



Benchmarking of Pay Components in CEO Compensation Design

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Editor's note: [Yaniv Grinstein](#) is a Professor of Finance at the Arison School of Business, IDC Herzliya; [Beni Lauterbach](#) is the Raymond Ackerman Family Chair in Israeli Corporate Governance and a Professor of Finance at the Graduate School of Business Administration, Bar-Ilan University; and [Revital Yosef](#) is a Post-Doctoral Fellow at the Graduate School of Business Administration, Bar-Ilan University. This post is based on their recent [paper](#). Related research from the Program on Corporate Governance includes the book [Pay without Performance: The Unfulfilled Promise of Executive Compensation](#), [Executive Compensation as an Agency Problem](#) and [Paying for Long-Term Performance](#) (discussed on the Forum [here](#)), all by Lucian Bebchuk and Jesse Fried.

A central issue in executive compensation is the methodology employed by boards of directors and compensation committees to determine chief executive officer (CEO) pay. [In this study](#), we focus on the practice of compensation benchmarking, in which a given firm compares CEO compensation with the compensation packages of peer CEOs at comparable companies. Previous empirical research has established that peer pay and benchmarking play an important role in determining total CEO compensation.

We extend the benchmarking research by analyzing the benchmarking of the components of CEO pay. Motivated by the description of benchmarking practices in compensation committee reports, we examine the following three questions: Is each pay component benchmarked separately and differently than other pay components? Is the structure of compensation (weight of each pay component in total pay) benchmarked as well? And, is pay component benchmarking a better description of benchmarking practices in US public firms than total pay benchmarking?

We employ two research strategies (and samples) to answer our research questions, and focus primarily on the benchmarking of three major pay components: Salary, equity-based compensation, and non-equity performance pay. First, we read the compensation-committee reports (Form DEF 14A) of S&P 500 firms in fiscal year 2013 and find that approximately 89% of firms explicitly state that they benchmark at least one pay component. Further, about 75% of firms declare that they benchmark all three major pay components. These figures indicate that these firms examine separately the distribution of salary, equity-based compensation, and non-equity-based compensation among peers to determine the level of each pay component to their CEO. We also examine whether companies target CEO compensation structure (weight of each pay component in total CEO compensation), and find that approximately 30% of firms explicitly declare in their proxy statement that they benchmark the compensation mix.

Our second empirical strategy employs detailed compensation data to examine the effectiveness of component benchmarking in explaining the cross-sectional and time-series variation in the reported compensation of CEOs. We analyze a relatively large CEO compensation database of 4,892 firm-year observations and 70,347 peer-year observations on 1,251 unique firms included in the S&P Composite 1500 during 2007–2013, and we consequently make three important observations.

First, we find that component benchmarking describes the data, i.e., describes actual pay practice, more effectively than does total compensation benchmarking. Second, when benchmarking pay components, the adjustments of CEO salary to that of selected peers are significantly less pronounced than the adjustments of the two other major pay components, i.e., non-equity performance pay and equity pay. We also identify an economically large yet statistically insignificant difference in the adjustment-to-peers coefficient between equity pay and non-equity performance pay—a larger adjustment coefficient of the weight of the equity pay component of total pay. Third and perhaps most novel, we present evidence supporting the contention that benchmarking is used not only to determine CEO total pay or pay component levels, but also to design the structure of CEO pay, in terms of the proportions of the various pay components. Boards attend to the proportion of each component in total pay, and, according to a simple estimate, correct CEO pay so that it closes about half of the previous-year gap in the weight of the pay component between the given CEO and their peer group.

Our findings regarding the benchmarking of CEO pay components are unexpected. According to economic theory, total pay benchmarking helps firms provide competitive CEO pay packages that serve to retain valuable human capital. However, competitive pay packages do not explicitly indicate benchmarking each pay component separately nor benchmarking the mix of CEO compensation.

We discuss potential explanations for pay component benchmarking. Several of these explanations are in line with optimal compensation design. For example, boards may rely on other firms' compensation design, as these designs provide information regarding the optimal compensation structure. This result suggests that boards benchmark not only the level of CEO pay but also its incentive structure. Further, boards might have a difficult time setting competitive pay to their CEOs if the compensation structure deviates from the compensation structure of other firms, since each pay component has a different certainty equivalence. For example, the certainty equivalence of a stock option is lower than that of cash salary. Granting the CEO a similar pay structure (weight of each pay component in total pay) as that of her peers, alleviates concerns that the CEO compensation is not competitive.

We also note that benchmarking of pay components may arise from external players' involvement in the process of CEO compensation design (regulators, compensation consultants, proxy advisors, and even board of directors), and join existing literature in expressing the concern that such external interventions could sometimes lead to suboptimal compensation. Examining the motivations behind pay component benchmarking and whether benchmarking leads to an optimal compensation design are important agendas for future research.

The complete paper is available for download [here](#).