

# The Relationship Between Company Size and CEO Pay



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It is well-known that one of the variables most highly correlated with executive compensation is the size of the company. It doesn't matter whether company size is measured as assets, market value, sales revenue or number of employees — bigger firms pay more ... way more.

In a report I wrote with Judit Torok from The Conference Board last year, we examined the total compensation packages of more than 2,300 CEOs in publicly traded companies in the United States. We sorted the organizations by company revenue. In the smallest 10 percent of companies, the median CEO earned about \$878,000 in total compensation (including salary, bonus, stock, stock options, etc.). This level of pay increased until the largest 10 percent of companies (those with annual revenue of more than \$9 billion), where the median compensation of the CEOs was about \$10.2 million.

In this column, I consider a few questions: Does the company-size-to-CEO-pay relationship hold up when we control for other factors of the organizations? That is, is it really characteristic of the company (i.e., industry, profitability, etc.) and/or characteristics of the CEO (age, seniority, etc.)

that matter more or most? Does the relationship between organizational size and the pay of the senior manager hold up in other types of organizations like nonprofits and labor unions?

## The Company-Size-to-CEO-Pay Relationship is Robust

Many times when we examine a relationship between two or more things, there may be an additional factor that mostly explains the relationship between the first two. For example, in a paper I wrote with Marianne Bertrand from the University of Chicago a decade ago, we found that, on average, female executives were paid less than male executives. But once we controlled for the fact that female executives were, on average, younger and had fewer years of job experience (and worked for much smaller companies), this gap narrowed considerably.

It turns out that the link between the size of the company and the pay of the CEO is one that is nearly impossible to make go away. We can isolate the impact of all kinds of other characteristics (e.g., industry, return on assets, profitability, research and development expense, etc.) and even use complicated statistical techniques



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to remove the influence of “unmeasurable” characteristics, and the size-to-pay link remains intact.

### Measuring How Much More Big Companies Pay

One measure of the company-size-to-CEO-pay relationship is called elasticity by economists. Elasticity can be summarized as how much (in percentage terms) one thing changes due to a 1-percent increase in something else. Economists like to measure elasticity for all sorts of things. For example, the elasticity of demand tells us by what percent sales fall when the price of the product rises by 1 percent.

It turns out that we can estimate the CEO compensation elasticity with respect to firm revenue, and this number is around 0.3. That is (controlling for everything we can), for a 1-percent increase in company

size, CEO pay goes up by about one-third of 1 percent, or for a 10-percent increase in company size, CEO pay goes up by about 3 percent. This is even true, on average, over decades and within companies. So again, bigger companies pay more, and as companies increase in size the pay of their CEOs goes up.

### For-Profit Companies vs. Nonprofits and Labor Unions

Nonprofits may not have profit maximization as their main objective, but are the executives paid like for-profit peer companies? By at least one measure the answer is yes. In some of my work, I have shown that the relationship between organization size (say, for example, assets) and top executive pay in nonprofits is near the same size as it is for for-profit organizations. For example, for a 10-percent change in

nonprofit assets, the compensation of the heads of nonprofits goes up by between 2 percent and 3 percent.

In more recent work, one of my doctoral students at Cornell, Felice Klein, and I have been studying how the heads of labor unions are paid. For example, we reasoned that union members may want to pay heads of unions based on things like increasing wages of members and the number of members. In preliminary work, we found evidence that (controlling for other variables), for a 10-percent increase in the membership, the heads of unions earn between 2 percent and 4 percent higher total compensation.

So it's true — bigger organizations pay their CEOs more, no matter whether they are for-profit companies, non-profit organizations or labor unions. If you're after the money, it's good to run a bigger ship. Exactly why this is the way things are and what we can learn from the situation is left for another column. WS

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The Institute for Compensation Studies (ICS) at Cornell University analyzes, teaches and communicates about monetary and nonmonetary rewards from work, and how rewards influence individuals, companies, industries and economies. ICS research and leading-edge insight addresses compensation issues challenging employers and employees in today's dynamic global marketplace.

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