SHAPED BY BOOMS AND BUSTS:
HOW THE ECONOMY IMPACTS CEO CAREERS AND MANAGEMENT STYLES

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ABSTRACT

We show that economic conditions when CEOs enter the labor market have lasting impact on their career paths and managerial styles. Recession CEOs take less time to become CEOs, but manage smaller firms, receive lower compensation, and move less across firms and industries. The results appear to be driven by distortions in the initial job allocation during recession times. Recession CEOs also display more conservative styles: lower capital expenditures, overheads and R&D, less leverage, and more diversification. We also document that recession experiences at the time of labor force entry rather than during early childhood explain variations in management styles.

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1. Introduction

How do CEOs shape the strategy and performance of the companies they head? Recent research provides evidence that CEOs and other top executives have large and persistent person-specific differences in their management styles, see Bertrand and Schoar (2003). These person-specific styles explain a substantial fraction of the variation in firms' capital structures, investment decisions and organizational structures. The idea that CEOs greatly affect the performance and operations of the firms they head is also supported by a number of papers that show substantial changes in a firm's stock price as well as accounting performance associated with top management turnovers, see for example Warner, Watts and Wruck (1989), Weisbach (1995), Perez-Gonzalez (2006), and Bennedsen, Nielsen, Perez-Gonzalez and Wolfenzon (2007). There is also a growing literature suggesting that specific traits of CEOs play a role in their management approach, see for example Malmendier and Tate (2008), Kaplan, Klebanov and Sorensen (2012), Graham, Harvey and Puri (2013), Benmelech and Frydman (2014), and Custódio and Metzger (2014).[1]

However, much less is known about the factors that determine a CEO's career path and the evolution of a CEO's management style. In particular, do labor market conditions at the beginning of a manager's career, i.e., recessions versus non-recessions, have an impact on a CEO's career path and management style? If indeed executives have fixed managerial styles by the time they reach the top management positions, these early career experiences could be important in determining the supply of managers in the executive labor market. Therefore, we investigate the impact of starting in a recession versus non-recession on a manager's career and the ultimate management style he/she develops. To avoid endogenous selection of when a

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[1] Similarly, a large literature in management science has looked at the role of CEOs, starting with Hambrick and Mason (1984) and Fligstein (1990). See also Kotter (1982), Khurana (2002) and Lazear (2004).

manager chooses to enter the labor market we proxy for the exogenous starting date by using the manager's birth year plus 24, the modal age of starting the first position over the sample.

A few earlier papers have argued that recessions have an impact on CEOs since people who spent their childhood during the Great Depression, "Depression Babies", develop different attitudes towards risk or leverage, see for example Malmendier and Nagel (2011), or Malmerdier, Tate and Yan (2011). Our results show that the important driver for the managerial style of CEOs and their career paths is whether a manager's *labor market entry* falls into a recession period, since it affects the initial job allocation of the manager. In contrast, we find that *growing up* in a recession has no effect on the manager's management style.

We begin by documenting that CEOs who start their careers in recessions tend to have different career trajectories than those who start in economically prosperous periods. In the following we call the former "recession CEOs".[2] These recession CEOs take less time to become CEOs, are more likely to rise through the ranks within a given firm rather than to move across firms and industries, but ultimately end up heading smaller firms and receiving lower compensation (each by about 20%) than their non-recession peers. This lower pay for recession CEOs persists even after we control for firm size and performance. These outcomes are an indication that the careers of recession CEOs overall are negatively affected by the environment they start in.[3]

The data suggests a particular channel by which recession CEOs are impacted: We find that the coefficient on the recession dummy drops by about 50% to 20% (depending on which

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[2] In additional analysis, we separate non-recession CEOs into "boom CEOs" and "other non-recession CEOs", where boom CEOs are defined as CEOs who enter the labor market in business cycle peaks. We do not find evidence that boom CEOs have different career trajectories or management styles than other non-recession CEOs.

[3] In a similar spirit, several papers look at whether exogenous shocks to firm performance affect CEO compensation or CEO turnover. For example, Jenter and Kanaan (2014) find that CEOs are significantly more likely to be fired after bad firm performance caused by factors beyond their control. Also see Bertrand and Mullainathan (2001), Garvey and Milbourn (2006), Jenter and Lewellen (2010), and Eisfeldt and Kuhnen (2013).

dependent variable about the CEO's career path is used) when we include the characteristics of the CEO's first job in the regression. For example, as discussed above recession CEOs head firms that are about 20% smaller than non-recession CEOs. However, half of this effect is explained by the characteristics of the first job. These results suggest that one of the important channels by which recessions affect managerial careers is through distortions in the initial job allocation.

Second, we document that recession CEOs have more conservative management styles once they reach a leadership position when compared to their non-recession peers. On the investment and financing side, recession CEOs display a tendency to invest less in capital expenditures and research and development (R&D), and have significantly lower leverage and better interest coverage. Meanwhile, they have lower cash holdings, which are often seen as a sign of better financial management. They also have lower working capital needs, which corroborate the idea that recession CEOs have tighter financial controls and are more conscientious about reducing capital needs. However, they pay higher effective tax rates possibly to avoid financial distress associated with heightened leverage or other aggressive tax planning strategies.

In addition, recession CEOs seem to manage operations more conservatively. They are more diversified across segments, show lower selling, general and administrative expenses and higher profit margins. At the same time, recession CEOs appear to adopt more conservative accounting, and overall have lower stock return volatility as a result of the conservative management of operations. These CEOs also seem to invest more in long-term assets and have lower asset turnover, but as a result, have lower return on assets (only borderline significant). We also show that the announcement period returns around the appointment of recession CEOs are

very significant and positive; the cumulative abnormal return (CAR) in the three days around the announcement is 1%. The CAR is even higher when a recession CEO replaces a non-recession CEO. The results suggest that investors value the set of skills and styles that recession CEOs bring into their companies.

In sum, our findings imply that the pool of managerial talent in each cohort of new executives is significantly shaped by the overall economic conditions at the time of labor market entry. However, there could be different channels by which the economy affects managerial styles. One potential explanation is that *ex ante selection* might result in people with different characteristics being hired into management positions during recessions versus non-recessions. For example, in recessions fewer or less talented people might start in management. We do not find evidence for this channel: There is no significant difference in the background of CEOs who enter the labor market in recessions versus non-recessions (e.g., their educational attainment, quality of schools they went to or the age at labor market entry); neither is there a change in the number of CEOs who started their first jobs in recession versus non-recession periods. While we cannot completely rule out that there could be differential selection on unobservable characteristics, it is difficult to believe that in recession times more conservative and risk averse people are more likely to select into management.

The alternative channel is that starting in recessions affects managerial outcomes *ex post*, either via imprinting (learning) of different management styles on the job or via selective promotion of people with different styles. Our results are more consistent with the former hypothesis, since we show that recession CEOs are early on assigned to firms with different characteristics, and that the first job assignment explains almost half of the recession impact. These findings confirm the predictions of labor market matching models where managers build

human capital on the job, see Jovanovic (1979b). Entering the labor market in a recession can result in worse initial job matches since there are fewer options available, see Jovanovic (1979a). As a result, managers might have fewer opportunities to develop desired human capital either within their initial job or throughout their career path than their non-recession peers, see for example Jovanovic (1979b), Neal (1999) or Gibbons and Waldman (2004). Similarly, a large literature in management science emphasizes that the early-career stage is the relevant sensitive period of imprinting for individuals, see for example Higgins (2005) or McEvily, Jaffee and Tortoriello (2012).[4]

A related paper that focuses on the CEO labor market is Malmendier, Tate and Yan (2011) which looks at how the Great Depression experience affects corporate financial policies.[5] However, our results differ from the prior paper in two important ways. First, we significantly expand the sample beyond the Depression time and obtain detailed information about the full career history of the CEOs to show that recession CEOs have very different career trajectories. Second and more importantly, we document that the impact of recessions works through the timing of when a CEO enters the labor market rather than when he/she grows up. Malmendier et al. (2011) measure exposure to the Depression using a decade fixed effect for all the people who were *born in the decade leading up to the Great Depression* (i.e., 1920 to 1929) and compare them to those born in other decades. They hypothesize that CEOs who grew up during the Great

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[4] Marquis and Tilcsik (2013, p. 199) define imprinting as "a process whereby, during a brief period of susceptibility, a focal entity develops characteristics that reflect prominent features of the environment, and these characteristics continue to persist despite significant environmental changes in subsequent periods." A large literature, in particular in management science, has looked at *imprinting* of early career experiences on managers' long-run outcomes and strategies. See Marquis and Tilcsik (2013) for a recent review. However, the challenge in most of these papers is that the choices which managers make early on in their careers might also be a reflection of the quality and characteristics of the person. This endogeneity makes it difficult to interpret the causal direction of the effect, since long-run differences in the manager's career might not be influenced by the job the person had, but be a function of the type of managers who select into this job. By looking at recessions we are able to identify an exogenous shock to managers' careers that does not suffer from this omitted variable bias.

[5] Malmendier and Nagel (2011) use a similar approach to show that past economic shocks have long-lasting effects on individual investment choices such as reducing capital allocations to risky assets and lowering stock market participation.

Depression adopt more conservative debt policies. Since their sample is relatively small and focuses primarily on the people who grew up in and around the Depression period (it covers only 343 CEOs between 1980 and 1994), they cannot differentiate whether the cohort specific effect is driven by the experience of the Depression per se or it depends on other changes for this cohort. In particular, they do not have the power to differentiate between *birth cohort effects* versus the impact of *starting the career* in a recession, as we suggest in our analysis.

In comparison, our data includes more than 4,000 CEOs of Execucomp firms from 1992 to 2010 with about 20% of firm-years having a recession CEO across multiple cohorts. By using the precise variation of the year that the CEO starts the first job (proxied by the birth year plus 24) we can run a horse race between our variable, Recession CEOs, and the effect of being born before bad economic times (Depression Babies). Our analysis shows that the variation in CEO styles is significantly related to whether the first job falls into a recession, while the coefficients on the Depression Baby variable are close to zero in almost all specifications and statistically insignificant. We also expand the Malmendier et al. (2011) study for all recession periods and still find that the timing of the first job explains more of the variation in CEO styles than the birth cohort.

Our work is also related to a growing literature that looks at cohort effects in different labor markets. See for example Oyer (2006, 2008), Cornaggia and Zou (2008), Kahn (2010), and Oreopoulos, von Wachter and Heisz (2012). We confirm that initial conditions in the managerial labor market have persistent effects on shaping a CEO's career path, which is similar to the findings in the wider labor market. However, it is even more surprising in the context of the executive labor market where one might have expected that the intense competition for talent would undo these early effects. Perhaps most comparable to the CEO labor market is the work

by Oyer (2008) who analyzes cohort effects for MBA graduates on their ability to obtain starting positions in the investment banking industry. He shows that these initial job allocations affect the long-run ability of graduates to succeed in the financial industry. Our paper is complementary to these papers, since they predominantly focus on the *extensive margin* and show that employees or students who start in bad economic times get worse starting jobs and lower salaries or do not even get a job at all. We focus on the *intensive margin* and show that the career progression and ultimate managerial styles differ for recession CEOs versus non-recession CEOs.

Finally, there are a few studies that look at CEOs who lived through the Great Depression. For example, Graham and Narasimhan (2004) analyze whether CEOs who lived through the Great Depression have lower leverage levels going forward.[6] Interestingly, the authors find that leverage levels of Depression CEOs drop in the aftermath of the crisis but the use of debt increases in the 1940s at companies for which the Depression-era company president retires or otherwise leaves the firm. The difference to our approach is that Graham and Narasimhan (2004) look at people who were already CEOs when the Depression hit, not managers who started their careers during the Depression. So their results speak to the persistence and memory of shocks at the level of the firm while we look at how management styles are formed at an individual manager's level.

The rest of this paper is organized as follows. Section 2 provides a description of the different data sources used to construct the dataset and discusses potential selection issues in the sampling framework for this study. Section 3 analyzes the effects of early career experiences such as recessions and characteristics of the first position on the career path of the managers. Section 4 quantifies the importance of starting in recessions on the managers' styles after they become CEOs. And finally Section 5 concludes.

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[6] Two closely related papers are: Graham, Hazarika and Narasimhan (2011a, 2011b).

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2. Data Description and Sample Selection

2.1. Data Construction

The data for this paper come from a number of different sources. We start with the companies and CEOs included in the Executive Compensation (Execucomp) database of Compustat between 1992 and 2010. Execucomp covers the S&P 1500 and companies that were once part of the S&P 1500. For each of these CEOs, we collect their career history from different sources that contain biographical information of the CEOs. Those data sources are the Biography in Context (formerly Biography Resource Center)[7], Bloomberg, Forbes, and the proxy filings of the company itself. This information allows us to compile data on the career profile of the CEOs and their demographic characteristics. We collect information on the different companies and non-business entities a manager worked in over his/her career, the position(s) a manager held within each of the firms and the dates at which the position was started and ended. In addition, we have information on the manager's birth year, birth place, gender, marital status, political affiliation, religion, and educational background (the school where he/she earned his/her undergraduate degree or any high-level degree such as MBA, Master or PhD, as well as the year when he/she graduated). We also obtain information about whether the CEO was ever in the military, held a political office or a position in academia. This dataset is constructed at the CEO level so that we have one observation per person.

From these sources we find (some) background information for over 5,700 CEOs or about 85% of the CEOs in the Execucomp universe. In the first step, we focus on CEOs who have a relatively complete and continuous career profile to examine how economic conditions at an individual's career start affect his/her career path. For those CEOs, we have their complete

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[7] Biography in Context combines biographies from printed Gale Group publications with biographies from The Complete Marquis Who's Who. The database also includes full-text articles from hundreds of periodicals.

career data since their first job and there are no major holes of more than three years at any point in their employment histories. Our sample includes 2,058 such CEOs.

2.2. Descriptive Statistics

The descriptive statistics are tabulated in Panel A of Table 1. In our sample, 21% of the CEOs started their career in a recession.[8] The recession dummy is based on the business cycle dating database of the National Bureau of Economic Research (NBER). We code years that the economy is in a recession period (excluding the peak of a business cycle) as a recession year. These years receive a one while all remaining years, which are moderate to medium expansion years, are coded as zero. We also repeat all our regressions below using a measure of the depth of the recession instead of just a dummy for whether there was a recession at a manager's career start. We measure the depth of the recession as the number of months that a given recession lasted, again based on the NBER recession dating convention. All the results are robust with this coding.[9]

The descriptive statistics in Panel A of Table 1 show that there is a large amount of mobility in the CEOs' career paths. The average CEO takes about 22 years to become a CEO, and is around 47 years old at the time of starting the first CEO position.[10] He/she has on average worked in two different industries and has been employed in three prior companies before starting the current job. The average manager held about six positions before becoming CEO,

[8] As discussed in Section 3.2, we proxy for the exogenous starting date by using a person's birth year plus 24 years.

[9] Part of the results from this alternative specification is tabulated in Table B3 in Appendix B. We also replicate the results using unemployment rates as a measure of poor economic conditions rather than recessions. The results generally go in the same direction as the ones using recessions but usually are much noisier (see Table B4 in Appendix B). Since unemployment rates are a less sharp measure of poor economic conditions than recession dating, we prefer the specifications recorded here. For example the unemployment rates and our recession indicator based on NBER data only have a correlation of 45%. In addition labor market conditions for white-collar workers might not be well captured by general unemployment rates.

[10] 149 CEOs out of these 2,058 CEOs are CEOs in several firms. For these multiple-firm CEOs, we focus on variables related to the first CEO position. We rerun all regressions using the variables related to the last CEO position or the CEO position with the maximal firm size; our results are virtually unchanged.

and the average tenure in each of the prior jobs is three years. Note that these averages do not fully sum up to the average time to become CEO of 22 years, since a number of CEOs hold appointments in non-business entities at some point in their career, such as the government, nonprofits, or associations. 10% of the CEOs are the founder of the firm; 15% of the CEOs have some prior experience in banking or other financial industry; 10% have some prior military experience; 8% of the CEOs started out as a consultant and 6% started out as a lawyer; 5% of the CEOs have held a political office and only 3% have spent time in academia;[11] 18% of the CEOs started out in a private firm and 9% of the CEOs started out in a firm that ranks within the top ten firms from which CEOs come.[12]

We obtain the data on the sales of the first public firm the individual worked at from Compustat (measured in the year the individual joined the firm). The average sales are \$3,409 million.[13] We also obtain from Compustat the data on sales, return on assets (ROA) and Tobin's Q of the firm at which the manager became CEO, measured in the year right before the CEO started the position. The average sales, ROA and Tobin's Q are \$3,117 million, 15%, and 1.76, respectively. Finally, we obtain from Execucomp the first-year total compensation data for these CEOs. Since Execucomp started at 1992, we use the 1992 compensation data for CEOs who started the CEO position before 1992.[14] The total value of the average CEO's compensation package including option grants is \$2,876,000; and the total value of the average CEO's compensation package including options exercised is \$2,752,000.

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[11] In computing these measures, we attempt to eliminate any positions that are not full-time appointments.
[12] These top ten firms are: IBM, GE, P&G, Arthur Andersen, Ford, GM, AT&T, McKinsey, Texas Instruments, and DuPont.
[13] All dollar values are converted into 1983 constant dollars. The data on sales, assets and CEO compensation are all log-transformed in the regressions.
[14] We rerun all compensation regressions excluding those CEOs who started the CEO position before 1992 and find qualitatively similar results.

2.3. Firm-Level Panel Data

We expand the sample in the second step to study how certain conditions at the beginning of a CEO's career affect the management style of the CEO when in office. In this step, we do not need detailed information on the career trajectories of these individuals and only require information on the year the individual starts his/her career, the year the individual becomes CEO, and the year the individual leaves the position of CEO. Following Bertrand and Schoar (2003), we only include CEOs who have been in their position at a firm for at least three years to ensure that they are given a chance to "imprint their mark" in a given company.[15] As is customary in the study of management style, we exclude CEOs of financial, insurance, and real estate firms, as well as CEOs of regulated utilities. These restrictions result in a sample of 4,152 CEOs.

We then form a dataset by merging these CEO characteristics and career profiles with Compustat firm-level data to obtain information about the type of firm the CEO heads. This merger results in a panel dataset at the firm-year level during the time that the CEO was in the office, as well as at least five years before the CEO came into office and five years after the CEO left office when such data are available. By construction, the dataset only contains CEOs who were at the helm of their companies in the years between 1992 and 2010. However, the firm-level panel data is not restricted to 1992-2010 if a CEO took office before 1992. Rather, it includes all available data points for a CEO after he/she took office till he/she left. For each firm-year, we know the characteristics of the CEO who was in office at the time. Firm-level data are not matched for any employment spells of a manager prior to getting into a CEO position. Lastly, we obtain the data on mergers and acquisitions from SDC Platinum and data on stock returns from the Center for Research in Security Prices (CRSP).

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[15] Our results are unchanged when we do not impose this condition.

2.4. Sampling Strategy

It is important to highlight the benefits and limitations of the sampling strategy in this paper. First, sample selection here is conditional upon managers who became CEOs at some point in their career and were at the helm of their company in the years between 1992 and 2010. While these CEOs are relatively successful managers in the first place, there is still a substantial amount of cross-sectional variation between firms, since public firms in the United States vary largely in their size, pay level and other success metrics of the managers. This heterogeneity gives us enough variation in CEO outcomes to differentiate between CEOs that had tremendous success in their careers and those CEOs that had more moderate outcomes.

An alternative sampling strategy would be to look at the unconditional probabilities of selecting into the CEO position. For this purpose, one would need to get data on the entire cohort of managers that started in a given year and follow their career path over time.[16] The advantage of this sample would be that we could observe if there are systematic factors that predict whether a given manager becomes a CEO or not. One potential issue with our sampling strategy is that managers who start in recessions may be less likely to become CEOs in the first place. However, we believe that this is not a first order concern in our data, since in that case our sample would include fewer CEOs starting in a recession year than those starting in a non-recession year. But this is not the case: We do not find in our sample that the average number of CEOs starting in a recession year is statistically different from the average number of CEOs starting in other years.[17] As an additional test, we focus on the sample of managers who became executives included in the Execucomp database between 1992 and 2010 and test whether recession starters

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[16] The main difficulty with this alternative sampling strategy is how to determine the "population at risk". For example, one could focus on the cohort of MBAs graduating each year in the United States. But obviously this is very difficult data to collect. In addition, more than one half of the CEOs in our sample do not have MBAs. So ideally one would have to cast an even wider net. A recent paper looking at one cohort of MBAs is Kuhnen (2011).

[17] We thank Dirk Jenter for his suggestion on this point.

are less likely to become CEOs than to become other executives such as CFOs and COOs. Specifically, we take each (birth) cohort of these executives and calculate the fraction of managers that became CEOs. We regress this variable on a dummy for whether there was a recession at each cohort's job market entry. The coefficient on the recession dummy is not statistically different from zero, suggesting that there is no difference in the supply of CEOs in recessions versus non-recessions.

A related issue with our sampling strategy is that there may be differential selection into the CEO labor market in recessions versus non-recessions. However, our data suggests that this is not the case either. We do not find significant differences in the undergraduate or postgraduate school background between recession and non-recession CEOs. To test this, we create a dummy for whether a manager obtains his or her undergraduate or postgraduate degree from an Ivy League school,[18] and we regress this variable on a dummy for whether there was a recession at the time of the manager's job market entry. The coefficient on the recession dummy is very close to zero but the standard error is very large. Similarly, we do not find significant differences in the number of degrees (such as MBA, Master or PhD) between recession and non-recession CEOs. So it appears that the pool of candidates that enter the CEO labor market does not change significantly over the business cycle. Nevertheless, we cannot fully rule out this ex ante selection since our tests are based on observable characteristics.

A second selection issue concerns the coverage of managers in sources like the Biography in Context, Bloomberg, and Forbes. Managers of larger and more successful firms might be more likely to be included in such biographical sources. Moreover, these CEOs might also be more willing to share information with the public. To avoid systematic bias in the

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[18] Results are quite similar when we define the dummy variable based on the top ten (or twenty) schools instead of the Ivy League schools.

completeness of information due to selective disclosure from voluntary sources, we supplement the data collection with biographical information from proxy filings. Even after using a combination of these sources, there is indeed more systematic coverage for CEOs in larger firms, but there is no bias in the types of CEOs who are covered in later versus earlier years. It is reassuring that the composition of firms and managers who are covered over time does not seem to change much, since the tests in this paper rely on longitudinal variation across managers from different cohorts. If the type of firms that are covered changes over time, the results could be affected by these differences in coverage. To alleviate this potential concern, we include decade fixed effects in all regressions.

Finally, a different type of sampling bias could be pronounced for the cohort results, especially since the sampling strategy employed here is more likely to include CEOs in the later part of the sample if they had very rapid ascensions to the CEO position. Managers who take a longer time to become a CEO will be dropped from the sample since those individuals that take longer to get to the CEO position will not have made it to this position by the time that the data was selected. To control for this bias we rerun all regressions only for CEOs who had a "fast career" (e.g., top 50% of the sample, in the early years of the sample as well as in the later years of the sample). So we compare managers on a fast track to the CEO position across different time periods. However, one could be concerned that these CEOs are fundamentally different from the rest of the market. For that purpose, we conduct a second robustness check that is based on following all the CEOs in one cohort. We only include CEOs that started career prior to 1980, and we repeat it for different time cutoffs. The latter approach allows us to look at all CEOs within the older cohorts. Under either approach, we find quite similar results.

3. CEO Careers and Early Recessions

3.1. Changes in Career Paths over Time

Before looking at managerial career paths as a function of specific experiences at the beginning of a manager's career, we first analyze whether there are general time trends in how the career trajectories of CEOs changed over the last few decades. A general perception from the executive labor market is that the careers of CEOs have become more active with quicker succession to the top position and more movements across firms and industries, see for example Parrino (1997), Murphy and Zabonjik (2007), Bertrand (2009), Frydman and Saks (2010) and Frydman (2013).

We verify a similar trend in our data. To do this, we estimate a regression of career characteristics on a linear time trend (i.e., the year the individual started his career minus 1968, the average career starting year). Table 2 shows a number of interesting patterns over the last few decades. We first look at the average time that managers took from the date of the first job to becoming CEOs. Rows 1 and 2 of Table 2 show that managers take a CEO job earlier in their careers and are also younger when taking the job. The coefficients on the linear time trend are -0.5 and -0.2, respectively. This result suggests that CEOs are on average about two years younger in each decade.

We then look at the structure of the career path of managers and their promotion to CEOs. Rows 3, 4 and 5 of Table 2 show that CEOs have fewer moves across industries, firms and positions in later decades of the sample; however, the coefficients are small (-0.009, -0.020, and -0.051, respectively). The coefficients on number of industries and number of positions become positive after we control for time to CEO, as shown in rows 6 and 8 (0.003 and 0.063, respectively); the coefficient on number of positions is significant at the 1% level, suggesting

that holding time to CEO constant, managers on average go through one more position before becoming CEOs in every fifteen years. Rows 9 and 10 of Table 2 show that managers in later periods are on a relatively fast track: They stay less time in a given job (-0.070 and -0.134, respectively). Controlling for time to CEO, in each successive decade managers on average spend one and a half fewer years in each position before becoming CEOs. Row 11 shows that managers in later cohorts are more likely to be the founder of the firm; the odds increase by 2% in each decade.

In addition, there is less mobility from non-business jobs into CEO positions: Managers in later cohorts are less likely to have come from the military (see row 13), law firms (see row 15), the government (see row 16), or academia (see row 17). The effect is strongest for military experience; the odds decrease by 9% in each decade. For law-firm, government and academia experience, the odds all decrease by 1% in each decade. It might not be surprising that military and government as a starting point for CEOs has dropped, since the role of these institutions in the business has shrunk over the same time period. Row 19 shows that managers in later cohorts are more likely to have come from a firm that ranks within the top ten firms that produce CEOs, and the odds increase by 1% in each decade; this result suggests that the top ten firms have strengthened their ability to produce CEOs over time. We do not find discernible time trends for the likelihood of having banking or consulting experience before becoming CEOs (see rows 12 and 14), the likelihood of starting one's career in a private firm (see row 18), or the size of the first public firm where someone works (see row 20).

3.2. Early Recessions

In the first step we want to understand how the economic conditions at the time that a manager enters the labor market affect the type of career that he/she will have. The motivation

behind this analysis is that early career experiences might have a long-lasting imprint on the manager's career outcomes and the ultimate success in business. In the second step we then analyze whether these early career experiences also affect the management style of the CEOs

There is a widespread perception that early career experiences can shape a manager and might have lasting effects on his/her career. The challenge in testing the validity of these arguments is that career choices early in the life of a manager are not exogenous, but depend on the person's skill, preferences and other unobservable characteristics. For example, obviously better employers are able to attract the best candidates from the start, even if they do not have a causal impact on the career of these employees.

One factor that is exogenous to the career choice of managers is the economic conditions at the time that managers enter the labor market, since a person's birth date is largely exogenous to their own life. However, if smart individuals know that it is disadvantageous to start one's career in a downturn, they might try to postpone entering the labor market in these times. In that case, the most well-informed and potentially smartest people would delay entering the market while the average employee still enters, which would then lead to selection effects. To avoid this type of selection bias, we proxy for the exogenous starting date by using a person's birth year plus 24 years. This specification is based on the observation that the distribution of starting ages has a strong mode at 24 (see Panel B of Table 1).[19] The likelihood of someone starting their first *full-time* job at the age of 24 is more than 21% and almost doubles that of starting work at the age of 23. The likelihood of starting at the age of 25 is still 16%, but then quickly drops off with older ages.[20] Therefore, we use 24 as the target age at which managers enter the labor market.

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[19] The number of observations in Panel B of Table 1 is less than 2,058 due to missing information on starting years for some observations.
[20] It is important here to base the starting age on the first full-time job that managers have. We do not count internships or short-term jobs as initial job allocations.

We also repeat all our regressions using 24 and 25 as target starting ages and our inferences are unchanged.[21]

This empirical strategy allows us to focus only on the exogenous part of a manager's starting conditions and not the endogenous choices he/she might have made in the timing when to begin his/her career. Our main variable of interest, "Recession", is a dummy variable that equals one if there was a recession at the time of the manager's job market entry, and zero otherwise. We call these managers who start their careers in recessions "recession CEOs".[22]

3.3. Early Career Path

In Table 3 we analyze a manager's career path as a function of the economic conditions at the time of labor market entry. We regress different measures of the shape of the career path on a dummy for whether there was a recession at the time of the manager's job market entry (proxied by the birth year plus 24).[23] The specification controls for decade fixed effects (of the decade in which a manager was born) to account for any long-run trends in the economic environment and the way CEO careers have evolved in the United States. Therefore, the variation in these regressions comes from comparing CEOs who started in a recession year with CEOs who started in a non-recession year in the same decade. We also control for the industry in

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[21] All untabulated results mentioned in this paper are available from the authors upon requests.

[22] In untabulated results, we see in the data that recession CEOs tend to be older (marginally significant) when entering the labor force than non-recession CEOs. This result suggests that some individuals do delay their job market entry when in a recession, which could be evidence of endogenous entry into the labor market. However, we find no evidence that those recession CEOs who delayed their job market entry have different outcomes from other recession CEOs.

[23] It is important to note that throughout the paper we compare recession CEOs with non-recession CEOs. In additional analysis, we also include a boom dummy in the regressions as an indicator variable for those CEOs who enter the labor market in business cycle peaks according to the NBER's business cycle dating database. So we use those CEOs who start their careers in neither recessions nor booms as the benchmark group. We continue to find quite similar results for recession CEOs. However, we do not find any significant effects for boom CEOs on any of our outcome variables. The coefficients on the boom dummy in all the regressions are very close to zero and the standard errors are very large.

which a CEO started the career, where industry effects are measured at the one-digit SIC level.[24] The rationale for including industry controls is that different industries might vary in their propensity and speed of promoting people. It would be especially interesting if there are large differences in the types of industries that CEOs start in when there is a recession year. However, our results show that the coefficient of interest on the recession dummy is almost unchanged when we do not include the industry fixed effect. These results suggest that the selection into industries based on the economic conditions at the beginning of the career does not have a measurable effect on a CEO's career path.

Panel A of Table 3 shows that recession CEOs take less time to become CEOs than non-recession CEOs (see column 1), and they are also younger when they become CEOs (see column 2). On average recession CEOs take about 1.5 years less time and are about one year younger when they are promoted into the top job. We then look at the number of industries and firms a manager was employed in over the career path before becoming CEO. Columns 3 and 4 show that recession CEOs have less mobility across both industries and firms; the effects are not very large, with coefficients equal to -0.128 and -0.137, respectively. In column 5, we look at the number of business positions a person held before becoming CEO for the first time. CEOs who start in recession periods tend to go through fewer positions before becoming CEOs than those individuals that start in other years. The coefficient is -0.421, which translates into about one fewer year to reach the CEO position for an average manager (-0.421 times 2, the median of average tenure as shown in Panel A of Table 1). In column 6 we show that the average tenure within each position is longer for those people who start in recession years. The dependent variable "Av Tenure" is calculated as the number of years a manager stayed in a given position, averaged over all business positions in his/her career prior to becoming CEO. The coefficient of

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[24] We code consulting and law firms as separate industries.

0.367 translates into about two more years prior to becoming CEOs for an average manager. Finally, we do not find that economic conditions at the time of the career start affect the probability to be the founder of the firm (see column 7). These results suggest that managers who start in recessions tend to rise within their organizations and seem to have internal career tracks rather than to move across firms. One interpretation of this result could be that it is difficult for outsiders to separate the quality of a manager from the overall market conditions.[25]

In Panel B of Table 3, we document that managers who start their career in recessions also have different early career experiences: Recession CEOs are less likely to start out as a consultant (see column 3), more likely to work in a private firm when entering the labor force (see column 5), and less likely to get their first job in a top ten firm that is famous for producing CEOs (see column 6). Specifically, the change in odds associated with recession CEOs are -2.5% for consulting experience, 4.3% for starting in a private firm, and -3.1% for starting in a top ten firm. In addition, when we look at the sales of the first public firm where these individuals worked, recession CEOs tend to work in smaller firms than non-recession CEOs (see column 7).[26] The coefficient of -0.29 suggests that, on average, the sales of the first public firm are 25% ($e^{-0.29} - 1$) lower for recession CEOs than for non-recession CEOs. However, we do not find evidence that starting one's career in a recession affects his/her chances of being hired by a bank (see column 1), the military (see column 2) or the government (see column 4).

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[25] In our sample, there are 320 individuals who have their whole careers in one firm (i.e., starting in an S&P 1500 firm and end up as the CEO of that firm). We find that recession CEOs are more likely to be these one-firm individuals. Our results still hold after we drop these one-firm individuals.

[26] We also find that in the subsample of individuals who start their career in a public firm (749 observations with sales data), recession CEOs tend to work in a smaller firm than non-recession CEOs.

3.4. Career Outcomes

We next examine whether starting in a recession also affects the ultimate career outcome. In Table 4 we focus on two measures that can proxy for the success of the manager's career: the size of the firm in which he/she becomes a CEO, and his/her total compensation for the first year as a CEO. We measure firm size as the natural logarithm of sales in the year before the CEO starts the position in order to abstract from any decisions about firm size that are a function of the CEOs' choices within the firm. We interpret the size of the firm that someone runs and the total compensation that he/she receives as an indicator of the overall success of the manager's career. We also look at ROA and Tobin's Q of the firm in which he/she becomes a CEO.

Column 1 of Table 4 suggests that recession CEOs on average end up heading smaller firms than managers who start in non-recessions; the coefficient of -0.234 suggests that on average firm size for recession CEOs is 20% ($e^{-0.234} - 1$) smaller than that for non-recession CEOs. However, we find no discernible differences in terms of profitability (see column 2) or valuation (see column 3), suggesting that these firms are not necessarily of a worse type. We then look at two proxies for the total compensation of these individuals for the first year as CEOs: the total compensation including option grants[27] and the total compensation including options exercised[28]. The results in columns 4 and 5 suggest that on average recession CEOs receive lower total compensation when becoming CEOs, at least once we take into account options exercised. The coefficient in column 5 (-0.185) suggests that on average recession CEOs receive 17% ($e^{-0.185} - 1$) lower compensation than non-recession CEOs. In addition, this lower pay is not just a function of running a smaller firm, since it persists even after we control for the

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[27] It is the Execucomp variable "tdc1", comprised of the following: salary, bonus, other annual, total value of restricted stock granted, total value of stock options granted (using Black-Scholes), long-term incentive payouts, and all other total.

[28] It is the Execucomp variable "tdc2", comprised of the following: salary, bonus, other annual, total value of restricted stock granted, net value of stock options exercised, long-term incentive payouts, and all other total.

size and profitability of the firm (see columns 6 and 7). The coefficient in column 7 (-0.117) suggests that on average the negative effect of recession on pay is -11% ($e^{-0.117} - 1$), holding firm size and profitability constant.[29]

Overall, these results suggest that managers who start in recession years tend to have careers that progress within a given firm, are less likely to be promoted through moves across firms, and thus take less time to reach a CEO position. Moreover, these early career effects have lasting impacts on the ultimate outcome of a manager's career, since these managers end up heading smaller firms and receiving lower total compensation when they become CEOs.[30]

3.5. Impact of the First Job

If starting in a recession affects the initial job assignment of a manager and at the same time impacts the ultimate career success, one can ask whether recessions have an independent effect on both of these dimensions or the impact of the recession affects career outcomes mainly by distorting the initial job allocation. To test this hypothesis, we rerun our regressions in Table 3 and Table 4 but include controls for the characteristics of the initial position that a manager starts in.[31] If recessions affect managers' careers mainly by assigning them to more non-standard jobs, the coefficient on the recession dummy should drop in size when we control for the job characteristics. We focus on the major characteristics we established in Panel B of Table 3: size

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[29] The results are robust to controlling for the age of the CEO. In addition, when we supplement the data with the first available data from Compustat (to achieve the full sample of 2,058 observations) and rerun all the regressions in Table 4, we obtain quite similar results.

[30] We do not find evidence that recession CEOs are more likely to get a second CEO job. This result allows us to rule out the possibility that these recession CEOs in their second job go on to run a larger firm and have a higher paying job after starting in the smaller firm that we document.

[31] Though it is clearly more endogenous, we also examine the correlation between early career choice and career progression to CEO. For example, we find that starting in a firm that ranks within the top ten firms from which CEOs come is associated with becoming CEO in a larger company and receiving higher compensation (see Table B2 in Appendix B). These results are interesting but cannot be interpreted in a causal way since people of different qualifications and types might be choosing these different career paths early on. The position might not shape the person and their outcome, but people with particular skills might seek out these positions in order to put themselves into a position of greater skill.

of firm (first sales), a dummy for whether the firm is private, and whether a manager starts in the banking or consulting industry.[32]

In Panel A of Table 5, we find that after controlling for these job characteristics the estimated coefficients on the recession dummy are much smaller across most dimensions. In column 1, the dependent variable is the time a manager took to become CEO (time to CEO). The coefficient on recession is 1.16 when including the first job characteristics, but was almost 1.55 before. Similarly, in column 2 we repeat the same regression but use age to CEO as the dependent variable. Again the estimated coefficient on the recession dummy drops by more than 20%. These effects are even bigger for the number of positions and industries CEOs go through in their career, see columns 3 through 6. Here the inclusion of the job characteristics reduces the size of the recession dummy by more than 30%. In Panel B of Table 5 we now repeat a parallel exercise by looking at the career outcomes. In column 1, we look at the size of the firm at which they become CEO. Including the characteristics of the first job reduces the size of the estimated coefficient on the recession dummy by almost 50%. In column 5, the effect of recession on the total compensation as CEO is also reduced after controlling for the first job characteristics. However, in column 7, the coefficient on the recession dummy remains almost unchanged when we control for the starting position. This result might be driven by the fact that the additional control variables (Size, Sales, ROA) already reflect to a certain extent the initial job characteristics since these variables are also likely to be affected by the starting job.

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[32] We do not control for "Top Ten" because it is strongly correlated with firm size that is included in the regression. Nevertheless, the results are quite similar when we add "Top Ten" as an additional control.

4. Managerial Styles and Early Recessions

4.1. Recession Effects on Managerial Styles

The second major question the paper focuses on is the impact that early career experiences can have on the management style that a manager adopts even decades later when he/she becomes a CEO. On average this time lag would be 20 years after the CEO starts his/her first job. Do managers who start their careers in recessions have more conservative management styles than those who start in non-recessions? This test is similar to the approach used by Bertrand and Schoar (2003) in using changes in observable outcomes at the firm level as an indicator of the impact that the CEO has on the firm. However, we do not have to rely only on firm switchers (i.e., CEOs observed in multiple firms) in this regression since we can examine changes in firm behavior when a recession CEO replaces a non-recession CEO or vice versa.

To test this hypothesis we start with Compustat data for the years that a given CEO was at the helm of the firm. We then match the CEO's career history to the annual firm data for the time that the CEO heads that company. The firm-level variables of interest are corporate outcomes related to investment, financial, and tax policies, as well as organizational strategy, financial reporting, firm risk and operating performance. We regress firm outcomes on the CEO's career profile to test whether decisions vary systematically based on the CEO's profile. To account for fixed differences in outcomes at the firm level, in all regressions we control for firm fixed effects.[33] Thus, the "Recession" coefficient is identified from firms switching from a recession CEO to a non-recession CEO, or vice versa.[34] As before, we also include decade fixed effects to control for any long-run trends in management styles and economic conditions. The

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[33] In this way, we alleviate confounding effects of firm characteristics due to the possible endogenous matching of CEOs to firms, see Graham, Harvey and Puri (2013).

[34] In untabulated results, we find that the probability of hiring a recession (or non-recession) CEO is the same for a firm replacing a recession CEO and a firm replacing a non-recession CEO, suggesting that firms do not proactively select into a certain type of CEOs.

variation in these regressions comes from the differences in firm outcomes between CEOs who started in recessions and CEOs who started in non-recessions within a given decade.[35]

The results from these tests are presented in Table 6.[36] In columns 1 to 3 of Panel A, we report the results for investment policy. The first variable in the table is capital expenditures. The specification includes controls for firm fixed effects, decade fixed effects, cash flows, and lagged Tobin's Q. Managers who start in recessions tend to have lower levels of capital expenditures than managers who started in other periods; and the effect is -0.7% of lagged total assets. The next variable in Panel A is R&D expenditures.[37] The result shows that recession CEOs also spend less on R&D, and the effect is -0.2% of lagged total assets. Column 3 shows that recession CEOs do not differ in their propensity to undertake mergers and acquisitions (M&As), as measured by the total number of acquisitions over the fiscal year.[38] The first three columns suggest that recession CEOs have more conservative investment policies and avoid excessive capital expenditures and R&D expenses than their non-recession peers.

Columns 4 to 8 focus on financial policy. Column 4 shows that leverage levels are significantly lower for firms led by recession CEOs. Recession CEOs lower the leverage ratio by 1% relative to other CEOs.[39] In column 5 we use interest coverage as the measure of leverage

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[35] In recent decades (i.e., 1970s, 1980s and 1990s), recessions have primarily happened in the beginning of the decade. Thus, even with decade fixed effects, recession CEOs might tend to be older than non-recession CEOs. In untabulated results, we include a continuous control for CEO age and find quite similar results.

[36] We include basic control variables in these regressions, mainly following Bertrand and Schoar (2003). The coefficients on all control variables have the predicted signs.

[37] As in other studies (e.g., Coles, Daniel and Naveen 2006), we set R&D equal to zero when it is missing from Compustat.

[38] Results are similar if we use the total dollar value of acquisitions over the fiscal year. However, we should interpret the M&A results with caution since we only have M&A data (obtained from SDC) for around one-third of the total firm-year observations in our sample. In untabulated results, we also find that recession CEOs tend to engage in more cash deals than non-recession CEOs, consistent with their conservative investment style.

[39] The result on leverage is robust to including the full set of controls as in Table VII of Malmendier, Tate and Yan (2011).

and find similar results; recession CEOs increase interest coverage[40] by 8% ($e^{0.077} - 1$) relative to non-recession CEOs. Column 6 shows that recession CEOs have lower cash holdings (-1.1% of lagged total assets), which is often seen as a sign of better financial management and less wasteful slack in the use of capital. The fact that recession CEOs also have lower working capital needs (see column 7, with coefficient equal to -2.7%) suggests that they are able to run a tight ship and get financing from their customers rather than having to finance them. Column 8 shows that recession CEOs do not have a significant impact on a firm's dividend policy.

In column 9 of Panel A we look at the tax policy. Dyreng, Hanlon and Maydew (2010) document that individual executives play a significant role in determining the level of tax avoidance that firms undertake (as proxied by effective tax rates). We find that firms led by recession CEOs have higher effective tax rates as measured by the ratio of cash taxes paid to pretax income (with coefficient equal to 4.2%).[41] This result is consistent with the finding that recession CEOs have lower leverage levels than non-recession CEOs, probably because they are more concerned with the costs of financial distress from heightened leverage or other aggressive tax planning strategies than the associated tax benefits.

Columns 1 to 3 in Panel B report our results for the organizational policy variables. Recession CEOs seem to manage operations more conservatively as well. Column 1 shows that they are more diversified across business segments (with coefficient equal to 0.437), possibly to hedge against the risk of a specific industry. Recession CEOs also show more concern about cost effectiveness since they have lower selling, general and administrative expenses (see column 2,

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[40] We use the natural logarithm of the interest coverage ratio in the regression because the raw ratio is highly skewed due to large outliers (firms with very low interest expenses).

[41] Following Dyreng, Hanlon and Maydew (2010), pretax income is measured as income before discontinued operations and extraordinary items and excludes special items. Effective tax rates with negative pretax income are set to missing. The remaining non-missing effective tax rates are winsorized (reset) so that the largest observation is 1 and the smallest is 0. Basic control variables in the regression include firm size and a dummy for whether the firm has a positive value of tax loss carry-forward (TLCF).

with coefficient equal to -2%) and a higher profit margin (see column 3, with coefficient equal to 1%).

Column 4 focuses on one of firms' financial reporting outcomes – accounting conservatism. Accounting conservatism is the asymmetrical verification requirements for gains and losses: The greater the difference in degree of verification required for gains versus losses, the greater the conservatism (Watts 2003). We use the C_Score developed by Khan and Watts (2009) as our measure of accounting conservatism. Ahmed and Duellman (2013) document consistent and robust evidence of a significant negative effect of CEO overconfidence on accounting conservatism. We find that firms led by recession CEOs adopt more conservative accounting. In column 5 we look at the overall riskiness of firms as proxied by the stock return volatility (Coles, Daniel and Naveen 2006). The result suggests that because of the conservative management styles, recession CEOs lower stock return volatility by 3.2%.

Finally, we look at the effect of recession CEOs on firms' operating performance. Column 6 and 7 show that recession CEOs invest more in long-term assets (with coefficient equal to 1.4%) and have lower asset turnover (with coefficient equal to -8.4%) probably due to asset diversification. As a result, a recession CEO has a lower return on assets (ROA) in his/her firm than a CEO who did not start in a recession (see column 8).[42] It is not a very strong effect on ROA (with coefficient equal to -0.9%). In column 9, we use an alternative accounting measure of performance that is less subject to accounting manipulations, operating cash flow (as a ratio of lagged total assets), and find a quite similar result (with coefficient equal to -0.7%).

Taken together, the results seem to suggest that recession CEOs indeed manage their firms more conservatively. In untabulated results, we see that recession CEOs have the same tenure in their CEO positions as non-recession CEOs; so any results that we find on the

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[42] Recall that: Return on Assets = Profit Margin × Asset Turnover.

differences in CEO styles are not driven by their horizon with their firms. In a further analysis, we ask whether recession CEOs manage firms differently in recessions or non-recessions. It is possible that recession CEOs manage firms more efficiently in recessions and perform better in such difficult periods, while non-recession CEOs are better at managing firms in non-recessions. However, our results indicate that recession CEOs do not perform differently in recessions and non-recessions.[43] This result supports the notion that managerial styles, once formed, are relatively fixed over time.

4.2. Timing of Recession

Our results suggest that economic conditions at the time managers enter the labor market have a lasting impact on their managerial styles they display as CEOs. In contrast, Malmendier et al. (2011) suggest that the birth decade of the CEOs matters: CEOs who were born in the decade leading up to the Great Depression adopt more conservative debt policies. To shed light on the precise channel by which bad economic conditions affect managerial decisions, we run a horse race between growing up as a child in the Depression (or even a normal recession) versus entering the labor market in these times. The underlying question is whether early personal (childhood) experiences or work-related experiences in bad economic times matter more. The variation used in Malmendier et al. (2011) is whether the future CEO grew up in the Great Depression, which relies on imprecise identification, since many other things might have been different for people with that decade fixed effect. The variation we use in this paper is the exact year in which a manager enters into the labor force (proxied by the birth year plus 24). Since we

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[43] Specifically, we create a dummy for whether the firm-year is a recession year (based on the NBER business cycle dating database), and we interact it with the recession CEO dummy we originally have. We rerun all regressions in Table 6 with the recession year dummy, the recession CEO dummy, and the interaction term of these two. The coefficients on the recession CEO dummy remain similar to those reported in Table 6, but we do not find any significant coefficient for the interaction term. Results are similar when we define a recession year as one when the industry stock return is below the market stock return.

use several decades of data it allows us to differentiate the effect of labor force entry from a broad decade fixed effect in which a person is born. In other words, some of the people growing up during the Depression decade will also have experienced the recession of the mid-1940s when entering the labor market, while others growing up in the Depression decade will however have entered the labor market in a non-recession time. This variation allows us to test if the important effect happens around the time of labor market entry or is a birth cohort effect.

To disentangle the two effects, we follow Malmendier et al. (2011) and construct a dummy variable (Depression Baby) that equals one if an individual was born between 1920 and 1929. Overall, 5% of firm-years have a Depression CEO. Table 7 Panel A shows the results from a horse race between the Depression Baby variable and our Recession variable (at labor market entry). In columns 1 and 2, we show that the Depression Baby dummy does not capture the important variation in manager behavior for our main capital structure variables, Leverage and Interest Coverage: The coefficients on Depression Baby are very close to zero and statistically insignificant. However, when adding our Recession dummy in columns 3 and 4, the results on our Recession dummy continue to be significant and economically important. The coefficients are close in magnitude to what we estimated before. We repeat our regressions with the kink variable (Graham 2000) which is their preferred specification in Malmendier et al. (2011), but we find that the Depression cohort fixed effect is not significant in any specification (see columns 5 and 6). Even when we restrict our sample to the shorter time period (i.e., CEOs born before 1940) that was used in Malemendier et al. (2011), we find the asymmetric effect that variation in CEO styles is explained by the economic conditions at labor force entry (Recession) rather than birth cohort (Depression Baby).

To go beyond just the Depression period we repeat this horse race for all recession periods. We cannot construct a "Recession Baby" variable as a whole decade fixed effect since it would be collinear with the decade fixed effects in our analysis. So instead we create a more precise birth cohort effect to capture the idea in Malmendier et al. (2011): We create a Recession Baby dummy that equals one if an individual turns ten in a recession.[44] We then include this dummy in the tests reported in Table 6. We report a subset of the results in Table 7 Panel B. As in Panel A the results show that almost all the coefficients on Recession Baby are statistically insignificant (except for Capex) and are much smaller in magnitude than the coefficients on our Recession variable. The coefficients on Recession are of similar magnitude and statistical significance to those reported in Table 6 without using the Recession Baby control.[45]

These results suggest that the variation in management styles is driven by whether the CEO started the first job in a recession rather than by whether the CEO grew up in a recession.[46]

4.3. Announcement Period Returns

In this section we test how investors perceive the bundle of skills and styles that recession CEOs provide. To that end we calculate the turnover announcement period returns for the different types of CEOs. We identify all CEO turnovers from the Execucomp database, and then search the *Factiva* and *Lexis-Nexis* databases for the exact turnover announcement date. Table 8 presents the results based on some univariate tests. The results based on market-adjusted and industry-adjusted CAR are quite similar. So we focus our discussions on the results related to industry-adjusted CAR. Panel A shows that the average industry-adjusted CAR is 0.9% when the

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[44] Results are similar when we define Recession Baby dummy that equals one if an individual turns eleven (or twelve) in a recession (see Table B5 in Appendix B).

[45] Full tables on Depression Baby and Recession Baby are available upon requests. All coefficients on Recession remain similar to those reported in Table 6.

[46] In untabulated results, we construct a variable that measures the number of recessions in a CEO's career and use it as a competing explanatory variable. The magnitudes and statistical significance of the coefficients on "Recession" remain quite similar to those reported.

new CEO is a recession CEO, and -0.1% when the new CEO is a non-recession CEO.[47] The difference of 0.9% is statistically significant at the 1% level. Panel B shows the average CAR_Industry is 1.2% when a recession CEO replaces a non-recession CEO, -0.6% when a recession CEO replaces a recession CEO, -0.7% when a non-recession CEO replaces a recession CEO, and 0.1% when a non-recession CEO replaces a non-recession CEO. When we use a non-recession CEO replacing a non-recession CEO as the benchmark, the incremental industry-adjusted stock price reaction is 1.1% for a recession CEO replacing a non-recession CEO (significant at the 1% level), -0.8% for a recession CEO replacing a recession CEO (not significant), and -0.8% for a non-recession CEO replacing a recession CEO (significant at the 10% level).[48]

This result suggests that the market assigns a positive and economically meaningful value to the selection of a recession CEO. The inferences are unchanged when we perform multiple regressions by including various control variables that affect CEO turnover announcement returns (see Table B6 in Appendix B).

5. Conclusions

The results of this paper suggest that management styles of CEOs are affected by the environment at the start of their career. In particular, we observe that beginning one's career during a recession leads to CEOs who have more conservative management styles, such as lower leverage and more cost cutting. Early career conditions also affect the career path of the manager on the way to becoming CEO and their career success as measured by the size of firm they

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[47] We use value-weighted market and industry stock returns. All results are almost identical when we use equal-weighted market and industry stock returns. Results are also quite similar when we use the five-day (-2, -1, 0, 1, 2) announcement window instead.

[48] We also look at whether the economic conditions at the beginning of a manager's career affect the "timing" when he/she becomes a CEO. We do not find evidence that firms are more likely to select recession CEOs when hiring people during recessions.

manage and the level of compensation. We show that the number and speed of outside offers and industry switches across the career increase when the manager starts his/her career in better economic conditions. Interestingly the data suggests that a major channel by which recessions affect CEO outcomes is through distortions in the initial job allocation at the time of labor market entry, e.g. starting at smaller and privately held firms rather than large, public firms. We also show that recessions do not affect CEO careers or management styles via the environment a person grows up in.

These findings can have broad implications for the managerial labor market. If the formation of CEOs and their management styles follows a time-to-build model, then the persistence of formative experiences affects the composition of available management styles at a given point in time. For instance, after extended times of high growth there are many managers who learned how to manage growing companies, but at the same time there could be a shortage of managers who know how to run firms in distress or turn-around situations. This pattern could lead to potential mismatches if the economic conditions change radically. If the majority of existing managers enter the labor market in a boom period there might be a net shortage of managers who know how to manage firms in a recession once the economic outlook changes. A lot more research is needed to understand how executive labor markets affect the formation of management styles and what constraints might affect the matching of managers to positions in this market.

References

Ahmed, Anwer S. and Scott Duellman, "Managerial Overconfidence and Accounting Conservatism," *Journal of Accounting Research*, 51 (2013), 1-30.

Benmelech, Efraim and Carola Frydman, "Military CEOs," *Journal of Financial Economics*, Forthcoming (2014).

Bennedsen, Morten, Kasper Meisner Nielsen, Francisco Perez-Gonzalez and Daniel Wolfenzon, "Inside the Family Firm: The Role of Families in Succession Decisions and Performance," *Quarterly Journal of Economics*, 122 (2007), 647-691.

Bertrand, Marianne, "CEOs," *Annual Review of Economics*, 1 (2009), 121-150.

Bertrand, Marianne and Sendhil Mullainathan, "Are CEOs Rewarded for Luck? The Ones without Principals Are," *Quarterly Journal of Economics*, 116 (2001), 901-932.

Bertrand, Marianne and Antoinette Schoar, "Managing with Style: The Effect of Managers on Firm Policies," *Quarterly Journal of Economics*, 118 (2003), 1169-1208.

Coles, Jeffrey L., Naveen D. Daniel and Lalitha Naveen, "Managerial Incentives and Risk-Taking," *Journal of Financial Economics*, 79 (2006), 431-468.

Cornaggia, Jess and Lin Zou, "Does Initial Placement Matter for Equity Analysts' Forecast Accuracy?," Working Paper (2008).

Custódio, Cláudia and Daniel Metzger, "Financial Expert CEOs: CEO's Work Experience and Firm's Financial Policies," *Journal of Financial Economics*, Forthcoming (2014).

Dyreng, Scott D., Michelle Hanlon and Edward L. Maydew, "The Effects of Executives on Corporate Tax Avoidance," *The Accounting Review*, 85 (2010), 1163-1189.

Eisfeldt, Andrea L. and Camelia M. Kuhnen, "CEO Turnover in a Competitive Assignment Framework," *Journal of Financial Economics*, 109 (2013), 351-372.

Fligstein, Neil, *The Transformation of Corporate Control*, (Cambridge, MA: Harvard University Press, 1990).

Frydman, Carola, "Rising Through the Ranks: The Evolution of the Market for Corporate Executives, 1936-2003," Working Paper (2013).

Frydman, Carola and Raven Saks, "Executive Compensation: A New View from a Long-Term Perspective, 1936–2005," *Review of Financial Studies*, 23 (2010), 2099-2138.

Garvey, Gerald T. and Todd T. Milbourn, "Asymmetric Benchmarking in Compensation: Executives Are Rewarded for Good Luck but Not Penalized for Bad," *Journal of Financial Economics*, 82 (2006), 197-225.

Gibbons, Robert and Michael Waldman, "Task-Specific Human Capital," *American Economic Review*, 94 (2004), 203-207.

Graham, John R., "How Big Are the Tax Benefits of Debt?," *Journal of Finance*, 5 (2000), 1901-1942.

Graham, John R., Campbell R. Harvey and Manju Puri, "Managerial Attitudes and Corporate Actions," *Journal of Financial Economics*, 109 (2013), 103-121.

Graham, John R., Sonali Hazarika and Krishnamoorthy Narasimhan, "Financial Distress in the Great Depression," *Financial Management*, 40 (2011a), 821-844.

Graham, John R., Sonali Hazarika and Krishnamoorthy Narasimhan, "Corporate Governance, Debt, and Investment Policy during the Great Depression," *Management Science*, 57 (2011b), 2083–2100.

Graham, John R. and Krishna Narasimhan, "Corporate Survival and Managerial Experiences during the Great Depression," Working Paper (2004).

Hambrick, Donald C. and Phyllis A. Mason, "Upper Echelons: The Organization as a Reflection of its Top Managers," *Academy of Management Review*, 9 (1984), 193-206.

Higgins, Monica C., *Career Imprints: Creating Leaders across an Industry*, (San Francisco, CA: Jossey-Bass, 2005).

Jenter, Dirk and Fadi Kanaan, "CEO Turnover and Relative Performance Evaluation," *Journal of Finance*, Forthcoming (2014).

Jenter, Dirk and Katharina Lewellen, "Performance-Induced CEO Turnover," Working Paper (2010).

Jovanovic, Boyan, "Job Matching and the Theory of Turnover," *Journal of Political Economy* 87 (1979a), 972-990.

Jovanovic, Boyan, "Firm Specific Capital and Turnover," *Journal of Political Economy* 87 (1979b), 1246-1260.

Kahn, Lisa B., "The Long-Term Labor Market Consequences of Graduating from College in a Bad Economy," *Labour Economics*, 17 (2010), 303-316.

Kaplan, Steven N., Mark M. Klebanov and Morten Sorensen, "Which CEO Characteristics and Abilities Matter?," *Journal of Finance*, 67 (2012), 973-1007.

Khan, Mozaffar and Ross L. Watts, Estimation and Empirical Properties of a Firm-Year Measure of Accounting Conservatism. *Journal of Accounting Economics*, 48 (2009), 132-150.

Khurana, Rakesh, *Searching for a Corporate Savior: The Irrational Quest for Charismatic CEOs*, (Princeton, NJ: Princeton University Press, 2002).

Kotter, John P., *The General Managers*, (New York, NY: The Free Press, 1982).

Kuhnen, Camelia M., "Searching for Jobs: Evidence from MBA Graduates," Working Paper (2011).

Lazear, Edward P., "Balanced Skills and Entrepreneurship," *American Economic Review*, 94 (2004), 208-211.

Malmendier, Ulrike and Stefan Nagel, "Depression Babies: Do Macroeconomic Experiences Affect Risk-Taking?," *Quarterly Journal of Economics*, 126 (2011), 373-416.

Malmendier, Ulrike and Geoffrey Tate, "Who Makes Acquisitions? CEO Overconfidence and the Market's Reaction," *Journal of Financial Economics*, 89 (2008), 20-43.

Malmendier, Ulrike, Geoffrey Tate and Jonathan Yan, "Overconfidence and Early-Life Experiences: The Effect of Managerial Traits on Corporate Financial Policies," *Journal of Finance*, 66 (2011), 1687-1733.

Marquis, Christopher, Andras Tilcsik, "Imprinting: Toward a Multilevel Theory," *Academy of Management Annals*, 7 (2013), 193-243.

McEvily, Bill, Jonathan Jaffee and Marco Tortoriello, "Not All Bridging Ties Are Equal: Network Imprinting and Firm Growth in the Nashville Legal Industry, 1933–1978," *Organization Science*, 23 (2012), 547-563.

Murphy, Kevin J. and Jan Zabojnik, "Managerial Capital and the Market for CEOs," Working Paper (2007).

Neal, Derek, "The Complexity of Job Mobility among Young Men," *Journal of Labor Economics* 17 (1999), 237-261.

Oreopoulos, Philip, Till von Wachter and Andrew Heisz, "The Short- and Long-Term Career Effects of Graduating in a Recession," *American Economic Journal: Applied Economics*, 4 (2012), 1–29.

Oyer, Paul, "Initial Labor Market Conditions and Long-Term Outcomes for Economists," *Journal of Economic Perspectives*, 20 (2006), 143-160.

Oyer, Paul, "The Making of an Investment Banker: Stock Market Shocks, Career Choice, and Lifetime Income," *Journal of Finance*, 63 (2008), 2601–2628.

Parrino, Robert, "CEO Turnover and Outside Succession: A Cross-Sectional Analysis," *Journal of Financial Economics*, 46 (1997), 165-197.

Perez-Gonzalez, Francisco, "Inherited Control and Firm Performance," *American Economic Review*, 96 (2006), 1559-1588.

Topel, Robert H. and Michael P. Ward, "Job Mobility and the Careers of Young Men," *Quarterly Journal of Economics* 107 (1992), 441-479.

Warner, Jerold B., Ross L. Watts and Karen Wruck, "Stock Prices and Top Management Changes," *Journal of Financial Economics*, 20 (1989), 461-492.

Watts, Ross L., "Conservatism in Accounting Part I: Explanations and Implications," *Accounting Horizons*, 17 (2003), 207-221.

Weisbach, Michael S., "CEO Turnover and the Firm's Investment Decisions," *Journal of Financial Economics*, 37 (1995), 159-188.

Table 1: Descriptive Statistics

Panel A: Summary Statistics

	Obs.	Mean	Median	SD
Recession	2,058	0.21	0.00	0.41
Time to CEO	2,058	22.0	23.0	9.94
Age to CEO	2,058	47.3	48.0	8.48
Num Industries	2,058	1.91	2.00	0.95
Num Firms	2,058	2.57	2.00	1.55
Num Positions	2,058	5.78	5.00	3.86
Av Tenure	2,058	3.15	2.00	3.28
Founder	2,058	0.10	0.00	0.30
Banking	2,058	0.15	0.00	0.36
Military	2,058	0.10	0.00	0.30
Consulting	2,058	0.08	0.00	0.26
Law	2,058	0.06	0.00	0.23
Politics	2,058	0.05	0.00	0.22
University	2,058	0.03	0.00	0.17
First Private	2,058	0.18	0.00	0.38
Top Ten	2,058	0.09	0.00	0.29
First Sales ($m)	2,058	3,409	714	7,754
Sales of Firm at Which CEO ($m)	1,566	3,117	936	7,224
ROA of Firm at Which CEO	1,511	0.15	0.14	0.13
Tobin's Q of Firm at Which CEO	1,536	1.76	1.28	2.95
CEO First Comp. incl. Option Grants ($000)	1,715	2,876	1,412	5,046
CEO First Comp. incl. Options Exercised ($000)	1,764	2,752	1,063	6,014

Panel B: Distribution of Age at Labor Market Entry

Age	Frequency	Percentage	Cumulative Percentage
19	12	0.7	0.7
20	17	1.1	1.8
21	57	3.5	5.3
22	151	9.4	14.7
23	197	12.2	26.9
24	**342**	**21.2**	**48.1**
25	262	16.2	64.3
26	213	13.2	77.5
27	160	9.9	87.4
28	96	5.9	93.3
29	60	3.7	97.0
30	48	3.0	100.0
Total	1,615	100	

Notes: The dataset is based on a cross-section of individuals that held a CEO position at some point between 1992 and 2010 in an "Execucomp" firm. We collect information on CEOs' background and career path from the Biography in Context (formerly Biography Resource Center), Bloomberg, Forbes, and the proxy filings of the company itself. We find (some) background information for about 85% of these "Execucomp" CEOs. In the reported tests on CEO careers, we only include 2,058 CEOs who have a relatively complete and continuous career profile. Data on sales, ROA and Tobin's Q are obtained from Compustat; compensation data are obtained from Execucomp. All dollar values are converted into 1983 constant dollars. The values of sales and assets are in millions; and CEO compensation data are in thousands. Details on the definition and construction of the variables reported in the table are available in Appendix A.

Table 2: Changes in Career Paths over Time

		Time Trend	Time to CEO	Constant	Obs.	Adj. R^2
(1)	Time to CEO	-0.532***		22.013***	2,058	0.322
		(0.018)		(0.181)		
(2)	Age to CEO	-0.216***		47.327***	2,058	0.073
		(0.019)		(0.180)		
(3)	Num Industries	-0.009***		1.914***	2,058	0.009
		(0.002)		(0.021)		
(4)	Num Firms	-0.020***		2.568***	2,058	0.018
		(0.003)		(0.034)		
(5)	Num Positions	-0.051***		5.776***	2,058	0.019
		(0.008)		(0.084)		
(6)	Num Industries	0.003	0.022***	1.419***	2,058	0.046
		(0.002)	(0.002)	(0.048)		
(7)	Num Firms	-0.002	0.033***	1.851***	2,058	0.019
		(0.004)	(0.004)	(0.080)		
(8)	Num Positions	0.063***	0.214***	1.061***	2,058	0.225
		(0.007)	(0.008)	(0.156)		
(9)	Av Tenure	-0.070***		3.147***	2,058	0.051
		(0.008)		(0.070)		
(10)	Av Tenure	-0.134***	-0.120***	5.792***	2,058	0.141
		(0.009)	(0.012)	(0.279)		
(11)	Founding CEO	0.002***		0.102***	2,058	0.006
		(0.001)		(0.007)		
(12)	Banking	-0.000		0.153***	2,058	-0.000
		(0.001)		(0.008)		
(13)	Military	-0.009***		0.100***	2,058	0.104
		(0.001)		(0.006)		
(14)	Consulting	-0.000		0.076***	2,058	-0.000
		(0.000)		(0.006)		
(15)	Law	-0.001*		0.056***	2,058	0.001
		(0.000)		(0.005)		
(16)	Politics	-0.001***		0.049***	2,058	0.004
		(0.000)		(0.005)		
(17)	University	-0.001***		0.032***	2,058	0.006
		(0.000)		(0.004)		
(18)	First Private	-0.000		0.180***	2,058	-0.000
		(0.001)		(0.008)		
(19)	Top Ten	0.001**		0.095***	2,058	0.002
		(0.001)		(0.006)		
(20)	First Sales	-0.005		6.333***	2,058	0.000
		(0.005)		(0.049)		

Notes: The sample is the CEO-level dataset as described in Section 2.1 and Table 1. Details on the definition and construction of the variables reported in the table are available in Appendix A. Data on sales is log transformed. The first entry in each row is the estimated coefficient from a regression of the dependent variable (described on the left of the table) on a linear time trend (i.e., the year the individual started his career minus 1968). Robust standard errors are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table 3: Recession and CEO Careers

Panel A: Career Path

	(1) Time to CEO	(2) Age to CEO	(3) Num Industries	(4) Num Firms	(5) Num Positions	(6) Av Tenure	(7) Founder
Recession	-1.549***	-0.907**	-0.128**	-0.137*	-0.421**	0.367*	0.003
	(0.550)	(0.449)	(0.052)	(0.082)	(0.214)	(0.193)	(0.017)
Constant	34.679***	61.217***	1.909***	2.228***	7.451***	8.110***	0.051
	(4.328)	(3.674)	(0.469)	(0.746)	(2.106)	(1.625)	(0.078)
Decade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	2,058	2,058	2,058	2,058	2,058	2,058	2,058
Adj. R^2	0.098	0.162	0.043	0.044	0.018	0.117	0.009

Panel B: Early Experience

	(1) Banking	(2) Military	(3) Consulting	(4) Politics	(5) First Private	(6) Top Ten	(7) First Sales
Recession	-0.007	-0.006	-0.025*	-0.001	0.043*	-0.031**	-0.290**
	(0.020)	(0.016)	(0.014)	(0.012)	(0.023)	(0.014)	(0.124)
Constant	0.001	0.096	0.002	0.048	0.282***	-0.080***	5.797***
	(0.002)	(0.064)	(0.002)	(0.047)	(0.099)	(0.018)	(0.743)
Decade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	No	No	No	No	No	Yes	Yes
Obs.	2,058	2,058	2,058	2,058	2,058	2,058	2,058
Adj. R^2	0.001	0.052	0.003	0.001	0.000	0.204	0.043

Notes: The sample is the CEO-level dataset as described in Section 2.1 and Table 1. Details on the definition and construction of the variables reported in the table are available in Appendix A. Data on sales is log transformed. Decade fixed effects are based on the decade in which the individual was born. Industry fixed effects are one-digit SIC dummies for the industry in which the individual started his career; we code consulting and law firms as separate industries. Robust standard errors are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table 4: Recession and Type of Firm at Which Became CEO

	(1) Sales of Firm at Which CEO	(2) ROA of Firm at Which CEO	(3) Tobin's Q of Firm at Which CEO	(4) CEO First Comp. incl. Option Grants	(5) CEO First Comp. incl. Options Exercised	(6) CEO First Comp. incl. Option Grants	(7) CEO First Comp. incl. Options Exercised
Recession	-0.234**	0.002	-0.290	-0.118	-0.185**	-0.072	-0.117*
	(0.112)	(0.007)	(0.208)	(0.073)	(0.078)	(0.062)	(0.066)
Assets						0.176***	0.169***
						(0.026)	(0.027)
Sales						0.218***	0.259***
						(0.030)	(0.030)
ROA						0.131***	0.196*
						(0.040)	(0.101)
Constant	6.981***	0.135***	0.568*	6.540***	6.498***	3.701***	3.410***
	(0.822)	(0.036)	(0.296)	(0.434)	(0.401)	(0.382)	(0.331)
Decade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	1,566	1,511	1,536	1,715	1,764	1,715	1,764
Adj. R^2	0.021	0.034	0.018	0.022	0.015	0.263	0.280

Notes: The sample is the CEO-level dataset as described in Section 2.1 and Table 1. Details on the definition and construction of the variables reported in the table are available in Appendix A. Data on sales, assets and CEO compensation are all log-transformed. Decade fixed effects are based on the decade in which the individual was born. Industry fixed effects are one-digit SIC dummies for the industry in which the individual started his career; we code consulting and law firms as separate industries. Robust standard errors are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table 5: Impact of the First Job

Panel A: Career Path

	(1) Time to CEO	(2) Age to CEO	(3) Num Industries	(4) Num Firms	(5) Num Positions	(6) Av Tenure	(7) Founder
Recession	-1.160**	-0.711	-0.085*	-0.087	-0.280	0.255	-0.010
	(0.527)	(0.438)	(0.047)	(0.078)	(0.207)	(0.190)	(0.017)
First Sales	0.977***	0.550***	0.111***	0.138***	0.444***	-0.265***	-0.029***
	(0.093)	(0.076)	(0.009)	(0.016)	(0.038)	(0.030)	(0.003)
First Private	-0.307	-0.356	0.179***	0.630***	0.469**	-0.380**	0.043**
	(0.545)	(0.464)	(0.045)	(0.088)	(0.212)	(0.175)	(0.019)
Banking	1.620***	0.595	0.354***	0.459***	0.000	0.184	-0.004
	(0.521)	(0.467)	(0.058)	(0.097)	(0.229)	(0.182)	(0.018)
Consulting	2.068***	0.013	0.974***	1.046***	1.324***	-0.846***	-0.036*
	(0.687)	(0.602)	(0.078)	(0.130)	(0.340)	(0.174)	(0.020)
Constant	24.939***	55.293***	1.054***	1.450***	1.565	11.094***	0.281***
	(3.925)	(3.280)	(0.196)	(0.504)	(0.987)	(1.492)	(0.084)
Decade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	No	No	No	No	No	No	No
Obs.	2,058	2,058	2,058	2,058	2,058	2,058	2,058
Adj. R^2	0.146	0.182	0.166	0.101	0.079	0.139	0.054

Panel B: Type of Firm at Which Became CEO

	(1) Sales of Firm at Which CEO	(2) ROA of Firm at Which CEO	(3) Tobin's Q of Firm at Which CEO	(4) CEO First Comp. incl. Option Grants	(5) CEO First Comp. incl. Options Exercised	(6) CEO First Comp. incl. Option Grants	(7) CEO First Comp. incl. Options Exercised
Recession	-0.127	-0.001	-0.255	-0.085	-0.153**	-0.065	-0.120*
	(0.104)	(0.007)	(0.168)	(0.073)	(0.078)	(0.064)	(0.067)
First Sales	0.312***	-0.003	0.024	0.088***	0.091***	0.006	-0.000
	(0.024)	(0.002)	(0.042)	(0.014)	(0.015)	(0.014)	(0.013)
First Private	-0.206**	0.007	0.125	-0.040	-0.050	-0.069	-0.072
	(0.101)	(0.009)	(0.115)	(0.097)	(0.097)	(0.089)	(0.089)
Banking	0.275**	-0.075***	-0.642***	0.353***	0.493***	-0.005	0.160**
	(0.117)	(0.010)	(0.148)	(0.076)	(0.082)	(0.078)	(0.081)
Consulting	0.067	-0.003	0.924	0.054	-0.015	0.070	-0.002
	(0.138)	(0.015)	(0.843)	(0.107)	(0.110)	(0.090)	(0.091)
Assets						0.185***	0.154***
						(0.030)	(0.029)
Sales						0.203***	0.266***
						(0.034)	(0.033)
ROA						0.129***	0.203**
						(0.042)	(0.103)
Constant	4.322***	0.172***	0.862***	6.082***	6.005***	4.017***	3.764***
	(0.528)	(0.031)	(0.241)	(0.231)	(0.207)	(0.226)	(0.202)
Decade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	No	No	No	No	No	No	No
Obs.	1,566	1,511	1,536	1,715	1,764	1,715	1,764
Adj. R^2	0.172	0.039	0.018	0.046	0.046	0.257	0.276

Notes: The sample is the CEO-level dataset as described in Section 2.1 and Table 1. Details on the definition and construction of the variables reported in the table are available in Appendix A. Data on sales, assets and CEO compensation are all log-transformed. Decade fixed effects are based on the decade in which the individual was born. Industry fixed effects are one-digit SIC dummies for the industry in which the individual started his career; we code consulting and law firms as separate industries. Robust standard errors are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table 6: Recession and Management Style

Panel A: Recession Effects on Investment, Financial, and Tax Policies

	Investment Policy			Financial Policy					Tax Policy
	(1) Capex	(2) R&D	(3) M&A	(4) Leverage	(5) Interest Coverage	(6) Cash Holdings	(7) Working Capital	(8) Dividends	(9) Effective Tax Rate
Recession	-0.007***	-0.002*	-0.014	-0.010**	0.077*	-0.011*	-0.027***	-0.004	0.042***
	(0.002)	(0.001)	(0.068)	(0.004)	(0.042)	(0.006)	(0.007)	(0.004)	(0.007)
Constant	0.078***	0.029***	0.356*	0.164***	2.528***	0.120***	0.206***	0.037***	-0.071
	(0.010)	(0.002)	(0.191)	(0.024)	(0.439)	(0.015)	(0.041)	(0.011)	(0.076)
Decade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	35,223	37,225	12,538	36,234	30,916	37,209	37,035	37,233	33,030
Adj. R^2	0.539	0.772	0.219	0.623	0.516	0.533	0.646	0.503	0.249

Panel B: Recession Effects on Organizational Strategy, Financial Reporting, Firm Risk, and Operating Performance

	Organizational Strategy			Financial Reporting	Firm Risk	Performance			
	(1) Diversification	(2) SG&A	(3) Profit Margin	(4) Accounting Conservatism	(5) Return Volatility	(6) Long-Term Assets	(7) Asset Turnover	(8) ROA	(9) OROA
Recession	0.437***	-0.020***	0.010*	0.006**	-0.032***	0.014**	-0.084***	-0.009**	-0.007**
	(0.126)	(0.006)	(0.005)	(0.003)	(0.012)	(0.007)	(0.022)	(0.004)	(0.003)
Constant	-1.546	0.281***	0.146***	0.068***	-3.759***	0.584***	1.856***	0.206***	0.125***
	(1.120)	(0.044)	(0.008)	(0.012)	(0.057)	(0.021)	(0.102)	(0.022)	(0.015)
Decade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	38,907	37,206	38,391	31,622	36,635	35,613	37,510	37,077	37,175
Adj. R^2	0.307	0.782	0.508	0.524	0.504	0.521	0.711	0.409	0.345

Notes: The sample is a firm-year level dataset covering a given firm over the years a given individual was the CEO of that firm. We only include CEOs who have been in their position at a firm for at least three years; and we exclude CEOs of financial, insurance, and real estate firms, as well as CEOs of regulated utilities. Our final sample includes 4,152 CEOs. Financial information of these firm-year observations is obtained from Compustat; data on mergers and acquisitions is obtained from SDC Platinum; and data on stock returns is obtained from CRSP. Included controls in Panel A are as follows: column (1): Cash Flows and lagged Tobin's Q; column (2): Cash Flows and ROA; columns (3) and (4): Cash Flows, ROA, and lagged Assets; column (5): lagged Assets; columns (6) and (7): Cash Flows and ROA; column (8): lagged Assets; column (9): Tax Loss Carry-Forward (TLCF) and lagged Assets. Included controls in Panel B are as follows: column (2): Cash Flows and ROA; column (4): Sales, Leverage, and Tobin's Q; columns (8) and (9): Sales. Details on the definition and construction of the variables reported in the table are available in Appendix A; summary statistics are presented in Appendix B. Decade fixed effects are based on the decade in which the individual was born. Robust standard errors clustered at the firm level are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table 7: Controlling for the Effects of Depression Baby and Recession Baby

Panel A: Controlling for the Effect of Depression Baby

	(1)	(2)	(3)	(4)	(5)	(6)
	Leverage	Interest Coverage	Leverage	Interest Coverage	Kink	Kink
Depression Baby	0.007	-0.091	0.007	-0.090	-0.081	-0.082
	(0.012)	(0.114)	(0.012)	(0.113)	(0.246)	(0.246)
Recession			-0.011***	0.081**		-0.093
			(0.004)	(0.041)		(0.112)
Constant	0.173***	2.348***	0.173***	2.351***	2.921***	2.919***
	(0.010)	(0.096)	(0.010)	(0.096)	(0.359)	(0.359)
Decade FE	No	No	No	No	No	No
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	36,234	30,916	36,234	30,916	25,971	25,971
Adj. R^2	0.623	0.516	0.623	0.516	0.523	0.523

Panel B: Controlling for the Effect of Recession Baby

	(1)	(2)	(3)	(4)	(5)
	Leverage	Interest Coverage	Capex	Cash Holdings	SG&A
Recession	-0.010**	0.078*	-0.007***	-0.011*	-0.020***
	(0.004)	(0.042)	(0.002)	(0.006)	(0.006)
Recession Baby	-0.002	0.035	-0.010***	-0.005	-0.003
	(0.004)	(0.046)	(0.002)	(0.006)	(0.005)
Constant	0.164***	2.534***	0.078***	0.120***	0.281***
	(0.024)	(0.442)	(0.010)	(0.014)	(0.044)
Decade FE	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes
Obs.	36,234	30,916	35,223	37,209	37,206
Adj. R^2	0.623	0.516	0.540	0.533	0.782

Notes: The sample is a firm-year level dataset covering a given firm over the years a given individual was the CEO of that firm. We only include CEOs who have been in their position at a firm for at least three years; and we exclude CEOs of financial, insurance, and real estate firms, as well as CEOs of regulated utilities. Our final sample includes 4,152 CEOs. Financial information of these firm-year observations is obtained from Compustat. Included controls in Panel A are as follows: columns (1), (3), (5) and (6): Cash Flows, ROA, and lagged Assets; columns (2) and (4): lagged Assets. Included controls in Panel B are as follows: column (1): Cash Flows, ROA, and lagged Assets; column (2): lagged Assets; column (3): Cash Flows and lagged Tobin's Q; columns (4) and (5): Cash Flows and ROA. Depression Baby is a dummy variable that equals one if an individual was born between 1920 and 1929. Recession Baby is a dummy variable that equals one if an individual turns ten in a recession. Details on the definition and construction of other variables reported in the table are available in Appendix A; summary statistics are presented in Appendix B. Decade fixed effects are based on the decade in which the individual was born. Robust standard errors clustered at the firm level are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table 8: CEO Turnover Announcement Returns

Panel A: Univariate Test by New CEO Types

	Obs.	CAR_Market	CAR_Industry
Recession = 1	502	0.009	0.009
Recession = 0	1,747	0.000	-0.001
	Diff	0.009**	0.009***

Panel B: Univariate Test by New/Old CEO Types

	Obs.	CAR_Market	CAR_Industry
Recession_Replacing_NonRecession	413	0.012	0.012
Recession_Replacing_Recession	89	-0.006	-0.006
NonRecession_Replacing_Recession	348	-0.006	-0.007
NonRecession_Replacing_NonRecession	1,399	0.001	0.001
Diff (Benchmark: NonRecession_Replacing_NonRecession)			
Recession_Replacing_NonRecession		0.011***	0.011***
Recession_Replacing_Recession		-0.007	-0.008
NonRecession_Replacing_Recession		-0.007*	-0.008*

Notes: The dataset is based on a cross-section of CEO turnover announcements. We identify all CEO turnovers from the Execucomp database from 1992 to 2010, and then search the *Factiva* and *Lexis-Nexis* databases for the exact turnover announcement date. We perform two-tailed t-test of differences in means. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. Details on the definition and construction of the variables reported in the table are available in Appendix A.

Appendix A: Variable Definitions

Table A1: Variables Related to CEO Careers

Recession	A dummy for whether the individual's first job was started in a recession
Time to CEO	Number of years between the earliest year in which the individual was CEO and the year in which the individual started his career
Age to CEO	Age at which the individual first became CEO
Num Industries	Number of industries a manager was employed in before becoming CEO for the first time
Num Firms	Number of firms a manager was employed in before becoming CEO for the first time
Num Positions	Number of positions the individual held before becoming CEO for the first time
Av Tenure	Number of years a manager stayed in a given position, averaged over all positions before becoming CEO for the first time
Founder	A dummy for whether the CEO is the founder of the firm
Banking	A dummy for whether the individual had any experience in a banking firm before becoming CEO for the first time
Military	A dummy for whether the individual had any military experience before becoming CEO for the first time
Consulting	A dummy for whether the individual had any experience in a consulting firm before becoming CEO for the first time
Law	A dummy for whether the individual had any experience in a law firm before becoming CEO for the first time
Politics	A dummy for whether the individual held any political office before becoming CEO for the first time
University	A dummy for whether the individual had any academic experience before becoming CEO for the first time
First Private	A dummy for whether the first job the individual held was in a private firm
Top Ten	A dummy for whether the first job the individual held was in a firm that ranks within the top ten firms from which CEOs come
First Sales	Sales of the first public firm the individual worked at, measured in the year the individual joined that firm
Sales of Firm at Which CEO	Sales of the firm at which the manager became CEO, measured in the year before the CEO starts the position
ROA of Firm at Which CEO	ROA of the firm at which the manager became CEO, measured in the year before the CEO starts the position
Tobin's Q of Firm at Which CEO	Tobin's Q of the firm at which the manager became CEO, measured in the year before the CEO starts the position
CEO First Comp. incl. Option Grants	Total value of a manager's compensation package including option grants for the year when the manager became CEO (tdc1)
CEO First Comp. incl. Options Exercised	Total value of a manager's compensation package including options exercised for the year when the manager became CEO (tdc2)

Table A2: Variables Related to CEO Management Styles

Capex	Capital expenditures (capx) over lagged total assets (at)
R&D	R&D expenditures (xrd) over lagged total assets (at)
M&A	Total number of acquisitions in the fiscal year (data obtained from SDC)
Leverage	Long-term debt (dltt) plus debt in current liabilities (dlc) over the market value of assets, where the market value of assets equals the book value of assets (at) plus the market value of common equity (prcc_f*csho) less the sum of the book value of common equity (ceq) and balance sheet deferred taxes (txdb)
Interest Coverage	Natural logarithm of the ratio of earnings before depreciation, interest, and tax (ebitda) over interest expenses (xint)
Cash Holdings	Cash and short-term investments (che) over lagged total assets (at)
Working Capital	Current assets (act) minus current liabilities (lct) over lagged total assets (at)
Dividends	The sum of common dividends (dvc) and preferred dividends (dvp) over earnings before depreciation, interest, and tax (ebitda)
Effective Tax Rate	Cash tax paid (txpd) over pre-tax book income (pi) before special items (spi)
Diversification	Total number of business segments
SG&A	Selling, general, and administrative expenses (xsga) over lagged total assets (at)
Profit Margin	Earnings before depreciation, interest, and tax (ebitda) over sales (sale)
Accounting Conservatism	A firm-year measure of accounting conservatism estimated following Khan and Watts (2009)
Return Volatility	Natural logarithm of the standard deviation of daily stock returns over the fiscal year
Long-Term Assets	Total long-term assets (at - act) over lagged total assets (at)
Asset Turnover	Sales (sale) over lagged total assets (at)
ROA	Earnings before depreciation, interest, and tax (ebitda) over lagged total assets (at)
OROA	Cash flow (ib + dp) over lagged total assets (at)
Kink	The amount of interest at the point where the marginal benefit function becomes downward-sloping, as a proportion of actual interest expense (Graham 2000)
Assets	Natural logarithm of total assets (at)
Sales	Natural logarithm of sales (sale)
Cash Flows	The sum of earnings before extraordinary items (ib) and depreciation (dp) over lagged total assets (at)
Tobin's Q	The market value of assets (at + prcc_f*csho - ceq - txdb) divided by the book value of assets (at)
TLCF	A dummy for whether the firm has a positive value of tax loss carry-forward (tlcf)

Table A3: Variables Related to CEO Turnovers

Recession	A dummy for whether the new CEO's first job (labor market entry) was started in a recession
Recession_Replacing_NonRecession	A dummy that equals one when the new CEO's first job was started in a recession and the old CEO's first job was started in a non-recession
Recession_Replacing_Recession	A dummy that equals one when both the new CEO's first job and the old CEO's first job were started in a recession
NonRecession_Replacing_Recession	A dummy that equals one when the new CEO's first job was started in a non-recession and the old CEO's first job was started in a recession
NonRecession_Replacing_NonRecession	A dummy that equals one when both the new CEO's first job and the old CEO's first job were started in a non-recession
CAR_Market	Three trading day (-1, 0, 1) market-adjusted cumulative abnormal stock return around the CEO turnover announcement
CAR_Industry	Three trading day (-1, 0, 1) industry-adjusted cumulative abnormal stock return around the CEO turnover announcement
NewCEO_Age	Age of the new CEO
OldCEO_Age	Age of the old CEO
Market_Performance	Market returns over the year prior to the CEO turnover announcement
Industry_Performance	Industry returns over the year prior to the CEO turnover announcement
Firm_Performance	Individual stock returns over the year prior to the CEO turnover announcement
Size	Market value of common equity (prcc_f*csho) in the most recent fiscal year prior to the CEO turnover announcement
Tobin's_Q	The market value of assets (at + prcc_f*csho - ceq - txdb) divided by the book value of assets (at) in the most recent fiscal year prior to the CEO turnover announcement
Leverage	Long-term debt (dltt) plus debt in current liabilities (dlc) over the market value of assets in the most recent fiscal year prior to the CEO turnover announcement, where the market value of assets equals the book value of assets (at) plus the market value of common equity (prcc_f*csho) less the sum of the book value of common equity (ceq) and balance sheet deferred taxes (txdb)
Profitability	Earnings before depreciation, interest, and tax (ebitda) over lagged total assets (at) in the most recent fiscal year prior to the CEO turnover announcement
Bid-Ask_Spread	Average Bid-Ask_Spread (scaled by the bid-ask midpoint) over the year prior to the CEO turnover announcement

Appendix B: Additional Tables

Table B1: Summary Statistics of Variables Related to CEO Management Styles

	Obs.	Mean	Median	SD
Capex	37,751	0.080	0.056	0.085
R&D	37,754	0.038	0.000	0.075
M&A	12,851	1.823	1.000	1.386
Leverage	37,287	0.157	0.122	0.149
Interest Coverage	31,939	2.419	2.183	1.358
Cash Holdings	37,695	0.184	0.080	0.290
Working Capital	37,519	0.289	0.248	0.365
Dividends	38,637	0.076	0.022	0.117
Effective Tax Rate	34,169	0.217	0.206	0.208
Diversification	38,907	2.500	1.000	2.997
SG&A	37,749	0.295	0.235	0.268
Profit Margin	38,391	0.133	0.133	0.217
Accounting Conservatism	32,319	0.051	0.051	0.102
Return Volatility	36,635	-3.653	-3.674	0.447
Long-Term Assets	35,613	0.597	0.556	0.314
Asset Turnover	37,510	1.392	1.203	0.935
ROA	37,407	0.169	0.160	0.137
OROA	37,550	0.107	0.109	0.120
Kink	26,392	4.184	3.000	3.488
Assets	37,565	6.394	6.384	1.792
Sales	38,503	6.441	6.452	1.782
Cash Flows	37,550	0.107	0.109	0.120
Tobin's Q	35,463	1.950	1.499	1.372
TLCF	39,034	0.267	0.000	0.442

Notes: The sample is a firm-year level dataset covering a given firm over the years a given individual was the CEO of that firm. We only include CEOs who have been in their position at a firm for at least three years; and we exclude CEOs of financial, insurance, and real estate firms, as well as CEOs of regulated utilities. Our final sample includes 4,152 CEOs. Financial information of these firm-year observations is obtained from Compustat; data on mergers and acquisitions is obtained from SDC Platinum; and data on stock returns is obtained from CRSP. Details on the definition and construction of the variables reported in the table are available in Appendix A.

Table B2: Starting Firm Effects

Panel A: Career Path

	(1) Time to CEO	(2) Age to CEO	(3) Num Industries	(4) Num Firms	(5) Num Positions	(6) Av Tenure	(7) Founder
Top Ten	3.066***	0.678	0.681***	0.831***	1.098***	-0.631***	-0.074***
	(0.745)	(0.603)	(0.093)	(0.133)	(0.358)	(0.222)	(0.023)
Constant	35.136***	61.400***	1.979***	2.310***	7.595***	8.009***	0.045
	(4.314)	(3.669)	(0.467)	(0.744)	(2.096)	(1.622)	(0.077)
Decade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	2,058	2,058	2,058	2,058	2,058	2,058	2,058
Adj. R^2	0.101	0.161	0.076	0.062	0.022	0.118	0.013

Panel B: Type of Firm at Which Became CEO

	(1) Sales of Firm at Which CEO	(2) ROA of Firm at Which CEO	(3) Tobin's Q of Firm at Which CEO	(4) CEO First Comp. incl. Option Grants	(5) CEO First Comp. incl. Options Exercised	(6) CEO First Comp. incl. Option Grants	(7) CEO First Comp. incl. Options Exercised
Top Ten	0.345*	-0.005	1.125	0.197*	0.042	0.155*	0.017
	(0.180)	(0.013)	(0.792)	(0.112)	(0.120)	(0.088)	(0.090)
Assets						0.177***	0.169***
						(0.026)	(0.027)
Sales						0.217***	0.260***
						(0.030)	(0.030)
ROA						0.128***	0.194*
						(0.040)	(0.101)
Constant	7.003***	0.135***	0.637**	6.571***	6.531***	3.722***	3.421***
	(0.817)	(0.036)	(0.290)	(0.432)	(0.398)	(0.383)	(0.332)
Decade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	1,566	1,511	1,536	1,715	1,764	1,715	1,764
Adj. R^2	0.021	0.034	0.027	0.023	0.012	0.264	0.278

Notes: The sample is the CEO-level dataset as described in Section 2.1 and Table 1. Details on the definition and construction of the variables reported in the table are available in Appendix A. Data on sales, assets and CEO compensation are all log-transformed. Decade fixed effects are based on the decade in which the individual was born. Industry fixed effects are one-digit SIC dummies for the industry in which the individual started his career; we code consulting and law firms as separate industries. Robust standard errors are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table B3: Depth of Recession and Management Style

Panel A: Recession Effects on Investment, Financial, and Tax Policies

	Investment Policy			Financial Policy					Tax Policy
	(1) Capex	(2) R&D	(3) M&A	(4) Leverage	(5) Interest Coverage	(6) Cash Holdings	(7) Working Capital	(8) Dividends	(9) Effective Tax Rate
Depth_Recession	-0.008***	-0.004*	-0.006	-0.012**	0.109*	-0.014*	-0.032***	-0.004	0.043***
	(0.003)	(0.002)	(0.093)	(0.005)	(0.057)	(0.008)	(0.010)	(0.005)	(0.009)
Constant	0.079***	0.029***	0.359*	0.165***	2.519***	0.121***	0.209***	0.037***	-0.076
	(0.010)	(0.002)	(0.190)	(0.024)	(0.444)	(0.014)	(0.039)	(0.011)	(0.072)
Decade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	35,211	37,214	12,538	36,222	30,905	37,198	37,024	37,222	33,018
Adj. R^2	0.539	0.772	0.219	0.623	0.516	0.533	0.646	0.502	0.248

Panel B: Recession Effects on Organizational Strategy, Financial Reporting, Firm Risk, and Operating Performance

	Organizational Strategy			Financial Reporting	Firm Risk	Performance			
	(1) Diversification	(2) SG&A	(3) Profit Margin	(4) Accounting Conservatism	(5) Return Volatility	(6) Long-Term Assets	(7) Asset Turnover	(8) ROA	(9) OROA
Depth_Recession	0.579***	-0.026***	0.014*	0.008**	-0.043***	0.018*	-0.109***	-0.010*	-0.008*
	(0.174)	(0.008)	(0.008)	(0.004)	(0.015)	(0.009)	(0.031)	(0.006)	(0.005)
Constant	-1.591	0.283***	0.145***	0.062***	-3.755***	0.582***	1.865***	0.207***	0.125***
	(1.115)	(0.045)	(0.008)	(0.018)	(0.055)	(0.022)	(0.102)	(0.021)	(0.014)
Decade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	38,897	37,187	38,381	32,146	36,625	35,602	37,499	37,066	37,164
Adj. R^2	0.307	0.782	0.508	0.432	0.504	0.521	0.711	0.409	0.344

Notes: Depth_Recession is defined as the number of months the recession lasted (rescaled to range from 0 to 1). The sample is a firm-year level dataset covering a given firm over the years a given individual was the CEO of that firm. We only include CEOs who have been in their position at a firm for at least three years; and we exclude CEOs of financial, insurance, and real estate firms, as well as CEOs of regulated utilities. Our final sample includes 4,152 CEOs. Financial information of these firm-year observations is obtained from Compustat; data on mergers and acquisitions is obtained from SDC Platinum; and data on stock returns is obtained from CRSP. Included controls in Panel A are as follows: column (1): Cash Flows and lagged Tobin's Q; column (2): Cash Flows and ROA; columns (3) and (4): Cash Flows, ROA, and lagged Assets; column (5): lagged Assets; columns (6) and (7): Cash Flows and ROA; column (8): lagged Assets; column (9): Tax Loss Carry-Forward (TLCF) and lagged Assets. Included controls in Panel B are as follows: column (2): Cash Flows and ROA; column (4): Sales, Leverage, and Tobin's Q; columns (8) and (9): Sales. Details on the definition and construction of the variables reported in the table are available in Appendix A; summary statistics are presented in Appendix B. Decade fixed effects are based on the decade in which the individual was born. Robust standard errors clustered at the firm level are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table B4: Labor Market Conditions and Management Style

Panel A: Labor Market Effects on Investment, Financial, and Tax Policies

	Investment Policy			Financial Policy					Tax Policy
	(1) Capex	(2) R&D	(3) M&A	(4) Leverage	(5) Interest Coverage	(6) Cash Holdings	(7) Working Capital	(8) Dividends	(9) Effective Tax Rate
Unemployment	-0.001	-0.001*	-0.041*	-0.002	0.032*	-0.003	-0.000	0.000	-0.011***
	(0.001)	(0.001)	(0.024)	(0.001)	(0.017)	(0.002)	(0.003)	(0.001)	(0.003)
Constant	0.068***	0.033***	0.155	0.180***	2.134***	0.125***	0.218***	0.058***	-0.090***
	(0.005)	(0.003)	(0.271)	(0.017)	(0.175)	(0.015)	(0.020)	(0.011)	(0.019)
Decade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	34,613	36,582	12,449	35,613	30,325	36,565	36,394	36,591	32,420
Adj. R^2	0.541	0.771	0.219	0.625	0.518	0.532	0.645	0.501	0.246

Panel B: Labor Market Effects on Organizational Strategy, Financial Reporting, Firm Risk, and Operating Performance

	Organizational Strategy			Financial Reporting	Firm Risk	Performance			
	(1) Diversification	(2) SG&A	(3) Profit Margin	(4) Accounting Conservatism	(5) Return Volatility	(6) Long-Term Assets	(7) Asset Turnover	(8) ROA	(9) OROA
Unemployment	0.151***	-0.003	0.003	-0.002**	-0.012***	-0.005*	-0.006	-0.001	0.000
	(0.045)	(0.002)	(0.003)	(0.001)	(0.004)	(0.003)	(0.009)	(0.002)	(0.001)
Constant	-0.652	0.257***	0.125***	0.087***	-3.634***	0.559***	1.739***	0.208***	0.127***
	(0.398)	(0.017)	(0.013)	(0.008)	(0.031)	(0.018)	(0.062)	(0.016)	(0.012)
Decade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	38,247	36,554	37,736	31,070	36,013	34,976	36,864	36,436	36,535
Adj. R^2	0.306	0.781	0.505	0.527	0.506	0.520	0.710	0.411	0.345

Notes: Unemployment is the unemployment rate in the year the CEO entered the labor market. The sample is a firm-year level dataset covering a given firm over the years a given individual was the CEO of that firm. We only include CEOs who have been in their position at a firm for at least three years; and we exclude CEOs of financial, insurance, and real estate firms, as well as CEOs of regulated utilities. Our final sample includes 4,152 CEOs. Financial information of these firm-year observations is obtained from Compustat; data on mergers and acquisitions is obtained from SDC Platinum; and data on stock returns is obtained from CRSP. Included controls in Panel A are as follows: column (1): Cash Flows and lagged Tobin's Q; column (2): Cash Flows and ROA; columns (3) and (4): Cash Flows, ROA, and lagged Assets; column (5): lagged Assets; columns (6) and (7): Cash Flows and ROA; column (8): lagged Assets; column (9): Tax Loss Carry-Forward (TLCF) and lagged Assets. Included controls in Panel B are as follows: column (2): Cash Flows and ROA; column (4): Sales, Leverage, and Tobin's Q; columns (8) and (9): Sales. Details on the definition and construction of the variables reported in the table are available in Appendix A; summary statistics are presented in Appendix B. Decade fixed effects are based on the decade in which the individual was born. Robust standard errors clustered at the firm level are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table B5: Alternative Definitions of Recession Baby

Panel A: Controlling for the Effect of Recession Baby 11

	(1) Leverage	(2) Interest Coverage	(3) Capex	(4) Cash Holdings	(5) SG&A
Recession	-0.009**	0.074*	-0.006***	-0.012**	-0.019***
	(0.004)	(0.043)	(0.002)	(0.006)	(0.006)
Recession Baby 11	-0.005	0.026	-0.009***	0.006	-0.005
	(0.004)	(0.044)	(0.002)	(0.006)	(0.006)
Constant	0.167***	2.511***	0.084***	0.116***	0.284***
	(0.023)	(0.438)	(0.012)	(0.015)	(0.043)
Decade FE	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes
Obs.	36,245	30,928	35,234	37,221	37,218
Adj. R^2	0.623	0.516	0.540	0.533	0.782

Panel B: Controlling for the Effect of Recession Baby 12

	(1) Leverage	(2) Interest Coverage	(3) Capex	(4) Cash Holdings	(5) SG&A
Recession	-0.011**	0.098**	-0.005**	-0.007	-0.016**
	(0.004)	(0.046)	(0.002)	(0.006)	(0.006)
Recession Baby 12	0.003	-0.054	-0.006***	-0.010	-0.009
	(0.005)	(0.046)	(0.002)	(0.007)	(0.006)
Constant	0.164***	2.545***	0.081***	0.124***	0.284***
	(0.024)	(0.440)	(0.010)	(0.017)	(0.043)
Decade FE	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes
Obs.	36,255	30,939	35,245	37,230	37,219
Adj. R^2	0.623	0.516	0.540	0.533	0.782

Notes: The sample is a firm-year level dataset covering a given firm over the years a given individual was the CEO of that firm. We only include CEOs who have been in their position at a firm for at least three years; and we exclude CEOs of financial, insurance, and real estate firms, as well as CEOs of regulated utilities. Our final sample includes 4,152 CEOs. Financial information of these firm-year observations is obtained from Compustat. Included controls are as follows: column (1): Cash Flows, ROA, and lagged Assets; column (2): lagged Assets; column (3): Cash Flows and lagged Tobin's Q; columns (4) and (5): Cash Flows and ROA. Recession Baby 11 (Recession Baby 12) is a dummy variable that equals one if an individual turns eleven (twelve) in a recession. Details on the definition and construction of other variables reported in the table are available in Appendix A; summary statistics are presented in Appendix B. Decade fixed effects are based on the decade in which the individual was born. Robust standard errors clustered at the firm level are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table B6: Regression of CEO Turnover Announcement Returns on CEO Types

	(1) CAR_Market	(2) CAR_Industry	(3) CAR_Market	(4) CAR_Industry
Recession	0.010***	0.011***		
	(0.004)	(0.004)		
Recession_Replacing_NonRecession			0.012***	0.013***
			(0.004)	(0.004)
NonRecession_Replacing_Recession			-0.009	-0.008
			(0.009)	(0.009)
Recession_Replacing_Recession			-0.007	-0.008
			(0.005)	(0.005)
LN(NewCEO_Age)	0.020	0.014	0.020	0.014
	(0.030)	(0.029)	(0.030)	(0.029)
LN(OldCEO_Age)	0.021	0.022	0.021	0.021
	(0.014)	(0.013)	(0.014)	(0.013)
Firm_Performance	-0.009	-0.013	-0.008	-0.012
	(0.020)	(0.019)	(0.020)	(0.019)
Industry_Performance	0.018*	0.015	0.019*	0.015
	(0.011)	(0.010)	(0.011)	(0.010)
Market_Performance	-0.002	-0.000	-0.002	-0.001
	(0.006)	(0.005)	(0.006)	(0.005)
LN(Size)	0.003**	0.003**	0.003**	0.003**
	(0.001)	(0.001)	(0.001)	(0.001)
Tobin's_Q	0.002	0.001	0.001	0.001
	(0.002)	(0.002)	(0.002)	(0.002)
Leverage	0.003	0.007	0.003	0.008
	(0.013)	(0.013)	(0.013)	(0.013)
Profitability	-0.038**	-0.036**	-0.037**	-0.035**
	(0.016)	(0.016)	(0.016)	(0.016)
Bid-Ask_Spread	0.368	0.383	0.386	0.402*
	(0.240)	(0.238)	(0.240)	(0.238)
Constant	-0.161	-0.170	-0.159	-0.167
	(0.143)	(0.140)	(0.142)	(0.139)
Decade FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Obs.	2,249	2,249	2,249	2,249
Adj. R^2	0.013	0.014	0.017	0.018

Notes: The dataset is based on a cross-section of CEO turnover announcements. We identify all CEO turnovers from the Execucomp database from 1992 to 2010, and then search the *Factiva* and *Lexis-Nexis* databases for the exact turnover announcement date. Decade fixed effects are based on the decade in which the individual was born. Year fixed effects are based on the year in which the CEO turnover announcement is made. Robust standard errors are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. Details on the definition and construction of the variables reported in the table are available in Appendix A.