Rich Dad Poor Dad? CEO Social Class and Firm Risk*

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Abstract

This study examines the effect of CEOs' social class on firm risk by using hand-collected data on whether CEOs attended private or public high schools. We find that upper-class CEOs (who attended private high schools) are associated with 5.35% lower firm risk but have no effect on risky corporate policies and risk-taking incentives. This effect is less pronounced for long-tenured CEOs and firms with higher analyst coverage. In addition, upper-class CEOs also do not outperform in general ability, risk management skills, and operational performance. Consistent with status characteristics theory, our findings suggest the difference in firm risk can be attributed to market expectations, while upper-class CEOs are not genuinely distinguished from others in terms of risk-taking and risk management.

JEL classification: G32, J24, M12

Keywords: Social Class, Firm Risk, Risk-Taking, CEOs, High Schools, Status Characteristics Theory

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1. Introduction

A large body of literature highlights that executives' experience during their formative years significantly impacts corporate policies and outcomes (e.g., Bertrand & Scholar, 2003; Malmendier & Tate, 2008; Kaplan, Klebanov, & Sorensen, 2012; Graham, Harvey, & Puri, 2013; Bernile, Bhagwat, & Rau, 2017; Yonker, 2017, Bennedsen et al., 2020). Social class is an important characteristic of individuals – yet to a great extent overlooked. Economic and sociological literature has extensively documented the impact of social class on individuals' education, consumption, career, and investment decisions (Blanden, Gregg, & Macmillan, 2007, Fiske & Markus, 2012, Dow & Reed, 2013, Dal Bó et al., 2017, Kuhnen & Miu, 2017, Chetty et al., 2020, Das, Kuhnen, & Nagel, 2020, and Bolt et al., 2024).[1] Alternatively, as suggested by the status characteristics theory (SCT henceforth), an individual's social class may influence also how others treat them and how they interpret their ability and behaviour.[2] The stock market is where investors express their interpretation on a CEO's abilities and behaviour through trading (Zhang & Wiersema, 2009, Pan, Wang, & Weisbach, 2015, Schoar & Zuo, 2016). In this study, we examine whether CEO's social class, as proxied by private high school attendance, has an effect on firm risk.

This study validates and extends the experimental evidence of Gold et al. (2024) by showing that CEOs' social class could shape the expectations of stock market participants. As the most

[1] Furthermore, studies emphasise the substantive effects of social class that upper-class individuals may have more social and monetary resources, receive better training and education, and develop specific personal traits (Twenge & Campbell, 2002; Blanden, Gregg, & Macmillan, 2007; Kraus & Keltner, 2009; Fiske & Markus, 2012, Lee & Persson, 2016).

[2] As suggested by the status characteristics theory (SCT) from the social psychological literature, people use others' status characteristics (such as gender, expertise, membership, etc.) to develop relative performance expectations (Berger, Cohen, & Zelditch, 1972, Simpson & Walker, 2002, Correll & Ridgeway, 2003). For instance, the experimental evidence of Gold et al. (2024) shows that, although auditing standards require auditors to determine their reliance on specialists based on competence, suggests that auditors tend to mistake social status for competence.

powerful decision-makers in companies, CEOs' characteristics significantly shape corporate policies (e.g., Bertrand & Scholar, 2003; Malmendier & Tate, 2008; Kaplan, Klebanov, & Sorensen, 2012; Graham, Harvey, & Puri, 2013; Bernile, Bhagwat, & Rau, 2017; Yonker, 2017, Bennedsen et al., 2020). Previous studies on CEOs' social class and social status highlighted the substantive effects.[3] For instance, using self-assessed childhood social class data, Campbell and Kish-Gephart (2015) find that CEOs from lower social class and higher social class take more risk than those from middle class. Palmer and Barber (2001) and Plaksina, Gallagher, and Dowling (2019) show that upper-class CEOs are less likely to take risky M&As. Campbell and Kish-Gephart (2024) show CEOs from lower social class are more likely to invest in community-centric CSR activities.

Levering the stock market's function in reflecting investors' perceptions and expectations of firms (Baker and Wurgler, 2006, Adam, Marcet, and Nicolini, 2015), we examine the insubstantial effects of CEOs' social class. Previous literature argues that elite education is indicative of an upper-class origin (Karbel & Astin, 1975, Palmer & Barber, 2001, Westphal & Khanna, 2003). Therefore, we proxy CEO social class using private high school attendance. We then document a stylized effect that upper-class CEOs are associated with less firm risk, measured by stock volatility. On average, firms with upper-class CEOs are associated with 5.347% lower stock volatility and 4.893% lower idiosyncratic volatility.

[3] We distinguish between social class and social status inspired by previous studies on both. Specifically, social class refers more to a lifelong, club-like social tier, while social status highlights the achievement in specific point in time. For example, becoming a famous executive or graduating from an Ivy League university is an achievement of social status, whereas attending a private school or being born in a wealthy family is more indicative of social class. In sociological and management studies, this difference is also distinguished as ascribed and achieved social class (Lin, 1999; Piazza & Castellucci, 2014).

To mitigate the endogeneity concerns, we conduct three tests. First, we replicate the baseline regression using an entropy-balancing sample. Entropy balancing helps to diverge the covariate distributions between the groups (i.e., firm-year observations with upper-class CEOs and without) while having no effect on sample size. Second, to further address the omitted variable bias, we conduct a two-stage least square analysis using the county-level income per capita of the CEO's birth county as the instrumental variable. This instrument meets both *relevance* condition and *exclusion* condition (Roberts and Whited, 2013) as the per capita income of the CEO's birth county is correlated with firm risk but only through CEO characteristics. In addition, we also check the robustness of our baseline results using alternative measures of firm risk. Our baseline results are robust and consistent across all three endogeneity tests.

Next, we examine whether this effect is driven by substantive risk-taking behaviours of upper-class CEOs (i.e., risk-taking hypothesis) or market expectations (market expectations hypothesis). Our evidence shows that upper-class CEOs are not different from other CEOs in terms of risk-taking behaviour and risk-taking incentives, which is against the risk-taking hypothesis. In specific, upper-class CEOs are not significantly related to R&D investment, leverage, M&A expenditure, CEO Vega, CEO Delta, and CEO overconfidence. Regarding CEOs' capabilities, upper-class CEOs also do not have a better education or general ability. Furthermore, we find that firms led by upper-class CEOs are also not outperformers using Tobin's Q ratio, ROA, and ROE as performance proxies. To rule out the alternative explanation that upper-class CEOs have better risk management skills, we lever two known shocks that induce exogenous risk to firms, i.e., the 2008 financial crisis and the Covid-19 pandemic (Lins, Servaes, & Tamayo, 2017, Ding et al., 2021). We do not find upper-class CEOs mitigate the negative impact of these shocks on firm risk.

Overall, our results suggest that upper-class CEOs are not genuinely distinguished from others in risk-taking and risk management.

To provide indirect evidence to support our market expectations hypothesis, we conduct two heterogeneous tests. Specifically, we find upper-class CEOs significantly mitigate the positive relationship between ROA volatility (or cash flow volatility) and firm risk. This result indicates that the market holds less pessimistic opinions on upper-class CEOs even when companies are volatile from the operational side. Additionally, if the result is driven by market expectations, the effect should fade away as the market knows better the CEO. Consistent with this understanding, the negative effect of upper-class CEOs is weaker for firms with higher analyst coverage and when these CEOs have longer tenure. Our findings support that the market holds unfounded expectations of upper-class CEOs, which is consistent with the expectations of auditors documented by Gold et al. (2024).

This study contributes to the literature in two ways. First, we methodologically contribute to studies on CEOs' social class by using a new proxy, namely private high school attendance, that mitigates the subjectivity concerns of survey-based measurement used in previous literature (e.g., Kish-Gephart & Campbell, 2015, 2024). Most importantly, survey-based social class categorization is determined by CEOs' perceptions. Researchers are also well aware of this limitation so they refer to the survey-based social class measurement as "perceived" and "subjective" social class (see Kish-Gephart & Campbell (2015)).[4] This perceived social class may

[4] People tend to believe they are not particularly special, which is why, in survey-based research, few individuals identify themselves as coming from upper or lower social classes. For instance, the proportion of CEOs from upper class is 20% in the study of Kish-Gephart and Campbell (2015), While with our measurement, nearly 40% of the observations come from CEOs who attended private high schools. Kish-Gephart and Campbell (2015, Page 1622) are also aware that this measurement is problematic, and they use two "subjective" social class factors, namely parents' occupation and highest level of education to check the validity of their survey-based measure.

simply be the CEO making an overly conservative assessment of their own social class, which could also be related to lower firm risk.[5] In addition, psychological and biological studies also indicate that people's memories of past experiences can be significantly biased (e.g., Schacter & Coyle, 1995).[6] Letting CEOs determine their social class will clearly suffer from this memory bias.

Moreover, as shown in educational and economic literature, decisions regarding children's education, such as dropping out, attending college and university, or enrolling in private schools, are closely linked to social class (Ball et al., 2002; Kearney and Levine, 2016; Anders et al., 2020). Attending a private school not only means bearing higher costs (Buddin, Cordes, & Kirby, 1998, Lauen, 2007) but also relates to an identity of social class (Ball, 1993). In addition, schools, as part of the reproduction of social classes, reinforce existing social hierarchies (Collins, 2009, Michelman et al., 2022). Therefore, private high school attendance is a subjective proxy of CEOs' social class.

Second, we add a novel market expectations hypothesis to explain the effect of CEO characteristics. Previous literature has focused on the substantive impact of CEO characteristics, i.e., that CEO characteristics shaped by past experiences will shape firm policies and thus impact firm outcomes (e.g., Bertrand & Scholar, 2003; Malmendier & Tate, 2008; Bernile et al., 2017; Yonker, 2017, Bennedsen et al., 2020). However, levering the status characteristics theory from social psychological literature (Berger, Cohen, & Zelditch, 1972; Simpson & Walker, 2002, Correll & Ridgeway, 2003), we highlight a different channel that CEOs' social class will shape the expectations of market participants but do not affect firms' risk-taking activities.

[5] This is an alternative explanation for the results documented by Kish-Gephart and Campbell (2015).

[6] Bound, Brown, and Mathiowetz (2001) review the measurement error in survey data. They highlight that measurement bias is widely observed in economic surveys (e.g., surveys on personal earnings, household earnings, unemployment, or length of educations), which is due to individuals' cognitive processes, social desirability, and essential survey conditions.

The remainder of the paper is organized as follows. Section 2 reviews related literature and presents the development of hypotheses. Section 3 demonstrates the sample used in this paper. Sections 4 and 5 present empirical results, including baseline results and further tests. And Section 6 concludes the paper.

2. Related Literature and Hypotheses Development

2.1 The risk-taking explanation

First and foremost, firm risk is determined by firms' risky activities. Literature has shown that CEO characteristics can have an effect on corporate policies. Literature has documented that some CEO characteristics, such as personal risk-taking behaviour (Cain & McKeon, 2016; Cen & Doukas, 2017), early-life disaster (Benile et al., 2017), CEO facial masculinity (Kamiya, Kim, & Park, 2019), CEO social network (Ferris, Javakhadze, & Rajkovic, 2017) are positively related to both higher firm risk and higher risk-taking. Some other CEO characteristics, such as, negative affective (Delgado-García, De La Fuente-Sabaté, & De Quevedo-Puente, 2010), and divorce (Neyland, 2020), are negatively related to both lower firm risk and lower risk-taking.

Sociology and economic literature highlight that social class plays a profound role in individual perspectives and decision-making (Cote, 2011; Fiske & Markus, 2012). Lubrano (2005) documents that the effect of childhood social class will not fade away, even after objective success and movement into a higher social class. Therefore, CEOs' social class may substantially influence their risk-taking, leading to varying corporate policies.

Using a survey-based measure of perceived social class data on 272 S&P 500 CEOs, Kish-Gephart and Campbell (2015) find that CEOs from upper social and lower social class take more risks than middle-class CEOs, in terms of R&D expenditures, capital expenditures, and value of

the long-term debt. They attribute the risk-taking behaviour of upper-class CEOs to their childhood "safety net" (social and economic resources) and reward-seeking tendencies, while they attribute the risk-taking behaviour of lower-class CEOs to their "nothing to lose" mentality.[7] Following this thinking, we give our first hypothesis:

H1a. Upper-class CEOs are associated with more risk-taking activities.

However, an upper-class CEO may also possess more conservative personality traits from her social class. For instance, several studies have found that wealthier people tend to be more conservative and risk-averse (e.g., Paravisini, Rappoport, & Ravina, 2017; Thal, 2020). Palmer and Barber (2001) and Palksina et al. (2019) also document that upper-class CEOs exhibit lower risk-taking behaviour in M&As compared to their marginal-status counterparts. Other studies have also found that individuals with lower status tend to take on higher financial risks (DeMarzo, Kaniel, & Kremer, 2004; Hong, Jiang, Wang, & Zhao, 2014).

Therefore, we give the competitive hypothesis of H1a:

H1b. Upper-class CEOs are associated with less risk-taking activities.

2.2 The market expectations explanation

Market-based firm risk is a function of both firm policies and market expectations. Therefore, firm risk depends not only on the company's risk-taking activities but also on the perceived market expectations about the company's risk. In other words, even if two companies have comparative risk-taking, firm risk could still be different due to different market expectations. On the one hand, market expectations could be related to limited knowledge of the market. For instance, Pan, Wang,

[7] Kraus et al. (2012) also argue that upper-class individuals and give rise to solipsistic social cognitive tendencies—that is, an individualistic focus on one's own internal states, goals, motivations, and emotions.

and Weisbach (2015) develop a stylized Bayesian learning model to show a process of "learning about CEO ability" of the market. The model predicts that the initial uncertainty about the CEO's ability is high, which could raise the firm's risk beyond its fundamental level. Over time, market participants use news about the firm to update their expectations regarding its future profits and their assessment of the CEO. In addition, Trabert (2023) documents that the increasing firm risk after younger CEOs take over is not driven by more risky activities but by the market's uncertainty about younger CEOs.

Markets may also be biased by other social psychological factors. For example, the status characteristics theory (SCT) suggests that people use others' status characteristics (such as gender, expertise, membership, etc.) to develop relative performance expectations (Berger, Cohen, & Zelditch, 1972; Simpson & Walker, 2002, Correll & Ridgeway, 2003). For instance, relative performance expectations on gender are widely shared by people from difficult cultures. People tend to believe that males and females are good at different tasks or males have greater worthiness and competence in general (Williams & Best, 1990; Ridgeway, 2002). Once developed, the performance expectations will shape people's behaviour in a self-fulfilling fashion, which contributes to the formation of stereotypes and status hierarchies.

Status characteristics can be specific or diffuse (Correll & Ridgeway, 2003). Specific status characteristics are related to past distinct experience or professional credentials, which create expectations on a limited, well-defined range of tasks. Diffuse status characteristics, including gender, race, occupation, and ties to elite social circles linked to exclusive schools, clubs, companies, or charities (D'Aveni 1990; Jensen & Roy, 2008). Diffuse status characteristics create general expectations for a wide range of tasks and have stronger effects and greater resilience (Simpson & Walker 2002).

Status characteristics theory (SCT) is applicable for analysing the relationship between CEOs' social class and firm risk. First, the social class of CEOs, especially when proxied by attending private high schools, is a form of diffuse status characteristics (D'Aveni 1990; Jensen & Roy, 2008). Therefore, market participants may generate accordingly expectations about CEOs. Second, these expectations are particularly important for firm risk. Because firm risk is related to a wide range of tasks, which include not only internal operational factors (e.g., risk-taking activities, risk management mechanisms) but also external risk factors (e.g., climate risk, political risk).[8] Compared with firm performance, different dimensions of firm risk are also harder to define and measure. Therefore, it is more difficult for market participants to modify their expectations on CEOs' capacity to manage firm risk. For upper-class CEOs, their specific diffuse status characteristics make market participants tend to believe that companies they manage can survive and even succeed in complex risk conditions. Accordingly, we give our second hypothesis on firm risk:

H2. Upper-class CEOs are associated with less firm risk, proxied by stock return volatility.

3. Data and Methodology

3.1 CEO social class

We use private high school experience as the proxy of CEO social class, which has two advantages. First, as shown in educational and economic literature, decisions regarding children's education, such as dropping out, attending college and university, or enrolling in private schools, are closely linked to social class (e.g., Ball et al., 2002; Kearney and Levine, 2016; Anders et al., 2020). Attending a private school not only means bearing higher costs (Buddin, Cordes, & Kirby,

[8] For instance, Gold et al. (2024) set their experiment in a high-risk setting due to the belief that variations in reliance on professionals are most meaningful in such settings.

1998, Lauen, 2007) but also relates to an identity of social class (Ball, 1993). Second, schools, as part of the reproduction of social classes, reinforce existing social hierarchies (Collins, 2009, Michelman et al., 2022). This perspective suggests that social classes, as measured by private school experiences, can have profound impacts. Therefore, our measure is better than the survey-based measure used by the previous literature (Kish-Gephart & Campbell, 2015, 2024). The survey-based method asks CEOs to estimate their social class. This method suffers from CEOs' conservative assessment and memory bias (Schacter & Coyle, 1995), which may not objectively reflect CEOs' social class.

We are not the first paper to use education background to proxy CEOs' social class. Plaksina et al. (2019) use prestigious university attendance (i.e., Ivy League universities and Russell Group universities) to proxy CEOs' upper class. We argue that our private high school measure is still advanced in two ways. First, Ivy League universities and Russell Group universities are prestigious themselves, which are still open to all social class students. In fact, openness to all social classes is precisely the vision of these universities.[9] Therefore, prestigious university attendance could be a better measure of personal ability and capacity, rather than a measure of social class. Second, Michelman, Price, & Zimmerman (2022) studied exclusive old boys' clubs at Harvard University in the 1920s and 1930s and found that students from private feeder schools are overrepresented in clubs, whereas academic high achievers and ethnic minorities are almost entirely absent. Their findings imply that even at prestigious universities, social class may be determined before admission and reinforced afterwards. Although graduates of prestigious universities generally enjoy higher social status compared to others, their social classes still differ.

[9] "Big data suggests colleges are levelling the economic playing field". Brown University News, January, 2017. "New Report Challenges The Ivy League To Enroll More Pell Grant Recipients". Forbes, September, 2023.

To collect CEOs' high school information, we started with names of S&P 1500 non-financial and non-utility CEOs covered by the ExecuComp database from 1992, which is the starting year of the database. We first manually searched for CEO names on Marquis Who's Who, NNDB, and Wikipedia and collected the name of their high schools[10]. For instance, NNDB shows Berkshire Hathaway's CEO Warren Buffett's high school by recording "High School: Woodrow Wilson High School, Washington, DC" (Figure OA1 in the appendix). To complement our CEO high school dataset, we also search for CEO's name plus "high school" on Google search, so that we do not ignore information on high school alumni websites, CEOs' official websites, and newspaper articles. Next, we use the schools' official website, Wikipedia, and Google search to check whether the school is private or not. We remove the observation if we cannot identify the type of school. Finally, we are able to identify high school information (260 unique high schools) for 393 non-financial and non-utility CEOs from 1992 to 2021.

3.2 Measure of firm risk

Following Serfling (2014), Bernile et al. (2017), and Trabert (2023), we mainly focus on the firms' equity risk as the dependent variable. Specifically, we use two proxies of firm risk, (1) total volatility, measured as the annualized standard deviation of daily stock returns of the firm's fiscal year, and (2) idiosyncratic volatility, measured as the annualized standard deviation of daily residuals, obtained from market model estimations, of the firm's fiscal year. Specifically, we estimate two risk factors using the WRDS Beta Suite tool. When setting up the market model to estimate the idiosyncratic volatility, the estimation window is 252 days.

[10] These data sources are commonly used in financial literature to obtain CEOs' personal information, such as birthplace, children, etc. (Bernile et al. 2017; Cronqvist & Yu, 2017). We searched for names of S&P 1500 CEOs one by one in the data sources and excluded the possibility of renaming based on other information (age, educational experience, professional experience, etc.).

3.5 Summary statistics and model setting

Financial and accounting data used in this study is obtained from Compustat database. Other CEO information is from ExecuComp database. To mitigate the impact of outliers, we winsorize all non-binary variables at the 1st and 99th percentiles. Table 1 presents the summary statistics for the sample. The average *Volatility* and *Idio_Vol* in our sample is 39.273% and 33.792%, respectively, which are comparable with the figures reported by Serfling (2014), Bernile, Bhagwat, & Rau (2017), and Trabert (2023). The mean value of *Private School CEO* is 0.392, indicating that our sample is dominated by CEOs that have attended public high schools.

[Please Insert Table 1 About Here]

The baseline regression model of this study is presented as follows:

$$Firm\ risk_{i,j,t+1} = \alpha + \beta\ Private\ School\ CEO_{i,j,t} + \mu F_{i,t} + \lambda C_{j,t} + \varepsilon_{i,j,t} \quad (1)$$

where *Private School CEO* is a dummy that equals to one if a CEO attended private high school, and zero otherwise. *F* denotes a vector of control variables on firm characteristics. *C* denotes a vector of control variables on CEO characteristics. The baseline regression also includes firm fixed effects and year fixed effects to control for time-invariant firm characteristics and the time trend. To further mitigate the concerns on endogeneity, the dependent variable and control variables are lagged by one year.

4. Empirical Results

4.1 CEO social class and firm risk: Baseline results

Table 2 presents the OLS estimates of Equation (1). The independent variable is *Private School CEO*, which is a dummy equal to one if a CEO attended a private high school, and zero

otherwise. In columns (1), (3), and (5), the dependent variable is stock volatility, which is the annualized standard deviation of daily stock returns of the firm's fiscal year. In columns (2),(4), and (6) the dependent variable is idiosyncratic stock risk, which is the annualized standard deviation of daily residuals, obtained from market model estimations, of the firm's fiscal year.

With firm fixed effects and year fixed effects (columns (1) and (2)), our results show that CEO social class, proxied by private high school attendance, is negatively related to firm risks, which is also statistically significant at 1% level (t-statistics are −2.777 and −2.720, respectively). In addition, this effect is also economically significant. In specific, the coefficient of *Private School CEO* is −5.347 in column (1), indicating that firms with private school CEOs have on average 5.347% lower stock volatility. Given the mean value of stock volatility is 39.273 and the standard deviation is 20.697, this effect is equivalent to 13.615% of average volatility and 25.835% of standard deviation. Similarly, the coefficient of *Private School CEO* is −4.893 in column (2), which is equivalent to 14.480% of average idiosyncratic volatility and 25.554% of standard deviation. The baseline results are consistent when we replace firm fixed effects with industry effects. Specifically, in columns (3) and (4), the coefficients of *Private School CEO* are −3.264 and −3.231, which are statistically significant at 5% level (t-statistics are −2.274 and −2.388, respectively).

Given our main explanatory variable, *Private School CEO*, has a very small within-firm variation and larger between-firm variation, it may be correlated with firm fixed effects which could lead to spurious results. In columns (5) and (6), the regression is estimated with random effects model. Our findings remain unchanged.

Our estimates with control variables also show consistency with previous studies on firm risk, measured by stock volatility. For instance, firm size and ROA are negatively related to firm risk,

and leverage is positively associated with firm risk (Serfling, 2014; Bernile et al., 2017; Cain & McKeon, 2016). CEO age is negatively related to firm risk (Serfling, 2014; Trabert, 2023). And CEO tenure is positively associated with firm risk (Serfling, 2014; Cain & McKeon, 2016). These results rationalize the sample selection and model setting of our study.

[Please Insert Table 2 About Here]

4.2 Deal with endogeneity concerns

In this section, we deal with potential endogeneity concerns regarding our results in the baseline analysis. First, sample selection bias may introduce random differences in firm characteristics between firms with private school CEOs and firms with public school CEOs. Second, the potential for omitted variable bias exists, whereby relevant variables impacting both CEOs' high school attendance and firm risk might be overlooked.

First, the univariate test in Panel B Table 1 shows that firms led by private school CEOs and public schools CEOs are significantly different in terms of most firm characteristics and the proportion of female CEOs. It raises an endogeneity concern that our baseline results are driven by unobservable features which are distinguished between firms with private school CEOs and firm with public school CEOs. To alleviate this concern, we adopt the entropy balancing approach to re-balance our sample following Madsen & McMullin (2020). The re-balances covariate distributions (i.e., control variables) between the groups while have no effect on sample size.

We report the proof of entropy balancing in Table OA1 in the appendix. Specifically, we find the difference between the private school CEO group and the public-school CEO group, in terms of mean, variance, and skewness of control variables, converge after the entropy balancing. Next,

we present the OLS estimation of Equation (1) using the sample constructed by entropy balancing in Table 3. We find that the results are consistent with the baseline results in Table 2.

[Please Insert Table 3 About Here]

Second, to deal with potential omitted variable bias, we perform a two-stage least square analysis (2SLS) using an instrumental variable, following the criteria set by Larcker and Rusticus (2010) and Roberts and Whited (2013). A valid instrument must be correlated with the independent variable (relevance condition) and impact the dependent variable only through the independent variable (exclusion condition). The instrumental variable is the county-level personal income, which is a ratio of the per capita personal income of the CEO's birth county to the average per capita personal income of the US. In specific, the instrument is measured at the age of 16 (average high school year) for every CEO. This instrument meets both criteria as the per capita income of the CEO's birth county is correlated with firm risk but only through CEO characteristics (in our cases, CEO social class).

Table 4 reports the results. The 2SLS results show that the per capita income of CEO's birth county is an effective predictor CEO's private school attendance in column (1). The coefficient is significant at the 10% level, and the Kleibergen-Paap rk Wald F-statistic of 40.214 exceeds the LIML Size of Nominal 10% threshold of 16.38, which confirms that our instrument is valid. In columns (2) and (3), the instrumented private school CEO is negatively associated with both stock volatility and idiosyncratic volatility, suggesting that our results are unlikely to be driven by omitted variable bias.

[Please Insert Table 4 About Here]

4.3 Robustness tests

We also conduct additional robustness tests. Most of these results are reported in Table OA2 in the online appendix. Specifically, we employ different empirical model setting, including Industry × Year fixed effects (columns 1-2, Table OA2) and random effects model (columns 5-6, Table 3). We also use alternative measures of firm risk, including the natural log of total volatility and idiosyncratic volatility (columns 3-4, Table OA2), total volatility calculated without dividend reinvestment (column 5, Table OA2), and idiosyncratic volatility estimated with Fama-French 3 factor model (column 6, Table OA2). Our baseline results are consistent and not sensitive to alternative model settings and alternative measurement of variables.

5. Further Analysis

5.1 Risky corporate activities and CEO risk-taking incentives

Our baseline results show that upper-class CEOs are associated with less firm risk. Since the stock volatility is determined by both company policies and market expectations, we will examine the baseline results to determine whether one or both of these factors are driving it. We first look at corporate risk-taking policies. Following previous literature (e.g., Campbell & Kish-Gephart, 2015, Trabert, 2023), we examine three types of risky activities, including R&D investments, leverage, and M&As.

To examine the effect of upper-class CEOs on firms' risk-taking, we replace the dependent variable in Equation (1) with three proxies of risky activities, with independent variables lagged by one period. *R&D* is the ratio of research and development expenses divided by total assets in a given year. *Leverage* is calculated as total debt divided by the sum of the market value of equity and total debt. *Acquisition Expenditure* is the ratio of acquisition expenses divided by total assets

in a given year (missing value set to be zero). The results are presented in columns (1)-(3) in Table 5. Specifically, we find that the coefficients of *Private School CEO* are not statistically significant for all three corporate risk-taking proxies. These results indicate that upper-class CEOs are not associated with higher (or lower) risk-taking activities, which is inconsistent with Campbell and Kish-Gephart (2015).

Second, we examine whether upper-class CEOs have more incentive to take risk. In specific, we consider three proxies of risk-taking incentives following the literature (Coles, Daniel, & Naveen, 2006, Banerjee, Humphery-Jenner, & Nanda, 2015). The three proxies are (1) CEO Vega, which is the dollar change in wealth associated with a 0.01 change in the standard deviation of the firm's returns (in $000s); (2) CEO Delta, which is the dollar change in wealth associated with a 1% change in the firm's stock price (in $000s); and (3) CEO overconfidence (*Holder67*), which is a dummy equal to one when the ratio of the value of options in-the-money to the average strike price exceeds 0.67 at least twice during the sample period, and zero otherwise.

We next re-estimate the Equation (1) by replacing the dependent variable with three proxies of risk-taking incentive. These results are presented in columns (4)-(5). Similarly, we do not find any statistically significant effects of upper-class CEOs on CEO risk-taking incentives. These findings, together with the findings on corporate risk-taking activities, suggest that upper-class CEOs do not take more risk, and do not have more incentive to take risk. To sum up, our findings reject H1, indicating that our baseline results are not driven by the company-level risk-taking.

[Please Insert Table 5 About Here]

5.2 Are upper-class CEOs really distinguished?

Levering our CEO-specific data, we further examine whether upper-class CEOs are really distinguished from other CEOs. We first test using proxies of CEO education and ability. In specific, we consider (1) CEO's master's degree, which is a dummy that equals one if the CEO has a master's degree or higher (including master's degree, MBA, JD, MD, and PhD), and zero otherwise; (2) PhD CEO, which is a dummy that equals to one if the CEO has a PhD degree (including JD, MD, and PhD), and zero otherwise; and (3) GAI, which is the general ability index developed by Custódio, Ferreira, & Matos (2013). The general ability index is the first factor of applying principal components analysis to five proxies of general managerial ability: past number of positions, number of firms, number of industries, CEO experience dummy, and conglomerate experience dummy.

We re-estimate Equation (1) using proxies of CEO education and ability as the dependent variables. The results are reported in Panel A Table 6. We do not find any significant effects of upper-class CEOs on education and ability. Specifically, the coefficients of *Private School CEO* are not statistically significant even at 10% level (t-statistics are 1.074, −0.253, and −0.523, respectively). In Panel B, we examine whether upper-class CEOs are associated with better firm performance. The three proxies of firm performance are (1) ROA; (2) ROE, which is the return on equity; and (3) Tobin's Q ratio, which is the ratio of the total assets minus book value of equity plus market value of equity minus deferred taxes, divided by total assets. Our results show that upper-class CEOs are not associated with better firm performance. In specific, the coefficients of

Private School CEO are not statistically significant even at 10% level (t-statistics are 0.271, 1.227, and 0.286, respectively).[11]

[Please Insert Table 6 About Here]

An alternative explanation is, that although upper-class CEOs do not have better higher education and general ability, it is still plausible that these CEOs have better specific abilities, e.g., risk management skills.[12] To further rule out this explanation, we test whether upper-class CEOs have better risk management skills.

As we cannot directly measure the risk management skills of CEOs, we investigate the role of upper-class CEOs in a specific risk management context. We lever two known shocks that induce exogenous risk to firms, i.e., the 2008 financial crisis and the Covid-19 pandemic (Lins, Servaes, & Tamayo, 2017, Ding et al., 2021), which offer a context to examine the risk management skills of CEOs. Therefore, we hypothesize that CEOs with better risk management skills should be able to mitigate the negative impact of two shocks and firm risk. To test the hypothesis, we use the following regression model:

$$Firm\ risk_{i,j,t+1} = \alpha + \beta_1\ Private\ School\ CEO_{i,j,t} + \beta_2\ Financial\ Crisis_{i,j,t} \times Private\ School\ CEO_{i,j,t} + \beta_3\ Covid-19\ Pandemic_{i,j,t} \times Private\ School\ CEO_{i,j,t}\ \mu F_{i,t} + \lambda C_{j,t} + \varepsilon_{i,j,t} \quad (2)$$

where *Financial Crisis* is a dummy that equals one in year 2008 and 2009, and zero otherwise. *Covid-19 Pandemic* is a dummy that equals one in year 2020 and 2021 (the end of the sample),

[11] In Table OA3 in the online appendix, we also included CEOs' Marster's degree and GAI as additional controls. Our results remain unchanged.

[12] For instance, CEOs can reduce firm-specific risk by diversifying their operations across multiple business segments and into different industries (Duchin, 2010, Mansi & Reeb, 2002).

and zero otherwise. *F* denotes a vector of control variables on firm characteristics, which are the same as Equation (1). *C* denotes a vector of control variables on CEO characteristics, which are the same as Equation (1). The model also includes firm fixed effects and year fixed effects to control for time-invariant firm characteristics and the time trend. The dependent variable and control variables are lagged by one year.

The results are reported in Table 7. We find that in both columns (1) and (2) the coefficients of *Private School CEO* are negative and statistically significant (t-statistics are -2.896 and -2.780, respectively), which is consistent with the baseline results. More importantly, we find the coefficients of the interaction of upper-class CEO and financial crisis and the interaction of upper-class CEO and Covid-19 pandemic are not statistically significant. These results indicate that upper-class CEOs do not mitigate the shock of 2008 financial crisis and Covid-19 pandemic to firm risk. We argue that upper-class CEOs do not have better risk management skills as they do not mitigate the effect of leverage on firm risk.

[Please Insert Table 7 About Here]

5.3 Upper-class CEOs, market expectations, and firm risk

In this section, we investigate whether our baseline results are influenced by the diverse market expectations to upper-class CEOs. Since we cannot directly measure market expectations to specific firms and CEOs, we indirectly test the heterogeneity of the upper-class CEOs' effects under different market conditions.

SCT suggests that the performance expectations on social class will shape people's behaviour in a self-fulfilling fashion, which contributes to the formation of stereotypes and status hierarchies. In addition, Gold et al. (2024) show that even industrial professionals (i.e., auditors) can mistake

other professionals' social status for their competence. Therefore, even though the US stock market is dominated by institutional investors, it is plausible that investors still hold expectations when corporate executives are from the upper class. These expectations could lead investors to believe that upper-class CEOs are more talented and better equipped to manage risk. Therefore, we first test whether upper-class CEOs weaken the positive relationship between operational volatility and stock volatility. As documented by previous studies, firm with greater ROA volatility and cash flow volatility are associated with higher stock volatility (e.g., Pastor & Pietro, 2003, Wei & Zhang, 2006, Rajgopal & Venkatachalam, 2011). We estimate the following regression model:

$$Firm\ risk_{i,j,t+1} = \alpha + \beta_1\ Private\ School\ CEO_{i,j,t} + \beta_2\ \sigma(ROA)_{i,j,t} + \beta_3\ \sigma(ROA)_{i,j,t} \times Private\ School\ CEO_{i,j,t} + \mu F_{i,t} + \lambda C_{j,t} + \varepsilon_{i,j,t} \quad (3)$$

where *σ(ROA)* is the ROA volatility proxied by the 5-year standard deviation of ROA. *F* denotes a vector of control variables on firm characteristics, which are the same as Equation (1). *C* denotes a vector of control variables on CEO characteristics, which are the same as Equation (1). The model also includes firm fixed effects and year fixed effects to control for time-invariant firm characteristics and the time trend. The dependent variable and control variables are lagged by one year.

The results are presented in columns (1) and (2) in Table 8. Consistent with previous studies (Pastor & Veronesi, 2003, Rajgopal & Venkatachalam, 2011), we find that ROA volatility is positively associated with stock volatility, which is statistically significant at 5% level. More importantly, the coefficient of the interactions between private school CEOs and ROA volatility is negative and statistically significant at 5% level (t-statistics are -3.018 and -2.311, respectively).

Next, we replace ROA volatility with cash flow volatility and re-estimate Equation (2). Cash flow volatility is defined as the 5-year standard deviation of a firm's operational cash flows, with cash flows adjusted by total assets. Similarly, we find that the coefficients of interactions between private school CEOs and cash flow volatility are negative and statistically significant at 1% level. In addition, in all specifications, the coefficient of *Private School CEO* is negative and statistically significant at 5% level, further confirming the robustness of our baseline results.

[Please Insert Table 8 About Here]

Furthermore, if our baseline results are driven by market expectations rather than risk-taking, the effect of upper-class CEOs should be weaker when more information are available. As the market is efficient, expectations could be rectified when investors get to know better about upper-class CEOs. To measure the availability of information on CEOs, we employ two proxies. First, we consider the tenure of CEOs. The longer a CEO's tenure, the more opportunities investors have to properly evaluate the CEO and correct any expectations. As shown by Pan et al. (2015), longer tenure reduces the uncertainty on CEOs' abilities. Our *Long Tenure* measure is a dummy that equals one if the tenure of a CEO is greater than 4 years, following the definition of Jenter and Kannan (2015) and Trabert (2023). Second, we consider the number of analysts following the firm. Analyst coverage provides advanced information about the company, which enhances the understanding of investors on CEOs. Our High Analyst Coverage is a dummy that equals one if the analyst coverage of a given firm is greater than the industry median, and zero otherwise. Analyst coverage is measured by the average monthly number of analysts who give EPS estimates for a given firm.

We examine the moderator effects of CEO tenure and analyst coverage with Equation (2) by replacing the volatility measures with *Long Tenure* and *High Analyst Coverage*, respectively.

These results are reported in Table 7. In columns (1) and (2), we find that the coefficient of the interaction between private school CEO and *Long Tenue* is positive and statistically significant at 5% level. This finding indicates that long CEO tenure mitigates the negative relationship between upper-class CEOs and firm risk, which supports our market expectations explanation of the baseline results. Similarly, in columns (3) and (4), we find that the coefficient of the interaction between private school CEO and High Analyst Coverage is also positive and statistically significant at 10% level. In addition, in all specifications, the coefficient of *Private School CEO* is negative and statistically significant at 5% level, further confirming the robustness of our baseline results.

[Please Insert Table 9 About Here]

6. Conclusions

This paper investigates the effect of CEOs' social class on firm risk, proxied by stock return volatility. Using hand-collected data on whether CEOs attended private or public high schools. We find that upper-class CEOs are associated with lower firm risk. However, upper-class CEOs have no effects on risky corporate policies and risk-taking incentives. Our findings are consistent with the status characteristics theory from the social psychological literature, which suggests that people use others' status characteristics to develop expectations.

Our findings have implications for both professionals and academics. First, we note that even professionals may have consistent and biased expectations about CEOs based on their status characteristics. It shows a new channel of how CEO characteristics could affect corporate outcomes, which has not been well-documented in previous literature. Second, we demonstrate

that market participants may be wrongly influenced by notions of social class. Specifically, for executives, their abilities and capacities may not be inherently linked to their social class.

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Table 1. Summary Statistics

This table presents summary statistics for a sample of US publicly listed firms with available data on CEO high school and firm risk over the period 1992−2021. We report the mean, median, first quartile, third quartile, standard deviation, and number of observations. The definitions of all variables are provided in the appendix.

Panel A. Summary statistics of the sample

	N	Mean	St.Dev	p25	Median	p75
Volatility (%)	2,157	39.273	20.697	25.018	33.995	46.694
Idio_Vol (%)	2,157	33.792	19.148	20.717	29.020	40.730
Private School CEO (Upper-Class)	2,157	0.392	0.488	0	0	1
Ln(Assets)	2,157	8.531	1.964	7.105	8.501	10.064
ROA	2,157	0.052	0.107	0.025	0.059	0.097
Leverage	2,157	0.192	0.193	0.039	0.138	0.278
B/M	2,157	0.402	0.489	0.181	0.318	0.513
Firm Age	2,157	2.717	0.577	2.303	2.773	3.178
CEO Tenure	2,157	6.303	1.941	4	6	10
CEO Ownership (%)	2,157	3.297	7.431	0	0.184	2
Female CEO	2,157	0.051	0.219	0	0	0
CEO Age	2,157	56	1.156	51	57	62

Panel B. Univariate tests

	Public School CEO		Private School CEO		Mean Diff.
	N	Mean	N	Mean	
Volatility (%)	1,311	38.910	846	39.830	-0.921
Idio_Vol (%)	1,311	33.380	846	34.440	-1.061
Ln(Assets)	1,311	8.680	846	8.301	0.379***
ROA	1,311	0.058	846	0.042	0.015***
Leverage	1,311	0.187	846	0.201	-0.014*
B/M	1,311	0.356	846	0.472	-0.116***
Firm Age	1,311	2.736	846	2.688	0.047*
CEO Tenure	1,311	1.823	846	1.869	-0.046
CEO Ownership (%)	1,311	3.333	846	3.243	0.090
Female CEO	1,311	0.077	846	0.009	0.068***
CEO Age	1,311	4.023	846	4.033	-0.010

Table 2. CEO Social Class and Firm Risk

This table reports the effects of CEOs' social class on firm risk for a sample of US firms from 1992 to 2021. The independent variable, *Private School CEO*, is a dummy that equals to one if the CEO attended a private high school, and zero otherwise. The dependent variables are (1) total volatility, *Volatility*, which is the annualized standard deviation of daily stock returns of the firm's fiscal year, and (2) idiosyncratic volatility, *Idio_Vol*, which is the annualized standard deviation of daily residuals, obtained from market model estimations, of the firm's fiscal year. All variables are defined in the Appendix and independent variables are lagged one period. Firm fixed effects, industry fixed effects, and year fixed effects are based on firm IDs, 2-digits SIC codes, and year dummies, respectively. Standard errors are clustered at the firm level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	Volatility (%) (1)	**Idio_Vol (%) (2)**	**Volatility (%) (3)**	**Idio_Vol (%) (4)**	**Volatility (%) (5)**	**Idio_Vol (%) (6)**
Private School CEO	-5.347***	-4.893***	-3.264**	-3.231**	-3.717**	-3.471**
	(-2.777)	(-2.720)	(-2.274)	(-2.388)	(-2.134)	(-2.262)
Ln(Assets)	-5.399***	-5.651***	-3.297***	-3.639***	-3.923***	-4.414***
	(-4.777)	(-5.611)	(-8.100)	(-9.339)	(-7.236)	(-9.195)
ROA	-17.262**	-19.436***	-28.905***	-30.039***	-18.984***	-19.688***
	(-2.232)	(-2.821)	(-2.734)	(-2.939)	(-4.303)	(-5.208)
Leverage	24.570***	25.011***	12.508***	13.743***	29.877***	28.918***
	(4.738)	(4.855)	(2.945)	(3.291)	(8.208)	(9.252)
B/M	-2.727	-2.406	0.676	1.231	-3.524***	-3.157***
	(-0.725)	(-0.593)	(0.208)	(0.358)	(-3.699)	(-3.895)
Firm Age	-10.384**	-11.246**	-2.621	-1.995	-4.051**	-5.141***
	(-2.248)	(-2.519)	(-1.450)	(-1.163)	(-2.129)	(-3.042)
CEO Tenure	2.873**	2.703**	1.009	0.194	2.948***	2.474***
	(2.298)	(2.409)	(0.789)	(0.154)	(2.978)	(2.895)
CEO Ownership (%)	0.004	-0.008	0.068	0.116	0.148	0.138*
	(0.033)	(-0.076)	(0.440)	(0.762)	(1.557)	(1.682)
Female CEO	-5.170	-5.809**	3.425	3.253	-0.204	-0.244
	(-1.642)	(-2.453)	(1.566)	(1.413)	(-0.067)	(-0.093)
CEO Age	-20.182**	-17.385**	-11.002	-7.592	-23.535***	-18.011***
	(-2.400)	(-2.310)	(-1.636)	(-1.128)	(-4.053)	(-3.532)
Firm FEs	YES	YES	NO	NO	NO	NO
Industry FEs	NO	NO	YES	YES	YES	YES
Year FEs	YES	YES	YES	YES	YES	YES
Random Effects	N/A	N/A	N/A	N/A	YES	YES
Observations	2,157	2,157	2,157	2,157	2,157	2,157
Adjusted R^2 (Overall R^2)	0.751	0.750	0.547	0.528	0.262	0.313

Table 3. Entropy Balancing Analyses

This table reports the effects of CEOs' social class on firm risk for a sample of US firms from 1992 to 2021 after entropy balancing. The balancing approach is based on the independent variable, *Private School CEO*, which is a dummy that equals to one if the CEO attended a private high school, and zero otherwise. The dependent variables are (1) total volatility, *Volatility*, which is the annualized standard deviation of daily stock returns of the firm's fiscal year, and (2) idiosyncratic volatility, *Idio_Vol*, which is the annualized standard deviation of daily residuals, obtained from market model estimations, of the firm's fiscal year. All variables are defined in the Appendix and independent variables are lagged one period. Firm fixed effects and year fixed effects are based on firm IDs and year dummies, respectively. Standard errors are clustered at the firm level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	Volatility (%)	**Idio_Vol (%)**
	(1)	**(2)**
Private School CEO	-4.058**	-3.636*
	(-2.036)	(-1.886)
Ln(Assets)	-4.889***	-5.320***
	(-3.793)	(-4.838)
ROA	-13.554*	-14.499**
	(-1.777)	(-2.240)
Leverage	20.171***	19.598***
	(3.675)	(3.818)
B/M	1.539	2.576
	(0.527)	(0.865)
Firm Age	-13.197***	-14.985***
	(-3.046)	(-3.469)
CEO Tenure	2.618*	2.518**
	(1.875)	(2.008)
CEO Ownership (%)	-0.052	-0.041
	(-0.480)	(-0.398)
Female CEO	-2.721	-3.161
	(-1.059)	(-1.391)
CEO Age	-17.389*	-14.823*
	(-1.837)	(-1.730)
Firm FEs	YES	YES
Year FEs	YES	YES
Observations	2,157	2,157
Adjusted R^2	0.751	0.761

Table 4. IV-2SLS

This table reports the results of a two-stage least square analysis with an instrumental variable for CEOs' social class. The instrumental variable is the county income, which is a ratio of per capita personal income of the CEO's birth county to the average per capita personal income of the US. The instrument is measured at the age of 16 (average high school year) for every CEO. In column (2), the dependent variable is total volatility, *Volatility*, which is the annualized standard deviation of daily stock returns of the firm's fiscal year. And in column (3) the dependent variable is idiosyncratic volatility, *Idio_Vol*, which is the annualized standard deviation of daily residuals, obtained from market model estimations, of the firm's fiscal year. All variables are defined in the Appendix and independent variables are lagged one period. Firm fixed effects and year fixed effects are based on firm IDs and year dummies, respectively. Standard errors are clustered at the firm level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	Private School CEO	**Volatility (%)**	**Idio_Vol (%)**
	(1)	**(2)**	**(3)**
County Income	0.007*		
	(1.744)		
Private School CEO (Instrumented)		-21.315**	-24.761**
		(2.278)	(2.528)
Ln(Assets)	0.029*	-4.375***	-4.899***
	(1.843)	(-3.612)	(-4.243)
ROA	-0.007	-21.406**	-21.198**
	(-0.217)	(-2.307)	(-2.596)
Leverage	-0.093	37.061***	34.015***
	(-0.766)	(5.328)	(4.378)
B/M	0.002	-9.441***	-9.842***
	(0.191)	(-5.865)	(-5.420)
Firm Age	-0.133**	-6.180	-4.292
	(-1.995)	(-0.929)	(-0.640)
CEO Tenure	0.037	1.690	0.526
	(0.745)	(0.851)	(0.266)
CEO Ownership (%)	0.001	-0.331*	-0.305
	(0.397)	(-1.702)	(-1.607)
Female CEO	-0.371*	6.848	6.221
	(-1.688)	(1.266)	(1.012)
CEO Age	-1.527**	6.144	19.478
	(-2.240)	(0.227)	(0.722)
Kleibergen-Paap rk Wald F statistic		40.214	
Stock-Yogo 10% critical value		16.38	
Firm FEs	YES	YES	YES
Year FEs	YES	YES	YES
Observations	787	787	787
Adjusted R^2	0.977	0.215	0.241

Table 5. CEO High School Experience and Risk-Taking

This table reports the effects of CEOs' social class on CEO risk-taking behaviour for a sample of US firms. The independent variable, *Private School CEO*, is a dummy that equals to one if the CEO attended a private high school, and zero otherwise. The risk-taking proxies include (1) R&D, which the R&D expenditure divided by total assets, (2) market leverage, which is the total debt divided by the sum of market value of equity and total debt, (3) acquisition expenditure, which is the acquisition expenditure divided by total assets, (4) CEO vega, which is the dollar change in wealth associated with a 0.01 change in the standard deviation of the firm's returns (in $000s), (5) CEO delta, which is the dollar change in wealth associated with a 1% change in the firm's stock price (in $000s), and (6) CEO overconfidence, which is a dummy that equals to one if the CEO holds options despite a 67 percent increase in stock price (or more) at least twice, beginning in the first year the CEO exhibits this behaviour. All variables are defined in the Appendix and independent variables are lagged one period. All models include control variables in Table 2, except for removing leverage variable in column (2). Firm fixed effects and year fixed effects are based on firm IDs and year dummies, respectively. Standard errors are clustered at the firm level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	R&D	**Leverage**	**Acquisition Expenditure**	**CEO Vega**	**CEO Delta**	**Holder67**
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Private School CEO	0.003	0.016	-0.000	2.471	-167.419	0.027
	(0.596)	(0.553)	(-0.029)	(0.893)	(-1.637)	(0.292)
Ln(Assets)	-0.008**	0.019*	-0.011**	1.985*	54.224	0.021
	(-2.384)	(1.851)	(-2.338)	(1.924)	(1.399)	(0.636)
ROA	-0.041*	-0.264***	0.022	0.098	140.914	0.161*
	(-1.742)	(-4.065)	(1.152)	(0.046)	(1.267)	(1.786)
Leverage	-0.015		-0.086***	-2.906	-147.803	0.047
	(-1.165)		(-4.678)	(-1.529)	(-1.333)	(0.296)
B/M	0.001	0.018	-0.003	0.515	15.210	-0.047
	(0.369)	(1.294)	(-1.111)	(1.107)	(0.656)	(-1.489)
Firm Age	0.005	0.042	0.027**	-1.485	7.278	0.035
	(0.326)	(1.115)	(2.042)	(-0.568)	(0.062)	(0.239)
CEO Tenure	0.002	-0.012	-0.010*	0.572	131.229	0.192***
	(0.435)	(-0.801)	(-1.923)	(0.643)	(1.621)	(4.194)
CEO Ownership (%)	-0.000	0.001	-0.001	0.110	27.529**	0.003
	(-0.048)	(0.512)	(-1.324)	(0.881)	(2.036)	(0.896)
Female CEO	0.008	-0.090	-0.011	-0.206	-209.895	-0.081
	(0.500)	(-1.237)	(-0.568)	(-0.060)	(-1.267)	(-0.545)
CEO Age	-0.007	-0.004	0.071*	10.236	-153.747	0.636
	(-0.230)	(-0.032)	(1.717)	(1.454)	(-0.322)	(1.415)
Firm FEs	YES	YES	YES	YES	YES	YES
Year FEs	YES	YES	YES	YES	YES	YES
Observations	2,113	2,108	2,114	1,929	1,932	1,927
Adjusted R^2	0.850	0.794	0.154	0.529	0.578	0.708

Table 6. Further Education, Ability, and Firm Performance

This table reports the effects of CEOs' social class on CEOs' further education, ability, and firm performance for a sample of US firms. The independent variable, *Private School CEO*, is a dummy that equals to one if the CEO attended a private high school, and zero otherwise. In panel A, the dependent variables measure CEO's future education and ability, including (1) master's degree, which is a dummy that equals to one if the CEO has a master's degree or higher (including master's degree, MBA, JD, MD, and PhD), and zero otherwise; (2) PhD CEO, which is a dummy that equals to one if the CEO has a PhD degree (including JD, MD, and PhD), and zero otherwise; and (3) general ability index (GAI), which is the first factor of applying principal components analysis to five proxies of general managerial ability: past number of positions, number of firms, number of industries, CEO experience dummy, and conglomerate experience dummy (Custódio et al., 2013). In panel B, the depdpent variables measure firm performance, including (1) ROA, (2) ROE, and (3) Tobin's Q ratio, which is the ratio of the total assets minus book value of equity plus market value of equity minus deferred taxes, divided by total assets. All variables are defined in the Appendix and independent variables are lagged one period. All models include control variables in Table 2. Firm fixed effects and year fixed effects are based on firm IDs and year dummies, respectively. Standard errors are clustered at the firm level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A. CEO high school experience and ability

	Master's degree	**PhD CEO**	**GAI**
	(1)	**(2)**	**(3)**
Private School CEO	0.112	-0.009	-0.213
	(1.074)	(-0.253)	(-0.523)
Control Variables in Table 2	YES	YES	YES
Firm FEs	YES	YES	YES
Year FEs	YES	YES	YES
Observations	2,157	2,157	1,636
Adjusted R^2	0.901	0.919	0.875

Panel B. CEO high school experience and firm performance

	ROA	**ROE**	**Tobin's Q**
	(1)	**(2)**	**(3)**
Private School CEO	0.002	0.118	0.065
	(0.271)	(1.227)	(0.286)
Control Variables in Table 2	YES	YES	YES
Firm FEs	YES	YES	YES
Year FEs	YES	YES	YES
Observations	2,112	2,112	2,112
Adjusted R^2	0.571	0.074	0.465

Table 7. Do Upper-Class CEOs Have Better Risk Management Skills?

This table reports the effects of exogenous risk shocks on firm risk, which is moderated by CEOs' social class. The independent variables include our upper-class CEO proxy and two exogenous shocks, i.e., 2008-09 financial crisis and the Covid-19 pandemic. *Private School CEO* is a dummy that equals one if the CEO attended a private high school, and zero otherwise. Financial Crisis is a dummy that equals one in year 2008 and 2009, and zero otherwise. Covid-19 Pandemic is a dummy that equals one in year 2020 and 2021 (the end of the sample), and zero otherwise. The dependent variables are (1) total volatility, *Volatility*, which is the annualized standard deviation of daily stock returns of the firm's fiscal year, and (2) idiosyncratic volatility, *Idio_Vol*, which is the annualized standard deviation of daily residuals, obtained from market model estimations, of the firm's fiscal year. All variables are defined in the Appendix and independent variables are lagged one period. Firm fixed effects and year fixed effects are based on firm IDs and year dummies, respectively. Standard errors are clustered at the firm level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	Volatility (%)	**Idio_Vol (%)**
	(1)	**(2)**
Private School CEO	-5.545***	-4.993***
	(-2.896)	(-2.780)
Private School CEO × Financial Crisis	1.705	0.633
	(0.901)	(0.418)
Private School CEO × Covid-19 Pandemic	3.816	2.416
	(1.414)	(0.966)
Ln(Assets)	-5.359***	-5.628***
	(-4.810)	(-5.650)
ROA	-17.225**	-19.400***
	(-2.235)	(-2.816)
Leverage	24.543***	24.955***
	(4.745)	(4.829)
B/M	-2.715	-2.382
	(-0.715)	(-0.582)
Firm Age	-10.439**	-11.299**
	(-2.254)	(-2.520)
CEO Tenure	2.830**	2.677**
	(2.280)	(2.388)
CEO Ownership (%)	0.008	-0.005
	(0.071)	(-0.051)
Female CEO	-4.955	-5.670**
	(-1.613)	(-2.439)
CEO Age	-20.247**	-17.433**
	(-2.460)	(-2.349)
Firm FEs	YES	YES
Year FEs	YES	YES
Observations	2,157	2,157
Adjusted R^2	0.752	0.750

Table 8. The Effects of ROA Volatility and Cash Flow Volatility

This table reports the effects of CEOs' social class on firm risk for a sample of US firms from 1992 to 2021. The independent variable, *Private School CEO*, is a dummy that equals to one if the CEO attended a private high school, and zero otherwise. The dependent variables are (1) total volatility, *Volatility*, which is the annualized standard deviation of daily stock returns of the firm's fiscal year, and (2) idiosyncratic volatility, *Idio_Vol*, which is the annualized standard deviation of daily residuals, obtained from market model estimations, of the firm's fiscal year. All variables are defined in the Appendix and independent variables are lagged one period. Firm fixed effects and year fixed effects are based on firm IDs and year dummies, respectively. Standard errors are clustered at the firm level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	Volatility (%)	**Idio_Vol (%)**	**Volatility (%)**	**Idio_Vol (%)**
	(1)	**(2)**	**(3)**	**(4)**
Private School CEO	-3.961**	-3.997**	-4.336**	-4.085**
	(-2.085)	(-2.251)	(-2.245)	(-2.192)
σ(ROA)	35.776***	22.299**		
	(2.829)	(2.074)		
Private School CEO × σ(ROA)	-37.618***	-24.390**		
	(-3.018)	(-2.311)		
σ(CFO)			53.562**	33.816*
			(2.568)	(1.711)
Private School CEO × σ(CFO)			-76.649***	-59.597**
			(-3.048)	(-2.589)
Ln(Assets)	-4.905***	-5.330***	-5.110***	-5.502***
	(-4.256)	(-5.187)	(-4.471)	(-5.347)
ROA	-15.465*	-18.423***	-15.253**	-18.554***
	(-1.941)	(-2.629)	(-2.051)	(-2.835)
Leverage	23.252***	24.163***	24.489***	24.951***
	(4.416)	(4.701)	(4.706)	(4.834)
B/M	-2.500	-2.262	-2.486	-2.251
	(-0.678)	(-0.563)	(-0.695)	(-0.573)
Firm Age	-8.771*	-10.523**	-10.166**	-11.442**
	(-1.937)	(-2.307)	(-2.141)	(-2.455)
CEO Tenure	2.689**	2.576**	2.853**	2.695**
	(2.179)	(2.313)	(2.307)	(2.410)
CEO Ownership (%)	0.002	-0.010	-0.028	-0.034
	(0.017)	(-0.095)	(-0.253)	(-0.333)
Female CEO	-4.750	-5.567**	-4.932	-5.706**
	(-1.535)	(-2.369)	(-1.562)	(-2.379)
CEO Age	-19.395**	-16.826**	-20.134**	-17.416**
	(-2.326)	(-2.245)	(-2.440)	(-2.340)
Firm FEs	YES	YES	YES	YES
Year FEs	YES	YES	YES	YES
Observations	2,152	2,152	2,134	2,134
Adjusted R^2	0.754	0.752	0.754	0.752

Table 9. The Moderator Effects of CEO Tenure and Analyst Coverage

This table reports the effects of CEOs' social class on firm risk, which is moderated by CEO tenure and analyst coverage. The independent variable, *Private School CEO*, is a dummy that equals to one if the CEO attended a private high school, and zero otherwise. The moderator variables include (1) long CEO tenure, which is a dummy that equals one if a CEO's tenure is greater than four in a given year, and zero otherwise; and (2) high analyst coverage, which is a dummy that equals one if the analyst coverage of a given firm is greater than the industry median, and zero otherwise. Analyst coverage is measured by the average monthly number of analysts who give EPS estimates for a given firm. The dependent variables are (1) total volatility, *Volatility*, which is the annualized standard deviation of daily stock returns of the firm's fiscal year, and (2) idiosyncratic volatility, *Idio_Vol*, which is the annualized standard deviation of daily residuals, obtained from market model estimations, of the firm's fiscal year. All variables are defined in the Appendix and independent variables are lagged one period. Firm fixed effects and year fixed effects are based on firm IDs and year dummies, respectively. Standard errors are clustered at the firm level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	Volatility (%)	**Idio_Vol (%)**	**Volatility (%)**	**Idio_Vol (%)**
	(1)	**(2)**	**(3)**	**(4)**
Private School CEO	-8.000***	-7.101***	-8.216***	-7.163***
	(-3.637)	(-3.439)	(-3.412)	(-3.227)
Long Tenure	-2.752**	-2.261**		
	(-2.444)	(-2.313)		
Private School CEO × Long Tenure	3.706**	3.090**		
	(2.368)	(2.086)		
High Analyst Coverage			-2.336*	-1.798*
			(-1.954)	(-1.739)
Private Sch. CEO × High Anal. Cov.			3.644**	2.883*
			(2.142)	(1.801)
Ln(Assets)	-5.381***	-5.636***	-5.335***	-5.605***
	(-4.902)	(-5.753)	(-4.684)	(-5.474)
ROA	-17.180**	-19.369***	-17.257**	-19.426***
	(-2.219)	(-2.810)	(-2.236)	(-2.824)
Leverage	24.479***	24.933***	24.623***	25.067***
	(4.729)	(4.840)	(4.695)	(4.813)
B/M	-2.733	-2.412	-2.797	-2.462
	(-0.727)	(-0.593)	(-0.745)	(-0.606)
Firm Age	-10.651**	-11.467**	-9.998**	-10.945**
	(-2.325)	(-2.581)	(-2.241)	(-2.508)
CEO Ownership (%)	3.840**	3.482**	2.891**	2.717**
	(2.303)	(2.357)	(2.321)	(2.435)
Female CEO	0.007	-0.006	0.009	-0.004
	(0.057)	(-0.053)	(0.075)	(-0.037)
CEO Age	-5.101*	-5.755**	-5.061	-5.718**
	(-1.687)	(-2.533)	(-1.616)	(-2.403)
Firm FEs	YES	YES	YES	YES
Year FEs	YES	YES	YES	YES
Observations	2,157	2,157	1,816	1,816
Adjusted R^2	0.753	0.751	0.752	0.751

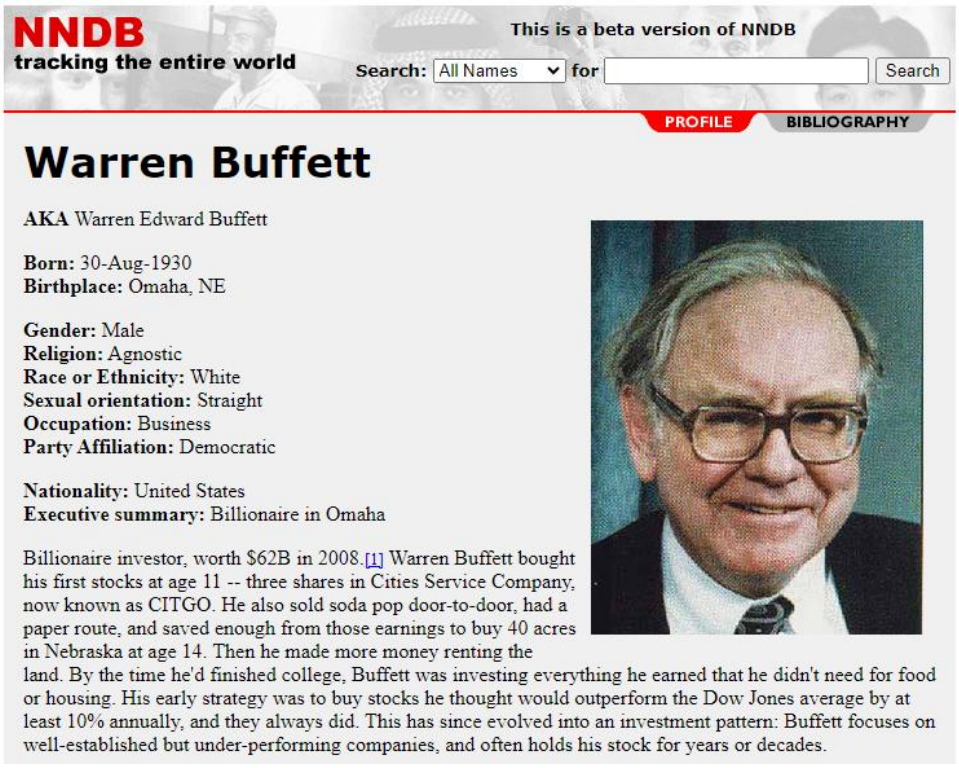
Appendix A. Variable Definition

Variable	Definition	Data Source
Firm Risk Variables		
Volatility (%)	Annualized standard deviation of daily stock returns of the firm's fiscal year.	CRSP
Idio_Vol (%)	Annualized standard deviation of daily residuals, obtained from market model estimations, of the firm's fiscal year.	CRSP
ROA Volatility	The standard deviation of ROA for the past 5 years.	Compustat
CFO Volatility	The standard deviation of operational cash flows for the past 5 years. The operational cash flow is adjusted by total assets.	Compustat
High Analyst Coverage	A dummy that equals one if the analyst coverage of a given firm is greater than the industry median, and zero otherwise. Analyst coverage is measured by the average monthly number of analysts who give EPS estimates for a given firm.	I/B/E/S
CEO Characteristics		
Private School CEO (Upper-Class)	A dummy that equals to one if a CEO attended private high school, and zero otherwise.	Manually collected from Marquis Who's Who, NNDB, Wikipedia, and Google
CEO Tenure	The natural log of CEO tenure in a given year.	ExecuComp
Long Tenure	A dummy equal to one if a CEO tenure is greater than 4 years.	ExecuComp
CEO Ownership (%)	The proportion of shares owned by the CEO, in percentage.	ExecuComp
Female CEO	A dummy that equals to one if a CEO is female, and zero otherwise.	ExecuComp
CEO Age	The natural log of CEO age in a given year.	ExecuComp
CEO Vega	Dollar changes in wealth associated with a 0.01 change in the standard deviation of the firm's returns (in $000s).	ExecuComp
CEO Delta	Dollar changes in wealth associated with a 1% change in the firm's stock price (in $000s).	ExecuComp
Holder67	A dummy that equals to one when the ratio of the value of options in-the-money to the average strike price exceeds 0.67 at least twice during the sample period, and zero otherwise. Consistent with Malmendier and Tate (2005) and Campbell et al. (2011), a CEO is classified as overconfident in the first fiscal year he/she exhibits the overconfident behaviour and continues to be classified as overconfident for the remainder of the sample.	ExecuComp, Compustat
GAI	General ability index, which is the first factor of applying principal components analysis to five proxies of general managerial ability: past number of positions, number of firms, number of industries, CEO experience dummy, and conglomerate experience dummy.	Custódio et al. (2013)
Firm Characteristics		
Ln(Assets)	The natural log of a firm's total assets in a given year.	Compustat
ROA	Return on assets, calculated as income before extraordinary items plus interest expenses plus taxes divided by total assets.	Compustat
Leverage	Market leverage calculated as total debt divided by the sum of market value of equity and total debt.	Compustat
B/M	The ratio of book market of equity divided by market value of equity.	Compustat
R&D	The ratio of research and development expenses divided by total assets in a given year (missing value set to be zero).	Compustat

Acquisition Expenditure	The ratio of acquisition expenses divided by total assets in a given year (missing value set to be zero).	Compustat
Tobin's Q	The ratio of the total assets minus book value of equity plus market value of equity minus deferred taxes, divided by total assets.	Compustat
ROE	Return on assets, calculated as income before extraordinary items plus interest expenses plus taxes divided by total assets.	Compustat

Online Appendix

Figure OA1. High School Information of Warren Buffett (via. NNDB)



NNDB
tracking the entire world

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Search: All Names for Search

PROFILE BIBLIOGRAPHY

Warren Buffett

AKA Warren Edward Buffett

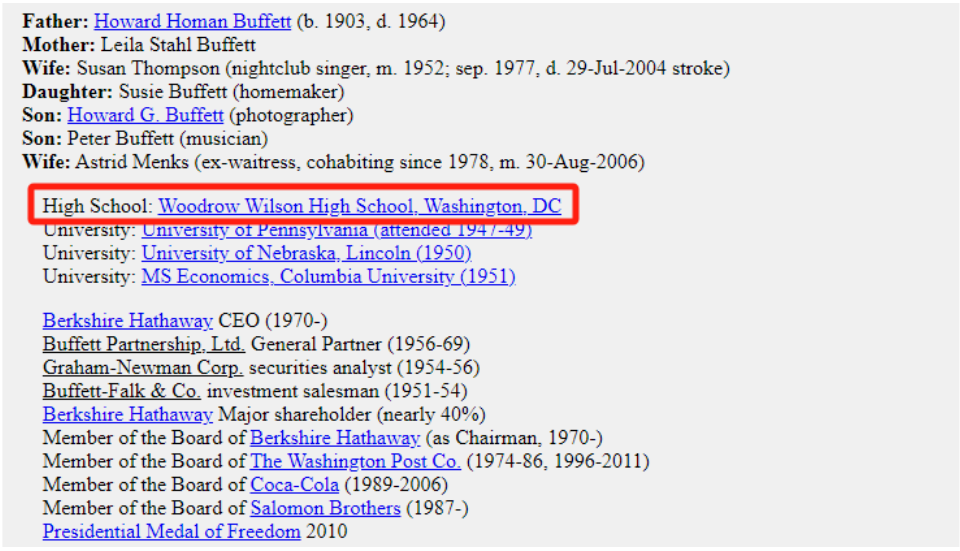
Born: 30-Aug-1930
Birthplace: Omaha, NE

Gender: Male
Religion: Agnostic
Race or Ethnicity: White
Sexual orientation: Straight
Occupation: Business
Party Affiliation: Democratic

Nationality: United States
Executive summary: Billionaire in Omaha

Billionaire investor, worth $62B in 2008.[1] Warren Buffett bought his first stocks at age 11 -- three shares in Cities Service Company, now known as CITGO. He also sold soda pop door-to-door, had a paper route, and saved enough from those earnings to buy 40 acres in Nebraska at age 14. Then he made more money renting the land. By the time he'd finished college, Buffett was investing everything he earned that he didn't need for food or housing. His early strategy was to buy stocks he thought would outperform the Dow Jones average by at least 10% annually, and they always did. This has since evolved into an investment pattern: Buffett focuses on well-established but under-performing companies, and often holds his stock for years or decades.

(a)



Father: Howard Homan Buffett (b. 1903, d. 1964)
Mother: Leila Stahl Buffett
Wife: Susan Thompson (nightclub singer, m. 1952; sep. 1977, d. 29-Jul-2004 stroke)
Daughter: Susie Buffett (homemaker)
Son: Howard G. Buffett (photographer)
Son: Peter Buffett (musician)
Wife: Astrid Menks (ex-waitress, cohabiting since 1978, m. 30-Aug-2006)

High School: Woodrow Wilson High School, Washington, DC
University: University of Pennsylvania (attended 1947-49)
University: University of Nebraska, Lincoln (1950)
University: MS Economics, Columbia University (1951)

Berkshire Hathaway CEO (1970-)
Buffett Partnership, Ltd. General Partner (1956-69)
Graham-Newman Corp. securities analyst (1954-56)
Buffett-Falk & Co. investment salesman (1951-54)
Berkshire Hathaway Major shareholder (nearly 40%)
Member of the Board of Berkshire Hathaway (as Chairman, 1970-)
Member of the Board of The Washington Post Co. (1974-86, 1996-2011)
Member of the Board of Coca-Cola (1989-2006)
Member of the Board of Salomon Brothers (1987-)
Presidential Medal of Freedom 2010

(b)

Table OA1. Diagnostic Test for the Entropy Balancing Analysis

This table presents the mean, variance, and skewness values of control variables for the treatment group and control group before and after entropy balancing. The treatment group includes firm-year observations with CEOs who attended private high school (i.e., *Private School CEO* = 1). The treatment group includes firm-year observations with CEOs who did not attend private high school (i.e., *Private School CEO* = 0).

Panel A. Pre-Balancing

	Private School			Public School		
	Mean	**Variance**	**Skewness**	**Mean**	**Variance**	**Skewness**
Ln(Assets)	8.301	3.843	-0.137	8.680	3.814	-0.017
ROA	0.042	0.012	-3.809	0.059	0.011	-4.992
Leverage	0.201	0.040	1.251	0.187	0.036	1.433
B/M	0.472	0.324	3.968	0.356	0.178	-4.602
Firm Age	2.688	0.305	-0.539	2.736	0.351	-0.688
CEO Tenure	1.869	0.453	-0.083	1.823	0.430	-0.024
CEO Ownership (%)	3.243	51.12	3.431	3.333	57.89	3.127
Female CEO	0.009	0.009	10.140	0.077	0.071	3.172
CEO Age	4.033	0.022	-0.248	4.023	0.020	-0.547

Panel B. Post-Balancing

	Private School			Public School		
	Mean	**Variance**	**Skewness**	**Mean**	**Variance**	**Skewness**
Ln(Assets)	8.301	3.843	-0.137	8.301	3.843	-0.147
ROA	0.042	0.012	-3.809	0.042	0.012	-3.642
Leverage	0.201	0.040	1.251	0.201	0.040	1.375
B/M	0.472	0.324	3.968	0.472	0.324	3.835
Firm Age	2.688	0.304	-0.539	2.688	0.304	-0.532
CEO Tenure	1.869	0.453	-0.083	1.869	0.453	-0.054
CEO Ownership (%)	3.243	51.120	3.431	3.243	51.120	3.395
Female CEO	0.009	0.009	10.140	0.009	0.009	10.130
CEO Age	4.033	0.022	-0.248	4.033	0.022	-0.256

Table OA2. Robustness Check: Alternative Measures of Firm Risk

This table reports the effects of CEOs' private school experience on firm risk for a sample of US firms from 1992 to 2021 using alternative measures of firm risk or alternative fixed effects. The independent variable, *Private School CEO*, is a dummy that equals to one if the CEO attended a private high school, and zero otherwise. The dependent variables are (1) total volatility, *Volatility*, which is the annualized standard deviation of daily stock returns of the firm's fiscal year, and (2) idiosyncratic volatility, *Idio_Vol*, which is the annualized standard deviation of daily residuals, obtained from market model estimations, of the firm's fiscal year, (3) the natural logarithm of total volatility, (4) the natural logarithm of idiosyncratic volatility, (5) total volatility (without dividend reinvestment), which is the annualized standard deviation of daily stock returns without dividend reinvestment of the firm's fiscal year, and (6) idiosyncratic volatility (Fama-French 3 factor), which is the annualized standard deviation of daily residuals, obtained from Fama-French 3 factor model estimations, of the firm's fiscal year. All variables are defined in the Appendix and independent variables are lagged one period. Firm fixed effects and year fixed effects are based on firm IDs and year dummies, respectively. Standard errors are clustered at the firm level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	Volatility (%)	**Idio_Vol (%)**	**Ln(Volatility)**	**Ln(Idio_Vol)**	**Volatility (No Div. Reinv.)**	**Idio_Vol (Fama-French 3 Factor)**
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Private School CEO	-5.783**	-4.751**	-0.121**	-0.124**	-5.360***	-5.036***
	(-2.354)	(-2.092)	(-2.369)	(-2.058)	(-2.791)	(-2.906)
Ln(Assets)	-2.866**	-3.316***	-0.122***	-0.145***	-5.426***	-5.976***
	(-2.144)	(-2.710)	(-5.268)	(-6.180)	(-4.805)	(-5.776)
ROA	-11.729	-15.401**	-0.224*	-0.268**	-17.024**	-22.557***
	(-1.606)	(-2.219)	(-1.787)	(-2.239)	(-2.198)	(-2.768)
Leverage	22.961***	21.714***	0.487***	0.579***	24.553***	24.780***
	(5.115)	(4.829)	(5.164)	(5.870)	(4.730)	(4.536)
B/M	-5.180	-4.817	-0.028	-0.031	-2.711	-2.491
	(-1.539)	(-1.321)	(-0.696)	(-0.642)	(-0.720)	(-0.531)
Firm Age	-15.445***	-15.786***	-0.052	-0.094	-10.333**	-5.017
	(-3.513)	(-3.719)	(-0.678)	(-1.020)	(-2.232)	(-1.113)
CEO Tenure	3.659***	3.367***	0.054*	0.066**	2.924**	2.070*
	(2.631)	(2.639)	(1.903)	(2.103)	(2.333)	(1.899)
CEO Ownership (%)	0.072	0.046	0.001	0.001	0.004	-0.028
	(0.562)	(0.381)	(0.417)	(0.413)	(0.031)	(-0.269)
Female CEO	-5.811	-6.117**	-0.064	-0.080	-5.228*	-5.486**
	(-1.597)	(-2.101)	(-0.999)	(-1.443)	(-1.664)	(-2.252)
CEO Age	-38.361***	-32.912***	-0.310*	-0.335*	-20.398**	-14.010*
	(-3.760)	(-3.513)	(-1.666)	(-1.716)	(-2.427)	(-1.932)
Firm FEs	YES	YES	YES	YES	YES	YES
Year FEs	NO	NO	YES	YES	YES	YES
Industry × Year FEs	YES	YES	NO	NO	NO	NO
Observations	2,157	2,157	2,157	2,157	2,157	1,760
Adjusted R^2	0.790	0.775	0.787	0.782	0.749	0.758

Table OA3. Robustness Check: Additional CEO Controls

This table reports the effects of CEOs' private school experience on firm risk for a sample of US firms from 1992 to 2021 after controlling for additional CEO characteristics. The independent variable, *Private School CEO*, is a dummy that equals to one if the CEO attended a private high school, and zero otherwise. The dependent variables are (1) total volatility, *Volatility*, which is the annualized standard deviation of daily stock returns of the firm's fiscal year, and (2) idiosyncratic volatility, *Idio_Vol*, which is the annualized standard deviation of daily residuals, obtained from market model estimations, of the firm's fiscal year. The additional controls include CEO education (Master's degree), general ability index, CEO vega, and CEO delta. All variables are defined in the Appendix and independent variables are lagged one period. Firm fixed effects and year fixed effects are based on firm IDs and year dummies, respectively. Standard errors are clustered at the firm level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	Volatility (%)	**Idio_Vol (%)**	**Volatility (%)**	**Idio_Vol (%)**
	(1)	**(2)**	**(1)**	**(2)**
Private School CEO	-6.189***	-5.146***	-4.866***	-4.866***
	(-2.911)	(-2.613)	(-2.776)	(-2.776)
Master's Degree	1.250	1.962		
	(0.585)	(1.006)		
GAI	-0.685	-1.051		
	(-0.596)	(-1.026)		
CEO Vega			0.041	0.041
			(0.479)	(0.479)
CEO Delta			-0.000	-0.000
			(-0.228)	(-0.228)
Ln(Assets)	-4.110***	-3.910***	-5.770***	-5.770***
	(-3.091)	(-3.652)	(-5.217)	(-5.217)
ROA	-21.769**	-23.034***	-19.344***	-19.344***
	(-2.224)	(-2.763)	(-2.726)	(-2.726)
Leverage	19.806***	21.077***	26.753***	26.753***
	(3.084)	(3.385)	(4.899)	(4.899)
B/M	-3.701	-3.867	-2.422	-2.422
	(-0.957)	(-0.940)	(-0.573)	(-0.573)
Firm Age	-11.578*	-12.389**	-9.756**	-9.756**
	(-1.766)	(-2.263)	(-2.157)	(-2.157)
CEO Tenure	2.769*	2.598**	2.292**	2.292**
	(1.962)	(2.050)	(2.016)	(2.016)
CEO Ownership (%)	0.046	0.035	0.070	0.070
	(0.349)	(0.281)	(0.585)	(0.585)
Female CEO	2.759	2.709	-4.693**	-4.693**
	(0.688)	(0.728)	(-2.112)	(-2.112)
CEO Age	-17.375**	-14.459*	-14.925**	-14.925**
	(-1.982)	(-1.772)	(-2.045)	(-2.045)
Firm FEs	YES	YES	YES	YES
Year FEs	YES	YES	YES	YES
Observations	1,636	1,636	2,041	2,041
Adjusted R^2	0.769	0.774	0.751	0.751