

Appendix: An Outline of the Methodology

The original CEO data set consisted of data on 459 CEOs of large North American companies, who began their tenure in the years 2009 through 2011. The number eventually analyzed in full was reduced to 252, consisting of those CEOs who had completed at least six years of tenure or whose tenure had ended early for reasons of performance or conduct. (The other 207 had ended their tenure early for other reasons, such as retirement.)

The survey was supplemented by 14 in-depth interviews, conducted by BCG senior partners, with current or recent CEOs or board directors of prominent corporations.

The analysis was based on two objective metrics, corresponding to our success criteria of Great Company and Great Stock, respectively:

- **Change in Tobin's Q.** Company enterprise market value per dollar of asset replacement cost (enterprise tangible investment), as measured at the start of tenure and the end of tenure (or the end of six years of tenure).
- **Relative Total Shareholder Return (rTSR).** Company stock performance during tenure, relative to the industry average over six years of tenure.

The 252 fully analyzed CEO tenures were ranked into three groups:

- **More Successful (18%).** CEOs who scored in the top third on both metrics.
- **Mixed or Moderately Successful (47%).** CEOs whose metrics did not both fall into the top third or both fall into the lowest third.
- **Less Successful (35%).** CEOs from one of two subgroups: those who scored in the lowest third on both metrics (18%) and those who were ousted (for reasons of performance or conduct) before completing six years in office (17%),

Our third criterion of success—Great Legacy—was explored during interviews, but it is not something that can be measured empirically, or at least not until many years beyond the end of a CEO's tenure.

As part of the effort to identify the characteristics of the more successful CEOs, our research team analyzed transcripts of discussions held between CEOs and investors on the subject of company earnings. The analysis used natural language processing (NLP), an AI-driven method, on a total of 6,403 transcripts (more than a million sentences, amounting to 21.3 million words). The NLP review, by sifting the CEOs' selection of words, elucidates the way that they think about their work. The word-clouds in Exhibit 3 in the main text are based on a subset of those transcripts—the earnings-call transcripts of ten CEOs with more successful tenures versus the earnings-call transcripts of ten CEOs with less successful tenures. The size of a word reflects its relative frequency. The set of items considered in the analysis consisted of words or concepts that would indicate either “biological” or “mechanistic” thinking. The vocabulary used by more successful CEOs in their early years of tenure pointed to their high degree of “biological thinking”—associated with an adaptable and

pragmatic approach—in contrast to the less successful CEOs’ “mechanistic thinking,” associated with a more rigid approach to attaining their goals.

The “strategic moves” that form the basis of Exhibit 5 in the main text are, per our broad definition, any significant and material changes related to capital allocation and serving as company performance markers; specifically, divestitures and acquisitions with disclosed terms, publicly announced transformation programs, changes to financial policy (changes in leverage: a 10% or greater increase or reduction in debt/assets ratio versus the same quarter from the previous year), resetting of the R&D-spending profile (a 10% or greater increase in R&D spending or intangible assets versus the same quarter from the previous year), restructuring initiatives (a 10% or greater increase or decrease in assets versus the prior quarter), and major changes in employee headcount (a 10% or greater increase or decrease).

SOURCES

BoardEx; S&P Capital IQ; Thomson One; company 10-Ks; BCG Gamma analysis; BCG ValueScience Center.