EXECUTIVE COMPENSATION:

What executives get,
and whether they're worth it.

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February 2020

EXECUTIVE SUMMARY

Few issues in business are as controversial as executive compensation. Investors, board directors, lawmakers, and even CEOs themselves talk about it constantly: what the "correct" amount of executive compensation should be, and what form that compensation should take.

So what does the data actually tell us about executive compensation?

To answer that question, Calcbench reviewed the compensation data reported by all U.S.-listed firms from 2010 through 2018. Three trends stood out:

- First, **compensation for the 100 best-paid executives has soared**. By 2018, compensation for the 100 best-paid named executive officers (NEOs) accounted for 15 percent of *all* compensation given to NEOs among more than 4,500 firms.

- Second, **financial performance metrics for large firms grew even faster.** As much as average total compensation grew from 2010 to 2018 (up 54.6 percent for all NEOs as a whole), among the S&P 500 and large accelerated filers, return on assets and return on equity grew even faster over the same period. Among small firms, the results were opposite: average total compensation grew faster than ROA or ROE.

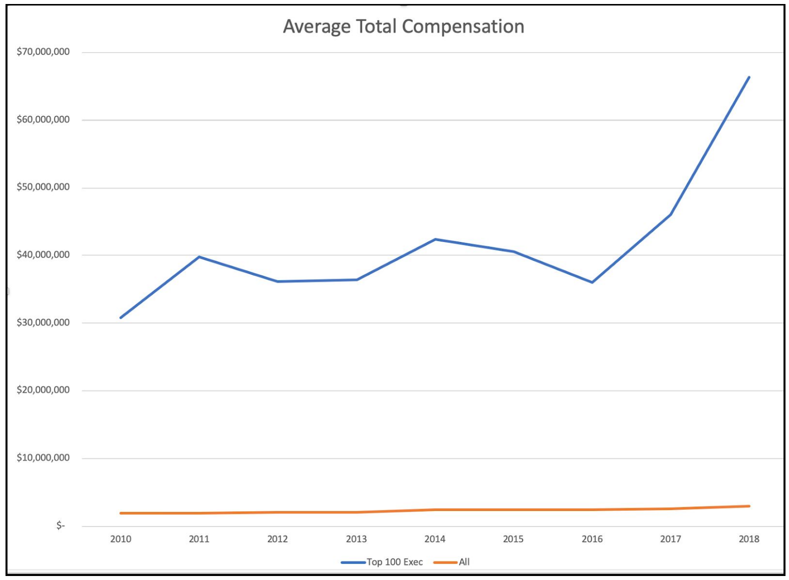
- Third, **equity awards accounted for an increasingly large share of total executive compensation over time**. In 2010, equity awards accounted for 29.6 percent of average total compensation across all firms as a whole. By 2018, equity awards accounted for 41 percent.

To perform this analysis, we grouped firms into the S&P 500, large accelerated filers (those with market caps above $700 million), accelerated filers (market cap $700 million to $75 million), and non-accelerated filers (market cap below $75 million).

Not every finding was identical across all categories, but the broad direction is clear: compensation for the very top has peeled away from everyone else; many firms have seen corporate performance grow even faster than executive pay; and equity compensation has become the single largest part of executive compensation for all.

SECTION 1: THE TOP 100 vs. THE WHOLE

Publicly traded firms are required to report total compensation of their top five named executive officers. The best paid executive is usually the CEO, followed by the CFO and other senior lieutenants; but not always. For example, some firms might have executives in charge of sales or dealmaking who take home the largest compensation package in any given year.

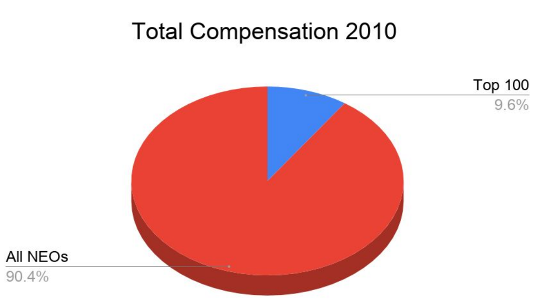


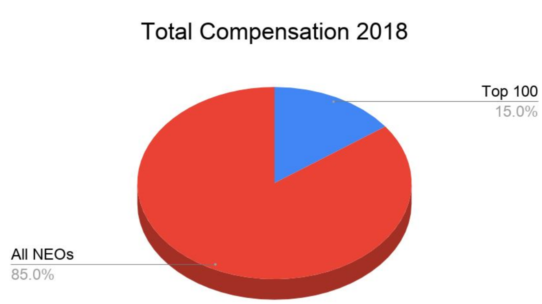
We compared average total compensation for the 100 best-paid executives against average total compensation for all NEOs. As seen in Figure 1, at right, average total compensation for all NEOs went from $1.94 million in 2010 to $3 million by 2018 — an increase of 54.6 percent.

Average total compensation for the top 100, however, more than doubled from $30.8 million in 2010 to $66.4 million by 2018 — including a sharp spike that started in 2016 and then accelerated through 2018.

We also calculated compensation for the top 100 as a portion of all compensation. That is, what slice of the whole pie did those top 100 executives get in 2010, and how much did that slice grow by 2018?

The slice grew by more than half: from 9.6 percent of all compensation in 2010, to 15 percent in 2018 (see Figure 2, below). That is, the top 100 people made up only 0.59 percent of all NEOs, but they received roughly 10 percent of all NEO pay.

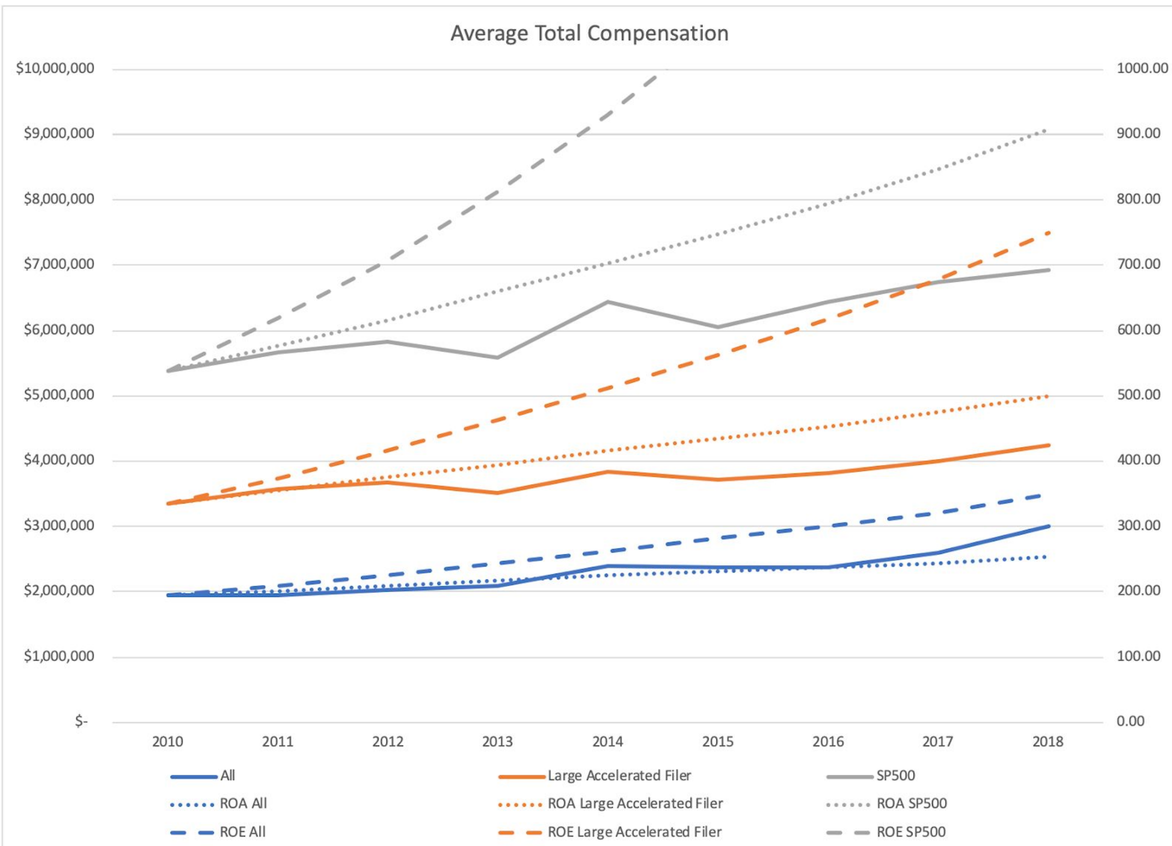




SECTION 2. FINANCIAL PERFORMANCE

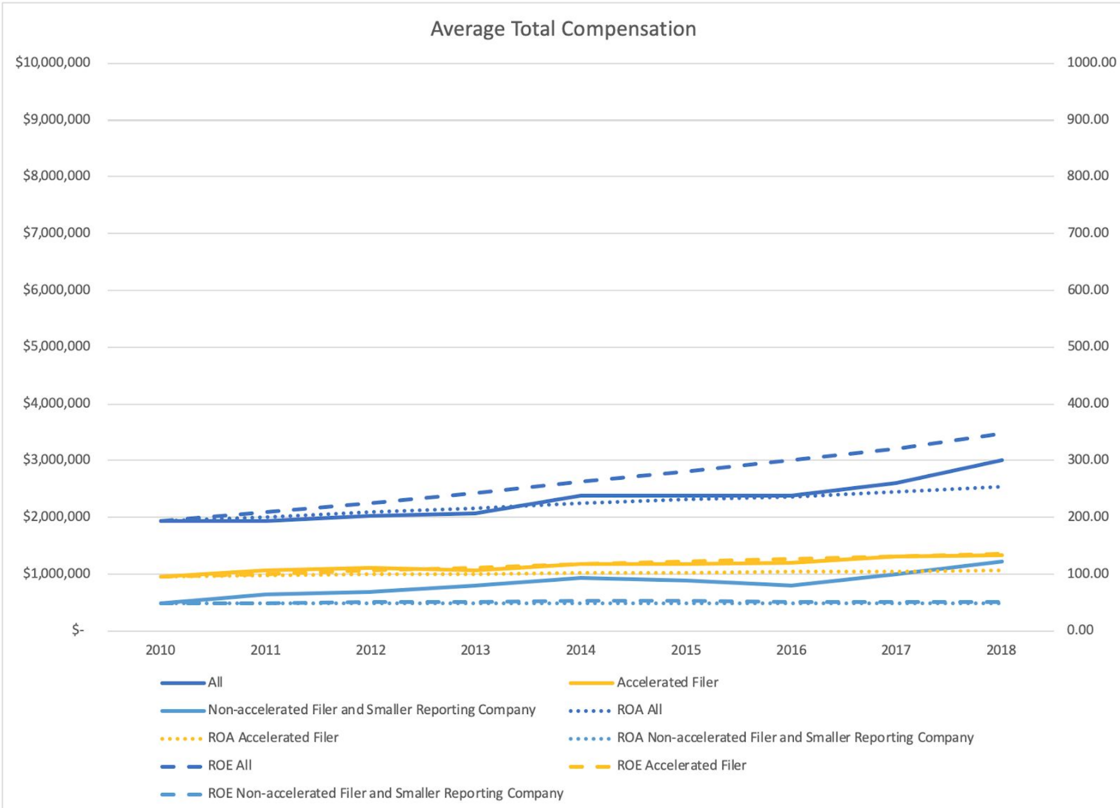
We also calculated the change in average total executive compensation over time, and compared that to change in return on equity (ROE) and return on assets (ROA).

Figure 3, below, tells the tale for S&P 500 firms (in grey), large accelerated filers (in orange), and all firms overall (in blue). The solid line is growth in average total compensation, measured by the left-side vertical axis. The dashed line is ROE and the dotted line ROA, both measured by the right-side vertical axis.



As we can see, among the S&P 500 and large accelerated filers, growth in ROA and ROE both outpaced growth in average total compensation over the decade. Among all filers, ROA eventually trailed compensation by 2018, but ROE outpaced compensation for all nine years.

This dynamic does not exist in the data for smaller firms. Figure 4, below, shows the same trends for all firms (in blue), accelerated filers (in yellow), and non-accelerated filers (in teal, along the bottom).



Here, as the firms in question get progressively smaller, growth in executive compensation does start to outpace growth in ROA and ROE.

The data raises several questions. First, why does growth in ROA and ROE exceed growth in compensation at larger firms, but not smaller ones? One reason could be that net income grew more sharply for large firms than for smaller ones. Since net income is the numerator in the formula to calculate both ROA and ROE, faster growth in net income would have the effect of pushing up both metrics more quickly.

Another question is more philosophical. If executives are paid for increasing the firm's value to shareholders — which is the conventional wisdom in corporate finance and governance circles — then **as much as executive compensation rose in the 2010s, were executives at larger firms still underpaid, since the two most common metrics of firm value increased even more?**

One point to consider is our decision to start tracking compensation data at 2010. We picked that date because (a) it was the numerical start of the decade; and (b) it was the first full year after the global financial crisis, an outlier event. Still, if you believe NEOs were correctly compensated in 2010, that means they are under-compensated now. Or if you believe they were over-compensated in 2010, then the trend could represent a correction.

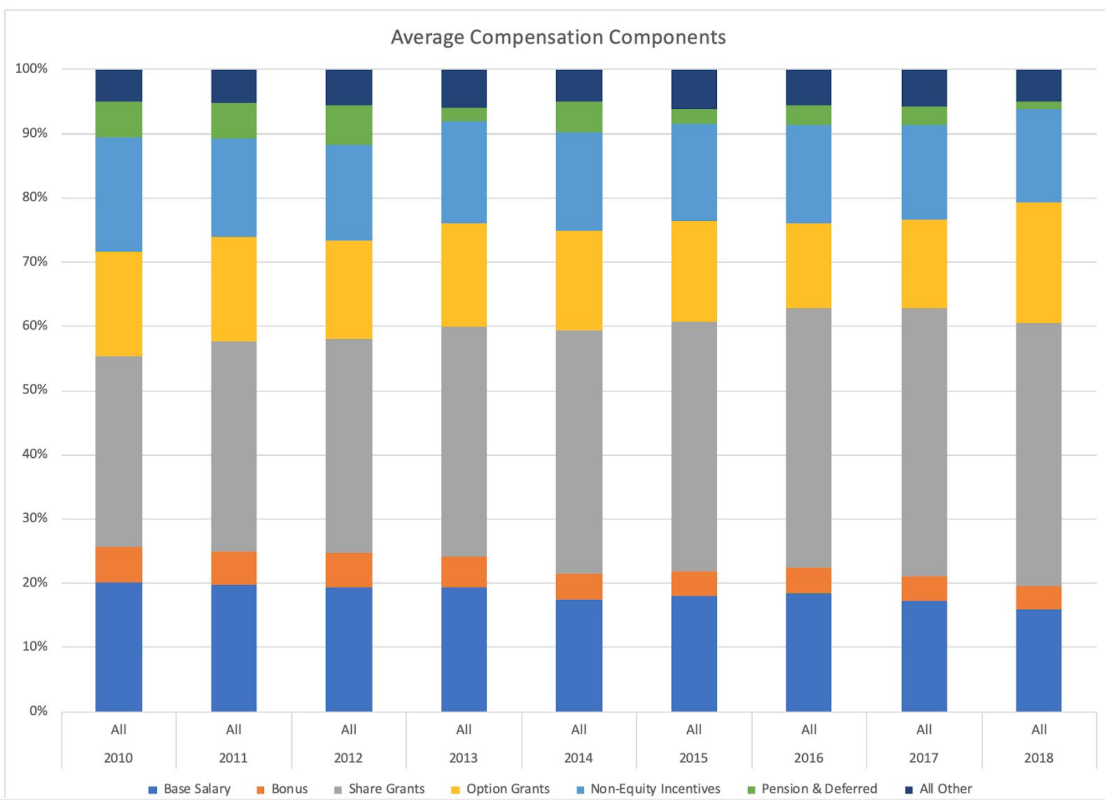
Answering such questions is not the purpose of this paper. But the data to correlate executive compensation and operating metrics is available; and it does show patterns worth further investigation.

SECTION 3. ELEMENTS OF EXECUTIVE COMPENSATION

Executive compensation is typically a mix of several components: salary, cash bonus, share grants, option grants, pension contributions, non-equity incentive awards, and other perks such as personal use of corporate aircraft. All firms must report the value of those components in table form, and report the total value of that compensation package.

Calcbench took the average value of each component and then calculated it as a percentage of all compensation, annually for 2010 to 2018. For all firms, large and small, share grants were an increasingly large part of total compensation over the nine years we examined, primarily as base salary and bonus became a smaller portion of total compensation.

Figure 5, below, shows the mix of compensation components for all firms.



The change in compensation components most likely stems from the increasing value of share grants as the stock market rose over the 2010s, rather than any decline in salary or pension benefits. Chart 1, below, shows a hypothetical example of how share grants can become a larger portion of total compensation even as salary rises too.

	Salary	Share grant	Mix
2010	$100,000	10,000 shares @ $20 each = 200,000	33/67
2018	$150,000	10,000 shares @ $45 each = 450,000	25/75

The shift toward share grants occurred for all types of filers. Indeed, the smallest filers saw the largest increase in value of share grants as a portion of total compensation. See Chart 2, below.

Filer	Pct. in 2010	Pct. in 2018	Increase
Non-accelerated filers	13.2	30.7	17.5
Accelerated filers	20.2	30.0	9.8
Large accelerated filers	32.6	43.4	10.8
S&P 500	34.1	48.4	14.3
All firms	29.6	41.0	11.4

SECTION 4. CONCLUSIONS & POINTS FOR FURTHER RESEARCH

- The ‘superstar effect’ is very real in executive compensation. The top-paid NEOs take home far more in compensation than everyone else, and that trend accelerated sharply in recent years as stock prices surged.

- Equity-based compensation, and specifically grants of shares, became a much more important part of total NEO compensation as the decade unfolded. That raises questions about whether executives’ incentives become too closely tied to a rising share price, rather than to long-term, sustainable growth of the business.

- As always, questions endure about how to determine the “correct” amount of executive compensation. If compensation is supposed to align with firm value, then at least several metrics might imply that NEOs are under-paid for the value they delivered across the 2010s.

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About Calcbench

Calcbench is changing the way sophisticated financial analysts and researchers access and analyze data. Founded in 2011 by Pranav Ghai and Alex Rapp, two former analysts, the company uses the latest technology to offer instant access to more than 500 million data points from 12,000+ U.S. corporate entities. The company brings usability to the hard to find information embedded in the footnotes and maximizes your productivity. Calcbench is the market-leading interactive, financial data platform powered by XBRL. All information in the company's database is unfiltered and traceable back to its original source. Visit www.calcbench.com.