *et al*., 2003). As a consumption good a donation is made with no expectation of a direct tangible reward, with value instead derived from political participation. The motivation behind such donations is individual utility maximisation, as might be the case with purely charitable donations, where in both cases if such donations are a normal good, their value would be expected to rise with income. Ansolabehere *et al*. (2003) conclude that the US evidence is supportive of campaign contributions being consumption goods, given their relatively small magnitude, and since there is no clear evidence that campaign contributions influence voting behaviour.

Nevertheless, it is plausible in the UK context that political donations are, at least in part, made as an investment in the expectation of a tangible benefit. The benefit, such as the award of a political position, might accrue directly to the individual donor. In the UK there is evidence that individuals are keen to buy their way into the UK political arena, perhaps attracted to the kudos of a peerage, carrying with it the entitlement to sit in the House of Lords. For example, Mell *et al*. (2015) provide evidence that donations are linked to individual peerage nominations; and in 2006 Prime Minister Tony Blair and politicians of other parties were questioned by police as part of their investigation into the Cash for Honours affair, which concerned the possibility that political parties were taking loans from supporters in return for nominations to the House of Lords. More recently, concerns were raised about potential conflicts of interest when Mr John Nash was given a peerage and made education minister in 2013, after he and his wife made a series of donations to the

Conservative Party. This followed other concerns relating to donations to the Conservatives' health spokesman, made in 2010 when Mr Nash was chairman of Care UK, a company providing services to the National Health Service (NHS). [3]

As the disquiet regarding these donations demonstrates, if the donor is the director of a company the benefit from the donation might also accrue indirectly to the employing firm. One obvious route is through the award of contracts. See, for example, reports of NHS contracts being awarded to Circle Health, a private healthcare firm, in February 2014, following donations to the Conservative Party made by linked investors; and advertising and publicity contracts awarded to Carat, part of the Dentsu Aegis Network after regular donations made by Jerry Buhlmann, its chief executive to the constituency of Michael Gove, the Conservative Party's then Justice Secretary. [4]

In general, however, these indirect rewards are likely to be less easy to identify and quantify. Donations might facilitate access to politicians, for example, allowing directors to influence political decision-making in a way that benefits the company. As an example, the Conservative Party treasurer, Peter Cruddas, was forced to resign in 2012 after he was covertly filmed offering "access to David Cameron and other leading members of the Government in exchange for donations to the Conservative Party. As party treasurer, he told the [Sunday Times'] undercover reporters that if they made substantial donations to the party they would have an opportunity to influence Government policy and to gain unfair

[3] https://www.theguardian.com/education/2013/jan/10/gove-appoints-john-nash-education-minister; http://www.dailymail.co.uk/news/article-1243579/Andrew-Lansley-embroiled-cash-influence-row-accepting-21-000-donation-Care-UK-chairman-John-Nash.html (both accessed 22 April, 2018).

[4]http://www.mirror.co.uk/news/uk-news/fury-tory-party-donors-handed-3123469; http://www.independent.co.uk/news/uk/politics/conservative-party-donor-jerry-buhlmann-receives-39m-treasury-contracts-a6927866.html; (both accessed 22 April, 2018).

commercial advantage through confidential meetings." Such access need not necessarily be covert: in 2011 there were reports of property developers paying via the Conservative Property Forum for breakfast meetings with senior Conservative MPs. More recently, reports have emerged that directors of oil companies have donated over £390,000 to the Conservative Party since Theresa May became Prime Minister.[5]

Of course this type of political access and influence need not imply corruption, but rather an efficient transfer of knowledge which can inform optimal policy decisions: politicians wanting advice or expertise relating to particular sectors might simply find it more efficient to seek it from donors with whom they have an established connection. The time a politician spends in becoming informed on a particular issue does, after all, impose an opportunity cost (see Grossman and Helpman, 2001, for a discussion of this issue). Equally, making donations may be a matter of maintaining reputation and social capital in general. For example, company directors are likely to attend charitable and social events, some of which may be political fundraisers for the Conservative Party. Any associated donations may not therefore necessarily reflect directors' specific political preferences.[6]

Our empirical exercise is founded on the premise that if political donations are investment goods we would expect the investment to deliver a greater benefit to the individual or firm if the party to which they donate gains political power. The winning party has the ability to make individual political appointments, and to determine regulation, fiscal policy and industrial policy in a way that might positively affect firm success. On the basis of this

[5] https://www.thetimes.co.uk/article/the-sunday-times-statement-vkzhxhp85hx; http://www.telegraph.co.uk/news/earth/hands-off-our-land/8754027/Conservatives-given-millions-by-property-developers.html; https://www.theguardian.com/business/2017/may/23/oil-bosses-have-given-390000-to-tories-conservatives-under-theresa-may; (all accessed 22 April, 2018).

[6] We are grateful to an anonymous referee for this point.

argument we investigate whether there is evidence that directors' donations are perceived as investment goods which do not solely benefit the director, by examining whether political donations are positively associated with firms' political sensitivities.

Evidence of a positive association between a firm's political sensitivity and its directors' donations to the winning party would support this hypothesis, but does not rule out the possibility that the donating directors also gain direct rewards, or simply increased utility, from their donations. A positive relationship could, at least in part, be driven by some form of selection or assortative matching. Assortative matching between firms, directors and political parties due to some common unobserved ideology would result in a positive correlation between sector-level, and within that, company-level returns, even if government policy is not in any way influenced by the donation or the donating director. For example, certain sectors might be favoured by a particular political party's stance, firms within these sectors might recruit directors who share the same political leanings and who also donate to the party, and these views may have also determined the director's own choice of job. Indeed, those firms that could gain the most within a sector from a particular political party being in power are more likely to recruit, and more likely to be attractive to donating directors.

A final possibility, as raised by Raff and Siming (2016), is that the direction of causality may be reversed. Rather than director political connections influencing government policy and subsequently firm performance, it may be that the prospect of a political appointment, such as membership of the House of Lords, affects CEO incentives and firm performance in a way which maximises politicians' objectives, which, as the authors find, may be at odds with those of shareholders. They show, using data over 15 years, that the abolition of knighthoods and damehoods in New Zealand acted to increase firm profitability and decrease firm employment, with their subsequent re-instatement having the opposite effects. While we cannot rule out that such incentives may also be at work due to the UK Honours system, and

that those directors who donate may be more likely face such incentives, it is not clear that government and shareholders' objectives will always be in conflict, hence it is difficult to theoretically sign the direction of any effect.

3. Estimation approach

In this section we first specify the returns model we use to estimate both our measure of company political sensitivity and post-polling day abnormal returns. We then discuss how we exploit variation in electoral conditions between 1992 and 2010 to test whether political risk is priced around general elections, and to confirm the validity of our measure of individual firms' political sensitivity. Finally, we outline how we investigate the relationships between our measure of political sensitivity and financial political connections.

3.1. Returns and the pricing of domestic political sensitivity

There is a large literature that investigates the degree to which equity markets are globally integrated, Stehle (1977) being probably the earliest example. With full global integration, country-specific risk – and domestic political risk in particular – will not be priced. But domestic risk will command a premium if not all investors within a country are globally diversified. While there is general agreement that the degree of integration is time-varying (see Bekaert and Harvey, 1995 and Arouri *et al*., 2012 for example), the evidence for full *versus* partial integration is mixed. For example, Bali and Cakici (2010) find that world market risk is not priced, while country-specific total and idiosyncratic risks do carry a premium. This finding is contradicted for developed markets by Arouri *et al*. (2012), who find that the total risk premium in these markets is largely explained by global factors.

Many studies examine markets around election dates, on the argument that a priced domestic political factor is likely to be particularly evident at these times. Although Santa-Clara and Valkanov (2003) find that their US Democratic risk premium is not concentrated around

election dates, much other work does find evidence of such a factor. For example, Li and Born (2006), studying the US market, and Bialkowski *et al*. (2008), studying 27 OECD countries, establish that volatility rises around elections, particularly those where the outcome is uncertain. Work by Pantzalis *et al*. (2000) on 45 countries suggests that at least some of this volatility, and its resolution, is associated with higher returns. More recently, Liu, Shu, and Wei (2017) provide evidence that political risk is priced in China.

Our returns model is based on the premise that country-specific risk is priced, and that domestic political risk is critical at election dates. We use the model given in equation (1), a parsimonious version of the partial integration framework used in Bekaert *et al*. (2014). We estimate the model using daily returns during the 250 days ending 2 months before the election is called, plus the 'campaign period'. Figure 2 shows the timeline of the estimation and event periods for the 2010 election.

[Figure 2]

The campaign period is defined as the interval preceding an election during which opinion polls are revised on a daily basis. UK election campaigns have historically been far shorter than those in the US. Before 2011 parliaments were of variable length, the election date being announced about one month in advance (see Appendix A). Our campaign period therefore begins approximately three weeks before polling day, shortly after the election is called.

Our model takes the form:

$$R_{i,t} = \alpha_{0,i} + \alpha_{1,i} EL_t + R_{w,t}\left(\beta_{0,i}^{w} + \beta_{1,i}^{w} EL_t\right) + R_{UK,t}\left(\beta_{0,i}^{UK} + \beta_{1,i}^{UK} EL_t\right) + \gamma_i R_{s,t} + e_{i,t} \qquad (1)$$

where $R_{i,t}$ is the excess return – over the risk-free rate – on stock *i* on day *t*;

$R_{w,t}$ is the excess return on the Datastream world market index on day *t* in Sterling, re-calculated to exclude UK market returns;

$R_{UK,t}$ is the excess return on the FTSE-Allshare market index on day *t*;

EL_t is an indicator variable which equals 1 when *t* is in the campaign period, and 0 otherwise. The interaction terms between EL_t and the UK and world factors account for the possibility that the heightened political risk during this period systematically affects groups of stocks, altering relationships among the factors and individual firms;[7] and

$R_{s,t}$ is the return on day *t* of a portfolio with unit exposure to UK election-related political risk. $R_{s,t}$ takes a value of zero when *t* lies outside the campaign period (i.e. when EL_t equals zero). During the campaign period (i.e. when EL_t equals 1) we assume that $R_{s,t}$ is proportionate to Δp_t, the change in the probability of electoral success of the eventual winning party (p_t) on day *t*, so the loadings on the political factor are estimated up to a constant of proportionality. Estimation of Δp_t is discussed in detail in section 4.5.

As can be seen from equation (1), the sign of $\hat{\gamma}_i$, our political sensitivity measure, indicates the political affiliation of firm *i*. In an election ultimately won by the Conservatives, for example, $\hat{\gamma}_i$ will be positive for those stocks which during the election campaign exhibit a tendency to rise with the expectation of a Conservative victory (pro-Conservative stocks), and negative for pro-Labour stocks. The absolute magnitude of $\hat{\gamma}_i$ is a measure of the extent to which stock *i* is generally sensitive to the election outcome.

Finally, we estimate the post-election period abnormal return for stock *i* using the parameters estimated in equation (1).

[7] We thank the editor for alerting us to this possibility.

3.2. Testing the measure of political sensitivity

Our approach relies on the $\hat{\gamma}_i$ measures providing a good proxy for political sensitivity. We test this by exploiting variation in electoral conditions over time and calculating separate sets of $\hat{\gamma}_i$ s for all elections between 1992 and 2010. This allows us to contrast the results for closely-fought elections where the outcome was highly uncertain with those for elections involving much less political risk. Political risk during an election will be at its highest and most clearly observable when an election outcome is unpredictable – with probabilities of success for each of the two main UK parties of around 50%, and/or substantial variability in opinion poll predictions – and when there are clear differences between the policies of the contending parties. In addition, the announcement of the election result will have a greater effect on stock returns the more surprising is the result.

A description of the UK electoral system and of the elections themselves is given in Appendix A. Of the five elections, those in 1997, 2001 and 2005 were the most predictable and had the smallest variability in opinion poll predictions during the campaigns. The differences between the parties were at their highest in 1992 and 2010. In 1992 there were strong ideological differences between the two parties, especially about privatisation, differences that had largely disappeared by 1997 with the advent of Tony Blair and New Labour. In 2010 there was sharp disagreement about the correct response to the credit crisis, especially about the speed with which the UK budget deficit should be eliminated.

If political risk is priced and our $\hat{\gamma}_i$ measures are fair estimates of sensitivity to this risk, we should therefore observe not only that pro-Conservative companies show positive (cumulative) abnormal returns at the resolutions of the 1992 and 2010 elections, with pro-Labour companies showing the opposite, but also that the abnormal returns are positively related to the $\hat{\gamma}_i$ measures. Moreover the abnormal returns should be more evident in the

1992 election than the 2010 election because of the misleading opinion polls and consequent surprise result in 1992; and also because of the protracted post-poll negotiation period in 2010, which makes it difficult to identify the 'announcement' date.[8] In contrast, there should be little evidence of politically-related abnormal returns at the resolution of the 1997, 2001 and 2005 elections, whose results were strongly and accurately predicted. Appendix B outlines how we test these predictions using OLS regressions and returns on portfolios constructed on the basis of the $\hat{\gamma}_i$ s.

3.3. Political finance and political sensitivity

For our main analysis of the 2010 election, we take a number of approaches to evaluate the relationships between firm characteristics and both the sign and the magnitude of our political sensitivity measure, $\hat{\gamma}_i$. We begin by estimating equation (2), a probit model, where the dependent variable, $\hat{\gamma}_i^{Pos}$, takes the value one if $\hat{\gamma}_i$ is positive, and where $\boldsymbol{X}_i$ represents a set of explanatory variables.

$$\Pr\left(\hat{\gamma}_i^{Pos} = 1\right) = \Phi(\boldsymbol{\theta}\boldsymbol{X}_i). \qquad (2)$$

$\boldsymbol{X}_i$ includes three types of variable: measures of financial connections, which are our main variables of interest; firm-level control variables; and industry indicators.

[8] For all elections other than 2010 we measure abnormal returns over the day following polling day, when the results were officially announced. We discuss the 2010 election in Appendix A, and consider two possible event periods, one ending on 12 May, and one ending on 13 May. We repeated all tests cumulating returns over both periods and results were qualitatively similar, so we present only those for the 5-day trading period to 13 May.

Financial connections

DonDirCon$_i$, an indicator variable which equals 1 if company *i* has a Conservative 'director-donor', that is, any director on company *i*'s board at the time of the election who donated to the Conservative Party between June 2005 and April 2010; and

UN_i^j, a measure of the degree of unionisation in firm *i*'s two-digit industry, *j*, measured as the share of industry employees who are union members in 2009.

Our prior is that if director donations represent a form of political connection which is perceived by the markets to be beneficial for the employing company, then the probability of $\hat{\gamma}_i$ taking a positive value will be positively associated with the Conservative Party director-donor indicator. The predicted relationship between the sign of $\hat{\gamma}_i$ and the degree of unionisation is less clear-cut. One could argue that companies with a history of high worker representation would be closer to the Labour Party and hence benefit from its election. Alternatively, a highly-unionised workforce combined with a Labour Party in power might be seen by the markets as a threat to profits. We are therefore agnostic about the sign on the UN_i^j variable.

Firm-level control variables

We incorporate as control variables two other firm-level characteristics which might plausibly affect their political sensitivity:

LnMV$_i$, log of company market value; and

Leverage$_i$, since a major focus of debate in this election was how to deal with the credit crisis, so highly-leveraged companies might be expected to be particularly sensitive to the outcome.

A firm's percentage of foreign sales is also a potentially important independent variable, but was available for only 245 out of the 300 firms. When we included it as an additional control, the coefficients were generally not significant at conventional levels, and its inclusion had no material effect on our main results.

Industry indicators

We include two alternative types of industry indicator.

IND_i^k is a standard indicator variable which equals 1 if company *i* is in broad industry *k*, based on ten categories defined using the Industry Classification Benchmark.

Indicators for the 'Conservative-only donor' industries versus the 'mixed donor' industries. GpA_i, is an indicator variable which equals 1 if firm *i* is in Group A, the set of industries whose donations – whether direct corporate donations or *via* directors – go *only* to the Conservative Party. GpB_i, is an indicator variable which equals 1 if firm *i* is in the set of 'mixed donor' industries – those which either donate to both parties or which do not donate at all.[9] We also consider interactions between these indicators and our main variables of interest to examine cross-group heterogeneity in the estimated coefficients.

To focus on the relationship between the magnitude of $\hat{\gamma}_i$ and the political connections measures we estimate OLS and quantile regressions. The quantile regressions both mitigate the effect of outliers and incorporate more flexibility than is possible in an OLS conditional mean model, allowing us to explore how the estimated relationships vary across the conditional distribution of $\hat{\gamma}_i$. For example, we might expect larger companies to be less

[9] These indicators are defined based on the set of firms in our estimation sample. We cannot rule out that other, smaller listed firms within the Conservative-only donor industry group also make donations directly or indirectly via their directors to the Labour Party.

vulnerable to domestic political events than smaller ones so their $\hat{\gamma}_i$ s will generally be closer to zero. For pro-Labour companies, with negative $\hat{\gamma}_i$ s which lie in the low conditional quantiles, market value will therefore have a dampening, *positive* influence. For pro-Conservative companies, with positive $\hat{\gamma}_i$ s in the high conditional quantiles, market value will have a dampening, *negative* influence. Furthermore, using a quantile regression will allow us to identify whether there is a different relationship between donations and the $\hat{\gamma}_i$ s in the tails of the conditional distribution. For example, it is possible that the marginal effect of having a Conservative director-donor is greater among companies in the top tail of the distribution, which would potentially benefit the most from a Conservative-led government. Hence we estimate the models shown in equations (3a) and (3b).

$$\hat{\gamma}_i = \boldsymbol{\theta} \boldsymbol{X}_i + u_i \tag{3a}$$

$$\hat{\gamma}_i = \boldsymbol{\theta_q} \boldsymbol{X}_i + u_{qi}, \quad \text{where } Quant_q\left(\hat{\gamma}_i \middle| \boldsymbol{X}_i\right) = \boldsymbol{\theta_q} \boldsymbol{X}_i, \tag{3b}$$

$Quant_q\left(\hat{\gamma}_i \middle| \boldsymbol{X}_i\right)$ is the *q*th conditional quantile of $\hat{\gamma}_i$ given $\boldsymbol{X}_i$, and $\boldsymbol{\theta_q}$ is the vector of parameters relating to that quantile.

Finally, we conduct robustness tests to address potential estimation error in our measure of political sensitivity. We repeat the tests using as dependent variables the two alternative political sensitivity measures discussed above: post-poll cumulative abnormal returns (CARs) over the 2010 event period ending on 13 May (see footnote 8); and a $\hat{\gamma}_i$ based on share prices from Intrade, a prominent prediction market at the time of the election. We also carry out a weighted least squares estimation with each of the two $\hat{\gamma}_i$ measures as dependent variable, in each case weighting by the *t*-statistic of the $\hat{\gamma}_i$, thereby giving more weight to those observations whose $\hat{\gamma}_i$ is estimated with least error.

4. Data and descriptive statistics

For our main analysis of political finance at the 2010 General Election we need a sufficiently large sample of donations, while minimising effects of thin trading on the estimation of the $\hat{\gamma}_i$ s. We first collected data on donations made by the largest 500 UK listed companies or by their directors, and of these we selected the largest 300 for use in estimation, as this captured almost all of those which donated either directly or *via* directors. For our tests of the validity of the $\hat{\gamma}_i$ s as political sensitivity measures across all five elections between 1992 and 2010 we chose a slightly smaller sample size of the largest 250 companies, because this further mitigates the thin trading problem and we are not constrained by the requirement to have a useable donations sample. We repeated these tests on the larger 2010 sample as a robustness check. All financial data used to estimate equation (1) are from Thomson Datastream.

Table 1 presents descriptive statistics on our data relating to the largest 300 firms in 2010 and the following sections discuss these variables in more detail.

[Table 1]

4.1. Donations

From January 2001 donations to political parties amounting to more than £7,500 from a single source in a calendar year have been published by the UK Electoral Commission. The data are available from its website and include the date of donation, donor type, donor name, donation recipient and the amount donated. We downloaded details of all donations to political parties and candidates reported by the Commission between June 2005 – the month following the 2005 election – and April 2010. We assigned donations made to individuals to the political party which the candidate represented.

Using BoardEx we matched donations by individuals to information on directors of our sample of companies. Matching donor names with director names is not straightforward because in many cases the names of donors in the Electoral Commission dataset contain an abbreviation of some sort. We therefore carried out the matching manually.

We define company *i* as a 'director-donor employer' if at the time of the 2010 UK General Election it employed at least one director who made at least one personal political donation between June 2005 and April 2010. Note that one director could sit on the boards of several companies at the same time and, if that was the case, we attribute the donation to all the companies that employed the director. The busiest director was sitting on the boards of three different companies in our estimation sample at the time of the election.

Panel A of Table 1 shows that 14% of companies in our sample are identified as employing Conservative director-donors, while only 2% of companies employed Labour director-donors. In terms of *corporate* donations only 2% and 3.7% of the companies donated directly to the Conservatives and Labour respectively. The average amount donated attributable to one company conditional on the company being a Conservative director-donor employer was £55,877, with a maximum of £578,621 and a minimum of £1,500. The value of these donations dwarfs donations made directly by companies, and donations to the Labour Party.

4.2. Political sensitivity and donation patterns by industry

Panel B in Table 1 splits industries into the two groups defined above, A and B. It shows that donation patterns vary quite widely across industries. Indeed, no donations are made by any companies or directors in the Technology industry, [10] and there are no director donors in the Utilities industry (we discuss director characteristics in these industries in section 4.4).

[10] A 2010 US study reported that companies in the Information Technology industry – equivalent to our Technology industry – were the least likely to make politically-driven expenditures (Welsh and Young, 2010).

Group A industries, where no donations to the Labour Party are observed, have markedly higher mean $\hat{\gamma}_i$ s and cumulative abnormal returns than do Group B industries.[11] *t*-tests of differences between the two groups' means for each variable show that they are statistically significantly different at standard levels. Figure 3 shows kernel density plots for each of these two variables for the two industry groups. The distribution for Group A industries tends to lie to the right of that for Group B. For our main measure of political sensitivity $\hat{\gamma}_i$, the mean and median for the whole sample are both positive: as might be predicted, there is a tendency for share returns to indicate more support for the traditionally pro-business party, the Conservatives, rather than for Labour.

[Figure 3]

The last column in Panel B summarises UN_i^j, the degree of unionisation in firm *i*'s two-digit industry, *j*. This is measured as the fraction of workers that report being union members in 2009 and varies at the two-digit industry level. It is derived from the UK Labour Force Survey. Unionisation rates are similar across the Group A and B industries.

4.3. Company characteristics

Panel C in Table 1 summarises mean company characteristics by industry. Company financial characteristics are obtained from Datastream, and characteristics on board membership from BoardEx. The asterisks against the Group A industry means in row 1 of the panel denote the statistical significance of *t*-tests of differences between Group A and Group B means.

Market value was measured at the start of March 2010, the month in which the election was called. Group A companies are, on average, significantly larger than Group B companies.

[11] $\hat{\gamma}_i$ s based on Intrade prices exhibited the same patterns so are not shown, for reasons of space.

We incorporate (logged) market value in our regression tests, as we do leverage – the book value of debt divided by total assets – which is lower for Group A companies but only moderately so. The means of return on assets (RoA) and Tobin's q are not significantly different between the two groups. Group A firms have slightly higher board size, as would be expected given their higher market values, but not markedly so.

We also examined changes in RoA and sales following the election to identify whether donating exclusively to the Conservative Party might have improved company performance, as is hinted at by the anecdotal evidence discussed in section 2. We do not present the data as, although summary statistics suggested that RoA increased more for Group A firms in the first year after the election, and, more strongly, that sales rose more for Group A firms, we found no evidence that these differences could be ascribed to donating characteristics.

4.4. Characteristics of donating directors

Panel D in Table 1 summarises characteristics of donating versus non-donating directors by industry. The first column shows that donors in Group A industries, who by definition donate only to the Conservative Party, sit on only one board within the 300 firms in our estimation sample, while on average director donors in Group B industries sat on 1.5 boards (none of them sat on the boards of companies in Group A). This means that, in cases where Group B directors did donate to the Conservative Party, not only was any impact of their donations on the company frequently 'diluted' by donations to the Labour Party but it was also diluted by being associated with more than one company. Non-donor directors in Group A industries also typically sat on fewer boards within this set of larger listed firms, but we find no differences either between donor and non-donor directors, or between Group A and Group B industries in the number of other listed and private companies on which they hold board seats.

We also look at the fraction who are Executive versus non-Executive directors, and the fraction who hold the position of CEO or Chairman. We find few significant differences, but it is worth bearing in mind the small sample of director donors. Finally, we tabulate the mean age of directors and the proportion who are UK nationals. The table indicates that director donors are more likely to be older, and much more likely to be UK nationals.

Two industries, Utilities and Technology contain no director donors. The table indicates that the characteristics of directors in these industries are more in line with those of non-donor directors than donor directors in the other sectors. For example, they are typically younger, and in the Technology industry they are less likely to be UK nationals.

4.5. Variation in the probability of winning the election, Δp_t

p_t is measured as the difference between the opinion poll percentage favouring the eventual election winner and that favouring the eventual loser.

For the 2010 election we have three sources of publicly-available data that were updated daily: the BBC Poll of Polls, the Aggregate Poll published in the Guardian newspaper, and the YouGov poll, published in the Sun or the Sunday Times newspapers. Of these the Poll of Polls and the Aggregate Poll incorporated many other opinion polls; the Poll of Polls was based on the smoothed median of recent opinion polls, while the Aggregate Poll did not distinguish between 'stale' and recent polls. Raw data from many polls are also available to us for this election so there are many different methods we could choose to combine the data, and no theory to guide us on the most appropriate choice. Our main method takes a simple average of all three daily-updated polls, as being as good a combination scheme as any other: it gives more weight to the individual poll which changes daily, incorporates other polls, and adopts a certain degree of smoothing *via* the Poll of Polls.

As a robustness check we use data on contract prices on Intrade, the main prediction market operating at the time of the 2010 election. Prediction markets offer the opportunity to trade in shares which pay out a fixed amount on the occurrence of an event, such as 'The Conservatives to win the UK Election'. Since they pay out nothing if the event does not occur, the price of such shares is generally taken to be the market's estimate of the probability of the event occurring. Wolfers and Zitzewitz (2007), for example, cite numerous empirical studies which have found that the probability of a binary prediction-market contract paying off is fairly represented by its price (for example Berg *et al*., 2008, Wolfers and Zitzewitz, 2006 and Tetlock, 2004). The Conservatives-to-win Intrade contract price is therefore a more direct indication of opinions about the probability of Conservative election success than the party's percentage vote share as predicted by the polls. The prediction market also has the advantage that we can identify the time at which a trade was made and a price set, unlike opinion poll data, for which it is not clear exactly when the data become public information. However, there is relatively thin trading in the shares, so we use this measure simply as a robustness test of the poll-based one.

For the analysis of the 1992 election we use the data given in ap Gwilym and Buckle (1994). Data for the 1997, 2001 and 2005 elections are available from various internet sources, and we construct averages of percentages across those polls for which we can obtain information, taking account only of newly-published polls.

5. Results

We first summarise our tests to demonstrate the validity of our political sensitivity measure, and then discuss our results on the relationship between our measure of political sensitivity and political financial connections.

5.1. Tests on $\hat{\gamma}_i$ as a political sensitivity proxy

In this section we summarise the evidence for the validity of our $\hat{\gamma}_i$ estimates as a measure of political sensitivity; Appendix B presents the full results of the tests. Following the predictions in Section 3.2 we first run OLS regressions to estimate the relationship between the $\hat{\gamma}_i$ measures and company abnormal returns for each of five elections, contrasting the results for the closely-fought elections with those for which the outcome was easily predicted. The results are reported in Table B1 in Appendix B. We find little evidence of a relationship between the $\hat{\gamma}_i$ measures and abnormal returns in the non-closely fought elections, but for both the 1992 and 2010 elections we find a positive and significant relationship between the political sensitivity measure and (cumulative) abnormal returns, particularly for 1992.

These results are supported by a set of tests on (cumulative) abnormal returns of portfolios which are long in high $\hat{\gamma}_i$s and short in low $\hat{\gamma}_i$s, which are reported in Appendix B. The mean and median (cumulative) abnormal returns of these portfolios are shown in the left-hand column of Figure B1 in Appendix B, while *p*-values on tests of the significance of the means and medians are shown in the right-hand column of the Figure. The 1992 abnormal returns dominate the others and, although the 2010 returns are much lower than the 1992 ones, the *p*-values on both the parametric and non-parametric tests shown in the right-hand column – which are so low as to be almost indistinguishable – indicate that these returns are strongly significantly different from zero. In contrast to the closely-fought 1992 and 2010 elections, the 1997, 2001 and 2005 election portfolios have abnormal returns that hover around 0 and no strong indication of significant abnormal returns related to the election.

These results all suggest that the $\hat{\gamma}_i$s are suitable data-driven measures of general political sensitivity.

5.2. Political sensitivity and political financial connections

We now turn to the main tests of the paper. Table 2 shows the results of estimating equations (2), (3a) and (3b) with a full set of industry dummies, IND_i^k. The base industry is Utilities, a Group A industry. *DonDirCon*$_i$ is an indicator of whether or not the company had a director who donated to the Conservatives between 2005 and 2010. We report marginal effects for the probit specifications. For the quantile regressions we report coefficient estimates, and mean and median predicted $\hat{\gamma}_i$ s for the 25th, 50th (median) and 75th conditional quantiles. The table suggests that there is no evidence that employing a director who donates to the Conservative Party is associated with a company having a positive (column 1), or more generally, a higher value of $\hat{\gamma}_i$ (columns 2 to 5); if anything the coefficient estimates point towards the opposite being true, although they are generally not statistically significantly different from zero. [12]

The coefficients on UN_i^j imply that higher unionisation rates are associated with lower values of $\hat{\gamma}_i$, although again are not generally statistically significant. The direction of these estimates would suggest that for firms in more highly unionised sectors an increase in the likelihood of a Conservative government might be perceived as a negative signal for future profitability, with firms in these sectors potentially benefitting more from the election of a Labour government.

[Table 2]

[12] We experimented with adding an indicator variable equal to 1 if company *i* directors made above-median value donations to the Conservative Party, but found no evidence that having relatively generous director donors has a positive association with political sensitivity. (We did not use donation values as the distribution is so skewed that the results are strongly influenced by outliers.) We also included an indicator variable for direct company donations to the Conservative Party. The coefficients were generally negative and statistically insignificant, and inclusion of this variable did not affect the coefficients on the director donor dummy**.**

The coefficients on the *DonDirCon*$_i$, and UN_i^j variables in the quantile regression estimates reported in columns (3)-(5), and indeed across the entire conditional distribution of the $\hat{\gamma}_i$ s, always lie within the 95% confidence intervals of the OLS estimates in column (2). The same is true for the relationship between the political sensitivity measure and market value, and that with leverage, although these do exhibit some variation across the conditional distribution of the $\hat{\gamma}_i$ s. The coefficient on market value is more strongly negative and statistically significant for top-quantile, positive $\hat{\gamma}_i$ s. As discussed earlier, it appears that, for companies with positive $\hat{\gamma}_i$ s, the larger the company the lower tends to be its political sensitivity. The overall relationship between leverage and political sensitivity, indicated by the OLS estimate, is negative. But the relationship is considerably stronger in the lower $\hat{\gamma}_i$ conditional quantiles, so for these observations leverage tends to amplify political sensitivity as we anticipated. In line with our expectations leverage has a positive relationship with political sensitivity in the top quantile, although not statistically different from zero. The relationship is robust to alternative definitions of leverage.

A notable feature is that some of the coefficients on the industry dummies indicate significant variation in political sensitivity across our two broad industry groups. The base-line industry is 'Utilities', which is in Group A. In line with the data presented in Panel B of Table 1 the Conservative-only donor Group A industries – and Basic Materials, and Oil and Gas in particular – have significantly higher $\hat{\gamma}_i$ s than the baseline, while Group B industries tend to exhibit lower values. These differences are more pronounced (and exhibit greater statistical significance) in the upper and lower conditional quantiles respectively, since, as Figure 3 indicates, firms in Group A sectors are more prevalent in the upper quantiles and those in Group B in the lower.

5.2.1. Industry heterogeneity

In Table 3 we examine heterogeneity in the main relationships of interest across the two broad industry groups, A and B. In Panel A we incorporate $DonDirConA_i$ and $DonDirConB_i$, which interact the $DonDirCon_i$ variable with the GpA_i and GpB_i indicators. We also replace the industry dummies with GpA_i. Otherwise the specification is comparable to that in Table 2.

[Table 3]

The results reveal some differences between the Group A and Group B industries. First, in line with the results for the industry dummies in Table 2, the coefficient on the Group A dummy, GpA_i, is consistently positive and statistically significant. Since the set of firms in Group A industries include both donor and non-donor firms (and any additional effect of employing a Conservative-donating director is taken account of by the relevant dummy), these results point to an industry-wide relationship, possibly incorporating spillovers from donor to non-donor firms.

Second, for the Conservative-only donor group, A, the Conservative director-donor dummy is consistently positive, whereas for the mixed donor group, B, it is consistently negative – indicating that, if anything, for firms in Group B employing a Conservative director donor is associated with lower political sensitivity, relative to non-donor firms in that group. However, as shown at the bottom of the table, the coefficients for the two groups are statistically significantly different from each other only in the probit and OLS estimates. In terms of magnitude the OLS results suggest that, for a firm in Group A, employing a director who donates to the Conservative Party is associated with an additional increase in the political sensitivity measure of around 0.15 compared to non-donor firms in Group A, equivalent to a move from the median value of $\hat{\gamma}_i$ to around the 75th quantile of the distribution.

As noted above, for firms in Group B industries, in particular in the upper conditional quantiles of $\hat{\gamma}_i$, employing a director who donates to the Conservative Party is associated with a decrease in $\hat{\gamma}_i$. It is not immediately clear why this should be the case, therefore, to exclude the possibility that this coefficient is picking up some other form of cross-group heterogeneity, in Panel B of Table 3 we allow the coefficients on all right-hand-side variables to vary according to whether a company is in a Group A or Group B industry.

The coefficients on the director-donor dummies in Panel B are largely unchanged. One notable difference between Panels A and B, though, is that once we allow for the full set of group-level interactions, the coefficients on the Group A dummy lose statistical significance, as there is now insufficient variation to identify differences between the Group A and Group B industries on average. However, as shown in Table C1 in Appendix C, if we re-estimate Panel B instead including the more disaggregated set of industry dummies, we continue to find positive and significant coefficients for individual Group A industries – Basic materials, Healthcare, and Oil and gas in the OLS specification. And, in line with Table 2, the coefficients for these industries are larger and more statistically significant in the upper end of the conditional quantile distribution. The inclusion of a full set of industry dummies also allows us to rule out the possibility that our estimates are biased due to industry-level unobservables. When we include the industry dummies, the coefficients on the Conservative donor indicator variables remain similar to those in Table 3, both in magnitude and statistical significance.[13] In some specifications the coefficients on the Group A and Group B

[13] We also experimented with including an indicator of whether the firm was associated with a financial donation to the Labour Party (via a director or the company itself). In the OLS specification in Table 3, Panel B the coefficient on this Labour donor dummy was negative (-0.048) but statistically insignificant (*p*-value 0.48), and its inclusion had very little effect on the coefficient on the Group B Conservative director-donor dummy.

Conservative director donor dummies are also statistically significantly different to each other, with the former coefficient typically being positive and the latter negative.

Of course, for both the Group A and Group B Conservative director donor dummies, there is always the caveat that the coefficient estimates may be influenced by firm-level unobservables, such as some form of selection or sorting. For example, those firms within Group A industries that could in any case gain the most from a Conservative government being in power might be more likely to try and recruit, and be a more attractive employer for, directors with Conservative political leanings who also donate to the party, creating a form of assortative matching. As shown in Table 1 Panel D, one such characteristic, potentially consistent with director-firm sorting within Group A industries, is that at the time of the election each Conservative-donating director within Group A industries sat on the board of only one company within our sample, whereas for Group B these directors (even when restricting to Conservative-only donor directors) generally sat on more than one company board. Hence, for Group A companies the donation is more clearly attributable to a single firm, while for Group B companies any potential benefit from the donation might be diluted or less transparent. Therefore, it is possible that the negative coefficients observed on the director donor dummies in Group B industries represent the net effect of a weakened positive relationship with $\hat{\gamma}_i$, and a negatively correlated firm-level unobservable.

Turning to the results for our measure of unionisation, the coefficients on the UN_i^j variables in both panels of Table 3 in general remain negative, but there is some suggestion that the coefficients on this variable differ across the two groups of industries in the upper conditional quantiles.

In summary, for industries in which firms donate only to the Conservative Party and for which we can therefore abstract from the influence of Labour Party donations, we find that,

on average, firms in these industries have higher (and more positive) political sensitivities to the probability of a Conservative win. However, conditional on this, comparing donor and non-donor firms within these industries, the results provide only a limited indication that political donations made by directors are associated with positive sensitivity to the electoral success of the Conservatives. For the set of firms in industries that make donations to both the Conservatives and Labour – or make no financial donations at all – director donations to the Conservative Party appear to have a negative relationship with our measure of political sensitivity. However, as we discuss below, this result is not borne out strongly in the robustness checks.

5.2.2. Robustness checks

We report on a series of robustness tests, re-estimating the equations with the two other sensitivity measures: the cumulative abnormal returns over days 1 to 5 following polling day and the $\hat{\gamma}_i$ estimated using Intrade prices.

In Table 4 we show specifications using the CARs. Panel A is equivalent to the specification in Table 2. The results differ from those in Table 2 in that they suggest a strong positive relationship between the presence of a Conservative-donating director and sensitivity to the election outcome. Turning to the industry dummies, we find positive and significant coefficients for the Basic materials industry in Group A as in Table 2, and some instances of negative and significant coefficients for two of the Group B industries. Panels B and C show specifications equivalent to those in Table 3. They suggest that in both Group A and Group B industries, the presence of a Conservative donor director is positively related to cumulative abnormal returns between polling day and the formation of the Conservative led coalition government. Although the coefficients on the Conservative donor indicator for Group B industries are more precisely identified due to the larger sample size, they are not statistically

significantly different from those for firms in Group A. In Panel B of Table 4 we also continue to find positive and statistically significant coefficients on the Group A dummy – firms in these industries exhibit higher cumulative abnormal returns on average, but in Panel C there is insufficient variation remaining to identify a statistically significant difference between Group A and Group B industries.

[Table 4]

In Table 5 we show equivalent specifications where the dependent variable is $\hat{\gamma}_i$ estimated using Intrade prices. We find results in line with those in Tables 2 and 3, which, for the between-firm comparisons, do not support a clear relationship between the presence of a Conservative director-donor on the board and firm political sensitivity. But the results in Panel A of Table 5 again indicate that a number of industries in Group B exhibit lower political sensitivity using this alternative measure.

[Table 5]

Finally, in Appendix C Tables C2 and C3, we report the results of weighted least squares estimations using the two $\hat{\gamma}_i$ measures (poll-based and Intrade-based) as dependent variables, where we weight by the *t*-statistic of the respective $\hat{\gamma}_i$. These are equivalent to the specifications in Tables 2 and 3. For the specifications comparable to Table 2 we continue to find negative but statistically insignificant coefficients on the Conservative director-donor dummy. Examining heterogeneity by industry group, in the specifications equivalent to those in Table 3, when using the poll-based $\hat{\gamma}_i$ as the dependent variable we find only some indications that the coefficients on the Conservative director-donor dummies for the two groups of industries are statistically significantly different to each other, with those for Group A positive and those for Group B negative. Both Table C2 (the coefficients on the industry dummies) and Panel A of Table C3 (the coefficient on the Group A dummy) lend support for

Group A industries exhibiting higher political sensitivity to a Conservative victory than those in Group B.

6. Conclusions

The main objective of this paper is to test whether indirect forms of political financial support from company directors are viewed by the markets as surrogate corporate political donations, which have been found in the US to create party-political links, but which are subject to strong regulation in the UK. To do this we investigate the relationship between donations to the Conservative Party by company directors and companies' political sensitivity.

We use the relationship between changes in opinion polls and individual company returns as our primary firm-level measure of sensitivity to domestic political risk. To support our main tests we confirm that domestic political risk appears to be priced in the UK around elections, and that information conveyed by opinion polls is a suitable proxy for this risk. To do this we link the poll-based sensitivity measure to abnormal returns on the announcement of election results, and exploit variation in electoral conditions over time by investigating all elections between 1992 and 2010.

Focusing on the 2010 election, we present evidence that firms in a set of 'Conservative donor only' industries, where we observe corporate or director donations to the Conservative Party but no donations to the Labour Party, have, on average, higher and more positive sensitivities to the electoral fortunes of the Conservative Party. But conditional on this, we find little consistent evidence that for firms within this set of industries, employment of a director who donates to the Conservative Party is positively related to a firm's sensitivity to the Conservative Party winning the election.

Overall, the results point more strongly towards an industry-level relationship, rather than a relationship specific to those firms within industries employing director donors. It remains of

course possible that our results are driven by some form of director-industry or director-firm positive assortative matching, according to the benefits that industries and companies might derive from different parties holding political power, and director political leanings or other attributes.

We provide some descriptive statistics on the characteristics of donor versus non-donor directors, which implies that such donor directors are typically older, and more likely to be UK-nationals. Given the lack of robust evidence that, over and above any industry-level relationship, employing a Conservative director donor is positively associated with sensitivity to a Conservative electoral victory, we cannot conclude that such donations are perceived as surrogates for corporate donations that would generate value for those firms. Instead, given the characteristics of the set of directors who donate, it seems more likely that these individual donations are made purely for consumption value, or in expectation of a private return to those individuals, such as a political role in government or the House of Lords towards the end of their career.

APPENDICES

A. UK ELECTIONS BETWEEN 1992 AND 2010

The pre-2011 UK electoral system aids identification of election campaign periods when a priced political factor might be measurable. Until 2011 the UK had variable-term parliaments with a maximum term of five years.

Each election campaign had a clearly-defined starting point: the announcement of the election date approximately a month before the election took place. This announcement triggered intense campaigning and opinion polling, with domestic political news dominating the media. Consequently within this period election-related information reached the markets with high frequency and visibility. The relatively short campaign period, characterised by a heightened importance of domestic political news, means that changes in a stock's price during this period are especially likely to be heavily influenced by its sensitivity to the flow of political information.

Our estimation and tests of the poll-based political sensitivity measure focus on the five elections between 1992 and 2010. The two main contenders for government in these elections were the Labour Party and the Conservative Party. The UK parliamentary election system means that the party with the higher percentage of supporting voters is generally the eventual winner, although the geographical distribution of support also plays a part. The system is a 'first past the post' one, in which the candidate in each constituency who wins more votes than any other candidate is elected to Parliament. There is no requirement to win a majority of the votes. The party which has more Members of Parliament than all the other parties forms the government. Consequently, the overall percentage of voters who support a party is only approximately related to the number of seats that the party will win, because the distribution of the voters across constituencies is also important.

Table A1 summarises the details of the elections we analyse that are relevant to our study. The table shows that decisive wins were correctly predicted by the opinion polls and the press in 1997 and 2001. The 2005 outcome – including the loss of Labour seats – was also predicted correctly.

[Table A1]

The 1992 and 2010 elections were different from the other three in our sample. Both of these elections were more closely fought than were the other three. The 1992 election was unusual in that the opinion polls and the press were wrong throughout the election campaign: they predicted a Labour win and the eventual outcome took the country by surprise. The 2010 election was unusual in that it resulted in a hung parliament for the first time since 1974. Support for the third major party, the Liberal Democrats, was sufficiently strong compared with support for the other two parties that, although there was the possibility of an outright Conservative win, a hung parliament was believed to be more likely. In the event the Conservative Party did win more seats than the Labour Party, but not enough for an outright majority. Polling day was followed by a five-day period of bilateral negotiations between the Liberal Democrats and each of the two main parties, each attempting to form a coalition. Eventually the Conservatives were successful, despite the Labour Party having more political affinity with the Liberal Democrats. Table A2 gives a more detailed timeline relating to this election, which informs our decisions regarding event-period timing.

[Table A2]

B. TESTING THE POLITICAL SENSITIVITY MEASURES

We carry out two forms of tests of the predictions in section 3.2. In the first test we use event day/period returns to estimate equations of the form shown in equation (B1).

$$AR_{i,T} = a + b\hat{\gamma}_i + e_i, \qquad \text{(B1)}$$

where $AR_{i,T}$ denotes the abnormal return on stock i on event day T, or a cumulative abnormal return for the 2010 election. If the $\hat{\gamma}_i$ s are suitable proxies for general political sensitivity, the less predictable is the outcome of an election, the larger and more significant should be the coefficient on $\hat{\gamma}_i$.

The choice of the event day for all elections other than 2010 is clear: the outcome was known by the end of the day following polling day. The final outcome of the 2010 election was revealed almost a week after polling day, and the timeline in Table A2 of Appendix A suggests that, given that the London Stock Exchange close of trade is at 4.30 pm, Wednesday 12 May or Thursday 13 May are the most appropriate event days. We considered two event periods, cumulating abnormal returns from the day after polling day to 12 May and to 13 May. Both yielded similar results so we present only those cumulated to 13 May.

Since the $\hat{\gamma}_i$ s are estimated, they will inevitably be subject to measurement error. To address this issue our second test investigates (cumulative) abnormal returns of portfolios formed according to the $\hat{\gamma}_i$ s. For each election we rank the stocks in order of $\hat{\gamma}_i$ and construct an equally-weighted portfolio long in high- $\hat{\gamma}_i$ stocks and short in low- $\hat{\gamma}_i$ stocks. If our hypotheses are valid, the less predictable is the outcome of an election, the higher (more positive) should be the portfolio abnormal return on the event day. One advantage of this approach is that it requires only a reasonably accurate ranking of the $\hat{\gamma}_i$ s, rather than accurate estimates of their values, as in the regression test.

The choice of the number of stocks to include in the portfolio is, of course, subjective. We want a sufficient number of stocks to obtain meaningful results, but not so many that differences between the groups are obliterated. We therefore try portfolios ranging from 30 in each of the high- and low- $\hat{\gamma}_i$ groups, up to 100 in each group.

We assess whether the (cumulative) abnormal returns of the high-minus-low portfolios are different from zero using a parametric test and a non-parametric rank test. The parametric test is the Kolari and Pynnönen (2010) ADJ-BMP statistic and the non-parametric test statistic is the GRANK-T statistic of Kolari and Pynnönen (2011). Both tests correct for the upward bias in test statistics caused by ignoring non-event period interdependence. We also adjust for event-day-induced variance, as in Patell (1976), modified for cumulative abnormal returns (see, for example, Salinger, 1992, p41).

Table B1 presents the coefficients on $\hat{\gamma}_i$ in equation (B1) for each of the elections (estimated using a Huber-White adjusted covariance matrix). For 2010 we show results for both poll-based and Intrade-based $\hat{\gamma}_i$ s. Note that the poll-based and Intrade-based coefficient sizes are not comparable as the proxies for Δp_t are of different orders of magnitude. There is little evidence of the election outcome, or sensitivities to that outcome, having any role in explaining returns for the 1997, 2001 or 2005 elections. For both 1992 and 2010 the coefficients on $\hat{\gamma}_i$ are significant and positive.

[Table B1]

The portfolio-returns tests confirm the regression results. Figure B1 summarises the event-period (cumulative) abnormal returns of the portfolios that are long in high-$\hat{\gamma}_i$ and short in low-$\hat{\gamma}_i$ firms, for between 30 to 100 firms in each set (that is, total portfolio sizes 60 to 200). The left-hand column shows the means and medians while the right-hand one shows the *p*-values of the parametric and non-parametric tests. The Figure confirms the general picture presented by the regression tests. The 1992 results dominate the others: the abnormal returns are about five times higher and the *p*-values on both tests are so small as to be almost invisible. They also suggest that the returns are very closely related to the size of the $\hat{\gamma}_i$ s,

because as the portfolio sizes increase and stocks with less extreme $\hat{\gamma}_i$ s are introduced, the abnormal returns fall. The 2010 results – for which the abnormal returns are measured over the extended post-polling period – are dwarfed by the 1992 ones but both the parametric and non-parametric tests suggest that these returns are significantly different from zero.

[Figure B1]

In contrast to the closely-fought elections in 1992 and 2010, the 1997, 2001 and 2005 election portfolios have abnormal returns that hover around 0, with *p*-values on both tests that are not significant at standard levels. For these there is no indication of significant abnormal returns related to the election.

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Table 1 Summary statistics

Panel A Donations: Firm level

	Mean	SD	Min	Q1	Median	Q3	Max
Indicator variables							
Conservative director-donor employer *(DonDirCon$_i$)*	0.143	0.351	0	0	0	0	1
Conservative company-donor *(DonCoCon$_i$)*	0.020	0.140	0	0	0	0	1
Labour director-donor employer *(DonDirLab$_i$)*	0.023	0.151	0	0	0	0	1
Labour company-donor *(DonCoLab$_i$)*	0.037	0.188	0	0	0	0	1
Amounts							
Conservative director-donations *(DonDir£Con$_i$)*	8,009	50,249	0	0	0	0	578,621
DonDir£Con$_i$, conditional on *DonDir£Con$_i \neq 0$*	55,877	123,437	1,500	2,500	7,000	25,959	578,621
Conservative company-donations *(DonCo£Con$_i$)*	742	10,365	0	0	0	0	178,000
DonCo£Con$_i$, conditional on *DonCo£Con$_i \neq 0$*	37,120	69,309	2,914	3,500	10,404	17,500	178,000
Labour director-donations *(DonDir£Lab$_i$)*	218	2,519	0	0	0	0	42,000
DonDir£Lab$_i$, conditional on *DonDir£Lab$_i \neq 0$*	9,329	14,734	500	2,000	3,800	10,000	42,000
Labour company-donations *(DonCo£Lab$_i$)*	520	5,169	0	0	0	0	82,648
DonCo£Lab$_i$, conditional on *DonCo£Lab$_i \neq 0$*	14,169	24,212	1,400	1,500	5,314	17,413	82,648

Continues...

Panel B Political sensitivity and donation patterns by industry

	No. of companies	Mean $\hat{\gamma}_i$ (%)	Mean CAR (1,5) (%)	Proportion donating to Conservative Party		Proportion donating to Labour Party		Mean unionisation rate
				Via directors	From company	Via directors	From company	
Group A	***63***	***0.163***	***1.069***	***0.175***	***0.032***	***0.000***	***0.000***	***0.199***
Basic materials	24	0.193	2.955	0.167	0.042	0.000	0.000	0.198
Healthcare	7	0.134	0.392	0.143	0.000	0.000	0.000	0.184
Telecoms	5	0.085	0.246	0.200	0.000	0.000	0.000	0.174
Utilities	9	-0.002	-1.027	0.000	0.111	0.000	0.000	0.249
Oil and Gas	18	0.238	0.096	0.278	0.000	0.000	0.000	0.187
Group B	***237***	***-0.025***	***-1.675***	***0.135***	***0.017***	***0.030***	***0.046***	***0.185***
Industrials	57	0.071	-1.133	0.105	0.000	0.000	0.018	0.215
Consumer goods	22	-0.092	-1.422	0.136	0.000	0.045	0.045	0.172
Consumer services	59	-0.066	-3.685	0.085	0.034	0.017	0.085	0.214
Financials	82	-0.022	-0.606	0.220	0.024	0.061	0.049	0.153
Technology	17	-0.140	-2.006	0.000	0.000	0.000	0.000	0.154

Continues...

Panel C Company characteristics: mean by industry

	Leverage	LnMV	RoA	Tobin's q	No. of directors
Group A	***0.298****	***8.154*****	***8.272***	***3.844***	***9.381****
Basic materials	0.219	8.093	8.300	3.114	9.125
Healthcare	0.302	8.374	9.987	3.829	9.286
Telecoms	0.419	8.830	4.622	7.998	11.400
Utilities	0.616	8.273	7.654	3.125	9.000
Oil and Gas	0.208	7.903	8.891	4.029	9.389
Group B	***0.368***	***7.316***	***7.823***	***6.922***	***8.738***
Industrials	0.385	7.215	9.106	4.556	8.228
Consumer goods	0.371	7.910	6.887	2.822	9.364
Consumer services	0.501	7.290	10.073	19.024	9.169
Financials	0.300	7.287	5.154	1.816	8.768
Technology	0.179	7.127	9.800	2.796	8.000
Total no. of companies	300	300	300	300	300

Continues...

Panel D Donor and non-donor director characteristics: mean by industry

	No. boards in sample		No. other boards		Fraction Executive		Fraction CEO		Age		British	
	Donors	**Non-donors**	**Donors**	**Non-donors**	**Donors**	**Non-donors**	**Donors**	**Non-donors**	**Donors**	**Non-donors**	**Donors**	**Non-donors**
Group A	***1.00 [c]*****	***1.28******	***2.58***	***2.90***	***0.42***	***0.31***	***0.25***	***0.11***	***62.00 [c]***	***57.46******	***0.83 [a]***	***0.44******
Basic materials	1.00	1.24	4.20	3.47	0.20	0.28	0.00	0.12	69.20	57.49	1.00	0.30
Healthcare	1.00	1.22	2.00	2.54	0.00	0.23	0.00	0.11	62.00	58.11	1.00	0.45
Telecoms	1.00	1.46	5.00	2.86	0.00	0.29	0.00	0.09	53.00	58.16	1.00	0.48
Utilities	n/a	1.41	n/a	2.30	n/a	0.40	n/a	0.13	n/a	56.41	n/a	0.76
Oil and Gas	1.00	1.21	0.60	2.61	0.80	0.33	0.60	0.10	56.8	57.58	0.60	0.46
Group B	***1.49***	***1.36***	***2.75***	***2.79***	***0.24***	***0.31***	***0.15***	***0.12***	***60.34 [a]***	***56.05***	***0.83 [a]***	***0.62***
Industrials	1.50	1.42	2.17	2.04	0.50	0.34	0.33	0.12	55.67	56.29	1.00	0.65
Consumer goods	1.40	1.38	2.60	2.21	0.20	0.33	0.00	0.12	63.60	55.73	1.00	0.62
Consumer services	1.65	1.35	1.71	3.10	0.29	0.33	0.14	0.12	59.43	55.33	0.86	0.64
Financials	1.65	1.31	3.27	3.33	0.17	0.26	0.13	0.11	61.34	56.83	0.74	0.57
Technology	n/a	1.43	n/a	2.27	n/a	0.36	n/a	0.13	n/a	54.75	n/a	0.64

Notes

1. Panel A summarises for the whole sample donations to the two main political parties.
$DonDirCon_i$ is an indicator which equals 1 if any director on company *i*'s board donated to the Conservative Party between June 2005 and April 2010.
$DonDir£Con_i$ is the total monetary value of company *i*'s director-donations to the Conservative Party between June 2005 and April 2010.
$DonCoCon_i$ and $DonCo£Con_i$ are the equivalent for donations directly made by company *i*.
$DonDirLab_i$, $DonDir£Lab_i$, $DonCoLab_i$ and $DonCo£Lab_i$ are equivalent measures for the Labour Party

2. Panel B summarises political sensitivity at industry level, and shows the pattern of political donations and unionisation by industry, categorised into Group A industries, which donate only to the Conservative Party and Group B industries, which donate to both, or neither political parties.
$\hat{\gamma}_i$ is stock *i*'s opinion-poll based political sensitivity measure estimated from equation (1).
$CAR_i(1, 5)$ is the cumulative abnormal return on stock *i* from the day after the 2010 polling day to 13 May, 2010.
UN_i^j, the degree of unionisation in the firm *i*'s two digit industry, *j*. This is measured as the fraction of workers that report being union members in 2009 and is derived from the UK Labour Force Survey.

3. Panel C summarises company characteristics by industry. The asterisks against the Group A industry means in row 1 of the panel denote the statistical significance of *t*-tests of differences between Group A and Group B means. *** denotes significance at 1%; ** at 5%; and * at 10%. As in Panel B, Group A industries are those which donate only to the Conservative Party. Group B industries donate to both, or neither political parties.
Market value is measured at 1 March, 2010.

Leverage = book value of debt divided by total assets, as reported in the financial statements ended in 2010.
RoA = [Net Income before Preferred Dividends + ((Interest Expense on Debt-Interest Capitalized) × (1-Tax Rate))] / [Average of Last Year's and Current Year's Total Assets] × 100, as reported in the financial statements ended in 2010.
Tobin's q is market value divided by book value.
No. of directors is the number of directors on the board as reported in the most recent financial statements preceding the election.

4. Panel D summarises director characteristics by industry and donor status.
Number of boards is the number of boards among the largest 300 publicly listed companies that an individual sat on prior to the 2010 election.
Number of other boards is the number of boards of other listed and private companies that an individual sat on prior to the 2010 election. The data indicate only positive numbers for the number of private boards or are recorded as missing. We have coded the missing values as zero. Leaving them as missing also implies no significant differences between donors and non-donors, or Group A and Group B industries.
Fraction Executive is the fraction in Executive as opposed to non-Executive roles.
Fraction CEO is the fraction in CEO/Chairman versus other roles.
Age is the director's age in years.
British is an indicator variable equal to 1 if a director is a British national.
The asterisks against the Group A industry means in row 1 of the panel denote the statistical significance of *t*-tests of differences between Group A and Group B means. *** denotes significance at 1%; ** at 5%; and * at 10%. [a, b,] and [c] indicate the statistical significance of *t*-tests of differences between donor and non-donor means at the 1%, 5% and 10% level respectively.

Table 2 Political sensitivity, director donations and unionisation rates

	Probit	OLS	Quantile regressions		
			0.25	**0.50**	**0.75**
$DonDirCon_i$	-0.088	-0.044	-0.033	-0.048	-0.096
	(0.298)	(0.362)	(0.452)	(0.125)	(0.095)*
UN_i^j	-0.526	-0.137	-0.216	-0.519	-0.133
	(0.113)	(0.446)	(0.369)	(0.003)***	(0.448)
$LnMV_i$	-0.005	-0.022	0.016	-0.008	-0.047
	(0.842)	(0.108)	(0.203)	(0.437)	(0.002)***
$Leverage_i$	-0.173	-0.080	-0.161	-0.173	0.047
	(0.192)	(0.225)	(0.035)**	(0.010)***	(0.542)
Industry Dummies Group A:					
Basic materials	0.355	0.159	0.174	0.130	0.354
	(0.054)*	(0.105)	(0.077)*	(0.114)	(0.000)***
Healthcare	0.333	0.110	0.101	0.049	0.283
	(0.160)	(0.242)	(0.282)	(0.489)	(0.030)**
Telecoms	0.102	0.082	0.052	-0.021	0.168
	(0.708)	(0.409)	(0.453)	(0.869)	(0.479)
Oil and gas	0.249	0.203	0.094	0.051	0.411
	(0.221)	(0.060)*	(0.228)	(0.682)	(0.024)**
Industry Dummies Group B:					
Industrials	0.098	0.030	-0.052	0.017	0.164
	(0.588)	(0.704)	(0.534)	(0.748)	(0.024)**
Consumer goods	-0.112	-0.122	-0.204	-0.176	0.023
	(0.578)	(0.143)	(0.025)**	(0.062)*	(0.809)
Consumer services	-0.092	-0.096	-0.133	-0.133	0.032
	(0.616)	(0.196)	(0.044)**	(0.034)**	(0.652)
Financials	-0.049	-0.071	-0.066	-0.093	0.096
	(0.793)	(0.355)	(0.353)	(0.102)	(0.205)
Technology	-0.164	-0.212	-0.455	-0.187	0.137
	(0.453)	(0.122)	(0.003)***	(0.230)	(0.284)
Constant	N/A	0.265	-0.105	0.303	0.421
		(0.037)**	(0.433)	(0.004)***	(0.003)***
Pseudo Rsq/AdjRsq	0.086	0.085	0.100	0.096	0.107
N	300	300	300	300	300
Predicted $\hat{\gamma}_i$ (× 100):					
Mean			-0.157	0.016	0.183
Median			-0.148	0.014	0.182

Notes

1. The table shows the results of estimating equation (2), $\Pr\left(\hat{\gamma}_i^{Pos} = 1\right) = \Phi(\boldsymbol{\theta X}_i)$ and equations (3a) and (3b), $\hat{\gamma}_i = \boldsymbol{\theta X}_i + u_i$ and $\hat{\gamma}_i = \boldsymbol{\theta_q X}_i + u_{qi}$ where $Quant_q\left(\hat{\gamma}_i \left| \boldsymbol{X}_i \right.\right) = \boldsymbol{\theta_q X}_i$. $\hat{\gamma}_i$ denotes the poll-based political sensitivity of stock *i*, $\hat{\gamma}_i^{Pos}$ takes the value 1 if $\hat{\gamma}_i$ is positive and $\boldsymbol{X}_i$ represents a set of explanatory variables.

2. Explanatory variables are:
$DonDirCon_i$, an indicator variable which equals 1 if any director on company *i*'s board donated to the Conservative Party between June 2005 and April 2010;
UN_i^j, the degree of unionisation in firm *i*'s two digit industry, *j*;
$LnMV_i$, log market value as at 1 March, 2010;
$Leverage_i$, long-term debt divided by total assets; and
IND_i^k, an indicator variable which equals 1 if company *i* is in broad industry *k*. The base industry is 'Utilities'.
Group A industries are those which donate only to the Conservative Party. Group B industries donate to both, or neither political parties.

3. All equations are estimated with Huber-White standard errors. The probit equation coefficients presented are marginal effects. *p*-values are given in parentheses. *** denotes significance at 1%; ** at 5%; and * at 10%.

Table 3 Political sensitivity, director donations and unionisation rates; Groups A and B

Panel A

	Probit	OLS	Quantile regressions		
			0.25	0.50	0.75
$DonDirConA_i$	0.242	0.149	0.049	0.154	0.136
	(0.246)	(0.065)*	(0.464)	(0.261)	(0.460)
$DonDirConB_i$	-0.155	-0.085	-0.043	-0.080	-0.124
	(0.107)	(0.132)	(0.494)	(0.063*	(0.024)**
UN_i^j	-0.467	-0.073	-0.233	-0.207	-0.368
	(0.130)	(0.674)	(0.159)	(0.257)	(0.106)
$LnMV_i$	-0.011	-0.027	0.002	-0.012	-0.048
	(0.652)	(0.048)**	(0.874)	(0.317)	(0.001)***
$Leverage_i$	-0.200	-0.081	-0.178	-0.210	-0.001
	(0.099)*	(0.184)	(0.028)**	(0.005)***	(0.991)
GpA_i	0.241	0.169	0.175	0.104	0.172
	(0.003)***	(0.001)***	(0.001)***	(0.015)**	(0.003)***
Constant	N/A	0.231	-0.090	0.211	0.598
		(0.021)***	(0.402)	(0.030)***	(0.000)***
Pseudo Rsq/AdjRsq	0.067	0.076	0.060	0.062	0.087
N	300	300	300	300	300
Test $DonDirConA_i = DonDirConB_i$	0.089*	0.017**	0.311	0.104	0.176
Predicted $\hat{\gamma}_i$ (× 100):					
Mean			-0.147	0.024	0.197
Median			-0.163	0.019	0.201

Panel B

	Probit	OLS	Quantile regressions		
			0.25	0.50	0.75
$DonDirConA_i$	0.170	0.141	0.035	0.128	0.053
	(0.441)	(0.089)*	(0.693)	(0.157)	(0.762)
$DonDirConB_i$	-0.150	-0.083	-0.030	-0.079	-0.134
	(0.121)	(0.144)	(0.583)	(0.091)*	(0.017)**
UNA_i^j	-2.475	-0.092	-0.563	-0.106	2.015
	(0.102)	(0.880)	(0.496)	(0.886)	(0.166)
UNB_i^j	-0.372	-0.068	-0.129	-0.192	-0.393
	(0.232)	(0.706)	(0.424)	(0.329)	(0.078)*
$LnMVA_i$	0.109	-0.015	0.009	-0.019	-0.067
	(0.088)*	(0.478)	(0.597)	(0.217)	(0.015)**
$LnMVB_i$	-0.047	-0.033	-0.011	-0.015	-0.034
	(0.124)	(0.062)*	(0.587)	(0.368)	(0.023)**
$LeverageA_i$	-0.411	-0.117	-0.206	-0.333	-0.424
	(0.221)	(0.487)	(0.106)	(0.000)***	(0.139)
$LeverageB_i$	-0.159	-0.073	-0.174	-0.129	-0.029
	(0.214)	(0.278)	(0.070)*	(0.121)	(0.730)
GpA_i	-0.417	0.049	0.126	0.188	0.094
	(0.426)	(0.846)	(0.674)	(0.379)	(0.802)
Constant	N/A	0.266	-0.027	0.208	0.509
		(0.028)**	(0.855)	(0.100)*	(0.000)***
Pseudo Rsq/AdjRsq	0.083	0.067	0.063	0.065	0.097
N	300	300	300	300	300
Test $DonDirConA_i = DonDirConB_i$	0.192	0.026**	0.533	0.042**	0.311
Test $UNA_i^j = UNB_i^j$	0.174	0.970	0.606	0.909	0.102
Predicted $\hat{\gamma}_i$ (× 100):					
Mean			-0.155	0.032	0.198
Median			-0.174	0.020	0.196

Continues...

1. The table shows the results of estimating equations (3a) and (3b), $\hat{\gamma}_i = \boldsymbol{\theta} \boldsymbol{X}_i + u_i$ and $\hat{\gamma}_i = \boldsymbol{\theta}_{\boldsymbol{q}} \boldsymbol{X}_i + u_{qi}$ where $Quant_q\left(\hat{\gamma}_i \left| \boldsymbol{X}_i \right.\right) = \boldsymbol{\theta}_{\boldsymbol{q}} \boldsymbol{X}_i . \hat{\gamma}_i$ denotes the poll-based political sensitivity of stock *i* and $\boldsymbol{X}_i$ represents a set of explanatory variables.

2. Explanatory variables are:
GpA_i, an indicator variable which equals 1 if company *i* is in Group A, industries which donate only to the Conservative Party;
$DonDirConA_i$, an indicator variable which equals 1 if company *i* is in Group A and any director on company *i*'s board donated to the Conservative Party between June 2005 and April 2010; and $DonDirConB_i$, an equivalent variable for companies in Group B industries, those which donate to both, or neither political parties;
UN_i^j, the degree of unionisation in firm *i*'s two digit industry, *j*;
$LnMV_i$, log market value as at 1 March, 2010; and
$Leverage_i$, book value of debt divided by total assets.
In Panel B the last three variables are interacted with the dummy variables for Groups A and B respectively, indicated in each case by a suffix A or B.
3. *p*-values of F-tests are given towards the bottom of each set of regression results.
4. All equations are estimated with Huber-White standard errors. *p*-values are given in parentheses. *** denotes significance at 1%; ** at 5%; and * at 10%

Table 4 Robustness tests: CAR(1,5)

Panel A: CAR(1, 5) Table 2 equivalent

	Probit	OLS	Quantile regressions		
			0.25	**0.50**	**0.75**
$DonDirCon_i$	0.243	1.502	1.330	1.364	1.568
	(0.004)***	(0.040)**	(0.032)**	(0.045)**	(0.137)
UN_i^j	-0.135	2.705	3.953	-0.438	-0.020
	(0.670)	(0.419)	(0.347)	(0.886)	(0.995)
$LnMV_i$	-0.016	0.123	0.637	0.002	-0.454
	(0.508)	(0.602)	(0.000)***	(0.993)	(0.075)***
$Leverage_i$	0.007	-0.018	-1.476	-0.197	-0.349
	(0.955)	(0.987)	(0.156)	(0.847)	(0.818)
Industry Dummies Group A:					
Basic materials	0.339	3.885	2.010	3.144	5.985
	(0.097)*	(0.034)**	(0.432)	(0.054)**	(0.003)**
Healthcare	0.205	1.361	2.540	0.818	3.673
	(0.431)	(0.454)	(0.216)	(0.683)	(0.175)
Telecoms	0.020	1.102	1.681	-0.092	-0.122
	(0.946)	(0.599)	(0.636)	(0.953)	(0.981)
Oil and gas	-0.078	0.911	-0.248	-1.059	0.490
	(0.706)	(0.621)	(0.903)	(0.289)	(0.919)
Industry Dummies Group B:					
Industrials	0.008	-0.045	0.251	-0.312	0.359
	(0.963)	(0.973)	(0.902)	(0.726)	(0.835)
Consumer goods	0.076	-0.352	-0.210	-1.350	2.032
	(0.710)	(0.822)	(0.913)	(0.539)	(0.296)
Consumer services	-0.129	-2.572	-1.979	-2.664	-1.454
	(0.458)	(0.055)*	(0.359)	(0.007)***	(0.316)
Financials	0.015	0.465	1.728	-0.151	-0.438
	(0.934)	(0.723)	(0.382)	(0.849)	(0.781)
Technology	-0.130	-0.590	0.073	-2.222	-1.821
	(0.530)	(0.737)	(0.973)	(0.028)**	(0.288)
Constant	N/A	-2.706	-9.684	-0.335	4.771
		(0.258)	(0.000)***	(0.825)	(0.057)*
Pseudo Rsq/AdjRsq	0.067	0.079	0.069	0.065	0.081
N	300	300	300	300	300
Predicted $\hat{\gamma}_i$ (× 100):					
Mean			-4.144	-0.924	1.770
Median			-4.054	-0.750	1.361

Continues...

Panel B: CAR(1, 5) Table 3 Panel A equivalent

	Probit	OLS	Quantile regressions		
			0.25	**0.50**	**0.75**
$DonDirConA_i$	0.155	1.827	3.241	0.879	4.997
	(0.362)	(0.294)	(0.035)**	(0.672)	(0.274)
$DonDirConB_i$	0.273	1.838	1.353	2.226	1.616
	(0.004)***	(0.015)**	(0.021)**	(0.076)*	(0.141)
UN_i^j	-0.221	0.369	-0.800	-2.431	-1.981
	(0.445)	(0.901)	(0.747)	(0.459)	(0.565)
$LnMV_i$	-0.008	0.188	0.536	0.002	-0.355
	(0.751)	(0.441)	(0.006)**	(0.990)	(0.341)
$Leverage_i$	-0.065	-1.496	-0.356	-0.203	-0.507
	(0.554)	(0.159)	(0.809)	(0.864)	(0.737)
GpA_i	0.163	2.406	0.487	0.971	3.546
	(0.042)**	(0.009)**	(0.632)	(0.314)	(0.009)**
Constant	N/A	-2.816	-8.416	-1.017	4.027
		(0.146)	(0.000)***	(0.508)	(0.131)
Pseudo Rsq/AdjRsq	0.036	0.048	0.033	0.021	0.041
N	300	300	300	300	300
Test $DonDirConA_i = DonDirConB_i$	0.537	0.996	0.250	0.577	0.471

Continues...

Panel C: CAR(1, 5) Table 3 Panel B equivalent

	Probit	OLS	Quantile regressions		
			0.25	**0.50**	**0.75**
$DonDirConA_i$	0.148	1.959	1.570	1.221	6.118
	(0.370)	(0.262)	(0.036)**	(0.474)	(0.146)
$DonDirConB_i$	0.284	1.825	1.549	2.003	1.697
	(0.003)***	(0.016)**	(0.087)*	(0.109)	(0.020)**
UNA_i^j	-0.770	-13.702	-17.098	-10.835	-16.083
	(0.566)	(0.142)	(0.130)	(0.590)	(0.246)
UNB_i^j	-0.195	0.904	1.845	-2.980	-0.558
	(0.512)	(0.768)	(0.601)	(0.384)	(0.855)
$LnMVA_i$	0.060	0.106	0.744	0.709	-0.728
	(0.199)	(0.825)	(0.090)*	(0.160)	(0.344)
$LnMVB_i$	-0.041	0.240	0.186	-0.307	-0.042
	(0.188)	(0.395)	(0.555)	(0.254)	(0.917)
$LeverageA_i$	0.261	1.550	3.949	3.077	-1.040
	(0.361)	(0.552)	(0.034)**	(0.362)	(0.843)
$LeverageB_i$	-0.109	-1.998	-1.418	-0.577	-1.395
	(0.365)	(0.089)*	(0.467)	(0.670)	(0.328)
GpA_i	-0.468	5.232	-1.145	-7.055	11.703
	(0.187)	(0.283)	(0.782)	(0.287)	(0.125)
Constant	N/A	-3.107	-5.780	1.451	1.800
		(0.159)	(0.018)**	(0.470)	(0.527)
Pseudo Rsq/AdjRsq	0.050	0.045	0.051	0.034	0.046
N	300	300	300	300	300
Test $DonDirConA_i = DonDirConB_i$	0.465	0.944	0.985	0.711	0.300
Test $UNA_i^j = UNB_i^j$	0.675	0.137	0.109	0.700	0.274

Notes

1. The table shows results of replicating the regressions reported in Tables 2 and 3. See notes to Tables 2 and 3 for definitions of the independent variables.
2. *CAR*(1, 5) is the cumulative abnormal return on stock *i* from the day after the 2010 polling day to 13 May, 2010. For the probit model the dependent variable takes the value 1 for positive values of *CAR*(1,5).
3. *p*-values are given in parentheses. *** denotes significance at 1%; ** at 5%; and * at 10%.

Table 5 Robustness tests: Intrade $\hat{\gamma}_i$

Panel A: Intrade $\hat{\gamma}_i$ Table 2 equivalent

	Probit	OLS	Quantile regressions		
			0.25	**0.50**	**0.75**
$DonDirCon_i$	0.009	-0.005	0.001	-0.007	-0.019
	(0.915)	(0.497)	(0.908)	(0.332)	(0.026)**
UN_i^j	-0.161	0.001	0.015	-0.013	-0.004
	(0.602)	(0.983)	(0.702)	(0.623)	(0.896)
$LnMV_i$	-0.040	-0.006	-0.001	-0.003	-0.003
	(0.110)	(0.010)***	(0.711)	(0.104)	(0.096)*
$Leverage_i$	-0.330	-0.038	-0.028	-0.029	-0.045
	(0.007)***	(0.002)***	(0.056)*	(0.003)***	(0.000)***
Industry Dummies Group A:					
Basic materials	-0.100	-0.011	-0.013	-0.002	0.002
	(0.635)	(0.526)	(0.641)	(0.908)	(0.920)
Healthcare	-0.051	-0.017	-0.015	0.002	-0.009
	(0.850)	(0.384)	(0.660)	(0.798)	(0.675)
Telecoms	0.124	-0.013	-0.019	-0.008	-0.033
	(0.633)	(0.479)	(0.511)	(0.683)	(0.478)
Oil and gas	-0.223	-0.016	-0.033	-0.016	0.010
	(0.313)	(0.405)	(0.193)	(0.429)	(0.675)
Industry Dummies Group B:					
Industrials	0.001	-0.007	-0.007	-0.002	-0.001
	(0.994)	(0.635)	(0.771)	(0.815)	(0.946)
Consumer goods	-0.232	-0.030	-0.027	-0.026	-0.020
	(0.268)	(0.049)**	(0.285)	(0.060)*	(0.305)
Consumer services	-0.244	-0.028	-0.028	-0.021	-0.007
	(0.194)	(0.058)*	(0.264)	(0.012)**	(0.712)
Financials	-0.191	-0.031	-0.023	-0.023	-0.008
	(0.313)	(0.039)**	(0.351)	(0.003)***	(0.704)
Technology	-0.396	-0.042	-0.055	-0.034	-0.012
	(0.070)*	(0.059)*	(0.053)*	(0.276)	(0.548)
Constant	N/A	0.098	0.022	0.065	0.093
		(0.000)***	(0.490)	(0.000)***	(0.000)***
Pseudo Rsq/AdjRsq	0.064	0.066	0.061	0.046	0.066
N	300	300	300	300	300
Predicted $\hat{\gamma}_i$ (× 100):					
Mean			-0.014	0.013	0.045
Median			-0.012	0.013	0.046

Continues...

Panel B: Intrade $\hat{\gamma}_i$ Table 3 Panel A equivalent

	Probit	OLS	Quantile regressions		
			0.25	**0.50**	**0.75**
DonDirConA$_i$	-0.047	-0.006	-0.009	0.003	-0.004
	(0.772)	(0.638)	(0.429)	(0.921)	(0.762)
DonDirConB$_i$	0.026	-0.007	0.009	-0.005	-0.016
	(0.773)	(0.478)	(0.430)	(0.511)	(0.074)*
UN_i^j	-0.039	0.023	0.013	0.025	0.014
	(0.896)	(0.448)	(0.701)	(0.400)	(0.688)
LnMV$_i$	-0.041	-0.007	-0.002	-0.005	-0.005
	(0.101)	(0.006)***	(0.479)	(0.037)**	(0.027)**
Leverage$_i$	-0.270	-0.031	-0.028	-0.019	-0.037
	(0.011)**	(0.003)***	(0.039)**	(0.069)*	(0.002)***
GpA$_i$	0.093	0.014	0.007	0.018	0.005
	(0.244)	(0.055)*	(0.529)	(0.016)**	(0.624)
Constant	N/A	0.071	0.006	0.052	0.090
		(0.000)***	(0.765)	(0.007)***	(0.000)***
Pseudo Rsq/AdjRsq	0.031	0.053	0.023	0.027	0.052
N	300	300	300	300	300
Test *DonDirConA*$_i$ = *DonDirConB*$_i$	0.693	0.965	0.260	0.780	0.409

Continues...

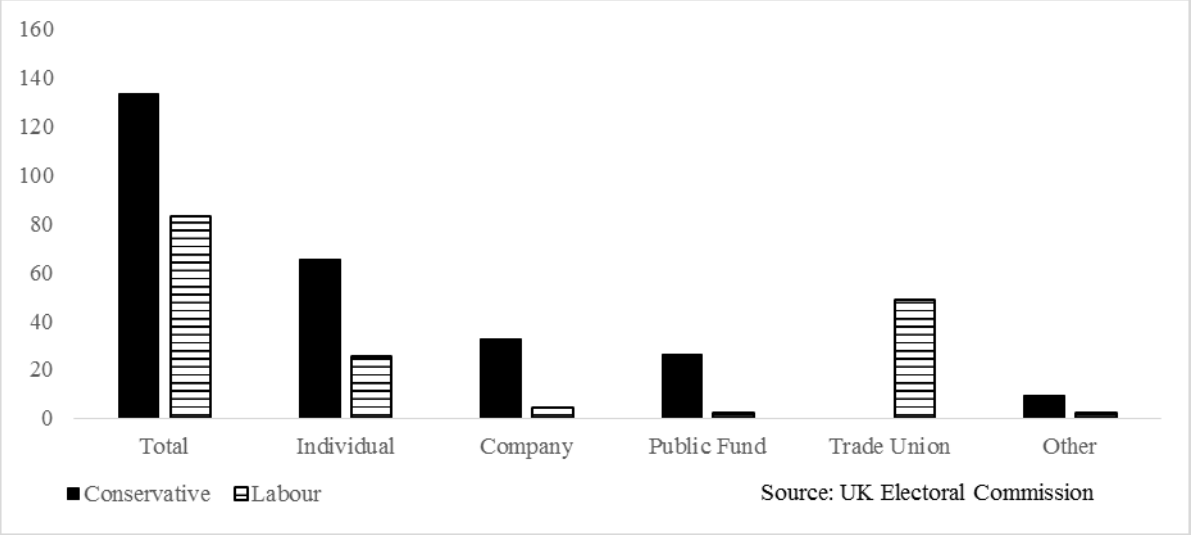
Panel C: Intrade $\hat{\gamma}_i$ Table 3 Panel B equivalent

	Probit	OLS	Quantile regressions		
			0.25	0.50	0.75
DonDirConA$_i$	-0.042	-0.004	-0.012	0.000	0.000
	(0.796)	(0.739)	(0.291)	(0.984)	(0.982)
DonDirConB$_i$	0.026	-0.007	0.008	-0.009	-0.019
	(0.767)	(0.485)	(0.396)	(0.235)	(0.024)**
UNA_i^j	-0.411	0.152	0.018	0.202	0.296
	(0.774)	(0.228)	(0.935)	(0.209)	(0.006)***
UNB_i^j	-0.028	0.016	0.006	0.016	-0.001
	(0.925)	(0.614)	(0.891)	(0.566)	(0.977)
LnMVA$_i$	-0.038	-0.007	-0.001	-0.008	-0.012
	(0.409)	(0.025)**	(0.801)	(0.036)**	(0.001)***
LnMVB$_i$	-0.042	-0.007	-0.001	-0.002	-0.003
	(0.151)	(0.029)**	(0.827)	(0.411)	(0.152)
LeverageA$_i$	-0.073	-0.002	0.010	-0.004	-0.029
	(0.799)	(0.917)	(0.798)	(0.852)	(0.299)
LeverageB$_i$	-0.302	-0.036	-0.035	-0.029	-0.045
	(0.009)***	(0.002)***	(0.029)**	(0.014)**	(0.000)***
GpA$_i$	0.065	-0.026	-0.008	0.012	0.012
	(0.894)	(0.553)	(0.897)	(0.808)	(0.717)
Constant	N/A	0.076	0.002	0.038	0.086
		(0.001)***	(0.939)	(0.069)*	(0.000)***
Pseudo Rsq/AdjRsq	0.032	0.051	0.025	0.032	0.069
N	300	300	300	300	300
Test *DonDirConA*$_i$ = *DonDirConB*$_i$	0.711	0.880	0.175	0.687	0.111
Test $UNA_i^j = UNB_i^j$	0.794	0.296	0.958	0.255	0.008***

Notes

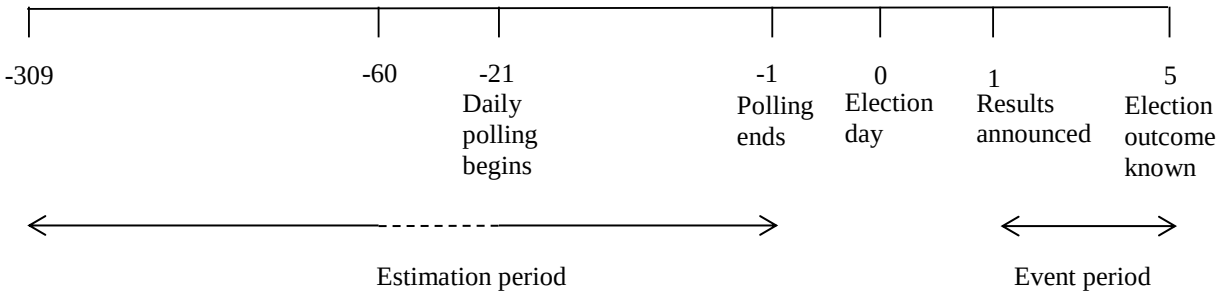
1. The table shows results of replicating the regressions reported in Tables 2 and 3. See notes to Tables 2 and 3 for definitions of the independent variables.
2. Intrade $\hat{\gamma}_i$ is stock *i*'s Intrade-price based political sensitivity measure estimated from equation (1).
3. *p*-values are given in parentheses. *** denotes significance at 1%; ** at 5%; and * at 10%.

Figure 1 Sources of political finance 2005 to 2010



Notes
1. The figure summarizes the sources of political finance for the main two political parties. The *y*-axis denotes the monetary value of all donations between June 2005 and March 2010 in £millions.

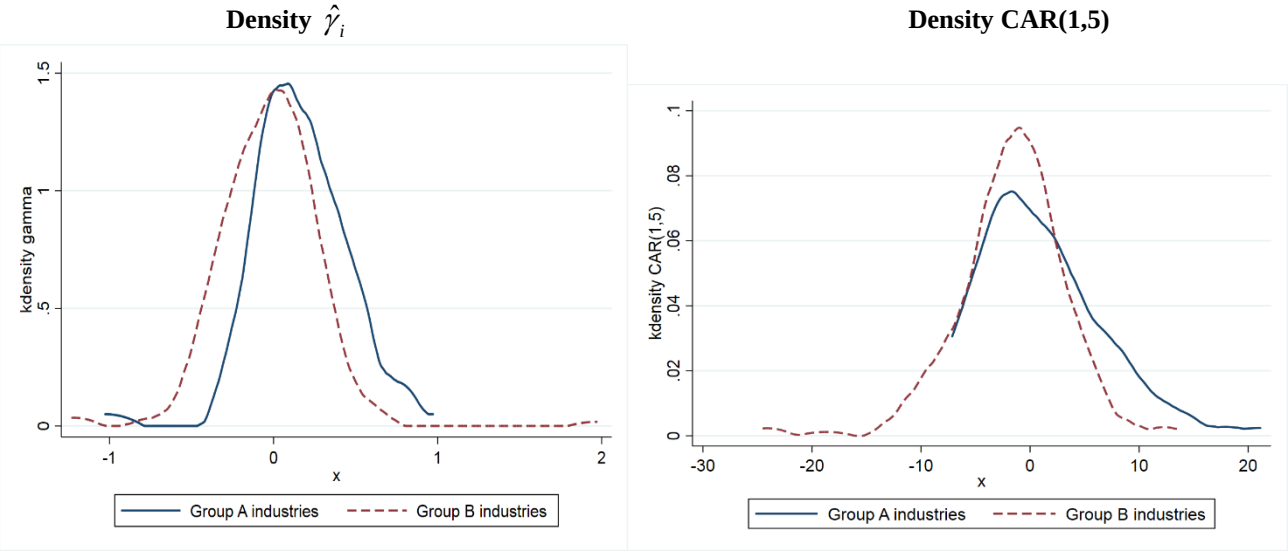
Figure 2 Timeline of estimation and event periods for the 2010 election



Notes

1. The Figure shows the estimation and event periods, not to scale. The estimation period is 250 days ending 2 months before the election is called, plus the 'campaign period', the interval during which opinion polls are revised on a daily basis. Abnormal returns are cumulated over the event period (see footnote 8).

Figure 3 Kernel density plots of $\hat{\gamma}_i$ and CAR(1,5) for Group A and Group B industries



Notes

1. The figure shows kernel density plots of the distributions of $\hat{\gamma}_i$ and CAR(1,5) for firms in Group A and Group B industries. Group A are industries which donate only to the Conservative Party. Group B are mixed-donor or no-donor industries.

APPENDICES' TABLES AND FIGURES

Table A1. Brief description of the five elections

	1992	1997	2001	2005	2010
Date election called	11 March 1992	17 March 1997	8 May 2001 (Note 1)	5 April 2005	6 April 2010
Polling date	9 April 1992	1 May 1997	7 June 2001	5 May 2005	6 May 2010
Incumbent party	Conservative	Conservative	Labour	Labour	Labour
Winning party	Conservative	Labour	Labour	Labour	Hung (Conservatives became majority party in coalition)
% lead of winning party over rival	10	38	38	24	7
Prediction when election called	Labour to win with small majority	Labour landslide win	Labour landslide win	Labour to win with reduced majority	Conservatives to win most seats, possibly not enough for outright majority

Notes
1. Polling date widely expected to be 3 May 2001, to coincide with local elections, but on 3 April Prime Minister Blair announced a postponement due to country-wide travel restrictions imposed to prevent the spread of foot and mouth disease.

Table A2. Timeline for the 2010 election

Thursday 6 May 2010, 22:00 BST	Polls close and coalition negotiations begin.
Monday 10 May, 17:00 BST	Gordon Brown publicly recognises that he is an obstacle to the formation of a Labour/Liberal Democrat coalition government. Announces that he will step down as Labour Party leader by September 2010, in the hope that this will make the coalition viable.
Tuesday 11 May, 19:20 BST	Gordon Brown resigns as Prime Minister, following which David Cameron invited to form a government.
Early hours of Wednesday 12 May	Coalition deal between Conservatives and Liberal Democrats confirmed. Initial agreement published. Negotiations begin about Cabinet posts.
Wednesday 12 May, 14:22 BST	David Cameron and Nick Clegg give first joint press conference.
Wednesday 12 May, various times	Government posts announced throughout the day, continuing after markets closed.

Sources:
http://news.bbc.co.uk/1/hi/uk_politics/election_2010/8677552.stm
http://www.telegraph.co.uk/news/election-2010/7558554/General-Election-2010-live.html

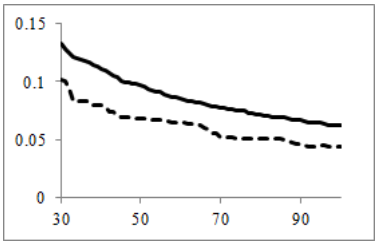
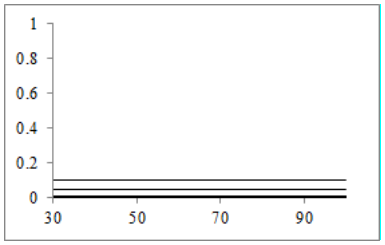
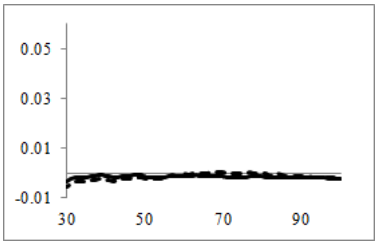
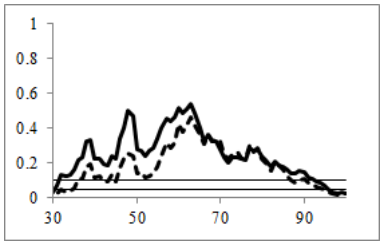
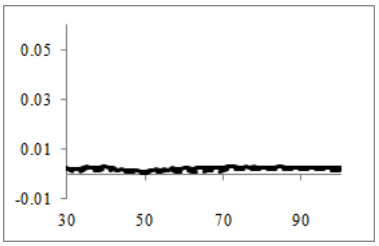
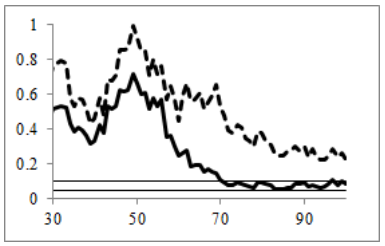
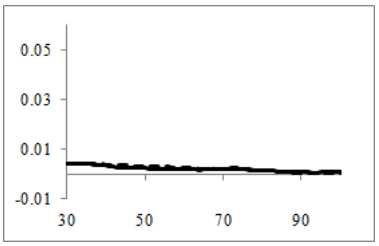
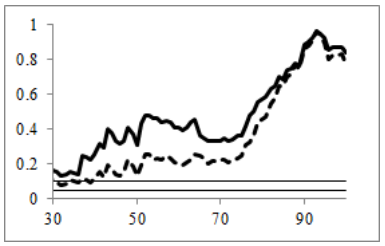
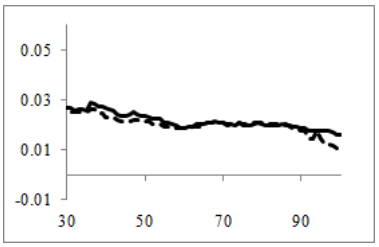
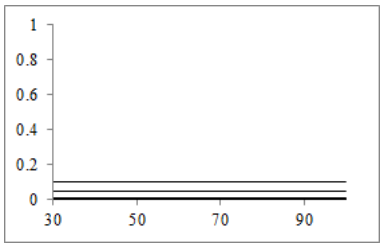
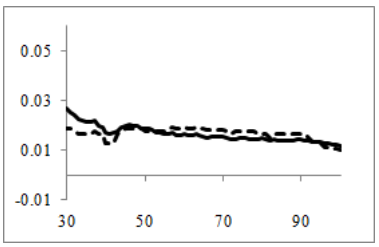
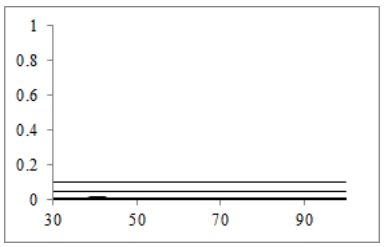
Table B1. Pricing of political risk during five elections

		Regression of abnormal return on $\hat{\gamma}_i$
1992		10.255 (0.000)***
1997		-1.262 (0.833)
2001		1.182 (0.484)
2005		1.584 (0.128)
2010	Polls	5.995 (0.000)***
	Intrade	25.929 (0.001)***

Notes

1. The first column presents the coefficient on $\hat{\gamma}_i$ in equation (B1), $AR_{i,T} = a + b\hat{\gamma}_i + e_i$ where $\hat{\gamma}_i$ is stock *i*'s political sensitivity measure estimated from equation (1) and $AR_{i,T}$ is calculated using parameters estimated in equation (1). When *T* relates to more than one day (for the 2010 election), $AR_{i,T}$ denotes a cumulative abnormal return. Results are presented for $\hat{\gamma}_i$ s calculated using changes in opinion polls; for the 2010 election they are also presented for $\hat{\gamma}_i$ s calculated using changes in Intrade share prices.
2. For all elections other than 2010, the announcement-day abnormal return is measured on the day after polling day. 2010 returns are cumulated from the day after polling day to 13 May, as described in the text.
3. *p*-values in parentheses. *** denotes significance at 1%; ** at 5%; and * at 10%.

Figure B1 Portfolio abnormal returns on results announcement day

Year of election	Mean and median abnormal returns Unbroken line = mean return; dashed line = median return	ADJ-BMP and GRANK-T statistics (*p*-values) Unbroken heavy line = ADJ_BMP statistic *p*-value; dashed line = GRANK-T statistic *p*-value; unbroken faint lines are $p = 0.05$ and 0.1
1992 (Note difference in scale)		
1997		
2001		
2005		
2010: Portfolios formed using $\hat{\gamma}_i$ estimates based on opinion polls: CARs to 13 May, 2010		
2010: Portfolios formed using $\hat{\gamma}_i$ estimates based on Intrade prices: CARs to 13 May, 2010		

Continues...

Notes

1. The Figure summarises the (cumulative) announcement-day abnormal returns of portfolios formed by going long on high-$\hat{\gamma}_i$ stocks and short on low-$\hat{\gamma}_i$ stocks, as described in the text. Portfolio sizes are shown on the *x*-axes and abnormal returns or *p*-values on the *y*-axes.
2. For all elections other than 2010, the abnormal return is measured on the day after polling day. 2010 returns are cumulated from the day after polling day to 13 May. Results are presented for $\hat{\gamma}_i$ s calculated using changes in opinion polls; for the 2010 election they are also presented for $\hat{\gamma}_i$ s calculated using changes in Intrade share prices.

APPENDIX C. ADDITIONAL TABLES

Table C1 Equivalent to Table 3 Panel B with industry dummies

Dep var $\hat{\gamma}_i$	Probit	OLS	Quantile regressions		
			0.25	**0.50**	**0.75**
DonDirConA$_i$	0.247	0.103	0.039	0.095	0.112
	(0.155)	(0.182)	(0.500)	(0.442)	(0.368)
DonDirConB$_i$	-0.158	-0.094	-0.074	-0.058	-0.134
	(0.118)	(0.099)*	(0.295)	(0.163)	(0.001)***
UNA_i^j	-1.808	0.678	-0.772	-0.166	0.701
	(0.294)	(0.264)	(0.291)	(0.829)	(0.486)
UNB_i^j	-0.458	-0.156	-0.212	-0.557	-0.070
	(0.173)	(0.406)	(0.412)	(0.005)***	(0.670)
LnMVA$_i$	0.117	-0.018	0.029	-0.034	-0.075
	(0.081)*	(0.399)	(0.046)**	(0.258)	(0.003)***
LnMVB$_i$	-0.043	-0.028	0.021	-0.005	-0.044
	(0.170)	(0.106)	(0.358)	(0.740)	(0.002)***
LeverageA$_i$	0.063	0.168	-0.114	-0.208	0.177
	(0.889)	(0.469)	(0.608)	(0.554)	(0.307)
LeverageB$_i$	-0.172	-0.100	-0.190	-0.196	0.014
	(0.225)	(0.166)	(0.042)**	(0.010)**	(0.869)
Industry Dummies Group A:					
Basic materials	0.384	0.276	0.103	0.136	0.415
	(0.115)	(0.015)**	(0.520)	(0.451)	(0.003)***
Healthcare	0.297	0.219	-0.043	-0.001	0.347
	(0.375)	(0.090)*	(0.783)	(0.993)	(0.007)***
Telecoms	-0.078	0.160	-0.034	0.031	0.371
	(0.825)	(0.214)	(0.817)	(0.921)	(0.061)*
Oil and gas	0.274	0.315	0.038	0.108	0.440
	(0.338)	(0.043)**	(0.790)	(0.630)	(0.004)***
Industry Dummies Group B:					
Industrials	0.666	0.480	-0.093	-0.127	0.212
	(0.125)	(0.118)	(0.800)	(0.661)	(0.388)
Consumer goods	0.515	0.332	-0.243	-0.321	0.074
	(0.198)	(0.279)	(0.512)	(0.288)	(0.774)
Consumer services	0.629	0.356	-0.169	-0.280	0.073
	(0.196)	(0.237)	(0.643)	(0.339)	(0.766)
Financials	0.708	0.383	-0.096	-0.233	0.158
	(0.172)	(0.200)	(0.789)	(0.425)	(0.518)
Technology	0.489	0.228	-0.503	-0.328	0.174
	(0.237)	(0.473)	(0.179)	(0.313)	(0.496)
Constant	N/A	-0.124	-0.088	0.438	0.356
		(0.649)	(0.781)	(0.105)	(0.109)
Pseudo Rsq/AdjRsq	0.109	0.089	0.102	0.101	0.122
N	300	300	300	300	300
Test *DonDirConA*$_i$ = *DonDirConB*$_i$	0.048**	0.041**	0.216	0.239	0.061*
Test $UNA_i^j = UNB_i^j$	0.441	0.189	0.470	0.622	0.450
Predicted $\hat{\gamma}_i$ (× 100):					
Mean			-0.164	0.024	0.181
Median			-0.159	0.012	0.178

Continues...

Notes

1. The table shows the results of estimating equations (3a) and (3b), $\hat{\gamma}_i = \boldsymbol{\theta} \boldsymbol{X}_i + u_i$ and $\hat{\gamma}_i = \boldsymbol{\theta_q} \boldsymbol{X}_i + u_{qi}$ where $Quant_q\left(\hat{\gamma}_i \left| \boldsymbol{X}_i \right.\right) = \boldsymbol{\theta_q} \boldsymbol{X}_i$. $\hat{\gamma}_i$ denotes the poll-based political sensitivity of stock *i* and $\boldsymbol{X}_i$ represents a set of explanatory variables.

2. Explanatory variables are:
DonDirConA$_i$, an indicator variable which equals 1 if company *i* is in Group A and any director on company *i*'s board donated to the Conservative Party between June 2005 and April 2010; and *DonDirConB*$_i$, an equivalent variable for companies in Group B industries, those which donate to both, or neither political parties;
UN_i^j, the degree of unionisation in firm *i*'s two digit industry, *j*;
LnMV$_i$, log market value as at 1 March, 2010; and
Leverage$_i$, book value of debt divided by total assets.
The last three variables are interacted with the dummy variables for Groups A and B respectively, indicated in each case by a suffix A or B.
IND_i^k, an indicator variable which equals 1 if company *i* is in broad industry *k*. The base industry is 'Utilities'.
3. *p*-values of F-tests are given towards the bottom of each set of regression results.
4. All equations are estimated with Huber-White standard errors. *p*-values are given in parentheses. *** denotes significance at 1%; ** at 5%; and * at 10%

Table C2 Robustness: weighted least squares equivalent to Table 2

	$\hat{\gamma}_i$ **Poll**	$\hat{\gamma}_i$ **Intrade**
$DonDirCon_i$	-0.141	-0.006
	(0.130)	(0.733)
UN_i^j	-0.199	0.006
	(0.495)	(0.936)
$LnMV_i$	-0.039	-0.014
	(0.133)	(0.005)***
$Leverage_i$	-0.145	-0.073
	(0.196)	(0.001)***
Industry Dummies Group A:		
Basic materials	0.164	-0.034
	(0.370)	(0.200)
Healthcare	0.084	-0.067
	(0.622)	(0.047)
Telecoms	0.115	-0.046
	(0.512)	(0.149)
Oil and gas	0.372	-0.036
	(0.041)**	(0.242)
Industry Dummies Group B:		
Industrials	-0.002	-0.029
	(0.990)	(0.249)
Consumer goods	-0.226	-0.066
	(0.158)	(0.011)**
Consumer services	-0.204	-0.072
	(0.185)	(0.007)***
Financials	-0.147	-0.073
	(0.354)	(0.007)***
Technology	-0.415	-0.085
	(0.068)*	(0.017)**
Constant	0.499	0.208
	(0.043)***	(0.000)***
Pseudo Rsq/AdjRsq	0.187	0.197
N	300	300

Notes

1. The table shows results of replicating the regression specification reported in Table 2, using as dependent variables the two political sensitivity measures indicated in the column headings, using weighted least squares. In each case the weights are the *t*-statistic of the relevant $\hat{\gamma}_i$. See notes to Table 2 for definitions of independent variables.

2. $\hat{\gamma}_i$ Poll denotes the poll-based political sensitivity of stock *i*. Intrade $\hat{\gamma}_i$ is stock *i*'s Intrade-price based political sensitivity. Both are estimated from equation (1).

3. *p*-values are given in parentheses. *** denotes significance at 1%; ** at 5%; and * at 10%.

Table C3 Weighted least squares: equivalent to Table 3

Panel A

	$\hat{\gamma}_i$ **Poll**	**Intrade** $\hat{\gamma}_i$
DonDirConA$_i$	0.117	-0.008
	(0.280)	(0.673)
DonDirConB$_i$	-0.166	-0.010
	(0.144)	(0.657)
UN_i^j	-0.103	0.059
	(0.736)	(0.420)
LnMV$_i$	-0.048	-0.014
	(0.067)*	(0.010)**
Leverage$_i$	-0.124	-0.065
	(0.239)	(0.001)***
GpA$_i$	0.321	0.028
	(0.000)***	(0.031)**
Constant	0.386	0.135
	(0.037)**	(0.001)***
Pseudo Rsq/AdjRsq	0.140	0.147
N	300	300
Test *DonDirConA*$_i$ = *DonDirConB*$_i$	0.068*	0.942

Panel B

	$\hat{\gamma}_i$ **Poll**	**Intrade** $\hat{\gamma}_i$
DonDirConA$_i$	0.127	-0.001
	(0.278)	(0.943)
DonDirConB$_i$	-0.165	-0.009
	(0.152)	(0.676)
UNA_i^j	0.201	0.346
	(0.838)	(0.019)**
UNB_i^j	-0.122	0.039
	(0.698)	(0.613)
LnMVA$_i$	-0.017	-0.011
	(0.728)	(0.024)**
LnMVB$_i$	-0.058	-0.016
	(0.066)*	(0.018)**
LeverageA$_i$	-0.010	-0.006
	(0.976)	(0.811)
LeverageB$_i$	-0.135	-0.073
	(0.235)	(0.001)***
GpA$_i$	-0.099	-0.093
	(0.838)	(0.203)
Constant	0.466	0.157
	(0.029)**	(0.001)***
Pseudo Rsq/AdjRsq	0.134	0.161
N	300	300
Test *DonDirConA*$_i$ = *DonDirConB*$_i$	0.076*	0.775

Notes

1. The table shows results of replicating the regression specification reported in Table 3, using as dependent variables the two political sensitivity measures indicated in the column headings, using weighted least squares. In each case the weights are the *t*-statistic of the relevant $\hat{\gamma}_i$. See notes to Table 3 for definitions of independent variables.

2. $\hat{\gamma}_i$ Poll denotes the poll-based political sensitivity of stock *i*. Intrade $\hat{\gamma}_i$ is stock *i*'s Intrade-price based political sensitivity. Both are estimated from equation (1).

3. *p*-values are given in parentheses. *** denotes significance at 1%; ** at 5%; and * at 10%.