CEO Traits and Firm Outcomes: Do Early Childhood Experiences Matter?

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ABSTRACT

This paper examines the impact of early childhood characteristics of top corporate decision makers on firm policies and value. Using a unique dataset, we study the effect of CEO birth order, family size, socioeconomic status, parent occupational choices and childhood trauma, all of which have been shown to affect personality development and social capital. Overall, we find that firstborn CEOs, CEOs from families with higher socioeconomic resources and those with less childhood trauma prefer safer investment and leverage policies, which also lead to lower firm value. Socioeconomic status dominates other childhood characteristics as a determinant of firm policies. Though our analyses indicate a moderate effect of birth order, it intensifies in CEO family owned firms where family dynamics facilitate expression of personal risk taking.

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I. Introduction

Managers' characteristics have been shown to significantly influence firm policies and performance. Most studies in this line of literature have focused on education, professional experiences or other characteristics such as religiosity or political preferences that correlate with management 'style'. Several recent studies suggest that the origins of management "style" may be traced to much earlier life experiences. For example, Pan, Siegel and Wang (2018) link cultural origin of CEOs to acquisition behavior of firms. Custodio and Siegel (2017) and Black, Gronqvist and Ockert (2017) find that firstborn children are more likely to self-sort into management positions. Malmendier, Tate and Yan (2011) show that CEOs with exposure to the Great Depression pursue safer corporate policies. Similarly, Bernile, Bhagwat and Rau (2017) show that the degree of childhood exposure to natural disasters, a form of trauma, affect CEO risk taking.[2]

These findings are supported by the extensive literature studying the development of personality. The individual characteristics shaped during childhood are persistent and affect multiple economic and social outcomes later in life (Borghans, Duckworth, Heckman and ter Weel, 2010). In fact, both cognitive and non-cognitive characteristics of adolescents and adults have been strongly linked to the family environment and, in particular, to the family socioeconomic status (SES), family size, and birth order.[3] Multiple variables such as resource allocation, competition and role assignment within the family unit and different dimensions of learning come into play to establish this connection. For example, firstborn children, children from small and more affluent families are typically allocated more of their parents' financial and cognitive resources, with the latter being in the form of socialization and informal teaching. This investment results in better cognitive abilities, health outcomes, higher education attainment and fewer risk seeking behaviors (Black, Devereux, and Salvanes, 2005; Cohen, Janicki-Deverts, Chen, and Matthews, 2010; Deckers, Falk, Kosse and Schildberg-Hörisch, 2015).[4] Further, Black, Devereux, Lundborg and Majlesi (2015) demonstrate that nurture is a more important factor than nature, in establishing children's risk preferences.

[2] In a different setting, Chuprinin and Sosyura (2018) demonstrate the effect of childhood socioeconomic family status on the performance of fund managers.

[3] Deckers, Falk, Kosse and Schildberg-Hörisch (2015) also identify multiple family microstructure variables (i.e., parenting style, amount and quality of parent-child interactions, family structure, birth conditions, and the personality of the child's mother) through which family environment affects child personality.

[4] In survey work, Sulloway (1999) finds that through adaptation to the new family structure, firstborns start to exhibit authoritarian and conservative tendencies, while laterborns become more flexible and receptive to innovation.

The labor market outcomes of early born children include higher earnings and placement into jobs requiring leadership qualities (Black, Gronqvist and Ockert, 2017; Kantarevic and Mechoulan, 2005). Financial decision making is also affected by early childhood experiences: Cronqvist and Siegel (2015) show that parents' socioeconomic status and family size affects savings behavior of individuals. Given the wealth of evidence that personality traits shaped during childhood are persistent and influence occupational choices and styles, we test the effect of CEO childhood family characteristics on firm policies and performance.

We construct a novel dataset of early childhood characteristics from the analysis of individual CEO biographies and supplement it with several databases containing publicly available demographic information. We are able to obtain family size and birth order[5] for 754 and socioeconomic status for 1258 CEOs of non-financial and non-utility S&P 1500 firms for the time period spanning 1992-2016. Since socioeconomic status is a construct that typically relies on measures of income, education or occupational prestige for identification, we use primarily parents' occupations to infer socioeconomic status of the family according to the classifications established in the sociology literature (Thompson and Hickey, 2005). The ranking is based on five socioeconomic classes ranging from 1 (poor) to 5 (upper). This classification is often supplemented by the CEO's personal account of his parents' perceived socioeconomic class status such as "we were dirt poor" or "I had a typical middle-class upbringing". Admittedly, while this identification of socioeconomic status lacks the precision of self-reported income or other wealth measures recorded in the 1940 Census and used by Chuprinin and Sosyura (2018) to identify parental resources of fund managers, it also offers some advantages. First, it is available for a larger sample of individuals and allows us to examine the behavior of CEOs from multiple birth cohorts. Second, it is does not rely on a financial snapshot recorded by the Census and represents the perceived socioeconomic status of the family during the CEO's formative years. Further, the richness of the dataset also allows us to make use of the nature of parents' occupations (i.e., management, finance), mothers' participation in the workforce, instances of single-parent households and trauma (i.e., parent's loss, family move).

Our results confirm that early childhood experiences influence personality traits of CEOs and are, subsequently, correlated with firm policies and outcomes. We find that CEOs from more affluent socioeconomic backgrounds and, to a lesser extent, firstborn CEOs, are likely to support less risky firm

[5] While family size is reported for a larger subsample of CEOs, birth order variables such as firstborn indicator is available for 661 CEOs and ordinal birth order for 633 CEOs.

policies. They are associated with lower investment rates in R&D and capital expenditures, which translate into lower realized stock return volatility. To test whether CEOs raised in environments with better resources are also better performers, we examine the firm value measured by Tobin's Q and market-adjusted firm stock returns. Contrary to the expectations of better performance, higher childhood socioeconomic status is associated with lower firm value. These findings, however, are consistent with the negative valuation effect of conservative firm policies. The relation between childhood socioeconomic status, firm policies and performance is not disproportionately affected by the CEOs who were raised in extreme hardship or extraordinary wealth. It is also incremental to firm and industry characteristics that can affect corporate policies and a number of other personal attributes such as gender, age, minority status and birth place.

In all policy and firm value analyses, socioeconomic class appears to dominate the firstborn child effect. Family size has virtually no relation to corporate policies. We acknowledge that these conclusions are sensitive to the measurement of birth order that relies on ordinal positioning rather than perceived positioning (i.e., the individual's perception of his or her place in the family hierarchy). Our control for the number of siblings alleviates this concern. Moreover, other large scale studies such as Sulloway (1996) do find the effect of birth order on personality development using ordinal birth order.[6]

Interestingly, the rather weak relation between firstborn indicator and firm policies observed at the sample level, intensifies in a sub-sample of firms owned by the CEO's family. In this sub-sample of family firms, the coefficient on firstborn indicator is more economically and statistically significant in total and idiosyncratic volatility, investment in R&D and Tobin's Q regressions than in the baseline regressions.

In addition to studying the effect of birth order, family size and socioeconomic status, we are able to examine several other childhood characteristics obtained from CEO biographies. For example, we confirm an effect of childhood trauma on risk taking. Bernile, Bhagwat and Rau (2017) show that moderate childhood traumatic experiences encourage CEOs to take risks while extreme events induce strong conservatism. Their study identifies trauma by exposure to natural disasters occurring near the place of CEO's residence during adolescence. Our measure of trauma is complementary and relies

[6] Melillo (1983) also investigates the differences between the ordinal birth order position and psychologically perceived birth order position in a study of female doctorates employed in a university setting. Her findings support previous research that revealed significantly higher numbers of only or eldest child female doctorates, but over half the sample were not firstborn. Moreover, the results did not support any significant differences between perceived birth order position and actual birth order position. However, parental encouragement and support toward daughters were more predictive of career achievement.

primarily on mentions of parent loss, family relocations and other types of hardships in CEO biographies. We assume that these events were truly traumatic if they were reported in a biography as a life-defining event. We do find that certain types of trauma such as family moves are associated with some evidence of risk taking, while other types of trauma such as severe illness, Holocaust, and political persecution are associated with conservatism.

To isolate the potential effect of occupational knowledge and personality trait transmission from parent to child, we make additional use of parents' occupational choices. We identify several types of parents' occupations that may have meaningfully benefited future CEOs: management, finance/accounting/insurance/real estate and self-employed, which reflects decision-making autonomy and spans a wide range of occupations from running a farm to running a large family firm.[7] Interestingly, these types of parents' occupations are correlated with firm policies in a manner similar to socioeconomic status even after controlling for socioeconomic status – they are typically associated with less risky policies. Most interesting, however, is a positive correlation between CEO parents employed in finance-related fields and higher firm value measured either by Tobin's Q or market adjusted firm returns.

While parental occupations are typically based on the father's job, mothers play a very important role in the child's personality development. To examine the effect of maternal influence, we record mothers outside employment (i.e., bookkeeper, teacher, nurse, factory worker) or employment in the family business (i.e., family farm, garment business, family restaurant). Lastly, we identify all CEOs who disclosed that they were raised by mothers in a single-parent household during all of part of their childhood. While we find no statistically significant association between mother's employment and firm policies, CEOs raised by single mothers have higher levels of book leverage, which can reflect the learned reliance on consumer debt in single-parent families.

These results should be interpreted carefully as to not overstate the causal effect of CEO childhood characteristics on firm policies. Our explanatory variables pre-date CEO appointments and firm policies by several decades, which helps eliminate certain types of endogeneity. For example, CEOs cannot alter their early childhood characteristics after being hired, thus ruling out reverse causality. Moreover, firms are unlikely to hire firstborns or CEOs from certain socioeconomic backgrounds as a public signal of anticipated firm policy changes. Unlike military service, university degrees or work experience, childhood characteristics are less visible to the board and investors and are harder to identify

[7] These classifications (i.e., management, finance/accounting/insurance/real estate and self-employed) are not mutually exclusive.

ex-ante. However, our results may be affected by another type of CEO-firm matching where CEOs, who develop conservative management styles as a result of their upbringing, are hired by firms requiring that management approach.

Indeed, we show that some form of manager-firm matching does exist in our sample. We examine a set of CEO turnovers and find that very few pre-turnover firm and industry characteristics have effect on the choice of the new CEO from a certain socioeconomic status background. However, the socioeconomic class of the previous CEO is an important predictor in that firms tend to hire CEOs with similar socioeconomic childhood status. This result may be driven by the selection of executive from the same social/executive/educational network or based on some other more observable characteristic correlated with childhood socioeconomic status (i.e., engineering degree or law degree).

While our results support executive firm matching to potentially implement certain firm policies, we examine the extent of active or independent influence of CEO management style on firm policies. We perform firm policy tests in a sub-sample of the dataset that includes the first two post-CEO-turnover years and a sub-sample that includes all subsequent years. These tests suggest that the effect of CEO characteristics on firm policies becomes most visible after the first two years. In most cases, policies become safer when firms are managed by CEOs with high childhood socioeconomic status and, to a lesser extent, firstborn children. Furthermore, where appropriate, we include industry fixed effects (in addition to year fixed effects), which allow us to interpret our results from the perspective of within-industry variation in policies due to CEO style induced by early childhood characteristics.

Moreover, we examine the effect of socioeconomic status of CEOs by exploiting natural shocks that increased uncertainty and stock return volatility, namely, the dot-com bubble and the financial crisis. We find that during these periods, the presence of a more conservative CEOs mitigates the effect of market-wide uncertainty on volatility of their firms. Lastly, we examine a small subset of CEO turnovers where an existing CEO is replaced with a new CEO from a higher or lower childhood socioeconomic status. We document changes in firm policies and firm volatility that are consisted with corresponding changes in CEO conservatism.[8]

Our paper expands the literature on CEO characteristics and their effect on firm policies. Several

[8] Firm fixed effects regression are frequently employed to examine the contemporaneous changes in firm policies and CEO attributes while holding the firm effect constant. Due to the small sample size and the limited number of CEO turnovers in the sample, which is the only source of within-firm variation in childhood characteristics, we cannot reliably include firm fixed effects in our regressions. We, instead report changes in firm policies around CEO turnovers associated with childhood SES changes.

recent empirical studies in finance show that personality traits such as overconfidence (Malmendier and Tate, 2005; Malmendier and Tate, 2008), religiosity (Hilary and Hui, 2009), life experiences (Malmendier Tate and Yan, 2011), military service (Benmelech and Frydman, 2015), personal debt aversion (Cronqvist, Makhija, and Yonker, 2012), specialist versus generalist professional experience (Custodio, Ferreira, and Matos, 2013), exposure to market shocks in early professional career (Shoar and Zuo, 2017) and various other personal traits (Graham, Harvey and Puri, 2009) could at least partially determine firm policies and outcomes. Kaplan, Klebanov and Sorensen (2012) use personality tests administered by private equity firms selecting CEOs to estimate the personality traits most highly correlated with successful performance. We extend this line of research by examining whether early childhood characteristics can affect CEO style. This is an important endeavor, because not only can childhood characteristics have an independent effect on CEO behavior, but they can also influence characteristics acquired much later in life and shown to affect firm policies.

In summary, our study demonstrates that early childhood characteristics are relevant in identifying CEO preferences for corporate policies. Greater access to resources at childhood is correlated with more cautious management style. Childhood socioeconomic status has a stronger association with firm policies relative to birth order, family size or childhood trauma and potentially represents the most significant constraint on the resources that influence development of personality and human capital.

The rest of the paper is structured as follows. Section II provides the literature and review and develops hypotheses. Section III discusses summary statistics and analyses results. Section IV offers some preliminary explanations for the observed results. Section V concludes the paper.

II. Literature Review and Hypotheses.

a. Birth Order and Number of Siblings

Multiple studies demonstrate the connection between birth order and a range of individual outcomes. This effect stems from several social and biological factors that have a differential effect on firstborn/earlyborn versus laterborn children. More specifically, firstborns receive a greater allocation of parents' time in the form of informal teaching and social interaction (Price, 2008; Black, Gronqvist and Ockert, 2017); are raised in an adult intellectual environment which is correlated with better scores on intelligence tests (Zajonc, 2001); benefit from the ability of younger mothers to produce healthier babies; and are often encouraged to take parent-like roles and care for younger siblings, which teaches them responsibility and the value of achievement. Sulloway (1996) offers a nuanced version of this effect in

which firstborns compete with younger siblings for the pecking order in the family and consequently become achievement-oriented, assertive, and self-confident.[9]

Consequently, the birth order effect is documented in a variety domains such as vocational choices, romantic relationships, intelligence, and achievement. In general, laterborns experience either qualitatively different or less favorable outcomes than firstborns. For example, Lynch and Lynch (1980) find significant differences in vocational interests of high school students between firstborns and laterborns. Clark (1982) finds some support for the birth order effect in a group of prominent athletes, actors, scientists, businessmen and writers. A large-scale study using the entire population of Norway by Black, Devereux, and Salvanes (2005) finds that firstborns have much higher levels of education attainment, greater earnings, and a smaller likelihood of teenage pregnancy relative to the laterborns. Similarly, Gary-Bobo, Prieto and Picard (2006), Fergusson, Horwood and Boden (2006), and Booth and Kee (2009) find better educational outcomes for firstborns. Gerner and Lillard (2006) report higher test scores of firstborn children. Aizer (2004), Argys, Rees, Averett and Witoonchart (2006) and Conley and Glauber (2005) all document lower likelihood of delinquent or risky behaviors of firstborns.

In summary, this literature indicates that firstborn or early-born children possess personality traits that may lead to the development of a management style different from that of the laterborns. This style will more likely be more authoritarian and rigid and lead to conservative policies and less innovation.

b. Socioeconomic Status and Parent Occupations

Similar to birth order, multiple studies document a strong effect of socioeconomic status on the child's personality, abilities and other attributes which manifest themselves in a wide variety of outcomes ranging from delinquency to health. In many ways, the pathways through which socioeconomic status affects these outcomes are similar to those of birth order. Deckers, Falk, Kosse and Schildberg-Hörisch (2015) find that young children from higher socioeconomic classes score better on patience and intelligence tests and demonstrate fewer risk seeking behaviors. At the same time they document evidence of transfer of personality profiles from parents to children, which perpetuates the same

[9] Lastly, societal belief in birth order characteristics can become a self-fulfilling prophesy. Herrera, Zajonc, Wieczorkowska, and Cichomski (2003) report survey evidence of firstborn perceptions indicating that firstborns are often viewed as obedient, intelligent, and responsible. This result is also documented within families: there is evidence firstborns are considered more achieving and conscientious by their family members, while laterborns were more rebellious, liberal, and agreeable (Paulhus, Trapnell, and Chen, 1999).

socioeconomic status[10]. Interestingly, replication of mother's personality is a significant factor responsible for this social status persistence. Personality traits such as risk avoidance and patience survive over time and children with these traits are less likely to engage in addictive behaviors such as smoking, drinking, or gambling (Sutter, Kocher, Rutzler and Trautmann, 2013) as young adults. Further, children that exhibited better self-control behavior in experimental settings, registered better outcomes later in life such as better standardized test scores, educational attainment and social competence (Mischel, Shoda, and Rodriguez, 1989). Consistent with persistence of personality traits, Cronqvist and Siegel (2015) show that parents' socioeconomic status and family size affect savings behavior of individuals. Specifically, individuals raised in families with higher socioeconomic status had a stronger expression of genetic predispositions to a certain savings propensity.

The characteristics of parents' jobs can also influence the personality of a child in a way reflective of these occupational demands. The family has consistently been established as the primary channel of work related values (Dekas and Baker, 2014). Children learn these values by observing their parents in their occupational settings and from discussions of their job. For example, Mortimer and Kumka (1979) find that the nature of father's occupation (business vs. professional) influences socialization and occupational attainment of male children.

Lastly, Chuprinin and Sosyura (2018) demonstrate the effect of socioeconomic family status on performance of fund managers. Fund managers from lower socioeconomic backgrounds deliver better fund performance. The results are not driven by risk preferences of managers since the measures of fund performance are risk adjusted but rather by higher level of ability necessary required to overcome limited access to education or career options.

III. Empirical Analyses

a. Data

Our main sample of firms and managers is obtained from the ExecuComp database and covers the period from 1992 to 2016. We exclude utility and financial firms because regulatory requirements of these industries affect firm polices and outcomes. We first identify the initial comprehensive sample of CEOs and then screen each person for the availability of early-childhood biographical data using a multi-

[10] This result establishes one channel through which income, education or occupational choice maintain intergeneration persistence (Black and Devereux, 2010).

step approach. For each executive in the sample we perform web and Lexis-Nexis searches using combinations of the executive's name, firm name and terms "CEO", "childhood", "family", "born", "raised", "grew up", "mother", "father", "brother", "sister", "siblings", "son", daughter" and "only child." If the first pass of this content analysis yields promising results we refine searches using more specific CEO childhood information that may lead to sources of birth order, sibling data, parent occupations and other details related to the family's socioeconomic status or other early-life events. These include names of towns, neighborhoods, streets, schools, universities, sibling names and parent names obtained from the first pass.

Overall, most of our data is obtained from interviews published in top national and local newspapers, books written by CEOs or third parties, trade publications, compilations of CEO biographies by professional societies, high school and university alumni publications as well as award, gift and other charity event speeches. CEO parent obituaries also serve as a rich source of occupational and CEO birth order data. When possible, we confirm CEO birth order and/or the number of siblings in USsearch.com, Ancestry.com or, in several cases, the U.S. Census data available up to 1940. Furthermore, in family firms, we extensively research CEO parents' biographies to obtain birth order and family size. To ensure the quality of the data, each observation was independently researched by several data collectors. Examples of biographies and obituaries are provided in Appendix B.

Social class is a construct typically defined by a combination of income, education and occupation. Our identification of socioeconomic class relies primarily on parents' occupations and, secondarily, on other details related to the family's socioeconomic status. When the mother's occupation is not identified as many women did not participate in the labor force in the first half of the 20th century, we rely on the father's occupation. [11] We use the class model proposed by Thompson and Hickey (2005) to convert occupations into five socioeconomic classes: upper, professional, middle, working and poor[12]. In their definition, the upper class is typically comprised of heirs, celebrities and corporate elite. Professional class consists of individual with white collar jobs such as doctors and lawyers and managers with college education and, frequently, graduate degrees. Middle class is semi-professionals and craftsmen with some college education. Working class is clerical and blue collar occupations with high school degrees, while the poor are individuals in transient, low-pay positions who often depend on

[11] For example, in 1950 33.9 percent were employed outside of home. This proportion increased to 43.3 percent in 1970 (Fullerton, 1999).

[12] Thompson and Hickey (2005) refer to these five socioeconomic classes as upper, upper middle, lower middle, working and lower. We change the class labels to make the classification more intuitive.

government subsidies. To preserve the relation between wealth and class in the data, we assign a value of five to the upper class and one to the poor.

While our measure of socioeconomic class is based mainly on CEO parents' occupations, we make adjustments for additional relevant biographical details to ensure a more accurate socioeconomic class assignment. For example, dentist is an occupation typically associated with the upper-middle class according to Thompson and Hickey (2005). However, cross-sectional variation in the earnings of dentists can place some individuals in a different socioeconomic class. Therefore, if the biography includes details such as a small town setting, references to children having jobs since young age or even more direct qualifiers like "middle-class upbringing", we assign the observation to the middle class. In instances where the interpretation is somewhat ambiguous or the family experienced upward or downward shift in socioeconomic status, the average of the two most likely values is assigned. When the parent occupation is missing (8.1 percent of observations), we rely on the CEO's stated perception of class or other descriptive information (i.e., "grew up in a blue-collar neighborhood"). In Appendix C, we provide a list of common occupations and frequently-used attributes that guide our socioeconomic class determination. To ensure the most accurate assessment of socioeconomic class based on available information, we rely on the average of independent opinions of several data collectors as well as our own.

In addition to the birth order data, family size and socioeconomic data, we collect information on other variables that may affect child development. These variables include birth place information, race, and information on early childhood trauma. We consider an event traumatic if it took place before the age of 18 and included such events as parent or major caretaker loss (to death, divorce or abandonment), temporary loss (imprisonment or military service), family move, severe parent, sibling or child illness, and other hardships such as relocation to concentration camp during Holocaust and other types of political prosecution that resulted in extreme hardship. This approach to identifying trauma is complementary to Bernile, Bhagwat and Rau (2017) who define trauma as occurrence of natural disasters near the CEO's childhood residence. They find that extreme events (i.e., high fatality disasters) can profoundly affect risk preferences and, therefore, they may be an important control in a study of early childhood characteristics.

Finally, we collect information on achievements occurring later in life, which include military service and measures of educational attainment such university prestige, earned degrees and majors. We acknowledge that some variables in our sample may be misreported or under-reported; fortunately the presence of third party biographies and a wealth of other personal information in the public domain that

does not suffer from the self-reporting bias mitigates this concern. Our final sample contains 1258 CEOs with reliable socioeconomic status; family size is available for 754 CEOs, 661 of which have sufficient information to construct a firstborn indicator. Furthermore, we collect additional demographic data on gender, age, and tenure from ExecuComp.

We then obtain firm financial and stock return data from Compustat and the Center for Research in Security Prices (CRSP) for firm years during which these executives held the CEO position. To minimize the sensitivity of our results to extreme observations, we winsorize all firm variables at the 1st and 99th percentile levels for all regressions. Our analyses of firm policies and outcomes in sub-samples that include birth order and family size rely on approximately 4,500 observations depending on financial data availability; the number of observations nearly doubles in regressions that include only socioeconomic status.

b. Time Variation of CEO Birth Order and Socioeconomic Status

In Figure 1 we examine the proportion of firstborn CEOs, family size, average socioeconomic childhood status and incidence of self-reported childhood trauma of CEOs over the sample period. While we have collected ordinal birth order data, we conduct most of our analyses using firstborn indicator as it is likely to yield sharper comparisons. We find that, on average, half of all CEOs are firstborn and the typical CEO was raised in the middle class family. The socioeconomic status averages remain relatively stable during the sample period; however they do increase slightly over the sample period reflecting a greater proportion of younger CEOs from post-World War II birth cohorts. A similar trend is observed for family size. The proportions of firstborn CEOs and those who experienced childhood trauma remain constant throughout the sample period.

In unreported analyses, we examine the proportion of firstborns in decade-long birth cohorts from 1900 to 1989. The proportion of firstborn CEOs is lowest (0.200) in the 1970's and highest (0.570) in the 1930's. We then compare the proportion of firstborn CEOs to the proportion of firstborns in the U.S. population from the same decade. This comparison controls for the temporal fluctuations in firstborn births due to social and economic trends. The population averages are available starting in 1920. We find that the proportion of firstborn CEOs is significantly higher than the population mean in decade birth cohorts from 1920 to 1959, which capture most CEOs in our sample. This finding supports the results reported in Custodio and Siegel (2017) and Black, Gronqvist and Ockert (2017) who find the evidence of firstborn sorting into management positions.

c. Summary Statistics

We report summary statistics for the sample of CEOs and their firms in Table 1. Slightly less than a half of the CEOs in our sample (47 percent) are firstborn children and 9.5 percent of the CEOs are the only children. The proportion of firstborns in the sample is significantly higher than the U.S. population at the start of our sample period and estimated at 35 percent (Sulloway, 1996). The average CEO has 2.282 siblings, and comes from an average social class ranking of 3.042 out of 5. To examine whether socioeconomic status affects firms policies through its extremes, we create indicator variables for Professional/Upper class (SES $\geq$ 4) and Poor/Working class (SES $\leq$ 2). Nearly equal proportions of CEOs in our sample come from the Upper/Professional (0.328) and Poor/Working class (0.343).[13] The fact that the upper tail of the socioeconomic class distribution is over-represented in this sample relative to the population mean is likely due to the fact that more detailed biographies are available for the CEOs managing their family firms. Despite the fact that extreme upward mobility for children in low socioeconomic classes is uncommon, CEOs from those groups are also well represented in our sample.

The average CEO is born around 1947. A relatively large portion of the sample (13.3 percent) is comprised of foreign CEOs who were born outside of the United States; 5.8 percent are minority or non-Caucasian, 4.4 percent of CEOs are female and 14.1 percent experienced some self-reported childhood trauma. The most common source of childhood trauma is parent loss (7.6 percent) followed by family move (6.3 percent). There is also evidence of parent-child occupational linkages in that CEOs are frequently raised by parents in related occupations. A third of CEOs are born to parents in managerial positions[14] (33.2 percent); finance, accounting, insurance and real estate occupations (6.4 percent) or self-employed[15] (44.9 percent). Moreover, we examine the effect of maternal influence by recording the mother's employment outside of the household (19.8 percent) or within the family business (9.9 percent). A small fraction of CEOs (5.7 percent) self-report being raised by their mothers. The remainder of Table 1 reports financial characteristics of sample firms at the firm-year level. These values are consistent with financial characteristics of large Compustat firms.

Since one of our main childhood CEO characteristics - socioeconomic status - is inferred from

[13] Thompson and Hickey (2005) allocate 1% of US population to the upper class, 15% to professional, 32% to middle, 32% to working and 20% to poor.

[14] Parent occupations described as "manager", "head of", "executive", "superintendent", "director", "in charge", "ran", and similar terms are classified as "manager".

[15] Self-employed status in inferred from parent occupation and biography. Individuals in occupations with decision making autonomy and absence of a superior, such as farmer, entrepreneur, lawyer, doctor, accountant or dentist in private practice, owner of a family business of any scale are considered self-employed.

parent occupations, we validate it using several other variables, correlated with socioeconomic status but not directly used in our classification scheme. In Table 2, we report the proportion of CEOs with Ivy League education[16], law degrees (J.D. degree or equivalent), military service as well as immigrants, minorities and recipients of the Horatio Alger award[17]; these proportions of CEOs are reported for Poor/Working (SES≤2), Middle (2<SES<4) and Professional/Upper(SES≥4) CEOs.

CEOs who grew up in the Poor/Working families are less likely to attend prestigious universities or earn prestigious degrees. Relative to peers from the Upper/Professional families, they less frequently hold degrees from Ivy League universities (23.9 versus 39 percent) or earn law degrees (5.2 versus 11 percent). These differences are indicative of multiple factors associated with high socioeconomic class: the child's propensity for higher achievement, availability of financial resources, and potential favoritism in university admission decisions. In the low SES subsample, we also observe a greater proportion of immigrants (16 versus 10.4 percent) and minorities (9.3 versus 4.4 percent) when compared to the high SES subsample. Similarly, military service (22.2 versus 14.5 percent), childhood trauma (27.2 versus 4.4 percent) and Horatio Alger award (7.2 versus 0.2 percent) variables follow the same patterns. All differences are significant at 1 and 5 percent. Overall, these results confirm the validity of our classification of socioeconomic status based on parental occupations. Further, as these results indicate, the effect of many education-based variables and military service, found in CEO style studies is, in part, driven by the circumstances and resources available to CEOs during their formative years.

d. Firms Policy and Firm Value Regressions

One prediction common to birth order, family size and socioeconomic status is that greater allocation of social and financial resources to children discourages risky behaviors later in life. We, therefore, expect firstborn CEOs, CEOs raised in small families, which do not suffer from resource dilution, and CEOs from families with high socioeconomic status to prefer safer firm policies. One natural starting point is to examine realized return volatility along firm investment and leverage policies. Our measures of volatility include both total and idiosyncratic daily volatility, where idiosyncratic volatility is the standard deviation of daily residual returns from the three-factor Fama-French regressions.

[16] Ivy League classification is broadened to include Stanford University and the University of Chicago.
[17] Awarded to public figures who have achieved success despite adversity. https://horatioalger.org/horatio-alger-award/

Risk-averse managers may reduce investment or select low-risk opportunities from the pool of R&D and capital projects. If this is the case, these safer investments combined with a more prudent leverage policy, on average, would generate lower stock return volatility. The choice of these dependent variables is not only intuitive but they have been shown to respond to managerial conservatism in a number of studies (Hutton, Jiang and Kumar, 2014; Benmelech and Frydman, 2015; Bernile, Bhagwat and Rau, 2017; Schoar and Zou, 2017). We expect to observe lower levels of stock return volatility, less investment in R&D and capex and lower leverage levels for CEOs from better provided economic backgrounds. Chuprinin and Sosyura (2018) make a case for managers from low socioeconomic classes, who overcome greater selection barriers and deliver better performance. We include Tobin's Q and one-year market-adjusted buy-and-hold returns in our analyses.

In Table 3, we report results of baseline OLS regressions of firm policies and outcomes described above. In the baseline volatility and volatility regressions we control for lagged log(total assets), market-to-book, ROA, leverage and tangible assets. We exclude lagged leverage or market-to-book ratio in the leverage or Tobin's Q regressions, respectively. The regression of returns also includes lagged returns. All variables are defined in Appendix A. In addition to the firm controls, we also include indicators for the CEOs born abroad, minority CEOs, female CEOs and decade birth cohort indicators as a control for age as well as social and economic factors that could have influenced personality development. Finally, each regression uses robust standard errors clustered at the firm level as well as year and industry fixed effects based on a 2-digit SIC.

In Panel A we report regressions estimated on the sample unconstrained by birth order. The main independent variable in these regressions is the childhood socioeconomic status of CEOs, which is statistically significant in all but leverage regression, where it also has a negative coefficient. These results support our hypothesis about lower levels of risk taking of CEOs raised with greater access to resources. The economic significance of these coefficients is not trivial. If we assume that a firm can replace a CEO from the lowest socioeconomic class with the one from the highest, the economic effect of this switch amounts to a 15.4 percent reduction in total volatility (-0.001*(5-1)/0.026=-0.1538). The same change in CEO SES can result in 18.2 percent change in idiosyncratic volatility, 46.2 change in R&D, 19.1 percent change in capital expenditures, 6.9 percent change in leverage, 29 percent change in Tobin's Q and 105 percent change in market-adjusted return. Among other CEO characteristics included in these regressions, CEOs born abroad are associated with lover leverage levels and female CEOs run firms with lower volatility and returns. In unreported analyses, we also explore the magnitude of calendar

time returns for equal-weighed portfolios constructed of firms based on the childhood socioeconomic class of the CEO. Qualitatively, the result is consistent with the findings reported in Panel A. Firms run by CEOs from less affluent backgrounds generate approximately 0.3 percent larger and statistically significant monthly 3-factor and 4-factor alphas than their wealthy peers.

In Panel B, we incorporate the firstborn indicator and the number of siblings to capture the size of the CEO's family. The number of observations in these regressions is reduced by approximately one half due to the smaller number of CEOs with available birth order data. Unlike socioeconomic class, firstborn CEOs have a weaker 'style' effect.

The results indicate that firstborns manage firms with lower total volatility and capex investment. The effect appears to be relatively weak in both the economic and statistical terms: statistical significance of the coefficients is at 10 percent and the magnitude of the coefficients is only -0.001 and -0.004. This effect of a one unit shift from a firstborn to a laterborn CEO is negligible relative to the sample means of 0.026 for total volatility and 0.063 for capex, respectively. In contrast to birth order, the effect of socioeconomic status remains similar to the regressions reported in Panel A. Interestingly, we observe no effect of family size as measured by the number of siblings. In unreported analyses, we replace for the number of siblings with a large family indicator (three of more siblings), which remains similarly insignificant. While we do not report coefficients of birth cohort indicators in the interest of preserving space, CEOs in certain birth cohorts are associated with systematically lower or higher levels of risk aversion in all analyses reported in Table 3. Therefore, it may be important to include CEOs from multiple birth cohorts to facilitate generalization in studies of CEO style.

We acknowledge that the nature of parental occupational choices can also have an effect on the child's personality development in a way that is distinct from the influence of socioeconomic class. Not only the characteristics of parents' jobs can mold the personality of a child to as if to meet these occupational demands, but discussions with parents and observation of their work environment can transmit unique occupational knowledge to the children. To evaluate whether differences in CEO personalities that can shape corporate policies are affected by their parents' occupations rather than socioeconomic status, we repeat our baseline analyses with controls for parents' occupations.

We construct three indicator variables to capture these intergenerational effects in occupations with demands closely related to the responsibilities of the CEO: management, finance/accounting/insurance/real estate and self-employed. It is important to note that while the first two

variables are correlated with socioeconomic status of the family, self-employed captures a variety of occupations from farmer to owner of a large family firm.

Further, since lower socioeconomic status is associated with greater exposure to traumatic events during formative years, we incorporate an indicator for childhood trauma gathered from CEO biographies. In general, we observe several types of traumatic events that frequently appear in the narratives: parent loss (permanent or temporary), family move (within the country or abroad) and other events ranging from illness to political prosecution, including Holocaust. In Table 4, we present the results of these analyses. In Panel A, we report the estimates from a larger sample unconstrained by birth order. In most models, the estimated coefficients of parent occupation indicators enter with negative signs, consistent with transmission of risk aversion to the child. However, the coefficient is negative and statistically significant only in the R&D regression, albeit for all three occupational indicators, and Tobin's Q regression for the self-employed indicator. Interestingly, the indicator for finance-related parent occupation is positive and significant in the cross-sectional return regression and positive, but without statistical significance, in Tobin's Q regression. One potential interpretation is the finance professionals' focus on firm value. The effect of socioeconomic status is comparable to the baseline regression, although no longer statistically significant in the R&D regression.

The effect of childhood trauma indicator is weaker but potentially consistent with findings of Bernile, Bhagwat and Rau (2017) who show that moderate traumatic experiences encourage CEOs to take risks while extreme events induce strong conservatism. The positive and statistically significant coefficients in total volatility and R&D regression are indicative of risk taking since our trauma variable, on average, picks up the effect of moderate trauma.

In the regressions reported in Panel B, firstborn and family size variables are added to the previous specification. The results remain largely similar. The effect of parent occupations becomes stronger with the self-employed indicator being significant in both volatility and R&D regressions. Management indicator has a negative effect in Tobin's Q and return regressions while the finance indicator is positive and significant in those same regressions. The effect of the socioeconomic status weakens, but is still detectible. This suggests that in some groups of CEOs the effect of socioeconomic status works through the transmission of parents' personality and occupational characteristics.

In unreported analyses, we examine the effect of other types of professional and blue-collar occupations such as doctor/dentist/veterinarian, lawyer/judge/politician, salesman, military/police and farmer. We find no relation between those occupations and firm policies, which suggests that the

intergenerational effect of parents in manager, finance/accounting/insurance/real estate and self-employed occupations is unlikely to be spurious.

In Table 5, we build on the effect of parents' occupations and childhood trauma by examining the effect of maternal influence and decomposing trauma into its components. We do not estimate these regressions with birth order or family size variables to preserve sample size and because those variables have a weaker correlation with firm policies. While most CEO biographies identify the family's socioeconomic status by father's occupation, many explicitly mention mother's employment. We construct an indicator for mother's employment outside the family (i.e., teacher, nurse, housekeeper), employment in the family business (i.e., parents ran a farm or restaurant) and, lastly, being the only parent. We do not have strong theoretical priors in approaching the effect of maternal influence. With only a third of women participating in the workforce in the 1950s (Fullerton, 1999), the mention of mother's occupation in the biography can be indicative of her career aspirations and work ethic that was modelled to the child; since the regression controls for socioeconomic status, this variable is unlikely to capture the family's low socioeconomic status that could have been the reason for mother's employment. Alternatively, mother's employment may indicate more limited socialization and informal teaching available to the child. Lastly, in families where the mother served as the breadwinner and without the father's influence, there may have been stronger transmission of gender-specific behavioral tendencies such as, for example, greater risk aversion.

Surprisingly, we find that the effect of mother's influence is nearly undetectable (Panel A). The only statistically significant effect is in the leverage regression where we observe a positive relation between being raised by mother and leverage levels, which can reasonably stem from the learned reliance on household debt in a single parent household. Another potential reason for this weak result is under-reporting of single-mother households or mother's employment, which is less likely since, approximately 30 percent of mothers in our sample are employed either outside the home or in a family business which is similar to the population estimate (Fullerton, 1999).

In Panel B, we decompose the effect of childhood trauma into its most frequently reported components: parent loss (due to death, divorce, abandonment, imprisonment or military service), family move (domestic or international) and other hardship. It is worth highlighting that these categories may not correspond to progressively decreasing levels of trauma severity. For example, parent loss may result from divorce or parent death, which can have a very different effect on a child. Interestingly, parent loss is not statistically significant in all regressions. Family move indicator is statistically significant and has

positive coefficients in total volatility and R&D regressions, which suggests that moderate trauma can be associated with some risk taking. However, all coefficients of other hardship variable are negative, significant in two regressions and approach statistical significance in two other regressions. The signs of the coefficients are consistent with severe trauma. This effect is plausible, since this trauma category contains events such as Holocaust, political prosecution, severe illness such as polio and parental abuse.

e. Firm-CEO Matching versus Active Influence

Thus far our analyses indicate a correlation between certain childhood characteristics of firm CEOs and firm policies. The strongest (negative) relationship is between socioeconomic status of the CEO and risky corporate policies. Our analyses have not yet addressed the causality between these variables. It is plausible that the childhood socioeconomics circumstances may reduce one's risk taking behaviors of future CEOs and affect firm policies. It is also plausible that firms carefully select CEOs based on observable characteristics to carry out certain policies that are optimal for the firm. Both of these mechanisms are likely at play because CEOs are carefully chosen into their positions; in this section we evaluate the relative importance of these explanations.

First, we analyze the effect of CEOs on firm policies by taking into account different levels of CEO influence over firm policies. We do so by separating the initial years ($t<3$) of CEO tenure from the rest of the tenure term. The early tenure period may be unusual for several reasons: first, it may be characterized by unsustainable firm policies, which could have been the reason the old CEO's departure; second, it may have high volatility brought on by the CEO turnover; third, the new CEO has not yet developed institutional knowledge and built influence; fourth, new policies may require time before their outcome becomes measurable.

In Table 6, we report the results of regressions estimated for the initial and seasoned period of CEO tenure. We find that the relation between socioeconomic status and firm outcomes is typically stronger after the initial adjustment period. It also holds in unreported regressions estimated on a subsample with available birth order and family size. However, the effect of firstborn indicator does not change with tenure length.

Overall, this result supports our conjecture that risk averse CEOs start to implement safer policies after the initial adjustment period. In summary, these results not only confirm our initial hypothesis that CEOs with high childhood SES prefer safer policies, but also indicate that these results may be reflective of the CEO's active management of firm policies.

In Table 7, we conduct additional tests to show that managerial risk aversion can be causal in the adoption of corporate policies. Our identification strategy for establishing this causal effect focuses on a natural experiment in which an exogenous shock greatly increases market uncertainty and requires management response. We expect that risk averse CEOs will take more defensive actions to mitigate the effect of market uncertainty on the firm. We use the dot.com bubble and the financial crisis as two market-wide shocks that significantly increased market uncertainty. Specifically, we construct and indicator variable *Crisis* equal to 1 during 1999, 2000, 2008 and 2009 and 0 in other years and interact it with CEO childhood SES. We test the effect of the interaction terms in regressions where we model the level of total and idiosyncratic volatility as well as one year change in both measures of volatility ($\Delta_{0,1}$). Each model includes the typical set of control variables, industry fixed effects and robust standard errors clustered at the firm level. The interaction effect is negative and statistically significant in all regressions indicating that high childhood SES CEOs are more risk averse and act to mitigate volatility of their firms during periods of high uncertainty. This result holds if we extend the definition of high-uncertainty period to include 2001 and 2007 and examine changes in volatility over a slightly longer period ($\Delta_{-1,1}$).

Additionally, we use CEO turnover as a form of firm-specific shock to investigate whether managers actively adjust firm policies in a manner consistent with their personal values. We identify a total of 205 turnovers 44 of which result in the decrease of CEO SES by least one unit on the socioeconomic class scale and 70 turnovers that lead to the decrease of CEO SES by least one unit. We also require that the new CEO remains in his position for at least three full years after the turnover to implement new firm policies. In Panel B of Table 7, we focus on changes in volatility, investment and leverage from year t=-1 to year t=3 relative to the turnover. We find that the increase in CEO SES leads to a reduction in these variables consistent with greater risk aversion, while the decrease in CEO SES leads to their increase. All differences, but in R&D, are statistically significant, typically at 10 percent. The evidence from both market-wide and firm-specific shocks suggests that top managers can play an active role in shaping firm policies according to their personal preferences.

While these analyses suggest active adjustment of firm policies to suit CEO style, we examine CEO selection and identify firm attributes that result in hiring a CEO with a particular style. As a proxy for style, we use childhood socioeconomic class, which has the strongest correlation with firm policies. In Table 8, we report the determinants of the newly appointed CEO's childhood SES, which we model as a function of the former CEO's SES in addition to pre-turnover firm and industry characteristics. The regression also includes year fixed effects and robust errors clustered at the firm level since some firms

have several CEO turnover events. The two models, estimated with OLS and, alternatively, Ordered Logit, yield similar estimates. We observe that the past CEO's SES is positively related to the new CEOs' SES, consistent with the style preference or selection of CEO's from the pool of executives with the same social/educational/professional ties. Firm size is the only firm characteristic significant in both model with a negative sign – large firms are more likely to hire CEOs from less affluent backgrounds. Lastly, industry R&D and market-to-book ratios are significantly related to the new CEO style: R&D with a positive sign and market-to-book with a negative sign; the conflicting effect of these industry ratios in hard to reconcile. In summary, CEO style persistence is an important factor in CEO selection and there is little evidence for CEO matching to easily observable firm characteristics.

Finally, we test the effect of childhood socioeconomic status for robustness by using its alternative classification. We repeat our baseline regression in Panel A of Table 9 with another definition of socioeconomic status based on three coarse, rather than five more refined classes. We aggregate the poor and working class into one group ($SES \leq 2$), middle class into the second ($2 < SES < 4$) and professionals and upper class into the third ($SES \geq 4$). This definition may reduce some of the noise associated with imprecise classification of parents' occupational data into socioeconomic classes. The results using this alternate specification are similar to those from our baseline regressions and statistically significant in all six regression at either 1 or 5 percent with marginally larger coefficients.

In the next two panels (Panel B and C), we replace our original SES variable with indicators for Professional/Upper class ($SES \geq 4$) and Poor/Working class ($SES \leq 2$) to determine whether our results may be asymmetrically affected by one end of the SES range. We find the effect of these indicator variables is very similar. Finally, in Panels D and E we introduce birth state fixed effects to control for birth place specific economic and cultural factors as well the interaction of industry and year fixed effects. Our baseline results remain virtually unchanged.

In the last table of the paper, we re-evaluate the effect of birth order on firm policies in light of family control. It is possible for firstborn children to more successfully navigate family dynamics and implement their preferred firm policies if the key corporate decision makers are family. In other words, parents and younger siblings are more likely to accept the opinion of the firstborn child in charge of the firm. On the other hand, strong family preferences for future firm policy may leave little room for the expression of personal CEO style.

Our results reported in Table 10, are consistent with the former expectation. We observe much more economically and statistically significant coefficients on firstborn variable in total and idiosyncratic

volatility regressions, capex and Tobin's Q regressions constrained to CEOs who manage firms owned by their families (Panel A). This result suggests that governance mechanisms in non-family-controlled public firms may inhibit the expression of CEO style. In CEO-family-owned firms, firstborn children may be very effective at quickly implementing firm policies. The bad news is that the policies of firstborn children are particularly value destroying in family firms. The coefficient on firstborn variable in the Tobin's Q regression is -0.262 and significant at 10 percent level in a model with 1,323 observations and saturated with control variables and three types of fixed effects. For comparison, the average Tobin's Q for CEO family-owned firms is 1.687. This means that the appointment of the firstborn child rather than a laterborn into the CEO role can cause a reduction in firm value of over 15 percent (-0.262/1.687).

IV. Discussion

After controlling for the known determinants of firm policies and performance, as well as a host of other demographic CEO characteristics that can influence firms policies, we find that early childhood characteristics are correlated with CEO style. The childhood socioeconomic status of the family is a much stronger predictor of CEO style than other variables that proxy for the allocation of family resources to children. We find no detectable effect of family size and only a small effect of birth order, concentrated entirely in firstborn children.

This finding is intuitive because socioeconomic status is highly correlated not only with financial resources available for childrearing, but also parental attention given to the children. These resources have been shown to affect intelligence, education and attitudes toward risk. Although family size and birth order can affect allocation of resources within the family unit, socioeconomic status represents a greater constraint. Further, we find that socioeconomic class affects personality formation through yet another important channel: in the course of parent-child interaction, parents transmit their personality traits such as patience and risk aversion to their children. Our results indicate that the effect of parental occupations in management, finance/accounting/insurance/real estate as well as self-employed is similar to the effect of socioeconomic status, albeit weaker.

While the relation between of firstborns and firm policies at the overall sample level is rather limited, it has a stronger effect in family firms. Firstborns, relative to the laterborns prefer more cautious policies that lower firm value. This result is interesting, because family style imprint may not leave any room for expression of CEO-specific style regarding financial policy decisions and leadership. Further, family-owned firms are known for dynamics that are more likely to favor firstborn over laterborn

children, but we do not observe a higher proportion of firstborns in their family firms. Still, the observed correlation between firstborns and conservatism in family firms may result from families deliberately choosing more conservative firstborns to perpetuate conservative policies and laterborns to do the opposite. While this matching is possible, family firms may not have too many choices if they want to keep management control in the family. Some children may be girls, who traditionally do not step into leadership roles, others may not have interest or cognitive ability. Thus, it is unlikely that our result is driven by matching in family firms.

We consider several potential explanations for the weak effect of birth order in our study. Why are there more firstborns CEOs but little evidence of a style effect based on CEO birth order? It is possible that the birth order effect is mitigated by selection of CEOs into certain industries. For example, firstborns may choose to work for the "old economy" firms that follow conservative policies and the industry fixed effect largely subsume the effect of the firstborn indicator. This explanation seems unlikely since the distribution of firstborns across industries does not show strong clustering of firstborns in "old economy" industries. Further, the firstborn effect remains weak in regressions even if we remove industry fixed effects.

Another possibility, as noted above, is that firstborns may have higher human capital for a variety of reasons. Becker and Tomes (1976) describe a human capital model based on maternal attention. Booth and Kee (2009) used the British Household Survey to show that firstborn children attain significantly higher educational levels than laterborn children, after correcting for parental age, familial resources, and other family-level attributes. Work by Behrman and Taubman (1986) shows firstborns have more schooling and higher earnings compared with laterborns. Kristensen and Bjerkedal (2007) analyzed nearly a quarter of a million Norwegian teenagers, and concluded that firstborns have higher IQ scores due to parenting style.

Under this account, there are more firstborn CEOs because of greater familial resource allocations, rather than any inherent personality differences. In other words, firstborns are more likely to become CEOs because they are smarter, more capable, and better educated than laterborns on average, meaning there is a larger pool of talent from which to draw. But, while the chance of being a CEO is greater for firstborns, contingent on being a CEO, behavior as CEO is not determined by birth order.

We offer some data consistent with this account. In our sample, CEOs are distributed evenly between socioeconomic classes with majority coming from solidly middle or lower class families (with greater resource constraints) but are quite likely to be high achievers academically, as nearly one in three

attended an elite college and over fifteen percent earned a terminal degree. In addition, about half our CEOs were born in the 1930s and 1940s, which were periods in which many families, especially middle-class families, faced significant resource constraints.

V. Conclusions

We examine the effect of early childhood characteristics of CEO on firm policies. Using content analysis of a large hand-collected dataset of CEO biographies, we are able to determine their birth order, family size, childhood socioeconomic status, exposure to childhood trauma, birthplace, education and other factors such as mother's participation in the workforce.

Survey, experimental and large-scale population studies show that earlyborn children tend to exhibit conservative and authoritarian personality traits, while laterborns are likely to be more flexible and innovative. Similarly, high socioeconomic status is associated with such traits as patience and lower preferences toward risk. Severe childhood trauma promotes conservatism while moderate trauma encourages risk seeking.

Consistent with these predictions, we find that CEO's from higher socioeconomic backgrounds and, to a lesser extent, firstborn children tend to prefer less risky policies that lead to lower firm value. Birth order has a stronger effect in firms owned by CEO families. Our results are robust to alternative variable definitions. Further, childhood trauma typically associated with family upheaval has some effect on personality development and risk preferences in adulthood. We also find evidence that parents' occupational choices may affect personality traits of a child. In summary, early childhood environment plays an important role in personality development, which has a strong life-long effect on preferences across multiple domains and plays a role in CEO management style formation and decision making.

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Appendix A. Variable Definitions.

Socioeconomic Status

Family SES: CEO family socioeconomic status during childhood. Socioeconomic status of the family is assigned following Thompson and Hickey (2005) based on parent occupations and, when available, personal account of the CEO. *Poor* (*Family SES=1*): individuals in transient, low-pay positions who often depend on government subsidies. *Working* (*Family SES=2*): is clerical and blue collar occupations with high school degrees. *Middle* (*Family SES=3*): is semi-professionals and craftsmen with some college education. *Professional* (*Family SES=4*): professionals such as doctors, lawyers and managers with college education and, frequently, graduate degrees. *Upper* (*Family SES=5*): heirs, celebrities and corporate elite. In cases where the interpretation was ambiguous or the family experienced upward or downward shift in socioeconomic class, the average of two most likely values was assigned.

Family SES Terciles: CEO family socioeconomic status during childhood using reclassification of *Family SES* into three groups. *Family SES Terciles* equals 1 if *Family SES*$\leq$2, 2 if 2<*Family SES*<4, and 3 if *Family SES*$\leq$4.

Poor/Working indicator: indicator variable that equals 1 if *Family SES* $\leq$2 and 0 otherwise.

Professional/Upper indicator: indicator variable that equals 1 if 4$\leq$*Family SES* and 0 otherwise.

Mother Employed indicator: indicator variable that equals 1 if CEO mother's employment is mentioned in the biography and 0 otherwise.

Biography

Firstborn indicator: indicator variable that equals 1 if the CEO is a firstborn child and 0 otherwise.

Birth Order: ordinal birth order of the CEO.

Number of Siblings: number of siblings of the CEO.

Only Child indicator: indicator variable that equals 1 if the CEO is the only child and 0 otherwise.

Born Abroad indicator: indicator variable that equals 1 if the CEO is born outside of the United States and 0 otherwise.

Minority indicator: indicator variable that equals 1 if the CEO is non-Caucasian and 0 otherwise.

Female indicator: indicator variable that equals 1 if the CEO is a female and 0 otherwise.

Childhood Trauma indicator: indicator variable that equals 1 if the CEO experienced emotional or physical trauma between the ages of 5 and 15 and 0 otherwise. Common examples of trauma include parent or caretaker-related events such as death, divorce, abandonment, military service, imprisonment or detention; either domestic or international family relocations; political or religious prosecution, Holocaust, relocation to concentration camp; severe or disabling parent or own illness or accident.

Parent Loss indicator: indicator variable that equals 1 if the CEO experiences permanent or lengthy temporary loss of parent or caretaker and 0 otherwise. Common events include death, divorce, abandonment, military service, imprisonment or detention.

Family Move indicator: indicator variable that equals 1 if the CEO family experiences a domestic or international move and 0 otherwise.

Family Firm indicator: indicator variable that equals 1 if the CEO manages his family-owned firm and 0 otherwise.

Founder indicator: indicator variable that equals 1 if the CEO manages the company he founded and 0 otherwise.

Ivy League indicator: indicator variable that equals 1 if the CEO attended an Ivy League University, Stanford University or University of Chicago for an undergraduate or graduate degree and 0 otherwise.

Science indicator: indicator variable that equals 1 if the CEO holds a degree in a STEM discipline (Science, Technology, Engineering or Mathematics) and 0 otherwise.

Business indicator: indicator variable that equals 1 if the CEO holds a degree in business or economics and 0 otherwise.

Ph.D./M.D. indicator: indicator variable that equals 1 if the CEO holds a PH.D or M.D. degree and 0 otherwise.

Law indicator: indicator variable that equals 1 if the CEO holds a J.D. degree, Ph.D. in Jurisprudence or an undergraduate degree such as LLB and 0 otherwise.

Military indicator: indicator variable that equals 1 if the CEO served in any branch of the military and 0 otherwise.

Republican: average financial contribution to the Republican party over all election cycles. REP_{CEO} is from Hutton, Jiang, Kumar (2014).

Firm Characteristics

Log Total Assets: natural logarithm of a firm's total book assets (AT).

ROA: ratio of net income (NI) over total book assets (AT).

Leverage: ratio of debt in current book liabilities (DLC) and long-term book debt (DLTT) divided by total book assets (AT).

Industry Adjusted Leverage: *Leverage* adjusted by the annual 2-digit SIC mean *Leverage*.

Tangible Assets: ratio of total property, plant and equipment (net) (PPENT) to total book assets (AT).

R&D: ratio of research and development expense (XRD) to total assets (AT). Coded as zero if missing.

Capex: ratio of capital expenditures (CAPEX) to total assets (AT).

Market-to-Book: ratio of price per share (PRCC_F) to book value of equity per share (BKVLPS).

Tobin's Q: ratio of market values of debt (AT-SEQ) and equity (CSHO*PRCC_F) to total book assets (TA).

Return: market-adjusted buy-and-hold return over a fiscal year.

Total Volatility: standard deviation of daily stock returns computed over one year.

Idiosyncratic Volatility: standard deviation of daily residual returns from the three-factor Fama-French regressions.

Appendix B. Examples of Biographic Data.

1. Biography describing socioeconomic circumstances through personal account of hardship, family size and childhood trauma.

   https://www.egr.msu.edu/sites/default/files/publications/AESIntegrations_summer-fall_2011.pdf

CEO Takes Time to Help Students

Seeing him casually lean up against a table, coffee cup in hand, you would never guess that Michael "Mike" W. Lamach is the chairman, president, and chief executive officer of a $14 billion global industrial company. A 1985 engineering arts (now known as applied engineering sciences) graduate, Lamach came back to MSU to give a lecture on smart energy systems and to talk with students informally. On a chilly Friday morning in February, Lamach met with students from two courses—AES (EGR) 310 - Analysis of Sustainable Systems, and AES (EGR) 410 - Senior AES Capstone—and answered numerous questions, many centered on students' future career plans. He was at ease, no other cares in the world—or so it seemed.

Lamach, who grew up in Detroit, worked his way through school as a resident assistant in Holmes Hall, and he also worked night security there. Because he had to stay awake through the night as a security guard, he studied, which he credits with helping him get through his college courses. His father died in the late '60s, so his mother raised three young children. "My mother had to work hard, to make ends meet—and she was an inspiration to all of us in learning to work hard and to do more than what was expected," says Lamach.

He remembers coming to MSU and having access to endless amounts and variety of food in the cafeteria. "Trumpets were playing for me. There was all this food. People were complaining [about the food], but I thought it was incredible."

AES alumnus Michael "Mike" W. Lamach is the chairman, president, and chief executive officer of Ingersoll Rand, a $14 billion global industrial company.

Lamach is the chief executive officer and chairman of the board of directors of Ingersoll Rand. He was appointed to both positions in 2010. Prior to that, he was the president and chief operating officer of the company. Lamach joined Ingersoll Rand in 2004 after 18 years with Johnson Controls in both the automotive and controls businesses where he advanced into leadership roles with global responsibilities.

In addition to his BS degree from MSU, Lamach has an MBA from Duke University. He also serves on the board of directors of Iron Mountain Inc., a global leader for information protection and storage services.

He told students "to stay flexible as you plan your career. I chose engineering arts because a broad engineering and business background

continued on page 2

CEO (continued from page 1)

CEO and AES alum Mike Lamach (left) with his son, Michael Lamach, who received his BS in chemical engineering from MSU this spring.

made sense to me. I liked the idea of integrating various areas of expertise instead of being an expert in just one area." He was emphatic that "we need to get the word out about AES; it's a smart approach."

Lamach says that what he considers his "greatest accomplishments" changes over time as he accomplishes more and more. "I loved growing the business at Johnson Controls, and I like building start-up companies. It's exciting and energizing." Lamach also enjoys sharing success and puts a lot of emphasis on a team approach. Another bit of advice: "Never stop learning, be humble. Get better and better, and put great people around you."

A few other words of advice from Lamach:

- Build relationships early on; even in the electronic era of texting, there are still opportunities to go meet people, meet your customers, and develop relationships.
- Love the job in the moment; do well and let the next level take care of itself. Have aspirations, but focus on what you are doing.
- Your career will be an adventure; you can't envision what the whole journey will entail.
- Listen a lot, and remember that it is not just what you do, but how you do it. Integrity, ethics, and your reputation are paramount.

Lamach entered graduate school the fall after he got his BS degree. "In 12 years I was enrolled in seven different grad schools. The first 19 years of my career, I moved 11 times. At times I was frustrated, but I never gave up on getting my graduate degree." However, his advice to students is to wait three to five years before going to graduate school. "Get some experience, and then investigate the possibilities for evening and weekend programs while continuing to build your career."

Regarding internships, Lamach encouraged students to make the experience different. "Do more than the task. Think about how you can problem solve and find solutions. Don't just identify the problem."

Lamach and his wife, Mary, have three children, one of whom, Michael, graduated this spring from MSU with a degree in chemical engineering. Lamach understands the difficulties of balancing work and life. "It will get out of whack; it will never be perfect, particularly early in your career." He told students that to balance work and your personal life, "Ask for help and give help."

Most importantly, Lamach says, "Work at something you have fun doing."

– Jane L. DePriest

2. Biography containing mother's and sister's names.

https://www.egr.msu.edu/sites/default/files/publications/AESIntegrations-spring-2012.pdf

Michael W. Lamach Receives 2012 Distinguished Alumni Award

Michael W. Lamach (right), chairman, president, and chief executive officer of Ingersoll Rand, receives the 2012 Applied Engineering Sciences Distinguished Alumni Award from AES program director Jon Sticklen during the ninth annual College of Engineering Alumni Awards Banquet on May 5.

Michael W. Lamach (BS '85) received the 2012 Applied Engineering Sciences Distinguished Alumni Award at the ninth annual College of Engineering Alumni Awards Banquet held in May. Established in 2004, this award honors a graduate who has had a distinguished career, evidenced by significant accomplishments, high standards of integrity that positively reflect on the college and the university, recognized leadership, and support of the AES program.

Lamach is chairman, president, and chief executive officer of Ingersoll Rand, a $14 billion global diversified industrial company that advances the quality of life in creating and sustaining safe, comfortable, and efficient environments.

He joined Ingersoll Rand in February 2004 as president of the company's Security Technologies sector and became president of Trane Commercial Systems after the acquisition of that business in 2008. He was elected chairman of the

continued on page 3

Distinguished Alumni Award (continued from page 1)

board of directors of Ingersoll Rand in June 2010, having previously been named chief executive officer in February 2010 and president and chief operating officer in February 2009.

Prior to joining Ingersoll Rand, Lamach was group vice president and managing director for the European, Asian, South Africa, and South American businesses of Johnson Controls Automotive Group. Before that, he served as vice president and general manager of the Controls Group, leading the company's integrated facilities management business. During his 17-year tenure with Johnson Controls, he also held positions in sales management, marketing, and new product development.

He is a member of the board of the National Association of Manufacturers. He also serves on the board of directors of Iron Mountain Inc. and is a member of the Davidson College Board of Visitors.

In March 2012, he addressed the Eighth International Conference on Green and Energy-Efficient Buildings & New Technologies and Products Expo initiated by the Chinese Ministry of Housing and Urban-Rural Development (MOHURD) in Beijing, China. He lectured on the future of green technology at Michigan State University in February 2011. He has also spoken on leadership at Duke University and Howard University.

Lamach has been quoted on several occasions in publications around the world, including *The Wall Street Journal*, Bloomberg News, Reuters, *China Business News*, and *Industry Week*, among others.

He received a bachelor's degree in engineering arts from Michigan State University in 1985 and an MBA from Duke University. During his time as a student at Michigan State, he worked as a resident assistant and night security officer in Holmes Hall.

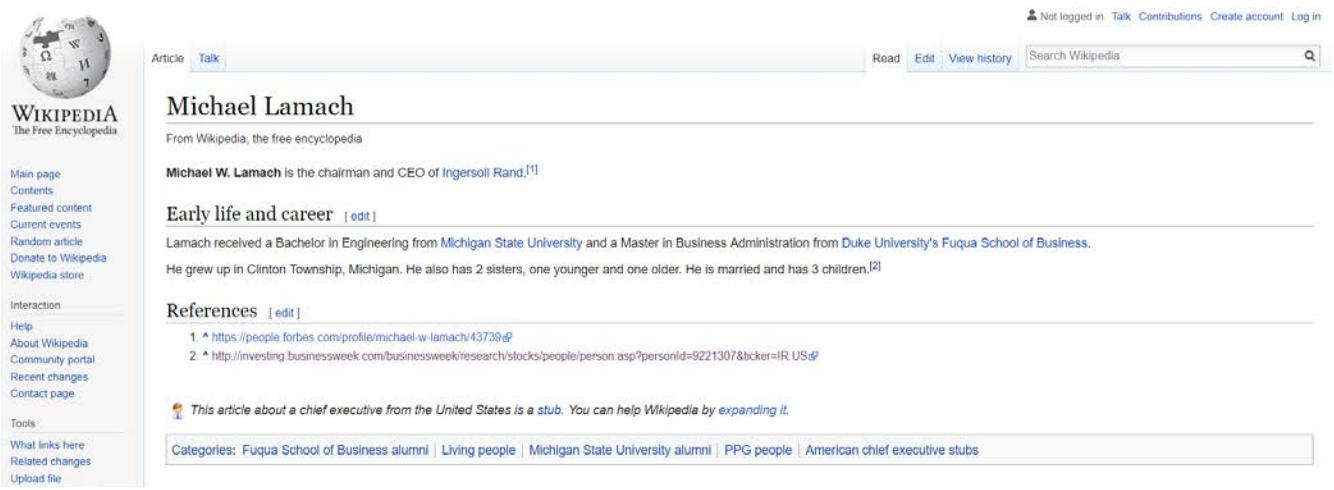
Lamach recently returned to MSU to give a lecture on smart energy systems to students in two AES courses—Analysis of Sustainable Systems and Senior AES Capstone.

He resides in Mooresville, North Carolina, with his wife of 26 years, Mary, who is also a graduate of Michigan State (College of Education, 1986). They have three sons, one of whom, Michael Jr., graduated from Michigan State University in 2011 with a degree in chemical engineering. Lamach enjoys boating, golfing, fishing, and spending time with family and friends at his home on Lake Norman.

Michael W. Lamach's family at the ninth annual College of Engineering Alumni Awards Banquet on May 5 *(left to right)*: Peter Colovas (brother-in-law); Angie Colovas (sister-in-law); Nicholas Lamach (son); Joan Lamach (mother); Michael Lamach, Sr.; Mary Lamach (wife); Jacqueline Andrix (sister); Michael Lamach, Jr. (son); and Peggy Stowell (sister-in-law).

3. Biography containing birth order and missing a reliable reference for it.

   https://en.wikipedia.org/wiki/Michael_Lamach



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Michael Lamach

From Wikipedia, the free encyclopedia

Michael W. Lamach is the chairman and CEO of Ingersoll Rand.[1]

Early life and career [edit]

Lamach received a Bachelor in Engineering from Michigan State University and a Master in Business Administration from Duke University's Fuqua School of Business.

He grew up in Clinton Township, Michigan. He also has 2 sisters, one younger and one older. He is married and has 3 children.[2]

References [edit]

1. ^ https://people.forbes.com/profile/michael-w-lamach/43739
2. ^ http://investing.businessweek.com/businessweek/research/stocks/people/person.asp?personId=9221307&ticker=IR:US

This article about a chief executive from the United States is a stub. You can help Wikipedia by expanding it.

Categories: Fuqua School of Business alumni | Living people | Michigan State University alumni | PPG people | American chief executive stubs

4. Maternal aunt's obituary that lists siblings according to birth order, thus confirming information provided by Wikipedia.

   http://wujekcalcaterra.tributes.com/obituary/read/Virginia-T.-Ulrich-103739234

Ulrich, Virginia T. (nee Sliz) Age 92 July 5, 2016. Beloved wife of the late Leslie. Cherished mother of Donna(Lawrence)Termini. Devoted and loving grandmother of Claire and Lillie. Dearest sister of Joan Lamach and the late Patricia Sliz and Maximillian Sliz. Loving aunt of Judi(John)Dadswell, Michael(Mary)Lamach and Jacqueline(Dennis)Andrix. Also survived by great nephews and nieces and 2 great great nieces. Visitation Sunday 2-9pm with a 7pm Scripture Service at Wujek-Calcaterra & Sons, Inc. 54880 Van Dyke Ave. at 25 Mile Rd. Funeral Monday Instate 9:30am at St. John Vianney 54045 Schoenherr Rd. (S. of 25 Mile Rd.) until time of Mass at 10am. Interment Resurrection Cemetery. Share memories with the family at their "On-Line Guestbook" at WujekCalcaterra.com

Appendix C. Common Occupations and Qualitative Descriptors of Socioeconomic Class in CEO Biographies.

Occupations	Qualitative Descriptors
	Poor
Factory, shop, railroad worker	Child had jobs, cared for siblings
Farme, sharecropper	Depression era
Housekeeper	Did not have enough food
Janitor, custodian	Dirt poor, rags-to-riches, zero money
Miner	Food stamps
Odd jobs	Had one pair of shoes
Produce stand operator	Made ends meet
Seamstress	Meager roots
Secretary	Single mother, abandoned by father
Travelling salesman	Struggled
	Working
Barber, beautician	Blue collar town
Butcher,fishmonger	Child had jobs
Cab, bus, truck driver	Humble home
Cashier, clerk, secretary, receptionist	In debt
Delivery man, mail carrier, post worker	Lower middle class
Electrician, mechanic	Modest background
Factory, shop, dock worker	Parents did not go to college, first to finish high-school
Farmer	Small town
Nurse, teacher, dressmaker	Worked long hours
Salesman	Working class childhood
	Middle
Accountant, insurance salesman	Average childhood
Airforce, army, navy officer	Child had jobs
Bakery, deli, grocery owner	Middle class
Engineer	Mother employed
Farm owner	Ordinary upbringing
Government employee	Public schools
Nurse, physical therapist, pharmacist	Scholarships
Police officer	Small town
Small business owner	Some college education
Teacher	Value of hard work
	Professional
Architect	Accomplished, prominent
Army general	Boarding, private school
Banker, stock broker, underwriter	Educated
Diplomat, politician	Exclusive neighborhood
Doctor, dentist, oncologist	Family business, firm

Executive, president, business owner	Grandfather founded the firm
Founder, co-founder	Growing business
Judge, lawyer	Mother artist, pianist
Real estate developer	Rich town
Researcher, scientist	Successful practice
	Upper
Ambassador, consul general	Banking family
CEO, President, Chairman	Billionaire, magnate
Executive	Born in privilege
Financier	Distinguished, prominent family
Managing director	Elite background
Philanthropist	Leaders
President	N-th generation
Prime minister	Old money
Real estate mogul	Rich kid
Trustee	Wealthy

Figure 1. CEO Early Childhood Characteristics by Year
This figure reports the annual proportion of firstborn children, average number of siblings, average childhood socioeconomic status and proportion of individuals who experienced childhood trauma for a sample of CEOs in this study. The socioeconomic status is determined according to social class definitions by Thompson and Hickey (2005) and ranges from 1 (poor) to 5 (upper).

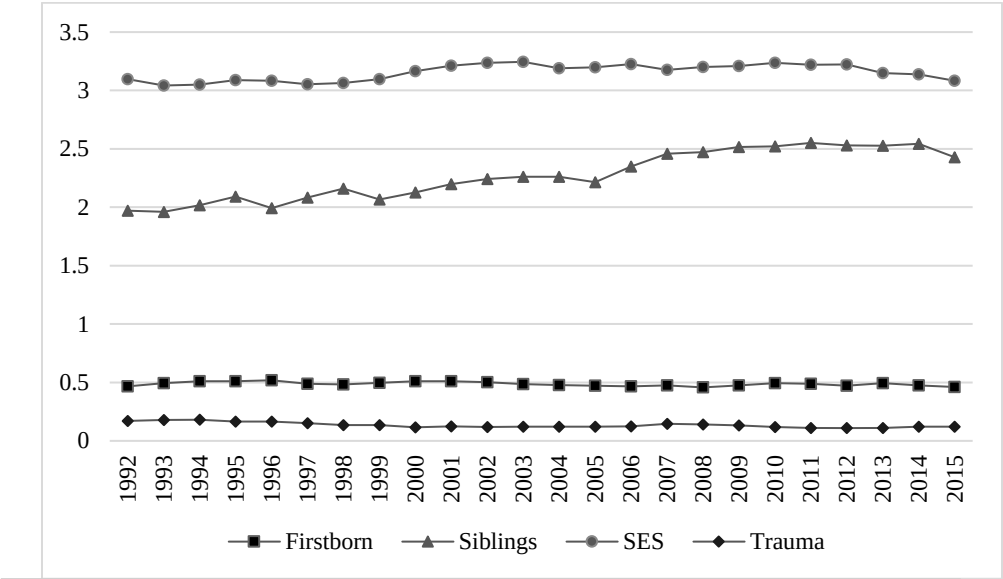

Table 1. Summary Statistics

	Mean	Std. Dev.	25%	50%	75%	No. Obs.
CEO Characteristics						
Firstborn	0.470	0.500	0.000	0.000	1.000	661
Birth order	1.893	1.170	1.000	2.000	2.000	633
Siblings	2.282	1.826	1.000	2.000	3.000	754
Only child	0.095	0.294	0.000	0.000	0.000	754
Family SES	3.042	1.139	2.000	3.000	4.000	1,258
Family poor/working	0.343	0.475	0.000	0.000	1.000	1,258
Family professional/upper	0.328	0.470	0.000	0.000	1.000	1,258
Born abroad	0.133	0.339	0.000	0.000	0.000	1,258
Female	0.044	0.205	0.000	0.000	0.000	1,258
Minority	0.058	0.234	0.000	0.000	0.000	1,258
Birth year	1946.745	12.062	1938.000	1948.000	1955.000	1,258
Parent Characteristics						
Manager	0.332	0.471	0.000	0.000	1.000	1,258
Finance/accntg./real estate/insur.	0.064	0.244	0.000	0.000	0.000	1,258
Self-employed	0.449	0.498	0.000	0.000	1.000	1,258
Childhood Trauma						
Trauma	0.141	0.349	0.000	0.000	0.000	1,258
Parent loss	0.076	0.266	0.000	0.000	0.000	1,258
Family move	0.063	0.243	0.000	0.000	0.000	1,258
Other hardship	0.045	0.206	0.000	0.000	0.000	1,258
Maternal Influence						
Mother raised	0.057	0.232	0.000	0.000	0.000	1,258
Mother inside employed	0.099	0.299	0.000	0.000	0.000	1,258
Mother outside employed	0.198	0.399	0.000	0.000	0.000	1,258
Firm characteristics						
Log(total assets)	7.810	1.702	6.531	7.669	9.018	8,489
R&D	0.026	0.056	0.000	0.000	0.028	8,489
Tangible assets	0.307	0.223	0.131	0.251	0.439	8,489
Capital expenditures	0.063	0.060	0.025	0.046	0.081	8,489
Book leverage	0.231	0.207	0.077	0.214	0.340	8,489
Market-to-Book	3.528	5.631	1.569	2.453	4.019	8,489
Tobin's Q	2.180	2.243	1.252	1.647	2.384	8,489
ROA	0.048	0.122	0.023	0.056	0.094	8,489
Return	0.065	0.477	-0.213	-0.004	0.239	8,489
Total volatility	0.026	0.013	0.017	0.023	0.031	8,489
Idiosyncratic volatility	0.022	0.016	0.013	0.018	0.026	8,489

Table 2. Socioeconomic Class Validation
This table report average CEO characteristics by socioeconomic class terciles. ***,**,* indicate the difference in means statistically significant at the 1%, 5%, and 10% level, respectively.

Variable	Poor/Working (1)	Middle (2)	Profess./Upper (3)	Diff. 1-3	t-stat.
Ivy League	0.239	0.305	0.390	-0.151	-4.63***
Born abroad	0.160	0.133	0.104	0.056	2.39**
Minority	0.093	0.036	0.044	0.049	2.85***
Military service	0.222	0.153	0.145	0.077	2.89***
Law degree	0.052	0.074	0.110	-0.058	2.96***
Childhood trauma	0.273	0.102	0.044	0.230	9.69***
Horatio Alger Award	0.072	0.005	0.002	0.069	5.47***
No. Obs.	432	413	413		

Table 3. CEO Early Childhood Characteristics, Volatility and Firm Policies

This table reports the results from the OLS regressions of CEO family characteristics on volatility, investment, leverage and firm value. Panel A controls for family SES and other CEO demographics; Panel B is amended with firstborn indicator and number of siblings. All models control for the natural log of book assets, ROA, market-to-book, and proportion of tangible assets. The first four models also control for book leverage. All variables are defined in Appendix A. Firm characteristics (independent variables) are lagged one year. The t-statistics are reported in parentheses. Robust standard errors are adjusted for clustering at the firm-level. ***, **, * indicate the coefficient is statistically significant at the 1%, 5%, and 10% level, respectively.

Panel A. Controlling for Family SES							
	Total Volatility	Idio.Volatility	R&D	Capex	Leverage	Tobin's Q	Return
Family SES	-0.001***	-0.001***	-0.003***	-0.003***	-0.004	-0.160***	-0.017***
	(-4.81)	(-4.19)	(-2.72)	(-3.99)	(-0.88)	(-4.16)	(-3.62)
Born Abroad	0.000	-0.000	0.006	-0.005	-0.041***	-0.205	-0.000
	(0.24)	(-0.56)	(1.44)	(-1.49)	(-2.59)	(-1.31)	(-0.01)
Minority	0.001	0.002	-0.003	-0.004	0.023	0.267	-0.003
	(0.61)	(1.06)	(-0.39)	(-1.04)	(1.15)	(0.65)	(-0.10)
Female	-0.003***	-0.000	-0.001	-0.001	0.000	-0.245	-0.060***
	(-2.93)	(-0.32)	(-0.20)	(-0.41)	(0.01)	(-1.28)	(-2.82)
Log (Total Assets)	-0.002***	-0.002***	-0.002*	-0.004***	0.021***	-0.142***	-0.021***
	(-19.02)	(-13.04)	(-1.78)	(-4.97)	(6.26)	(-3.98)	(-5.99)
Return on Assets	-0.026***	-0.021***	-0.115***	0.046***	-0.261***	1.870**	-0.160**
	(-8.38)	(-6.29)	(-2.87)	(4.81)	(-3.16)	(2.07)	(-2.03)
Tangible Assets	-0.002*	-0.001	-0.025***	0.147***	0.019	-1.004***	-0.017
	(-1.68)	(-0.51)	(-3.33)	(18.38)	(0.28)	(-3.35)	(-0.47)
Book Leverage	0.003**	0.004**	-0.032***	-0.022***		-0.527	0.042
	(2.49)	(2.02)	(-2.93)	(-2.98)		(-0.93)	(1.29)
Market-to-Book	0.000***	-0.000	0.001***	0.001***	-0.002		-0.001
	(3.27)	(-1.55)	(4.58)	(4.55)	(-1.38)		(-0.83)
Return							0.009
							(0.62)
Birth Cohorts	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES	YES
Observations	8,385	8,385	8,385	8,385	8,406	8,461	8,342
R-squared	0.530	0.285	0.394	0.519	0.212	0.137	0.052

Panel B. Controlling for Birth Order, Family Size and Family SES							
	Total Volatility	Idio.Volatility	R&D	Capex	Leverage	Tobin's Q	Return
Firstborn	-0.001*	-0.000	0.004	-0.004*	-0.007	0.121	0.005
	(-1.73)	(-0.54)	(1.01)	(-1.78)	(-0.57)	(0.83)	(0.32)
Siblings	0.000	0.000	-0.000	0.001	0.001	0.002	0.001
	(0.17)	(0.58)	(-0.01)	(1.62)	(0.49)	(0.05)	(0.38)
Family SES	-0.001***	-0.001***	-0.005***	-0.004***	-0.007	-0.164***	-0.023***
	(-4.02)	(-2.76)	(-3.34)	(-3.65)	(-1.39)	(-3.18)	(-3.33)
Born Abroad	-0.000	-0.000	0.003	0.003	-0.041*	-0.393	-0.018
	(-0.08)	(-0.06)	(0.45)	(0.67)	(-1.75)	(-1.11)	(-0.56)
Minority	0.000	-0.001	0.004	-0.012**	0.039	1.017	0.039
	(0.00)	(-0.81)	(0.32)	(-2.03)	(1.41)	(1.27)	(0.94)
Female	-0.003***	-0.000	0.002	-0.001	0.016	-0.367	-0.077**
	(-2.61)	(-0.17)	(0.16)	(-0.10)	(0.54)	(-1.62)	(-2.46)
Log (Total Assets)	-0.002***	-0.002***	-0.002	-0.003***	0.022***	-0.108**	-0.017***
	(-13.01)	(-9.47)	(-1.38)	(-3.27)	(5.60)	(-2.13)	(-3.12)
Return on Assets	-0.023***	-0.018***	-0.159***	0.037***	-0.282**	0.733	-0.104
	(-6.14)	(-4.85)	(-3.55)	(3.10)	(-2.39)	(0.71)	(-1.13)
Tangible Assets	-0.002	-0.000	-0.022**	0.148***	0.121***	-1.250***	-0.051
	(-1.33)	(-0.01)	(-2.53)	(16.64)	(2.67)	(-3.70)	(-1.09)
Book Leverage	0.004**	0.006***	-0.061***	-0.026***		-1.391***	0.047
	(2.45)	(2.89)	(-4.63)	(-3.11)		(-3.25)	(0.87)
Market-to-Book	0.000***	-0.000	0.001***	0.001***	-0.000		0.001
	(3.33)	(-1.40)	(4.46)	(4.49)	(-0.20)		(0.28)
Return							0.022
							(1.04)
Birth Cohorts	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES	YES
Observations	8,385	8,385	8,385	8,385	8,406	8,461	8,342
R-squared	0.530	0.285	0.394	0.519	0.212	0.137	0.052

Table 4. Effect of Parental Occupations and Childhood Trauma

This table reports the results from the OLS regressions of CEO family characteristics on volatility, investment, leverage and firm value. Panel A and Panel B also contain measures of parent occupations and childhood trauma in addition to the baseline specifications reported in Table 3. All models control for the natural log of book assets, ROA, market-to-book, and proportion of tangible assets. The first four models also control for book leverage. All variables are defined in Appendix A. Firm characteristics are lagged one year. The t-statistics are reported in parentheses. Robust standard errors are adjusted for clustering at the firm-level. ***, **, * indicate the coefficient is statistically significant at the 1%, 5%, and 10% level, respectively.

Panel A. Controlling for Family SES							
	Total Volatility	Idio.Volatility	R&D	Capex	Leverage	Tobin's Q	Return
Family SES	-0.001**	-0.001***	0.001	-0.003***	-0.002	-0.102*	-0.013**
	(-2.42)	(-2.92)	(0.47)	(-3.34)	(-0.33)	(-1.91)	(-1.99)
Born Abroad	-0.000	-0.001	0.003	-0.005	-0.042***	-0.233	-0.001
	(-0.15)	(-0.77)	(0.64)	(-1.40)	(-2.71)	(-1.57)	(-0.06)
Minority	0.001	0.002	-0.003	-0.003	0.022	0.246	-0.004
	(0.59)	(1.01)	(-0.47)	(-0.95)	(1.12)	(0.60)	(-0.16)
Female	-0.003***	-0.000	-0.003	-0.001	-0.001	-0.318*	-0.069***
	(-3.07)	(-0.35)	(-0.53)	(-0.30)	(-0.02)	(-1.69)	(-3.19)
Parent Management	-0.001	0.000	-0.008**	-0.001	-0.004	-0.140	-0.018
	(-1.26)	(0.06)	(-2.10)	(-0.35)	(-0.29)	(-1.20)	(-1.23)
Parent Finance	-0.000	-0.001	-0.008**	0.000	-0.012	0.142	0.044**
	(-0.42)	(-0.89)	(-1.96)	(0.00)	(-0.57)	(0.94)	(2.03)
Parent Self-employed	-0.000	-0.001	-0.007**	0.002	-0.007	-0.257***	-0.018
	(-0.58)	(-0.88)	(-2.29)	(1.08)	(-0.60)	(-2.80)	(-1.49)
Childhood Trauma	0.001*	0.001	0.009*	-0.001	-0.004	-0.025	-0.007
	(1.84)	(0.99)	(1.94)	(-0.36)	(-0.22)	(-0.15)	(-0.40)
Firm Controls	YES	YES	YES	YES	YES	YES	YES
Birth Cohorts	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES	YES
Observations	8,385	8,385	8,385	8,385	8,406	8,461	8,342
R-squared	0.531	0.285	0.405	0.520	0.212	0.141	0.054

Panel B. Controlling for Birth Order, Family Size and Family SES							
	Total Volatility	Idio.Volatility	R&D	Capex	Leverage	Tobin's Q	Return
Firstborn	-0.001*	-0.000	0.004	-0.004*	-0.007	0.112	0.003
	(-1.72)	(-0.49)	(1.06)	(-1.78)	(-0.56)	(0.79)	(0.23)
Siblings	0.000	0.000	0.000	0.001	0.001	0.009	0.002
	(0.36)	(0.75)	(0.16)	(1.58)	(0.48)	(0.27)	(0.51)
Family SES	-0.001**	-0.001*	-0.001	-0.004***	-0.008	-0.032	-0.010
	(-2.18)	(-1.91)	(-0.33)	(-3.25)	(-1.27)	(-0.40)	(-1.10)
Born Abroad	-0.000	-0.000	-0.002	0.003	-0.040*	-0.538	-0.032
	(-0.32)	(-0.09)	(-0.20)	(0.60)	(-1.70)	(-1.61)	(-1.02)
Minority	-0.000	-0.001	0.003	-0.011*	0.040	1.009	0.042
	(-0.12)	(-1.02)	(0.22)	(-1.88)	(1.43)	(1.23)	(1.01)
Female	-0.003***	-0.000	-0.001	-0.000	0.018	-0.494**	-0.092***
	(-2.69)	(-0.08)	(-0.11)	(-0.04)	(0.58)	(-2.20)	(-2.87)
Parent Management	0.000	0.001	-0.006	0.001	0.005	-0.292*	-0.041*
	(0.29)	(1.36)	(-1.15)	(0.33)	(0.29)	(-1.65)	(-1.83)
Parent Finance	-0.002**	-0.003**	-0.007	0.001	-0.004	0.429*	0.076**
	(-2.06)	(-2.15)	(-1.23)	(0.29)	(-0.17)	(1.77)	(2.48)
Parent Self-employed	-0.001*	-0.002**	-0.009**	0.004	0.004	-0.193	-0.001
	(-1.82)	(-2.36)	(-2.22)	(1.38)	(0.29)	(-1.30)	(-0.08)
Childhood Trauma	0.001*	0.001	0.016**	0.004	0.002	0.453*	0.045*
	(1.81)	(0.66)	(2.43)	(1.10)	(0.09)	(1.91)	(1.81)
Firm Controls	YES	YES	YES	YES	YES	YES	YES
Birth Cohorts	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES	YES
Observations	4,496	4,496	4,496	4,496	4,510	4,534	4,476
R-squared	0.538	0.317	0.445	0.562	0.313	0.173	0.068

Table 5. Maternal Influence and Types of Childhood Trauma

This table reports the results from the OLS regressions of CEO family characteristics on volatility, investment, leverage and firm value. Panel A and Panel B also contain measures of maternal influence and details of reported childhood trauma in addition to the baseline specifications reported in Table 3. All models control for the natural log of book assets, ROA, market-to-book, and proportion of tangible assets. The first four models also control for book leverage. All variables are defined in Appendix A. Firm characteristics are lagged one year. The t-statistics are reported in parentheses. Robust standard errors are adjusted for clustering at the firm-level. ***, **, * indicate the coefficient is statistically significant at the 1%, 5%, and 10% level, respectively.

Panel A. Controlling for Maternal Influence							
	Total Volatility	Idio.Volatility	R&D	Capex	Leverage	Tobin's Q	Return
Family SES	-0.001***	-0.001***	-0.003**	-0.003***	-0.001	-0.173***	-0.018***
	(-4.33)	(-3.62)	(-2.12)	(-3.38)	(-0.24)	(-3.90)	(-3.40)
Born Abroad	0.000	-0.000	0.006	-0.005	-0.040**	-0.207	-0.000
	(0.26)	(-0.53)	(1.50)	(-1.49)	(-2.51)	(-1.32)	(-0.03)
Minority	0.001	0.002	-0.002	-0.003	0.023	0.254	-0.005
	(0.62)	(1.09)	(-0.34)	(-0.93)	(1.20)	(0.62)	(-0.18)
Female	-0.003***	-0.000	-0.001	-0.001	-0.000	-0.264	-0.063***
	(-2.92)	(-0.32)	(-0.23)	(-0.23)	(-0.00)	(-1.39)	(-2.90)
Mother raised	0.001	0.000	-0.005	0.005	0.041*	-0.250	0.000
	(0.68)	(0.24)	(-0.78)	(1.42)	(1.92)	(-0.92)	(0.01)
Mother empl. inside	0.000	0.001	0.005	0.005	0.006	-0.130	-0.023
	(0.17)	(0.57)	(0.86)	(1.42)	(0.37)	(-0.98)	(-1.31)
Mother empl. outside	0.000	0.000	0.003	-0.003	0.002	0.097	0.007
	(0.04)	(0.31)	(0.85)	(-1.01)	(0.14)	(0.74)	(0.45)
Firm Controls	YES	YES	YES	YES	YES	YES	YES
Birth Cohorts	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES	YES
Observations	8,385	8,385	8,385	8,385	8,406	8,461	8,342
R-squared	0.530	0.285	0.395	0.520	0.214	0.137	0.053

Panel B. Controlling for Childhood Trauma							
	Total Volatility	Idio.Volatility	R&D	Capex	Leverage	Tobin's Q	Return
Family SES	-0.001***	-0.001***	-0.003**	-0.003***	-0.004	-0.171***	-0.017***
	(-4.15)	(-3.44)	(-2.19)	(-3.66)	(-0.96)	(-4.11)	(-3.35)
Born Abroad	-0.000	-0.001	0.004	-0.005	-0.031**	-0.178	0.010
	(-0.05)	(-0.64)	(0.82)	(-1.23)	(-2.20)	(-1.22)	(0.54)
Minority	0.001	0.002	-0.003	-0.004	0.022	0.256	-0.006
	(0.50)	(1.03)	(-0.51)	(-1.13)	(1.13)	(0.62)	(-0.22)
Female	-0.002***	-0.000	-0.000	-0.001	0.001	-0.218	-0.057***
	(-2.86)	(-0.29)	(-0.07)	(-0.31)	(0.04)	(-1.15)	(-2.71)
Parent loss	0.001	0.001	0.005	0.003	0.016	-0.039	0.034
	(1.33)	(0.84)	(0.74)	(0.89)	(0.89)	(-0.15)	(1.22)
Family move	0.002***	0.001	0.016**	0.002	-0.022	0.162	0.006
	(2.93)	(0.59)	(2.05)	(0.53)	(-0.91)	(0.81)	(0.23)
Other hardship	-0.002	-0.000	-0.005	-0.006	-0.038	-0.410**	-0.078***
	(-1.63)	(-0.35)	(-0.85)	(-1.24)	(-1.62)	(-2.48)	(-3.22)
Firm Controls	YES	YES	YES	YES	YES	YES	YES
Birth Cohorts	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES	YES
Observations	8,385	8,385	8,385	8,385	8,406	8,461	8,342
R-squared	0.532	0.285	0.397	0.520	0.214	0.138	0.053

Table 6. Tenure Length

This table reports the results from the OLS regressions of CEO family characteristics on volatility, investment, leverage and firm value estimated on a subsample of early tenure (< 3 years) and late tenure (>=3 years). Panel A controls for family SES and other CEO demographics; Panel B is amended with firstborn indicator and number of siblings. All models control for the natural log of book assets, ROA, market-to-book, and proportion of tangible assets. The first four models also control for book leverage. All variables are defined in Appendix A. Firm characteristics are lagged one year. The t-statistics are reported in parentheses. Robust standard errors are adjusted for clustering at the firm-level. ***, **, * indicate the coefficient is statistically significant at the 1%, 5%, and 10% level, respectively.

Panel A. Controlling for Family SES

	Tenure < 3 years						
	Total Volatility	Idio.Volatility	R&D	Capex	Leverage	Tobin's Q	Return
Family SES	-0.001***	-0.001***	-0.002	-0.002*	0.001	-0.095	-0.010
	(-2.69)	(-2.95)	(-1.31)	(-1.66)	(0.22)	(-1.42)	(-0.91)
Born Abroad	0.001	0.000	0.016***	-0.001	-0.022	-0.256	0.004
	(0.91)	(0.30)	(2.72)	(-0.41)	(-0.90)	(-0.64)	(0.10)
Minority	-0.000	-0.001	-0.008	-0.003	0.013	1.234	0.037
	(-0.02)	(-0.61)	(-1.08)	(-0.92)	(0.53)	(1.08)	(0.65)
Female	-0.000	-0.001	-0.002	0.003	0.004	-0.049	-0.015
	(-0.40)	(-1.40)	(-0.51)	(0.77)	(0.15)	(-0.24)	(-0.39)
Firm Controls	YES	YES	YES	YES	YES	YES	YES
Birth Cohorts	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES	YES
Observations	1,724	1,724	1,724	1,724	1,730	1,765	1,704
R-squared	0.549	0.393	0.403	0.516	0.236	0.147	0.109

	Tenure>=3						
	Total Volatility	Idio.Volatility	R&D	Capex	Leverage	Tobin's Q	Return
Family SES	-0.001***	-0.001***	-0.004***	-0.004***	-0.005	-0.175***	-0.020***
	(-4.44)	(-3.42)	(-2.84)	(-4.10)	(-0.99)	(-4.28)	(-3.81)
Born Abroad	0.000	-0.001	0.003	-0.006	-0.045***	-0.154	0.000
	(0.14)	(-1.00)	(0.52)	(-1.42)	(-2.72)	(-1.21)	(0.01)
Minority	0.001	0.003	0.001	-0.004	0.026	-0.183	-0.019
	(0.63)	(1.29)	(0.07)	(-0.89)	(1.17)	(-0.88)	(-0.60)

Female	-0.004***	0.001	0.001	-0.003	0.007	-0.247	-0.087***
	(-3.58)	(0.36)	(0.15)	(-0.93)	(0.21)	(-1.09)	(-3.36)
Firm Controls	YES	YES	YES	YES	YES	YES	YES
Birth Cohorts	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES	YES
Observations	6,661	6,661	6,661	6,661	6,676	6,696	6,638
R-squared	0.534	0.282	0.399	0.532	0.222	0.156	0.057

Panel B. Controlling for Birth Order, Family Size and Family SES							
	Tenure < 3 years						
	Total Volatility	Idio.Volatility	R&D	Capex	Leverage	Tobin's Q	Return
Firstborn	-0.001	0.001	0.008	-0.002	-0.002	0.551	0.063*
	(-1.20)	(1.36)	(1.54)	(-0.45)	(-0.11)	(1.30)	(1.83)
Siblings	-0.000	-0.000	0.000	0.002	0.007	-0.048	0.006
	(-1.29)	(-0.18)	(0.21)	(1.39)	(1.49)	(-0.66)	(0.68)
Family SES	-0.001**	-0.001**	-0.003	0.000	0.006	-0.131	-0.010
	(-2.42)	(-2.00)	(-1.52)	(0.16)	(1.04)	(-1.05)	(-0.61)
Born Abroad	-0.001	-0.000	0.024**	-0.001	-0.017	-0.594	-0.015
	(-0.47)	(-0.20)	(2.17)	(-0.31)	(-0.56)	(-0.56)	(-0.20)
Minority	0.001	0.000	-0.020	0.000	0.041	3.226	0.052
	(0.41)	(0.01)	(-1.43)	(0.01)	(1.12)	(1.21)	(0.50)
Female	-0.000	-0.001	0.003	0.008	0.036	-0.071	0.031
	(-0.12)	(-1.03)	(0.38)	(1.26)	(1.11)	(-0.16)	(0.65)
Firm Controls	YES	YES	YES	YES	YES	YES	YES
Birth Cohorts	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES	YES
Observations	805	805	805	805	807	825	799
R-squared	0.572	0.647	0.489	0.569	0.438	0.235	0.179
	Tenure>=3						
	Total Volatility	Idio.Volatility	R&D	Capex	Leverage	Tobin's Q	Return
Firstborn	-0.001*	-0.001	0.003	-0.005**	-0.012	0.038	-0.006
	(-1.90)	(-1.21)	(0.71)	(-2.10)	(-0.83)	(0.27)	(-0.36)
Siblings	0.000	0.000	-0.000	0.000	0.001	0.010	-0.001
	(0.45)	(0.67)	(-0.04)	(0.72)	(0.21)	(0.26)	(-0.26)
Family SES	-0.001***	-0.001**	-0.006***	-0.005***	-0.010*	-0.175***	-0.026***
	(-3.55)	(-2.15)	(-3.42)	(-4.35)	(-1.68)	(-3.27)	(-3.42)
Born Abroad	0.000	-0.000	-0.003	0.004	-0.045*	-0.123	-0.012
	(0.28)	(-0.02)	(-0.32)	(0.76)	(-1.71)	(-0.60)	(-0.38)
Minority	-0.001	-0.001	0.011	-0.014**	0.044	0.128	0.017

	(-0.37)	(-0.72)	(0.83)	(-2.04)	(1.41)	(0.41)	(0.38)
Female	-0.004***	0.001	0.002	-0.005	0.017	-0.423*	-0.110***
	(-3.07)	(0.39)	(0.19)	(-0.97)	(0.48)	(-1.78)	(-2.95)
Firm Controls	YES	YES	YES	YES	YES	YES	YES
Birth Cohorts	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES	YES
Observations	3,691	3,691	3,691	3,691	3,703	3,709	3,677
R-squared	0.549	0.313	0.437	0.586	0.313	0.196	0.072

Table 7. Financial Crises and CEO Turnover

This table reports the results from the OLS regressions of CEO family SES on volatility (Panel A) during financial market crises, identified by the burst of the dot.com bubble and the financial crisis. Panel B identifies changes in volatility and firm policies from year (t=-1) to year (t=3) around CEO turnovers (t=0). All variables are defined in Appendix A. Firm characteristics (independent variables) are lagged one year. The t-statistics are reported in parentheses. Robust standard errors are adjusted for clustering at the firm-level. ***, **, * indicate the coefficient is statistically significant at the 1%, 5%, and 10% level, respectively.

Panel A. Firm Volatility around Financial Crises				
	Total Volatility	Idio. Volatility	ΔTotal Volatility $_{-1,0}$	ΔIdio.Volatility $_{-1,0}$
Family SES	-0.001***	-0.001***	-0.000***	-0.001***
	(-3.84)	(-3.30)	(-2.75)	(-2.90)
Family SES*Crisis	-0.001*	-0.001***	-0.001*	-0.001***
	(-1.69)	(-3.00)	(-1.76)	(-2.89)
Crisis	0.015***	0.006***	0.011***	0.004**
	(12.69)	(3.42)	(10.70)	(2.58)
Born Abroad	0.000	-0.001	0.000	-0.001
	(0.33)	(-0.73)	(0.26)	(-0.89)
Minority	0.000	0.002	0.000	0.001
	(0.27)	(0.83)	(0.05)	(0.79)
Female	-0.003***	-0.001	-0.001***	0.000
	(-3.39)	(-0.39)	(-3.03)	(0.08)
Firm Controls	YES	YES	YES	YES
Birth Cohorts	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES
Observations	8,385	8,385	8,355	8,355
R-squared	0.416	0.167	0.303	0.205

Panel B. Changes in Volatility and Firm Policies around CEO Turnover				
	New CEO SES Relative to Old CEO			
	Lower SES (1)	Higher SES (2)	(2) - (1)	t-stat.
ΔTotal Volatility $_{-1,3}$	0.004	0.000	0.004	1.93*
ΔIdio. Volatility $_{-1,3}$	0.004	0.001	0.004	1.85*
ΔR&D $_{-1,3}$	-0.017	-0.057	0.040	1.27
ΔCapex $_{-1,3}$	0.004	-0.015	0.019	2.15**
ΔLeverage $_{-1,3}$	0.025	-0.015	0.040	1.70*
Observations	44	70		

Table 8. CEO Selection

This table reports the results from the regressions of the newly-appointed CEO childhood SES at CEO turnover. First model is estimated using OLS regression; second model is estimated using Ordered Logit. All variables are defined in Appendix A. Industry variables are annual averages at the 2-digit SIC level. Firm and industry characteristics are lagged one year. The t-statistics are reported in parentheses. Robust standard errors are adjusted for clustering at the firm-level. ***, **, * indicate the coefficient is statistically significant at the 1%, 5%, and 10% level, respectively.

	New CEO Family SES (OLS)	New CEO Family SES (Ordered Logit)
Old CEO family SES	0.177**	0.351**
	(2.37)	(2.15)
Log (Total Assets)	-0.137**	-0.288**
	(-2.38)	(-2.42)
Return on Assets	-0.675	-1.437
	(-0.80)	(-0.88)
Ind. Return on Assets	-0.008	-0.014
	(-0.93)	(-0.97)
Market-to-Book	-0.026	-0.046
	(-1.53)	(-1.31)
Ind. Market-to-Book	-0.009*	-0.016*
	(-1.66)	(-1.76)
Book Leverage	-0.071	-0.138
	(-0.39)	(-0.46)
Ind. Book Leverage	-0.446	-1.707
	(-0.46)	(-0.84)
R&D	-3.058	-6.616
	(-1.38)	(-1.60)
Ind. R&D	1.600**	3.009**
	(2.07)	(2.42)
Capex	-0.497	-0.850
	(-0.31)	(-0.26)
Ind. Capex	1.419	2.184
	(0.63)	(0.51)
Return	0.177	0.427
	(1.09)	(1.42)
Total Volatility	11.275	22.774
	(0.30)	(0.28)
Ind. Total Volatility	102.233	194.955
	(1.22)	(1.12)
Idio.Volatility	-117.442	-224.360
	(-1.38)	(-1.28)
Ind. Idio Volatility	-23.309	-49.139
	(-0.59)	(-0.59)
Year FE	YES	YES
Observations	205	205
R-sq. /Pseudo R-sq.	0.278	0.086

Table 9. Robustness

This table reports the results from the OLS regressions of CEO childhood characteristics on volatility, investment in R&D and capital expenditures and leverage. All models control for the natural log of book assets, ROA, market-to-book, and proportion of tangible assets. The first four models also control for book leverage. All variables are defined in Appendix A. Firm characteristics are lagged one year. The t-statistics are reported in parentheses. Robust standard errors are adjusted for clustering at the firm-level. ***, **, * indicate the coefficient is statistically significant at the 1%, 5%, and 10% level, respectively.

Panel A. Family Socioeconomic Status: Terciles							
	Total Volatility	Idio.Volatility	R&D	Capex	Leverage	Tobin's Q	Return
Family SES Terciles	-0.001***	-0.001***	-0.004***	-0.004***	-0.002	-0.225***	-0.023***
	(-4.16)	(-3.62)	(-2.63)	(-3.32)	(-0.37)	(-3.92)	(-3.47)
CEO Controls	YES	YES	YES	YES	YES	YES	YES
Birth Cohorts	YES	YES	YES	YES	YES	YES	YES
Firm Controls	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	NO	YES	YES
Observations	8,385	8,385	8,385	8,385	8,406	8,461	8,342
R-squared	0.528	0.284	0.393	0.518	0.212	0.137	0.052

Panel B. Family Socioeconomic Status : Professional/Upper Class Indicator							
	Total Volatility	Idio.Volatility	R&D	Capex	Leverage	Tobin's Q	Return
Professional/Upper	-0.001***	-0.002***	-0.008**	-0.005***	0.001	-0.340***	-0.024**
	(-3.50)	(-3.20)	(-2.57)	(-2.89)	(0.08)	(-3.64)	(-2.24)
CEO Controls	YES	YES	YES	YES	YES	YES	YES
Birth Cohorts	YES	YES	YES	YES	YES	YES	YES
Firm Controls	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES	YES
Observations	8,385	8,385	8,385	8,385	8,406	8,461	8,342
R-squared	0.527	0.282	0.394	0.518	0.211	0.136	0.052

Panel C. Family SES: Poor/Working Class Indicator							
	Total Volatility	Idio.Volatility	R&D	Capex	Leverage	Tobin's Q	Return
Poor/Working	0.002***	0.002***	0.005*	0.006***	0.008	0.332***	0.047***
	(3.71)	(3.32)	(1.72)	(2.84)	(0.79)	(3.04)	(3.87)
CEO Controls	YES	YES	YES	YES	YES	YES	YES
Birth Cohorts	YES	YES	YES	YES	YES	YES	YES
Firm Controls	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES	YES
Observations	8,385	8,385	8,385	8,385	8,406	8,461	8,342
R-squared	0.527	0.283	0.391	0.518	0.212	0.135	0.053

Panel D. Birth State Fixed Effects							
	Total Volatility	Idio.Volatility	R&D	Capex	Leverage	Tobin's Q	Return
Family SES	-0.001***	-0.001***	-0.003**	-0.003***	-0.004	-0.163***	-0.018***
	(-4.71)	(-4.00)	(-2.28)	(-3.92)	(-0.89)	(-3.90)	(-3.67)
CEO Controls	YES	YES	YES	YES	YES	YES	YES
Birth Cohorts	YES	YES	YES	YES	YES	YES	YES
Firm Controls	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES	YES
Birth State FE	YES	YES	YES	YES	YES	YES	YES
Observations	8,385	8,385	8,385	8,385	8,406	8,461	8,342
R-squared	0.542	0.300	0.419	0.531	0.240	0.168	0.060

Panel E. Industry*Year Fixed Effects							
	Total Volatility	Idio.Volatility	R&D	Capex	Leverage	Tobin's Q	Return
Family SES	-0.001***	-0.001***	-0.004**	-0.003***	-0.002	-0.159***	-0.016***
	(-5.00)	(-4.37)	(-2.53)	(-3.88)	(-0.48)	(-3.81)	(-3.18)
CEO Controls	YES	YES	YES	YES	YES	YES	YES
Birth Cohorts	YES	YES	YES	YES	YES	YES	YES
Firm Controls	YES	YES	YES	YES	YES	YES	YES
Industry*Year FE	YES	YES	YES	YES	YES	YES	YES
Observations	8,385	8,385	8,385	8,385	8,406	8,461	8,342
R-squared	0.630	0.420	0.418	0.603	0.275	0.220	0.282

Table 10. Birth Order and Firm Policies in CEO Family-owned Firms

This table reports the results from the OLS regressions of CEO birth order on volatility, investment in R&D and capital expenditures and leverage. The regressions are estimated separately for the subsample of CEO managing their family-owned firms and CEOs of all other firms. All variables are defined in Appendix A. Firm characteristics (independent variables) are lagged one year. The t-statistics are reported in parentheses. Robust standard errors are adjusted for clustering at the firm-level. ***, **, * indicate the coefficient is statistically significant at the 1%, 5%, and 10% level, respectively.

	Total Volatility	Idio.Volatility	R&D	Capex	Leverage	Tobin's Q	Return
				CEO Family Firms			
Firstborn	-0.002**	-0.002*	-0.005**	-0.006	-0.021	-0.262*	-0.009
	(-2.20)	(-1.94)	(-2.34)	(-1.52)	(-0.83)	(-1.88)	(-0.37)
CEO Controls	YES	YES	YES	YES	YES	YES	YES
Birth Cohorts	YES	YES	YES	YES	YES	YES	YES
Firm Controls	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES	YES
Observations	1,315	1,315	1,315	1,315	1,318	1,323	1,310
R-squared	0.552	0.385	0.586	0.676	0.494	0.348	0.144
				All Other Firms			
Firstborn	-0.001	-0.000	0.008	-0.005*	-0.002	0.274	0.013
	(-0.90)	(-0.09)	(1.47)	(-1.69)	(-0.11)	(1.51)	(0.70)
CEO Controls	YES	YES	YES	YES	YES	YES	YES
Birth Cohorts	YES	YES	YES	YES	YES	YES	YES
Firm Controls	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES	YES
Observations	3,181	3,181	3,181	3,181	3,192	3,211	3,166
R-squared	0.589	0.341	0.492	0.552	0.312	0.192	0.065