Political Connections and Insider Trading*

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Abstract

This paper investigates whether directors' political connections affect their behavior in financial markets. We conjecture that directors feel protected by their political connections, which translates in lower perceived enforcement probability. We use the French 2007 presidential election as a plausibly exogenous change in the value of political connections in a difference-in-differences research design. Specifically, we examine the behavior of directors of publicly listed companies that are connected to the future President—through campaign donations or direct friendships—compared to other directors before and after the election. We find larger two-day cumulative abnormal returns around the disclosure of purchases by politically-connected directors, suggesting that they are more likely to trade on private material information. Furthermore, we observe that the probability to break the disclosure time limit increased significantly for connected directors after the election. Overall, our results indicate that politically-connected directors have a sense of impunity and engage in fraudulent behavior.

KEYWORDS: Insider Trading, Politics of Financial Markets, Securities Regulation

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1 Introduction

This paper investigates how politically-connected directors change their behavior in financial markets in response to a shift in power of the politician they are connected to. We use the French 2007 presidential election as a plausibly exogenous change in the value of political connections in a difference-in-differences research design. Our results suggest that politically-connected directors have a sense of impunity and engage in fraudulent behavior in financial markets, after the election of the politician they are connected to. They tend to trade more on private information on their company's stocks and are more likely not to comply with trades' legal reporting requirements

Existing studies in finance and political economics examine the consequences of political connections at the firm level. Fisman (2001) and Faccio (2006) document a positive impact of political connections on firm value. Recent studies also show that such connections lead to other types of benefits for firms. For instance, Khwaja and Mian (2005) and Claessens et al. (2008) report preferential access to finance and banks loans for connected firms, while Correia (2014) shows that they incur lower costs from public enforcement actions. Goldman et al. (2013), Tahoun and Van Lent (2013), and Tahoun (2014) provide evidence that such firms have a higher probability of obtaining government contracts or to be bailed out. To our knowledge, our paper is the first to depart from this literature by examining how political connections affect directors themselves.[1]

Under the rational framework developed by Becker (1968), individuals decide to break the law if the expected benefits from doing so are larger than the expected costs, which combine the incurred punishment and the probability of getting caught. Under the assumption that political connections can alleviate their legal exposure to securities regulation, politically-connected directors might be more likely to engage in fraudulent behavior in financial markets. In other terms, we conjecture that the sense of impunity due to political

[1]Recent contributions by Hwang and Kim (2009) and Khanna et al. (2014) emphasize the role of social ties amongst directors in shaping their decisions but do not consider political connections.

connections leads directors to act illegally in financial markets. Testing this conjecture is empirically challenging. Once political connections are established, it is particularly difficult to assess when a director feels that he is protected enough by his tie to a politician. It is also arduous to determine when a politician is exactly able to protect a director if he behaves fraudulently.

We use the French 2007 presidential election as a plausibly exogenous increase in the value of connections to the future President, Nicolas Sarkozy. A difference-in-differences framework allows us to capture the extent to which directors connected to Nicolas Sarkozy change their trading behavior from the pre- to the post-election period relatively to non-connected directors. This framework allows us to plausibly isolate how a shift in power of the politician directors are connected to affects directors' behavior in financial markets.

The French setting is particularly appropriate to answer our research question. France is a country where the President has major political power. He directly appoints the head of the "*Autorités des Marchés Financiers*"—the national agency which oversees French financial markets, including insider trading prosecution. Therefore, the election of Nicolas Sarkozy as President goes together with a tangible increase of his political power, and, as consequence, increases the value of connections to him. Prior studies, such as Bertrand et al. (2007) and Kramarz and Thesmar (2013) also argue that France is a particularly well-suited country to investigate the consequences of social ties of directors because its elites are highly concentrated and politically-connected.

We define political connections to Nicolas Sarkozy through two channels. The first one is the group of major contributors to Nicolas Sarkozy presidential campaign. We obtained the data from a major French information website, Mediapart, which leaked the list of major contributors to Sarkozy's 2007 political campaign. The second group is composed of businessmen who are Sarkozy's friends as constructed by Coulomb and Sangnier (2014).

We study whether connected directors are more likely to trade their company's stocks on the basis of private information due to the election of Nicolas Sarkozy. Insider trading

based on private information is prohibited under French law, as in most developed countries. According to Beaver (1968), Rozeff and Zaman (1988), and Kim and Verrechia (1991), changes in abnormal returns of a firm around the public disclosure of insider trades reveal insiders' private information concerning future profits of the firm. We find evidence that purchases by politically-connected directors exhibit larger abnormal returns after the election relatively to our control-group of unconnected directors. Our baseline estimation provides us with a difference-in-differences estimate around 0.7% around the disclosure date of purchases.

Our findings on stock returns might be due to the fact that politically-connected directors have superior information on Government's future decisions. To disentangle this interpretation from the one where directors break the law because of expected impunity, we next examine changes in reporting behavior. Since April 2006, executives and board members of French publicly listed companies are required to disclose their transactions on AMF's website within five business days. The difference-in-differences estimate we obtain suggests that politically-connected directors became about 20% more likely to break the law in response to the shift in power of Sarkozy. This supports our conjecture that the sense of impunity due to political connections leads directors to engage in fraudulent behavior in financial markets. However, we cannot exclude that, in addition, connected directors can have access to more non-public information about future laws or policies.

We perform a variety of tests to ensure the robustness of our findings. First, we show that our results are robust to various estimation windows for the market model we use to construct abnormal returns. We also show that no effect is reported around the transaction date, as the information is not publicly available to market participants, and that our effects are exclusively driven by directors' purchases, which is consistent with findings by Lakonishok and Lee (2001), Jeng et al. (2003), and Cohen et al. (2012). Second, we perform several placebo tests around fictitious election dates and non-presidential elections in France between 2008 and 2011 that do not correspond to any shift in power of Nicolas Sarkozy. As expected, applying our identification strategy around these dates does not produce mean-

ingful difference-in-differences estimates.

The remainder of the paper is organized as follows. Section 2 presents the related literature and details our research hypothesis. Section 3 describes the institutional and political context. Section 4 lays out the data and our estimation strategy. Empirical results are presented in Section 5. Section 6 offers some concluding remarks.

2 Literature review and hypothesis development

In this paper we relate and build on the results of two research fields. First, the literature on political connections and firms' value. Second, the literature on social ties and directors' behaviors. We summarize their main findings and subsequently develop our hypothesis that political connections may induce directors to act fraudulently in financial markets.

Prior studies in finance and political economy examine the value of political connections for a firm. The literature defines politically-connected firms in various ways. For example, Jayachandran (2006), Claessens et al. (2008), Ferguson and Voth (2008), and Cooper et al. (2010) define politically-connected firms as firms that financially contributed to an electoral campaign, while Knight (2007) and Coulomb and Sangnier (2014) consider as politically-connected those that should benefit from political platforms. In the literature, connected firms can also be firms whose directors or shareholders are personally connected to a political party or a politician. In this case, different types of personal connections are considered. Executives' campaign contributions are used by Ferguson and Voth (2008), direct friendships by Johnson and Mitton (2003) and Coulomb and Sangnier (2014), common educational background or geographical locations by Bertrand et al. (2007), Faccio and Parsley (2009), and Cohen et al. (2010), while cases where investors and directors are politicians or government officials themselves are considered by Faccio (2006), Faccio et al. (2006), Goldman et al. (2009), Imai and Shelton (2011), Luechinger and Moser (2012), and Cingano and Pinotti (2013).

In this literature, most studies use abnormal stock returns surrounding events that change firms' connections to establish the effect of political ties on firms' value. Such events include elections (Ferguson and Voth 2008, Goldman et al. 2009, Cooper et al. 2010, Imai and Shelton 2011, Do et al. 2013, and Akey 2014), or non-electoral power shifts (Fisman 2001, Jayachandran 2006 and Acemoglu et al. 2014), appointments of politically-connected directors (Faccio 2006 and Fan et al. 2007), or appointments in local governments of former employees (Cingano and Pinotti 2013).

The literature examines how politically-connected firms receive preferential treatments from public institutions. Such studies are motivated by theoretical contributions of Stigler (1971) and Pelzman (1976) that suggest that agencies use public resources to improve the economic status of specific economic groups. Empirically, Gordon and Hafer (2005) report lower investigation rates by the Nuclear Regulatory Commission for firms that contribute to political campaigns, while Correia (2014) finds that firms with long-term political connections incur lower costs from the enforcement actions by the Securities and Exchange Commission (SEC). Some studies, such as Khwaja and Mian (2005) and Claessens et al. (2008), argue that politically-connected firms have a preferential access to finance and banks loans, while Tahoun and Van Lent (2013) document that financial institutions in the portfolios of key committee members of the US Congress received higher and quicker bailouts during the financial crisis. Finally, Goldman et al. (2013), Boas et al. (2014), and Tahoun (2014) provide evidence that connected firms receive more government contracts. In lines with the previous findings, Amore and Bennedsen (2013) find that firms in industries relying heavily on public demand exhibit better operating returns if they are connected to local governments. Overall, these findings support the idea that political connections lead to favorable treatments by politicians in power.

Another stream of research emphasizes the role of social ties in shaping directors' decisions. For instance, Hwang and Kim (2009) report that CEOs that are socially-connected to independent directors enjoy higher level of compensation and lower turnover-performance

sensitivity. In the same vein, Khanna et al. (2014) document that CEOs develop connections through the appointment of directors. They provide evidence that appointment-based CEO connectedness increases the likelihood of committing corporate fraud and decreases the likelihood of detection. Finally, Fracassi and Tate (2012) find that firms with more CEO–director ties engage more in value-destroying acquisitions.

In this paper, we link these two streams of literature by investigating how political connections shape the behavior of directors themselves. Specifically, we explore whether political connections induce managers to engage in fraudulent transactions in financial markets. Our intuition relies on the seminal work by Becker (1968) who considered criminality as a rational choice under uncertainty, where the offender decides to break the law if the expected benefits from acting so exceed the expected costs. In this framework, the deterrence effect depends on the expected costs associated with the crime. Such costs are a function of two elements: the probability of being caught and the severity of the punishment, if convicted.

We conjecture that politically-connected directors should experience a decrease in the perceived probability of being targeted by an enforcement action whenever the politician they are connected to increases his political power. Such expectations seem obvious for directors tied with a politician by friendship connections. They are also plausible for contributors. Indeed, in a framework *à la* Stigler (1971) and Grossman and Helpman (1994), utility-maximizing politicians who want to increase their re-election probability have incentives to protect their contributors in response to donations, while financial support is supposed to be a function of the expected returns to politicians' constituencies. Consistently with our conjecture, Correia (2014) shows that firms' political contributions reduce the penalties prescribed by the SEC both to firms and their executives in cases of prosecutions for fraudulent accounting practices. Following our reasoning, connected directors should be more likely to engage in fraudulent behavior in financial markets among other activities.

We focus on the market returns around the reporting of insider trades to determine whether connected-directors trades contain more private information after their candidate

won the election. This approach follows prior theoretical and empirical contributions by Beaver (1968), Rozeff and Zaman (1988), and Kim and Verrechia (1991) who emphasize the role of stock returns in measuring the information content of a public announcement. Larger abnormal returns around the disclosure of purchases are meant to capture illegal trading on material information by insiders.[2]

3 Institutional context

This section presents the French insider trading regulation and describe the context of the 2007 presidential election.

3.1 Insider trading regulation

The "*Autorités des Marchés Financiers*" (AMF) oversees French financial markets and its court rules on penalties. Two important features characterize insider trading regulation: restrictions to trade on material and non-public information, and reporting requirements.

As most developed countries, France has laws that restrict trading on private information. Insider trading was initially recognized as a problem in France during the late 1960s. The first law was passed in 1970. The French Monetary and Financial Code prohibits insiders from carrying out or facilitating transactions before the public has knowledge of the information that is privileged. The 2005 version of this code lists a maximum penalty of two years of imprisonment and a fine of 1.5 million euro, which could be increased to up to ten times the amount of profit.[3,4] In addition, French listed companies usually prohibit directors transactions before major corporate events such as earnings releases.

[2]It is beyond the scope of this paper to review the literature on insider trading regulation and its role on stock markets. These issues are detailed by Manne (1966), Manove (1989), Ausubel (1990), Leland (1992), Fernandes and Ferreira (2009), and Brochet (2014) among others.

[3]The 2010 Banking and Financial Regulation Act increased the maximum penalty up to 100 million euro and to twenty years of imprisonment.

[4]Recently, the court of the AMF pursued a case and ruled on a 14 million euro fine against Joseph Raad and Charles Rosier for illegal insider trading during the 2008 takeover bid of the SNCF on Geodis.

Reporting requirements under French law are derived from the 2003 European Market Abuse Directive ($2003/6/EC$). This directive aims to harmonize disclosure requirements across European Union member states by mandating disclosure of transactions within five working days. In France, executives and other directors disclose their trades directly to the AMF since April 2006. The information is then posted on the AMF's website. Before this date, trades were not systematically disclosed to market participants. Directors that fail to timely disclose their transactions incur financial penalties.[5]

One could argue that breaching the law with respect to the disclosure of transactions is not particularity costly for insiders. Indeed, the AMF rarely investigates a case simply for failing to disclose on time. However, anecdotal evidence suggests that the national agency uses disclosure delays as an aggravating factor when it pursues cases for suspicions of illegal insider trading.[6]

3.2 Political context

French citizens elect their president for a five-year term by direct universal suffrage. In the 2007 election, Nicolas Sarkozy was declared as the official candidate of the largest rightist party—the "*Union pour un Mouvement Populaire*" (UMP). His main competitor was Ségolène Royal, the official candidate of the largest leftist party—the "*Parti Socialiste*". The 2007 French presidential election was held on April 22$^{\text{nd}}$. As no candidate received a majority of votes, a run-off between the two top vote-getters was held on May 6$^{\text{th}}$. Sarkozy won this second run-off against Royal, with 53.06% of the votes.

Nicolas Sarkozy was already a member of government before the 2007 presidential election.[7] However, his election as President did change much his power and, consequently, the

[5]For instance, the AMF imposed a $30,000$ euro fine on September 18^{th} 2009 to an executive that did not timely disclosed the sale of $87,141$ stocks of his company.

[6]On July 22nd 2014, the Commission of Sanctions of the AMF ruled on a case (SAN-2014-16) and charged several executives with fines ranging from $30,000$ to $90,000$ euro for trading on private material information while not complying with the disclosure rule.

[7]Under President Jacques Chirac's second term, Sarkozy served as Minister of the Interior in Jean-Pierre Raffarin's first governments from May 2002 to March 2004. He was appointed as Minister of Finances in

value of being connected to him for two reasons.

First, France is a semi-presidential republic where the President has a large power. The Prime Minister is chosen by the President and appoints the Government that must be validated by the President. The parliament votes laws that are *de facto* fostered by the President. Indeed, for the past two terms, the presidential election has immediately preceded parliamentary elections, and the party of the elected President systematically obtained the majority. In addition, the French National Assembly can be dissolved by the President at any time. Furthermore, the President can also appoint the director of the AMF for a five-year term.[8] Finally, Nicolas Sarkozy was known to have a strong conception of the President role as argued by Jan (2011).

Second, a well-documented animosity existed between Nicolas Sarkozy and former President Jacques Chirac, as well as between Nicolas Sarkozy and former Prime Minister, Dominique de Villepin, that was likely to limit Nicolas Sarkozy's influence before his election as President. All in all, Sarkozy's election goes together with a real additional power that could be used to benefit to individuals related to him.

4 Data and estimation strategy

This section first presents the data used in this paper. We then explain our estimation strategy.

4.1 Political connections

We use two sources to uncover politically-connected directors: directors that were major contributors to Sarkozy's presidential campaign and those that are Sarkozy's friends.

Raffarin's second government from March 2004 to May 2005. He was then appointed again as Minister of the Interior in Dominique de Villepin's government from June 2005 to March 2007. Sarkozy left this position to run for the 2007 presidential election. He was also the leader of UMP party since November 2004.

[8]For example, President Sarkozy appointed Jean-Pierre Jouyet—who first served in the government following the 2007 presidential election—as head of the AMF on December 15$^{\text{th}}$ 2008.

On September 25th 2012, the French information website, Mediapart, published a column about a list of individuals considered as "*grands donateurs*" ("large contributors") of UMP, Sarkozy's party. This list has been produced by the party's administration. The existence of the list has never been contested nor denied by anybody. Furthermore, its accuracy has been publicly confirmed by some of the individuals it contains. The group of "*grands donateurs*" was a club: meetings and diners were organized to gather all its members, and therefore the composition of the group was known by all its members. The list contains first and last names of 584 distinct individuals. Individuals working in finance were overrepresented in this group (Mediapart, 2012), this strongly suggests that the information concerning the identity of UMP large contributors was known by market participants around the presidential election. In France, the maximum donation an individual can make to a political party was $7,500$ euro in 2007. Individuals that appear on the list gave at least $3,000$ euro to the party during the 2007 presidential campaign.

The second group is composed of businessmen who are friends of Nicolas Sarkozy. Around the 2007 presidential election, French media reported a number of connections between Nicolas Sarkozy and prominent businessmen, while no such connections were reported for the leftist candidate, Ségolène Royal. This group is made of 27 businessmen and has been constructed by Coulomb and Sangnier (2014) who used information from Chemin and Perrignon (2007) and Dély and Hassoux (2008)—books written by journalists and political pundits.[9]

4.2 Insider transactions

Data on insiders' trades contains all trades by board members of French listed companies since 2006. We obtain this database from Directors Deals, a data vendor that compiled data from the AMF's website.[10] Each trade is registered in the dataset by the name of the trader and the company whose stocks are traded. The dataset also contains the position of

[9]See Coulomb and Sangnier (2014) for more information on the construction of this group, evidence of these friendship connections, and measures of their visibility in the media.

[10]Other recent studies such as Fidrmuc et al. (2013) and Brochet (2014), focusing on non-US insider transactions used Directors Deals as a primary source of information.

the board member in the firm (e.g., non-executive director, executive etc.) the type of the transaction (e.g., sale, purchase), the number of shares traded and the total trade value, as well as the transaction date and the announcement date, i.e. the date at which the trade has been made public. The data set is exhaustive and contains $7,385$ trades from mid-2006 to mid-2008—the time-window that will be used in the empirical analysis. These trades have been operated by $1,643$ distinct individuals.

We use three different dependent variables to capture two dimensions of the behavior of traders. As a first dependent variable, we compute the *two-day cumulative abnormal returns on purchases* of the traded stock at the announcement date. Under the efficient-market hypothesis, following Rozeff and Zaman (1988) and Brochet (2010), we consider changes in such returns as proxies for the private information embedded in insider trades. However, the literature makes an important distinction in the informativeness of sales and purchases with respect to illegal trading. Indeed, Lakonishok and Lee (2001) and Jeng et al. (2003) argue that open market sales by directors are driven by diversification motives while illegal insider trading is mostly embedded in open market insider purchases. This is the reason why our main analysis of abnormal returns focuses exclusively on purchases of a company's stocks made by its directors.

We follow MacKinlay (1997) in constructing firms' abnormal returns. For each purchase, we first estimate the relationship between a firm's return and that of the market before the announcement date. We then predict firm's returns from the market returns observed on the announcement day and the next two days. Specifically, we run the following regression for each stock i for which a purchase is announced on day t:

$$\mathbb{R}_{i\tau} = \alpha_{it} + \beta_{it} \times \bar{\mathbb{R}}_{\tau} + \varepsilon_{i\tau}, \text{ for } \tau \in [t-30, t-1]\,,$$

where $\mathbb{R}_{i\tau}$ is firm i's stock return on day τ, $\bar{\mathbb{R}}_{\tau}$ is the market return on day τ, and $\varepsilon_{i\tau}$ is the error term. We obtain daily stock and market returns from Datastream. We use the

SBF 120 return as market return. The SBF 120 is a reference index composed of the 120 most actively traded stocks on the Paris Stock Exchange. We estimate the above expression separately for each firm and each announcement date, which yields trade-level estimated parameters $\hat{\alpha}_{it}$ and $\hat{\beta}_{it}$. These are used to compute the abnormal returns of each purchase over the two following business days using the following formula:

$$\tilde{\mathbb{R}}_{i\tau} = \mathbb{R}_{i\tau} - \left\{\hat{\alpha}_{it} + \hat{\beta}_{it} \times \bar{\mathbb{R}}_{\tau}\right\}, \text{ for } \tau \in [t, t+1, t+2],$$

where $\tilde{\mathbb{R}}_{i\tau}$ is the abnormal return of stock i on day τ.

Finally, we compute the two-day cumulative abnormal return as:

$$\tilde{\mathbb{R}}_{it}^{\text{cum}} = \left(1 + \tilde{\mathbb{R}}_{i,t}\right) \times \left(1 + \tilde{\mathbb{R}}_{i,t+1}\right) \times \left(1 + \tilde{\mathbb{R}}_{i,t+2}\right) - 1.$$

We use two additional dependent variables. We compute the *announcement delay* of each trade by taking the difference in business days between the transaction date and the announcement date. From this measure, we also construct our third dependent variable, a dummy variable, labeled *non-compliance with legal time limit* that is equal to one if the announcement delay is strictly larger than 5 business days, the legal time limit, and zero otherwise. These last two dependent variables capture the intensive and the extensive margins of traders' compliance with legal announcement requirements.

4.3 Estimation strategy

As reported by Coulomb and Sangnier (2014), the outcome of the 2007 French presidential election was anticipated in the weeks that preceded the vote itself. Thus, we use a large time-window of two years around the election event—from mid-2006 to mid-2008—to capture a change in directors' behavior due to the shift in Sarkozy's power.

We match data on insiders' trades and the lists of connected businessmen in order to identify individuals that appear in both datasets. Out of 584 individuals that appear on the

list of contributors, 28 could be matched to trades using their first and last names. So do 16 out of the 27 businessmen considered as friends of Nicolas Sarkozy in 2007. Only 2 traders are both friends of Nicolas Sarkozy and contributors of his campaign. We consider all these 42 individuals as *Sarkozy affiliates*. This group represents 2.5% of all traders that operated during our time-window. Yet, Sarkozy affiliates traded on average 15 times over these two years, against 4 times on average for other board members. As a consequence, 8.7% of all trades have been operated by Sarkozy affiliates. Table 1 displays summary statistics of dependent variables and descriptive statistics for the two groups of individuals.

We estimate the change in behavior of politically-connected directors before and after Nicolas Sarkozy's election thanks to a difference-in-differences approach. We implement this design by estimating the following expression:

$$\begin{aligned} y_{it} &= \beta \text{Sarkozy affiliate}_i \times \text{Post-election}_t \\ &+ \gamma \text{Sarkozy affiliate}_i + \delta \text{Post-election}_t \\ &+ \theta \text{Time}_t + \alpha + \varepsilon_{it}, \end{aligned} \tag{1}$$

where *Sarkozy affiliate*$_i$ is a dummy variable equal to one if the trader is connected to Sarkozy, *Post-election*$_t$ is a dummy variable equal to one after May 6$^{\text{th}}$ 2007, *Time*$_t$ is a time trend, ε_{it} is the error term, and α is a constant. Our coefficient of interest, the difference-in-differences estimate β, captures the relative change in behavior of Sarkozy affiliates compared to other directors after the presidential election. Coefficients δ and θ capture the common change in the behavior of all directors after the election compared to before the election. The coefficient γ captures possible differences between the behavior of Sarkozy affiliates and other directors over the whole period.

5 Results

In this section, we present empirical evidence of the change of behavior of Sarkozy's affiliates in financial markets after the 2007 presidential election.

5.1 Main results

We start our analysis by estimating expression (1) with abnormal returns on purchases as dependent variable. The first column of Table 2 presents estimated coefficients. The coefficient on *Sarkozy affiliates* × *Post Election* is positive and statistically significant, suggesting that more private information is embedded in Sarkozy affiliates' trades after the election, relatively to private information in other directors' trades. The effect is economically significant as well. The difference-in-differences estimate corresponds to 70 additional basis points in returns.

However, the estimated coefficient of the non-interacted *Sarkozy affiliate* variable is negative. This suggests that purchases by politically-connected directors produce lower abnormal returns on average. This is likely to be due to a composition effect related to the firms they are associated to. We tackle this issue in column 2 by adding firm fixed effects to our model. This specification is more restrictive as it compares connected and non-connected traders within the same firm. This allows us to get rid of any effect that would be firm-specific, which encompasses composition effects due to firms' characteristics. Our estimate of interest is left unchanged both in terms of magnitude and statistical significance. The coefficient on *Sarkozy affiliate* is now close to zero and not statistically significant anymore. This indicates that trades by Sarkozy's affiliates contain on average the same level of private information as trades by non-connected directors before the election, conditional on firms' characteristics.

Other composition effects might be at play. Among them, it is likely that trades by executive directors contain more information than trades by other board members. Similarly,

larger trades might be more informative than smaller ones. These are the reason why we introduce two trade-level control variables in the model estimated in column 3: *Trades' value* which corresponds to the logarithm of the total value of the transaction and *executive*, a dummy that equals one if the insider is an executive director at the trading date, and zero otherwise. The coefficient on *trades' value* is insignificant.[11] As expected, the coefficient on *executive* is positive and statistically significant, indicating that more information is embedded in transactions by insiders who are involved in running the firm.[12] We further exploit these trade-level variables in column 4 by interacting them with the *post-election* dummy variable. This helps us to alleviate the concern that our main results could be driven by changes in behaviors shared by all traders of a given type. Sarkozy affiliates are indeed more likely to be executives and tend to trade higher values as shown by Table 1. Our coefficient of interest would be biased if all executives or all directors that trade high values changed their behavior after Sarkozy's election. Our main estimate remains unaffected by this change of specification.

All in all, estimates presented in Table 2 suggest that trades by Sarkozy affiliates contain more private information after than before the presidential election, relatively to non-connected board members. While this empirical finding is consistent with our conjecture that political connections lead managers to act fraudulently in financial markets, it does not prove it. Indeed, this higher content in information might be due to the fact that politically-connected directors have superior information on the government's future decisions that could impact their firms. Examining directors reporting behavior can help us to determine whether this is the correct interpretation of earlier findings or whether Sarkozy affiliates became more likely to break the law, both options being not exclusive of each other.

Figure 1 plots the disclosure patterns for all trades—i.e. sales and purchases together—

[11] Prior literature has found contradictory evidence that large trades by executives could contain more private information: Seyhun (1986) and Chang and Corbitt (2012) reported a positive relation between trade size and returns, contrary to Lin and Howe (1990).

[12] This result supports the information hierarchy hypothesis developed by Seyhun (1986) and Lin and Howe (1990).

and presents the means and confidence intervals for Sarkozy affiliates and other board members separately. While the overall trend seems to converge slowly toward the 5-day legal time limit since the law was enacted, a sizable difference in the behavior of both groups can be observed after the 2007 presidential election: the trade announcement delay—i.e. the number of business days between a trade and its disclosure—of Sarkozy affiliates increases significantly. This suggests that Sarkozy affiliates are more likely to break the law after than before the election, relatively to non-connected directors.

In Table 3, we formally estimate this change in behavior by estimating expression (1) with our two dependent variables that capture the extent to which traders comply with legal disclosure requirements. Estimated coefficients presented in the top part of Table 3 are those obtained when using the trade announcement delay as dependent variable. The dummy variable—that is equal to 1 whenever the 5-day legal time limit is broken—is used as dependent variable for estimates presented in the bottom part of the table. We replicate the different specifications used in Table 2 for both dependent variables. All reported difference-in-differences estimates are positive and statistically significant. This indicates that Sarkozy affiliates became more likely to break the law after the election, relatively to other traders.

5.2 Robustness checks

In Table 4, we perform additional analyses to ensure the robustness of our findings by varying the definition and the construction of abnormal returns. In column 1, we examine the market reaction over a single day after a trade's disclosure to market participants. In columns 2–4, we test the sensitivity of our estimates by changing the pre-event period of the market model from 30 to 7, 60 and 120 days, respectively. Although slightly different, reported point estimates are of the same order of magnitude as those previously presented. The difference-in-differences estimate presented in column 5 illustrates that there is no market reaction at the transaction date as equity traders cannot react to a trade of which they are not aware. Finally, in column 6, we use cumulative abnormal returns on sales as a dependent variable.

According to the literature, there is few information content in sales as such transactions are motivated by diversification purposes (Lakonishok and Lee 2001 Jeng et al. 2003). As expected, our difference-in-differences estimate is insignificant when focusing solely on sales.

We also perform several placebo tests to ensure the robustness of our findings. In Table 5, we randomly select ten fictitious election dates and estimate expression (1) replacing the date of Sarkozy's election by these dates.[13] Two points are worth mentioning following these ten estimations. First, the only date for which we report difference-in-differences estimates that could be compared to those previously estimated—although smaller and not statistically significant—is August 20$^{\text{th}}$ 2007, a date that is relatively close from the actual election date. This illustrates the fact that our approach does not rely on a sharp discontinuity. Second, while we do find some statistically significant estimates for other fictitious dates, none of them provide us with estimates that are statistically significant for all of the three dependent variables. Furthermore, none of these dates is located around an event we would be aware of and that would be relevant to explain a change in Sarkozy affiliates' trading behavior. Finally, we also estimate expression (1) around four non-presidential elections in France that took place between 2008 and 2011. These four elections are not supposed to change how directors could benefit from their political connections in a way that would lead to fraudulent behavior in financial markets. Thus, it helps us to disentangle between a potential effect of the election itself and the effect of a perceived change in law enforcement probability for connected directors due to the 2007 presidential election. As expected, reported difference-in-differences estimates around these elections are not systematically positive, nor statistically significant for all dependent variables.

We next decompose the group of Sarkozy affiliates along the two sources we used to construct it. Table 6 presents the jointly estimated difference-in-differences coefficients for both groups. In the upper part of the table, the dependent variable is the two-day cumulated

[13]Each fictitious election date has been randomly drawn from the interval March 22$^{\text{nd}}$ 2007–June 28$^{\text{th}}$ 2012. The lower bound of this interval corresponds to the earliest date at which we observe a trade plus one year. The upper bound corresponds to the latest date at which we observe a trade minus one year.

abnormal return on purchases. Estimates of our difference-in-differences model are similar to those of the baseline regression for both groups, but the one for Sarkozy's friends turns to be non-significant when firm fixed effects are added. This indicates that previous results were likely to be driven by UMP contributors solely. In the middle and bottom parts of the table, the dependent variables are the trade announcement delay and the dummy variable that indicates non-compliance with the legal time limit. Difference-in-differences estimates of both groups are positive and statistically significant. The one for Sarkozy's friends is significantly larger than the one for UMP contributors. This indicates that the election of Sarkozy increases the probability that both groups of connected directors breach the legal reporting-time limit, and that this effect is even larger for Sarkozy's friends compared to UMP contributors.

6 Conclusion

In this paper, we examined the consequences of political connections on the insider trading behavior of directors. We use the victory of Nicolas Sarkozy at the 2007 presidential election in France as a plausibly exogenous source of variation in the perceived protection afforded to directors who are connected to him, either by friendship or through major contributions to his campaign.

First, we find larger two-day cumulative abnormal returns around the disclosure of stocks' purchases by politically-connected directors after the election compared to a control group of non-connected directors. This result indicates that connected directors are more likely to trade on private information, which is illegal under French business law. Second, we find that the probability to break the legal time limit in disclosing trades to the AMF increases significantly for politically-connected directors after the election. We ensure the robustness of our findings by using various specifications and by conducting placebo analyses. Overall, our results suggest that political-connected directors have a sense of impunity that leads to

fraudulent behavior in financial markets.

Our findings contribute to the empirical literature on political connections. To our knowledge, this paper is the first to depart from this literature by focusing directly on directors' behavior rather than on firms' performance. Our results also speak to the literature on social ties by showing that links to politicians induce directors to plausibly engage in illegal insider trading. From a regulatory standpoint, this suggests that connected directors are more likely to exploit information asymmetries between themselves and less-well-informed market participants, including retail investors. This contributes to the lack of trust in stock markets, leading retail investors less willing to participate to financial stock markets (Guiso et al., 2008), which might hamper economic growth (Levine and Zervos, 1998).

References

Acemoglu, D., T. Hassan, and A. Tahoun, 2014, The Power of the Street: Evidence from Egypt's Arab Spring, Working Paper.

Akey, P., 2014, Valuing Changes in Political Networks: Evidence from Campaign Contributions to Close Congressional Elections„ Technical report, Working Paper.

Amore, M., and M. Bennedsen, 2013, The Value of Local Political Connections in a Low-Corruption Environment, *Journal of Financial Economics* 110, 387 – 402.

Ausubel, L., 1990, Insider Trading in a Rational Expectations Economy, *American Economic Review* 80, 1022–41.

Beaver, W., 1968, The Information Content of Annual Earnings Announcements, *Journal of Accounting Research* 6, 67–92.

Becker, G., 1968, Crime and Punishment: An Economic Approach, *Journal of Political Economy* 76.

Bertrand, M., F. Kramarz, A. Schoar, and D. Thesmar, 2007, Politicians, Firms and the Political Business Cycle: Evidence from France, Working Paper.

Boas, T., D. Hidalgo, and N. Richardson, 2014, The Spoils of Victory: Campaign Donations and Government Contracts in Brazil, *Journal of Politics* 76, 415–429.

Brochet, F., 2010, The Information Content of Insider Trades Before and After the Sarbanes-Oxley Act of 2002, *The Accounting Review* 85, 419–446.

Brochet, F., 2014, Transparency, Insider Trading, and Market Returns around the World Working Paper.

Chang, Millicent, and Ross Corbitt, 2012, The Effect of Cross-Listing on Insider Trading Returns, *Accounting & Finance* 52, 723–741.

Chemin, Ariane, and Judith Perrignon, 2007, *La Nuit du Fouquet's* (Fayard, Paris).

Cingano, F., and P. Pinotti, 2013, Politicians at Work: The Private Returns and Social Costs of Political Connections, *Journal of the European Economic Association* 11, 433–465.

Claessens, S., E. Feijen, and L. Laeven, 2008, Political Connections and Preferential access to Finance: The Role of Campaign Contributions, *Journal of Financial Economics* 88, 554–580.

Cohen, L., A. Frazzini, and C. Malloy, 2010, Sell-Side School Ties, *Journal of Finance* 65, 1409–1437.

Cohen, L., C. Malloy, and L. Pomorski, 2012, Decoding Inside Information, *Journal of Finance* 67, 1009–1043.

Cooper, M., H. Gulen, and A. Ovtichinnikov, 2010, Corporate Political Contributions and Stock Returns, *Journal of Finance* 65, 687–724.

Correia, Maria M., 2014, Political connections and SEC enforcement, *Journal of Accounting and Economics* 57, 241–262.

Coulomb, R., and M. Sangnier, 2014, The Impact of Political Majorities on Firm Value: Do Electoral Promises or Friendship Connections Matter?, *Journal of Public Economics* 115, 158–170.

Dély, Renaud, and Didier Hassoux, 2008, *Sarkozy et l'Argent Roi* (Calmann-Levy, Paris).

Do, Q-A., Y-T. Lee, and B. D. Nguyen, 2013, Political Connections and Firm Value: Evidence from the Regression Discontinuity Design of Close Gubernatorial Elections,, Technical report, Working Paper.

Faccio, M., 2006, Politically Connected Firms, *American Economic Review* 96, 369–386.

Faccio, M., R.W. Masulis, and J.l McConnel, 2006, Political Connections and Corporate bailouts, *Journal of Finance* 61, 2597–2635.

Faccio, Mara, and David C. Parsley, 2009, Sudden Deaths: Taking Stock of Geographic Ties, *Journal of Financial and Quantitative Analysis* 44, 683–718.

Fan, J., T.J. Wong, and T. Zhang, 2007, Politically Connected CEOs, Corporate Governance, and Post-IPO Performance of China's Newly Partially Privatized Firms, *Journal of Financial Economics* 84, 330–357.

Ferguson, T., and H-J. Voth, 2008, Betting on Hitler - The Value of Political Connections in Nazi Germany, *Quarterly Journal of Economics* 123, 101–137.

Fernandes, Nuno, and Miguel A. Ferreira, 2009, Insider trading laws and stock price informativeness, *Review of Financial Studies* 22, 1845–1887.

Fidrmuc, J., A. Korczak, and P. Korczak, 2013, Why Does Shareholder Protection Matter for Abnormal Returns after Reported Insider Purchases and Sales?, *Journal of Banking and Finance* 37, 1915–1935.

Fisman, R., 2001, Estimating the Value of Political Connections, *American Economic Review* 91, 1095–1102.

Fracassi, C., and G. Tate, 2012, External Networking and Internal Firm Governance, *Journal of Finance* 67, 153 – 194.

Goldman, E., J. Rocholl, and J. So, 2009, Do Politically Connected Boards affect Firm Value?, *Review of Financial Studies* 22, 2331–2360.

Goldman, Eitan, Jörg Rocholl, and Jongil So, 2013, Politically Connected Boards of Directors and the Allocation of Procurement Contracts, *Review of Finance* .

Gordon, S., and C. Hafer, 2005, Flexing Muscle: Corporate Political Expenditures as Signals to the Bureaucracy, *American Political Science Review* 99, 245 – 261.

Grossman, G., and E. Helpman, 1994, Protection for Sale, *American Economic Review* 84, 833 – 850.

Guiso, L., P. Sapienza, and L. Zingales, 2008, Trusting the Stock Market, *Journal of Finance* 63, 2557 – 2600.

Hwang, B.-H., and S. Kim, 2009, It Pays to Have Friends, *Journal of Financial Economics* 93, 138–158.

Imai, M., and C. Shelton, 2011, Elections and Political Risk: New Evidence from the 2008 Taiwanese Presidential Election, *Journal of Public Economics* 95, 837–849.

Jan, P., 2011, *Le Président de la République, au Centre du Pouvoir* (Les Etudes de la Documentation française).

Jayachandran, S., 2006, The Jeffords Effect, *Journal of Law and Economics* 49, 397–425.

Jeng, L., A. Metrick, and R. Zeckhauser, 2003, Estimating the Returns to Insider Trading: A Performance-Evaluation Perspective, *Review of Economics and Statistics* 85, 453–471.

Johnson, S., and T. Mitton, 2003, Cronyism and Capital Controls: Evidence from Malaysia, *Journal of Financial Economics* 67, 351–382.

Khanna, V., H.E. Kim, and Y. Lu, 2014, CEO Connectedness and Corporate Frauds, *Journal of Finance* Forthcoming.

Khwaja, A., and A. Mian, 2005, Do Lenders Favor Politically Connected Firms? Rent Provision in an Emerging Financial Market, *Quarterly Journal of Economics* 120, 1371–1411.

Kim, O., and R. Verrechia, 1991, Trading Volumes and Price Reactions to Public Announcements, *Journal of Accounting Research* 26, 302–321.

Knight, B., 2007, Are Policy Platforms Capitalized into Equity Prices? Evidence from the Bush/Gore 2000 Presidential Election, *Journal of Public Economics* 91, 389–409.

Kramarz, F., and D. Thesmar, 2013, Social Networks in the Boardroom, *Journal of the European Economic Association* 11, 780–807.

Lakonishok, J., and I. Lee, 2001, Are Insiders Trades Informative?, *Review of Financial Studies* 14, 79–111.

Leland, Hayne E, 1992, Insider Trading: Should It Be Prohibited?, *Journal of Political Economy* 100, 859–87.

Levine, R., and S. Zervos, 1998, Stock Markets, Banks, and Economic Growth, *American Economic Review* 88.

Lin, Ji-Chai, and John S. Howe, 1990, Insider trading in the otc market, *The Journal of Finance* 45, pp. 1273–1284.

Luechinger, Simon, and Christoph Moser, 2012, The Value of the Revolving Door: Political Appointees and the Stock Market, CESifo Working Paper Series 3921, CESifo Group Munich.

MacKinlay, C. A., 1997, Event Studies in Economics and Finance, *Journal of Economic Literature* 35, 13–39.

Manne, H., 1966, *Insider Trading and the Stock Market* (The Free Press, New York).

Manove, M., 1989, The Harm from Insider Trading and Informed Speculation, *Quarterly Journal of Economics* 104, 823–45.

Mediapart, 2012, Argent de l'UMP : la liste secrète, Mediapart.fr, Sep. 25th.

Pelzman, S., 1976, Towards a More General Theory of Regulation, *Journal of Law and Economics* 19, 211 – 240.

Rozeff, F., and M. Zaman, 1988, Market Efficiency and Insider Trading: New Evidence, *Journal of Business* 61, 25–44.

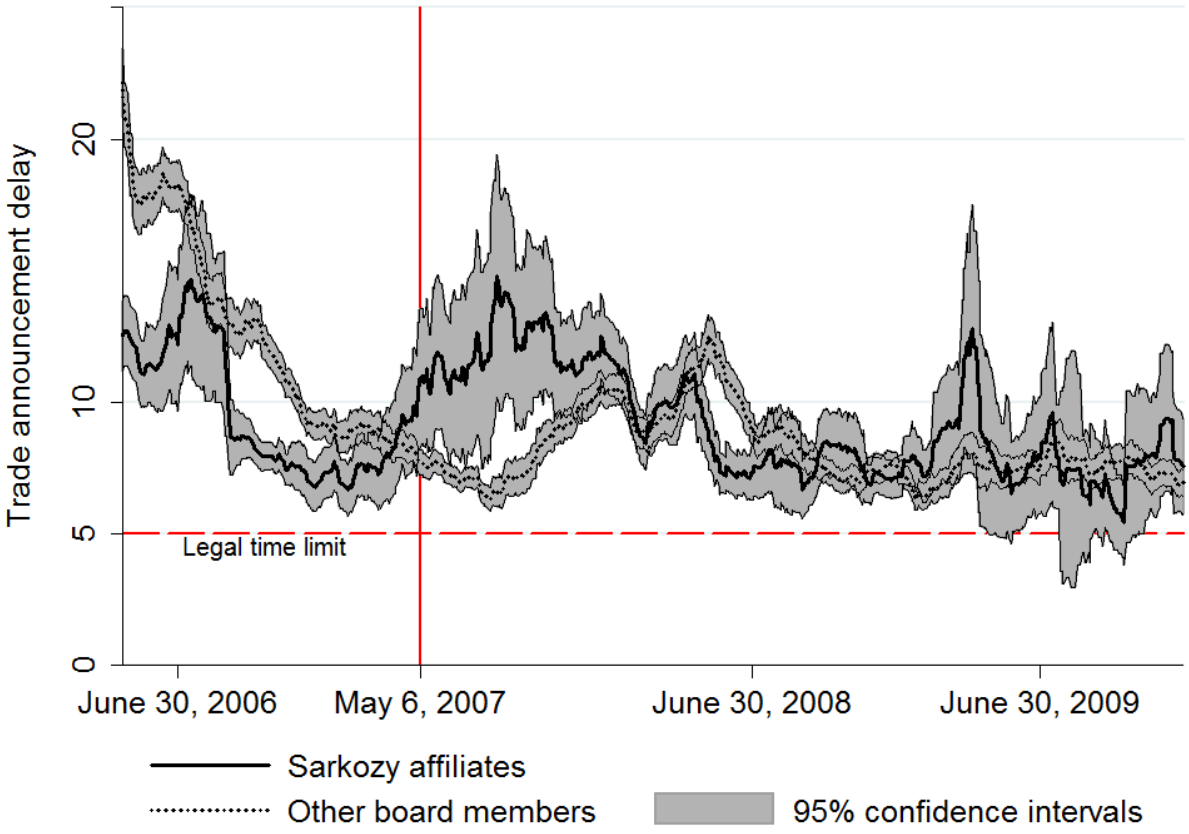
Seyhun, H.Nejat, 1986, Insiders' profits, costs of trading, and market efficiency, *Journal of Financial Economics* 16, 189 – 212.

Stigler, G., 1971, The Theory of Economic Regulation, *The Bell Journal of Economics and Management Science* 2, 3 – 21.

Tahoun, A., 2014, The Role of Stock Ownership by US Members of Congress on the Market for Political Favors, *Journal of Financial Economics* 111, 86–110.

Tahoun, A., and L. Van Lent, 2013, The Personal Wealth Interests of Politicians and Government Intervention in the Economy Working Paper.

Figure 1: Trade announcement delay by Sarkozy affiliates and other board members.



Trade announcement delay is the number of business days between a trade and its official announcement. Means and confidence intervals have been estimated using a 30-day window before and after each date.

Table 1: Descriptive statistics.

	Observations	Mean	Median	Standard dev.
Two-day cumulated ab. ret. on purchases	2,224	0.00	-0.00	0.03
Trade announcement delay	7,385	10.29	8.00	8.17
Non-compliance with legal time limit	7,385	0.73	1.00	0.44
	Total	Sarkozy affiliates	Other board members	
# of traders	1,643	42	1,601	
# of trades	7,385	643	6,742	
# of trades by trader	4.5	15.3	4.2	
Trade's value (average, in thousand euro)	2,429	4,789	2,204	
Executive	0.37	0.49	0.36	

The time window is 365 days before and after May 6$^{\text{th}}$ 2007. The sample is made of all trades by board members of French listed firms during the time window. *Trade announcement delay* is the number of business days between a trade and its announcement. *Non-compliance with legal limit* is a dummy variable equal to 1 if the trade announcement delay is strictly greater than 5 business days. *Two-day cumulated ab. ret. on purchases* is the compound abnormal return (computed using a firm-specific 30-day market model) of the traded stock over the two days following the announcement of a purchase. *Sarkozy affiliates* are traders connected to Sarkozy. See the text for details about the construction of the group. *Executive* is a dummy equal to one for individuals that are members of the management board of the firm at the date of the trade. *Trade's value* is the trade's value in current euro.

Table 2: Difference-in-differences estimation of the change in the behavior of Sarkozy affiliates around Sarkozy's election: Abnormal returns on purchases.

Dependent variable: Two-day cumulated abnormal return on purchases at announcement date

	(1)	(2)	(3)	(4)
Sarkozy affiliate × Post-election	0.007**	0.007**	0.007**	0.007**
	(0.003)	(0.003)	(0.003)	(0.004)
Sarkozy affiliate	-0.008***	-0.001	-0.002	-0.002
	(0.002)	(0.003)	(0.003)	(0.004)
Post-election	-0.004	-0.004	-0.004	-0.008
	(0.003)	(0.004)	(0.004)	(0.009)
Executive			0.006*	0.009***
			(0.003)	(0.003)
Trade's value			0.000	-0.000
			(0.000)	(0.001)
Executive × Post-election				-0.006
				(0.004)
Trade's value × Post-election				0.001
				(0.001)
Firm fixed effects		Yes	Yes	Yes
Observations	2,224	2,224	2,224	2,224

*** p<0.01, ** p<0.05, * p<0.1. White heteroskedastic standard errors in parentheses. OLS regressions. Each column presents estimates from a separate regression. All regressions include a constant term and a time trend. The election date is May 6$^{\text{th}}$ 2007. The time window is 365 days before and after the election. The sample is made of all stock purchases by board members of French listed firms during the time window. *Post-election* is a dummy variable equal to 1 for all trades that occurred after the election. The dependent variable is the compound abnormal return (computed using a firm-specific 30-day market model) of the traded stock over the two days following the announcement of a purchase. *Sarkozy affiliate* is a dummy variable equal to 1 if the trader is connected to Sarkozy. See the text for details about the construction of the group. *Executive* is a dummy equal to one for individuals that are members of the management board of the firm at the date of the trade. *Trade's value* is the log of a trade's value in current euro.

Table 3: Difference-in-differences estimation of the change in the behavior of Sarkozy affiliates around Sarkozy's election: Compliance with legal requirements.

Dependent variable: Trade announcement delay				
	(1)	(2)	(3)	(4)
Sarkozy affiliate × Post-election	5.854***	4.428***	4.390***	4.263***
	(0.562)	(0.549)	(0.546)	(0.563)
Sarkozy affiliate	-3.080***	-2.768***	-2.451***	-2.366***
	(0.332)	(0.538)	(0.536)	(0.546)
Post-election	-0.038	0.376	0.337	-1.886*
	(0.326)	(0.370)	(0.367)	(1.074)
Executive			0.129	0.301
			(0.260)	(0.342)
Trade's value			-0.289***	-0.391***
			(0.050)	(0.070)
Executive × Post-election				-0.352
				(0.387)
Trade's value × Post-election				0.194**
				(0.083)
Firm fixed effects		Yes	Yes	Yes
Observations	7,385	7,385	7,385	7,385
Dependent variable: Non-compliance with legal time limit				
	(5)	(6)	(7)	(8)
Sarkozy affiliate × Post-election	0.188***	0.222***	0.220***	0.208***
	(0.035)	(0.034)	(0.033)	(0.034)
Sarkozy affiliate	-0.056**	-0.176***	-0.160***	-0.152***
	(0.025)	(0.035)	(0.035)	(0.035)
Post-election	-0.100***	-0.117***	-0.118***	-0.260***
	(0.022)	(0.024)	(0.024)	(0.064)
Executive			-0.004	-0.008
			(0.015)	(0.018)
Trade's value			-0.014***	-0.020***
			(0.003)	(0.004)
Executive × Post-election				0.007
				(0.023)
Trade's value × Post-election				0.012**
				(0.005)
Firm fixed effects		Yes	Yes	Yes
	7,385	7,385	7,385	7,385

*** p<0.01, ** p<0.05, * p<0.1. White heteroskedastic standard errors in parentheses. OLS regressions. Each column presents estimates from a separate regression. All regressions include a constant term and a time trend. The election date is May 6th 2007. The time window is 365 days before and after the election. The sample is made of all trades by board members of French listed firms during the time window. *Post-election* is a dummy variable equal to 1 for all trades that occurred after the election. *Trade announcement delay* is the number of business days between a trade and its official announcement. *Non-compliance with legal limit* is a dummy variable equal to 1 if the trade announcement delay is strictly larger than 5 business days. *Sarkozy affiliate* is a dummy variable equal to 1 if the trader is connected to Sarkozy. See the text for details about the construction of the group. *Executive* is a dummy equal to one for individuals that are members of the management board of the firm at the date of the trade. *Trade's value* is the log of a trade's value in current euro.

Table 4: Difference-in-differences estimation of the change in the behavior of Sarkozy affiliates around Sarkozy's election: Various types of abnormal returns.

Dependent variable :	(1) One-day ab. ret. on purchases at announcement date	(2) Two-day cumulated ab. ret. on purchases at announcement date (7-day market model)	(3) Two-day cumulated ab. ret. on purchases at announcement date (60-day market model)
Sarkozy affiliate × Post-election	0.008***	0.011***	0.006**
	(0.002)	(0.003)	(0.003)
Dependent variable :	**(4) Two-day cumulated ab. ret. on purchases at announcement date (120-day market model)**	**(5) Two-day cumulated ab. ret. on purchases at transaction date**	**(6) Two-day cumulated ab. ret. on sales at announcement date**
Sarkozy affiliate × Post-election	0.007**	-0.002	-0.001
	(0.003)	(0.004)	(0.004)

*** p<0.01, ** p<0.05, * p<0.1. White heteroskedastic standard errors in parentheses. OLS regressions. Each cell presents an estimate from a separate regression. All regressions include a constant term, a time trend, a dummy variable equal to 1 for dates after the election, and the non-interacted *Sarkozy affiliate* dummy variable which is equal to 1 if the trader is connected to Sarkozy. See the text for details about the construction of the group. The election date is May 6^{th} 2007. The time window is 365 days before and after the election. The sample is made of all stock purchases by board members of French listed firms during the time window, except in column 6 where sales are used. Dependent variables are abnormal returns (computed using a firm-specific market model of the traded stock) for different length and at different dates as specified in columns' heads.

Table 5: Difference-in-differences estimation of the change in the behavior of Sarkozy affiliates around fictitious election dates and non-presidential elections.

Dependent variable:	(1) Two-day cumulated abnormal return on purchases	(2) Trade announcement delay	(3) Non-compliance with legal time limit	(4) Two-day cumulated abnormal return on purchases	(5) Trade announcement delay	(6) Non-compliance with legal time limit
	Fictitious election on August 20, 2007			Fictitious election on October 21, 2007		
Sarkozy affiliate × Post-election	0.001	0.911*	0.042	0.000	-1.033*	-0.005
	(0.003)	(0.528)	(0.036)	(0.003)	(0.559)	(0.037)
	Fictitious election on September 8, 2008			Fictitious election on April 20, 2009		
Sarkozy affiliate × Post-election	0.000	0.760	0.205***	-0.001	0.629	-0.051
	(0.005)	(0.507)	(0.038)	(0.009)	(0.633)	(0.050)
	Fictitious election on June 21, 2009			Fictitious election on February 22, 2010		
Sarkozy affiliate × Post-election	-0.011*	0.762	-0.023	-0.010	1.315	-0.067
	(0.007)	(0.760)	(0.052)	(0.009)	(0.935)	(0.060)
	Fictitious election on October 18, 2010			Fictitious election on March 15, 2011		
Sarkozy affiliate × Post-election	0.007	-1.256	-0.129**	0.006	-1.108	0.072
	(0.006)	(0.971)	(0.065)	(0.006)	(1.001)	(0.069)
	Fictitious election on December 6, 2011			Fictitious election on December 28, 2011		
Sarkozy affiliate × Post-election	0.003	-0.805	-0.016	0.003	-0.972	-0.033
	(0.006)	(0.865)	(0.069)	(0.006)	(0.871)	(0.068)
	Municipal election on March 16, 2008			European election on June 7, 2009		
Sarkozy affiliate × Post-election	0.001	-3.091***	-0.027	-0.011*	0.985	-0.033
	(0.004)	(0.554)	(0.036)	(0.007)	(0.757)	(0.051)
	Regional election on March 21, 2010			Partial gubernatorial election on September 25, 2011		
Sarkozy affiliate × Post-election	0.002	1.463	-0.016	0.007	-0.786	0.102
	(0.008)	(0.956)	(0.061)	(0.006)	(0.826)	(0.069)

*** p<0.01, ** p<0.05, * p<0.1. White heteroskedastic standard errors in parentheses. OLS regressions. Each cell presents an estimate from a separate regression. All regressions include a constant term, a time trend, a dummy variable equal to 1 for dates after the (fictitious or non-presidential) election, and the non-interacted *Sarkozy affiliate* dummy variable which is equal to 1 if the trader is connected to Sarkozy. See the text for details about the construction of the group. The true election date is May 6$^{\text{th}}$ 2007. The time window is 365 days before and after fictitious and non-presidential election dates. Each fictitious election date has been randomly drawn from the interval March 22$^{\text{nd}}$ 2007–June 28$^{\text{th}}$ 2012. *Trade announcement delay* is the number of business days between a trade and its announcement. *Non-compliance with legal limit* is a dummy variable equal to 1 if the trade announcement delay is strictly greater than 5 business days. *Two-day cumulated abnormal return on purchases* is the compound abnormal return (computed using a firm-specific 30-day market model) of the traded stock over the two days following the announcement of a purchase.

Table 6: Difference-in-differences estimation of the change in the behavior of Sarkozy affiliates around Sarkozy's election: Decomposition along the type of connection.

Dependent variable: Two-day cumulated abnormal return on purchases at announcement date				
	(1)	(2)	(3)	(4)
UMP contributor × Post-election	0.007*	0.009**	0.009**	0.008*
	(0.004)	(0.005)	(0.005)	(0.005)
Sarkozy friend × Post-election	0.006**	0.004	0.004	0.005
	(0.003)	(0.004)	(0.004)	(0.005)
Firm fixed effects		Yes	Yes	Yes
Trade-level variables			Yes	Yes
Interacted trade-level variables				Yes
P-value for equality of coefficients	0.843	0.357	0.366	0.610
Observations	2,224	2,224	2,224	2,224
Dependent variable: Trade announcement delay				
	(5)	(6)	(7)	(8)
UMP contributor × Post-election	5.578***	6.022***	5.817***	5.845***
	(0.999)	(1.024)	(1.025)	(1.028)
Sarkozy friend × Post-election	4.515***	3.058***	3.165***	2.844***
	(0.485)	(0.524)	(0.521)	(0.558)
Firm fixed effects		Yes	Yes	Yes
Trade-level variables			Yes	Yes
Interacted trade-level variables				Yes
P-value for equality of coefficients	0.330	0.00901	0.0196	0.0103
Observations	7,385	7,385	7,385	7,385
Dependent variable: Non-compliance with legal time limit				
	(9)	(10)	(11)	(12)
UMP contributor × Post-election	0.091*	0.141***	0.131***	0.133***
	(0.050)	(0.047)	(0.047)	(0.048)
Sarkozy friend × Post-election	0.243***	0.277***	0.282***	0.264***
	(0.045)	(0.043)	(0.043)	(0.045)
Firm fixed effects		Yes	Yes	Yes
Trade-level variables			Yes	Yes
Interacted trade-level variables				Yes
P-value for equality of coefficients	0.0220	0.0279	0.0142	0.0432
Observations	7,385	7,385	7,385	7,385

*** p<0.01, ** p<0.05, * p<0.1. White heteroskedastic standard errors in parentheses. OLS regressions. Each column presents estimates from a separate regression. All regressions include a constant term, a time trend, a dummy variable equal to 1 for all trades that occurred after the election, and the non-interacted group variables. The election date is May 6^{th} 2007. The time window is 365 days before and after the election. The sample is made of all trades by board members of French listed firms during the time window. *Two-day cumulated abnormal return on purchases* is the compound abnormal return (computed using a firm-specific 30-day market model) of the traded stock over the two days following the announcement of a purchase. *Trade announcement delay* is the number of business days between a trade and its official announcement. *Non-compliance with legal limit* is a dummy variable equal to 1 if the trade announcement delay is strictly larger than 5 business days. *UMP contributor* is a dummy variable equal to 1 if the trader is connected to Sarkozy via the list of UMP contributors. *Sarkozy friend* is a dummy variable equal to 1 if the trader is a friend of Sarkozy. See the text for details about the construction of groups. *Trade-level variables* are *executive* and *trade's value* as used in tables 2 and 3.