Corruption Culture and Corporate Misconduct

Xiaoding Liu*

December 30, 2015

Abstract

Despite significant interest in corporate culture, there is little empirical research on its role in influencing corporate misconduct. Using cultural background information on key company insiders, I construct a measure of corporate corruption culture, capturing a firm's general attitude toward opportunistic behavior. Firms with high corruption culture are more likely to engage in earnings management, accounting fraud, option backdating, and opportunistic insider trading. I further explore the inner workings of corruption culture and find evidence that it operates both as a selection mechanism and by having a direct influence on individual behavior.

*Assistant Professor of Finance, Department of Finance, Lundquist College of Business, University of Oregon, Eugene OR 97403-1208. Email: xliu@uoregon.edu. I thank an anonymous referee, Bill Schwert (the editor), John Chalmers, Larry Dann, Diane Del Guercio, Jonathan Karpoff, Lin Peng, Al Sheen, Rohan Williamson, and seminar participants at the Pacific Northwest Finance Conference, the Fifth Annual Academic Conference on Corporate Governance, the China International Finance Conference, Florida State University, Hong Kong Polytechnic University, Shanghai University of Finance and Economics, Virginia Tech, the University of Florida, the University of Hong Kong, the University of Oregon, and the University of South Carolina for helpful comments.

I. Introduction

A key question in corporate governance is how to control problems arising from conflicts of interest between agents and principals. The existing literature has extensively investigated traditional ways of dealing with agency problems such as hostile takeovers, the board of directors and institutional investors, and has found mixed evidence regarding their effectiveness. Acknowledging the difficulty in designing effective governance rules to curb corporate scandals and bank failures, regulators and academics have recently turned their attention inward to the firm's employees.[1] In particular, they ask whether a firm's inherent tendency to behave opportunistically is deeply rooted in its corporate culture, commonly defined as the shared values and beliefs of a firm's employees.[2] In this paper, I investigate this question by studying the role of corporate culture in influencing corporate misconduct.

Despite significant interest in corporate culture, empirical research on this topic has been limited in the finance literature mainly due to measurement difficulties. Recently, some headway has been made to measure corporate culture and assess its impact on corporate behavior. For instance, several studies (e.g., Hilary and Hui, 2009; Grullon, Kanatas, Weston, 2010; McGuire, Omer, and Sharp, 2012) use local geographic culture measures such as religiosity around a firm's headquarters, while Bereskin, Campbell, and Kedia (2014) use firm-level data on corporate philanthropic activities and Guiso, Sapienza, and Zingales (2015) use responses from employee surveys administered by the Great Place to Work Institute. Complementing these earlier studies, I identify the cultural background (country of ancestry) of officers and directors in the firm and aggregate this information to construct a firm-specific measure of corporate culture.

[1] For example, see the October 14, 2014 speech by Williams C. Dudley, President and CEO of the New York Fed, which is available at http://www.newyorkfed.org/newsevents/speeches/2014/dud141020a.html.

[2] This is the definition used by many studies including Donaldson and Lorsch (1983), Schein (1985), and Kotter and Heskett (1992). See Hermalin (2001) for a review of the theoretical literature on corporate culture.

Specifically, I measure corporate corruption culture, which is calculated as the average corruption attitudes of insiders (i.e., officers and directors) of a company.[3] This measure has several useful features. First, the measure is constructed at the firm level, which enables examination of the firm's culture in relation to the firm's behavior. Second, although this measure does not necessarily pick up all aspects of corporate culture, it captures a general attitude toward opportunistic behavior, which is relevant for influencing corporate misconduct.[4] Third, by employing a recently developed methodology in the economics literature, I am able to construct the measure for a large and representative sample of close to 9,000 publicly traded firms in the U.S.[5] Fourth, the measure is available over a span of nineteen years from 1988 to 2006, which allows me to conduct within-firm analysis exploiting its time-series variation. Fifth, by measuring corruption attitudes at the individual level and using data on the entry and exit of insiders, I can potentially shed some light on the inner workings of corporate corruption culture.

To measure corruption attitudes for company insiders in the U.S., I apply the epidemiological approach as described in Fernández (2011), which is based on the key idea that when individuals emigrate from their native country to a new country, their cultural beliefs and values travel with them, but their external economic and institutional environment is left behind. Moreover, immigrants not only bring their beliefs and values to the new country, they also pass down these beliefs to their descendants (e.g., Guiso, Sapienza, and Zingales, 2006). Thus, relevant economic outcomes in the country of ancestry can be used as proxies of culture for immigrants and their descendants.

[3] The focus on insiders is motivated by the corporate culture literature, which has emphasized the role of leaders and key decision makers in the formation and propagation of corporate culture.

[4] Transparency International, a leading anti-corruption organization, defines corruption as the abuse of entrusted power for private gains. Thus, I argue that corruption is similar to corporate misconduct in nature, which also involves individuals entrusted with power accruing private benefits through means that are unlawful or in violation of their fiduciary duty to shareholders.

[5] The number of firms is based on the sample used in the misconduct regression in Table 2. Without restricting the sample to observations with non-missing controls, the number of firms with corruption culture measures is around 16,000.

In the context of corruption, DeBacker, Heim, and Tran (2015) present the first evidence in a corporate setting that corruption attitudes can be imported from a native country to the U.S.[6] Specifically, they use IRS audits of foreign-controlled corporations with operations in the U.S. and find a positive link between corruption in the foreign owner's country of residence and measures of tax evasion. In addition, Simpser (2015) uses individual level survey data and presents evidence on the intergenerational transmission of corruption attitudes. Together, these findings support the premise of the epidemiological approach that corruption attitudes can be both imported to the new country and passed down to later generations. Building on these studies, I use corruption in the country of ancestry identified based on surnames to capture corruption attitudes for more than 171,000 officers and directors (an average of 19 insiders per firm) in U.S. public companies, most of whom are second or higher generation immigrants born in the U.S.[7]

The main testable hypothesis is that firms with high corruption culture, which tend to be more tolerant toward corrupt behavior, are more likely to engage in corporate misconduct. Using four types of opportunistic behaviors that are commonly studied in the literature, I consistently find support for this prediction. In particular, a one standard deviation increase in a firm's corruption culture is significantly associated with an increase in the incidence of earnings management, accounting fraud, option backdating, and opportunistic insider trading by 1.9%, 7.4%, 4.6%, and 5.7%, respectively.[8] These effects are also comparable to those of other predictors of corporate misconduct such as board independence and local religiosity found in previous studies (e.g., Collins, Gong, and Li, 2009; Dyreng, Mayew, and Williams, 2012).

[6] In a non-corporate setting, Fisman and Miguel (2007) show that United Nations diplomats from high-corruption countries accumulate more unpaid parking violations in Manhattan.

[7] Corruption is measured as the Transparency International's Corruption Perception Index. The country of ancestry is identified as the country of origin of insiders' surnames based on U.S. census records following prior studies (e.g., Lauderdale and Kestenbaum, 2000). The insider count is based on the sample used in the misconduct regression.

[8] For robustness, I also conduct the analysis for only first generation immigrants identified by their country of birth and find larger positive effects. See the Internet Appendix for more details.

Parsons, Sulaeman, and Titman (2014) show that a firm's likelihood of engaging in misconduct is related to the misconduct rates of firms in the same locale and that the relation is likely driven by social interactions among neighboring firms. Moreover, other factors such as the local economic, cultural, and political environment may also impact the incidence of corporate misconduct. To capture an effect that is unique to the organization, I disentangle firm-specific culture from local effects by controlling for county-year in addition to industry-year fixed effects in all regressions.[9] While the main results still hold, the increase in the R-squared and the reduction in the magnitude of the key estimates highlight the importance of accounting for time-varying local and industry factors.

In order to investigate whether the relation between corruption culture and corporate misconduct is causal or merely an association, I conduct several additional analyses. First, I examine potential omitted variables such as corporate philanthropy, a firm-specific measure of pro-social culture proposed by Bereskin, Campbell, and Kedia (2014). My findings are robust to controlling for this variable and also for traditional measures of corporate governance including the board size, the percentage of insider directors, the presence of institutional investors, and the threat of hostile takeovers.

Second, Van den Steen (2010) proposes a model of corporate culture and predicts that the appointment of a new CEO will lead to turnover through both selection and self-sorting. Thus, although corporate culture tends to be persistent over time, it is likely to change in a significant way around new CEO appointments. Motivated by this prediction, I examine corporate misconduct five years before and after the appointment of a new CEO while controlling for firm fixed effects. I continue to find a significant positive relation between corruption culture and corporate misconduct, suggesting that the main results are not subsumed by omitted time-invariant firm-specific factors.

[9] Instead of counties, I also use metropolitan statistical areas (MSAs) for robustness and find similar results. An MSA consists of one or more counties except in New England.

Third, the theoretical literature has predictions regarding the mechanisms through which corporate culture would affect opportunistic behavior. Taking advantage of corruption attitudes measured at the individual level and exploiting data on the entry and exit of corporate insiders, I test these predictions as another way to address concerns of endogeneity. If the evidence is not in line with the predictions, then it casts doubt on whether the results are due to corporate culture.

The first channel predicts that corruption culture acts as a selection mechanism by attracting or selecting individuals with similar corruption attitudes to the firm, where these individuals act according to their internal norms that are then reflected in corporate outcomes (Schneider, 1987). Consistent with this channel, I find that individuals with high corruption attitudes are more likely to join firms with high corruption culture and an insider is more likely to leave the firm if his corruption attitudes are more distant from the corruption attitudes of the other insiders in the firm. I also examine selection around new CEO appointments and find evidence of significant insider turnover that aligns the firm's corruption culture closer to the new CEO's corruption attitudes.

The second channel predicts that corruption culture can operate beyond internal norms and have a direct effect on individual behavior through group norms (Hackman, 1992). To test this channel, I examine misconduct at the insider level and focus on the sample of insiders that have moved across firms to control for person fixed effects, which removes the effect of internal norms to the extent that they do not vary over time. Holding the individual constant, results show that when the same individual joins a firm with high corruption culture, his likelihood of engaging in personal misconduct increases compared to when he was at a firm with low corruption culture, consistent with corruption culture working through group norms.

Together, these findings suggest that the documented relations between corruption culture and corporate misconduct may be more than just correlations. For instance, traditional measures of corporate governance and time-invariant firm characteristics are unlikely to explain the relations. Moreover, I find evidence consistent with predictions from theories of corporate

culture, further alleviating concerns of other non-cultural factors driving results. More generally, any omitted variables must be able to explain not only the positive relation between corruption culture and corporate misbehavior, but also the evidence on the mechanisms of corruption culture.

By showing that an internal governance mechanism, corruption culture, is an important determinant of corporate misconduct, the paper complements the broader corporate governance literature. It also contributes to a growing finance literature on corporate culture by constructing a measure of corruption culture based on the ancestry origins of company insiders. Moreover, I provide evidence on the inner workings of corruption culture, which shows that it influences corporate misconduct by both acting as a selection mechanism and having a direct influence on individual behavior. I also find evidence that corruption culture arises from the attraction-selection-attrition process consistent with the conceptual framework of Schneider (1987) and new CEOs play an important role in the evolution of corruption culture.

In addition, the paper adds to an emerging empirical literature on corruption norms. Previous studies have examined the influence of corruption norms on illegal parking activities (Fisman and Miguel, 2007) and corporate tax evasion (DeBacker, Heim, and Tran, 2015). My results complement these studies in two ways. First, it highlights the persistence of corruption norms by documenting that corruption attitudes inherited from one or more generations earlier can still impact behavior today. Second, it shows that individuals are not only influenced by their own corruption norms, but also the corruption norms of their peers.

Finally, the paper belongs to a strand of the economics literature examining immigrants and their descendants to identify the effect of culture on individual outcomes such as the use of financial contracts (Guiso, Sapienza, and Zingales, 2004), family living arrangements (Giuliano, 2007), and labor choices (Fernández and Fogli, 2009). Complementing these findings, I show that inherited cultural attitudes can also permeate through the organization and influence corporate outcomes.

II. Measuring Corporate Corruption Culture

Corporate culture is defined as the shared values and beliefs of a firm's employees. I focus on company insiders including all officers and directors for several reasons. First, the literature has emphasized the role of leaders and key decision-makers in the formation and propagation of corporate culture (Donaldson and Lorsch, 1983; Schein, 1985; Kotter and Heskett, 1992; Hermalin, 2012).[10] Second, since leaders create and disseminate culture within the organization by hiring and attracting employees with similar beliefs (Van den Steen, 2010), it is reasonable to assume that lower level employees have similar values as their leaders. Third, the key insiders are mainly responsible for the corporate misconduct decisions examined in the paper, thus their cultural attitudes should be more relevant and important.

Thus, for each firm-year, corporate corruption culture is calculated as the average corruption attitude for all insiders including officers and directors.[11] The list of officers and directors come from Compact Disclosure, which covers a much more comprehensive set of firms than the Execucomp dataset (i.e., 20,000 vs. 3,000 firms).

To measure corruption attitudes of insiders, I use a recently developed methodology from the economics literature that is generally described as the epidemiological approach (Fernández, 2011).[12] It is based on the key idea that when individuals emigrate from their native country to a new country, their cultural beliefs and values travel with them, but their external environment is left behind. Moreover, these immigrants not only bring their beliefs and values to the new country, they also pass down these beliefs to their descendants.[13] Thus, relevant economic outcomes at the country of ancestry are used as proxies of culture for immigrants and

[10] I also look at directors because they play a significant role in the formation of corporate culture by making key hiring and firing decisions.

[11] I also use alternative weighting schemes such as giving a higher weight to CEOs, which yield similar results.

[12] In the economics literature, this approach has been used to study the effect of culture on many outcomes such as labor choices (Fernández and Fogli, 2009), family living arrangements (Giuliano, 2007), savings behavior (Carroll, Rhee and Rhee, 1994), the propensity to shirk at work (Ichino and Maggi, 2000), and the use of financial contracts (Guiso, Sapienza, and Zingales, 2004).

[13] See the survey by Bisin and Verdier (2011) for evidence on intergenerational transmission of cultural beliefs.

their descendants. Applying this approach and building on the work of DeBacker, Heim, and Tran (2015) and Simpser (2015), I use corruption in the insiders' country of ancestry to capture corruption attitudes for insiders in the U.S.

Insiders' country of ancestry is identified using their surnames similar to the methodology of Lauderdale and Kestenbaum (2000) as described in the Internet Appendix. Corruption is measured as the average Transparency International's Corruption Perception Index value from 1980 to 2009 constructed based on surveys of journalists, analysts, and consultants, where higher index values denote more corruption.[14] The corruption index ranges from 0.6 (Denmark) to 8.6 (Somalia), where U.S. has an index value of 2.4. These corruption indices have been used by many papers including Mauro (1995), Ades and Di Tella (1999), Fisman and Miguel (2007), and DeBacker, Heim, and Tran (2015).

The firm-year level summary statistics for the corruption culture measure are reported in Table 1. It has a mean of 2.8 and a standard deviation of 0.905. The (unreported) minimum and maximum of the corruption culture measure are 0.6 and 7.9, respectively.

III. Data and Measures of Corporate Misconduct

A. Main Sample

To construct the main dataset used in the empirical analysis, I start with the entire Compustat sample from 1988 to 2006. The sample period is based on the availability of the Compact Disclosure data, which I use to identify officers and directors. I exclude ADRs, closed-end funds, special purpose acquisition companies (SPACs), REITs, stocks with CRSP share codes other than 10 or 11, and firms incorporated or headquartered outside of the U.S. In other words, I restrict the sample to publicly traded operating firms in the U.S. Accounting data are from Compustat, and stock data are from the Center for Research in Security Prices (CRSP).

[14] For robustness, I also use corruption indices from different years including the earliest year (1980), which yield results that are qualitatively similar. Also note that the corruption index is based on survey responses from third parties, not self-reported survey responses from the potentially corrupt officials themselves.

B. Description of the Dependent Variables

To examine whether a firm's corruption culture can impact the likelihood of corporate misconduct, I examine four types of corporate misbehaviors that can be measured systematically and have been previously studied.

B.1. Earnings Management

While managing earnings does not constitute fraudulent behavior per se, managed earnings have the potential to mislead investors and can lead to earnings restatements, shareholder lawsuits, and SEC enforcement actions resulting in significant losses for shareholders. As evidence of the impact of financial misrepresentations on shareholder value, Karpoff, Lee, and Martin (2008) report that firms on average lose 41% of their market values upon the discovery of such misconduct.

To measure the extent of earnings management, I use the absolute value of abnormal discretionary accruals following the literature.[15] The construction of the earnings management measure is provided in the Data Appendix, which follows the modified Jones (1991) model, as implemented by Dechow, Sloan, and Sweeney (1995) and modified by Kothari, Leone, and Wasley (2005). The final earnings management regression sample consists of 61,013 firm-years for 8,235 firms during 1988-2006.[16] The summary statistics for the main variables used in the empirical analysis are presented in Table 1. The earnings management measure has a mean and a standard deviation of 0.089 and 0.052, respectively, which are similar to the ones reported in Hazarika, Karpoff, and Nahata (2012).

B.2. Accounting Fraud

[15] Since earnings cannot be consistently managed in a single direction and negative abnormal accruals can reflect the unwinding of prior upward managing activity, the unsigned accruals are used to capture the general propensity to manage earnings. Many studies measure earnings management as the absolute value of abnormal discretionary accrual. Some examples are Dechow and Dichev (2002), Klein (2002), Cohen, Dey, and Lys (2008), Yu (2008), and Hazarika, Karpoff, and Nahata (2012).

[16] I restricted the sample to observations with non-missing values in all three tables (2, 3, and 4) in order to make the results more comparable across tables.

I construct an accounting fraud dummy that equals one (zero otherwise) if the firm has experienced one of following three events.

First, the firm-year is within a class action lawsuit period, which refers to the period when the alleged misconduct is occurring. Lawsuit data are obtained from the Stanford Securities Class Action Clearinghouse database. Cases involving IPO underwriters, analysts, or mutual funds rather than firm management are excluded from the sample. The remaining cases typically involve financial misrepresentation, accounting manipulations and insider trading. Following Dyck, Morse, and Zingales (2010), I also exclude cases that are subsequently dismissed and those with a settlement amount of less than $3 million, to avoid cases that are settled due to negative publicity alone.

Second, earnings are misstated in that firm-year according to the SEC's Accounting and Auditing Enforcement Releases (AAER), which are issued for violations of SEC Rule 10b-5. AAER data come from Dechow, Ge, Larson, and Sloan (2011).

Third, the firm announced an earnings restatement in that year according to the database compiled by the General Accounting Office (GAO) in 2003 and 2006 and the restatement is classified as an irregularity. In order to distinguish irregularities (intentional restatements) from errors (unintentional restatements), I use the data from Hennes, Leone, and Miller (2008), which identifies irregularities based on whether the words "fraud" or "irregularity" are used in the restatement disclosures or whether the restatement leads to an investigation by the SEC, the Attorney General's Office, or the company's board. From 1988 to 2006, 3.1% of the firm-year observations have a fraud dummy of one.

B.3. Option Backdating

Insiders may have a desire to extract more private benefits by raising the level of compensation, but overt increases anger shareholders. Options backdating provides a way for company insiders to obtain more attractive compensation packages without having to report higher expenses to their shareholders. This type of insider opportunistic behavior came to the

public's attention following research by Lie (2005). The option backdating revelations led to a wave of SEC investigations and lawsuits.

To identify potential backdated options, I follow the procedure in Bebchuk, Grinstein, and Peyer (2010) and use data from Thomson Financial's insider trading database. The dependent variable is an insider backdating dummy, which equals one (zero otherwise) if the strike price of at least one insider's option grant in a given year is the lowest price of the month. Insiders include all officers and directors. The final sample consists of 34,993 firm-year observations for 7,124 firms in 1996-2006, where 20.7% of the observations have a backdating dummy of one.

B.4. Opportunistic Insider Trading

Insiders have access to non-public information, and this advantage can be used to accrue personal benefits. A particular way for insiders to enrich themselves is to engage in opportunistic insider trading, that is, trading in their own company stock based on non-public information. Such actions benefit insiders, while imposing potential costs on other shareholders. From a legal perspective, insider trading based on non-public information is prohibited by SEC Rule 10b5-1.

Empirically, it is difficult to distinguish opportunistic trades from legal trades. I use the measure developed by Rozanov (2008) to identify the insider trades that are more likely to be based on non-public information. The key measure is a price pattern ratio, which is computed as the ratio of the market-adjusted gross return over the 20 trading days following the insider transaction to the market-adjusted gross return over the 20 trading days preceding the insider transaction.[17] I average the price pattern ratios across trading days in a given year into a single measure for each firm-year observation. Based on the idea that the profitability of an insider trade reflects the extent of the insider's informational advantage, the price pattern measure should be higher for more favorable insider buys and lower for more favorable insider sells. Rozanov (2008) shows in a series of validity tests that the price pattern measure is positively

[17] I also calculate the price pattern ratio based on raw profits without market adjustments and the results are similar.

related to favorable earnings guidance and the probability of subsequent class action lawsuits, which provide additional support for the notion that this measure is reflective of information-based trades.

I use insider-trading data from Thomson Financial, with cleansing code of either H or R. Rather than analyzing all transactions, like Rozanov (2008), I focus on insider (all officers and directors) purchase transactions (excluding option exercises) as a cleaner sample. Prior studies (e.g., Ravina and Sapienza, 2009) find that executives do not earn positive abnormal returns on sales, but they do on purchases. The final regression sample consists of 39,467 firm-years for 7,654 firms during 1988-2006.

IV. Main Analysis

A. Model Specifications

To estimate the relationship between corporate corruption culture and the incidence of corporate misconduct, I use the following models:

$$Y_{ijkt} = \alpha_j + \alpha_t + \beta \text{Corruption Culture}_{it} + \gamma' X_{it} + \epsilon_{ijkt}, \quad (1)$$

$$\text{Prob}(Y_{ijkt}=1) = F(\alpha_j + \alpha_t + \beta \text{Corruption Culture}_{it} + \gamma' X_{it} + \epsilon_{ijkt}), \quad (2)$$

where i indexes firms, j indexes (49 Fama-French (1997)) industries, k indexes counties of corporate headquarters, and t indexes time. α_j is the vector of 49 Fama-French industry fixed effects, and α_t is the vector of year fixed effects. Corruption Culture$_{it}$ is the average corruption attitudes for the firm's insiders including officers and directors as a group and the measure varies by firm and year. X_{it} is a vector of firm level controls, which include size, age, market-to-book, leverage, profitability, stock volatility, capital intensity, R&D intensity, and a high-tech dummy in all regressions. For the earnings management and accounting fraud regressions, I follow the prior literature (e.g., Hribar and Nichols, 2007) and control for operating cycle, loss percentage, sales growth, sales volatility, and cash flow volatility. I control for the number of stock options

granted in the option backdating regression and the number of shares traded in the opportunistic insider trading regression.

Y_{ijkt} denotes the absolute abnormal discretionary accruals in the earnings management regression, the fraud dummy in the fraud regression, the insider backdating dummy in the insider backdating regression, and the price pattern ratio in the opportunistic insider trading regression. Earnings management and opportunistic insider trading regressions use OLS estimation as in model (1), whereas accounting fraud and insider backdating regressions uses probit estimation as in model (2). If firms with high corruption culture are more tolerant toward corporate misconduct, then I expect a positive relation between corruption culture and measures of corporate misconduct. Since the key variable of interest, Corruption Culture, varies by firm and year, I cluster the standard errors by firm to account for potential within-firm correlation of the residuals.

B. Main Results

The main regression results for earnings management, accounting fraud, option backdating, and opportunistic insider trading are presented in Table 2. The coefficients on corruption culture in all four regressions are positive and statistically significant, suggesting that corruption culture is positively associated with the incidence of corporate misconduct, consistent with the main prediction.

In column (1), the dependent variable is earnings management, calculated as the absolute value of abnormal discretionary accruals scaled by total assets. The coefficient on corruption culture is 0.227 (t=2.83). In terms of economic effects, a one standard deviation (0.905) increase in the firm's corruption culture is associated with an increase in earnings management of 0.205%, which is 2.3% of the mean absolute abnormal accruals of 8.9%. This is of similar magnitude to the effect of local religiosity, measured as the number of religious adherents divided by county population, which is associated with a reduction in earnings management of

2.3% for a one standard deviation increase in religiosity based on the estimates reported by Dyreng, Mayew, and Williams (2012).

Column (2) examines the relation between corporate corruption culture and accounting fraud, which is a dummy that equals one (zero otherwise) if the firm-year is within a class action lawsuit period or has misstated earnings according to AAER or GAO. The coefficient on corruption culture is 0.392 (t=3.92), indicating that a one standard deviation (0.905) increase in the firm's corruption culture is associated with an increase in the incidence of accounting fraud of 0.355%, which is 11.4% of the mean accounting fraud rate of 3.1%. This effect of corruption culture contrasts notably with the evidence documented in Larcker, Richardson, and Tuna (2007) that typical measures of corporate governance such as board characteristics and institutional ownership have little relation to the incidence of accounting fraud.

In column (3), the estimated marginal effect for option backdating is reported, where the backdating dummy equals one (zero otherwise) if the strike price of at least one insider's option grant is at the lowest price of the month. A coefficient of 1.188 (t=4.05) on corruption culture indicates that a one standard deviation (0.905) increase in the firm's corruption culture is associated with a 5.2% increase in the probability of insider backdating, measured at the mean insider backdating of 20.7%. This effect is comparable to the effect of other governance-related characteristics such as board independence, measured as the percentage of insider directors, which is associated with a 1.5% increase in the probability of backdating for a one standard deviation increase in the measure based on the estimates reported by Collins, Gong, and Li (2009).

Column (3) presents results for the opportunistic insider trading regression. The coefficient on corruption culture is 0.954 (t=3.92). The estimate indicates that decreasing the firm's corruption culture by one standard deviation (0.905) is associated with a decrease in the price pattern measure of 0.86%. The average price pattern measure is 1.1, meaning that the twenty trading day post-transaction abnormal return is 1.1 times the twenty trading day pre-

transaction abnormal return for a typical insider purchase. Thus, a reduction of 0.86% brings the price pattern measure 8.6% closer to one, which may signify non-opportunistic trades.

C. Controlling for Local Effects

Parsons, Sulaeman, and Titman (2014) show that a firm's likelihood of engaging in misconduct is related to the misconduct rates of firms in the same locale and that the relation is likely driven by social interactions among neighboring firms. In addition, other local factors such as local economic conditions and political environment may also impact the incidence of corporate misconduct. Moreover, several studies (e.g., Grullon, Kanatas, Weston, 2010; McGuire, Omer, and Sharp, 2012) use local geographic culture measures such as religiosity in the county of a firm's headquarters as a proxy for corporate culture and show that these measures are significantly associated with the firm's incidence of misconduct.

To account for the local effect documented in Parsons, Sulaeman, and Titman (2014) and to examine whether my measure of corruption culture has predictive power beyond the local culture measures, I use the following model:

$$Y_{ijkt} = \alpha_{jt} + \alpha_{kt} + \beta \text{Corruption Culture}_{it} + \gamma' X_{it} + \epsilon_{ijkt}, \quad (3)$$

where i indexes firms, j indexes (49 Fama-French (1997)) industries, k indexes counties of firms' headquarters, and t indexes time. Following the recommendation of Gormley and Matsa (2014), I control for time-varying heterogeneity across industries and locales using fixed effects, where α_{jt} is the vector of industry-year fixed effects and α_{kt} is the vector of county-year fixed effects.[18] All other variables are previously defined in Section IV.A. This model controls for time-varying industry-specific factors such as industry growth opportunities and time-varying county-specific factors such as local cultural, political, and economic conditions. Given the large number of fixed effects included in this model, I estimate all regressions by ordinary least squares following the suggestion of Greene (2004).

[18] Instead of county, I also use metropolitan statistical area (MSA) for robustness and find similar results.

The results are presented in Table 3. In all four columns, the coefficients on the corporate corruption culture measure are positive and statistically significant. In terms of economic effects, a one standard deviation increase in the firm's corruption culture is associated with an increase in the incidence of earnings management, accounting fraud, option backdating, and opportunistic insider trading of 1.9%, 7.4%, 4.6%, and 5.7%, respectively. These effects are smaller than the corresponding effects from the baseline model in Table 2, which are 2.3%, 11.4%, 5.2%, and 8.6%. The reduction in the magnitude of the coefficients suggests that time-varying local and industry factors partially account for the effect of corruption culture on corporate misconduct in the baseline model.

Another way to analyze the importance of local and industry effects is to compare the goodness of fit. The R-squared in Table 2 for regressions of earnings management, accounting fraud, insider option backdating, and opportunistic insider trading are 14.8%, 4.9%, 6.9%, and 4.9%, respectively, when only industry and year fixed effects are included. The corresponding R-squared in Table 3 are 17.1%, 5.2%, 8.1%, and 6.0%. The increase in R-squared when industry-year and county-year fixed effects are included is another indication that it is important to control for them when estimating the effect of corruption culture on corporate misconduct.

For robustness, I use an alternative model to control for local effects as follows:

$$Y_{ijkt} = \alpha_1 Y_{kt,-i} + \alpha_2 Y_{jt,-i} + \alpha_3 Y_{t,-k,-j} + \alpha_4 \text{Corruption Culture}_{kt,-i} + \alpha_5 \text{Corruption Culture}_{jt,-i} + \alpha_6 \text{Corruption Culture}_{t,-k,-j} + \beta \text{Corruption Culture}_{it} + \gamma' X_{it} + \epsilon_{ijkt}, \quad (4)$$

$$P(Y_{ijkt}=1) = F(\alpha_1 Y_{kt,-i} + \alpha_2 Y_{jt,-i} + \alpha_3 Y_{t,-k,-j} + \alpha_4 \text{Corruption Culture}_{kt,-i} + \alpha_5 \text{Corruption Culture}_{jt,-i} + \alpha_6 \text{Corruption Culture}_{t,-k,-j} + \beta \text{Corruption Culture}_{it} + \gamma' X_{it} + \epsilon_{ijkt}) \quad (5)$$

where i indexes firms, j indexes (49 Fama-French (1997)) industries, k indexes counties of corporate headquarters, and t indexes time. Following Parsons, Sulaeman, and Titman (2014), I control for time-varying industry, local, and market misconduct rates. $Y_{kt,-i}$ is the average misconduct rate for firms located in the same county k and in the same year t excluding firm i. $Y_{jt,-i}$ is the average misconduct rate for firms in the same industry j and in the same year t

excluding firm i. $Y_{t,-k,-j}$ is the average misconduct rate for all firms in the same year excluding those in county k and industry j.

In addition, I also control for time-varying industry, local, and market corruption culture. Corruption $Culture_{kt,-i}$ is the average corruption culture measure for firms located in the same county k and in the same year t excluding firm i. Corruption $Culture_{jt,-i}$ is the average corruption culture measure for firms in the same industry j and in the same year t excluding firm i. Corruption $Culture_{t,-k,-j}$ is the average corruption culture measure for all firms in the same year excluding those in county k and industry j.

The results are presented in Table 4. Most of the coefficients on the six additional controls are significant, suggesting that it is important to control for industry, local, and market misconduct rates and the industry, local, and market corruption culture in the regressions. Importantly, the coefficients on corruption culture are all positive and statistically significant. Again, these coefficients are smaller than the ones from the baseline model in Table 2, indicating that part of the baseline effects are captured by the additional controls.

Overall, the results in Tables 2 to 4 document a positive and significant relation between corporate corruption culture and the firm's likelihood of engaging in corporate misconduct. By controlling for time-varying local and industry factors, I show that the captured effect is unique to the organization and is identified beyond the local effect documented in Parsons, Sulaeman, and Titman (2014) and the local culture measures examined in prior studies.

V. Concerns of Endogeneity

The last section shows that corporate corruption culture is positively associated with the incidence of corporate misconduct and this relation holds after controlling for time-varying local and industry effects. In order to examine whether the correlations are causal or merely associations, I conduct several additional analyses. First, I control for potential omitted variables such as corporate philanthropy, a firm-specific measure of corporate culture, and measures of

corporate governance. Second, I examine corporate misconduct around the time of new CEO appointments while controlling for time-invariant firm characteristics through firm fixed effects. Finally, as another way to address concerns of endogeneity, I test theoretical predictions regarding the inner workings of corporate culture in the next section.

A. Controlling for Potential Omitted Variables

Section IV documents a positive relation between a firm's corruption culture and the incidence of corporate misconduct. A potential concern is that the relation may be driven by omitted variables that are correlated with both corruption culture and the firm's tendency to engage in opportunistic behavior.

One potential candidate for omitted variables is other measures of corporate culture used by prior studies. Since the local culture measures such as religiosity in the county of a firm's headquarters are already controlled for through time-varying local fixed effects, I focus on firm-specific measures of culture. Bereskin, Campbell, and Kedia (2014) propose a measure of prosocial culture at the firm level using corporate donations and find evidence that firms participating in more philanthropic activities are less likely to be subject to class action litigation. To examine whether the documented relations in Section IV are driven by corporate philanthropy, I obtain the charitable giving data from Petrovits (2006), which provide a list of 539 firms that have made charitable donations through direct giving or through a foundation in the 1989 to 2000 period. I create a philanthropy dummy, which equals one for the 539 firms with charitable donations and zero otherwise. The correlation between the corruption culture measure and the philanthropy dummy is -0.06 (p=0.000), which is consistent with the two measures capturing opposing values. However, due to the low correlation, it is unlikely that corporate philanthropy is the main driver behind the documented relations in Section IV.

In addition to controlling for corporate philanthropy, I also examine the possibility that governance mechanisms are driving results by controlling for several measures of corporate governance. First, I control for board characteristics such as board size and the percentage of

insider directors. Jensen (1993) suggests that large boards are more prone to free-riding problems, and thus are less effective than small boards and Yermack (1996) finds empirical support for this prediction. Since outside directors are considered to be better monitors, boards occupied by more insiders signify weaker governance (Weisbach, 1988; Hermalin and Weisbach, 1998). Following Linck, Netter, and Yang (2007), Coles, Daniel, and Naveen (2008), and others, I obtain board information from Compact Disclosure, which has much better coverage than RiskMetrics that is only available from 1996 on and only covers firms in the S&P 1500 index. Since Compact Disclosure only identifies whether the director is an employee of the firm, the fraction of insider directors is calculated as the number of executive directors divided by the board size.

Second, I control for the presence of institutional investors, where institutional holdings is calculated as the fraction of shares held by 13F institutional investors using data from Thomson Reuters. According to Shleifer and Vishny (1986), institutional investors may have more incentives to act as effective monitors.

Third, I control for the threat of hostile takeovers since it has been documented as one of the most important mechanisms through which shareholders exercise their power (Jensen, 1988). I measure the threat of hostile takeovers with the takeover index developed by Cain, McKeon, and Solomon (2014). The coverage of this takeover index (i.e., 14,441 firms from 1965 to 2011) is much better than the G-index from Gompers, Ishii, and Metrick (2003), which covers mostly firms in the S&P 500 index. The G-index is also subject to potential endogeneity concerns. Thus, recent studies (e.g., Bertrand and Mullainathan, 2003) have used largely exogenous measures such as the passage of Business Combination (BC) laws to measure the external governance environment. The takeover index is constructed based on the passage of 12 different types of state anti-takeover laws, one federal statue and three state standards of review, where higher

values indicate higher hostile takeover hazard.[19] Thus, while similar in nature to the BC laws, the takeover index is richer and more comprehensive than the BC laws alone. The correlations between the corruption culture measure and these four governance measures are low, ranging from -0.09 to 0.06.

The results are reported in Table 5, where the five new controls are added to the regressions from Table 3 that control for time-varying industry and local fixed effects. Since the additional variables are not available for all observations, the sample size is smaller in this table. The results for corporate philanthropy are mixed. Of the four types of corporate misconduct examined in Table 5, the only partial overlap with Bereskin, Campbell, and Kedia (2014) is accounting fraud, which is negatively related to philanthropy. This effect is in line with their study, although it is not statistically significant. I also find that philanthropy is significantly negatively related to opportunistic insider trading, consistent with the notion that philanthropic activities are likely to create a prosocial culture that discourages corporate misconduct. In contrast, there is a positive relation between philanthropy and earnings management. Although not supporting the idea that philanthropy captures ethical culture, this finding is consistent with Petrovits (2006), which shows that firms manage their earnings through strategic timing of their charitable contributions.

In terms of the relation between corporate governance measures and corporate misconduct, the results are mostly in line with prior studies. The positive relation between the fraction of insider directors and option backdating is similar to the finding of Collins, Gong, and Li (2009). Board size is negatively related to earnings management, which is inconsistent with the prediction that smaller boards are more effective monitors, but is consistent with findings

[19] The 12 state takeover laws include first generation statues, business combination, fair price, control share acquisition, control share cash-out, poison pill, expanded constituency, disgorgement, anti-greenmail, golden parachute restriction, tin parachute blessing, and assumption of labor contracts laws. The state laws are matched to the firms based on their state of incorporation. The federal statue is the Williams Act in 1968, which regulates tender offers requiring SEC filings, disclosure, and waiting periods for all firms. The three standards of review are based on court decisions including Revlon, Inc. v. MacAndrews & Forbes Holdings, Unocal v. Mesa Petroleum, and Blasius Industries v. Atlas Corp.

from other studies such as Larcker, Richardson, and Tuna (2007). The takeover index is positively related to the incidence of two types of corporate misconduct. Although counterintuitive, other studies also find a positive relation between a takeover index and opportunistic behaviors such as earnings management (Larcker, Richardson, and Tuna, 2007) and option backdating (Gao and Mahmudi, 2011).

Overall, none of the coefficients on the additional controls have consistent signs and are statistically significant across all four types of corporate misconduct, further alleviating omitted variable concerns. More importantly, the coefficients on corruption culture remain positive and statistically significant, suggesting that the documented relations in Section IV are unlikely driven by a firm's governance structure or its engagement in corporate philanthropy. In terms of economic effects, a one standard deviation increase in a firm's corruption culture is associated with a 2.2%, 7.2%, 5.1%, and 6.2% increase in the probability of engaging in earnings management, accounting fraud, option backdating, and opportunistic insider trading, respectively.

B. Corporate Misconduct around New CEO Appointments

Van den Steen (2010) devises a model of corporate culture and predicts that the appointment of a new CEO will lead to turnover through both selection and self-sorting. Consistent with this prediction, Hayes, Oyer, and Schaefer (2006) show that the likelihood of top management turnover increases markedly around times of CEO turnover. I also find support for this prediction in Section VI. Thus, although corporate culture tends to be persistent over time, it is likely to change in a significant way around new CEO appointments.

Motivated by this pattern, I examine corporate misconduct around the appointment of a new CEO. The sample consists of firm-year observations five years before and five years after the appointment of a new CEO to capture a period during which significant changes to

corruption culture are likely to occur.[20] For this sample, I include firm fixed effects in all regressions to account for potential omitted time-invariant firm-specific factors driving results.

The results are reported in Table 6. In addition to firm fixed effects, I also control for industry-year and county-year fixed effects as in Table 3. The R-squared tends to be larger than the ones in Table 3, suggesting that firm fixed effects have additional explanatory power toward explaining corporate misconduct. More importantly, the coefficients on corruption culture are all positive and significant. At the same time, it is interesting to note that some of the control variables such as leverage, stock volatility, capital intensity, and R&D are no longer significant, suggesting that firm fixed effects have absorbed most of their effects on corporate misconduct. In terms of economic effects, a one standard deviation increase in corruption culture is associated with a 6.0%, 20.3%, 9.2%, and 12.5% increase in the incidence of earnings management, accounting fraud, option backdating, and opportunistic insider trading, respectively. These effects are generally larger than the corresponding effects from the baseline model.

Overall, the results in Table 6 show that there is a positive and significant relation between corruption culture and corporate misconduct even after controlling for firm fixed effects. Although this finding does not exclude omitted variables that are also changing at the same time as corruption culture and in the same direction, it mitigates concerns that some omitted time-invariant firm-specific variables may be responsible for the documented relations.

VI. Mechanisms of Corruption Culture

In this section, I test theoretical predictions regarding the inner workings of corporate culture as another way to address concerns of endogeneity. Based on predictions from the theoretical literature, corruption culture can operate through two channels. First, corruption culture can act as a potential selection mechanism that selects and attracts individuals with

[20] In unreported analysis, I examine corruption culture around this period and find that the changes in corruption culture during the five years before and after the appointment of a new CEO are significantly larger than the changes during other times.

similar corruption attitudes to the firm, where these individuals act according to their personal corruption attitudes that are then reflected in corporate outcomes. Second, corruption culture can also have a direct effect on individual behavior through group norms. If the evidence is not in line with the predictions, then it is likely that the results are not due to corporate culture.

A. Corruption Culture as a Selection Mechanism

A.1. The Attraction-Selection-Attrition Process

A key attribute of corporate culture is that it arises from the attraction-selection-attrition (ASA) process (Schneider, 1987), where "attraction to an organization, selection by it, and attrition from it yield particular kinds of persons in an organization. These people determine organizational behavior." Consistent with this notion of corporate culture as a selection mechanism, empirical evidence shows that individuals are more likely to join firms with cultures that are similar to their own and are less likely to be satisfied if their values are incongruent with the firm's culture (Meglino, Ravlin, and Adkins, 1989; Chatman, 1991; O'Reilly, Chatman, and Caldwell, 1991).

In Table 7, I test whether corruption culture acts as a selection mechanism in ways that are consistent with predictions from the theoretical literature. In column (1), I study the attraction and selection part of the ASA process. I restrict the Compact Disclosure sample to only new insiders (i.e., the first time an insider appears in a firm), which proxies for the group of individuals looking for jobs in a given year and see which firms these individuals select. If corruption culture acts as a selection mechanism, then the prediction is that new insiders with high (low) corruption attitudes are more likely to join firms with high (low) corruption culture.

The test is conducted at the insider level, where corruption culture is measured in the year before the new insider entered. Controlling for other firm characteristics, industry-year fixed effects and county-year fixed effects, the coefficient on corruption culture is 0.124 (t-stat=10.71), which is positive and statistically significant. This finding is consistent with the theoretical

prediction that people are attracted to organizations that share similar values and beliefs, and organizations select people who they think are compatible with their corporate culture.

In column (2), I examine the attrition (or the reverse selection) part of the ASA process that individuals who are not compatible with a firm's corporate culture tend to leave the organization. To test this prediction, I use the entire sample of insiders in the Compact Disclosure database. The dependent variable is insider exit, which equals one (zero otherwise) if the insider leaves the firm in the following year. The key explanatory variable is |Corruption Culture_{-i}-Insider i Corruption|, which is the absolute difference between the firm's corruption culture (excluding the insider in question) and the insider's corruption value. I use the absolute value because the theoretical literature predicts a matching between the insider's culture and corporate culture, which suggests that a low corruption insider in a high corruption firm or a high corruption insider in a low corruption firm both experience cultural conflict and are likely to leave the firm.

I control for firm-year fixed effects, thus comparing insiders within the same firm in the same year. Also, since all time-varying firm characteristics are absorbed by the fixed effects, only insider characteristics matter. The coefficient on the key explanatory variable is 0.210 (t=7.94), which is positive and significant, consistent with the attrition prediction that an insider is more likely to leave the firm if there is a larger difference between his corruption attitudes and the firm's corruption culture. The estimate suggests that a one standard deviation (1.06) increase in the absolute difference measure is associated with a 3.0% increase in the likelihood of exit, evaluated at the mean exit rate of 7.3%.

In column (3), I separate the absolute difference measure into two signed difference components to test whether the results are driven by low corruption insiders leaving high corruption firms or high corruption insiders leaving low corruption firms. The coefficients on both components are significant and the signs suggest that insiders whose corruption values are more distant from the firm's corruption culture from either side are more likely to leave than

other insiders. On the positive side, when the firm's corruption culture is higher than the insider's corruption value, a one standard deviation (0.63) increase in the difference is associated with a 5.7% increase in the exit rate. On the negative side, when the firm's corruption culture is lower than the insider's corruption value, a one standard deviation (1.19) increase in the difference is associated with a 3.3% increase in the exit rate. Thus, the effect is larger when the firm's corruption culture is higher than the insider's corruption value.

A.2. Selection around New CEO Appointments

A point at which important selection decisions are made is when a new CEO is appointed. The theoretical literature (e.g., Van den Steen, 2010) predicts significant turnover around the appointment of a new CEO through both selection and self-sorting. In Table 8, I test this prediction by studying the role of new CEOs in the evolution of corruption culture.

First, I examine insider turnover around new CEO appointments. I calculate the number of insiders entering and exiting the firm every year. In columns (1) and (2), controlling for time-varying industry and county fixed effects, and the average turnover rate through firm fixed effects, I find that there is a significant increase in the number of insiders entering and exiting the firm in the year following the appointment of a new CEO.

Second, I examine which insiders are more likely to enter and which ones are more likely to exit in the next columns. In column (3), the sample only includes new insiders that joined firms one year after new CEO appointments and the key estimate indicates that insiders with high (low) corruption attitudes are more likely to join firms where the new CEO also has high (low) corruption attitudes. These results are consistent with selection and self-sorting taken place around new CEO appointment that aligns the firm's culture closer to the new CEO's values.

In column (4), the dependent variable is insider exit, which equals one (zero otherwise) if the insider leaves the firm in the year following the appointment of a new CEO. The key explanatory variable is the absolute difference between the new CEO's corruption value and the insider's corruption value. I control for firm-year fixed effects, thus comparing insiders within

the same firm in a given year. The coefficient on the key explanatory variable is 0.480 (t=6.97), which suggests that a one standard deviation (1.40) increase in the absolute difference between the insider's corruption attitudes and the firm's corruption culture is associated with a 5.9% increase in the likelihood of exit, evaluated at the mean exit rate of 11.4%.

In column (5), I separate the absolute difference measure into two signed differences. The results suggest that insiders whose corruption values are more distant from the new CEO's corruption value are more likely to leave the firm in regardless of whether the new CEO's corruption value is higher or lower than the insider's corruption value. On the positive side, when the new CEO's corruption value is higher than the insider's corruption value, a one standard deviation (1.04) increase in the difference is associated with a 12% increase in the exit rate. On the negative side, when the new CEO's corruption value is lower than the insider's corruption value, a one standard deviation (1.25) increase in the difference is associated with a 4% increase in the exit rate.

Together, the findings in this section are consistent with predictions from the theoretical literature. In particular, the evidence suggests that corruption culture acts as a selection mechanism: insiders are attracted to firms that share their corruption attitudes and are more likely to stay at these firms. Moreover, selection plays a significant role in the evolution of corruption culture, especially around new CEO appointments.

B. Corruption Culture Acting through Group Norms

The previous section presents evidence consistent with corruption culture acting as a selection mechanism. In other words, corruption culture attracts or selects people with similar corruption attitudes to the organization and these individuals act according to their internal norms. An internal norm refers to a pattern of behavior guided by one's value system that is enforced by feelings of shame, guilt, or loss of self-esteem, as opposed to purely external sanctions such as material rewards and punishments (Gintis, 2003). In this way, company

decision-makers with high corruption beliefs are more tolerant toward acts of corruption, thus are more inclined to engage in corporate misconduct.

The theoretical literature (Hackman, 1992) suggests that corporate culture not only work through internal norms by acting as a selection mechanism, but it can also have a direct effect on individual behavior through group norms. In contrast to internal norms, group norms are enforced by members of the group through rewards and punishment. In a corporate context, the prevailing group norm is corporate culture. To punish a deviating employee, people may distance themselves socially from the employee, withhold key information that would help to advance the employee's career, and refrain from helping when solicited. Thus, even if an individual does not share corruption beliefs with other employees, he may nevertheless behave in ways consistent with the prevailing group norm due to fear of punishment by the group.

In Table 9, I test the prediction that corporate culture can have a direct effect on individual behavior beyond internal norms. To examine the effect of internal norms versus group norms, I conduct the analysis at the insider level and decompose the corruption culture measure into two components: insider i's corruption attitudes and the firm's corruption culture (measured without insider i). Thus, the insider corruption component represents internal norms and the corruption culture component represents group norms. Since only option backdating and opportunistic insider trading activities can be linked to the specific responsible individual, I focus on these two types of misconduct in this test.

In column (1), the dependent variable is the option backdating dummy. Insider i's corruption has a coefficient of 0.123 (t=2.37) and the corruption culture has a coefficient of 0.750 (t=2.40). In terms of economic magnitudes, a one standard deviation (1.483) increase in insider i's corruption measure is associated with a 1.9% increase in the probability of backdating, whereas a one standard deviation (0.606) increase in the corruption culture measure is associated with a 4.7% increase in the probability of backdating, measured at the mean insider backdating of 9.6%. These estimates suggest that group norms are 2.5 times as important as internal norms

in determining the likelihood of option backdating, consistent with the notion that corporate culture has a direct effect on individual behavior beyond individual personal attitudes.

Similarly, the key coefficients in column (4) also indicate that both internal norms and group norms matter for opportunistic insider trading. A one standard deviation (1.403) reduction in insider i's corruption measure brings the price pattern measure 4.2% closer to one, whereas a one standard deviation (0.620) reduction in the corruption culture measure brings the price pattern measure 6.0% closer to one, which may signify non-opportunistic trades. Again, the estimates suggest that both internal norms and group norms are important in influencing individual behavior.

In the next two columns, I test internal norms and group norms separately. In columns (2) and (5), I test the effect of internal norms. In additional to controlling for time-varying industry and local factors through fixed effects, I also control for time-invariant component of corruption culture through firm fixed effects. I examine the effect of insider i's corruption attitudes on option backdating in column (2) and the key coefficient is 0.086 (t=2.02), suggesting that individual corruption attitudes is significantly related to the likelihood of option backdating even after controlling for firm fixed effects. In column (5), I examine insider opportunistic trading. The coefficient on insider i's corruption attitudes is 0.220 (t=2.07), which is also positive and significant.

To further test the prediction that corporate culture can have a direct effect on individual behavior through group norms, I focus on the sample of insiders that have moved across firms. Similar to the previous column, I control for industry-year, county-year, and firm fixed effects. For this sample, I can also control for person fixed effects, which removes the effect of internal norms to the extent that they do not vary over time. Holding the individual constant, corruption culture continues to have a positive and significant effect on the insider's likelihood of engaging in option backdating and opportunistic insider trading. In terms of economic effects, a one standard deviation increase in the corruption culture measure is associated with an increase in the

likelihood of option backdating and opportunistic insider trading of 15.3% and 22.0%, respectively, based on the estimates in columns (3) and (6). These effects indicate that an individual working in a firm with higher corruption culture is more likely to commit misconduct than the same individual working in a firm with lower corruption culture, suggesting that group norms have a significant impact on the incidence of corporate misconduct.

Together, the findings in Sections V and VI help mitigate concerns of endogenity and provide supportive evidence that the documented relations between corruption culture and corporate misconduct may be more than just correlations. In particular, specific measures of corporate governance cannot explain the main results. Since the effect of corruption culture still remains even after controlling for firm fixed effects, time-invariant firm characteristics are also unlikely to explain the relations.

Moreover, I find evidence consistent with predictions from theories of corporate culture, which further alleviates concerns that the documented relation is driven by other factors. In particular, I find evidence consistent with corruption culture both acting as a selection mechanism and having a direct influence on individual behavior beyond individual personal attitudes. In other words, insiders are both influenced by their own corruption attitudes, and by the corruption attitudes of their co-workers. Thus, any omitted variables must be able to explain not only the positive relation between corruption culture and corporate misbehavior, but also the findings on the mechanisms of corruption culture documented in this section.[21]

VII. Conclusion

While traditional governance mechanisms have been studied extensively, relatively little is known about the role of corporate culture in influencing opportunistic behavior. In this paper,

[21] For example, if the main relation between corruption culture and corporate misconduct is driven by unobserved time-varying growth opportunities, then we should be able to decompose this factor into an individual component and a firm component and both should be related to misconduct. However, variables such as growth opportunities are firm-level phenomena and cannot be decomposed into an individual component the way corporate culture can.

I use a large sample of publicly-traded U.S. firms and examine whether a firm's corruption culture matters for corporate misconduct.

I measure a firm's corruption culture as the average corruption attitudes of officers and directors of a company using their cultural background information. The main finding of the paper is that corporate corruption culture has a significant positive effect on corporate misconduct such as earnings management, accounting fraud, option backdating, and opportunistic insider trading. The effects are also economically significant: a one standard deviation increase in a firm's corruption culture is associated with an increase in the likelihood of corporate misconduct by about 2% to 7%.

A significant challenge in the corporate culture literature is to understand the mechanisms through which corporate culture influences corporate behavior. Exploiting data on the entry and exit of insiders, I find that corruption culture operates by both attracting similar individuals to the organization and having a direct effect on individuals beyond their own beliefs and attitudes.

Overall, the study shows that a firm's corruption culture is an important determinant of the firm's likelihood of engaging in corporate misconduct. This finding echoes the growing focus on corporate culture by regulators in an effort to curb corporate wrongdoing. Corporate culture is akin to a firm's DNA that is rooted in the identity of the firm's employees, especially its leaders. Although corporate culture arises from the attraction, selection, and attrition process that is self-reinforcing and persistent, it is possible to change corporate culture gradually over time through changes in leadership. Further examinations of corporate culture and its evolution can help us better understand a firm's internal dynamics and how it impacts corporate behavior.

References

Ades, Alberto, and Rafael Di Tella, 1999, Rents, competition, and corruption, *American Economic Review* 89, 982-993.

Bebchuk, Lucian A., Yaniv Grinstein, and Urs C. Peyer, 2010, Lucky CEOs and lucky directors, *Journal of Finance* 65, 2363-2401.

Bengtsson, Ola, and David H. Hsu, 2013, Ethnic matching in the U.S. venture capital market, Working Paper.

Bereskin, Frederick, Terry Campbell, and Simi Kedia, 2014, Philanthropy, corporate culture and misconduct, Working Paper.

Bertrand, Marianne, and Sendhil Mullainathan, 2003, Enjoying the quiet life? Corporate governance and managerial preferences, *Journal of Political Economy* 111, 1043-1075.

Bisin, Alberto, and Thierry Verdier, 2011, The economics of cultural transmission and socialization, in J. Benhabib, A. Bisin, and M. O. Jackson, eds., *Handbook of Social Economics*, Vol. 1A, North-Holland, 339-416.

Cain, Matthew, Stephen McKeon, Steven Davidoff Solomon, 2014, Do takeover laws matter? Evidence from 5 decades of hostile takeovers, Working Paper.

Carroll, Christopher D., Ryung-kun Rhee, and Changyong Rhee, 1994, Are there cultural effects on saving? Some cross-sectional evidence, *Quarterly Journal of Economics* 109, 685-699.

Chatman, Jennifer A., 1991, Matching people and organizations: Selection and socialization in public accounting firms. *Administrative Science Quarterly* 36: 459-484.

Cohen, Daniel A., Aiyesha Dey, and Thomas Z. Lys, 2008, Real and accrual-based earnings management in the pre- and post-Sarbanes-Oxley periods, *Accounting Review* 83, 757-787.

Coles, Jeffrey, Naveen D. Daniel, and Lalitha Naveen, 2008, Boards: does one size fit all?, *Journal of Financial Economics* 87, 329-356.

Collins, Daniel W., Guojin Gong, and Haidan Li, 2009, Corporate governance and backdating of executive stock options, *Contemporary Accounting Research* 26, 403-445.

DeBacker, Jason, Bradley T. Heim, and Anh Tran, 2015, Importing corruption culture from overseas: evidence from corporate tax evasion in the United States, *Journal of Financial Economics* 117, 122-138.

Dechow, Patricia M., and Ilia D. Dichev. 2002, The quality of accruals and earnings: the role of accrual estimation errors, *Accounting Review* 77, 35–59.

Dechow, Patricia M., Weili Ge, Chad R. Larson, and Richard G. Sloan, 2011, Predicting material accounting misstatements, *Contemporary Accounting Research* 28, 17-82.

Dechow, Patricia M., Richard G. Sloan, and Amy P. Sweeney, 1995, Detecting earnings management, *Accounting Review* 70, 193-225.

Donaldson, Gordon, Jay W. Lorsch, 1983, *Decision Making at the Top: The Shaping of Strategic Direction*, Basic Books, New York.

Dyck, Alexander, Adair Morse, and Luigi Zingales, 2010, Who Blows the Whistle on Corporate Fraud?, *Journal of Finance* 65, 2213-2253.

Dyreng, Scott D., William J. Mayew, and Christopher D. Williams, 2012, Religious social norms and corporate financial reporting, *Journal of Business Finance and Accounting 39, 845-875*.

Fama, Eugene F., and Kenneth R. French, 1997, Industry cost of equity, *Journal of Financial Economics* 43, 153-193.

Fernández, Raquel, 2011, Does culture matter?, in J. Benhabib, M. O. Jackson and A. Bisen, eds., *Handbook of Social Economics*, Vol. 1A, North-Holland.

Fernández, Raquel, and Alessandra Fogli, 2009, Culture: an empirical investigation of beliefs, work, and fertility, *American Economic Journal: Macroeconomics* 1, 146-177.

Fisman, Raymond, and Edward Miguel, 2007, Corruption, norms, and legal enforcement: evidence from diplomatic parking tickets, *Journal of Political Economy* 115, 1020-1048.

Gao, Huasheng, and Hamed Mahmudi, 2011, Backdating executive stock option grants: is it all agency?, Nanyang Business School and the University of Toronto working paper.

Gintis, Herbert, 2003, The hitchhiker's guide to altruism: gene-culture coevolution, and the internalization of norms, *Journal of Theoretical Biology* 220, 407-418.

Giuliano, Paola, 2007, On the determinants of living arrangements in western Europe: does cultural origin matter?, *Journal of the European Economic Association* 5, 927-952.
Gompers, Paul, Joy Ishii, Andrew Metrick, 2003, Corporate governance and equity prices, *Quarterly Journal of Economics* 118, 107-155.
Gompers, Paul, Vladimir Mukharlyamov, and Yuhai Xuan, 2014, The cost of friendship, *Journal of Financial Economics* forthcoming.
Gormley, Todd A. and David A. Matsa, 2014, Common errors: how to (and not to) control for unobserved heterogeneity, *Review of Financial Studies* 27, 617-661.
Greene, William, 2004, The behaviour of the maximum likelihood estimator of limited dependent variable models in the presence of fixed effects, *Econometrics Journal* 7, 98–119.
Grullon, Gustavo, George Kanatas, and James Weston, 2010, Religion and corporate (mis)behavior, Rice University working paper.
Guiso, Luigi, Paola Sapienza, and Luigi Zingales, 2004, The role of social capital in financial development, *American Economic Review* 94, 526-556.
Guiso, Luigi, Paola Sapienza, and Luigi Zingales, 2006, Does culture affect economic outcomes?, *Journal of Economic Perspectives* 20, 23-48.
Guiso, Luigi, Paola Sapienza, and Luigi Zingales, 2015, The value of corporate culture, *Journal of Financial Economics* 117, 60-76.
Hackman, Richard J., 1992, Group influences on individuals in organizations, *Handbook of Industrial and Organizational Psychology*, 2nd ed., vol. 3, Palo Alto, CA: Consulting Psychologists Press.
Hayes, Rachel M., Paul Oyer, and Scott Schaefer, 2006, Coworker complementarity and the stability of top-management teams, *Journal of Law, Economics, & Organization* 22, 184-212.
Hazarika, Sonali, Jonathan M. Karpoff, and Rajarishi Nahata, 2012, Internal corporate governance, CEO turnover, and earnings management, *Journal of Financial Economics* 104, 44-69.
Hegde, Deepak, and Justin Tumlinson, 2013, Can birds of a feather fly together? The payoffs of ethnic proximity in US venture capital, Working Paper.
Hennes, Karen M., Andrew J. Leone, and Brian P. Miller, 2008, The importance of distinguishing errors from irregularities in restatement research: the case of restatements and CEO/CFO turnover, *Accounting Review* 83, 1487-1519.
Hermalin, Benjamin E., 2001, Economics and corporate culture, C. L.Cooper, S. Cartwright, P. C. Earley, eds. *The International Handbook of Organizational Culture and Climate*, Chap. 10. John Wiley & Sons, Chichester, UK, 217–261.
Hermalin, Benjamin E., 2012, Leadership and corporate culture, R. Gibbons and J. Roberts, eds. *The Handbook of Organizational* Economics, Chap. 11. Princeton University Press, 432-478.
Hermalin, Benjamin E., and Michael S. Weisbach, 1998, Endogenously chosen boards of directors and their monitoring of the CEO, *American Economic Review* 88, 96-118.
Hilary, Gilles, and Kai Wai Hui, 2009, Does religion matter in corporate decision making in America?, *Journal of Financial Economics* 93, 455-473.
Hribar, Paul, and Craig Nichols, 2007, The use of unsigned earnings quality measures in tests of earnings management, *Journal of Accounting Research* 45, 1017-1053.
Ichino, Andrea, and Giovanni Maggi, 2000, Work environment and individual background: explaining regional shirking differentials in a large Italian firm, *Quarterly Journal of Economics* 115, 1057-1090.
Jensen, Michael C., 1988, Takeovers: their causes and consequences, *Journal of Economic Perspectives* 2, 21-48.
Jensen, Michael C., 1993, The modern industrial revolution, exit, and the failure of internal control systems, *Journal of Finance* 48, 831-880.
Jones, Jennifer J., 1991, Earnings management during import relief investigations, *Journal of Accounting Research* 29, 193-228.
Karpoff, Jonathan M., D. Scott Lee, and Gerald S. Martin, 2008, The cost to firms of cooking the books, *Journal of Financial and Quantitative Analysis* 43, 581-611.
Kerr, William, and William F. Lincoln, 2010, The supply side of innovation: H-1B visa reforms and U.S. ethnic invention, *Journal of Labor Economics* 28, 473-508.

Klein, April, 2002, Audit committee, board of director characteristics, and earnings management, *Journal of Accounting and Economics* 33, 375-400.
Kothari, S. P., Andrew J. Leone, and Charles E. Wasley, 2005, Performance-matched discretionary accrual measures, *Journal of Accounting and Economics* 39, 163–197.
Kotter, John P., James L. Heskett, 1992, *Corporate Culture and Performance*, Free Press, New York.
Larcker, David F., Scott A. Richardson, and Irem Tuna, 2007, Corporate governance, accounting outcomes, and organizational performance, *Accounting Review* 82, 963-1008.
Lauderdale, Diane, and Kestenbaum, Bert, 2000, Asian American ethnic identification by surname, *Population Research and Policy Review* 19, 283-300.
Lie, Erik, 2005, On the timing of CEO stock option awards, *Management Science* 51, 802-812.
Linck, James, Jeffry Netter, and Tina Yang, 2007, The determinants of board structure, *Journal of Financial Economics* 87, 308–28.
Loughran, Tim, and Jay R. Ritter, 2004, Why has IPO underpricing changed over time? *Financial Management* 33(3), 5–37.
Mauro, Paolo, 1995, Corruption and growth, *Quarterly Journal of Economics* 110, 681-712.
Mateos, Pablo, 2007, A review of name-based ethnicity classification methods and their potential in population studies, *Population Space and Place* 13, 243-263.
McGuire, Sean T., Thomas C. Omer, and Nathan Y. Sharp, 2012, The impact of religion on financial reporting irregularities, *The Accounting Review* 87, 645-673.
Meglino, Bruce M., Elizabeth C. Ravlin, Cheryl L. Adkins, 1989, A work values approach to corporate culture: A field test of the value congruence process and its relationship to individual outcomes. *Journal of Applied Psychology* 74, 424-432.
O'Reilly, Charles A., Jennifer Chatman, David F. Caldwell, 1991, People and organizational culture: a profile comparison approach to assessing person-organization fit, *Academy of Management Journal* 34, 487-516.
Parsons, Christopher A., Johan Sulaeman, and Sheridan Titman, 2014, Peer effects and corporate corruption, Working Paper.
Petrovits, Christine, 2006, Corporate-sponsored foundations and earnings management, *Journal of Accounting and Economics* 41, 335-362.
Ravina, Enrichetta, and Paola Sapienza, 2010, What do independent directors know? Evidence from their trading, *Review of Financial Studies* 23, 962-1003.
Rossiter, W. S., 1909, A Century of Population Growth, from the First Census of the United States to the Twelfth, 1790-1900.
Rozanov, Konstantin A., 2008, Corporate governance and insider trading, Harvard University, dissertation.
Scandura, Terri A. and Ethlyn A. Williams, 2000, Research methodology in management: current practices, trends, and implications for future research, *Academy of Management Journal* 43, 1248-1264.
Schein, Edgar. H, 1985, *Organizational Culture and Leadership*. Jossey-Bass, San Francisco.
Schneider, Benjamin, 1987, The people make the place, *Personnel Psychology* 40, 437–453.
Shleifer, Andrei, and Robert Vishny, 1986, Large shareholders and corporate control, *Journal of Political Economy* 94, 461-488.
Simpser, Alberto, 2015, Do attitudes towards corruption have a life of their own? A study of intergenerational persistence, Working Paper.
Van de Steen, Eric, 2010, On the origin of shared beliefs (and corporate culture), *Rand Journal of Economics* 41, 617-648.
Weisbach, Michael S., 1988, Outside directors and CEO turnover, *Journal of Financial Economics* 20, 431-460.
Webber, Richard, 2007, Using names to segment customers by cultural, ethnic, or religious origin, *Direct, Data and Digital Marketing Practice* 8(3), 226-242.
Yermack, David, 1996. Higher market valuation of companies with a small board of directors, *Journal of Financial Economics* 40, 185–212.
Yu, Frank, 2008, Analyst coverage and earnings management, *Journal of Financial Economics* 88, 245-271.

Table 1: Summary Statistics

This table presents summary statistics for the main variables used in the empirical analysis. See Appendix A for variable definitions.

	Mean	Med.	Stdev	P25	P75
Corruption Culture	2.802	2.609	0.905	2.142	3.255
Earnings Management	0.089	0.052	0.131	0.022	0.107
Fraud	0.031	0.000	0.172	0.000	0.000
Backdating	0.207	0.000	0.405	0.000	0.000
Price Pattern	1.106	1.052	0.285	0.977	1.169
Ln(Assets)	5.409	5.245	2.139	3.831	6.827
Ln(1+Age)	2.619	2.565	0.774	2.079	3.296
Market-to-book	1.721	1.122	1.949	0.793	1.881
Leverage	0.237	0.209	0.214	0.052	0.363
Stock Volatility	0.615	0.525	0.375	0.342	0.782
ROA	0.071	0.112	0.219	0.041	0.169
Capital Intensity	0.285	0.226	0.225	0.107	0.410
R&D	0.043	0.000	0.089	0.000	0.051
High Tech	0.231	0.000	0.422	0.000	0.000
Ln(Operating Cycle)	4.150	4.304	1.098	3.589	4.828
Loss Percentage	0.287	0.000	0.432	0.000	0.900
Sales Growth	0.228	0.097	0.682	-0.010	0.265
Sales Volatility	0.514	0.270	0.641	0.124	0.635
Cash Flow Volatility	0.414	0.086	0.589	0.041	0.654
Ln(N. of Options)	0.667	0.693	0.618	0.000	1.099
Shares Traded	0.002	0.000	0.007	0.000	0.000
Philanthropy	0.092	0.000	0.290	0.000	0.000
Board Size	7.807	7.000	3.011	6.000	9.000
Insider Directors	0.295	0.250	0.190	0.167	0.400
Institutional Holdings	0.453	0.405	0.348	0.138	0.716
Takeover Index	0.088	0.058	0.094	0.029	0.113

Table 2: Corruption Culture and Corporate Misconduct

Results from corporate misconduct regressions are reported. The sample in columns (1), (2), and (4) consists of firm-year observations from 1988 to 2006. The sample in column (3) consists of firm-year observations from 1996 to 2006. The dependent variable in column (1) is earnings management, calculated as the absolute value of abnormal discretionary accruals scaled by total assets. The dependent variable in column (2) is a fraud dummy, which equals one (zero otherwise) if the firm-year is within a class action lawsuit period or has misstated earnings according to AAER or GAO. The dependent variable in column (3) is an insider backdating dummy, which equals one (zero otherwise) if the strike price of at least one insider's option grant is at the lowest price of the month. The dependent variable in column (4) is the price pattern ratio, computed as the ratio of the market-adjusted gross return over the 20 trading days following the insider purchase transaction to the market-adjusted gross return over the 20 trading days preceding the insider purchase transaction, averaged across all insider purchase transactions in the same firm and year. Corruption Culture is the average corruption values for all insiders including both officers and directors. Other variables are defined in Appendix A. Year and (49 Fama-French) industry fixed effects are included. t-statistics or z-statistics (in parentheses) are computed using heteroskedasticity-consistent standard errors that are corrected for clustering at the firm level. All coefficients are multiplied by 100 for ease of exposition. *, **, and *** denotes significance at the 10%, 5%, and 1% levels, respectively.

	Earnings Management	Fraud	Backdating	Price Pattern
	(1)	(2)	(3)	(4)
Corruption Culture	0.227***	0.392***	1.188***	0.954***
	(2.83)	(3.92)	(4.05)	(3.92)
Ln(Assets)	-0.730***	0.848***	-1.138***	0.346***
	(-18.54)	(15.97)	(-7.39)	(3.16)
Ln(1+Age)	-0.216*	-0.225	-2.412***	-2.112***
	(-1.89)	(-1.51)	(-6.70)	(-10.15)
Market-to-book	0.884***	0.224***	0.018	1.293***
	(11.78)	(7.06)	(0.17)	(9.01)
Leverage	2.380***	1.265***	2.471**	2.881***
	(5.74)	(3.37)	(2.12)	(3.31)
Stock Volatility	2.169***	1.432***	4.546***	9.697***
	(8.84)	(6.69)	(5.93)	(12.52)
ROA	-9.670***	0.633	-0.111	0.574
	(-11.45)	(1.50)	(-0.09)	(0.43)
Capital Intensity	-2.833***	-1.548***	0.537	-0.049
	(-8.55)	(-3.38)	(0.45)	(-0.07)
R&D	-3.949**	-0.636	-10.366***	10.944***
	(-2.20)	(-0.54)	(-3.83)	(3.67)
High Tech	0.303	0.754***	0.279	3.611***
	(1.56)	(2.74)	(0.48)	(6.86)
Operating Cycle	0.301***	-0.166**	-	-
	(4.07)	(-2.05)		
Loss Percentage	0.491***	0.308	-	-
	(2.66)	(1.60)		
Sales Growth	0.588***	0.226***	-	-
	(4.13)	(2.79)		
Sales Volatility	1.871***	0.734***	-	-
	(10.66)	(4.81)		
Cash Flow Volatility	-0.502***	-0.736***	-	-
	(-2.98)	(-3.94)		
N. of Options	-	-	15.758***	-
			(43.35)	
Shares Traded	-	-	-	59.157***
				(2.59)
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	61,013	67,104	34,993	39,467
N. of Firms	8,235	8,924	7,124	7,654
R-squared	0.148	0.049	0.069	0.049

Table 3: Controlling for Time Varying Local and Industry Effects

Results from corporate misconduct regressions are reported. The sample in columns (1), (2), and (4) consists of firm-year observations from 1988 to 2006. The sample in column (3) consists of firm-year observations from 1996 to 2006. The dependent variable in column (1) is earnings management, calculated as the absolute value of abnormal discretionary accruals scaled by total assets. The dependent variable in column (2) is a fraud dummy, which equals one (zero otherwise) if the firm-year is within a class action lawsuit period or has misstated earnings according to AAER or GAO. The dependent variable in column (3) is an insider backdating dummy, which equals one (zero otherwise) if the strike price of at least one insider's option grant is at the lowest price of the month. The dependent variable in column (4) is the price pattern ratio, computed as the ratio of the market-adjusted gross return over the 20 trading days following the insider purchase transaction to the market-adjusted gross return over the 20 trading days preceding the insider purchase transaction, averaged across all insider purchase transactions in the same firm and year. Corruption Culture is the average corruption values for all insiders including both officers and directors. Other variables are defined in Appendix A. Industry×Year and County×Year fixed effects are included. t-statistics (in parentheses) are computed using heteroskedasticity-consistent standard errors that are corrected for clustering at the firm level. All coefficients are multiplied by 100 for ease of exposition. *, **, and *** denotes significance at the 10%, 5%, and 1% levels, respectively.

	Earnings Management	Fraud	Backdating	Price Pattern
	(1)	(2)	(3)	(4)
Corruption Culture	0.182**	0.254**	1.051***	0.631**
	(2.11)	(2.21)	(3.20)	(2.30)
Ln(Assets)	-0.808***	0.879***	-1.255***	0.387***
	(-18.62)	(10.48)	(-7.67)	(3.20)
Ln(1+Age)	-0.003	-0.658***	-1.073***	-2.554***
	(-0.03)	(-3.00)	(-2.82)	(-11.13)
Market-to-book	0.797***	0.193***	-0.077	0.899***
	(10.29)	(3.39)	(-0.64)	(5.76)
Leverage	1.635***	2.073***	2.108*	1.455*
	(3.89)	(4.04)	(1.73)	(1.66)
Stock Volatility	1.367***	0.332	2.260**	6.304***
	(5.38)	(1.37)	(2.41)	(7.02)
ROA	-9.981***	-0.254	-1.976	-1.234
	(-11.27)	(-0.58)	(-1.46)	(-0.87)
Capital Intensity	-1.941***	-1.355*	-0.610	-1.946*
	(-4.24)	(-1.91)	(-0.37)	(-1.77)
R&D	-3.145	-3.084**	-6.099*	5.408
	(-1.62)	(-2.34)	(-1.88)	(1.59)
High Tech	-0.070	-0.082	-2.349	1.199
	(-0.17)	(-0.16)	(-1.57)	(1.04)
Operating Cycle	0.646***	0.233**	-	-
	(7.28)	(2.19)		
Loss Percentage	0.493***	-0.147	-	-
	(2.62)	(-0.69)		
Sales Growth	0.441***	0.423***	-	-
	(3.12)	(3.84)		
Sales Volatility	1.765***	0.580***	-	-
	(9.52)	(2.72)		
Cash Flow Volatility	-0.445**	-0.593**	-	-
	(-2.40)	(-2.52)		
N. of Options	-	-	17.103***	-
			(44.31)	
Shares Traded	-	-	-	54.553**
				(2.37)
Industry×Year FE	Yes	Yes	Yes	Yes
County×Year FE	Yes	Yes	Yes	Yes
Observations	61,013	67,104	34,993	39,467
N. of Firms	8,235	8,924	7,124	7,654
R-squared	0.171	0.052	0.081	0.060

Table 4: Alternative Model Specification

Results from corporate misconduct regressions are reported. The sample in columns (1), (2), and (4) consists of firm-year observations from 1988 to 2006. The sample in column (3) consists of firm-year observations from 1996 to 2006. The dependent variable in column (1) is earnings management, calculated as the absolute value of abnormal discretionary accruals scaled by total assets. The dependent variable in column (2) is a fraud dummy, which equals one (zero otherwise) if the firm-year is within a class action lawsuit period or has misstated earnings according to AAER or GAO. The dependent variable in column (3) is an insider backdating dummy, which equals one (zero otherwise) if the strike price of at least one insider's option grant is at the lowest price of the month. The dependent variable in column (4) is the price pattern ratio, computed as the ratio of the market-adjusted gross return over the 20 trading days following the insider purchase transaction to the market-adjusted gross return over the 20 trading days preceding the insider purchase transaction, averaged across all insider purchase transactions in the same firm and year. Corruption Culture is the average corruption values for all insiders including both officers and directors. Other variables are defined in Appendix A. t-statistics or z-statistics (in parentheses) are computed using heteroskedasticity-consistent standard errors that are corrected for clustering at the firm level. All coefficients are multiplied by 100 for ease of exposition. *, **, and *** denotes significance at the 10%, 5%, and 1% levels, respectively.

	Earnings Management	Fraud	Backdating	Price Pattern
	(1)	(2)	(3)	(4)
Corruption Culture	0.177**	0.149*	1.094***	0.680**
	(2.06)	(1.70)	(3.46)	(2.54)
Corruption Culture$_{\text{county-year mean}}$	0.165	0.113	1.158*	0.164
	(1.13)	(0.67)	(1.79)	(0.41)
Corruption Culture$_{\text{industry-year mean}}$	-1.506***	1.489***	0.315	2.774***
	(-4.17)	(4.30)	(0.22)	(3.28)
Corruption Culture$_{\text{market mean}}$	-5.425**	16.791***	-78.000***	0.167
	(-2.23)	(5.86)	(-4.07)	(0.04)
County-Year Mean	0.042***	-0.028**	-0.023	0.053***
	(4.65)	(-2.40)	(-1.35)	(3.76)
Industry-Year Mean	0.284***	0.184***	0.151***	0.295***
	(16.79)	(11.87)	(3.47)	(8.79)
Market Mean	0.135**	0.518***	0.849***	0.312***
	(2.31)	(9.37)	(9.10)	(5.58)
Ln(Assets)	-0.751***	0.475***	-1.147***	0.288***
	(-19.09)	(11.36)	(-7.30)	(2.60)
Ln(1+Age)	-0.073	-0.176	-1.547***	-2.136***
	(-0.65)	(-1.57)	(-4.28)	(-10.20)
Market-to-book	0.787***	0.100***	-0.086	1.011***
	(10.41)	(3.88)	(-0.84)	(6.98)
Leverage	2.405***	1.370***	2.120*	2.185**
	(5.81)	(5.02)	(1.82)	(2.54)
Stock Volatility	1.528***	0.276	2.660***	6.820***
	(6.29)	(1.55)	(3.26)	(8.62)
ROA	-10.260***	0.317	-1.656	-0.591
	(-12.10)	(0.96)	(-1.41)	(-0.44)
Capital Intensity	-1.844***	-0.004	-0.271	1.169
	(-5.00)	(-0.01)	(-0.22)	(1.63)
R&D	-6.458***	-0.809	-9.974***	6.999**
	(-3.57)	(-0.89)	(-3.67)	(2.35)
High Tech	-0.322*	0.415*	0.373	1.905***
	(-1.67)	(1.95)	(0.61)	(3.67)
Operating Cycle	0.396***	0.036	-	-
	(5.31)	(0.58)		
Loss Percentage	0.323*	-0.048	-	-
	(1.75)	(-0.32)		
Sales Growth	0.530***	0.263***	-	-
	(3.74)	(4.27)		
Sales Volatility	1.881***	0.497***	-	-
	(10.83)	(4.09)		

Cash Flow Volatility	-0.381**	-0.088	-	-
	(-2.25)	(-0.62)		
N. of Options	-	-	16.229***	-
			(44.12)	
Shares Traded	-	-	-	51.296**
				(2.27)
Observations	61,013	67,104	34,993	39,467
N. of Firms	8,235	8,924	7,124	7,654
R-squared	0.158	0.137	0.076	0.060

Table 5: Potential Omitted Variables

Potential omitted variables are included in corporate misconduct regressions. The sample in columns (1), (2), and (4) consists of firm-year observations from 1988 to 2006. The sample in column (3) consists of firm-year observations from 1996 to 2006. The dependent variable in column (1) is earnings management, calculated as the absolute value of abnormal discretionary accruals scaled by total assets. The dependent variable in column (2) is a fraud dummy, which equals one (zero otherwise) if the firm-year is within a class action lawsuit period or has misstated earnings according to AAER or GAO. The dependent variable in column (3) is an insider backdating dummy, which equals one (zero otherwise) if the strike price of at least one insider's option grant is at the lowest price of the month. The dependent variable in column (4) is the price pattern ratio, computed as the ratio of the market-adjusted gross return over the 20 trading days following the insider purchase transaction to the market-adjusted gross return over the 20 trading days preceding the insider purchase transaction, averaged across all insider purchase transactions in the same firm and year. Corruption Culture is the average corruption values for all insiders including both officers and directors. Philanthropy is a dummy that equals one (zero otherwise) if the firm has made charitable donations through direct giving or through a foundation during the 1989 to 2000 period. Board Size is the number of directors on board. Insider Directors is the fraction of directors who are also officers of the company. Institutional Holdings is the fraction of shares held by 13F institutional investors. Takeover Index is an index developed by Cain, McKeon, and Solomon (2014) constructed based on the passage of 12 different types of state takeover laws, one federal statue and three state standards of review, where higher values indicate higher hostile takeover hazard. The control variables are defined in Appendix A. Industry×Year and County×Year fixed effects are included. t-statistics (in parentheses) are computed using heteroskedasticity-consistent standard errors that are corrected for clustering at the firm level. All coefficients are multiplied by 100 for ease of exposition. *, **, and *** denotes significance at the 10%, 5%, and 1% levels, respectively.

	Earnings Management	Fraud	Backdating	Price Pattern
	(1)	(2)	(3)	(4)
Corruption Culture	0.215**	0.246**	1.158***	0.684**
	(2.37)	(1.96)	(3.08)	(1.97)
Philanthropy	0.846***	-0.152	1.397	-2.750***
	(4.58)	(-0.28)	(1.10)	(-5.36)
Board Size	-0.063**	-0.038	-0.233*	-0.244***
	(-2.48)	(-0.66)	(-1.94)	(-2.86)
Insider Directors	-0.330	0.763	4.484***	-1.254
	(-0.90)	(1.18)	(2.73)	(-0.99)
Institutional Holdings	-0.093	0.853	1.227	3.536***
	(-0.38)	(1.60)	(1.37)	(4.51)
Takeover Index	3.956***	4.377**	7.450	-2.703
	(4.58)	(2.02)	(1.36)	(-1.18)
Ln(Assets)	-0.883***	0.830***	-1.447***	0.479**
	(-12.78)	(6.47)	(-5.50)	(2.41)
Ln(1+Age)	-0.384***	-0.994***	-1.655***	-2.381***
	(-2.61)	(-3.37)	(-2.98)	(-7.43)
Market-to-book	0.739***	0.150**	-0.078	0.818***
	(9.07)	(2.32)	(-0.59)	(4.94)
Leverage	1.644***	1.337**	1.094	1.112
	(3.56)	(2.41)	(0.79)	(1.06)
Stock Volatility	1.245***	0.308	1.683	6.076***
	(4.58)	(1.09)	(1.58)	(5.59)
ROA	-9.296***	-0.700	-2.964**	-3.906**
	(-9.76)	(-1.33)	(-1.99)	(-2.38)
Capital Intensity	-2.131***	-1.848**	0.488	-0.981
	(-4.62)	(-2.25)	(0.27)	(-0.81)
R&D	-1.269	-3.272**	-6.320*	4.438
	(-0.62)	(-2.13)	(-1.79)	(1.18)
High Tech	-0.246	0.120	-2.201	1.304
	(-0.58)	(0.22)	(-1.39)	(1.12)
Operating Cycle	0.512***	0.139	-	-
	(5.37)	(1.04)		
Loss Percentage	0.311	-0.033	-	-
	(1.59)	(-0.14)		

Sales Growth	0.366**	0.359***	-	-
	(2.51)	(2.86)		
Sales Volatility	1.868***	0.522**	-	-
	(9.10)	(2.14)		
Cash Flow Volatility	-0.670***	-0.704**	-	-
	(-3.27)	(-2.56)		
N. of Options	-	-	17.386***	
			(40.54)	
Shares Traded	-	-	-	68.923**
				(2.22)
Industry×Year FE	Yes	Yes	Yes	Yes
County×Year FE	Yes	Yes	Yes	Yes
Observations	49,537	50,502	26,769	28,237
N. of Firms	6,104	6,171	5,256	5,495
R-squared	0.169	0.074	0.103	0.084

Table 6: Corporate Misconduct around CEO Turnover

Results from corporate misconduct regressions are reported. The sample consists of firm-year observations five years before and five years after the appointment of a new CEO. The dependent variable in column (1) is earnings management, calculated as the absolute value of abnormal discretionary accruals scaled by total assets. The dependent variable in column (2) is a fraud dummy, which equals one (zero otherwise) if the firm-year is within a class action lawsuit period or has misstated earnings according to AAER or GAO. The dependent variable in column (3) is an insider backdating dummy, which equals one (zero otherwise) if the strike price of at least one insider's option grant is at the lowest price of the month. The dependent variable in column (4) is the price pattern ratio, computed as the ratio of the market-adjusted gross return over the 20 trading days following the insider purchase transaction to the market-adjusted gross return over the 20 trading days preceding the insider purchase transaction, averaged across all insider purchase transactions in the same firm and year. Corruption Culture is the average corruption values for all insiders including both officers and directors. The firm controls are defined in Appendix A. Firm, Industry×Year, and County×Year fixed effects are included. t-statistics (in parentheses) are computed using heteroskedasticity-consistent standard errors that are corrected for clustering at the firm level. All coefficients are multiplied by 100 for ease of exposition. *, **, and *** denotes significance at the 10%, 5%, and 1% levels, respectively.

	Earnings Management	Fraud	Backdating	Price Pattern
	(1)	(2)	(3)	(4)
Corruption Culture	0.586*	0.696**	2.103**	1.459*
	(1.72)	(2.01)	(2.04)	(1.77)
Ln(Assets)	-3.727***	2.040***	-0.956	5.767***
	(-8.32)	(4.95)	(-0.99)	(6.43)
Ln(1+Age)	-4.047***	0.020	-6.153*	0.824
	(-2.94)	(0.01)	(-1.83)	(0.38)
Market-to-book	0.629***	0.255**	-0.273	1.175***
	(3.87)	(2.17)	(-1.21)	(3.48)
Leverage	0.304	0.767	2.152	-2.702
	(0.20)	(0.65)	(0.60)	(-0.98)
Stock Volatility	0.386	-0.482	1.202	2.437
	(0.68)	(-0.78)	(0.69)	(1.33)
ROA	-6.668***	-0.480	-2.523	-1.255
	(-3.34)	(-0.46)	(-0.91)	(-0.42)
Capital Intensity	0.222	-2.553	-1.748	-4.222
	(0.11)	(-1.22)	(-0.28)	(-0.92)
R&D	-5.599	-4.055	5.899	7.447
	(-1.29)	(-1.45)	(0.79)	(0.88)
Operating Cycle	0.564*	0.146	-	-
	(1.90)	(0.55)		
Loss Percentage	-0.325	-1.028**	-	-
	(-1.02)	(-2.36)		
Sales Growth	-0.162	0.402*	-	-
	(-0.53)	(1.77)		
Sales Volatility	-0.675	-0.101	-	-
	(-1.21)	(-0.16)		
Cash Flow Volatility	-0.626	0.391	-	-
	(-1.25)	(0.65)		
N. of Options	-	-	17.874***	-
			(26.55)	
Shares Traded	-	-	-	107.987**
				(2.15)
Industry×Year FE	Yes	Yes	Yes	Yes
County×Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Observations	20,994	23,777	16,928	15,397
N. of Firms	3,404	3,690	3,367	3,385
R-squared	0.292	0.238	0.104	0.124

Table 7: Corruption Culture as a Selection Mechanism

This table examines the attraction, selection, and attrition process of corporate culture. The sample in column (1) consists of new insider-year observations from 1988 to 2006. The sample in columns (2) and (3) consists of insider-year observations from 1988 to 2006. The dependent variable in column (1) is new insider corruption, which is the corruption index value for the new insider's country of ancestry, where new insiders are officers and directors that appear for the first time in the sample. The dependent variable in columns (2) and (3) is insider exit, which is a dummy that equals one (zero otherwise) if the insider leaves the firm in the following year. Corruption $\text{Culture}_{\text{prior year}}$ is the average corruption values for all insiders including both officers and directors, measured in the year before the new insider entered. |Corruption Culture_{-i} - Insider i Corruption| is the absolute difference between the firm's corruption culture measured without insider i and insider i's corruption value. (Corruption Culture_{-i} - Insider i Corruption)$^{+}$ is the signed difference when the difference is positive and zero otherwise. (Corruption Culture_{-i} - Insider i Corruption)$^{-}$ is the signed difference when the difference is negative and zero otherwise. Insider Age is the insider's age in years. Director is a dummy that equals one (zero otherwise) if the insider is a director. The control variables are defined in Appendix A. Industry×Year, County×Year, and Firm×Year fixed effects are included as specified. t-statistics (in parentheses) are computed using heteroskedasticity-consistent standard errors that are corrected for clustering at the firm level. The coefficients in columns (2) and (3) are multiplied by 100 for ease of exposition. *, **, and *** denotes significance at the 10%, 5%, and 1% levels, respectively.

	New Insider Corruption	Insider Exit	Insider Exit
	(1)	(2)	(3)
Corruption $\text{Culture}_{\text{prior year}}$	0.124***	-	-
	(10.71)		
|Corruption Culture_{-i} - Insider i Corruption|	-	0.210***	-
		(7.94)	
(Corruption Culture_{-i} - Insider i Corruption)$^{+}$	-	-	0.658***
			(12.50)
(Corruption Culture_{-i} - Insider i Corruption)$^{-}$	-	-	-0.200***
			(-7.88)
Insider Age	-0.006***	0.102***	0.102***
	(-10.38)	(4.45)	(4.45)
Director	0.052***	-1.980***	-1.984***
	(5.21)	(-13.33)	(-13.42)
Ln(Assets)	-0.010***	-	-
	(-2.66)		
Ln(1+Age)	-0.007	-	-
	(-0.75)		
Market-to-book	0.001	-	-
	(0.36)		
Leverage	0.024	-	-
	(0.90)		
Stock Volatility	0.013	-	-
	(0.61)		
ROA	-0.069*	-	-
	(-1.96)		
Capital Intensity	-0.055	-	-
	(-1.54)		
R&D	-0.086	-	-
	(-1.09)		
High Tech	0.026	-	-
	(0.79)		
Industry×Year FE	Yes	Yes	Yes
County×Year FE	Yes	Yes	Yes
Firm×Year FE		Yes	Yes
Observations	95,233	1,678,000	1,678,000
N. of Firms	9,209	16,732	16,732
R-squared	0.044	0.160	0.160
Sample	New Insiders	All Insiders	All Insiders

Table 8: Selection around new CEO Appointments

The sample in columns (1) and (2) consists of firm-year observations from 1988 to 2006. The sample in column (3) consists of new insider-year observations from 1988 to 2006. The sample in columns (4) and (5) consists of insider-year observations from 1988 to 2006. The dependent variable in column (1) is the number of insiders that exit a given firm in the following year. The dependent variable in column (2) is the number of insiders that enter a given firm in the following year. The dependent variable in column (3) is new insider corruption, which is the corruption index value for the new insider's country of ancestry, where new insiders are officers and directors that appear for the first time in the sample. The dependent variable in columns (4) and (5) is insider exit, which is a dummy that equals one (zero otherwise) if the insider leaves the firm in the year following the appointment of a new CEO. New CEO is a dummy that equals one (zero otherwise) if a new CEO enters a firm in a given year. New CEO Corruption is the corruption index value in the new CEO's country of ancestry. |New CEO Corruption-Insider i Corruption|, which is the absolute difference between the new CEO's corruption value and insider i's corruption value. (New CEO Corruption- Insider i Corruption)$^{+}$ is the signed difference when the difference is positive and zero otherwise. (New CEO Corruption- Insider i Corruption)$^{-}$ is the signed difference when the difference is negative and zero otherwise. Insider Age is the insider's age in years. Director is a dummy that equals one (zero otherwise) if the insider is a director. The fixed effects are included as specified. t-statistics (in parentheses) are computed using heteroskedasticity-consistent standard errors that are corrected for clustering at the firm level. *, **, and *** denotes significance at the 10%, 5%, and 1% levels, respectively.

	Number of Insiders Exiting	Number of Insiders Entering	New Insider Corruption	Insider Exit	Insider Exit
	(1)	(2)	(3)	(4)	(5)
New CEO	0.223***	0.092***	-	-	-
	(7.88)	(2.65)			
New CEO Corruption	-	-	0.113***	-	-
			(5.45)		
|New CEO Corruption-Insider i Corruption|	-	-	-	0.480***	-
				(6.97)	
(New CEO Corruption-Insider i Corruption)$^{+}$	-	-	-	-	1.283***
					(9.94)
(New CEO Corruption-Insider i Corruption)$^{-}$	-	-	-	-	-0.344***
					(-4.77)
Insider Age	-	-	-0.006***	0.176***	0.174***
			(-2.96)	(16.26)	(16.00)
Director	-	-	0.051	-2.478***	-2.479***
			(1.64)	(-14.46)	(-14.49)
Ln(Assets)	0.065***	0.281***	-0.007	-	-
	(3.69)	(12.65)	(-0.60)		
Ln(1+Age)	0.781***	0.349***	-0.004	-	-
	(16.28)	(5.98)	(-0.11)		
Market-to-book	-0.053***	-0.037***	0.011	-	-
	(-11.41)	(-5.91)	(1.05)		
Leverage	0.363***	0.231***	0.005	-	-
	(6.05)	(2.83)	(0.07)		
Stock Volatility	0.319***	0.211***	-0.025	-	-
	(10.32)	(5.34)	(-0.38)		
ROA	-0.594***	-0.403***	-0.051	-	-
	(-9.75)	(-5.42)	(-0.46)		
Capital Intensity	0.000	-0.142	-0.085	-	-
	(0.00)	(-1.09)	(-0.75)		
R&D	0.181	0.822***	-0.068	-	-
	(1.20)	(3.91)	(-0.29)		
High Tech	-	-	0.033	-	-
			(0.31)		
Industry ×Year FE	Yes	Yes	Yes	Yes	Yes
County×Year FE	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes		Yes	Yes
Firm×Year FE				Yes	Yes
Observations	76,562	76,562	11,419	162,152	162,152
N. of Firms	9,996	9,996	2,839	7,270	7,270
R-squared	0.285	0.268	0.123	0.172	0.172
Sample	All Firms	All Firms	New Insiders	All Insiders	All Insiders

Table 9: Insider Level Misconduct

This table examines the effect of internal norms vs. group norms. The sample in columns (1) to (3) consists of insider-grant date observations from 1996 to 2006. The sample in columns (4) to (6) consists of insider-purchase date observations from 1988 to 2006. All insiders are included except columns (3) and (6), where only insiders that moved between firms are included. The dependent variable in columns (1) to (3) is an insider backdating dummy, which equals one (zero otherwise) if the strike price of the insider's option grant is at the lowest price of the month. The dependent variable in columns (4) to (6) is the price pattern ratio, computed as the ratio of the market-adjusted gross return over the 20 trading days following the insider purchase transaction to the market-adjusted gross return over the 20 trading days preceding the insider purchase transaction. Insider i Corruption is the corruption index value in insider i's country of ancestry. Corruption Culture$_{-i}$ is the average corruption values for all insiders excluding insider i. Insider Age is the insider's age in years. Director is a dummy that equals one (zero otherwise) if the insider is a director. The control variables are defined in Appendix A. Industry×Year, County×Year, Firm, and Person fixed effects are included as specified. t-statistics (in parentheses) are computed using heteroskedasticity-consistent standard errors that are corrected for clustering at the firm level. All coefficients are multiplied by 100 for ease of exposition. *, **, and *** denotes significance at the 10%, 5%, and 1% levels, respectively.

	Backdating	Backdating	Backdating	Price Pattern	Price Pattern	Price Pattern
	(1)	(2)	(3)	(4)	(5)	(6)
Insider i Corruption	0.123**	0.086**	-	0.393***	0.220**	-
	(2.37)	(2.02)		(2.99)	(2.07)	
Corruption Culture$_{-i}$	0.750**	-	2.783***	1.266**	-	4.512**
	(2.40)		(3.13)	(2.15)		(2.24)
Insider Age	-0.037***	-0.017**	0.013	-0.028**	0.002	0.081
	(-3.68)	(-2.31)	(0.44)	(-2.01)	(0.20)	(1.58)
Director	-1.627***	-1.568***	-1.346**	-0.714***	-1.042***	-0.358
	(-6.40)	(-6.34)	(-2.42)	(-2.72)	(-4.79)	(-0.78)
Ln(Assets)	-1.323***	-1.054*	-0.461	0.774***	3.453***	3.852***
	(-8.79)	(-1.80)	(-0.59)	(4.84)	(6.21)	(2.95)
Ln(1+Age)	-0.693**	-2.498	-2.917	-1.573***	-2.363**	-0.046
	(-2.07)	(-1.39)	(-1.17)	(-5.20)	(-2.03)	(-0.01)
Market-to-book	-0.032	-0.451**	-0.428*	1.733***	1.418***	0.437
	(-0.24)	(-2.41)	(-1.69)	(7.94)	(4.51)	(0.72)
Leverage	3.743***	2.044	2.090	-0.632	-0.984	-7.023
	(3.32)	(0.97)	(0.74)	(-0.55)	(-0.44)	(-1.56)
Stock Volatility	-5.141***	-4.457***	-3.053*	2.672**	-1.599	-6.594**
	(-4.13)	(-3.20)	(-1.66)	(2.49)	(-1.22)	(-2.22)
ROA	-4.883**	-5.429*	-2.249	-5.801**	-0.689	5.192
	(-2.44)	(-1.79)	(-0.53)	(-2.35)	(-0.20)	(0.70)
Capital Intensity	-1.710	-4.474	1.361	0.071	0.096	-2.417
	(-1.31)	(-1.33)	(0.28)	(0.05)	(0.03)	(-0.32)
R&D	1.459	10.217**	9.400*	-1.240	-9.600	-4.388
	(0.55)	(2.40)	(1.73)	(-0.34)	(-1.62)	(-0.43)
High Tech	-0.142	-	-	0.759	-	-
	(-0.10)			(0.47)		
Ln(N. of Options)	0.000	0.000	0.000	-	-	-
	(1.04)	(0.48)	(0.77)			
Shares Traded	-	-	-	433.506***	384.211***	433.795***
				(4.50)	(5.86)	(4.02)
Industry×Year FE	Yes	Yes	Yes	Yes	Yes	Yes
County×Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE		Yes	Yes		Yes	Yes
Person FE			Yes			Yes
Observations	220,542	220,300	78,298	137,177	136,718	46,759
N. of Firms	6,968	6,717	4,725	7,246	6,791	4,046
R-squared	0.162	0.331	0.436	0.152	0.350	0.500
Sample	All Insiders	All Insiders	Moved Insider	All Insiders	All Insiders	Moved Insider

Appendix A
Variable Definitions

This table provides definitions for the main variables used in the empirical analysis. Accounting data are from Compustat, where the Compustat variable names are in italics. Stock return data are from CRSP. Other sources are specified in variable definitions. All dollar values are in dollars of 2008 purchasing power using the Consumer Price Index. All accounting variables are winsorized at the 1st and 99th percentiles of their empirical distribution.

Variable	Definition
Key variables	
Corruption Culture	The average corruption values for all insiders including both officers and directors in a given firm-year. The corruption values are based on the corruption index in the insiders' country of ancestry, which is identified based on their surnames using U.S. Census data. See the Internet Appendix for more surname matching details. The list of officers and directors come from Compact Disclosure The corruption index is the average Transparency International's Corruption Perception Index value from 1980 to 2009, where a higher index value denotes more corruption.
Key dependent variables	
Earnings Management	Earnings management for each firm i at year t is measured as the absolute value of abnormal discretionary accruals. The abnormal discretionary accruals $AAC_{i,j,t} = \frac{TAC_{i,j,t}}{AT_{i,j,t-1}} - NAC_{i,j,t}$ and $NAC_{i,j,t} = \hat{\alpha}_{0,j,t} + \hat{\alpha}_{1,j,t}\left(\frac{1}{AT_{i,j,t-1}}\right) + \hat{\beta}_{j,t}\left(\frac{\Delta SALE_{i,j,t} - \Delta RECT_{i,j,t}}{AT_{i,j,t-1}}\right) + \hat{\gamma}_{j,t}\left(\frac{PPEGT_{i,j,t}}{AT_{i,j,t-1}}\right) + \hat{\delta}_{j,t}\left(\frac{IBC_{i,j,t-1}}{AT_{i,j,t-1}}\right)$. $\hat{\alpha}$, $\hat{\beta}$, $\hat{\gamma}$, and $\hat{\delta}$ are coefficients from estimating firm-level regressions specified as $\frac{TAC_{i,j,t}}{AT_{i,j,t-1}} = \alpha_{0,j,t} + \alpha_{1,j,t}\left(\frac{1}{AT_{i,j,t-1}}\right) + \beta_{j,t}\left(\frac{\Delta SALE_{i,j,t}}{AT_{i,j,t-1}}\right) + \gamma_{j,t}\left(\frac{PPEGT_{i,j,t}}{AT_{i,j,t-1}}\right) + \delta_{j,t}\left(\frac{IBC_{i,j,t-1}}{AT_{i,j,t-1}}\right) + \epsilon_{i,j,t}$ for each industry-year (j, t) group with more than 8 firms, where industry is defined at the two-digit SIC level. $TAC = IBC - OANCF$ (if $OANCF$ is missing, then $OANCF = IB - [(\Delta ACT - \Delta LCT - \Delta CHE + \Delta DLC) - DP]$). *TAC/AT* is truncated at 99th percentile of its absolute value and all other variables are winsorized at the 1st and 99th percentiles before estimation.
Fraud	1 (0 otherwise) if any of the following events happened in a given firm-year. First, the firm-year is within a class action lawsuit period based on Dyck, Morse, and Zingales (DMZ) (2010) and hand-collected data from the Stanford Securities Class Action Clearinghouse. Second, if earnings are misstated in that firm-year according to the SEC's Accounting and Auditing Enforcement Releases from the UC Berkeley Center for Financial Reporting Management. Third, if an earnings restatement is announced in that year according to GAO (2003, 2006) and is classified as an irregularity by Hennes, Leone, and Miller (2008).
Backdating	1 (0 otherwise) if the strike price of the insider option grant is at the lowest price of the month in a given firm-year. Source: Thomson Financial's Insider Trading database.
Price Pattern	The ratio of the market-adjusted gross return over the 20 trading days following the insider buy transaction to the market-adjusted gross return over the 20 trading days preceding the insider buy transaction. The ratio is averaged across all insider transactions in a given firm-year. Market returns are CRSP value-weighted returns. Source of insider trades: Thomson Financial's Insider Trading database.
Control variables	
Corruption Culture$_{\text{county-year mean}}$	The average corruption culture for firms located in the same county and in the same year excluding firm i.
Corruption Culture$_{\text{industry-year mean}}$	The average corruption culture for firms in the same (49 Fama-French) industry and in the same year excluding firm i.
Corruption Culture$_{\text{market mean}}$	The average corruption culture for all firms in the same year excluding those in same county or industry as firm i.

County-Year Mean	The average misconduct measure for firms located in the same county and in the same year excluding firm i, where the misconduct measure refers to measures of earnings management, fraud, option backdating, or price pattern.
Industry-Year Mean	The average misconduct measure for firms in the same (49 Fama-French) industry and in the same year excluding firm i, where the misconduct measure refers to measures of earnings management, fraud, option backdating, or price pattern.
Market Mean	The average misconduct measure for all firms in the same year excluding those in same county or industry as firm i, where the misconduct measure refers to measures of earnings management, fraud, option backdating, and price pattern.
Ln(Assets)	Natural logarithm of total assets (*AT*).
Ln(1+Age)	Natural logarithm of one plus the number of years the firm has been in Compustat.
Market-to-book	Market value of assets over book value of assets (*CSHO*×*PRCC_F*+*PSTK*+*DLTT*+*DLC*)/*AT*).
Leverage	Debt over book value of assets ((*DLTT*+*DLC*)/*AT*).
Stock Volatility	Annualized standard deviation of daily returns.
ROA	Operating income before depreciation (*OIBDP*) divided by total assets (*AT*).
Capital Intensity	Ratio of property, plant and equipment (*PPENT*) to total assets (*AT*).
R&D	Ratio of research and development expenses (*XRD*) to total assets (*AT*).
High Tech	Equals one (zero otherwise) if the firm is in the technology business as defined in Appendix D of Loughran and Ritter (2004).
Ln(Operating Cycle)	Natural logarithm of the firm's operating cycle, calculated as $\ln((360/(SALE_{i,t}/((RECT_{i,t}+RECT_{i,t-1})/2))) + (360/(COGS_{i,t}/((INVT_{i,t} + INVT_{i,t-1})/2))))$.
Loss Percentage	Percentage of annual losses reported over the prior 10 years.
Sales Growth	Annual rate of change in sales (*SALE).*
Sales Volatility	Standard deviation of sales (*SALE)* deflated by the lagged total assets (*AT*) over the prior five years.
Cash Flow Volatility	Standard deviation of cashflows from operations (*OANCF-XIDOC*) deflated by the lagged total assets (*AT*) over the prior five years.
Ln(N. of Options)	Natural logarithm of the number of options granted to insiders in a given year. Source: Execucomp.
Shares Traded	The number of shares traded by insiders (executives and directors) in a given year, normalized by the total number of shares outstanding. Source: Thomson Financial's Insider Trading database.
Other variables	
Philanthropy	A dummy that equals one (zero otherwise) if the firm has made charitable donations through direct giving or through a foundation during the 1989 to 2000 period. Source: Petrovits (2006).
Board Size	Number of directors on the board. Source: Compact Disclosure.
Insider Directors	The fraction of directors who are also officers of the firm. Source: Compact Disclosure.
Institutional Holdings	The fraction of shares held by 13F institutional investors. Source: Thomson Reuters Institutional (13F) Holdings.
Takeover Index	The firm-level takeover index developed by Cain, McKeon, and Solomon (2014), which is constructed based on the passage of 12 different types of state takeover laws, one federal statue, and three state standards of review, where higher values indicate higher hostile takeover hazard. Source: Steve McKeon's website.

THE INTERNET APPENDIX OF "CORRUPTION CULTURE AND CORPORATE MISCONDUCT"

I. Surname Matching

Insiders' country of ancestry is identified using their surnames similar to the methodology of Lauderdale and Kestenbaum (2000). While the use of names to classify populations into different ethnic groups has been around since the early 1900s (Rossiter, 1909), most recent efforts have been concentrated in the public health and population genetics literature (Mateos, 2007). Several recent studies (Kerr and Lincoln, 2010; Bengtsson and Hsu, 2013; Hegde and Tumlinson, 2013; Gompers, Mukharlyamov and Xuan, 2014) in the entrepreneurial finance literature also use surnames to identify the ethnic origin of inventors, venture capitalists, and entrepreneurial founders.

I use two main sources to identify the country of origin of surnames in a systematic way. First, I use U.S. Census records from 1850 to 1940. These records represent the complete set of Census records available to the public in which the respondents' names are disclosed since they are no longer subject to the 72-year confidentiality rule. For several of these datasets (1880, 1920, 1930, 1940), I acquired access to 100% of the records through the Minnesota Population Center. For the other years, only 1% of the records are currently available. To identify the country of origin of surnames, I restrict the dataset to first and second generation immigrants whose country of birth or father's country of birth is outside of the United States, which yields 54 million census records. I then link each unique surname from the Census records to its most frequently associated country of birth or father's country of birth. For instance, the surname "Wong" is linked to China because 97.2% of immigrants with the same surname are from China.

Second, I use the surname-ancestry country matching list from a commercial database. Origins Info Ltd., a well-known commercial vendor of name classification services, processed the list of surnames using its proprietary database constructed based on sources such as the

American Dictionary of Family names and international telephone directories. The accuracy of Origins Info's matching has been validated in prior studies (Webber, 2007).

To create the final matching list, I do the following. First, I record matches where the most frequently associated country of birth from census records is the same country of origin identified by Origin Info. Second, I keep surnames for which the most frequently associated country of birth appears in more than 75% of the census records. Third, for surnames with different census and Origin Info country of origin, I hand-check their country of origin using sources such as ancestry.com, which provides a distribution of U.S. immigrants based on port entry records. Fourth, for the remaining unmatched surnames, I hand-check their country of origin using ancestry.com for 3,000 of the most common surnames. The procedure generates a list of over 1.5 million unique surnames and their associated country of origin.

I then merge the surname data with the list of officers and directors from Compact Disclosure from 1988 to 2006. Of the 1.87 million firm-year-insider observations, about 89% are matched to a country of origin.

II. First Generation Immigrants

One potential drawback of my corruption culture measure is that it may have low power since the impact of ancestry country culture tends to attenuate over time as the number of generations increases. While it is difficult to examine this issue directly without generational information on the insiders, there are several reasons to believe that this issue is unlikely to introduce significant biases that would alter the main results. First, the possibility that ancestry country culture attenuating over time creates a bias against finding culture to be significant. Second, many studies in the economics literature (e.g., Giuliano, 2007; Fernández and Fogli, 2009) use similar culture measures and document a significant impact of culture on individual behavior and economic outcomes.

To further investigate this issue empirically, I collect birth location information from *Marquis Who's Who* biographies to identify a sample of insiders who are first generation

immigrants. I run the corporate misconduct regressions on this sample of foreign-born insiders. For this analysis, the corruption measure is the average Transparency International's corruption index value from 1980 to 2009 in the insider's country of birth, where higher index values indicate more corruption. Unlike the main analysis, the corruption measure can only be constructed at the individual insider level rather than the firm level.

For option backdating and opportunistic insider trading, it is possible to link each event to a specific insider. Thus, these analyses are conducted at the firm-year-insider level. However, it is not possible to identify the specific individuals responsible for earnings management and accounting fraud. Thus, I run these regressions at the firm-year level using the sample of foreign-born CEOs and CFOs.

The results are presented in the Internet Appendix Table IA.1. Since the sample is small, I cannot include the full set of industry-year and county-year fixed effects. Instead, I control for time-varying industry, local, and market average misconduct rates, and time-varying industry, local, and market average corruption culture as in models (4) and (5), where these averages are calculated using the original sample.

Consistent with the main results, I find that insiders born in high corruption countries are more likely to commit corporate misconduct. In terms of economic significance, a one standard deviation (2.308) increase in the insider's corruption level is associated with an increase in the incidence of earnings management, accounting fraud, option backdating, and opportunistic insider trading of 6.1%, 6.4%, 10.4%, and 52.6%, respectively, compared to the means in the sample. These effects are larger than those from the main analysis, consistent with the idea that cultural influences are stronger for first-generation immigrants. I also rerun the main regressions excluding the foreign-born insiders and find results similar to the baseline case in Table 3. Overall, similar results are observed for both first and higher generation immigrants, providing additional support for the main culture measure.

Internet Appendix Table IA.1: Foreign-born Insiders

Results from corporate misconduct regressions are reported, where the sample of foreign-born insiders is used. The sample in columns (1) and (2) consists of firm-year observations from 1988 to 2006. The sample in column (3) consists of insider-grant date observations from 1996 to 2006. The sample in columns (4) consists of insider-purchase date observations from 1988 to 2006. Only foreign-born CEOs and CFOs are included in columns (1) and (2), whereas all foreign-born insiders are included in columns (3) and (4). The dependent variable in column (1) is earnings management, calculated as the absolute value of abnormal discretionary accruals scaled by total assets. The dependent variable in column (2) is a fraud dummy, which equals one (zero otherwise) if the firm-year is within a class action lawsuit period or has misstated earnings according to AAER or GAO. The dependent variable in column (3) is an insider backdating dummy, which equals one (zero otherwise) if the strike price of the insider's option grant is at the lowest price of the month. The dependent variable in column (4) is the price pattern ratio, computed as the ratio of the market-adjusted gross return over the 20 trading days following the insider purchase transaction to the market-adjusted gross return over the 20 trading days preceding the insider purchase transaction. Corruption is the average Transparency International's corruption index value from 1980 to 2009 in the insider's country of birth, where higher index values indicate more corruption. The firm controls are defined in Appendix A. t-statistics or z- statistics (in parentheses) are computed using heteroskedasticity-consistent standard errors that are corrected for clustering at the firm level. All coefficients are multiplied by 100 for ease of exposition. *, **, and *** denotes significance at the 10%, 5%, and 1% levels, respectively.

	Earnings Management	Fraud	Backdating	Price Pattern
	(1)	(2)	(3)	(4)
Corruption	0.163*	0.079**	0.374**	3.611**
	(1.71)	(2.05)	(2.08)	(2.34)
Corruption Culture$_{county\text{-}year}$	-0.143	0.164	0.238	5.138**
	(-0.89)	(1.59)	(0.73)	(1.98)
Corruption Culture$_{industry\text{-}year}$	0.223	0.371**	0.239	7.030***
	(0.92)	(2.47)	(0.45)	(3.00)
Corruption Culture$_{market\ mean}$	2.343	1.732	4.617	11.114***
	(1.04)	(1.41)	(0.92)	(2.71)
County-Year Mean	-0.018	0.024	-0.021	0.279
	(-0.95)	(1.40)	(-0.56)	(0.81)
Industry-Year Mean	0.309***	-0.057	0.072	-1.737*
	(4.62)	(-1.31)	(0.95)	(-1.87)
Market Mean	0.263	0.300	0.245	1.659
	(1.54)	(1.60)	(1.36)	(1.17)
Ln(Assets)	-0.068	0.190*	-0.059	-0.092
	(-0.18)	(1.66)	(-0.19)	(-0.03)
Ln(1+Age)	-0.866	0.347	-2.105***	-12.637**
	(-1.25)	(1.15)	(-2.92)	(-2.28)
Market-to-book	0.302	-0.087	-0.970***	5.092*
	(0.84)	(-0.54)	(-2.90)	(1.85)
Leverage	-2.514	1.213	-3.827*	13.852
	(-0.86)	(1.52)	(-1.72)	(0.78)
Stock Volatility	5.253*	2.470**	0.430	-22.815
	(1.83)	(2.54)	(0.15)	(-1.52)
ROA	-1.354	0.584	4.095	-180.367***
	(-0.32)	(0.33)	(0.85)	(-2.96)
Capital Intensity	-2.194	-2.552**	0.827	54.429**
	(-1.36)	(-2.56)	(0.31)	(2.30)
R&D	-15.974	1.998	11.878	-108.029**
	(-1.26)	(0.68)	(1.62)	(-2.06)
High Tech	0.315	-0.167	0.371	54.328***
	(0.43)	(-0.45)	(0.31)	(3.06)
Operating Cycle	-0.041	-0.176	-	-
	(-0.14)	(-1.39)		
Loss Percentage	2.719	-1.233*	-	-
	(1.45)	(-1.79)		
Sales Growth	6.613	-0.061	-	-
	(1.15)	(-0.15)		
Sales Volatility	0.523	-0.610	-	-
	(0.44)	(-1.18)		
Cash Flow Volatility	-1.533	0.807	-	-
	(-0.88)	(1.36)		

Ln(N. of Options)	-	-	-0.506	-
			(-0.93)	
Shares Traded	-	-	-	730.996
				(0.92)
Observations	2,881	2,741	4,188	2,757
N. of Firms.	479	487	629	273
R-squared	0.176	0.161	0.022	0.563
Sample	Foreign-born CEOs and CFOs		All Foreign-born Insiders	