

Criminal Convictions, Governance, and Corporate Performance

Eli Amir
London Business School
Regent's Park, London NW1 4SA, UK
Eamir@london.edu

Juha-Pekka Kallunki*
University of Oulu, Department of Accounting and Finance
P.O. Box 4600, FIN-90014 University of Oulu, Finland
Juha-Pekka.Kallunki@oulu.fi

Henrik Nilsson
Stockholm School of Economics
Department of Accounting and Finance
Box 6501, 113 83 Stockholm, Sweden
Henrik.Nilsson@hhs.se

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*Corresponding author.

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Criminal Convictions, Governance, and Corporate Performance

An analysis of a unique proprietary dataset reveals that non-trivial proportions of directors, CEOs and CFOs in Swedish listed companies have been convicted of crimes. We predict that firms that appoint directors and senior executives with prior criminal convictions will report lower profits, engage more in goodwill writeoffs due to unsuccessful acquisitions, and recognize bad news in earnings in a less timely manner. We find that companies with larger proportions of convicted directors and companies led by convicted CEOs report lower profits, are more likely to recognize goodwill writeoffs and recognize bad news in a less timely manner. We also find that companies with convicted CFOs recognize bad news in a less timely manner. These findings support the argument that companies managed and monitored by individuals with criminal convictions experience weaker corporate governance leading to higher agency costs. Our results also suggest that the effectiveness of corporate governance depends not only on structural mechanisms but also on individuals' behavioral attributes.

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1. Introduction

Conflicts of interests between directors, senior executives, and shareholders arise when there is a separation of ownership and control, and are attributed primarily to the inability to write and enforce complete contracts (Jensen and Meckling, 1976; Fama and Jensen, 1983). Improved corporate governance mechanisms, such as independent boards, incentive compensation, and transparent financial statements, may reduce agency costs, but will not eliminate it altogether. Numerous studies link the structure of corporate governance to firm value (Brown and Caylor, 2006; Coles et al., 2008), operating performance (Bhagat and Black, 2002; Fich and Shivdasani, 2006), incentive pay (Werner et al., 2005), informativeness of earnings (Fan and Wong, 2005), earnings quality (Wang, 2006) and accounting conservatism (Ahmed and Duellman, 2007; Chi et al., 2009). These studies measure the quality of corporate governance using observable structural variables, including board size, the number of independent directors, CEO tenure, and institutional ownership, among many others.

Since corporate decisions are made, influenced and monitored by individuals, it is plausible that agency costs vary not only with firm characteristics and the structure of governance mechanisms, but also with the personal characteristics of directors and senior executives. However, as Larcker et al. (2007) point out, studies that examine the effect of personal characteristics of directors and senior executives on corporate governance are relatively rare due to data limitations; these studies often rely on interviews and surveys.

Still, many studies suggest that personal characteristics of senior executives play an important role in their choices and consequently, in corporate decisions. These studies often rely on the upper echelons theory originally presented by Hambrick and Mason's (1984);

this theory argues that executives' choices and interpretations are influenced by their personalities, experiences, and values (Hambrick, 2007). Related studies showed that over-confidence, risk-seeking and narcissism affect managers' decisions on mergers and acquisitions (Malmendier and Tate, 2008; Cain and McKeon, 2010; and Aktas et al., 2010), investment policy (Malmendier and Tate, 2005), voluntary financial reporting (Bamber et al., 2010) and tax avoidance (Dyreng et al., 2010).

We extend the literature on the effect of personal characteristics on corporate decisions by making a distinction between individuals with and without prior criminal convictions. In particular, we use prior crime convictions as an indicator of directors' and senior executives' adverse personal characteristics, because prior studies (for instance, Jones and Kavanagh, 1997; and Blickle *et al.* 2006) have shown that crime convictions, regardless of the nature or seriousness of the crime, reflect on an individual's over-confidence, risk-seeking and narcissism – the same personal characteristics that have been shown to adversely affect managerial choices.¹ Our argument is that individuals with prior criminal convictions care more about their private benefits leading to higher agency costs. This in turn will result in lower earnings, more unsuccessful acquisitions (reflected in goodwill writeoffs), and less conservative accounting recognition.

One advantage of our study is that we are able to examine the effect of criminal convictions on three important decision-makers of the firm - boards of directors, Chief Executive Officers (CEOs) and Chief Financial Officers (CFOs). Our analysis employs a unique and proprietary database on the criminal convictions of all board members, CEOs and CFOs serving on Swedish listed firms, obtained from the Swedish National Council for Crime Prevention. Our database contains all criminal convictions in Sweden since 1974,

¹ Studies use different terminology such as 'risk seeking' and 'risk tolerance' and 'sensation seeking interchangeably (Cain et al., 2010).

regardless of the type of crime or whether these convictions have been expunged from the official crime records.

We begin by documenting the extent of criminal convictions of directors, CEOs and CFOs in Swedish listed companies. We show that out of 3,373 directors, 727 (21.6%) have been convicted of a crime and sentenced to pay a fine or to unconditional or conditional prison sentences; 128 additional directors (4.0%) have been suspected of a serious crime but not convicted.² Also, out of 580 CEOs of Swedish listed companies, 182 (31.3%) and 25 (4.3%) have been convicted or suspected of a serious crime; out of 364 CFOs 78 (21.4%) have been convicted and 11 (3%) suspected of a serious crime.³ These proportions, which are similar to that in the Swedish population as a whole, seem high because most would expect directors and senior executives of listed companies to be above the population average in terms of personal conduct due to their fiduciary responsibility and their positions in the firm's corporate governance system. Clearly, having been convicted of a crime should reflect an undesirable personal characteristic.

We proceed with an examination of the effect of appointing criminally-convicted directors and senior executives on earnings. We find that earnings are lower when more individuals with criminal convictions serve as directors and CEOs; we do not find a link between criminal convictions and profitability for CFOs. This result is consistent with the argument that appointing individuals with criminal convictions as directors and CEOs is likely to increase agency costs, due to the negative personal attributes of these decision

² These and other related figures in this study do not include speeding, parking and similar minor infringements of traffic laws. The dataset contains criminal convictions in a court of law.

³ During the sample period, 24 Swedish firms were listed on the New York Stock Exchange and NASDAQ in addition to their listing in Sweden. The proportions of convicted directors and senior executives in Swedish companies listed in the NYSE and NASDAQ are similar to that of Swedish companies listed only in Sweden (see Panel B of Table 2). While ideally we would need more data on US companies for a more meaningful comparison, this finding suggests that having directors and senior executives convicted of a crime is a phenomenon not confined to Sweden, as foreign firms listed in US stock markets must follow US regulation and governance rules.

makers and their effect on corporate strategy. We also find evidence suggesting that directors' personal ownership interest in the firm mitigates the negative effect on corporate profitability, due to improved monitoring. These results are robust for the inclusion of firm fixed-effects, as well as many other corporate governance variables, in the regression models as controls for potential correlated omitted variables.

We continue with an investigation of the effect of appointing directors, CEOs and CFOs with criminal convictions on goodwill writeoffs and the timeliness of recognizing bad news in earnings. We focus on goodwill writeoffs because this transaction reflects on management ability to identify and acquire new businesses, and because goodwill must be assessed for impairment annually. If directors, CEOs and CFOs acquire new businesses because they wish to extract more benefits for themselves (“empire building” ambition), the likelihood of goodwill writeoffs will increase. Our results suggest that the frequency and magnitude of goodwill writeoffs is significantly larger in companies led by directors and CEOs with criminal convictions. However, we do not find any link between goodwill writeoffs and crime convictions for CFOs, probably because CFOs are less consequential than directors and CEOs in acquisition-related decisions. In addition, we find evidence suggesting that goodwill writeoffs are more likely to occur when a convicted CEO is replaced by a CEO without criminal convictions, and much less likely when a “clean” CEO is replaced by a CEO with a criminal conviction. This result provides additional support for the argument that CEOs with criminal convictions tend to acquire new businesses for their own benefits, resulting in more unsuccessful acquisitions.

Recognition of goodwill writeoffs may seem as if accounting is conservative; this is indeed the case if these writeoffs are recognized on a timely manner. We therefore examine the timeliness of recognizing bad news in earnings using the model introduced by Basu (1997) and find that companies with convicted directors, CEOs and CFOs do not recognize

bad news on a timely manner. This result suggests that accounting is less conservative when the leaders of the company have been convicted of a crime. In contrast to the previous analyses, CFOs' criminal convictions are associated with less conditional conservatism, due to their key role in making accounting decisions.

Taken together, our empirical results support the argument that appointing individuals with past criminal behavior as directors, CEOs and CFOs may be more widespread than often believed, and that those appointments could have a serious negative effects on firms' performance and financial reporting. Our results support the view that, when developing new corporate governance measures, more emphasis should be placed on enhancing the quality of individuals serving within the corporate governance system, rather than on changing the governance system itself.

The remainder of this paper is organized as follows: Section 2 reviews the relevant literature and provides institutional background. Section 3 describes the sample, data sources and variables. In Section 4, we report the results of our analysis. Section 5 provides concluding remarks.

2. Literature Review and Institutional Background

2.1. Appointing Directors and Senior Executives with Criminal Convictions

An individual's prior crime convictions are often considered as an undesirable personal attribute. An obvious question that arises is whether listed firms in Sweden or in other countries exclude such individuals from serving as directors or senior executives.⁴ Similar to other western countries, information on criminal convictions in Sweden is maintained by the police. Typically, personal criminal records may be accessed by that person but not by the

⁴ Searching the media, we found four cases where directors' crime convictions became publicly known. In all cases, the convicted directors had to resign their position. This anecdotal evidence suggests that crime convictions are considered a negative personal attribute.

public. However, criminal background checks are required for positions involving contacts with minors, for certain health services occupations, and employment with firms providing security services (Stoll and Bushway, 2008). An important limitation of these official crime registers is that they include only convictions not yet expunged. Depending on the seriousness of the crime, convictions are expunged from these databases after five to 10 years. Hence, official crime registers contain only part of all crime convictions that are relevant for assessing an individual's personal attributes.

Since each Swedish citizen may request a transcript of their own record, Swedish companies could require a criminal record check on candidates for board membership or other senior appointments. Similarly, US candidates could issue similar transcripts obtained from the government. However, this policy is uncommon in both Sweden and in the US. Consequently, convicted individuals can be appointed as directors and senior executives, because these convictions are often not known to the nomination committee or shareholders.

The process of appointing directors, CEOs and CFOs in Sweden is similar in many respects to that in the US. However, there are some differences that are likely to make this process actually more stringent in Sweden than in the US. In particular, the nomination committee for directors in Sweden is not part of the board, but made up of shareholders' representatives who nominate new candidates to the shareholders' meeting. Second, CEOs and other senior executives are not involved in appointing directors. Appendix 1 provides a short summary of the Swedish system of justice and the Corporate Governance Code.

Another likely reason for appointing convicted individuals as directors and senior executives is that many of the convictions are linked to crimes that are not viewed by many as impairing an individual's ability to exercise sound business judgment or even considered undesirable personal characteristics (for instance, driving under the influence of alcohol). However, the criminology literature is unambiguous: criminal convictions, regardless of the

nature or seriousness of the crime, are indicative of an individual's negative behavioral attributes, such as over-confidence, narcissism, hedonism, propensity to manipulate others, and propensity to take risk. Appointing such individuals to senior corporate positions is likely to increase agency costs due to these individuals' self-serving behavior.

Other studies suggest that appointing individuals with criminal convictions as senior executives may be surprisingly common. For instance, Pech and Slade (2007) argue that firms sometimes appoint and promote to top managerial positions individuals who may be incompetent, narcissistic and manipulative. They conclude that such individuals can be characterized as organizational sociopaths, and they are sometimes promoted repeatedly until they reach the highest levels of the organizational hierarchy. In addition, Jones *et al.* (2004) suggest that organizational cultures actually tolerate and favor manipulative, egotistical and self-centered managerial behavior. If the organizational cultures described in these studies are widespread among firms, finding convicted individuals on boards of directors and senior management may be more common than often believed.

2.2 Personal characteristics, Crime and Corporate Governance

Hambrick and Mason's (1984) "Upper Echelons Theory" argues that managerial experiences, values and cognitive styles, such as honesty, affect their choices and consequent corporate decisions. Motivated by this theory, prior studies have looked at the effect of managerial characteristics on specific corporate decisions. For instance, Bamber *et al.* (2010) show that top executives have a significant influence on their firms' voluntary accounting disclosures. Dyreng *et al.* (2010) show that individual executives play a significant role in determining the level of tax avoidance undertaken by their firms.

Other studies focus on identifying certain managerial characteristics associated with corporate decisions. Personal characteristics that have received particular attention are over-

confidence, sensation seeking and narcissism. Roll (1986) argues that management over-confidence is associated with unsuccessful corporate takeovers. Malmendier and Tate (2008) find that over-confident CEOs are more likely to engage in value-destroying mergers and acquisitions (M&A). Malmendier and Tate (2005) link managerial over-confidence to corporate investment decisions, while Cain and McKeon (2010) argue that over-confidence leads to increased over-all risk taking and more frequent M&A activity. Aktas et al. (2010) find that CEO narcissism in both the acquirer and target companies has a negative effect on the takeover process.

We argue that criminal convictions can be used as an indicator of directors' and senior management's over-confidence, sensation seeking and narcissism, among other adverse personal characteristics. These adverse personal characteristics increase agency costs and weaken the firm's corporate governance system. Prior behavioral studies provide strong support for our claims: criminal convictions, regardless of the nature or seriousness of the crime, are likely to reflect on an individual's over-confident, narcissistic or sensation-seeking behavior. In particular, over-confidence has been recognized as a major determinant of traffic accidents (Sandroni and Squintani, 2004). Also, sensation-seekers take greater risks while driving, especially after consuming alcohol (McMillan et al., 1989; Iversen and Rundmo, 2002). Jones and Kavanagh (1996) show that individuals lacking conventional morality and being effective manipulators of others exhibit significantly more unethical behavioral tendencies than others. Focusing on business-related crimes, Blickle *et al.* (2006) argue that low behavioral self-control, high hedonism, high narcissism and high conscientiousness are positively related to the likelihood of committing business white collar crime. Finally, individuals with past criminal behavior tend to persist in this type of behavior. Gendreau *et al.* (1996) find that one of the best predictors of future criminal acts is a history of criminal behavior. Shu *et al.* (2009) show that people perpetrating unethical

behavior tend to persist in this, justifying it through moral disengagement. These individuals also exhibit motivated forgetting of information that might otherwise limit their dishonesty.

The personal characteristics of board members and executives play a significant role in corporate actions (Raheja 2005; Adams and Ferreira 2008; and Fischer *et al.* 2009). In essence, the composition of the board plays a crucial role in its effectiveness as a governance mechanism (Fama, 1980; Fama and Jensen, 1983). Therefore, having individuals with adverse personal characteristics on the board is likely to reduce a board's ability to effectively monitor and advise management. In particular, board members convicted of crimes are likely to put less emphasis on corporate governance rules and principles that require them to monitor and advise management.⁵ In addition, such board members may exhibit over-confidence, sensation-seeking and narcissistic behavior, which is likely to reduce their ability to adequately monitor and advise management. Similarly, senior executives with prior criminal convictions are likely to be more interested in enjoying their private benefits of being a senior executive rather than putting in the necessary effort. Studies even suggest that these personal characteristics may result in poor business decisions, because the individuals possessing these characteristics are not appointed to their positions because of their skills, but because they can manipulate those who appoint them (e.g., Pech and Slade, 2007). In addition, senior executive's crime convictions reflect their tendency for over-confident and sensation-seeking behavior, which has been shown to be associated with bad managerial decisions.

The literature discussed above implies a negative relation between the proportion of criminally-convicted board members and the board's effectiveness in monitoring and

⁵ Individuals' tendency to engage in criminal behavior may also be associated with the so-called free rider problem often discussed in the literature. This problem is more pervasive in large boards, where a single board member plays a relatively minor role in the joint decision-making. Jensen (1993), Yermarck (1996) and Larcker et al. (2007) find that small boards are more effective in their work.

advising management. This literature also suggests that senior executives with criminal convictions care more about their private benefits, leading to higher agency costs for the firm. Such behavior is likely to lead to poor business decisions, and hence to lower profitability.

While lower profitability is a general outcome of higher agency costs and weaker governance, we also expect that companies with weaker governance and higher agency costs engage more in value-destroying M&As, for instance, by acquiring too many subsidiaries or by overpaying for acquired subsidiaries (Jensen, 1986; and Masulis et al., 2007). Relatedly, Roll (1986) and Malmendier and Tate (2008) find that over-confident executives are more involved in unsuccessful acquisitions. If crime convictions reflect over-confidence, as we argue here, companies with more convicted directors and senior executives will report more goodwill write-offs, reflecting poor subsidiary performance subsequent to acquisition.

2.3. Crime and Accounting Conservatism

Prior studies support the argument that accounting conservatism serves as a substitute for weaker corporate governance, where agency costs are expected to be higher (Watts, 2003a; Watts, 2003b). Ahmed and Duellman (2007) show that conservatism assists directors in reducing agency costs. LaFond and Roychowdhury (2008) find that conservatism declines with increased managerial ownership. These studies suggest that when corporate governance is strong, there is less demand for accounting conservatism. However, the literature also considers the supply side for conservatism, according to which directors and senior executives in companies with stronger (weaker) corporate governance will report more (less) conservatively. Consistent with this view, Garcia-Lara et al. (2009) find that companies with stronger corporate governance use negative discretionary accruals on a timelier manner. Similarly, Beekes et al. (2004) find that firms with a higher proportion of outside directors

recognize bad news in earnings on a timelier basis. It is therefore unclear ex-ante, as Chi et al. (2009) point out, whether the association between the strength of corporate governance and conservatism should be positive or negative.

If appointing directors and senior executives with criminal convictions results in weaker corporate governance, we should observe an effect on accounting conservatism. Under the demand-side argument, accounting in companies with more criminally-convicted directors and senior executives should be more conservative. Alternatively, under the supply side argument, companies with more criminally-convicted directors and senior executives are expected to engage in less conservative reporting. To address this issue, we adopt the Basu (1997) model of asymmetric recognition of bad news.

3. Data and Variables

3.1. Data sources

Our initial sample includes all companies listed on the Swedish stock market for the period 1999-2007 and monitored by Finansinspektionen, i.e. the Swedish securities regulator (650 companies). Data availability and truncation results in a sample of 385 companies. We also remove financial institutions from the sample obtaining a final sample of 334 firms (1,762 firm/year observations). Table 1 includes information on sample selection.

(Table 1 about here)

The identities of directors and senior executives in listed Swedish companies were obtained from *Finansinspektionen*. Data on criminal convictions and suspected criminal actions are taken from *Brå* (The Swedish National Council for Crime Prevention).⁶ This

⁶ *Brå* (www.bra.se) produces Sweden's official crime statistics, evaluates reforms, conducts research and provides support to local crime prevention agencies. Also, a criminal investigation does not always lead to a prosecution and trial. If the suspect confesses to the crime and it is clear what the punishment will be, the prosecutor may pronounce a so-called order of summary punishment.

dataset contains information on all crime committed by all Swedish citizens since 1974, regardless of whether these convictions have been expunged from the official crime records. Specifically, it contains information about individuals who have been found guilty by a court of law or received summary punishments by prosecutors. The information contained in the database is collected from all Swedish courts and prosecution authorities. For each registered director, this dataset includes details of the crime (an exact reference to the law violated) and the punishment (the length of unconditional prison sentences, suspended sentences and monetary fines). The database does not, however, contain information on minor offences, such as speeding, parking and violations of local bylaws.

While criminal convictions by a court of law are undoubtedly evidence of criminal behavior, focusing only on actual convictions could potentially cause a selection bias. This is because the burden of proof beyond any reasonable doubt is heavier in more serious crimes. Consequently, serious crimes are likely to be underrepresented in the dataset of actual criminal convictions. This selection bias could be reduced by including data on individuals suspected of serious crimes (Korsell, 2001). Our dataset on suspected serious criminal actions contains information on all Swedish citizens who have been suspected of serious crimes for which the penalty is prison. Suspicion of a crime in this study means that a police investigation had been launched but the prosecutor later on decided not to pursue the case in court, or alternatively lost the case in court. The database is maintained by the National Police Board and is mainly used by the Police, Tax Authorities, Custom and Coastguard to coordinate preliminary investigations against individuals in order to prevent, discover and investigate crimes.

Data on the stockholdings of directors and senior executives were taken from Euroclear Sweden, which maintains an electronic database on the ownership of all Swedish stocks at the end of July and December of each year. Data on directors' and senior

executives' other wealth (real estate, mutual funds, bank holdings and investments in debt securities) were obtained from the Swedish tax authorities and are reported on an annual basis. Finally, accounting and market data for Swedish listed firms were obtained from Thomson's Datastream. If the firm was missing from Thomson's Datastream, we retrieved data from Bureau van Dijk global database, accessed via Wharton Research Data Services (WRDS), and the Six Trust database.

3.2. Variable definitions

To capture the effect of criminal behavior directors, CEOs and CFOs, we construct three variables: $BOARD_{it}$ is the ratio of board members convicted or suspected of crimes to the total number of board members for firm i at fiscal year-end t ; CEO_{it} is an indicator variable equal to "1", if the CEO has been convicted or suspected of a crime, and "0" otherwise; and CFO_{it} is an indicator variable that obtains the value of "1", if the CFO has been convicted or suspected of a crime, and "0" otherwise.

We also include in our models corporate governance variables that have been used in the literature (each variable is measured for firm i at fiscal year t). $MALE_{it}$ is the ratio of male directors to total directors; $BUSY_{it}$ is the number of directors serving on three or more boards of listed Swedish firms, divided by total board members; $CEODUAL_{it}$ is an indicator variable that obtains the value of "1" if the CEO is also a member of the board, and "0" otherwise; $BOARDSIZE_{it}$ is the logarithm of the total number of board members; $MAINOWNER_{it}$ is an indicator variable that obtains the value of "1" if there is at least one controlling shareholder (that is owns 10% or more of the firm's equity) in the firm, and "0" otherwise; $EMPLOYEE_{it}$ is the proportion of employee representatives on the board; AGE_{it} is the average age of directors; $LISTING_{it}$ is an indicator variable that obtains the value of "1" if the firm is also listed in the United States (NYSE, NASDAQ or AMEX), and "0"

otherwise; $INSIDER_{it}$ denotes the proportion of directors who hold other executive positions in the firm in addition to being on the board (non-independent board members). Finally, we use data on board members' total personal wealth to compute the proportion of total personal wealth invested in the firm. Specifically, we define $OWNER_{it}$ as the average market value of the board members' holdings in firm i at year t divided by the average value of their total wealth at year t (the market value of holdings in all insider and outsider stocks and the value of other wealth).

Firm performance is measured using net income divided by market value of equity at the beginning of the year (EP_{it}). Annual stock returns for each firm/year are computed from January to December (RET_{it}). Total accruals ($ACCRUALS_{it}$) are measured as:

$$TOTACCRUALS_{it} = \Delta Inventory_{it} + \Delta Receivables_{it} + \Delta Other\ current\ assets_{it} - \Delta Payables_{it} - \Delta Other\ current\ liabilities_{it} - Depreciation_{it}.$$

3.3. Descriptive Statistics

Table 2, Panel A, presents information on the number of directors, CEOs and CFOs convicted/suspected of a crime. The figures seem high: 25.3% of directors were either convicted or suspected of a crime; 35.7% of CEOs and 24.5% of CFOs have been either convicted or suspected of a crime.⁷ Panel B of Table 2 shows that the mean (median) proportion of convicted directors ($BOARD_{it}$) is 0.30 (0.29), ranging from zero to one. We also present summary statistics for a sub-sample of Swedish firms listed in the US. The proportions of convicted/suspected directors, CEOs and CFOs are quite similar to those in the entire sample.

(Table 2 about here)

⁷ For comparison, nearly 25% of the Swedish population has been convicted of crimes of all sorts (Svensson 2000). Also, the proportion of convicted/suspected CFOs is smaller (at the 0.01 level) than that of convicted/suspected CEOs, probably because many CFOs are licensed accountants that are better screened for crime convictions when obtaining their certification.

Table 3 presents summary statistics for several firm-specific variables. We divide each of the three samples (Directors, CEOs and CFOs) into sub-samples according to the magnitude of crime convictions. As the Table shows, companies with more than 50% convicted directors report lower earnings (at the 0.01 level) and higher absolute accruals (at the 0.01 level). These companies are also smaller (at the 0.01 level) than companies with less than 50% convicted directors; price-to-book and leverage ratios are similar across the two sub-samples. Focusing on CEOs, mean profits are lower in companies with convicted/suspected CEOs (at the 0.05 level), but median profits are similar across sub-samples. All remaining variables are not materially different across the two sub-samples. Univariate results are somewhat surprising for CFO sub-samples. Specifically, median earnings are higher (at the 0.01 level) for companies with convicted/suspected CFOs, while mean absolute accruals are lower (at the 0.05 level) for these companies. However, these results do not hold for mean earnings and median absolute accruals, respectively. Also surprising is the finding that companies with convicted CFOs are larger than those without convicted CFOs. Finally, companies with convicted CFOs are more highly leveraged (at the 0.01 level).

(Table 3 about here)

4. Empirical results

4.1. Determinants of the proportion of criminal directors and senior executives

The purpose of the following OLS regression is to identify the determinants of appointing directors, CEOs and CFOs with prior criminal convictions:

$$\begin{aligned}
 GOV_{it} = & \alpha_0 + \sum_{s=1999}^{2007} \alpha_s YEAR_s + \sum_{i=1}^I \alpha_i FIRM_i + \beta_1 MALE_{it} + \beta_2 BUSY_{it} + \beta_3 CEODUAL_{it} + \\
 & \beta_4 BOARDSIZE_{it} + \beta_5 MAINOWNER_{it} + \beta_6 EMPLOYEE_{it} + \beta_7 AGE_{it} + \beta_8 LISTING_{it} + \\
 & \beta_9 INSIDER_{it} + \beta_{10} LEVERAGE_{it} + \beta_{11} SIZE_{it} + \beta_{12} PB_{it} + \varepsilon_{it}
 \end{aligned} \tag{1}$$

We estimate equation (1) separately for directors, CEOs and CFOs using $GOV_{it} \in \{BOARD_{it}, CEO_{it}, CFO_{it}\}$ as the independent variable. We include as explanatory variables nine corporate governance variables that have been found to be associated with the level of corporate governance. Since appointing individuals with prior criminal behavior as directors and senior executives could result in higher agency costs and weaker governance, we expect these variables to be associated with the dependent variable.

We include $MALE_{it}$ (the proportion of male board members) in the model because prior studies (Daly, 1989; Zahra *et al.*, 2005; and Blikle *et al.*, 2006) argue that males engage in white-collar crimes more often than females. In addition, Adams and Ferreira (2009) show that US companies with more gender-diverse boards invest more effort in monitoring activities. Hence, we expect β_1 to be positive. We also include $BUSY_{it}$ (the proportion of board members with three or more board memberships in the listed Swedish firms) without predicting its sign. While more experienced directors contribute to stronger governance, these directors could be less committed to a company's success. $CEODUAL_{it}$ (an indicator variable that obtains the value of "1" if the CEO is also a member of the board, and "0" otherwise) is included because prior studies have found that when the CEO is on the board, the level of governance is weaker. Hence, β_3 is expected to be positive. $BOARDSIZE_{it}$ (logarithm of the total number of board members) is included because larger boards have been found to be less effective (β_4 is expected to be positive).

The next two variables capture the independence of the board: $MAINOWNER_{it}$ is an indicator variable that obtains the value of "1" if there is at least one shareholder that owns 10% or more of the firm's equity, and "0" otherwise. If the existence of major shareholders reduces agency costs, β_5 is expected to be negative. We also include $EMPLOYEE_{it}$ (the proportion of employee representatives on the board) because employee representatives are

known to be independent directors, which is likely to reduce the likelihood of appointing criminals as directors and senior executives. Hence, β_6 is expected to be negative as well. AGE_{it} (the average age of the board members) is also included as a control variable for directors' experience. However, we do not predict the sign β_7 .

To control for information and regulatory environment, we include in equation (1) $LISTING_{it}$ (an indicator variable that obtains the value of "1" if the firm is also listed in the United States, and "0" otherwise). If the regulatory environment in the US is stricter and if the US markets are more information-efficient, β_8 is expected to be negative. The model also includes $INSIDER_{it}$ (the proportion of directors who hold other positions in the firm). Prior studies find (Larcker et al., 2007; Klein, 1998) that when directors also serve as senior executives, corporate governance is compromised (β_9 is expected to be positive).

$LEVERAGE_{it}$ (interest-bearing debt divided by total assets) is included in the model because firms with more leverage are likely to be under stricter control by lenders, which may reduce the likelihood of appointing criminals. On the other hand, firms with a larger proportion of convicted criminals are more likely to engage in risky projects and borrow more. The sign of β_{10} thus depends largely on the direction of causality. $SIZE_{it}$ (the natural logarithm of total assets) is included in the model because larger firms are more visible to the public and corporate governance decisions, such as appointing directors, CEOs and CFOs, may be under greater public scrutiny, hence reducing the likelihood of appointing criminals (β_{11} is expected to be negative). Finally, we include the market-to-book ratio (PB_{it}) as control for the investment opportunity set without predicting the sign of β_{12} .

Equation (1) includes *firm* and *year* fixed-effects to control for potential omitted variables. All *t*-values in the pooled regression are based on heteroskedasticity-adjusted standard errors. Also, we take into account firm-level clustering in standard errors as in Petersen (2009). Specifically, we allow both a firm and time effect in the panel data and

address the time effect parametrically by including yearly dummies and then estimate standard errors clustered on the firm dimension. This methodology is applied in all pooled regressions throughout this study.

As Table 4 shows, the coefficients on $MALE_{it}$ are positive (significant at the 0.05 level or better) for board members and CEOs; this coefficient is not statistically significant in the CFO regression. This result is consistent with earlier findings on males being more likely than females to be involved in criminal activities. The coefficient on $BUSY$ is positive (significant at the 0.01 level) in the CEO and CFO regressions, suggesting that when the board includes “professional” directors, the likelihood of appointing a convicted/suspected CEOs and CFOs increases. The coefficient on $CEODUAL$ in the directors regression is positive (significant at the 0.05 level), suggesting that when the CEO is a member of the board, the likelihood of appointing directors with criminal convictions increases. However, the coefficient on $CEODUAL$ is negative (at the 0.01 level) in the CFO regression, suggesting that when the CEO is also a member of the board, the likelihood of appointing a CFO with past criminal convictions is lower. Overall, it is not clear from these results whether the corporate governance system benefits from having a CEO who is also a member of the board.

Companies with larger boards are less likely to appoint a convicted/suspected CEO, as reflected by the negative coefficient on $BOARDSIZE$ in the CEO regression. Also, the coefficient on $MAINOWNER_{it}$ is positive and significant at the 0.01 in the CFO regression, suggesting that the existence of a major shareholder increases the likelihood of appointing a CFO with past criminal convictions. Both of these results seem counter-intuitive as larger boards are often blamed for weaker corporate governance, and having a major share-owner is often linked to improved board-independence. However, as Larcker et al. (2007) point out, corporate governance variables often exhibit conflicting results due to measurement error.

Furthermore, older directors are less likely to appoint a convicted/suspected CEO, but the likelihood of appointing a convicted CFO is higher, as reflected by the negative and positive coefficients on *AGE* (significant at the 0.05 level) in the CEO and CFO regressions, respectively.

Boards of directors of firms cross-listed in the US have less criminally-convicted individuals, as reflected by the negative coefficient on *LISTING_{it}* (significant at the 0.05 level). However, this variable has no effect on senior executives. When directors hold additional positions in the firm, the likelihood of appointing a convicted/suspected CEO increases, as reflected by the positive coefficients on *INSIDER_{it}* (significant at the 0.01 level). This result is consistent with the argument that when directors hold executive positions in the company, corporate governance is weaker and agency costs increase.

The coefficients on *SIZE_{it}* are positive in the CEO and CFO regressions, suggesting that larger firms are more likely to appoint convicted/suspected senior executives. Again, this result seems counter-intuitive given the higher visibility to regulators of larger corporations. The variables *EMPLOYEE*, *LEVERAGE*, and *PB* exhibit no relation with the dependent variable.

(Table 4 about here)

4.2. The Effect of Appointing Criminal Directors/Executives on Earnings

As convicted/suspected directors and senior executives care more about their private benefits, we expect a negative relation between the proportion of convicted/suspected directors and senior executives and firm profitability. To examine the association between profitability and directors', CEOs' and CFOs' crime convictions, we use equation (2):

$$\begin{aligned}
EP_{it} = & \alpha_0 + \sum_{s=1999}^{2007} \alpha_s YEAR_s + \sum_{i=1}^I \alpha_i FIRM_i + \gamma_1 GOV_{it} + \gamma_2 GOV_{it} \times OWNER_{it} + \\
& \gamma_3 OWNER_{it} + \gamma_4 LEVERAGE_{it} + \gamma_5 SIZE_{it} + \gamma_6 PB_{it} + \sum_{k=7}^{15} \gamma_k CORP_GOV_{kit} + \varepsilon_{it}
\end{aligned} \tag{2}$$

The dependent variable in equation (2) is earnings per share divided by lagged share price (EP_{it}). We expect a negative coefficient on $GOV_{it} \in \{BOARD_{it}, CEO_{it}, CFO_{it}\}$ in each of the three regressions. We also expect that the governance problem arising from appointing criminals may be mitigated if convicted directors own the equity of the firm. In such a case, these individuals have an incentive to exert more effort in monitoring the firm. We therefore expect that the classical solution to the principal-agent problem, that is, the alignment of the agent's interests with those of the principal through equity ownership (Jensen 1993), applies here.⁸ Specifically, we expect a positive coefficient on $GOV_{it} \times OWNER_{it}$ (an interaction variable between the proportion of criminals and directors' personal equity ownership interest in the firm).

Equation (2) also includes financial leverage ($LEVERAGE_{it}$), firm size ($SIZE_{it}$), and market-to-book ratios (PB_{it}) as these firm characteristics may be related to profitability. In addition, we include the nine governance variables used in equation (1) because these variables maybe correlated with GOV_{it} and some of these variables have been found to be associated with firm performance.⁹ In addition, each regression includes fixed *year* and *firm*

⁸ Bhagat and Black (2002) find that independent board members who hold significant stock positions add value to the firm, while other independent board members do not. Bhagat and Bolton (2008) find that the stock ownership of board members increases the firm's operating performance.

⁹ Specifically, gender diversity ($MALE_{it}$ - the proportion of male directors) affects firm performance, although different studies report different signs for the effect. Prior studies also found that firms with "busy" directors (represented here $BUSY_{it}$ - the proportion of directors with three or more directorships in listed Swedish firms) exhibit weaker profitability (Fich and Shivdasani, 2006). $CEODUAL_{it}$ (an indicator variable of whether the CEO is also a board member), $BOARDSIZE_{it}$ (log of the number of directors), AGE_{it} (average age of directors) and $INSIDER_{it}$ (the proportion of directors who hold executive positions in the firm), are included because they reflect board independence, which may be associated with firm performance (see Drymiotes 2007; Coles *et al.* 2008, Larcker *et al.* 2007).

effects. Heteroskedasticity-adjusted standard errors are used to calculate t -values, and the firm-level clustering in standard errors is taken into account as described in Equation (1) and in Petersen (2009).

The results in Table 5 show negative coefficients on GOV_{it} , as expected, and significantly different from zero at the 0.05 level in the directors and CEO regressions. These results support the argument that firms with more criminally-convicted directors and CEOs report lower profits and are consistent with the view that the corporate governance mechanisms are weaker in firms led by individuals with crime convictions. In contrast, the coefficient on GOV_{it} in the CFO regression is virtually zero, because the impact of the CFO on overall earnings is weaker than that of the board and the CEO.

The coefficients on the interaction variable $GOV_{it} \times OWNER_{it}$ are positive, as expected, in the board and CEO regressions, and significant at the 0.05 level only for CEOs. This result suggests that personal ownership mitigates the agency problem caused by appointing a CEO with prior criminal convictions. Regarding the control variables, we find some evidence suggesting that firms with “busy” directors report lower profitability (at the 0.10 level), while firms with older directors report higher profitability (at the 0.10 level). The remaining corporate governance variables do not have material effect on explaining profitability. We also find that leverage is negatively associated with profitability, as expected, and that firm size is positively associated with profitability.

(Table 5 about here)

Given the strong link between CEOs' crime convictions and corporate profitability, we further explore how replacing the CEO affects earnings. We distinguish between two types of CEO replacements: (i) replacing a convicted/suspected CEO in year $t-1$ with a “clean” CEO (one without any criminal activity) in year t , denoting it as $CEOCHANGE_GOOD$; and (ii) replacing a “clean” CEO in year $t-1$ with a convicted/suspected CEO in year t , denoting

it *CEOCHANGE_BAD*. If appointing a convicted/suspected CEO results in weaker corporate governance, replacing a “clean” CEO with a criminal CEO should reduce earnings. We estimate a modified version of equation (2), including all the control variables:

$$\begin{aligned}
 EP_{it} = & \alpha_0 + \sum_{s=1999}^{2007} \alpha_s YEAR_s + \sum_{i=1}^I \alpha_i FIRM_i + \gamma_0^G CEOCHANGE_GOOD_{it} + \\
 & \gamma_0^B CEOCHANGE_BAD_{it} + \gamma_1 GOV_{it} + \gamma_2 GOV_{it} \times OWNER_{it} + \gamma_3 OWNER_{it} + \\
 & \gamma_4 LEVERAGE_{it} + \gamma_5 SIZE_{it} + \gamma_6 PB_{it} + \sum_{k=7}^{15} \gamma_k CORP_GOV_{kit} + \varepsilon_{it}
 \end{aligned}
 \tag{2a}$$

The results in Table 6 show that the coefficient γ_0^B is negative and significant at the 0.05 level, but the coefficient γ_0^G is not significant. This result is consistent with the view that appointing a convicted/suspected CEO reduces profitability. We do not find an increase in earnings following a replacement of a convicted/suspected CEO with a clean CEO, perhaps because a clean CEO is more likely to recognize writeoffs, a possibility explored below.

(Table 6 about here)

While analyzing profitability provides general evidence on the effect of appointing individuals with criminal convictions as directors and senior executives, we now turn to a specific accounting transaction – writing off acquired goodwill – that is directly linked to decisions made by senior executives and approved by the board of directors. Goodwill writeoffs often occur subsequent to unsuccessful acquisitions, although it is possible that changes in market conditions, which are not within the control of the firm, cause companies to write off acquired goodwill. Still, if agency costs are high and governance is weaker, we would expect the likelihood and magnitude of goodwill writeoffs to be higher than in firms with low agency costs and strong governance. To examine the link between goodwill writeoffs and directors’, CEOs’ and CFOs’ crime convictions, we use the following models:

$$\begin{aligned}
WO_{jt} = & \delta_0 + \delta_1 GOV_{jt} + \delta_2 RET_{jt} + \delta_3 CEOCHANGE_{jt} + \delta_4 ROA_{jt} + \delta_5 SIZE_{jt} + \\
& \delta_6 LEVERAGE_{jt} + \delta_7 PB_{jt} + \sum_{k=8}^{16} \delta_k CORP_GOV_{kjt} + \nu_{jt}
\end{aligned} \tag{3a}$$

$$\begin{aligned}
WO / GOODWILL_{jt} = & \gamma_0 + \gamma_1 GOV_{jt} + \gamma_2 RET_{jt} + \gamma_3 CEOCHANGE_{jt} + \gamma_4 ROA_{jt} \\
& + \gamma_5 SIZE_{jt} + \gamma_6 LEVERAGE_{jt} + \gamma_7 PB_{jt} + \sum_{k=8}^{16} \delta_k CORP_GOV_{kjt} + \phi_{jt}
\end{aligned} \tag{3b}$$

The dependent variable in equation (3a), WO_{it} , is an indicator variable that obtains the value of “1” if firm j recognized a goodwill writeoff in year t , and “0” otherwise. The dependent variable in equation (3b) is goodwill writeoff divided by the amount of goodwill before the writeoff (the proportion of goodwill written off). The main explanatory variable in equations (3a) and (3b) is $GOV_{it} \in \{BOARD_{it}, CEO_{it}, CFO_{it}\}$ as defined above. In addition, we include in both equations several variables associated with goodwill writeoffs: RET_{it} is annual stock returns. If goodwill writeoffs are recognized on a timely manner, the coefficient on this variable should be negative. $CEOCHANGE_{it}$ is an indicator variable that obtains the value "1" if the CEO was replaced during year t , and "0" otherwise. As recognition of goodwill writeoffs often occurs following a replacement of a CEO, the coefficient on this variable is expected to be positive. ROA_{it} is the return-to-asset-ratio. The coefficient on this variable is expected to be negative, as more profitable firms are less likely to recognize goodwill writeoffs. $SIZE_{it}$ is log of total assets. Larger companies are more likely to be scrutinized by regulators leading to more timely recognition of goodwill writeoffs. $LEVERAGE_{it}$ is interest bearing debt divided by total assets. Companies with higher leverage prefer to delay goodwill writeoffs in order to avoid possible violations of debt covenants. Hence the coefficient on this variable is expected to be negative. Finally, PB_{it} is the market-to-book-ratio. Higher share prices relative to book values suggest that goodwill writeoffs are not required; hence the coefficient on this variable is expected to be negative. We also

include in equations (3a) and (3b) the nine corporate governance variables used in our previous analysis to control for possible correlated omitted variables. We estimate equation (3a) using Logit, and equation (3b) using Tobit, as in Beatty and Weber (2006).

The results in Table 7 show a strong link between the proportion of convicted directors and the frequency and magnitude of goodwill writeoffs (coefficients on GOV_{it} are significant at the 0.01 level). We also find that goodwill writeoffs are more frequent and larger in magnitude when the CEO has been convicted of a crime (significant at the 0.05 level or better). We do not find a link between CFOs' crime convictions and goodwill writeoffs, because CFOs are less consequential than CEOs and the board in acquisition decisions. In addition, the likelihood of goodwill writeoffs increase in the year of a CEO change (at the 0.05 level), establishing a direct link between CEOs and the decision to write off goodwill. Taken together, these results support our view that appointing directors and CEOs with criminal convictions increases agency costs and weakens corporate governance; and consequently, increase the likelihood of unsuccessful acquisitions, leading to goodwill writeoffs.

As expected, the coefficients on ROA are negative (significant at the 0.01 level in all models), suggesting that profitable companies are less likely to recognize goodwill writeoffs. Larger firms are more likely (at the 0.01 level) to recognize goodwill writeoffs due to their visibility to regulators. The coefficients on $LEVERAGE$ are negative, as expected, but not significant at the 0.10 level. Also, as expected, companies with higher market-to-book ratios (PB) are less likely (at the 0.01 level) to recognize goodwill writeoffs.

The coefficients on annual stock returns (RET) are positive in the Logistic regressions and negative in the Tobit regressions, but not significant at the 0.10 level. A plausible explanation for this result is that writeoffs are not recognized on a timely manner. The issue of timeliness of recognizing bad news is addressed in Section 4.3.

(Table 7 about here)

To establish a direct link between CEOs' criminal convictions and goodwill writeoffs, we distinguish between two types of CEO replacements like in Table 6: (i) replacing a convicted/suspected CEO in year $t-1$ with a "clean" CEO (one without any criminal activity) in year t , denoting it as *CEOCHANGE_GOOD*; and (ii) replacing a "clean" CEO in year $t-1$ with a convicted/suspected CEO in year t , denoting it *CEOCHANGE_BAD*. If appointing a convicted/suspected CEO increases agency costs and weakens governance, replacing a criminal CEO with a "clean" CEO is more likely to result in a goodwill writeoff than vice versa. We estimate the following model using Logit:

$$WO_{jt} = \delta_0 + \delta_1 GOV_{jt} + \delta_2 RET_{jt} + \delta_3^G CEOCHANGE_GOOD_{jt} + \delta_3^B CEOCHANGE_BAD_{jt} + \delta_4 ROA_{jt} + \delta_5 SIZE_{jt} + \delta_6 LEVERAGE_{jt} + \delta_7 PB_{jt} + \sum_{k=8}^{16} \delta_k CORP_GOV_{kjt} + u_{jt} \quad (4)$$

The results in Table 8 show that the coefficient δ_3^G is positive and significant at the 0.05 level, but the coefficient δ_3^B is not significant. This result means that goodwill writeoffs follow a replacement of a convicted/suspected CEO with a clean CEO, but not vice versa. That is, a newly appointed "clean" CEO writes off goodwill on a timelier manner than the predecessor convicted/suspected CEO.

(Table 8 about here)

4.3 Criminal Directors/Executives and Accounting Conservatism

Prior literature links weaker corporate governance to accounting conservatism. To examine whether appointing convicted/suspected individuals as directors and senior executives affect accounting conservatism, we adopt Basu's (1997) model and estimate it

separately for firms with high and low proportions of convicted directors and for firms with and without convicted CEOs and CFOs. In particular, we estimate the following model:

$$EP_{jt} = \phi_0 + \phi_1 RET_{jt} + \phi_2 DRET_{jt} + \phi_3 RET_{jt} \times DRET_{jt} + \phi_8 SIZE_{jt} + \phi_9 LEVERAGE_{jt} + \phi_{10} PB_{jt} + \sum_{k=11}^{19} \phi_k CORP_GOV_{kjt} + \nu_{jt} \quad (5)$$

The dependent variable (EP_{jt}) is annual earnings per share divided by last year's stock price. Independent variables include RET_{jt} - annual stock return; $DRET_{jt}$ - an indicator variable that obtains the value "1" if RET_{jt} is negative, and "0" otherwise; $SIZE$ (log of total assets); $LEVERAGE$ (interest-bearing debt divided by total assets); PB (market-to-book ratios), and the nine corporate governance variables used earlier as control variables (not tabulated).

Table 9, panel A, presents results for companies with 50% or less convicted directors, and companies with "clean" CEOs and CFOs. As can be seen, the coefficients on $RET_{jt} \times DRET_{jt}$ are positive, as expected, and significant at the 0.01 level. This result is consistent with prior findings, namely bad news are recognized in earnings faster than good news. Panel B presents results for companies with more than 50% convicted/suspected directors, convicted CEOs, and convicted CFOs, respectively. Here, the coefficients on $RET_{jt} \times DRET_{jt}$ are not different from zero at the 0.10 level, suggesting that bad news are as timely as good news. That is, accounting in these companies is not conservative according to Basu's (1997) model.

The results in Table 9 suggest that companies with more convicted directors and senior executives use less conservative reporting. This finding is consistent with the supply side argument discussed above, where companies with weaker corporate governance report less conservatively.

(Table 9 about here)

5. Summary and Conclusions

Surprisingly, many board members and senior executives in Swedish listed companies have been convicted or suspected of crimes. Recent legislative and self-regulation initiatives have focused on preventing corporate frauds by placing more responsibilities on board members, executives and auditors. Perhaps regulators should focus more on preventing individuals who have previously exhibited criminal behavior from holding key positions in publicly listed corporations.

What are the economic implications of appointing convicted criminals as directors and senior executives in listed companies? We address this issue by using unique proprietary data on the criminal activities of all board members, CEOs and CFOs in Swedish listed firms. First, we document the extent to which firms appoint individuals with prior criminal convictions as directors, CEOs and CFOs. Our results show that such appointments are surprisingly common among listed firms in Sweden, a country where the rule of law is strong and the general level of crime is lower than in many other Western countries.

Next, we examine the effect of appointing individuals with criminal convictions as directors, CEOs and CFOs on reported earnings. We find that companies with more convicted individuals on the board and companies in which the CEO has been convicted of a crime report lower profits. This result is consistent with the argument that these companies have weaker corporate governance mechanisms leading to higher agency costs. In addition, our results show that directors' personal ownership interest in the firm mitigates the negative effect on firm profitability.

We also focus on acquisitions and find that having directors or CEOs with prior criminal convictions increases the likelihood and magnitude of goodwill writeoffs. Also, the

likelihood of goodwill writeoffs increases when a convicted CEO is replaced by a “clean” CEO. These results are consistent with the argument that convicted directors and CEOs care more about their private benefits than monitoring and managing the firm, leading to more unsuccessful acquisitions, which in turn lead to goodwill writeoffs.

As prior literature links corporate governance to accounting conservatism, we examine the effect of appointing individuals with criminal convictions as directors, CEOs and CFOs on the timeliness of recognizing bad news in earnings. We find that earnings of firms with more convicted directors and firms with convicted CEOs and CFOs are not conservative according to Basu’s (1997) model. This result supports the view that appointing individuals with prior crime convictions increases agency costs and weakens governance, as reflected in less conservative reporting.

The policy implication of our study is straightforward. Appointing individuals with prior criminal behavior as directors and senior executives is costly to the firm and its shareholders in terms of lower profits, unsuccessful acquisitions and less conservative reporting. To reduce this cost, companies should avoid appointing such individuals to senior managerial positions or compensate by other governance mechanisms (for instance, higher quality auditing). Our results may also have direct implications for future research on corporate governance and regulatory intervention. A natural corollary to our study is to examine the effect of appointing criminals to senior corporate positions in US companies, where the overall crime rates are higher than in Sweden. In addition, it would be interesting to examine whether companies accused of accounting fraud, companies sanctioned by the SEC and companies that restated their financial statements had appointed relatively more convicted directors and senior executives.

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Table 1
Sample Selection*

	Number of Companies	Firm-year Observations
All listed Swedish companies	650	3,560
Companies with complete accounting and other data	448	2,419
Companies with lagged variables	391	2,140
Companies after truncating 1% on each side as outliers	385	2,040
Companies after deleting non-financial companies	334	1,762

*Note: The Table presents information on the sample selection process in terms of firms and the corresponding number of observations. The sample includes companies listed on the Swedish stock markets for the period 1999-2007 and monitored by the Swedish Financial Supervisory Authority.

Table 2
Directors, CEOs and CFOs with Criminal convictions
Frequency and Distribution*

Panel A – Frequency of crime occurrences

	Convicted and/or Suspected			Not Convicted nor Suspected	Total
	Suspected and Convicted	Suspected but not Convicted	All		
Board of Directors	727 (21.6%)	128 (3.8%)	855 (25.3%)	2,518 (74.7%)	3,373 (100%)
CEOs	182 (31.3%)	25 (4.3%)	207 (35.7%)	373 (64.3%)	580 (100%)
CFOs	78 (21.4%)	11 (3.0%)	89 (24.5%)	275 (75.5%)	364 (100%)

Panel B - Descriptive statistics of the key crime variables

	Mean	Median	Std.	Min	Max
Total sample (1,762 observations)					
BOARD	0.30	0.29	0.19	0.00	1.00
CEO	0.34	0.00	0.48	0.00	1.00
CFO	0.17	0.00	0.37	0.00	1.00
Swedish firms listed in the US (58 observations)					
BOARD	0.23	0.18	0.16	0.00	0.67
CEO	0.38	0.00	0.49	0.00	1.00
CFO	0.22	0.00	0.42	0.00	1.00

*Note: Panel A presents the number of individuals and proportions of convicted/suspected directors, CEOs and CFOs in Swedish listed companies. Panel B presents the distribution of our crime variables - $GOV_{it} \in \{BOARD_{it}, CEO_{it}, CFO_{it}\}$. Variables are defined as follows:

- *BOARD* – the proportion of board members convicted or suspected of crimes.
- *CEO* – an indicator variable that obtains the value of “1”, if the CEO has been convicted or suspected of a crime, and “0” otherwise.
- *CFO* – an indicator variable that obtains the value of “1”, if the CFO has been convicted or suspected of a crime, and “0” otherwise.

Table 3
Characteristics of Sample Firms*

	Board Directors			Chief Executive Officers (CEO)			Chief Financial Officers (CFO)		
	50% or more Convicted/Suspected (N = 334)	Less than 50% Convicted/Suspected (N = 1,428)	Diff	CEO Convicted/Suspected (N = 606)	CEO not Convicted/Suspected (N = 1,156)	Diff	CFO Convicted/Suspected (N = 291)	CFO not Convicted/Suspected (N = 1,471)	Diff
	Mean Median	Mean Median	t-test Wilcoxon	Mean Median	Mean Median	t-test Wilcoxon	Mean Median	Mean Median	t-test Wilcoxon
<i>EP</i>	-0.07 0.01	-0.01 0.04	4.90++ 4.99++	-0.03 0.03	-0.01 0.03	2.18+ 1.28	-0.00 0.06	-0.02 0.03	-1.59 -3.46++
<i>ABS_ACCRUALS</i>	0.10 0.07	0.08 0.06	-4.42++ -3.44++	0.08 0.06	0.08 0.06	0.41 0.30	0.07 0.06	0.08 0.06	1.93* 1.04
<i>SIZE</i>	5.85 5.68	7.01 6.73	9.18++ 8.91++	6.81 6.66	6.78 6.54	-0.22 -0.10	7.51 7.26	6.65 6.48	-6.67++ -6.01++
<i>PB</i>	3.07 2.14	2.97 2.19	-0.59 0.39	3.04 2.16	2.96 2.19	-0.60 0.39	2.93 2.19	3.00 2.17	0.40 0.83
<i>LEVERAGE</i>	0.16 0.11	0.17 0.15	0.62 1.45	0.17 0.14	0.17 0.14	0.33 0.15	0.19 0.17	0.16 0.13	-2.28+ -2.79++

*Notes

1. The Table presents descriptive statistics for the sample of companies listed on the Swedish stock markets for the period 1999-2007 and monitored by the Swedish Financial Supervisory Authority. We present means and medians for companies for which more (less) than 50% of the directors have been convicted/suspected of a crime; companies for which the CEO has been convicted/suspected (not convicted/suspected) of a crime; and companies for which the CFO has been convicted/suspected (not convicted/suspected) of a crime. We also present *t*-statistics for differences in means (medians) between sub-samples.
2. Variables are defined as follows:
 - *EP* – Earnings divided by the beginning of year market value of equity;
 - *ABS_ACCRUALS* – The absolute value of total accruals, measured as the difference between operating cash flows and earnings;
 - *SIZE* – Logarithm of total assets;
 - *PB* – Market value of equity divided by book value of equity).
 - *LEVERAGE* – Total interest-bearing debt divided by total assets;
3. ++, +, * denote significance levels at the 0.01, 0.05, and 0.10 levels respectively.

Table 4
Determinants of Proportions of Convicted Directors and Senior Executives*

Variable	Exp. Sign	Board Members	CEO	CFO
<i>MALE</i>	+	0.17 (4.02)++	0.81 (3.58)*	-0.57 (1.11)
<i>BUSY</i>	?	0.01 (0.29)	2.61 (9.05)++	1.56 (12.22)++
<i>CEODUAL</i>	+	0.03 (2.08)+	0.02 (0.02)	-0.56 (14.51)++
<i>BOARDSIZE</i>	+	-0.01 (-0.46)	-1.10 (18.36)++	0.06 (0.03)
<i>MAINOWNER</i>	-	0.01 (0.59)	-0.04 (0.16)	0.48 (10.84)++
<i>EMPLOYEE</i>	-	-0.05 (-1.03)	0.05 (0.01)	0.03 (0.00)
<i>AGE</i>	?	-0.00 (-1.32)	-0.02 (3.85)+	0.04 (8.08)+
<i>LISTING</i>	-	-0.05 (-2.07)+	0.05 (0.03)	-0.37 (1.01)
<i>INSIDER</i>	+	-0.16 (-1.61)	2.61 (9.04)++	-1.55 (1.20)
<i>LEVERAGE</i>	?	0.02 (0.37)	0.24 (0.44)	0.10 (0.04)
<i>SIZE</i>	-	-0.01 (-1.54)	0.19 (20.05)++	0.19 (11.71)++
<i>PB</i>	?	-0.00 (-1.06)	0.01 (0.25)	0.02 (0.55)
<i>Year fixed-effects</i>		YES	YES	YES
<i>Firm fixed-effects</i>		YES	YES	YES
<i>Adjusted R²</i>		0.17	--	--
<i>Observations</i>		1,762	1,762	1,762

*Notes:

1. The Table provides results for estimating Equation (1), as follows:

$$\begin{aligned}
 GOV_{it} = & \alpha_0 + \sum_{s=1999}^{2007} \alpha_s YEAR_s + \sum_{i=1}^I \alpha_i FIRM_i + \beta_1 MALE_{it} + \beta_2 BUSY_{it} + \beta_3 CEODUAL_{it} + \\
 & \beta_4 BOARDSIZE_{it} + \beta_5 MAINOWNER_{it} + \beta_6 EMPLOYEE_{it} + \beta_7 AGE_{it} + \beta_8 LISTING_{it} + \\
 & \beta_9 INSIDER_{it} + \beta_{10} LEVERAGE_{it} + \beta_{11} SIZE_{it} + \beta_{12} PB_{it} + \varepsilon_{it}
 \end{aligned}$$

2. The dependent variable is, *GOV*, measures the magnitude of crime convictions in different parts of the corporations' governing bodies: 1) *BOARD* - the proportion of board members convicted or suspected of crimes; (2) *CEO* - an indicator variable taking the value of "1" if the *CEO* has been convicted or suspected of crimes, and "0" otherwise; (3) *CFO* – an indicator variable taking the value of "1" if the *CFO* has been convicted or suspected of crimes, and "0" otherwise.
3. Independent variables are:
 - *MALE_{it}* – The proportion of male board members for firm *i* at year-end *t*.
 - *BUSY_{it}* – The proportion of board members with three or more board memberships in the listed Swedish firms for firm *i* at the end of year *t*.
 - *CEODUAL_{it}* – An indicator variable that obtains the value of "1" if the CEO of firm *i* at year-end *t* is also a member of the board, and "0" otherwise.
 - *BOARDSIZE_{it}* – The logarithm of the total number of board members for firm *i* at year-end *t*.
 - *MAINOWNER_{it}* – An indicator variable that obtains the value of "1" if there is at least one controlling shareholder (that is owns 10% or more of the firm's equity) in the firm *i* at year-end *t*, and "0" otherwise.
 - *EMPLOYEE_{it}* – The proportion of employee representatives on the board of firm *i* at year-end *t*.
 - *AGE_{it}* – The average age of the board members of firm *i* at year-end *t*.
 - *LISTING_{it}* – An indicator variable that obtains the value of "1" if firm *i* is listed also in the United States (NYSE, NASDAQ or AMEX) at year-end *t*, and "0" otherwise.
 - *INSIDER_{it}* – The proportion of board members who hold executive positions in the firm in addition to being on the board.
 - *LEVERAGE_{it}* is interest-bearing debt divided by total assets.
 - *SIZE_{it}* is the logarithm of total assets.
 - *PB_{it}* is market value of equity divided by book value of equity.
4. Pooled regressions are estimated using pooled data with firm and year fixed-effects. All *t*-values in the pooled regression are based on heteroskedasticity-adjusted standard errors. We also take into account the firm-level clustering in standard errors as in Petersen (2009). Specifically, we allow both a firm and time effect to be present in the panel data and address the time effect parametrically by including yearly dummies and then estimate standard errors clustered on the firm dimension.
5. ++, +, * denote significance levels at the 0.01, 0.05, and 0.10 levels respectively.

Table 5
Criminal Convictions and Profitability*

	Exp. Sign	Board Members	CEOs	CFOs
<i>GOV</i>		-0.08 (-2.00)+	-0.04 (-2.42)+	0.01 (0.30)
<i>GOV</i> × <i>OWNER</i>	+	0.17 (1.00)	0.13 (2.25)+	-0.02 (-0.32)
<i>OWNER</i>	+	0.03 (0.49)	0.03 (0.85)	0.08 (2.39)+
<i>MALE</i>	?	0.09 (1.66)*	0.07 (1.40)	0.07 (1.47)
<i>BUSY</i>	?	-0.06 (-1.66)*	-0.06 (-1.66)*	-0.06 (-1.63)
<i>CEODUAL</i>	?	0.01 (0.96)	0.01 (1.01)	0.01 (0.91)
<i>BOARDSIZE</i>	?	0.03 (0.94)	0.03 (0.91)	0.03 (0.96)
<i>MAINOWNER</i>	?	0.01 (0.74)	0.01 (0.49)	0.01 (0.61)
<i>EMPLOYEE</i>	?	0.07 (1.25)	0.07 (1.28)	0.08 (1.37)
<i>AGE</i>	?	0.00 (1.58)	0.00 (1.74)*	0.00 (1.73)*
<i>LISTING</i>	?	0.01 (0.27)	0.01 (0.38)	0.01 (0.41)
<i>INSIDER</i>	?	0.08 (0.62)	0.08 (0.66)	0.08 (0.66)
<i>LEVERAGE</i>	-	-0.20 (-4.08)++	-0.20 (-4.12)++	-0.20 (-4.15)++

SIZE	?	0.04 (6.39)++	0.04 (6.45)++	0.04 (6.36)++
PB	?	0.00 (1.12)	0.00 (1.27)	0.00 (1.14)
Year fixed-effects		YES	YES	YES
Firm fixed-effects		YES	YES	YES
Adjusted R²		0.21	0.21	0.21
Observations		1,762	1,762	1,762

*Notes:

1. The Table provides results for estimating Equation (2). The model is:

$$\begin{aligned}
 EP_{it} = & \alpha_0 + \sum_{s=1999}^{2007} \alpha_s YEAR_s + \sum_{i=1}^I \alpha_i FIRM_i + \gamma_1 GOV_{it} + \gamma_2 GOV_{it} \times OWNER_{it} + \gamma_3 OWNER_{it} \\
 & + \gamma_4 LEVERAGE_{it} + \gamma_5 SIZE_{it} + \gamma_6 PB_{it} + \sum_{k=7}^{15} \gamma_k CORP_GOV_{kit} + \varepsilon_{it}
 \end{aligned}$$

2. The dependent variable is EP_{it} (earnings deflated by the beginning of year market value of equity).
3. Independent variables include:
 - a. GOV measures the magnitude of crime convictions in different parts of the corporations' governing bodies: 1) $BOARD$ – the proportion of board members convicted or suspected of crimes; 2) CEO – an indicator variable taking the value of “1”, if the CEO has been convicted/suspected of a crime, and “0” otherwise; 3) CFO – an indicator variable taking the value of “1”, if the CFO has been convicted/suspected of a crime, and “0” otherwise.
 - b. $OWNER$ is the average market value of the board members' holdings in the firm divided by the average value of his/her total wealth;
 - c. All the 12 independent variables included in Equation (1) and defined in Table 4.
4. All regressions include fixed year and firm effects. All t -values are based on heteroskedasticity-adjusted standard errors. We also take into account the firm-level clustering in standard errors as in Petersen (2009).
5. ++, +, * denote significance levels at the 0.01, 0.05 and 0.10 levels respectively.

Table 6
CEO Changes and Profitability*

Variable	Exp. Sign	Coefficient
<i>GOV</i>	–	-0.03 (-1.68)*
<i>GOV</i> × <i>OWNER</i>	+	0.12 (2.07)+
<i>OWNER</i>	+	0.03 (0.85)
<i>CEOCHANGE_GOOD</i>	+	-0.00 (0.17)
<i>CEOCHANGE_BAD</i>	–	-0.07 (-2.23)+
<i>SIZE</i>	+	0.04 (7.20)++
<i>LEVERAGE</i>	–	-0.19 (-3.88)++
<i>PB</i>	–	0.00 (1.30)
<i>Year fixed-effects</i>		YES
<i>Firm fixed-effects</i>		YES
<i>Number of ‘Good’ changes</i>		52
<i>Number of ‘Bad’ changes</i>		59
<i>Adjusted R²</i>		0.20
<i>Observations</i>		1,762

*Notes:

1. The Table presents results of estimating the following OLS regression model:

$$EP_{it} = \alpha_0 + \sum_{s=1999}^{2007} \alpha_s YEAR_s + \sum_{i=1}^I \alpha_i FIRM_i + \gamma_0^G CEOCHANGE_GOOD_{it} + \gamma_0^B CEOCHANGE_BAD_{it} + \gamma_1 GOV_{it} + \gamma_2 GOV_{it} \times OWNER_{it} + \gamma_3 OWNER_{it} + \gamma_4 LEVERAGE_{it} + \gamma_5 SIZE_{it} + \gamma_6 PB_{it} + \sum_{k=7}^{15} \gamma_k CORP_GOV_{kit} + \varepsilon_{it}$$

2. We distinguish between two types of *CEO* change: (i) *CEOCHANGE_GOOD* - an indicator variable that obtains the value "1" if a convicted or suspected *CEO* was replaced by a “clean” *CEO*, and "0" otherwise; and (ii) *CEOCHANGE_BAD* - an indicator variable that obtains the value "1" if a “clean” *CEO* was replaced by a convicted or suspected *CEO*, and "0" otherwise.
3. The model includes financial leverage (*LEVERAGE*), firm size (*SIZE*), market-to-book ratios (*PB*), and the nine corporate governance control variables, all defined in Table 4.
4. ++, +, * denote significance levels at the 0.01, 0.05 and 0.10 levels respectively.

Table 7
Criminal Convictions and Goodwill Writeoffs*

Variable	Exp. Sign	Board Members		CEOs		CFOs	
		LOGIT	TOBIT	LOGIT	TOBIT	LOGIT	TOBIT
<i>RET</i>	-	0.06 (0.09)	-0.05 (0.78)	0.06 (0.09)	-0.04 (0.76)	0.06 (0.10)	-0.04 (0.67)
<i>GOV</i>	+	1.88 (14.12)++	0.40 (12.15)++	0.37 (4.33)+	0.12 (8.65)++	0.04 (0.03)	-0.03 (0.38)
<i>CEOCHANGE</i>	+	0.54 (6.21)+	0.10 (4.17)+	0.52 (5.63)+	0.10 (4.11)+	0.53 (5.99)+	0.10 (4.32)+
<i>ROA</i>	-	-1.87 (20.04)++	-0.37 (-12.68)++	-1.86 (20.27)++	-0.33 (-12.48)++	-1.84 (20.04)++	-0.37 (-13.01)++
<i>SIZE</i>	+	0.36 (22.95)++	0.07 (14.13)++	0.33 (19.87)++	0.06 (12.29)++	0.35 (21.85)++	0.07 (14.50)++
<i>LEVERAGE</i>	-	-0.67 (1.11)	-0.09 (0.43)	-0.46 (0.51)	-0.07 (0.26)	-0.45 (0.50)	-0.05 (0.11)
<i>PB</i>	-	-0.22 (14.25)++	-0.03 (7.35)++	-0.22 (14.48)++	-0.04 (7.61)++	-0.22 (14.54)++	-0.03 (7.14)++
# Writeoffs		159	159	159	159	159	159
Observations		1,762	1,762	1,762	1,762	1,762	1,762

*Notes:

1. The Table presents results of estimating two models:

a. Logistic regressions for the likelihood of goodwill writeoffs. The model is:

$$\begin{aligned}
 WO_{jt} = & \delta_0 + \delta_1 GOV_{jt} + \delta_2 RET_{jt} + \delta_3 CEOCHANGE_{jt} + \delta_4 ROA_{jt} + \delta_5 SIZE_{jt} + \\
 & \delta_6 LEVERAGE_{jt} + \delta_7 PB_{jt} + \sum_{k=8}^{16} \delta_k CORP_GOV_{kit} + v_{jt}
 \end{aligned} \tag{3a}$$

b. Tobit regressions taking into account the magnitude of goodwill writeoffs:

$$\begin{aligned}
 WO/GOODWILL_{jt} = & \gamma_0 + \gamma_1 GOV_{jt} + \gamma_2 RET_{jt} + \gamma_3 CEOCHANGE_{jt} + \gamma_4 ROA_{jt} \\
 & + \gamma_5 SIZE_{jt} + \gamma_6 LEVERAGE_{jt} + \gamma_7 PB_{jt} + \sum_{k=8}^{16} \delta_k CORP_GOV_{kit} + \phi_{jt}
 \end{aligned} \tag{3b}$$

2. The dependent variable in the first model takes the value of “1” if the firm recognizes a goodwill writeoff and “0” otherwise. The dependent variable in the Tobit model is goodwill writeoffs divided by the amount of goodwill before the writeoff (i.e. the proportion of goodwill that is written off).
3. Independent variables are:
 - *GOV* measures the magnitude of crime convictions in different parts of the corporations’ governing bodies: 1) *BOARD* - the proportion of board members convicted or suspected of crimes; (2) *CEO* – an indicator variable taking the value of “1”, if the *CEO* has been convicted/suspected of a crime, and “0” otherwise; (3) *CFO* – an indicator variable taking the value of “1”, if the *CFO* has been convicted/suspected of a crime, and “0” otherwise.
 - *RET* is the annual stock return.
 - *CEOCHANGE* is an indicator variable that obtains the value "1" if the *CEO* has been replaced during the year, and "0" otherwise.
 - *ROA* is the return-to-asset-ratio.
 - *SIZE* is the log of total assets.
 - *LEVERAGE* is the debt-to-asset-ratio.
 - *PB* is the price-to-book-ratio.
 - Nine additional corporate governance control variables (not tabulated) defined in Table 4.
4. ++, +, * denote significance levels at the 0.01, 0.05 and 0.10 levels respectively.

Table 8
CEO Changes and Likelihood of Goodwill Writeoffs*

Variable	Exp. Sign	LOGIT
Intercept		-0.23 (0.03)
<i>RET</i>	-	0.05 (0.07)
<i>GOV</i>	+	0.39 (4.28)+
<i>CEOCHANGE_GOOD</i>	+	0.90 (4.64)+
<i>CEOCHANGE_BAD</i>	?	0.39 (0.96)
<i>ROA</i>	-	-1.92 (21.58)++
<i>SIZE</i>	+	0.32 (18.81)++
<i>LEVERAGE</i>	-	-0.47 (0.55)
<i>PB</i>	-	-0.22 (14.25)++
<i>Number of CEO changes</i>		260
<i>Number of 'Good' changes</i>		52
<i>Number of 'Bad' changes</i>		59
<i>Number of Writeoffs</i>		159
<i>Observations</i>		1,762

*Notes:

1. We distinguish between two types of CEO change: (i) *CEOCHANGE_GOOD* - an indicator variable that obtains the value "1" if a convicted or suspected CEO was replaced by a "clean" CEO, and "0" otherwise; and (ii) *CEOCHANGE_BAD* - an indicator variable that obtains the value "1" if a "clean" CEO was replaced by a convicted or suspected CEO, and "0" otherwise.
2. ++, +, * denote significance levels at the 0.01, 0.05 and 0.10 levels respectively.
3. All the other variables are as in Table 7.

Table 9
Criminal Convictions and Conditional Conservatism*

Variable	Exp. Sign	Board Members	CEOs	CFOs
Panel A: Directors and Executives Not Convicted/Suspected				
<i>RET</i>	+	0.06 (3.18)++	0.03 (1.31)	0.06 (3.18)++
<i>DRET</i>	?	0.00 (0.13)	-0.01 (-1.15)	-0.01 (-0.92)
<i>RET×DRET</i>	+	0.21 (5.11)++	0.18 (3.77)++	0.16 (3.34)++
<i>SIZE</i>	?	0.02 (5.55)++	0.03 (4.63)++	0.02 (4.43)++
<i>LEVERAGE</i>	-	-0.10 (-2.84)++	-0.06 (-1.61)	-0.15 (-3.54)++
<i>PB</i>	?	-0.00 (-2.38)+	-0.00 (-0.97)	-0.00 (-1.75)*
<i>Observations</i>		1,428	1,156	1,471
Panel B: Convicted/Suspected Directors and Executives				
<i>RET</i>	+	0.07 (1.93)*	0.12 (4.90)++	0.07 (1.96)*
<i>DRET</i>	?	-0.05 (-1.45)	0.02 (0.71)	0.02 (0.53)
<i>RET×DRET</i>	0	-0.08 (-0.84)	0.08 (0.92)	0.03 (0.30)
<i>SIZE</i>	?	0.03 (1.52)	0.03 (3.70)++	0.04 (3.23)++
<i>LEVERAGE</i>	-	-0.38 (-2.38)+	-0.35 (-3.99)++	-0.28 (-2.08)+
<i>PB</i>	?	-0.01 (-0.42)	-0.01 (-2.38)+	0.00 (0.96)
<i>Observations</i>		334	606	291

*Notes:

- The Table presents results for Basu's (1997) regressions for conditional conservatism. The model is:

$$\begin{aligned}
 EP_{jt} = & \phi_0 + \phi_1 RET_{jt} + \phi_2 DRET_{jt} + \phi_3 RET_{jt} \times DRET_{jt} + \phi_8 SIZE_{jt} + \phi_9 LEVERAGE_{jt} \\
 & + \phi_{10} PB_{jt} + \sum_{k=11}^{19} \phi_k CORP_GOV_{kjt} + v_{jt}
 \end{aligned}$$

The dependent variable is the annual earnings per share divided by last year's stock price. Independent variables are defined as follows:

- a. *RET* is the annual stock return;
 - b. *DRET* is an indicator variable that obtains the value "1" if *RET* is negative, and "0" otherwise.
 - c. *GOV* measures the magnitude of crime convictions in different parts of the corporations' governing bodies: (1) Board members (the proportion of board members convicted or suspected of crimes), (2) *CEO*, (3) *CFO*.
 - d. *SIZE* – log of total assets.
 - e. *LEVERAGE_{it}* - interest-bearing debt divided by total assets.
 - f. *PB_{it}* is market value of equity divided by book value of equity.
 - g. Nine corporate governance control variables, as defined in Table 4.
2. We estimate three regressions: (1) Companies in which more (less) than 50% of the directors have been convicted/suspected of a crime; (2) Companies in which the CEO has been convicted/suspected (not convicted/suspected) of a crime; and (3) Companies in which the CFO has been convicted/suspected (not convicted/suspected) of a crime.
3. ++, +, * denote significance levels at the 0.01, 0.05 and 0.10 levels respectively.

Appendix A - Legal and corporate governance systems in Sweden

While the legal system in Sweden is based primarily on French and German civil codes, the importance of case law has increased over time (Strömholm, 1991). The penal code in Sweden is similar to that in other western countries, although penalties are usually less severe in Sweden than in the US and the UK. Capital punishment is not allowed and punitive damages are not imposed in civil cases (Carlson 2009). Crime rates in Sweden are considered average among western countries (Dolmén 2001). Leuz *et al.* (2003) give the Swedish law enforcement system a grade of 10 on a scale from zero to 10, based on scores developed by La Porta *et al.* (1998). The table below lists the crime convictions in our sample.

As a member of the European Union (EU), listed companies in Sweden must comply with EU directives regarding corporate governance as well as with the Swedish Corporate Governance Code, which is similar to the corporate governance rules and practices followed in the United States. As in other western countries, the corporate governance system is made up of shareholders, who can exercise control over the firm through nomination committees and non-executive boards, executives in charge of operations, and external auditors (Unger 2006).

Recent global integration of stock markets resulted in a merger between the Stockholm Stock Exchange (OMX) and NASDAQ forming the current OMX-NASDAQ as the main securities market in Sweden. The association between OMX and NASDAQ also upgraded the quality of corporate governance practices to those in the United States. However, in contrast to the US, many large Swedish firms have major owners, who often take an active role in governing the company, which is likely to increase the level of corporate governance. Also, Swedish firms have employee representatives on the boards with the same rights and responsibilities as other

board members elected by the shareholders. In addition, unlike in the US, Chief Executive Officers (CEOs) in Sweden may not be the chairman of the board. The Swedish Companies Act makes a clearer distinction between the board and executive management, stating that the board is responsible for management, strategy and resource allocation, appointing monitoring and evaluating the CEO, but less involved in operational decisions.

The Companies Act in Sweden requires a minimum of three directors on the board but stipulates no maximum. The board itself has no influence over its own size. The Corporate Governance Code states that the majority of directors elected by the shareholders must be independent of the company and its senior management. Typically, only the CEO represents the executive management on the board, however, it is not uncommon to find Swedish listed firms without any senior executives on the board (Unger 2006). At least two of the directors who are independent of the company and its management must also be independent of the company's major shareholders.

Potential candidates for the board are proposed by an independent nomination committee, and later elected by the shareholders at the shareholders' meeting. The nomination committee proposes candidates for the position of chairman and other members of the board, as well as remuneration for each director. The Swedish Corporate Governance Code requires that the majority of the nomination committee members are independent of the firm and its top management, and at least one member of the committee is independent of the largest shareholder in terms of voting power, or any ownership group. Board members may be members of the nomination committee but may not constitute majority or chair the committee. The CEO and other senior executives cannot be members of the nomination committee (Unger 2006).

Table A1 - Laws Violated by Board Members and Senior Executives

Code	Title	# of convictions	Example	Minimum penalty	Maximum penalty
1951:649	Act on Criminal Responsibility for Certain Traffic Offences	285	Drunken or reckless driving	Fines	2 years in prison
1972:603	Road Traffic Promulgation	163	Various traffic-related crimes, all types of vehicles	Fines	Fines
1998:1276	Vehicle Ordinance	134	Various traffic related crimes, all kinds of vehicles	Fines	Fines
1960:418	Act on Criminal Responsibility for Smuggling	97	Importing/Exporting goods without proper payment of duty or other taxes	Fines	6 years in prison
Ch. 8	Theft, robbery, other stealing	71	Shoplifting, robbery	Fines	10 years in prison
1972:595	Vehicle Promulgation	27	Driving a car with a driving ban	Fines	Fines
Ch. 3	On Crimes against Life and Health	30	Assault, manslaughter	Fines	Life time in prison
Ch. 9	Fraud and Other Acts of Dishonesty	22	Fraud	Fines	6 years in prison
1986:300	Sea Traffic Ordinance	22	Violation of international sea traffic rules	Fines	Fines
1956:617	Public Order Act	18	Arranging public meetings without permit	Fines	6 months in prison
Ch. 12	Crimes Inflicting Damage	15	Damage to public property	Fines	4 years in prison
1941:967	The Conscription Act	11	Failure to appear for military service	Fines	1 year in prison
1990:1342	Insider Act	11	Insider trading based on non-public information	Fines	2 years in prison
1971:69	Tax Offence Act	9	Incorrect information to tax authorities, obstruction of tax control	Fines	6 years in prison
Ch. 4	Crimes against Liberty and Peace	9	Unlawful coercion	Fines	Life in prison
1988:327	Vehicle Tax Act	7	Driving a vehicle without paying vehicle tax	Fines	6 months in prison
Ch. 11	Crime Against Creditors	5	Crime against creditors	Fines	6 years in prison
Ch. 17	Crime Against Public Activity	6	Obstruction of police	Fines	8 years in prison
	All other crimes	164			
	Total crime convictions	1,106			
	Suspected of crimes	244			
	Total convictions/suspicious	1,350			