

Men of honor: Military CEOs and directors in Korea

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Abstract

In this paper, we examine whether the presence of ex-military directors of the board within Korean firms affect their financial policies and ethical behavior. Despite the exposure to prolonged periods of military rule during their formative years, firms with CEOs and inside directors who served as military officers are substantially less likely to commit corporate fraud. In particular, the positive association between *Chaebol* business group firms and corporate fraud is weakened when these ex-military CEOs and inside directors are present. They also adopt more conservative managerial policies in normal times but take more risks during crisis periods. In contrast, the presence of ex-military-officer outside directors has little effect on the firms' corporate policies or ethical behavior. Our results suggest the exposure to military values on honor positively affects a person's subsequent managerial integrity.

JEL Classifications: G30; G32; G34.

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1. Introduction

A growing body of recent literature explore the implications of personal traits and past experiences of both the CEOs and board directors on corporate managerial decisions and financial policies (e.g., Bertrand and Schoar, 2003; Malmendier and Tate, 2005; 2008; Cronqvist, Makhija and Yonker, 2012; Hirshleifer, Low and Teoh, 2012). In particular, a number of studies explore the relationship between the CEOs' military experience and their subsequent managerial traits (Malmendier, Tate and Yan, 2011; Benmelech and Frydman, 2015), with mixed results. Whereas Malmendier, Tate and Yan (2011) find that traumatic battlefield experiences during formative years can induce managers to become more aggressive and overconfident, resulting in an increased leverage among firms managed by ex-veteran CEOs, Benmelech and Frydman (2015) find contrasting evidence that military CEOs tend to run firms more conservatively when a broader definition of military service is employed.

Military experience can also influence the CEOs' managerial ethics; according to Benmelech and Frydman (2015), ex-military CEOs are substantially less likely to engage in corporate fraud activities, which the authors attribute to the emphasis on the values of ethics and honor in the military. In fact, Lin, Ma, Officer and Zou (2011) also argue the superior announcement returns of U.S. acquirers with ex-military CEOs may be due to the "value system that promotes honor, duty, integrity, self-discipline, and selflessness (p. 2)." According to this reasoning, managers instilled with strong sense of duty and morality in their formative years are more likely to run their firms in a manner concurrent to their acquired military values.

These extant research on military CEOs, however, focuses on U.S. firms, raising questions about whether similar results may be obtained in other environments where the military served a distinctly different role within the nations' socio-political discourse. Moreover, if such military values affect an ex-military CEO's subsequent managerial ethics and risk taking propensities, it is worth exploring whether a similar effect is present among ex-military directors, whose *raison d'être*, after all, is to safeguard the interests of the shareholders through the monitoring of the firms' activities. In this paper, we extend the previous studies precisely on these two fronts, by (i) focusing on a non-U.S. environment, South Korea, which experienced a prolonged period of military dictatorship, and (ii) exploring the effect of military experience not just among CEOs but among everyone in the corporate boardroom.

First, we shift our attention away from the U.S., because it cannot be argued unambiguously that those exposed to the military values in their formative years would invariably develop a heightened sense of duty and ethics regardless of the environments in which they operate. After all, some of the most corrupt countries in the world either were or continue to be under strict military rule; North Korea,

which occupies the bottom spot on the latest 2015 Corruption Perceptions Index (CPI), is a dictatorial regime with the long-standing “Military First” policy, and other nations with exposure to military rule, such as Burma or Guinea-Bissau, score poorly. Indeed, as Brunetti and Weder (2003) and Svensson (2005) note, countries with weak freedom of press are more corrupt, and these tend to be where the military or the police exerts strong influence over the political discourse.

If so, it is not clear whether the traits exhibited by ex-military managers in the U.S. are likely to be observed similarly in other countries with distinct differences in socio-economic characteristics. This echoes the recent finding in the behavioral science, namely that the American undergraduates that form a vast majority of the experimental database do not truly represent the rest of the world (Henrich, Heine and Norenzayan, 2010). Indeed, even within the field of finance, a recent paper by Mironov (2015) suggests hiring a manager with greater personal propensity to corrupt results in a faster revenue growth in Russia, in contrast with the broadly positive valuation implications of perceived integrity among U.S. firms (Guiso, Sapienza and Zingales, 2015).¹ Then, a natural question arises as follows: when the personal values of the managers are likely to be at odds with the social norms of the environment that they work within, which can we expect to be the dominant outcome?

To address this research question, it is important to identify an environment where the corporate managers with prior military experiences are familiarized with the values similar to those serving in the U.S. but the perceived role of the military within the society is dissimilar. In this respect, South Korea provides an excellent setting. Since the division of the Korean peninsula in 1945, South Korea has been one of the closest allies of the U.S., which still maintains significant presence of armed forces personnel in South Korea standing at around 28,500. A unique set of arrangements such as the Korean Augmentation to the United States Army (KATUSA), whereby enlisted South Korean army personnel live and work alongside their American counterparts, foster close cooperation between the two forces.

In particular, the similarities in the promoted values are strong for the officer training program. While all physically able males are required to fulfil compulsory military service, making most CEOs in Korea “ex-military” by default, the attempted “Americanization” of the Korean military by the U.S. during the nation building of South Korea failed on the whole (Brazinsky, 2009). However, the U.S.

¹ On a related issue, a number of other studies also find mixed evidence of the ethical behavior of firms when they are exposed to new environments with different norms. While Braguinsky and Mityakov (2015) find that multinationals with greater exposure to transparency continue to uphold transparency when operating in Russia, another study by DeBacker, Heim and Tran (2015) report greater tax evasion in the U.S. among foreign-owned corporations with owners residing in corrupt nations. Thus, it appears both transparency *and* corruption can carry over to new environments.

explicitly took measures to ensure that at least the officer training program met the rigorous U.S. standards and values, especially the Korea Military Academy (KMA) that trained army cadets:

“The U.S. advisers who supervised its establishment modeled the KMA on the revered U.S. Military Academy at West Point. Many of them were themselves West Point graduates. Colonel Harry McKinney, the senior U.S. adviser to the KMA... and his staff imported manuals and books used at West Point and made them the basis for the policies and regulations of the KMA. ... To ensure that the academy never went too far astray from the American standard, the KMAG [Korean Military Advisory Group] appointed numerous U.S. officers to monitor its development (p. 86).”

Thus, at least within the confines of the officer training, the values promoted by the military are remarkably similar to those in the U.S., with cadets abiding by strict honor codes. Yet, the roles of the military in the two countries have been very different over the past half century. South Korea saw two major military coups, in 1961 and 1979, whereas the U.S. has never witnessed a successful coup on its soil. For over a quarter of a century between 1961 and 1987, South Korea was under authoritarian military rule, with full transition to the civilian rule not complete until early 1993.

In particular, during the latter part of the military and quasi-civilian rule between 1979 and 1993, the top echelon of powers within the military and political institutions were held by a close-knit circle of KMA graduates known as *hanahoe*. Crucially, firms that failed to comply with the ruling military elite jeopardized their survival. One of the largest conglomerates at the time, Kukje Group, declined to make the requested political donation for the ruling party and was forced into default overnight in February 1985. It was not until the Kim Young-sam administration’s dismantling of *hanahoe* in 1993 and the indictment of Chun Doo-hwan and Roh Tae-woo—his predecessors and 1979 coup leaders—that South Korea managed to shake off the remnants of its past military rule.

Thus, South Korea offers a valuable test case where the cadets exposed to strict military values in their formative years similar to those in the U.S. are also witnesses to military rule years with more opportunities to extract gains and favors from the businesses, with the firms—even those outside the defense industry—trying to remain on favorable terms with the military elite. Even though our sample period begins after the transition of South Korea into a fully functioning democracy, most directors in our sample have a firsthand experience of the military dictatorship years. Yet, precisely because of South Korea’s successful transition, with little power held by the military elite in any branch of the

government,² we may be assured that the outcomes generated by the ex-military CEOs in our sample are not by-products of political connections except for in certain defense-related industries, a common identification issue in many developing countries (Fan, Wong and Zhang, 2007; Li, Meng, Wang and Zhou, 2008; Yu and Dou, 2012). If so, whether the managers with exposure to the U.S.-style officer training curriculum can continue exhibit similar managerial and ethical traits in a society as different from the U.S. as in South Korea is a question well worth exploring.

Yet, when examining the impact of prior military experience on corporate outcomes, one does not need to stop at the analysis of the CEOs. After all, the board of directors exists to monitor and advise managers, and numerous studies have explored the implications of board composition characteristics on its efficacy. While the early literature focuses on the aggregate level board characteristics such as board independence or size (e.g., Weisbach, 1988; Yermack, 1996; Cotter, Shivdasani and Zenner, 1997), a number of recent studies also inquire into the demographic and social network composition of the individual directors that comprise the board, particularly with respect to the board diversity (e.g., Adams and Ferreira, 2009; Lee, Lee and Nagarajan, 2014) and their social ties with the CEOs (e.g., Hwang and Kim, 2009; Fracassi and Tate, 2012).

If so, having a director with strong military values emphasizing duty and ethics on a firm's board can plausibly affect the board's ability and willingness to monitor the managerial decision. Above all, when faced with the prospect of unethical behavior such as accounting frauds, their presence on the corporate board can conceivably make a difference. If we are to accept Benmelech and Frydman's (2015) argument, namely that those instilled with military values would find unethical decisions less palatable, then having an ex-military board director would reduce the likelihood of a firm committing a corporate fraud. However, the military also strongly emphasizes the values of loyalty and deference to one's superiors. If so, ex-military directors may also be less willing to challenge the CEO's actions, however questionable, increasing the likelihood of a corporate fraud. In addition, given the conflicting predictions of Benmelech and Frydman (2015) and Malmendier, Tate and Yan (2011) over the personal risk taking propensities of managers with prior military experience, their inclination toward leverage, investment and other corporate variables would also be worth examining.

With this in mind, we examine the financial policies and ethical behavior of all listed firms in South Korea from 1998 until 2014. Given our earlier discussion, we focus our attention on a subset of CEOs

² For example, in the past two parliamentary sessions, there were only 5 or 6 National Assembly members with ex-military career (excluding compulsory military service), a number highly insufficient to exert any significant influence.

and directors who served as officers in the South Korean armed forces, given their likely exposure to the values similar to the U.S. military during their training and thereafter. Thus, we opt for a strict definition of “ex-military” throughout our paper, excluding those who served their military service requirement merely as a conscript. In total, there are 580 firm-year (or 666 director-year) observations where either a CEO or director served as officer in the armed forces prior to their corporate career. Surprisingly, these firms are rarity, only constituting around 3% of our final sample.

We find the overall behavior of ex-military CEOs and board directors to be broadly similar to that in Benmelech and Frydman (2015). First, having an ex-military CEO or inside director results in a significantly lower research and development (R&D) expenditure and dividend payouts, even after controlling for various board- and firm-level characteristics. Although their presence has little direct effect on firm leverage, this suggests that, on the whole, ex-military managers and inside directors tend to opt for more cautious corporate policies. In contrast, the presence of an ex-military outside director has very little influence on any of the corporate variables. This is not surprising given the previous empirical study that finds little valuation or policy implications of outside directors in Korea, whose *raison d'être* is to increase the firms' external social networks (Kim, 2007). Thus, overall, we find some evidence of conservative managerial tendencies among ex-military board directors, albeit limited to the insiders only.

Second, by hand collecting the data on accounting fraud from press releases made by the Financial Supervisory Service (FSS), we find that the presence of an ex-military CEO or inside director leads to a significantly lower likelihood of accounting fraud. However, once again, a similar pattern is not found among ex-military outside directors, suggesting that the acquired military values of ethics and honor exude themselves among board directors only when they are actively involved in day-to-day monitoring of their firms as insiders, not when the directors sit on the corporate board as outsiders to broaden the firms' external social and political connections. Our main findings over corporate policies and managerial ethics hold regardless of whether we utilize the full sample or only a subsample of firms with similar characteristics identified through propensity score matching.

Further analysis also reveals more interesting patterns. First, although ex-military CEOs and inside directors appear to display conservative traits with regards to corporate policies, they tend to take more risk during the global financial crisis, with a significantly higher level of leverage than firms without ex-military managers and inside directors during the crisis years. We attribute this to the well-known phenomenon of the “resurfacing of stress”, whereby those exposed to traumatic early-year experiences exhibit aggressive risk taking tendencies when they are involved in a similarly stressful situation. This

reconciles the conflicting results found in the previous studies regarding the ex-military managers' risk taking propensity.

Second, it appears the positive ethical implications of having an ex-military CEO or inside director are particularly pronounced among firms belonging to *Chaebol* business groups; although they are more likely to commit accounting fraud on the whole by around 1.7 percentage points on average, having an ex-military CEO or inside board director mostly mitigates the problem, with the likelihood of accounting fraud decreasing by around 3.6 percentage points. In contrast, within these firms, ex-military outside directors are unable to improve the firms' ethical behavior. Given that these *Chaebol* firms have been consistently criticized for poor governance that harms shareholder wealth (e.g., Joh, 2003; Baek, Kang and Park, 2004), our result suggests that the presence of an ex-military manager or inside director may be one of the plausible ways to improve the firm's internal governance.

Third, the positive implications of ex-military managers and inside directors on the firms' ethical behavior appear to be driven largely by the firms outside defense-related industries. Even though the presence of an ex-military CEO or inside director lowers the likelihood of accounting fraud for both defense and non-defense firms as far as the point estimates are concerned, statistical significance is retained only for the case of non-defense firms. This is not surprising when viewed in conjunction with our earlier results on outside directors; within the defense industries, firms often hire the ex-military personnel retiring from sufficiently high ranks in order to foster closer connections with the military, and they often serve as inside directors or even CEOs in a number of instances. This suggests that the positive ethical effect of ex-military managers and directors materializes when their appointment is less likely to be driven by the considerations for social and political connections.

Thus, our paper adds more weight to Benmelech and Frydman's (2015) hypothesis that ex-military managers brought up on military values of honor and duty tend to manage firms more ethically. Even in a society that experienced more than thirty years of military rule as in Korea, having an ex-military CEO or inside director on the board leads to a substantially lower likelihood of accounting fraud. In addition, the positive ethical implications of such ex-military managers and inside directors appear to be stronger when their primary reason for appointment is not driven by social connections. In particular, their presence seems to have a particularly pronounced effect among *Chaebol* firms that have been noted for poor governance in previous studies, highlighting their potential for improving governance among these conglomerates. Despite a wide gap in cultural and social norms, and notwithstanding the years of military dictatorship, it appears that ex-military managers and inside directors are still "men of honor," managing firms in a manner not too dissimilar to their U.S. counterparts.

2. Literature review and hypothesis development

Numerous studies have explored the implications of CEOs and director demographics on managerial and corporate policies. First, as for the CEOs' birth cohort, Bertrand and Schoar (2003) report that the older generation CEOs tend to pursue conservative strategies. On a related study, Yim (2013) report a greater propensity to engage in mergers and acquisitions among younger CEOs. As for the CEO gender, Huang and Kisgen (2013) find that male executives tend to make more acquisitions and issue more debt than their female counterparts.

Second, a number of studies also focus on the personal risk-taking propensities of CEOs. Using the percentage of in-the-money stock options exercised late as a measure of overconfidence, Malmendier and Tate (2005, 2008) report that overconfident CEOs with greater access to internal cash financing tend to invest more, conduct more acquisitions, and are viewed less favorably by the stock market. Hirshleifer, Low and Teoh (2012) also find that overconfident CEOs tend to invest more on innovation. In a similar vein, Cronqvist, Makhija, and Yonker (2012) find that CEOs who build a higher leverage on their personal home purchase also opt for more leveraged capital structure for the firms they manage. Furthermore, Cain and McKeon (2016) report that CEOs with greater propensity to personal sensation seeking, as measured by private pilot licenses, tend to run higher leverage.³

Third, and perhaps most importantly, a small number of studies on ex-military corporate managers are directly relevant to our research question. Malmendier, Tate and Yan (2011) examine World War II veteran CEOs likely to have served on the frontline and witnessed the devastation first hand. They argue that these CEOs with traumatic experiences are more likely to be aggressive and overconfident given the extant evidence within the psychology literature (e.g., Elder, 1986; Elder and Clipp, 1989). They find this is indeed the case; firms run by ex-veteran CEOs have higher market leverage.⁴

In contrast, Benmelech and Frydman (2015) find that CEOs with military experience—including both the war veterans and non-veterans—tend to run more conservative corporate policies, with lower investment and R&D expenditure. Crucially, these firms are also significantly less likely to engage in

³ Other prominent recent studies on the personal traits of CEOs include Graham, Harvey and Puri (2013), who engage in a psychometric survey of CEOs and report a prevalent presence of risk-tolerant CEOs in fast-growing firms, and Dittmar and Duchin (2016), who find that CEOs with prior employment in a distressed firm tend to hold less debt and more cash.

⁴ This is not a general trait of the CEOs for the particular age cohort, as Malmendier, Tate and Yan (2011) find that CEOs experiencing the Great Depression in their early years actually tend to be more conservative on average, echoing the findings of Malmendier and Nagel (2011).

corporate fraud activities, which, according to the authors, may be attributed to the managers' "strong sense of ethics (p. 44)" acquired from the military. A similar reasoning is made by Lin, Ma, Officer and Zou (2011), who attribute the superior abnormal announcement returns for the acquirers run by CEOs with military background to the attenuation of agency problems resulting from having managers with "value system that promotes honor, duty, integrity, self-discipline, and selflessness (p. 2)."

Nevertheless, managerial decisions are also monitored and held into account by the corporate board. Therefore, the characteristics of the individual directors, particularly regarding their relationship with the CEO, has garnered much interest in the recent literature. Adams and Ferreira (2009) explore the implications of gender diversity on CEO turnover sensitivity and firm valuation, while Lee, Lee and Nagarajan (2014) inquire into the political alignment between directors and the CEO and the resulting effect of political homophily on CEO turnover and firm performance. A number of recent studies also examine the board director's social ties with the CEO such as educational or regional ties. Hwang and Kim (2009) find corporate boards conventionally classified as independent—without familial or direct financial ties—but sharing substantial social ties with the CEO have lower CEO pay-performance and turnover-performance sensitivities. Similarly, Fracassi and Tate (2012) find that firms with strong social network CEO-director ties have lower Tobin's Q.

Therefore, while the previous studies focus on the military experience of only the CEOs, it would be reasonable to expect that a firm's financial policies or managerial ethics may be influenced also by the ex-military directors. However, there is one caveat. The prior literature on the board of directors in Korea finds that outside directors have little role except through opening up new channels of *inmaek*, which refers to their external social and political connections (Kim, 2007). If so, their role on the day-to-day monitoring of the firms' corporate activities would be much weaker. Thus, we expect that the realization of military values into financial policies and managerial ethics would be stronger only when the ex-military personnel serves either as the CEO or inside director, but not when he or she is an outside director. This leads to our first hypothesis, namely:

(H1) (Insider vs. outsider) The effect of a person's prior military experience on a firm's financial policies and ethical behavior will only be present in South Korea if the person serves either as CEO or inside director but not as outside director.

However, even if such an effect exists among CEOs and inside directors, it is important to establish the direction in which the presence of a CEO or inside director with military experience has on a firm's financial policies. Unfortunately, the prior literature has failed to arrive at a consensus on this front. While Benmelech and Frydman (2015) associate military experience with conservatism, Malmendier,

Tate and Yan (2011) view it as a potential source of a person's risk taking propensity. There appears to be "no one 'big unified theory' of military leadership (Benmelech and Frydman, 2015, p. 46)," but instead a competing set of hypotheses, summarized as follows:

(H2a) (Conservative military CEOs and inside directors) If a firm has an ex-military CEO or inside director, it would be run more conservatively, with lower investment, R&D expenditure, dividend payout and leverage.

(H2b) (Aggressive military CEOs and inside directors) If a firm has an ex-military CEO or inside director, it would be run more aggressively, with higher investment, R&D expenditure, dividend payout and leverage.

It is also possible to advance a hybrid hypothesis. Elder and Clipp (1989) highlight that, among the war veterans, "resurfacing of stress (p. 316)" is an important issue, whereby these veterans lead normal lives for a sustained period of time but the stress resurfaces when they are presented with a situation similar to their previous trauma. Given that most officers graduating from the cadet academies of each armed forces branch are required to serve on the frontline, and with the two Koreas technically still at war with frequent aggressions by the North Korean side, many of these ex-military personnel are likely to carry some exposure to traumatic experiences. If so, their risk taking propensity and aggressive characteristics may lie dormant during normal periods but surface only when they are presented in a highly stressful situation. As our sample period includes the global financial crisis of 2007-09, this allows us to examine our hybrid hypothesis, namely:

(H2c) (Hybrid hypothesis) If a firm has an ex-military CEO or inside director, the firm would either be run more conservatively or similar to other firms during normal times, but it would exhibit greater tendency to take risk during crisis periods.

Having established our competing hypotheses regarding corporate financial policies, we proceed with the hypothesis development with regards to managerial ethics. As with Benmelech and Frydman (2015), we expect ex-military CEOs to exhibit a higher level of integrity. However, as for the board of directors, particularly the insiders, competing hypotheses exist. On the one hand, a person that values duty, integrity and honor is less likely to be complicit in the firms' attempt to engage in corporate frauds. On the other hand, the military values of deference and loyalty to one's higher ranks may make ex-military directors more hesitant to speak out and resist any potential wrongdoings. In other words:

(H3a) (Integrity) An ex-military inside director with higher degree of personal integrity would be less willing to accept unethical behavior by the firm's management, making corporate frauds less likely.

(H3b) (Deference) An ex-military inside director would feel greater deference toward the firm's top management and less willing to speak out against any unethical behavior, making corporate frauds more likely.

While these research questions are similar to those explored in Benmelech and Frydman (2015), our paper differ in two major respects. First, while their sole focus is on the top management, we allow for the possibility that an ex-military director may also have some role, albeit mainly inside directors. Second, we examine these hypotheses within the context of South Korea, where the acquired personal values of ex-military CEOs and directors are broadly comparable to the U.S. but the external social norms are different, with greater potential for its clash with personal values.

3. Data

3.1. Data construction

Personal information on CEOs and other board members are collected from the TS2000 database provided by the Korea Listed Companies Association. This database lists each director's educational and professional backgrounds, as well as his or her gender, birth year, and position within the corporate board. As discussed, all males without physical or mental handicaps in South Korea must complete compulsory military service, making a vast majority of male managers and directors "ex-military" by definition. However, given our earlier discussion on the Korean officer training, we focus only on professional military officers by engaging in a manual search of their educational and professional backgrounds as listed in the TS2000 database. We exclude those served as medical or legal officers for a short period of time to meet their compulsory service requirements, as their training tends to be shorter and on a lighter curriculum, weakening their exposure to military values.⁵

⁵ These officers serve three years' service in the military, with the primary aim of continuing their existing career path as either doctors or lawyers. Recognizing this, the initial officer training tends to be much shorter than those received by the cadets and reserve officers' training corps (ROTC) or officer candidate school (OCS) candidates. In any case, in untabulated analysis, we re-run our regression analysis with these officers included. On the whole, their presence only marginally weakens the statistical significance of our qualitative results, and no major change occurs.

Although we only have information on the board members, a large majority of CEOs in South Korea do sit on the corporate board, as is the case in the U.S. (e.g., Lee, Lee and Nagarajan, 2014).⁶ Thus, for our subsequent analysis, our discussion of “military boards” includes the presence of CEOs as well as all other inside and outside directors. We thus define *Military Board* as a dummy variable that takes the value of one whenever a firm has an ex-military director—CEO or otherwise—on the board in a given year. Then, to examine our first hypothesis, namely the differential effect of inside and outside directors on corporate policies and managerial ethics, we construct two dummy variables, specifically *Military CEO/Inside Director* and *Military Outside Director*, which take the value of one if and only if an ex-military CEO or inside director serves on the corporate board and an ex-military outside director sits on the corporate board in a given year respectively.

Firm level corporate variable data is obtained from the TS2000 and FnGuide databases. All variables that we consider, namely *Investment*, *R&D*, *Book Leverage*, *Market Leverage*, *Dividend Payouts*, *ROA* and *Tobin’s Q*, follow standard definitions, with the detailed description for each variable available in the Appendix. Given that the South Korean government have traditionally pursued export-led growth (Park, 1990), and the decision to penetrate a foreign market may also indicate a firm’s willingness to take on a new set of risks such as exchange rate risk, we also consider the firm’s level of exports, with the variable *Export* defined as the ratio of export revenues to total assets.

Corporate fraud data is hand collected from the FSS in our examination of managerial ethics. For the most of our sample period, the First and Second Accounting Supervision Departments within the FSS have been responsible for investigating any allegations of corporate fraud.⁷ Whenever the alleged corporate fraud was found to have substance, these two departments sanctioned the firm’s management and/or its auditors, in some instances pursuing separate judicial cases. In each case, they were required to make detailed information available to the public via press releases. We thus manually search for every press release made by these two departments (and their successors since their reorganization in February 2015). Their broad definition of corporate fraud encompasses the following: manipulation of accounting numbers, intentional omission of relevant information in financial statements, and the refusal to submit any required material to the investigatory bodies. We thus define *Fraud* as a dummy

⁶ According to Lee, Lee and Nagarajan (2014), around 93% of CEOs serves as the chairperson of the board. However, even when we exclude the companies where CEOs do not sit on the board, all our subsequent results remain qualitatively unchanged. We omit this from the main paper for the brevity of exposition, but the results are available upon request.

⁷ In February 2015, they were reorganized into Audit Review Department and Accounting Inspection Department.

variable equal to one if a firm in the given year is identified to have committed fraud according to the definition used by the FSS as described above.

There are two other aspects that we need to consider. First, as we focus on the presence of ex-military directors on the board, we need to highlight environments under which internal governance mechanism is of particular importance. In Korea, *Chaebol* firms, family-owned conglomerates with a complicated web of ownership networks within the corporate group, have been noted for poor governance. We thus identify whether a firm belongs to a *Chaebol*. This data is manually collected from the Korea Fair Trade Commission (KFTC), which annually publishes the list of *Chaebol* groups under the Fair Trade Act based on two criteria. First, more than 30% of the group's shares must be held by the controlling shareholders. Second, the total assets of the affiliated firms in the group must be sufficiently large (Almeida, Kim, and Kim, 2015).⁸ We define *Chaebol* as a dummy variable that takes the value of one if a firm in the given year is classified as *Chaebol* by the KFTC and zero otherwise.

Second, apart from our earlier discussion about inside and outside directors, there are circumstances when even inside directors are appointed with the primary aim of fostering closer connections with the military. This is particularly true of defense-related industries. We thus obtain the list of defense firms from the Korea Defense Industry Association (KDIA). In total, 95 firms are classified as such. We define *Defense Firm* as a dummy variable that takes the value of one if a firm in given year meets KDIA's criteria and zero otherwise.

For the purpose of firm-level controls, we further obtain the data for *Firm Size* and *Cash Flows* (before depreciation and amortization), with each variable defined in detail in the Appendix. We also construct a set of CEO and board characteristics for the purpose of controls. First, we construct *CEO Ownership*, which refers to the percentage of shares held by the CEO. *Majority Outside Director* is a dummy variable denoting whether a firm's board has more than 50% of outside directors in a given year or not. *Board Size* is the total number of directors on the board, and we also include two age-related variables, namely *CEO Age*, and *Board Age*, with the latter referring to the average age of all directors excluding the ex-military directors that are the key interest of our study.

⁸ This list varies substantially annually, not least because the KFTC itself changes the classification method for *Chaebol* from time to time (Joe and Oh, 2016). For instance, in 2007, the KFTC increased the total asset criterion from 2 trillion Korean won (\$1.8 billion) to 5 trillion Korean won (\$4.5 billion).

3.2. Descriptive statistics

Panel A of Table 1 presents the distribution of all firm-year observations by fiscal year. The number of observations increases over the sample period with a minimum of 385 in 1998 and a maximum of 1,626 in 2014, mainly due to greater data coverage. Panel B of Table 1 then reports all director-year and firm-year observations with at least one ex-military director sitting on the corporate board. These directors serve in various positions, including as CEOs, inside directors, outside directors, auditors, or advisors. 70% of these observations have ex-army directors, with the rest coming in from the navy or the air force. Among these military board firm-year observations, around a third has ex-military inside directors (excluding the CEO), another third has outside directors, but ex-military CEOs only accounts for around 14% of the military board sample.

TABLE 1 HERE

Panel A of Table 2 provides summary statistics. Within the sample, boards with ex-military directors are rarity, only comprising 3.02% of firm-year observations. Firms with ex-military CEOs are even rarer, only constituting 0.47%. When we put together boards with ex-military CEOs and boards with inside directors (excluding the CEO), they together constitute around 1.44%.

Panel B of Table 2 then presents descriptive statistics of dependent variables and control variables. Within our full sample, capital expenditure accounts for 6.1% of total assets on average, and average R&D expenditure amounts to around 1.1% of total assets. On average, book leverage and market leverage are 41.7% and 43.6% respectively. As for their valuation, the mean Tobin's Q stands around 1.16. Finally, our main variable of interest with respect to managerial ethics, namely corporate fraud, accounts for around 0.94% of firm-year observations.

TABLE 2 HERE

Following Benmelech and Frydman (2015) as well as Lee, Lee and Nagarajan (2014), we use a different set of firm-level controls for various regression specifications, which may or may not include book leverage, dividend payouts, ROA, Tobin's Q and cash flows depending on the specification. All regressions include firm size, and various CEO and board characteristics as controls. It is worth noting that only 4.9% of firm-year observations have majority independent boards in Korea, a figure much lower than in the U.S. The average board size is around 6.5, with the mean age of CEOs and directors at 54 years old. All continuous variables are winsorized at the 1% level.

4. Empirical results

4.1. Univariate tests

We first run univariate tests to obtain preliminary insights. In Panel A of Table 3, we split the sample into two groups: military board firm-year observations, i.e., firms with at least one ex-military director in a given year, and non-military ones. Then, we perform the difference-in-mean and difference-in-median tests between those two groups. Military board firms appear to spend significantly less R&D expenditure and pay out less in dividends but use more leverage, yielding mixed results regarding their conservatism. There is no significant difference in the likelihood of corporate fraud between the two groups.

TABLE 3 HERE

In Panel B, we report our results of univariate tests when we focus on a subset of military board firm-year observations that only include ex-military CEOs and inside directors.⁹ The picture remains largely unchanged from Panel A, with lower R&D expenditure and dividend payouts but higher level of leverage. Once again, we do not find a statistically meaningful difference in corporate fraud between the two groups. When we re-run these univariate tests for the case of ex-military outside directors in Panel C, the results are once again broadly similar to Panels A and B.

However, given the obvious shortcomings of univariate tests, which fail to take into account various firm- and board-level characteristics, we need to engage in a more rigorous multivariate analysis that control for these factors.

4.2. Multivariate analysis

4.2.1. *Corporate policies and firm valuation*

In this subsection, we perform multivariate regressions, drawing insights from the previous literature (Benmelech and Frydman, 2015; Lee, Lee and Nagarajan 2014). In addition to the firm-, CEO- and board-level controls, we also include year and industry fixed effects in all specifications. As is common

⁹ Although separating military CEOs from inside directors may also be a useful exercise, the sample size of military CEOs is too small, and thus we focus on the distinction between inside vs. outside directors throughout the analysis.

in the recent literature on corporate finance, all explanatory variables are lagged by one term and the standard errors are clustered at firm level, making our final sample 17,323 firm-year observations.

Table 4 presents our main results. Panel A presents the results for the broad definition of military board. Corporate boards with an ex-military director appears to opt for lower dividend payouts, with statistical significance at the 10% level. However, we do not find a significant relation between the military board variable and other corporate variables. Thus, examining ex-military directors without regards to their position in the boardroom does not appear to yield a clear picture on their managerial traits. It is worth noting that the signs on the controls are in line with the previous studies, with the significantly positive impact of *Tobin's Q* and *Cash Flows* on firm investment (e.g., Fazzari, Hubbard and Petersen, 1988). Furthermore, as in the existing literature on CEO age, we find it to be negatively related to firm investment, along with the *Board Age* variable.

TABLE 4 HERE

Then, to test our first hypothesis, we separately consider the presence of ex-military CEOs or inside directors and ex-military outside directors separately in Panels B and C. Panel B indicates that a firm with an ex-military CEO or inside director on the board tends to spend less on R&D, with statistical significance at the 5% level. It also pays out less in dividends and has lower export revenue, both of which are statistically significant at the 10%, indicating that, on the whole, such firms are managed in a more conservative manner. Nevertheless, since only three variables display statistical significance, with two of them only marginally, the observed relation between the presence of ex-military CEOs and inside directors and corporate policies ought to be treated with caution. As for the ex-military outside directors in Panel C, their presence does not exert significant influence on any corporate variable, supporting our hypothesis that the position of the ex-military board director do matters.

4.2.2. Likelihood of corporate fraud

We now consider the impact of military values on the ethical behavior of managers and directors. Given the incidental parameters problem associated with the use of probit or logit specifications, we run a linear probability model as in Benmelech and Frydman (2015).¹⁰ Table 5 presents our results.

TABLE 5 HERE

¹⁰ In any case, our qualitative results hold when we run probit regressions instead, with *Military CEO/Inside Director* significant at around 5% level but *Military Outside Director* displaying a lack of significance.

In column (1), the coefficient on *Military Board* is -0.0105, with statistical significance at the 5% level. The coefficient on *Military CEO/Inside Director* is even more significantly negative, with the point estimate of -0.0134 and significance at the 1% level. Given that corporate frauds are relatively rare occurrences to begin with, these estimates suggest that the presence of ex-military CEO or inside director can have a substantial impact on the firm's managerial ethics. In contrast, the coefficient on *Military Outside Director* is negative but insignificant, once again supporting our hypothesis that the position of ex-military board directors matters in affecting the ethical behavior of their firms.¹¹ Putting together, these results suggest that a firm with ex-military managers or inside directors is less likely to engage in unethical activities due to their unwillingness to accept corporate behavior contrary to their personal values acquired during their military career, supporting our integrity hypothesis.

4.3. Matching-firm analysis

Even though we employ various firm-level controls in our multivariate analysis, it remains the case that our results may be driven by some of the unobserved firm-level heterogeneity. Thus, following the methodology of Rosenbaum and Rubin (1983), we engage in propensity score matching to enable a closer comparison between firms sharing similar characteristics in all respects except for the presence of ex-military directors on the board. We thus identify for each firm-year observation with an ex-military director a matching “control” firm-year observation that share similar firm, CEO and board characteristics. Using firm size and all CEO and board characteristic variables in the earlier regressions, along with the two-digit SIC industry code and year as additional matching criteria, we engage in nearest neighbor matching.¹²

We define *Military Board_Treatment* as a dummy variable equal to one if a firm in the given year has an ex-military director on the board, and zero if a firm is the matching firm without ex-military

¹¹ For robustness, we run regressions on a more stringent measure of corporate fraud, including only the instances where the firm was found to manipulate the accounting figures. Our results are qualitatively very similar and thus we omit the results for the brevity of exposition from the main paper.

¹² In untabulated analysis, we find that larger firms or firms with large board size have greater probability of selecting an ex-military director, and in some specifications, a greater propensity to include an ex-military director is observed when either the CEO or the board members are old in age, broadly in line with casual expectations regarding firms with military directors in Korean context.

director with the closest propensity score. *Military CEO/Inside Director_Treatment* and *Military Outside Director_Treatment* variables are constructed in a similar manner.

TABLE 6 HERE

The results of propensity score matching analysis are reported in Table 6. In columns (5), (6), and (9) of Panel A, the coefficients on *Military Board_Treatment* are significantly negative with respect to dividend payouts, return on assets, and fraud, suggesting that a firm with ex-military board members tend to be run more conservatively and are less likely to commit corporate fraud. From columns (2), (7), and (9) of Panel B, it is also apparent that a firm with an ex-military CEO or insider director on the board has less R&D expenditure, lower Tobin's Q, and a lower likelihood of fraud compared to its matched pair. However, in Panel C, we do not find any statistically significant difference in corporate outcomes between a firm with an ex-military outside board director and its matching firm. Thus, in short, our main results remain unchanged even when a more rigorous matching-firm analysis is employed.

4.4 Two-stage least squares (2SLS) estimation

We also run two-stage regressions with an instrumental variable to address the endogeneity concern, namely that an unobserved heterogeneity may be driving both the presence of ex-military directors on the board and the firm's corporate outcomes or ethical behavior. In particular, applying to become an officer is not a random choice, and our results may thus be driven by other unobserved traits of these ex-officers that self-select into the professional military. However, unlike in previous studies in the field of labor economics that use Vietnam War lotteries or other random selection methods into military service (e.g., Angrist, 1990), we do not have a clean instrument. Therefore, we stress that the results of our 2SLS estimation are indicative at best and ought to be treated with caution and care.

Given that South Korea was under full military rule until 1987, joining the military as a professional officer during these years could offer more opportunities for a successful career. As such, it would be reasonable to expect that the likelihood of joining the officer training program would have been higher before 1987.¹³ Under this line of reasoning, a person who was eligible for the university entrance exam at 18 years of age before 1987 (i.e, the person born before 1969) was more likely to enter into

¹³ There are other arrangements during these years that contributed to the popularity of enrolment into officer training programs, such as *Yusin Samugwan* system that allowed officers to serve for ten years upon commission then transfer to civilian government departments as mid-ranking civil servants upon their honorable discharge between 1978 and 1987.

military service. We thus use *Majority Board Before 1969*, a dummy variable that takes the value of one if the percentage of board members born prior to 1969 is greater than 50%, as our main instrument variable. For the case of full *Military Board* regressions, the first-stage *F*-statistic is close to the rule-of-thumb value of 10 suggested by Stock and Yogo (2005).

TABLE 7 HERE

The 2SLS estimation procedure leads to some qualitative changes in our results. In Panel A, *Military Board* is now positively related to dividend payouts. Panel B also reports the same result is obtained for the case of *Military CEO/Inside Director*. In addition, the previously found statistical relationship between the presence of ex-military CEOs and inside directors on the likelihood of corporate fraud also disappear. However, it is also worth noting that the *F*-statistic for the first-stage regressions with *Military CEO/Inside Director* are only around 6.

The inconsistency between our baseline findings and the 2SLS regression results may arise due to the weak instrument problem. Given that the promotion structure of most firms in South Korea still retains an emphasis on seniority and tenure, with a slow pace of transition toward merit-based system, a large majority of firms in our sample has old-aged directors. As a result, although our choice of the instrumental variable has an intuitive appeal, its lack of variation makes it a weak instrument.

4.5. Further analysis

In this section, we present our results for a number of additional analyses. First, in order to test our hybrid hypothesis on the firms' risk-taking behavior, namely that ex-veterans and military personnel exposed to traumatic experiences would exhibit dormant or even conservative behavior during normal times but aggressive risk taking propensities would resurface when they are reminded by a similarly stressful situation (Elder and Clipp, 1989; Kilgore et al., 2008; Wansink, Payne and Ittersum, 2008), we focus on the behavior of these ex-military managers and directors during one of the most stressful managerial situations of modern times, namely the global financial crisis.

TABLE 8 HERE

TABLE 9 HERE

When we re-estimate Tables 4 and 5 for the subsample period between 2007 and 2009 in Tables 8 and 9, an interesting picture emerges. Although the presence of ex-military managers and directors has little implications on firm valuation as measured by Tobin's *Q* during this period, as is apparent from

Table 8, Table 9 reveals that the presence of an ex-military CEO or inside director is associated with a sizeable increase in both book and market leverage variables, with strong statistical significance. This supports our hybrid hypothesis (H2c), namely that, although firms with ex-military managers and inside directors tend to exhibit little difference in leverage choice during normal times compared to their non-military counterpart, in some instances pursuing even more conservative strategies such as lower R&D expenditure and dividend payouts, it is during periods of high stress that the risk taking propensity of these managers and directors re-emerge. However, given that our sample of the ex-military board directors is already small to begin with, interpreting the results ought to be treated with caution over a window as short as three years.

Second, given our focus on the ex-military directors' monitoring, it is worth exploring whether their presence has an effect on a subset of Korean firms consistently identified in the previous literature for poor governance, namely *Chaebol* firms. They are characterized by highly concentrated ownership structure (e.g. Shin and Park, 1999; Song, Mantecon, and Altintig, 2012; Joe and Oh, 2016), and as a result, the role of military directors within *Chaebols* may be somewhat limited when compared to *Non-Chaebols*, given the dominating influence of controlling shareholders on the professional management and the directors. Thus, in Table 10, we re-run regressions with the interaction terms between the military board variables and the *Chaebol* dummy. In particular, we focus on whether the presence of an ex-military CEO or director has an influence on the firms' managerial ethics.

TABLE 10 HERE

When we consider the military board as a whole, it appears the positive value of ex-military board director on the firm's managerial ethics is limited to *Non-Chaebol* firms. Whereas the coefficient on *Military Board* is significantly negative, revealing the positive ethical implication of ex-military board directors among *Non-Chaebol* firms, the difference between the coefficients on *Chaebol* dummy and the interaction dummy is not significant, indicating that the presence of an ex-military board director is insufficient in improving the managerial ethics within *Chaebol* firms.

However, a more interesting picture emerges when we limit our attention to ex-military CEOs and inside directors. Curiously, it appears that their presence has a stronger impact on the managerial ethics of *Chaebol* firms, not the other way round; while the coefficient on *Military CEO/Inside Director* is insignificant, the difference between the coefficients on *Chaebol* and the interaction dummies are not only sizeable in economic magnitude but also statistically significant at the 5% level. While *Chaebol* firms are more likely to commit corporate fraud by around 1.7 percentage points, the presence of an ex-military CEO or inside director reduces the likelihood by 3.6 percentage points on average. Even

though we are cautious of interpreting this result given the small sample size, it nevertheless suggests the presence of an ex-military inside director on the board of a *Chaebol* firm may be a plausible way of improving its managerial ethics and improve upon the strength of its internal governance.

TABLE 11 HERE

Third, we also examine the possibility that, at least in certain defense-related industries, even the CEOs and inside directors may be appointed by the firm with the primary purpose of strengthening its network with the decision-makers within the military. If so, the effect of their presence on managerial ethics may be weaker among defense-related firms if their primary purpose for appointment is not their character, personal values and aptitude but their ability to foster closer connections. In Table 11, we find that this is indeed the case. While the positive ethical effect of the presence of ex-military CEOs and inside directors are evident from the significantly negative coefficient on *Military CEO/Inside Director* obtained in column (9), the difference between the *Defense Firm* and interaction dummies is insignificant, indicating that their presence has little implication for the firm's managerial ethics among defense-related firms.

5. Conclusion

Drawing on from the recent literature on the managerial traits of ex-military CEOs, this paper examines whether Korean firms with an ex-military director on the corporate board exhibits different corporate policies from directors without a military career. Our empirical analysis reveals a number of interesting stylized findings. First, the presence of ex-military outside directors has little influence on the firms' corporate outcomes and the likelihood of corporate fraud, which we attribute to the fact that the primary purpose for the appointment of these directors is to strengthen the firms' external networks. The lack of statistical significance for the presence of ex-military CEOs and inside directors on the likelihood of corporate fraud among defense-related firms further suggests that the positive ethical implications of military values only materializes as a firm's ethical behavior when ex-military directors are appointed for their personal character and aptitude rather than their connections. Second, although firms with ex-military CEOs or inside directors tend to opt for more conservative managerial approach in normal times, with lower R&D expenditure and smaller dividend payouts, these firms are also found to substantially increase the level of leverage during the global financial crisis, suggesting that those with potentially traumatic frontline experience may indeed exhibit greater risk taking propensity, albeit only limited to periods of great distress.

Most importantly, we find that the presence of ex-military CEOs and inside directors also leads to a substantially lower likelihood of corporate fraud. This suggests that the exposure to military values with consistent emphasis on honor positively affects a person's subsequent managerial integrity. Even in a society where being associated with the military opened up more opportunities for favors and gains during a quarter-century of military rule, the positive ethical value of military experience appears to be still relevant for the managers and directors, particularly within *Chaebol* firms. Thus, even in a corporate environment as different from the U.S. as in Korea, when these ex-military directors are chosen for their character and given appropriate opportunities to manage or monitor corporate activities, their presence could lead to improved ethical behavior within the firms they oversee. In this respect, these directors do indeed appear to be men of honor within the corporate boardroom; after all, in the words of Lt. Daniel Kaffee in the critically acclaimed film *A Few Good Men* (1992), "you don't need to wear a patch on your arm to have honor."

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Appendix: Variable Definitions

Variable	Definition
Military Board Variables:	
<i>Military Board</i>	An indicator variable equal to one if a firm in the given year has at least one ex-military director on the board, and zero otherwise.
<i>Military CEO/Inside Director</i>	An indicator variable equal to one if a firm in the given year has at least one ex-military CEO or inside director on the board, and zero otherwise.
<i>Military Outside Director</i>	An indicator variable equal to one if a firm in the given year has at least one or more ex-military outside directors on the board but no ex-military CEO or inside director, and zero otherwise.
Corporate Outcome Variables:	
<i>Investment</i>	Capital expenditure divided by total assets.
<i>R&D</i>	The ratio of R&D expenditure to total assets.
<i>Book Leverage</i>	The sum of total current liabilities and long-term liabilities, divided by total assets.
<i>Market Leverage</i>	The sum of total current liabilities and long-term liabilities, divided by the market value of assets.
<i>Dividend Payouts</i>	The ratio of total dividends paid to total assets.
<i>Return on Assets</i>	The ratio of EBITDA to total assets.
<i>Tobin's Q</i>	Total assets plus the market value of equity minus the book value of equity, divided by total assets.
<i>Export</i>	The ratio of export revenues to total assets.
<i>Fraud</i>	An indicator variable equal to one if a firm in the given year is identified to have committed the fraud and zero otherwise.
Firm, CEO, and Board Characteristics:	
<i>Firm Size</i>	The natural logarithm of total assets.
<i>Cash Flows</i>	Net income plus depreciation and amortization, divided by total assets.
<i>CEO Ownership</i>	Percentage of shares held by CEO.
<i>Majority Outside Director</i>	An indicator variable equal to one if the proportion of outsider directors on the board is greater than 50% and zero otherwise.
<i>Board Size</i>	The total number of directors on the board.
<i>CEO Age</i>	The age of the CEO.
<i>Board Age</i>	The average age of board directors excluding directors with ex-military experience.
Propensity Score Matching Variables:	
<i>Military Board_Treatment</i>	An indicator variable equal to one if a firm in the given year has ex-military individuals on the board, and zero if a firm is the matching firm that has the closest propensity score from the firm in the question.
<i>Military CEO/Inside Director_Treatment</i>	An indicator variable equal to one if a firm in the given year has ex-military CEOs or inside directors on the board, and zero if a firm is the matching firm that has the closest propensity score from the firm in the question.
<i>Military Outside Director_Treatment</i>	An indicator variable equal to one if a firm in the given year has ex-military outside directors on the board, and zero if a firm is the matching firm that has the closest propensity score from the firm in the question.

Instrumental Variable:

Majority Board Before 1969

An indicator variable that takes the value of one if the percentage of board members born prior to 1969 is greater than 50% and zero otherwise.

Additional Variables:

Chaebol

An indicator variable that takes the value of one if a firm in the given year is classified as *Chaebol* by the KFTC and zero otherwise.

Defense Firm

An indicator variable that takes the value of one if a firm in given year is identified as the defense firm by the KDIA and zero otherwise.

Table 1. Sample Distribution

This table presents the distribution of 19,204 firm-year observations by fiscal year, as well as the distribution of all director-year observations of ex-military directors by military branch and position held.

Panel A: Observations by Year		
	Number	Percentage
1998	385	2.00
1999	577	3.00
2000	674	3.51
2001	759	3.95
2002	915	4.76
2003	981	5.11
2004	1,041	5.42
2005	1,116	5.81
2006	1,173	6.11
2007	1,253	6.52
2008	1,290	6.72
2009	1,352	7.04
2010	1,432	7.46
2011	1,504	7.83
2012	1,539	8.01
2013	1,587	8.26
2014	1,626	8.47
Total	19,204	100.00

Panel B: Military Board		
	Director-Year Observations	Firm-Year Observations
	Number	Number
<i><u>Military Branch</u></i>		
Army	463	415
Navy	140	125
Air Force	63	63
Total	666	580
<i><u>Composition</u></i>		
CEO	92	91
Inside Director	223	207
Outside Director	220	204
Inside Auditor	124	124
Outside Auditor	1	1
Advisor	6	6
Total	666	580

Table 2. Summary Statistics

This table presents descriptive statistics for the variables used in our analysis. Panel A presents 25th percentile, medians, means, 75th percentile, standard deviation, and number of observations of military board. Panel B reports distributional statistics of firm-, CEO-, and board-level characteristics. For the detailed definition of each variable, please refer to the Appendix. The sample includes 19,224 firm-year observations over the period of 1998-2014.

Panel A: Military Board						
Variables	25 th percentile	Median	Mean	75 th percentile	SD	N
<i>Military Board</i>	0.0000	0.0000	0.0302	0.0000	0.1711	19,204
<i>Military CEO</i>	0.0000	0.0000	0.0047	0.0000	0.0687	19,204
<i>Military Inside Director</i>	0.0000	0.0000	0.0108	0.0000	0.1033	19,204
<i>Military CEO/Inside Director</i>	0.0000	0.0000	0.0144	0.0000	0.1192	19,204
<i>Military Outside Director</i>	0.0000	0.0000	0.0098	0.0000	0.0987	19,204
Panel B: Firm, CEO, and Board Characteristics						
Variables	25 th percentile	Median	Mean	75 th percentile	SD	N
<i>Investment</i>	0.0000	0.0238	0.0610	0.0864	0.0886	19,204
<i>R&D</i>	0.0000	0.0011	0.0112	0.0127	0.0208	19,204
<i>Book Leverage</i>	0.2572	0.4167	0.4168	0.5642	0.2005	19,204
<i>Market Leverage</i>	0.2306	0.4262	0.4364	0.6290	0.2426	19,204
<i>Dividend Payouts</i>	0.0000	0.0047	0.0082	0.0123	0.0107	19,204
<i>Return on Assets</i>	0.0414	0.0896	0.0910	0.1441	0.0924	19,204
<i>Tobin's Q</i>	0.7579	0.9510	1.1578	1.2932	0.6962	19,204
<i>Export</i>	0.0000	0.0000	0.1622	0.1940	0.3070	19,204
<i>Fraud</i>	0.0000	0.0000	0.0094	0.0000	0.0964	19,204
<i>Total Assets (in thousands KRW)</i>	51,388,844	102,616,267	565,335,921	264,992,347	1,786,739,657	19,204
<i>Cash Flows</i>	0.0066	0.0392	0.0243	0.0799	0.1118	19,204
<i>CEO Ownership</i>	0.0001	0.0574	0.1067	0.1773	0.1292	19,204
<i>Majority Outside Director</i>	0.0000	0.0000	0.0493	0.0000	0.2165	19,204
<i>Board Size</i>	5.0000	6.0000	6.5192	8.0000	2.2164	19,204
<i>CEO Age</i>	49.0000	54.5000	53.9597	59.0000	7.8729	19,204
<i>Board Age</i>	50.0000	54.2000	53.7523	57.9091	6.0407	19,204

Table 3. Univariate Tests

This table reports univariate mean and median comparison tests of firm outcomes between two groups. The sample is split into two subsamples according to whether the board includes ex-military directors or not. *t*-tests are performed for the difference-in-mean tests and Wilcoxon-Mann-Whitney tests are conducted for the difference-in-median tests. Significance at the 10%, 5%, and 1% levels are indicated by *, **, and ***, respectively.

Panel A: Military Board								
Variables	Military Board (Obs. = 580)		Nonmilitary Board (Obs. = 18,624)		Difference			
	Mean	Median	Mean	Median	Mean	<i>t</i> -stat	Median	<i>z</i> -stat
<i>Investment</i>	0.0606	0.0247	0.0611	0.0237	-0.0005	-0.14	0.0010	0.15
<i>R&D</i>	0.0079	0.0002	0.0113	0.0011	-0.0034	-4.41***	-0.0009	-4.66***
<i>Book Leverage</i>	0.4695	0.4753	0.4152	0.4144	0.0543	6.60***	0.0609	6.44***
<i>Market Leverage</i>	0.5049	0.5319	0.4343	0.4234	0.0706	6.84***	0.1085	6.83***
<i>Dividend Payouts</i>	0.0070	0.0039	0.0082	0.0047	-0.0012	-2.81***	-0.0008	-2.16**
<i>Return on Assets</i>	0.0890	0.0797	0.0910	0.0900	-0.0020	-0.54	-0.0103	-1.36
<i>Tobin's Q</i>	1.1122	0.8928	1.1592	0.9529	-0.0470	-1.60	-0.0901	-2.99***
<i>Export</i>	0.1783	0.0130	0.1617	0.0000	0.0166	1.47	-0.0036	3.36***
<i>Fraud</i>	0.0121	0.0000	0.0093	0.0000	0.0028	0.61	0.0000	0.68
<i>Firm Size</i>	19.2706	18.9087	18.6973	18.4330	0.5733	8.26***	0.4757	8.38***
<i>Cash Flows</i>	0.0233	0.0338	0.0243	0.0394	-0.0010	-0.22	-0.0056	-1.58
<i>CEO Ownership</i>	0.0880	0.0337	0.1073	0.0579	-0.0193	-3.70***	-0.0242	-3.98***
<i>Majority Outside Director</i>	0.0828	0.0000	0.0483	0.0000	0.0345	2.98***	0.0000	3.78***
<i>Board Size</i>	7.7466	7.0000	6.4809	6.0000	1.2656	10.74***	1.0000	11.29***
<i>CEO Age</i>	55.4963	56.0000	53.9119	54.5000	1.5844	5.10***	1.5000	5.12***
<i>Board Age</i>	54.5601	55.0000	53.7271	54.1667	0.8330	3.73***	0.8333	3.43***

Panel B: Military CEO or Inside Director								
Variables	Military CEO/Inside Director (Obs. = 277)		Nonmilitary CEO/Inside Director (Obs. = 18,927)		Difference			
	Mean	Median	Mean	Median	Mean	<i>t</i> -stat	Median	<i>z</i> -stat
<i>Investment</i>	0.0604	0.0221	0.0611	0.0238	-0.0007	-0.11	-0.0017	-0.62
<i>R&D</i>	0.0057	0.0001	0.0112	0.0011	-0.0055	-8.20***	-0.0010	-3.94***
<i>Book Leverage</i>	0.4834	0.4797	0.4158	0.4155	0.0676	6.11***	0.0642	5.41***
<i>Market Leverage</i>	0.5362	0.5549	0.4350	0.4246	0.1012	7.17***	0.1303	6.84***

<i>Dividend Payouts</i>	0.0070	0.0038	0.0082	0.0047	-0.0012	-1.89*	-0.0009	-1.49
<i>Return on Assets</i>	0.0902	0.0860	0.0910	0.0897	-0.0008	-0.16	-0.0037	-0.39
<i>Tobin's Q</i>	1.0334	0.8903	1.1596	0.9522	-0.1262	-4.14***	-0.0619	-2.56**
<i>Export</i>	0.1683	0.0129	0.1622	0.0000	0.0061	0.40	0.0129	1.89*
<i>Fraud</i>	0.0108	0.0000	0.0094	0.0000	0.0014	0.24	0.0000	0.15
<i>Firm Size</i>	19.1930	18.7669	18.7076	18.4433	0.4854	4.77***	0.3236	4.41***
<i>Cash Flows</i>	0.0206	0.0323	0.0243	0.0393	-0.0037	-0.61	-0.0070	-1.70*
<i>CEO Ownership</i>	0.0815	0.0088	0.1071	0.0580	-0.0256	-3.40***	-0.0492	-3.76***
<i>Majority Outside Director</i>	0.0650	0.0000	0.0491	0.0000	0.0159	1.07	0.0000	1.21
<i>Board Size</i>	7.8339	7.0000	6.4999	6.0000	1.3340	8.00***	1.0000	8.51***
<i>CEO Age</i>	55.1315	56.0000	53.9426	54.5000	1.1889	2.67***	1.5000	2.67***
<i>Board Age</i>	54.5635	54.8333	53.7391	54.2000	0.9144	2.90***	0.6333	2.63***

Panel C: Military Outside Director

Variables	Military Outside Director (Obs. = 189)		Nonmilitary Outside Director (Obs. = 19,015)		Difference			
	Mean	Median	Mean	Median	Mean	t-stat	Median	z-stat
<i>Investment</i>	0.0611	0.0300	0.0610	0.0237	0.0001	0.02	0.0063	1.02
<i>R&D</i>	0.0072	0.0003	0.0112	0.0011	-0.0040	-3.07***	-0.0008	-3.13***
<i>Book Leverage</i>	0.4657	0.5036	0.4163	0.4161	0.0494	3.02***	0.0875	3.54***
<i>Market Leverage</i>	0.4880	0.5009	0.4359	0.4258	0.0521	2.69***	0.0751	2.75***
<i>Dividend Payouts</i>	0.0077	0.0042	0.0082	0.0047	-0.0005	-0.56	-0.0005	-0.21
<i>Return on Assets</i>	0.0959	0.0815	0.0909	0.0897	0.0050	0.79	-0.0082	-0.29
<i>Tobin's Q</i>	1.1546	0.8788	1.1578	0.9516	-0.0032	-0.05	-0.0728	-2.25**
<i>Export</i>	0.1887	0.0000	0.1620	0.0000	0.0267	1.34	0.0000	1.62
<i>Fraud</i>	0.0106	0.0000	0.0094	0.0000	0.0012	0.16	0.0000	0.17
<i>Firm Size</i>	19.5984	19.1331	18.7058	18.4403	0.8926	7.31***	0.6928	7.61***
<i>Cash Flows</i>	0.0415	0.0363	0.0241	0.0393	0.0174	3.05***	-0.0030	-0.36
<i>CEO Ownership</i>	0.0692	0.0669	0.1071	0.0574	-0.0379	-6.04***	0.0095	3.01***
<i>Majority Outside Director</i>	0.1534	0.0000	0.0483	0.0000	0.1051	3.99***	0.0000	6.64***
<i>Board Size</i>	7.9524	7.0000	6.5049	6.0000	1.4475	7.31***	1.0000	8.07***
<i>CEO Age</i>	56.8489	57.3333	53.9310	54.5000	2.9179	5.87***	2.8333	5.82***
<i>Board Age</i>	56.2825	56.2222	53.7271	54.1667	2.5554	8.46***	2.0555	6.13***

Table 4. Effect of Military Board on Corporate Outcomes

This table presents the results of regressions of various corporate outcomes on the presence of ex-military directors and other controls. *Military Board* is an indicator variable equal to one if a firm in the given year has ex-military individuals on the board, and zero otherwise. *Military CEO/Inside Director* is an indicator variable equal to one if a firm in the given year has ex-military CEOs or inside directors on the board, and zero otherwise. *Military Outside Director* is an indicator variable equal to one if a firm in the given year has only ex-military outside directors on the board, and zero otherwise. All other variable definitions in the Appendix. All independent variables are lagged by one year, and all regressions include year and industry fixed effects. Standard errors are clustered at the firm level. *t*-statistics are in parentheses. Significance at the 10%, 5%, and 1% levels are indicated by *, **, and ***, respectively.

Panel A: Military Board								
	<i>Investment</i>	<i>R&D</i>	<i>Book Leverage</i>	<i>Market Leverage</i>	<i>Dividend Payouts</i>	<i>Return on Assets</i>	<i>Tobin's Q</i>	<i>Export</i>
Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Military Board</i>	0.0050 (1.37)	-0.0007 (-0.35)	0.0158 (0.83)	0.0135 (0.71)	-0.0010* (-1.65)	-0.0105* (-1.66)	0.0204 (0.40)	-0.0201 (-1.18)
<i>Firm Size</i>	-0.0047*** (-6.26)	-0.0003 (-0.85)	0.0280*** (7.27)	0.0314*** (7.93)	-0.0001 (-0.82)	0.0155*** (11.22)	-0.0097 (-0.80)	0.0259*** (5.56)
<i>Tobin's Q</i>	0.0224*** (16.00)	0.0047*** (8.09)	0.0065 (1.48)	-0.1020*** (-28.08)	0.0011*** (3.90)			
<i>Cash Flows</i>	0.0566*** (7.30)	0.0100*** (4.12)						
<i>Return on Assets</i>			-0.2374*** (-7.33)	-0.2717*** (-9.22)	0.0413*** (23.96)			
<i>Book Leverage</i>					-0.0158*** (-19.14)			
<i>CEO Ownership</i>	0.0005 (0.08)	0.0067*** (2.60)	-0.1016*** (-3.56)	-0.0818*** (-3.02)	-0.0001 (-0.05)	0.0640*** (6.09)	-0.0978 (-1.23)	-0.0335 (-1.02)
<i>Majority Outside Director</i>	0.0079** (2.55)	0.0055*** (3.71)	0.0116 (0.79)	-0.0352** (-2.37)	-0.0000 (-0.06)	-0.0189*** (-3.69)	0.1525*** (3.70)	-0.0213 (-1.42)
<i>Board Size</i>	0.0005 (1.24)	0.0002 (1.09)	-0.0044** (-2.57)	-0.0042** (-2.41)	0.0002** (2.49)	-0.0011* (-1.76)	0.0126*** (2.81)	-0.0045** (-2.17)
<i>CEO Age</i>	-0.0004*** (-3.40)	-0.0001* (-1.83)	0.0001 (0.15)	0.0001 (0.28)	0.0001*** (5.15)	0.0007*** (3.63)	-0.0018 (-1.40)	0.0007 (1.12)
<i>Board Age</i>	-0.0007*** (-4.22)	-0.0003*** (-4.22)	-0.0007 (-0.90)	0.0015** (1.96)	0.0001*** (3.97)	0.0009*** (2.96)	-0.0200*** (-9.96)	0.0022** (2.43)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Number of obs.	17,323	17,323	17,323	17,323	17,323	17,323	17,323	17,323
Adjusted R^2	0.082	0.220	0.165	0.405	0.347	0.151	0.208	0.275
Panel B: Military CEO or Inside Director								
	<i>Investment</i>	<i>R&D</i>	<i>Book Leverage</i>	<i>Market Leverage</i>	<i>Dividend Payouts</i>	<i>Return on Assets</i>	<i>Tobin's Q</i>	<i>Export</i>
Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Military CEO/Inside Director</i>	0.0067 (1.30)	-0.0022** (-2.03)	0.0242 (1.26)	0.0251 (1.36)	-0.0013* (-1.74)	-0.0079 (-0.92)	-0.0382 (-0.75)	-0.0356* (-1.73)
<i>Firm Size</i>	-0.0047*** (-6.24)	-0.0003 (-0.84)	0.0281*** (7.28)	0.0314*** (7.93)	-0.0001 (-0.84)	0.0154*** (11.16)	-0.0096 (-0.79)	0.0258*** (5.55)
<i>Tobin's Q</i>	0.0224*** (16.04)	0.0047*** (8.08)	0.0066 (1.50)	-0.1019*** (-28.09)	0.0011*** (3.88)			
<i>Cash Flows</i>	0.0566*** (7.30)	0.0100*** (4.11)						
<i>Return on Assets</i>			-0.2379*** (-7.34)	-0.2720*** (-9.22)	0.0413*** (24.01)			
<i>Book Leverage</i>					-0.0158*** (-19.11)			
<i>CEO Ownership</i>	0.0005 (0.09)	0.0067*** (2.59)	-0.1013*** (-3.56)	-0.0816*** (-3.01)	-0.0001 (-0.07)	0.0639*** (6.07)	-0.0975 (-1.23)	-0.0337 (-1.02)
<i>Majority Outside Director</i>	0.0079** (2.55)	0.0055*** (3.71)	0.0115 (0.79)	-0.0352** (-2.37)	-0.0000 (-0.06)	-0.0189*** (-3.68)	0.1523*** (3.70)	-0.0213 (-1.42)
<i>Board Size</i>	0.0005 (1.26)	0.0002 (1.13)	-0.0044** (-2.56)	-0.0042** (-2.41)	0.0002** (2.47)	-0.0011* (-1.83)	0.0128*** (2.86)	-0.0045** (-2.17)
<i>CEO Age</i>	-0.0004*** (-3.38)	-0.0001* (-1.84)	0.0001 (0.17)	0.0001 (0.29)	0.0001*** (5.14)	0.0007*** (3.60)	-0.0018 (-1.39)	0.0007 (1.11)
<i>Board Age</i>	-0.0007*** (-4.23)	-0.0003*** (-4.21)	-0.0007 (-0.91)	0.0015* (1.95)	0.0001*** (3.98)	0.0009*** (2.98)	-0.0200*** (-9.97)	0.0023** (2.44)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of obs.	17,323	17,323	17,323	17,323	17,323	17,323	17,323	17,323
Adjusted R^2	0.082	0.220	0.165	0.405	0.347	0.151	0.208	0.275

Panel C: Military Outside Director

	<i>Investment</i>	<i>R&D</i>	<i>Book Leverage</i>	<i>Market Leverage</i>	<i>Dividend Payouts</i>	<i>Return on Assets</i>	<i>Tobin's Q</i>	<i>Export</i>
Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Military Outside Director</i>	0.0083 (1.22)	-0.0025 (-0.93)	0.0065 (0.15)	0.0088 (0.21)	-0.0003 (-0.23)	-0.0063 (-0.55)	0.0505 (0.44)	-0.0156 (-0.61)
<i>Firm Size</i>	-0.0047*** (-6.25)	-0.0003 (-0.84)	0.0281*** (7.29)	0.0314*** (7.95)	-0.0001 (-0.85)	0.0154*** (11.17)	-0.0097 (-0.80)	0.0258*** (5.55)
<i>Tobin's Q</i>	0.0224*** (15.99)	0.0047*** (8.09)	0.0066 (1.48)	-0.1019*** (-28.03)	0.0011*** (3.90)			
<i>Cash Flows</i>	0.0565*** (7.29)	0.0100*** (4.11)						
<i>Return on Assets</i>			-0.2382*** (-7.36)	-0.2723*** (-9.24)	0.0413*** (23.99)			
<i>Book Leverage</i>					-0.0158*** (-19.13)			
<i>CEO Ownership</i>	0.0006 (0.10)	0.0066*** (2.59)	-0.1012*** (-3.55)	-0.0815*** (-3.01)	-0.0001 (-0.07)	0.0638*** (6.07)	-0.0974 (-1.23)	-0.0338 (-1.03)
<i>Majority Outside Director</i>	0.0078** (2.52)	0.0055*** (3.72)	0.0114 (0.78)	-0.0353** (-2.37)	-0.0000 (-0.05)	-0.0188*** (-3.66)	0.1519*** (3.68)	-0.0211 (-1.40)
<i>Board Size</i>	0.0005 (1.26)	0.0002 (1.12)	-0.0043** (-2.53)	-0.0041** (-2.37)	0.0002** (2.41)	-0.0011* (-1.84)	0.0126*** (2.81)	-0.0046** (-2.21)
<i>CEO Age</i>	-0.0004*** (-3.38)	-0.0001* (-1.83)	0.0001 (0.17)	0.0001 (0.29)	0.0001*** (5.13)	0.0007*** (3.60)	-0.0018 (-1.40)	0.0007 (1.11)
<i>Board Age</i>	-0.0007*** (-4.24)	-0.0003*** (-4.20)	-0.0007 (-0.91)	0.0015* (1.95)	0.0001*** (3.98)	0.0009*** (2.98)	-0.0200*** (-9.98)	0.0023** (2.44)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of obs.	17,323	17,323	17,323	17,323	17,323	17,323	17,323	17,323
Adjusted R ²	0.082	0.220	0.164	0.405	0.346	0.151	0.208	0.275

Table 5. Effect of Military Board on Corporate Fraud

This table presents the results of regressions of the effect of military board on corporate fraud. *Fraud* is an indicator variable equal to one if a firm in given year is identified to have committed fraud, and zero otherwise. All variable definitions are provided in the Appendix. All independent variables are lagged by one year. All regressions include year and industry fixed effects. Standard errors are clustered at the firm level. *t*-statistics are in parentheses. Significance at the 10%, 5%, and 1% levels are indicated by *, **, and ***, respectively.

Variables	<i>Fraud</i>		
	(1)	(2)	(3)
<i>Military Board</i>	-0.0105** (-2.29)		
<i>Military CEO/Inside Director</i>		-0.0134*** (-2.81)	
<i>Military Outside Director</i>			-0.0015 (-0.13)
<i>Firm Size</i>	0.0037** (2.35)	0.0036** (2.33)	0.0036** (2.32)
<i>CEO Ownership</i>	-0.0033 (-0.47)	-0.0035 (-0.49)	-0.0035 (-0.49)
<i>Majority Outside Director</i>	0.0039 (0.34)	0.0039 (0.35)	0.0040 (0.35)
<i>Board Size</i>	0.0017** (2.44)	0.0017** (2.41)	0.0017** (2.37)
<i>CEO Age</i>	-0.0002 (-1.12)	-0.0002 (-1.15)	-0.0002 (-1.16)
<i>Board Age</i>	-0.0007*** (-2.72)	-0.0007*** (-2.70)	-0.0007*** (-2.69)
Year fixed effects	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes
Number of obs.	17,323	17,323	17,323
Adjusted R^2	0.021	0.021	0.021

Table 6. Effect of Military Board on Corporate Outcomes: Propensity Score Matching Analysis

This table reports the results of regressions using nearest neighbor propensity score matching procedure to examine the effects of military board on corporate outcomes. *Military Board_Treatment* is a dummy variable equal to one if a firm in the given year has ex-military individuals on the board, and zero if a firm is the matching firm with the closest propensity score. Each firm is matched based on a set of firm characteristics (*Firm Size, CEO Ownership, Majority Outside Director, Board Size, CEO Age, and Board Age*), industry, and year. *Military CEO/Inside Director_Treatment* is a dummy variable equal to one if a firm in the given year has ex-military CEOs or inside directors on the board, and zero if a firm is the matching firm. *Military Outside Director_Treatment* is a dummy variable equal to one if a firm in the given year has ex-military outside directors on the board, and zero if a firm is the matching firm. All other variable definitions are provided in the Appendix. All independent variables are lagged by one year. All regressions include year and industry fixed effects. Standard errors are clustered at the firm level. *t*-statistics are in parentheses. Significance at the 10%, 5%, and 1% levels are indicated by *, **, and ***, respectively.

Panel A: Military Board									
	<i>Investment</i>	<i>R&D</i>	<i>Book Leverage</i>	<i>Market Leverage</i>	<i>Dividend Payouts</i>	<i>Return on Assets</i>	<i>Tobin's Q</i>	<i>Export</i>	<i>Fraud</i>
Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Military Board_Treatment</i>	-0.0013 (-0.27)	0.0001 (0.04)	0.0127 (0.63)	0.0231 (1.15)	-0.0012* (-1.90)	-0.0152** (-2.24)	-0.0256 (-0.50)	-0.0114 (-0.58)	-0.0114* (-1.69)
<i>Firm Size</i>	-0.0083*** (-3.11)	0.0012 (0.99)	0.0300*** (3.88)	0.0225*** (2.76)	0.0002 (0.51)	0.0140*** (4.15)	0.0099 (0.41)	0.0294*** (3.66)	0.0096* (1.95)
<i>Tobin's Q</i>	0.0197*** (2.87)	0.0066*** (3.18)	0.0383** (2.33)	-0.0969*** (-6.87)	0.0002 (0.22)				
<i>Cash Flows</i>	0.1271*** (4.57)	-0.0084 (-0.83)							
<i>Return on Assets</i>			-0.2774*** (-3.11)	-0.3165*** (-3.39)	0.0447*** (10.62)				
<i>Book Leverage</i>					-0.0141*** (-7.47)				
<i>CEO Ownership</i>	0.0119 (0.48)	0.0139 (1.32)	-0.1357* (-1.88)	-0.1671** (-2.32)	0.0018 (0.52)	0.0590** (1.97)	0.4792* (1.79)	0.0459 (0.53)	0.0238 (0.87)
<i>Majority Outside Director</i>	0.0264*** (2.69)	0.0049 (1.51)	-0.0264 (-0.80)	-0.0512 (-1.39)	-0.0005 (-0.43)	-0.0187* (-1.67)	0.1103 (1.62)	0.0156 (0.33)	-0.0319** (-2.16)
<i>Board Size</i>	0.0020* (1.75)	-0.0003 (-0.75)	-0.0062* (-1.65)	-0.0045 (-1.12)	0.0001 (0.99)	0.0012 (0.79)	0.0041 (0.45)	-0.0020 (-0.45)	0.0045 (1.53)
<i>CEO Age</i>	-0.0011** (-2.30)	0.0000 (0.11)	-0.0026** (-2.22)	-0.0010 (-0.84)	0.0001* (1.67)	-0.0000 (-0.07)	-0.0025 (-0.80)	0.0013 (0.66)	-0.0014* (-1.88)
<i>Board Age</i>	0.0005 (0.66)	-0.0006*** (-3.44)	-0.0021 (-1.03)	0.0005 (0.24)	0.0001 (1.21)	0.0006 (0.67)	-0.0201*** (-4.48)	-0.0043 (-1.61)	-0.0030** (-2.55)

Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of obs.	1,042	1,042	1,042	1,042	1,042	1,042	1,042	1,042	1,042
Adjusted R^2	0.110	0.242	0.233	0.435	0.404	0.137	0.297	0.313	0.090

Panel B: Military CEO or Inside Director

	<i>Investment</i>	<i>R&D</i>	<i>Book Leverage</i>	<i>Market Leverage</i>	<i>Dividend Payouts</i>	<i>Return on Assets</i>	<i>Tobin's Q</i>	<i>Export</i>	<i>Fraud</i>
Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Military CEO/Inside Director_Treatment</i>	-0.0084 (-1.04)	-0.0028** (-2.05)	0.0281 (1.30)	0.0300 (1.51)	-0.0013 (-1.46)	-0.0048 (-0.47)	-0.1007* (-1.83)	-0.0409 (-1.60)	-0.0238** (-2.37)
<i>Firm Size</i>	-0.0097* (-1.87)	0.0022** (2.59)	0.0096 (0.83)	0.0193* (1.80)	-0.0006 (-1.40)	0.0152*** (3.63)	-0.0224 (-0.85)	0.0068 (0.50)	0.0161* (1.82)
<i>Tobin's Q</i>	0.0188** (2.02)	0.0044** (2.38)	0.0175 (0.70)	-0.1126*** (-7.29)	0.0007 (0.55)				
<i>Cash Flows</i>	0.0107 (0.16)	-0.0075 (-0.87)							
<i>Return on Assets</i>			-0.3468*** (-2.89)	-0.4892*** (-4.39)	0.0410*** (6.52)				
<i>Book Leverage</i>					-0.0126*** (-5.12)				
<i>CEO Ownership</i>	0.1081** (2.31)	0.0179* (1.78)	-0.2244** (-2.17)	-0.2357** (-2.51)	0.0112* (1.70)	0.0869* (1.72)	-0.1700 (-0.44)	-0.0548 (-0.35)	0.0626 (0.93)
<i>Majority Outside Director</i>	0.0205 (1.09)	-0.0008 (-0.34)	0.0492 (1.22)	-0.0004 (-0.01)	0.0035** (2.24)	0.0169 (0.82)	0.0608 (0.66)	-0.0273 (-0.35)	-0.0258 (-0.94)
<i>Board Size</i>	0.0045** (2.13)	-0.0002 (-0.56)	-0.0018 (-0.34)	-0.0060 (-1.21)	-0.0000 (-0.14)	-0.0036 (-1.59)	0.0175 (1.33)	-0.0031 (-0.44)	-0.0023 (-0.72)
<i>CEO Age</i>	-0.0013* (-1.66)	-0.0001 (-0.79)	-0.0010 (-0.67)	0.0011 (0.70)	0.0000 (0.39)	0.0006 (0.75)	0.0003 (0.08)	-0.0009 (-0.37)	0.0015 (1.32)
<i>Board Age</i>	0.0001 (0.11)	-0.0001 (-0.79)	-0.0005 (-0.20)	-0.0004 (-0.19)	0.0000 (0.04)	-0.0014 (-1.10)	-0.0020 (-0.27)	0.0012 (0.35)	-0.0026 (-1.53)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of obs.	476	476	476	476	476	476	476	476	476
Adjusted R^2	0.053	0.244	0.258	0.513	0.479	0.254	0.330	0.358	0.099

Panel C: Military Outside Director

	<i>Investment</i>	<i>R&D</i>	<i>Book Leverage</i>	<i>Market Leverage</i>	<i>Dividend Payouts</i>	<i>Return on Assets</i>	<i>Tobin's Q</i>	<i>Export</i>	<i>Fraud</i>
Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Military Outside Director_Treatment</i>	0.0096 (1.05)	-0.0011 (-0.33)	0.0227 (0.57)	0.0332 (0.84)	-0.0012 (-1.21)	-0.0095 (-0.84)	-0.1108 (-0.84)	-0.0084 (-0.25)	-0.0041 (-0.33)
<i>Firm Size</i>	-0.0038 (-1.10)	-0.0006 (-0.53)	0.0398*** (3.38)	0.0394*** (3.19)	-0.0001 (-0.22)	0.0062 (1.30)	-0.0644 (-1.22)	0.0125 (0.82)	0.0065 (1.18)
<i>Tobin's Q</i>	0.0224*** (2.87)	0.0076*** (2.75)	0.0528** (2.39)	-0.0756*** (-3.66)	0.0002 (0.11)				
<i>Cash Flows</i>	0.1123*** (2.69)	0.0153 (1.03)							
<i>Return on Assets</i>			-0.3911** (-2.30)	-0.4041** (-2.38)	0.0437*** (6.36)				
<i>Book Leverage</i>					-0.0174*** (-6.33)				
<i>CEO Ownership</i>	-0.1005* (-1.78)	0.0462*** (3.26)	-0.4561*** (-2.83)	-0.3074* (-1.69)	-0.0096 (-1.23)	0.0114 (0.17)	0.1932 (0.19)	0.0939 (0.46)	0.0306 (0.61)
<i>Majority Outside Director</i>	0.0081 (0.64)	0.0114** (2.20)	-0.0438 (-0.96)	-0.0220 (-0.43)	-0.0017 (-1.39)	0.0029 (0.18)	0.1533 (1.09)	0.0034 (0.08)	-0.0177 (-1.31)
<i>Board Size</i>	-0.0022 (-1.10)	0.0001 (0.20)	-0.0137** (-2.06)	-0.0174** (-2.44)	-0.0001 (-0.32)	-0.0007 (-0.31)	0.0159 (0.82)	-0.0028 (-0.43)	0.0031 (0.62)
<i>CEO Age</i>	0.0006 (0.70)	0.0003 (1.34)	-0.0038* (-1.79)	-0.0029 (-1.19)	-0.0002* (-1.71)	0.0002 (0.28)	-0.0018 (-0.26)	0.0000 (0.00)	-0.0013 (-1.28)
<i>Board Age</i>	-0.0007 (-0.62)	-0.0006 (-1.30)	-0.0023 (-0.65)	-0.0000 (-0.01)	0.0006*** (4.28)	0.0023 (1.61)	-0.0315** (-2.43)	0.0021 (0.46)	-0.0019 (-0.87)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of obs.	357	357	357	357	357	357	357	357	357
Adjusted R ²	0.149	0.264	0.290	0.426	0.632	0.187	0.242	0.333	0.103

Table 7. The Effect of Military Board on Corporate Outcomes: Two-Stage Least Squares (2SLS) Regression

This table re-estimates Tables 4 and 5 using the two-stage least squares regressions, with the variable *Majority Board Before 1969*, which takes the value of one if and only if the board has more than 50% of directors that are born before 1969, as an instrument for the military board variables. All other variable definitions are provided in the Appendix. All independent variables are lagged by one year. All regressions include year and industry fixed effects. Standard errors are clustered at the firm level. *t*-statistics are in parentheses. Significance at the 10%, 5%, and 1% levels are indicated by *, **, and ***, respectively.

Panel A: Military Board									
Dependent Variable	<i>Investment</i>	<i>R&D</i>	<i>Book Leverage</i>	<i>Market Leverage</i>	<i>Dividend Payouts</i>	<i>Return on Assets</i>	<i>Tobin's Q</i>	<i>Export</i>	<i>Fraud</i>
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
First Stage: <i>Majority Board Before 1969</i>	0.0189*** (3.22)	0.0189*** (3.22)	0.0186*** (3.17)	0.0186*** (3.17)	0.0185*** (3.17)	0.0184*** (3.15)	0.0184*** (3.15)	0.0184*** (3.15)	0.0184*** (3.15)
<i>Military Board</i>	-0.4092 (-1.41)	0.0999 (1.02)	1.0090 (1.14)	0.7990 (1.05)	0.0952** (2.26)	0.1630 (0.41)	-1.8861 (-0.60)	-2.1193** (-2.14)	-0.1745 (-0.47)
First Stage <i>F</i> -statistics	10.35	10.35	10.07	10.07	10.04	9.91	9.91	9.91	9.91
Control variables	Included	Included	Included	Included	Included	Included	Included	Included	Included
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of obs.	17,323	17,323	17,323	17,323	17,323	17,323	17,323	17,323	17,323
Panel B: Military CEO or Inside Director									
Variables	<i>Investment</i>	<i>R&D</i>	<i>Book Leverage</i>	<i>Market Leverage</i>	<i>Dividend Payouts</i>	<i>Return on Assets</i>	<i>Tobin's Q</i>	<i>Export</i>	<i>Fraud</i>
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
First Stage: <i>Majority Board Before 1969</i>	0.0100** (2.51)	0.0100** (2.51)	0.0100** (2.50)	0.0100** (2.50)	0.0099** (2.48)	0.0099** (2.49)	0.0099** (2.49)	0.0099** (2.49)	0.0099** (2.49)
<i>Military CEO/Inside Director</i>	-0.7719 (-1.34)	0.1885 (0.97)	1.8795 (1.09)	1.4883 (1.02)	0.1779** (1.99)	0.3536 (0.41)	-3.5129 (-0.60)	-2.9472* (-1.90)	-0.3250 (-0.47)
First Stage <i>F</i> -statistics	6.30	6.30	6.23	6.23	6.17	6.22	6.22	6.22	6.22
Control variables	Included	Included	Included	Included	Included	Included	Included	Included	Included
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of obs.	17,323	17,323	17,323	17,323	17,323	17,323	17,323	17,323	17,323

Panel C: Military Outside Director									
Variables	<i>Investment</i>	<i>R&D</i>	<i>Book Leverage</i>	<i>Market Leverage</i>	<i>Dividend Payouts</i>	<i>Return on Assets</i>	<i>Tobin's Q</i>	<i>Export</i>	<i>Fraud</i>
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
First Stage: <i>Majority Board Before 1969</i>	0.0035 (1.39)	0.0035 (1.39)	0.0036 (1.41)	0.0036 (1.41)	0.0036 (1.41)	0.0036 (1.38)	0.0036 (1.38)	0.0036 (1.38)	0.0036 (1.38)
<i>Military Outside Director</i>	-2.2287 (-1.06)	0.5441 (0.82)	5.2237 (0.89)	4.1363 (0.85)	0.4926 (1.28)	0.8400 (0.39)	-9.7199 (-0.56)	-10.9217 (-1.25)	-0.3993 (-0.45)
First Stage <i>F</i> -statistics	1.94	1.94	1.97	1.97	1.97	1.90	1.90	1.90	1.90
Control variables	Included	Included	Included	Included	Included	Included	Included	Included	Included
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of obs.	17,323	17,323	17,323	17,323	17,323	17,323	17,323	17,323	17,323

Table 8. Effect of Military Board on Firm Valuation: Periods of Financial Distress

This table presents the results of firm valuation regressions on military board and other control variables, engaging in a subsample analysis between financial distress years, i.e., global financial crisis of 2007-09, and all other non-distress years. All other variable definitions are provided in the Appendix. All independent variables are lagged by one year. All regressions include year and industry fixed effects. Standard errors are clustered at the firm level. *t*-statistics are in parentheses. Significance at the 10%, 5%, and 1% levels are indicated by *, **, and ***, respectively. χ^2 -test statistic tests for the equality of coefficients for the military board variables between distress periods and non-distress periods.

Variables	Tobin's <i>Q</i>					
	Financial Distress Periods			Financial Non-Distress Periods		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Military Board</i>	-0.0079 (-0.11)			0.0273 (0.50)		
<i>Military CEO/Inside Director</i>		-0.0959 (-1.40)			-0.0227 (-0.44)	
<i>Military Outside Director</i>			-0.0409 (-0.56)			0.0683 (0.49)
<i>Firm Size</i>	-0.0101 (-0.54)	-0.0102 (-0.55)	-0.0100 (-0.54)	-0.0095 (-0.80)	-0.0093 (-0.79)	-0.0095 (-0.80)
<i>CEO Ownership</i>	-0.1933* (-1.77)	-0.1939* (-1.77)	-0.1934* (-1.77)	-0.0793 (-0.96)	-0.0789 (-0.96)	-0.0788 (-0.96)
<i>Majority Outside Director Dummy</i>	0.2062*** (3.25)	0.2061*** (3.25)	0.2071*** (3.26)	0.1329*** (3.15)	0.1326*** (3.14)	0.1324*** (3.13)
<i>Board Size</i>	0.0194*** (2.60)	0.0198*** (2.66)	0.0194*** (2.62)	0.0110** (2.41)	0.0113** (2.45)	0.0110** (2.40)
<i>CEO Age</i>	-0.0011 (-0.57)	-0.0011 (-0.58)	-0.0011 (-0.57)	-0.0021 (-1.60)	-0.0021 (-1.58)	-0.0021 (-1.59)
<i>Board Age</i>	-0.0137*** (-4.37)	-0.0137*** (-4.36)	-0.0137*** (-4.36)	-0.0219*** (-10.57)	-0.0219*** (-10.59)	-0.0219*** (-10.59)
χ^2 test statistic				0.23	1.45	0.48
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Number of obs.	3,693	3,693	3,693	13,630	13,630	13,630
Adjusted <i>R</i> ²	0.213	0.213	0.213	0.216	0.216	0.216

Table 9. Effect of Military Board on Corporate Outcomes: Periods of Financial Distress

This table presents the results of firm valuation regressions on military board and other control variables, engaging in a subsample analysis between financial distress years, i.e., global financial crisis of 2007-09, and all other non-distress years. All other variable definitions are provided in the Appendix. All independent variables are lagged by one year. All regressions include year and industry fixed effects. Standard errors are clustered at the firm level. *t*-statistics are in parentheses. Significance at the 10%, 5%, and 1% levels are indicated by *, **, and ***, respectively. χ^2 -test statistic tests for the equality of coefficients for the military board variables between distress periods and non-distress periods.

Variables	Financial Distress Periods						Financial Non-Distress Periods					
	<i>Investment</i>	<i>R&D</i>	<i>Book Leverage</i>	<i>Market Leverage</i>	<i>Dividend Payouts</i>	<i>Exports</i>	<i>Investment</i>	<i>R&D</i>	<i>Book Leverage</i>	<i>Market Leverage</i>	<i>Dividend Payouts</i>	<i>Exports</i>
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Military CEO/Inside Director</i>	-0.0043 (-0.27)	-0.0025 (-1.37)	0.0924*** (3.21)	0.0943*** (3.20)	-0.0008 (-0.76)	-0.0452 (-1.36)	0.0089 (1.43)	-0.0022* (-1.86)	0.0093 (0.48)	0.0110 (0.58)	-0.0015* (-1.71)	-0.0281 (-1.38)
<i>Firm Size</i>	-0.0057*** (-3.14)	-0.0003 (-0.64)	0.0266*** (5.07)	0.0265*** (5.01)	-0.0000 (-0.15)	0.0364*** (4.78)	-0.0044*** (-5.73)	-0.0003 (-0.87)	0.0287*** (7.54)	0.0328*** (8.31)	-0.0002 (-0.99)	0.0237*** (5.35)
<i>Tobin's Q</i>	0.0200*** (5.90)	0.0051*** (4.91)	0.0199*** (2.61)	-0.0872*** (-14.65)	0.0007* (1.68)		0.0228*** (15.42)	0.0048*** (7.93)	0.0037 (0.82)	-0.1044*** (-27.43)	0.0012*** (4.23)	
<i>Cash Flows</i>	0.0453*** (2.72)	0.0157*** (3.75)					0.0619*** (7.41)	0.0083*** (3.08)				
<i>Return on Assets</i>			-0.1813*** (-3.69)	-0.2507*** (-5.56)	0.0425*** (16.51)				-0.2579*** (-7.68)	-0.2797*** (-8.91)	0.0410*** (23.68)	
<i>Book Leverage</i>					-0.0154*** (-13.77)						-0.0158*** (-18.92)	
<i>CEO Ownership</i>	-0.0150 (-1.07)	0.0073* (1.77)	-0.0879** (-2.14)	-0.0656 (-1.63)	-0.0009 (-0.50)	-0.0430 (-0.70)	0.0051 (0.83)	0.0064*** (2.59)	-0.1038*** (-3.68)	-0.0837*** (-3.12)	0.0001 (0.04)	-0.0370 (-1.21)
<i>Majority Outside Director</i>	0.0080 (1.04)	0.0047** (2.13)	0.0213 (0.98)	-0.0332 (-1.53)	-0.0008 (-0.91)	-0.0043 (-0.14)	0.0075** (2.27)	0.0058*** (3.81)	0.0075 (0.52)	-0.0355** (-2.32)	0.0001 (0.15)	-0.0327** (-2.24)
<i>Board Size</i>	0.0005 (0.49)	0.0003 (1.07)	-0.0040 (-1.59)	-0.0054** (-2.14)	0.0003*** (2.72)	-0.0048 (-1.16)	0.0005 (1.36)	0.0001 (0.97)	-0.0047*** (-2.70)	-0.0042** (-2.38)	0.0001** (2.11)	-0.0046** (-2.32)
<i>CEO Age</i>	-0.0003 (-1.24)	-0.0001** (-2.14)	-0.0003 (-0.38)	-0.0001 (-0.14)	0.0001*** (3.83)	0.0011 (0.81)	-0.0004*** (-3.20)	-0.0001 (-1.48)	0.0002 (0.38)	0.0002 (0.49)	0.0001*** (4.82)	0.0006 (0.96)
<i>Board Age</i>	-0.0011*** (-2.72)	-0.0003*** (-2.69)	-0.0002 (-0.19)	0.0015 (1.27)	0.0001** (2.35)	0.0041** (2.28)	-0.0006*** (-3.09)	-0.0003*** (-4.18)	-0.0009 (-1.12)	0.0016** (1.99)	0.0001*** (4.00)	0.0018** (1.96)
χ^2 test statistic							0.53	0.04	10.28***	7.96***	0.28	0.34
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of obs.	3,693	3,693	3,693	3,693	3,693	3,693	13,630	13,630	13,630	13,630	13,630	13,630
Adjusted R ²	0.039	0.209	0.132	0.331	0.362	0.238	0.083	0.222	0.173	0.424	0.344	0.289

Table 10. Effect of Military Board on Corporate Outcomes and the Likelihood of Corporate Fraud: *Chaebol*

This table presents the results of regressions of corporate outcomes on military board but with the addition of *Chaebol* and the interaction dummies. The classification of *Chaebol* firms follows the standard definition by the Korean Fair Trade Commission. All other variable definitions are provided in the Appendix. All independent variables are lagged by one year. All regressions include year and industry fixed effects. Standard errors are clustered at the firm level. *t*-statistics are in parentheses. Significance at the 10%, 5%, and 1% levels are indicated by *, **, and ***, respectively. *F*-test statistic tests for the equality of coefficients for the *Chaebol* and the interaction dummies for the linear probability model regression on the likelihood of corporate fraud.

Panel A: Military Board									
	<i>Investment</i>	<i>R&D</i>	<i>Book Leverage</i>	<i>Market Leverage</i>	<i>Dividend Payouts</i>	<i>Return on Assets</i>	<i>Tobin's Q</i>	<i>Export</i>	<i>Fraud</i>
Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Military Board</i>	0.0044 (1.00)	0.0001 (0.02)	0.0158 (0.73)	0.0150 (0.69)	-0.0010 (-1.36)	-0.0032 (-0.45)	0.0335 (0.53)	-0.0124 (-0.67)	-0.0090*** (-2.95)
<i>Chaebol</i>	0.0023 (0.76)	0.0003 (0.28)	-0.0042 (-0.28)	-0.0303** (-2.02)	0.0007 (1.13)	-0.0081 (-1.63)	0.1213*** (2.66)	0.0102 (0.60)	0.0167** (2.33)
<i>Military Board*Chaebol</i>	-0.0051 (-0.55)	-0.0031 (-0.97)	0.0431 (0.93)	0.0321 (0.71)	0.0003 (0.25)	-0.0234 (-1.40)	-0.0225 (-0.22)	-0.0544 (-1.41)	0.0067 (0.25)
<i>F</i> -test statistic									0.12
Control variables	Included	Included	Included	Included	Included	Included	Included	Included	Included
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of obs.	15,771	15,771	15,771	15,771	15,771	15,771	15,771	15,771	15,771
Adjusted <i>R</i> ²	0.078	0.221	0.156	0.381	0.354	0.145	0.206	0.272	0.023
Panel B: Military CEO or Inside Director									
	<i>Investment</i>	<i>R&D</i>	<i>Book Leverage</i>	<i>Market Leverage</i>	<i>Dividend Payouts</i>	<i>Return on Assets</i>	<i>Tobin's Q</i>	<i>Export</i>	<i>Fraud</i>
Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Military CEO/Inside Director</i>	0.0035 (0.60)	-0.0024* (-1.88)	0.0383 (1.62)	0.0400* (1.88)	-0.0013 (-1.43)	-0.0010 (-0.09)	-0.0329 (-0.50)	-0.0226 (-0.96)	-0.0085 (-1.57)
<i>Chaebol</i>	0.0021 (0.69)	0.0002 (0.14)	-0.0013 (-0.09)	-0.0281* (-1.88)	0.0007 (1.20)	-0.0087* (-1.72)	0.1211*** (2.68)	0.0090 (0.54)	0.0173** (2.40)

<i>Military CEO/Inside Director*Chaebol</i>	0.0011 (0.08)	0.0019 (0.76)	-0.0589 (-1.06)	-0.0476 (-0.71)	-0.0013 (-0.74)	-0.0185 (-1.47)	-0.0544 (-0.52)	-0.0587 (-1.50)	-0.0188* (-1.67)
<i>F-test statistics</i>									4.72**
Control variables	Included	Included	Included	Included	Included	Included	Included	Included	Included
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of obs.	15,771	15,771	15,771	15,771	15,771	15,771	15,771	15,771	15,771
Adjusted R^2	0.078	0.221	0.156	0.381	0.354	0.145	0.206	0.272	0.023

Panel C: Military Outside Director

	<i>Investment</i>	<i>R&D</i>	<i>Book Leverage</i>	<i>Market Leverage</i>	<i>Dividend Payouts</i>	<i>Return on Assets</i>	<i>Tobin's Q</i>	<i>Export</i>	<i>Fraud</i>
Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Military Outside Director</i>	0.0073 (0.88)	-0.0012 (-0.39)	-0.0211 (-0.45)	-0.0151 (-0.31)	-0.0003 (-0.21)	-0.0002 (-0.02)	0.0690 (0.50)	-0.0074 (-0.24)	-0.0081*** (-2.71)
<i>Chaebol</i>	0.0021 (0.69)	0.0003 (0.24)	-0.0049 (-0.33)	-0.0310** (-2.08)	0.0007 (1.15)	-0.0085* (-1.72)	0.1211*** (2.68)	0.0088 (0.53)	0.0162** (2.32)
<i>Military Outside Director*Chaebol</i>	0.0027 (0.25)	-0.0060* (-1.69)	0.1653*** (3.00)	0.1338** (2.31)	0.0007 (0.32)	-0.0340 (-1.11)	-0.0407 (-0.20)	-0.0595 (-1.16)	0.0559 (0.68)
<i>F-test statistics</i>									0.24
Control variables	Included	Included	Included	Included	Included	Included	Included	Included	Included
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of obs.	15,771	15,771	15,771	15,771	15,771	15,771	15,771	15,771	15,771
Adjusted R^2	0.078	0.221	0.156	0.381	0.354	0.145	0.206	0.272	0.023

Table 11: Effect of Military Board on Corporate Outcomes and the Likelihood of Corporate Fraud: Defense Firm

This table presents the results of regressions of corporate outcomes on military board but with the addition of *Defense Firm* and the interaction dummies. The definition of *Defense firms* follow the standard classification annually published by the Korea Defense Industry Association. All other variable definitions are provided in the Appendix. All independent variables are lagged by one year. All regressions include year and industry fixed effects. Standard errors are clustered at the firm level. *t*-statistics are in parentheses. Significance at the 10%, 5%, and 1% levels are indicated by *, **, and ***, respectively. *F*-test statistic tests for the equality of coefficients for the *Chaebol* and the interaction dummies for the linear probability model regression on the likelihood of corporate fraud.

Panel A: Military Board

	<i>Investment</i>	<i>R&D</i>	<i>Book Leverage</i>	<i>Market Leverage</i>	<i>Dividend Payouts</i>	<i>Return on Assets</i>	<i>Tobin's Q</i>	<i>Export</i>	<i>Fraud</i>
Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Military Board</i>	0.0049 (1.20)	-0.0002 (-0.11)	0.0122 (0.59)	0.0125 (0.60)	-0.0011* (-1.77)	-0.0054 (-0.83)	0.0207 (0.37)	-0.0113 (-0.61)	-0.0093* (-1.83)
<i>Defense Firm</i>	0.0017 (0.37)	-0.0009 (-0.40)	0.0183 (0.69)	-0.0084 (-0.35)	-0.0002 (-0.29)	-0.0229*** (-2.75)	0.0310 (0.73)	-0.0219 (-0.62)	0.0305 (1.10)
<i>Military Board*Defense Firm</i>	-0.0008 (-0.10)	-0.0028 (-0.72)	0.0130 (0.27)	0.0144 (0.30)	0.0012 (0.70)	-0.0211 (-1.15)	-0.0271 (-0.23)	-0.0496 (-1.05)	-0.0331 (-1.18)
<i>F</i> -test statistics									1.31
Control variables	Included	Included	Included	Included	Included	Included	Included	Included	Included
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of obs.	17,323	17,323	17,323	17,323	17,323	17,323	17,323	17,323	17,323
Adjusted <i>R</i> ²	0.082	0.220	0.165	0.405	0.347	0.152	0.208	0.275	0.022

Panel B: Military CEO or Inside Director

	<i>Investment</i>	<i>R&D</i>	<i>Book Leverage</i>	<i>Market Leverage</i>	<i>Dividend Payouts</i>	<i>Return on Assets</i>	<i>Tobin's Q</i>	<i>Export</i>	<i>Fraud</i>
Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Military CEO/Inside Director</i>	0.0073 (1.23)	-0.0026** (-2.18)	0.0347 (1.64)	0.0364* (1.89)	-0.0011 (-1.30)	0.0002 (0.02)	-0.0388 (-0.72)	-0.0237 (-1.06)	-0.0131** (-2.45)
<i>Defense Firm</i>	0.0023 (0.53)	-0.0018 (-0.82)	0.0308 (1.21)	0.0023 (0.10)	0.0001 (0.18)	-0.0241*** (-2.96)	0.0350 (0.88)	-0.0249 (-0.77)	0.0256 (1.03)

<i>Military CEO/Inside Director*Defense Firm</i>	-0.0059	0.0042	-0.1024**	-0.0841	-0.0018	-0.0392*	-0.0239	-0.0667	-0.0231
	(-0.59)	(1.48)	(-2.26)	(-1.59)	(-0.98)	(-1.86)	(-0.15)	(-1.36)	(-0.95)
<i>F-test statistics</i>									1.01
Control variables	Included	Included	Included	Included	Included	Included	Included	Included	Included
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of obs.	17,323	17,323	17,323	17,323	17,323	17,323	17,323	17,323	17,323
Adjusted R^2	0.082	0.220	0.165	0.405	0.347	0.152	0.208	0.275	0.022

Panel C: Military Outside Director

	<i>Investment</i>	<i>R&D</i>	<i>Book Leverage</i>	<i>Market Leverage</i>	<i>Dividend Payouts</i>	<i>Return on Assets</i>	<i>Tobin's Q</i>	<i>Export</i>	<i>Fraud</i>
Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Military Outside Director</i>	0.0068	-0.0016	-0.0170	-0.0068	-0.0005	0.0019	0.0547	-0.0153	0.0021
	(0.88)	(-0.54)	(-0.37)	(-0.14)	(-0.33)	(0.16)	(0.40)	(-0.54)	(0.15)
<i>Defense Firm</i>	0.0012	-0.0011	0.0130	-0.0115	-0.0002	-0.0258***	0.0293	-0.0352	0.0251
	(0.31)	(-0.51)	(0.53)	(-0.50)	(-0.28)	(-3.06)	(0.68)	(-1.08)	(1.04)
<i>Military Outside Director*Defense Firm</i>	0.0091	-0.0045	0.1422**	0.1097*	0.0013	-0.0333	-0.0496	0.0253	-0.0426
	(0.59)	(-1.04)	(2.47)	(1.90)	(0.81)	(-1.46)	(-0.32)	(0.38)	(-1.45)
<i>F-test statistics</i>									1.71
Control variables	Included	Included	Included	Included	Included	Included	Included	Included	Included
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of obs.	17,323	17,323	17,323	17,323	17,323	17,323	17,323	17,323	17,323
Adjusted R^2	0.082	0.220	0.165	0.405	0.346	0.152	0.208	0.275	0.022