

# Does the Market Value CEO Styles?

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A growing body of research offers evidence that CEOs and other top executives show large and persistent person-specific heterogeneity in their management styles. Bertrand and Schoar (2003) document that such person-specific styles explain a substantial fraction of the variation in firms' capital structures, investment decisions and organizational structures. The idea that CEOs greatly differ in their styles is also supported by a number of papers that show substantial changes in a firm's stock price and accounting performance when its top management changes. For example, Perez-Gonzalez (2006) and Bennedsen, Nielsen, Perez-Gonzalez and Wolfenzon (2007) focus on transitions to family CEOs, and Parrino (1997) focuses on internal versus external successors. Similarly, a large literature suggests that CEOs' specific traits play a role in their management approach. See, for example, Malmendier and Tate (2008) on CEO overconfidence; Kaplan, Klebanov and Sorensen (2012) on general

ability and execution skills; Graham, Harvey and Puri (2013) on optimism and risk aversion; and Benmelech and Frydman (2015) on prior military experience.<sup>1</sup>

But there is still considerable debate about the importance of managerial style. First, there is the question of where individual management styles come from: do they predominantly depend on the optimal, endogenous choice of managers, who want to invest in the skill set that promises the highest expected returns? Or are they shaped by formative events that are largely outside a manager's control? The latter would imply that managers might not be at liberty to change styles, even when they might wish to. And if one's management style depends on exposure to certain experiences or learning opportunities in a manager's formative years, there might be constraints in the distribution of management styles (or skills) available in the managerial labor market.

The second question is whether managers "matter" to the firms they run. In other words, do managerial styles constitute a value added

<sup>1</sup> A large literature in management science has also looked at the role of CEOs, starting with Hambrick and Mason (1984) and Fligstein (1990). See also Kotter (1982), Khurana (2002), and Lazear (2004).

or even an idiosyncratic bias that the CEO “imposes” on the firm? Or are they just the expression of an endogenous choice made by the board to purposefully hire managers with certain types of skills based on the firm’s needs?<sup>2</sup> An extreme view of a frictionless CEO labor market might suggest that even if CEOs have heterogeneous styles, they do not have a causal impact on the firms they run, since boards will always hire the CEO with the right match of skills for the firm. Under this view, CEOs are interchangeable inputs into the production function, such as machines or other capital investments that firms undertake. So if the full spectrum of CEO styles is abundantly available in the market, there should be no systematic impact on the firm or its stock price when a new CEO hire is announced. However, if frictions exist in the CEO labor market or if certain skills are in short supply, then not all firms would be able to hire the style of CEO they would prefer.

In this paper, we build on Schoar and Zuo (2015), which shows how starting one’s career during a recession (as an exogenous formative event) affects the manager’s career progression and management style. Here we provide evidence on how the market values

<sup>2</sup> For example, Eisfeldt and Kuhnen (2013) develop a competitive assignment model in which CEOs and firms form matches based on multiple characteristics. In their model, firm productivity is determined by the match between a firm’s skill demand and the supply of the skills of its particular manager.

these recession styles: announcement period returns around the appointment of recession CEOs are very significant and positive; the cumulative abnormal return in the three days around the announcement is 1 percent. This positive announcement period return is driven by cases where a recession CEO replaces a non-recession CEO. This result suggests that the market assigns a positive and economically meaningful value to the selection of a recession CEO.

## **I. Where Do Managerial Styles Come From?**

The empirical literature to date suggests that management styles depend on a mix of endogenously acquired characteristics and exogenous (formative) events that may lie outside the manager’s control. As an example of endogenously acquired skills, Bertrand and Schoar (2003) show that managers with an MBA degree follow more aggressive management strategies such as higher leverage or more market-driven investing. Custódio and Metzger (2014) find that firms headed by CEOs with a career background in finance hold less cash and more debt and make more share repurchases. In an efficient labor market, we would expect good managers to deliberately acquire these skills, knowing that they are valued by the market.

But there is also evidence that early career experiences outside a manager's control can have a lasting impact on managers. Our own work, Schoar and Zuo (2015), examines the economic conditions when a manager enters the labor market. We find that CEOs who started their careers during a recession have a more conservative management style: recession CEOs invest less in capital expenditures and R&D, show lower overheads and have significantly lower leverage and working capital needs. Firms run by recession CEOs also have lower stock return volatility but a similar rate of return on assets, when compared to firms run by non-recession CEOs. A few other papers have also looked at the role certain formative experiences play in shaping a CEO's management style. For example, Malmendier, Tate and Yan (2011) consider CEOs who grew up during the Great Depression, and Benmelech and Frydman (2015) analyze CEOs who underwent a military draft.

Taking formative experiences into account does not mean that managers are merely the passive recipients of a style that is imposed on them. In fact, they might make optimal decisions conditional on having been exposed to a certain formative event. For example, a manager who starts his career during a recession might invest in a complementary

skill set that allows him to deepen his existing knowledge and strengthen the image that the market has of his type. Thus, a recession CEO might seek to learn more about cost cutting and lean management, which might go well with the "frugal" image of a recession CEO. Interestingly, we do not observe the reverse behavior in our analysis: we do not see managers working actively to undo the style predicted by their labor market entry cohort. If they did, observable managerial characteristics would not predict behavior. This is in line with a new theory paper by Dessein and Santos (2015): in complex and uncertain environments, the endogenous allocation of managerial attention amplifies even small initial manager fixed effects.

## **II. Do Managerial Styles Matter?**

We look at the event study returns to the appointment announcements of CEOs with different styles. To do so, we again turn to look at recession versus non-recession CEOs. Our goal is to test how investors value the bundle of skills that recession CEOs bring to the firm. Since markets are forward looking and CEOs are not randomly assigned to firms, announcement period returns might also reflect the resolution of uncertainty about whether the firm would be able to hire a CEO with a scarce style.

### III. Data

We start with the companies and CEOs included in the Executive Compensation (Execucomp) database of Compustat between 1992 and 2007, and identify the exact turnover date with the Factiva and Lexis-Nexis databases. For each of the CEOs in our sample, we collect a host of demographic information (see Schoar and Zuo (2015) for more details). We obtain information on stock prices from the Center for Research in Security Prices (CRSP), accounting data from Compustat and corporate governance data from RiskMetrics.

Our sample includes 2,249 CEO turnovers. The average age of the incoming CEO is 51; the average age of the departing CEO is 59. 502 (22 percent) incoming CEOs are recession CEOs, while 437 (19 percent) departing CEOs are recession CEOs. Following Schoar and Zuo (2015), we define recession CEOs as those who entered the labor market during a recession. Recession periods are based on the business cycle dating database of the National Bureau of Economic Research (NBER). To avoid endogenous selection of when a manager chose to enter the labor market, we proxy for the exogenous starting date by using the manager's birth year plus 24, the modal age for starting one's first position over our sample.

### IV. Results

To test how investors value the bundle of skills that recession CEOs bring to the firm, we compare the turnover announcement period stock returns for different types of CEOs. 18 percent of the turnovers in our sample involve a recession CEO replacing a non-recession CEO; 15 percent involve a non-recession CEO replacing a recession CEO; 4 percent involve a recession CEO replacing a recession CEO; and for the vast majority (62 percent), a non-recession CEO replaces a non-recession CEO.

Over the entire sample, the three-day (-1, 0, 1) market-adjusted stock price reaction to CEO turnovers has a mean of 0.20 percent and a median of 0.18 percent; the three-day industry-adjusted stock price reaction to CEO turnovers has a lower mean (0.15 percent) and a lower median (0.11 percent).<sup>3</sup> The mean (median) values of individual stock returns, market returns and industry returns over the year prior to the CEO turnover announcement are 4.7 percent (2.1 percent), 11.3 percent (12.2 percent) and 11.1 percent (10.8 percent), respectively. The market-adjusted and industry-adjusted individual stock returns over the year prior to the CEO turnover

<sup>3</sup> We use value-weighted market and industry stock returns. All results in the paper are almost identical when we use equal-weighted market and industry stock returns. Results are also quite similar when we use a five-day (-2, -1, 0, 1, 2) announcement window instead.

announcement have negative means (-0.9 percent and -0.7 percent) and negative medians (-2.5 percent and -1.0 percent).<sup>4</sup>

[ Insert Table 1 Here ]

Table 1 presents the results based on univariate tests. The results based on market-adjusted and industry-adjusted announcement period returns are very similar. We also confirm that the results hold when we run multiple regressions that include various controls.<sup>5</sup> Panel A shows that the average industry-adjusted return is 0.87 percent when the incoming CEO is a recession CEO, and -0.05 percent when the incoming CEO is a non-recession CEO. The difference of 0.92 percent is statistically significant at the 1 percent level. Panel B shows the average industry-adjusted return is 1.19 percent when

a recession CEO replaces a non-recession CEO, -0.65 percent when a recession CEO replaces a recession CEO, -0.67 percent when a non-recession CEO replaces a recession CEO, and 0.10 percent 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 1.09 percent for a recession CEO replacing a non-recession CEO (significant at the 1 percent level), -0.75 percent for a recession CEO replacing a recession CEO (not significant), and -0.78 percent for a non-recession CEO replacing a recession CEO (significant at the 10 percent level).

We perform several additional analyses. First, the positive stock price reaction when a recession CEO replaces a non-recession CEO is stronger for firms with a worse (market-adjusted or industry-adjusted) stock price performance over the year prior to the CEO turnover announcement.<sup>6</sup> Second, the positive stock price reaction when a recession CEO replaces a non-recession CEO is stronger for well-governed firms.<sup>7</sup> This finding underlines

<sup>4</sup> To decompose individual stock returns into a market-induced or industry-induced component and a firm-specific component, we follow the approach developed in Jenter and Kanaan (2015). Specifically, we run a cross-sectional regression over the entire sample where the dependent variable is individual stock returns over the year prior to the CEO turnover announcement and the regressor is the market or industry returns over the year prior to the CEO turnover announcement. The residuals from these regressions are the market-adjusted or industry-adjusted individual stock returns. All results are quite similar when we define market-adjusted (industry-adjusted) returns as the individual stock returns minus the market (industry) returns or when we use firm-specific betas to do the adjustment. All results are also similar when we use unadjusted individual stock returns in the regressions.

<sup>5</sup> The set of controls is measured over the year prior to the CEO turnover announcement and includes the following: the market-adjusted or industry-adjusted individual stock returns, market or industry stock returns, incoming CEO age, departing CEO age, the market value of equity, Tobin's Q, leverage ratio, return on assets and the average bid-ask spread. The regressions also include decade fixed effects (based on the decade in which the incoming CEO was born) and year fixed effects (based on the year in which the CEO turnover announcement is made).

<sup>6</sup> CEO turnovers following bad firm performance are termed "performance-induced turnovers" in Jenter and Lewellen (2014). Jenter and Lewellen (2014) state that many turnovers that a standard classification algorithm classifies as voluntary (Parrino 1997), are, in fact, performance-induced and likely to be forced. Kaplan and Minton (2012) reach a similar conclusion.

<sup>7</sup> To measure corporate governance, we use the governance index developed in Gompers, Ishii and Metrick (2003).

the idea that certain skills are in short supply in the market. In a well-governed firm, investors should have expected that the board would try to hire a CEO with the skill set the firm needs. The fact that even for these firms, the announcement effects of hiring a recession CEO is significant and positive suggests that investors are positively surprised that an appropriate individual was available in the market.

## V. Conclusion

The results of this paper suggest that investors value the skill set that recession CEOs bring into their companies. It is possible that a board selects recession CEOs based on the firm's specific needs. However, if it were obvious that a firm would always hire a recession CEO when it has a specific need for this skill set, the announcement of such a hire should not contain any news for the market; all the potential performance impact should have been priced in previously. Thus, our results show that the announcement of a recession CEO hire is seen as unexpected good news for a firm, most likely since this skill set is in short supply in the market and the announcement confirms that the firm was able to hire this type of CEO. But it also

implies that the market believes that this particular style has a value added for the firm.<sup>8</sup>

## REFERENCES

- Benmelech, Efraim, and Carola Frydman. 2015. "Military CEOs." *Journal of Financial Economics* 117: 43-59.
- Bennedsen, Morten, Kasper Meisner Nielsen, Francisco Perez-Gonzalez, and Daniel Wolfenzon. 2007. "Inside the Family Firm: The Role of Families in Succession Decisions and Performance." *Quarterly Journal of Economics* 122: 647-691.
- Bertrand, Marianne, and Antoinette Schoar. 2003. "Managing with Style: The Effect of Managers on Firm Policies." *Quarterly Journal of Economics* 118: 1169-1208.
- Custódio, Cláudia, and Daniel Metzger. 2014. "Financial Expert CEOs: CEO's Work Experience and Firm's Financial Policies." *Journal of Financial Economics* 114: 125-154.
- Dessein, Wouter, and Tano Santos. 2015. "Managerial Style and Attention." Working Paper.
- Eisfeldt, Andrea L., and Camelia M. Kuhnen. 2013. "CEO Turnover in a Competitive Assignment Framework." *Journal of Financial Economics* 109: 351-372.
- Fligstein, Neil. 1990. *The Transformation of Corporate Control*. Cambridge, MA: Harvard University Press.
- Gompers, Paul A., Joy L. Ishii, and Andrew Metrick. 2003. "Corporate Governance and Equity Prices." *Quarterly Journal of Economics* 118: 107-155.

<sup>8</sup> We believe that the alternative story, in which firms with good inside information systematically hire recession CEOs, is unlikely to be true. If firms are profit maximizing and CEO styles are meaningless, it would not make sense to systematically hire recession CEOs when the firm has good internal news.

- Graham, John R., Campbell R. Harvey, and Manju Puri. 2013. "Managerial Attitudes and Corporate Actions." *Journal of Financial Economics* 109: 103-121.
- Hambrick, Donald C., and Phyllis A. Mason. 1984. "Upper Echelons: The Organization as a Reflection of its Top Managers." *Academy of Management Review* 9: 193-206.
- Jenter, Dirk, and Fadi Kanaan. 2015. "CEO Turnover and Relative Performance Evaluation." *Journal of Finance* 70: 2155-2184.
- Jenter, Dirk, and Katharina Lewellen. 2014. "Performance-Induced CEO Turnover." Working Paper.
- Kaplan, Steven N., Mark M. Klebanov, and Morten Sorensen. 2012. "Which CEO Characteristics and Abilities Matter?" *Journal of Finance* 67: 973-1007.
- Kaplan, Steven N., and Bernadette A. Minton. 2012. "How Has CEO Turnover Changed?" *International Review of Finance* 12: 57-87.
- Khurana, Rakesh. 2002. *Searching for a Corporate Savior: The Irrational Quest for Charismatic CEOs*. Princeton, NJ: Princeton University Press.
- Kotter, John P. 1982. *The General Managers*. New York, NY: The Free Press.
- Lazear, Edward P. 2004. "Balanced Skills and Entrepreneurship." *American Economic Review* 94: 208-211.
- Malmendier, Ulrike, and Geoffrey Tate. 2008. "Who Makes Acquisitions? CEO Overconfidence and the Market's Reaction." *Journal of Financial Economics* 89: 20-43.
- Malmendier, Ulrike, Geoffrey Tate, and Jonathan Yan. 2011. "Overconfidence and Early-Life Experiences: The Effect of Managerial Traits on Corporate Financial Policies." *Journal of Finance* 66: 1687-1733.
- Parrino, Robert. 1997. "CEO Turnover and Outside Succession: A Cross-Sectional Analysis." *Journal of Financial Economics* 46: 165-197.
- Perez-Gonzalez, Francisco. 2006. "Inherited Control and Firm Performance." *American Economic Review* 96: 1559-1588.
- Schoar, Antoinette, and Luo Zuo. 2015. "Shaped by Booms and Busts: How the Economy Impacts CEO Careers and Management Styles." NBER Working Paper No. w17590.

TABLE 1 – CEO TURNOVER ANNOUNCEMENT RETURNS (IN PERCENT)

	Observations	Market-adjusted returns	Industry-adjusted returns
Panel A. Univariate test by incoming CEO types			
(1) Recession CEOs	502	0.91	0.87
(2) Non-recession CEOs	1,747	0.00	-0.05
t-test: (1) vs. (2)		0.91**	0.92***
Panel B. Univariate test by incoming/departing CEO types			
(1) A recession CEO replacing a non-recession CEO	413	1.23	1.19
(2) A recession CEO replacing a recession CEO	89	-0.59	-0.65
(3) A non-recession CEO replacing a recession CEO	348	-0.57	-0.67
(4) A non-recession CEO replacing a non-recession CEO	1,399	0.14	0.10
t-test:			
(1) vs. (4)		1.09***	1.09***
(2) vs. (4)		-0.73	-0.75
(3) vs. (4)		-0.71*	-0.78*

*Notes:* We perform a two-tailed *t*-test of differences in means.

*Source:* Author calculations.

\*\*\* Significant at the 1 percent level.

\*\* Significant at the 5 percent level.

\* Significant at the 10 percent level.