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Reining in CEO compensation and curbing the rise of inequality

Report • By Dean Baker, Josh Bivens, and Jessica Schieder • June 4, 2019

What this report finds: Since the 1970s, rapidly accelerating CEO pay has exacerbated inequality in the United States: High CEO pay generates pay increases for other high-level managers, while pay at the middle and bottom of the wage distribution continues to be depressed. Increasing CEO pay is not actually linked to an increase in the value of CEOs' work; instead, it is more likely to reflect CEOs' close ties with the corporate board members who set their pay. While corporate boards technically report to shareholders, shareholders are not particularly well positioned to put pressure on directors to restrain CEO pay.

Why it matters: CEO pay is not just a symbolic issue. High CEO pay spills over into the rest of the economy and helps pull up pay for privileged managers in the corporate and even nonprofit spheres. Because pay for top managers—CEOs and others—is not driven by their contributions to economic growth, this pay can be reduced and others' incomes boosted if we can figure out a way to restrain CEOs' market power. Importantly, the most direct damage done by excess CEO pay is to shareholders. Since shareholders are a relatively privileged group themselves (if not as privileged as CEOs), they could potentially wield power in this situation; policymakers should try to figure out how to enlist shareholders in the fight to restrain excess managerial pay.

What can be done about it: Policies should be passed that boost both the incentive for and the ability of shareholders to exercise greater control over excess CEO pay. Tax policy that penalizes corporations for excess CEO-to-worker pay ratios can boost incentives for shareholders to restrain excess pay. To boost the power of shareholders, fundamental changes to corporate governance have to be made. One key example of such a fundamental change would be to provide worker representation on corporate boards. Finally, as a starting point, the Securities and Exchange Commission (SEC) should change the reporting requirements for corporations calculating their CEO-to-worker pay ratios to make them consistent over time and across firms; this will make these ratios far more useful to policymakers and the public.

Introduction

There are many facets to the rise in American income inequality over the last four decades, but a particularly salient one is the explosion of pay for top corporate executives. While chief executive officers (CEOs) have always been well paid, the ratio of CEO pay to typical worker pay went from 20- or 30-to-1 in the 1960s and 1970s to 200- or 300-to-1 in recent years. The average CEO at a Fortune 500 firm now makes close to $20 million per year.[1] It is not uncommon for a CEO to make $30 or $40 million if their company has an especially good year or if they have a favorable contract.

This paper argues for the desirability of reining in CEO pay and discusses policy strategies that could be part of such an effort. Its key findings are described below.

Key findings of this report

Excessive CEO pay exacerbates inequality. By now the explosive growth of CEO pay in large firms—relative to typical workers' pay and even the pay of other members of the top 0.1 percent of the wage distribution—has been well documented. This excessive CEO pay matters for inequality, not only because it means a large amount of money is going to a very small group of individuals, but also because it affects pay structures throughout the corporation and the economy as a whole. If a CEO is earning $20 million, then it is likely many other high-level executives are also being paid in the millions.

There are probably even broader spillover effects in labor markets that should not necessarily be all that tightly linked to executive pay, but that *are* linked through norms and bargaining power that allow privileged actors in other sectors to "benchmark" their salary growth to CEO pay. Many directors of well-funded nonprofit institutions or colleges and universities, for example, once worked in the corporate sector and have seen their pay rise as corporate director pay rises.

Increasing CEO pay is not linked to increasing CEO productivity. The explosion of pay for CEOs of large firms is not strongly associated with evidence that these CEOs have become far more productive in their ability to generate returns to shareholders.

Weak corporate governance is a large part of the problem. Research has demonstrated that CEOs are rewarded for luck and that weak corporate governance—boards of directors more concerned with hanging onto their own positions than with advocating for the best interests of shareholders—fails to restrain CEO pay by subjecting it to serious competition.

Shareholders are not well positioned to hold corporate boards accountable. Reforming corporate governance to empower shareholders to rein in CEO pay will require policy changes that overcome a host of bad incentives and agency problems that currently keep boards of directors from working on behalf of shareholders. Essentially, the market for good corporate governance is plagued by externalities—costs or benefits faced by actors not directly involved in the corporate governance decisions. For example, because a large share of the benefits stemming from activist shareholders spending resources to try to discipline CEO pay will accrue not to the activists, but instead to the lazier group of shareholders who do not spend resources in this effort, the gains from activism are substantially muted. Similarly, the excess pay for CEOs at firms with particularly poor corporate governance puts upward pressure on pay for CEOs at firms whose shareholders do spend resources on good corporate governance, thereby reducing the payoff to these efforts.

Tax penalties or incentives may be helpful in restraining CEO pay, if complemented with corporate governance reforms. A number of proposals for reining in CEO pay through tax penalties or incentives have been introduced in recent years. These proposals have merit, but they would need to be complemented with corporate governance reforms to be effective in restraining CEO pay growth.

- **These proposals effectively highlight how broken the market for top corporate managers is.** They also highlight that the root of growing American inequality in recent decades is the labor market, with typical workers seeing anemic wage growth while their bosses see much more rapid pay growth.
- **Tax penalties may raise revenue, but they're unlikely to change corporate behavior without corporate governance reforms.** In the current corporate governance environment, tax penalties pegged to excessive CEO pay have the potential to raise tax revenue and shine a spotlight on the broken market for CEO pay. But to make firms' owners (the shareholders) *responsive* to these incentives—i.e., to get them to actually reduce CEOs' pay—tax penalties must be paired with complementary efforts to empower these owners through corporate governance reform.
- **Shareholders have an incentive to restrain CEO pay, but they are not well positioned to do so.** Elevated CEO pay largely comes at the expense of shareholders. This means that these shareholders *already* have incentive to prevent large increases in CEO pay, yet this pay has risen enormously in recent decades. The key problem is not that shareholders lack *incentive* to restrain pay, but rather that the current corporate governance structure leaves control largely in the hands of boards of directors who owe their allegiance to CEOs rather than to shareholders.

The problem of excessive CEO pay

We first outline the problem of excessive CEO pay over four sections: The first section briefly outlines the history of CEO pay over the last four decades. The second section draws out the implications of excessive CEO pay for the overall wage structure. The third section discusses the corporate governance problem and explains how the current system effectively allows CEOs to have their pay determined by their friends. The fourth section puts excessive pay in the context of returns to shareholders.

A brief history of CEO pay

This section draws largely on the work of Mishel and Schieder (2018), who have clearly documented the explosive growth in pay for CEOs at the largest firms in the economy. **Table 1**—reproduced from their report—shows growth in CEO pay (measured two ways) and growth in annual compensation for production and nonsupervisory workers.

Using their preferred measure of CEO pay, which calculates it based on stock options realized, Mishel and Schieder document a rise in the CEO-to-typical-worker pay ratio from 20-to-1 in 1965 to 30-to-1 in 1978 to 58-to-1 in 1989 to 344-to-1 in 2000. Because CEO pay is often pegged to the share value of companies, the bursting of the stock market bubble in 2001 led to the decline of the CEO-to-worker pay ratio to 327-to-1 by 2007. The stock market decline brought on by the 2009 financial crisis depressed it further, to 188-to-1. Since then, however, CEO pay has recovered smartly—Mishel and Schieder project[2] that the CEO-to-worker pay ratio reached 312-to-1 in 2017.[3] In 2017, the average level of pay for CEOs in the 350 largest firms was $18.9 million.

Often, the stratospheric rise of CEO pay in recent decades is defended as simply another symptom of a technology-induced rise in the wage premium for skilled workers that allegedly occurred over the same time. This argument is not convincing. For one, evidence backing claims that technology-induced shocks to relative demand are driving wage inequality in the bottom 99 percent of the wage distribution has been shown to be quite weak.[4] For another, the growth of pay for CEOs at large firms has dwarfed even pay growth for other members of the top 0.1 percent of the wage distribution (and presumably this top 0.1 percent contains some technology-savvy workers)—as is shown in **Figure A**.[5] In fact, the wedge between CEO pay and pay for the rest of the top 0.1 percent has grown far faster than the economywide wage premium college graduates see relative to high school graduates.[6]

In short, the rise in large-firm CEO pay in recent decades has been extraordinary and seems impossible to explain with generic forces that have affected the rest of the economy. There really does seem to be something special (and especially broken) about the market for CEO pay.

Implications of high CEO pay

The issue of high CEO pay is not just a problem of the top executives at large companies getting paychecks in the tens of millions of dollars. Excessive pay at the top affects pay structures throughout an individual corporation and even throughout the economy. Average annual pay for CEOs at the 350 largest firms was $18.9 million in 2017. But pay of the next four highest-paid executives at these same firms totaled roughly this much on average as well. Given these numbers, it is hard to imagine that the next 10–20 highest-paid people in each of these companies are getting far less than $1 million a year.

If we contrast this with a world in which the CEOs of these companies are making $2 to $3 million per year, then the next four highest-paid executives at each company would

Table 1

CEO compensation, CEO-to-worker compensation ratio, and stock prices (2017 dollars), 1965–2017

	CEO annual compensation (in thousands)*		Private-sector production/ nonsupervisory workers annual compensation (in thousands)		Stock market (indexed to 2017$)		CEO-to-worker compensation ratio***	
	Based on options realized	Based on options granted	All private-sector workers	Firms' industry**	S&P 500	Dow Jones	Based on options realized	Based on options granted
1965	$902	$688	$40.9	n/a	588	6,078	20.0	14.5
1973	$1,177	$898	$48.0	n/a	520	4,473	22.2	16.1
1978	$1,612	$1,230	$49.1	n/a	325	2,780	29.7	21.6
1989	$3,004	$2,291	$46.7	n/a	605	4,704	58.2	42.3
1995	$5,830	$6,468	$46.8	$56.3	850	7,058	112.3	123.2
2000	$21,048	$21,136	$49.4	$58.9	1,994	14,985	343.5	360.5
2007	$19,503	$13,583	$51.4	$61.2	1,714	15,290	327.4	226.9
2009	$10,983	$10,550	$53.4	$62.5	1,063	9,963	187.8	175.7
2013	$15,903	$12,193	$52.9	$62.2	1,696	15,487	278.6	204.7
2014	$16,843	$12,688	$53.1	$62.9	1,960	17,023	284.0	213.4
2015	$16,564	$12,716	$53.9	$64.2	2,088	17,814	271.6	208.5
2016	$16,030	$13,039	$54.5	$62.2	2,095	17,927	270.1	219.9
Projected 2017	$18,855	$13,264	$54.6	$62.4	2,398	21,292	311.7	220.7
2016 FH	$15,200	$12,768	$54.5	$62.2	2,095	17,927	257.3	215.7
2017 FH	$17,880	$12,988	$54.6	$62.4	2,398	21,292	298.9	216.5
Percent change							**Change in ratio**	
1965–1978	78.7%	78.7%	19.9%	n/a	-44.7%	-54.3%	9.8	7.1
1978–2000	1,205.5%	1,618.8%	0.7%	n/a	513.0%	439.1%	313.8	338.8
2000–2017	-10.4%	-37.2%	10.5%	6.0%	20.2%	42.1%	-31.8	-139.7
2009–2017	71.7%	25.7%	2.1%	-0.1%	125.6%	113.7%	123.9	45.0
1978–2017	1,069.5%	978.6%	11.2%	n/a	636.9%	666.0%	282.0	199.1
2016–2017	17.6%	1.7%	0.2%	0.3%	14.5%	18.8%	41.6	0.9

* CEO annual compensation is computed using the "options realized" and "options granted" compensation series for CEOs at the top 350 U.S. firms ranked by sales. The "options realized" series includes salary, bonus, restricted stock grants, options realized, and long-term incentive payouts for CEOs at the top 350 U.S. firms ranked by sales. The "options granted" series includes salary, bonus, restricted stock grants, value of options granted, and long-term incentive payouts.
** Annual compensation of the workers in the key industry of the firms in the sample.
*** Based on averaging specific firm ratios and not the ratio of averages of CEO and worker compensation.

Notes: Projected value for 2017 is based on the change in CEO pay as measured from June 2016 to June 2017 applied to the full-year 2016 value. Projections for compensation based on options granted and options realized are calculated separately. "FH" denotes preliminary values from the "first half" of the year.

Source: Table 1 in Lawrence Mishel and Jessica Schieder, *CEO Compensation Surged in 2017,* Economic Policy Institute, August 2018; analysis of data from Compustat's ExecuComp database, the Federal Reserve Economic Data (FRED) database from the Federal Reserve Bank of St. Louis, the Bureau of Labor Statistics' Current Employment Statistics data series, and the Bureau of Economic Analysis NIPA tables

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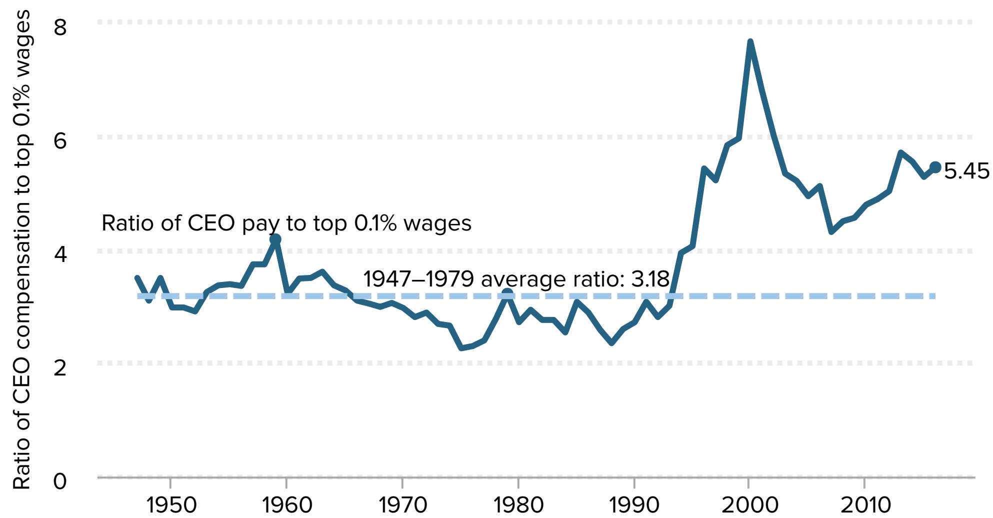
probably be paid close to $1 million each. The next tier of senior management would probably be looking at paychecks in the $400,000 to $800,000 range, far below current levels. This would free up a considerable amount of money that would most likely accrue

Figure A

Comparison of CEO compensation with top 0.1 percent wages, 1947–2016



Source: Authors' analysis of data on top 0.1 percent wages from Mishel and Wolfe 2017 and extrapolation of Kaplan's (2012) CEO compensation series

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to shareholders in the form of higher corporate profits.[7] Over the longer term, we would probably also see some of the money saved in executive pay passed along to more typical workers in the form of higher wages, especially if measures to restrain CEO pay were complemented by other policies that provided greater labor market leverage for typical workers.

The high pay of CEOs in corporate America also affects pay structures elsewhere in the economy. It is common for top executives at universities, foundations, and private charities to receive pay in the range of $1 million a year, and in some cases two or three times this amount.[8] The rationale is that a person running a corporation the size of Harvard University or the American Red Cross could easily be making $10 or $15 million a year if they opted for a managerial job in the corporate sector. With the pay of corporate CEOs as a reference point, working for $1 million a year can even seem like a sacrifice.

As in the corporate sector, the high pay for a CEO at a nonprofit also affects the pay of other top officers. If a university president is getting over $1 million a year, then the provost and deans of major schools might be earning somewhere close to $1 million each. The high pay for those at the top comes to some extent at the expense of pay for those at the middle and bottom of the wage ladder.

High pay in the corporate sector also affects pay in government. While wages at the top of the government pay ladder are usually held down by statute, people are often hired on contracts by which their effective pay may be many times higher than the pay of top government employees.

In addition, the much higher pay available in the corporate sector is a huge factor in the problem of "revolving door" officials, who spend a few years in a regulatory position and then go to work for the industry they were regulating; this pattern can lead to conflicts of interest—resulting in degradation of regulatory enforcement and increased potential for corruption—as regulators may be (consciously or unconsciously) courting future employers even as they are regulating them. This route is much more attractive to government workers in a context in which private-sector employment can pay millions of dollars a year while public-sector pay tops off at around $200,000. The story would be quite different if high-level public officials could only expect to earn twice or perhaps three times their pay in the corporate sector, as opposed to 10 times or more.

For these reasons, we would be looking at a very different world in terms of income inequality, regulatory quality, and corruption if we could get CEO pay back down to the levels, relative to ordinary workers, that we saw in the 1960s and 1970s. The economy and corporate America performed very well through most of this period when CEO pay was not so outsized. It would be difficult to argue that top executives lacked incentives and that talented people did not consider running a major corporation to be worth their time in those years. While the economy and the world are different today, it is hard to see why people would not still be willing to work as a CEO of a major company for $2 to $3 million per year.

Are CEOs worth the pay they receive?

The main justification for why shareholders tolerate huge increases in CEO pay—money that comes directly out of their pockets—is that this higher pay is necessary to attract the CEOs who produce good returns for shareholders. The argument is that a CEO who gets paid $20 or $30 million a year may produce returns to shareholders that are 10 or even 100 times as large as his or her paycheck. In that narrative, shareholders are getting a good deal even with these very high pay packages for CEOs.

Before we turn to the evidence, it is important to be clear about what is at issue. Corporations obviously need to have *someone* in charge (although there is no reason it needs to be a single person). In that sense, it is trivially true that CEOs contribute an enormous amount of value to shareholders in the sense that corporations contribute value to shareholders and CEOs lead these corporations. But the issue is not how valuable having a CEO is to shareholders relative to having the company operate aimlessly, the question is how valuable a *specific* CEO is relative to the other people who could fill the position. If the people who are next in line, or who could be hired from other companies, are as capable as the current CEO, then the value of the CEO to the company is only as high as what they would have to pay to replace them.

We certainly apply this logic to the pay of other jobs. For example, a nurse's assistant may discover that a patient's vital signs are weak or that a patient is having difficulty breathing. By providing immediate assistance and/or contacting more trained personnel, a nurse's assistant can save lives. Based on this fact, we could say that the assistant's services are worth hundreds of thousands—or even millions—of dollars a year. In fact, nurse's assistants are very low paid, often getting little more than the minimum wage. The reason they are so low paid is that other people can be found to do the job for a very low wage; further, institutions (unions or robust minimum wages, for example) that could keep low-wage workers from having to accept low pay in order to secure work have been eroded over time. (The fact that the vast majority of nurse's assistants are women is likely a factor in all of this.)

For these reasons, it makes no sense to credit any CEO with all of the profits the company delivers to shareholders. The relevant question is whether there is another person who would be willing to do the CEO's job for lower pay *who could provide the same returns to shareholders*.

There is considerable evidence that the pay of CEOs is not closely related to the returns they provide to shareholders.[9] Rather, there seems to be a large element of luck in CEO pay. Factors that have little or nothing to do with the CEO's performance, but that lead to a rise in profits and share prices, can lead to higher CEO pay. For example, a study found that jumps in world oil prices led to large increases in the pay of CEOs at oil companies (Bertrand and Mullainathan 2001). Presumably, the CEOs had nothing to do with the rise in world oil prices, so effectively they got large pay raises as a result of factors that were outside of their control.

The bulk of CEO pay usually comes in the form of company stock or, more typically, stock options. This means *anything* that causes a company's stock price to rise will lead to higher pay for the CEO. While the CEO's performance obviously affects the stock price, factors beyond their control—such as the overall direction of the economy or movements in the stock market as a whole—will also have a large impact on their pay.

In principle, company boards of directors could construct contracts ensuring that CEOs would only be rewarded for stock returns that exceed the average returns of companies in a reference group. For example, a contract could specify that Exxon-Mobil's CEO would not be rewarded simply because the company's stock price went up; rather, in order for the CEO to get performance-based rewards, the company's stock price would have to rise more than that of competitors (e.g., not just because rising oil prices had increased profits for oil companies across the board). While it is possible (and even easy) to structure compensation for CEOs in this way, these sorts of contracts are the exception. In the vast majority of cases, CEOs effectively get rewarded for anything that increases the company's share price, even if they had nothing to with it.

There is evidence that boards often have almost no understanding of the pay packages they grant to CEOs. A recent paper found that corporate boards largely failed to recognize that the value of an option was rising hugely over the course of the 1990s as share prices soared due to the tech stock bubble (Shue and Townsend 2016). This analysis found that most boards continued to issue the same number or a greater number of options to CEOs, even as the value of these options hugely increased, apparently because they did not want to seem to be cutting the pay of their CEOs. Certainly directors cannot effectively rein in CEO pay if they do not even know how much they are paying them.

Another study found an interesting way to assess whether CEOs are extraordinarily talented individuals who are essential to their companies' success. Quigley, Crossland, and Campbell (2017) looked at the impact of unexpected CEO deaths—such as in an airplane or car crash—on stock prices. The reason for focusing on unexpected deaths is that it takes away the possibility that a death may have been anticipated and its impact already reflected in the stock price, as might be the case when a CEO dies after a long illness. In almost half of the cases examined since 1990 (44.3 percent), the price of the company's stock rose following the death of the CEO.

If incumbent CEOs are unusually talented individuals who cannot be easily replaced, then their unanticipated loss should be unambiguously bad news for the company's shareholders. In fact, the market might be expected to overreact on the negative side to the unexpected death of a CEO, since there might be the expectation that the CEO actually was a major asset to the company even in cases where it is not true. After all, why else would the shareholders have been paying them so much money? And yet there is little effect on share prices from these losses.

Marshall and Lee (2016) looked at long-term (10-year) returns to shareholders relative to total CEO pay at 429 large corporations over the years 2006–2015. The study found a significant negative relationship, with high CEO compensation associated with worse returns to shareholders. The analysis divided CEO pay by quintiles and found that the total return to shareholders of companies with pay in the bottom quintile was *more than 60 percent higher* than the total return to shareholders of companies with CEO pay in the top quintile. These findings are hard to reconcile with claims that the pay of CEOs reflects their ability to increase returns to shareholders.[10]

These and other studies indicate that there is little relationship between CEO pay and returns to shareholders. This would mean that it is reasonable to believe that shareholders could get away with paying their current CEO considerably less money and still get a comparable performance in terms of returns or, alternatively, that they could hire another CEO who would do just as good a job for considerably lower pay.

There is one aspect to this picture that is underappreciated. It is often taken for granted that, while wage growth for the vast majority of American workers has been weak for decades, returns to shareholders have been strong. The resulting corollary many take from these presumed trends is that the root problem behind all corporate governance dysfunction is too much fealty to the lodestar of "maximizing shareholder value."

However, returns to shareholders have actually *not* been very good in recent decades. Average inflation-adjusted stock returns for the S&P 500 have been less than 3.6 percent annually over the last two decades. This compares to an average of more than 7 percent that prevailed between 1950 and 2001.[11] And this low return is in spite of the fact there have been large reductions in taxes paid by corporations, most notably in the tax cut passed by the Republican Congress in 2017, which lowered the corporate income tax rate from 35 percent to 21 percent.

The idea that shareholders and CEOs have jointly benefited from a governance structure that has allowed CEO pay to soar is simply not true. Obviously, there is always a possibility that shareholders could have done even worse with an alternative structure that left them with lower-paid CEOs. But the last two decades have not been a good period for shareholders relative to prior decades, and shareholders really should be asking themselves just why they've been paying their CEOs so much to deliver such poor returns.

The difficulty of reining in CEO pay

The people most immediately in a position to rein in CEO pay are the boards of directors who approve CEO pay packages. Ostensibly, these directors are answerable to shareholders, who vote them in and can, in principle, remove them. As a practical matter, directors are generally more responsive to top management (including CEOs), who often play a large role in selecting members of the board. Furthermore, once a director is on the board, the incentive structure goes strongly against raising serious questions about CEO pay.

Being on a corporate board pays very well, typically well over $100,000 a year, and often several hundred thousand dollars a year, for very part-time work. In his book *The CEO Pay Machine*, Steven Clifford, who has sat on a number of corporate boards, estimated that the amount of work involved was typically in the range of 150 hours a year. This means that a board member making $100,000 annually is being paid almost $700 per hour. Higher-paid directors getting $300,000 or $400,000 annually are being paid $2,000 or more per hour. In short, being a member of a corporate board is an extraordinarily lucrative job, which most directors would presumably like to keep.

Keeping these jobs turns out to be trivially easy, as it is almost impossible for directors to be voted out through a shareholder revolt. An analysis of director elections in 2012 by Investor Shareholder Services found that 99.6 percent of the 17,081 directors nominated by management were approved (Stewart 2013). Even among the 61 who were defeated, 55 were still on the payroll many months later at the next proxy filing. Their fellow directors were apparently willing to shelter them from the wrath of shareholders.

The key to any one director keeping their job is keeping their other directors happy. This probably means not asking questions about the feasibility of drastic cuts to the board's hand-chosen CEO's pay or whether it would be possible to find a new CEO who is at least as good and willing to work for much lower pay. Insofar as the directors' job is to act in the interest of the shareholders, these questions should be frequent topics of discussion at board meetings. After all, while top management often shows great interest in keeping down other costs for the company, it has no interest in keeping down its own pay. If the firm's directors are not actively working to limit CEO pay, then no one is.

In principle, shareholders can organize to oust directors who are not serious about restraining CEO pay, but this requires a large amount of coordination with little guarantee of success. This is a classic collective action problem. It typically is not worth the time and effort for individual shareholders—even those holding a large number of shares in a company—to get actively involved in the governance of a corporation in which they hold stock. It is usually much easier to just sell their shares of the company, if they think that abuses and/or ineptitude of top management is bad enough, or to just live with the excessive pay, if they think the company is otherwise well managed.

Even if some activist shareholders *did* spend resources organizing efforts to rein in CEO pay, many of the benefits of this effort would accrue to free-riding shareholders who were not active in these efforts. This *externality*—a benefit accruing to nonactivist shareholders stemming from a transaction (activist shareholders' investment in monitoring and organizing around CEO pay) guarantees underinvestment in sound corporate governance. Further, as long as *some* firms exist that do a poor job disciplining CEO pay, this corporate governance failure will put upward pressure on pay for CEOs even at firms whose owners *do* invest resources in restraining executive pay.

Proposed solutions to the problem of excessive CEO pay

We now turn to proposed solutions: First, we look at proposed (and implemented) tax incentives and penalties aimed at restraining CEO pay, and we discuss why such tax incentives need to be complemented with governance reforms to have their greatest impact on CEO pay. Next, we propose changes in governance that could bolster efforts to put downward pressure on pay; we highlight that the first step in this process should be changes in how the Securities and Exchange Commission mandates corporations report their own CEO-to-worker pay ratios, to make those ratios informative for policymakers.

Adding tax incentives and penalties to the policy tool kit for reining in CEO pay

There have been a number of proposals in recent years to use tax incentives and penalties to help lower inflated ratios of CEO-to-typical-workers' pay. The elements of these proposals—discussed in more detail below—effectively highlight how broken the market for top corporate managers is and how failures in the labor market are the chief driver of American inequality in recent decades. Typical workers have seen only anemic wage growth for decades, while the pay of their corporate bosses has soared.

Many of these proposals carry the promise of raising more revenue from corporate incomes if (as expected) CEO-to-worker pay ratios do not respond quickly to tax policy changes and firms instead just choose to pay higher taxes. More revenue could certainly be put to good use to counter the effects of inequality. However, if policymakers wish to durably fix many of the broken aspects of the market for top managers, tax incentives and penalties would need to be complemented with other policy changes.

Specifically, tax incentives and penalties would need to be paired with policies aimed at fixing the broken corporate governance structures that have allowed CEO pay to skyrocket in recent decades (we go over some of these corporate governance fixes in a later section). There would also need to be much more effective tax enforcement to put a halt to accounting gimmicks that let firms qualify for pay-based tax benefits. Further, to prevent gaming of these tax incentives, the federal government would need to measure CEO-to-typical-workers' pay more carefully than they are currently, and bulwarks against firms simply "fissuring" off their lower-paid employees to subcontracting firms (in order to artificially decrease their CEO-to-worker pay ratios) would have to be constructed. The rest of this section highlights a number of issues that should be considered when looking at these proposals.

Targeting pay levels or pay ratios?

It is useful to first distinguish between measures that use corporate tax changes to create incentives for corporations to raise the pay *levels* of their rank-and-file workers versus those changes that are pegged to CEO-to-worker pay *ratios*.[12] If the incentives are pegged to raising the level of rank-and-file worker pay, they would have to be enormous to move the dial, even in a world where CEO and shareholder interests were aligned and shareholders were empowered to influence CEO pay. The reasoning behind this is simple: The cost to shareholders of significantly higher pay for rank-and-file workers is huge—far larger even than the benefits of moving the corporate tax rate all the way to zero.

In 2017, for example, corporate-sector value-added was roughly $8.5 trillion in the U.S. economy. This value-added was split between labor compensation ($6.4 trillion) and corporate profits ($2.1 trillion). The effective tax rate on these profits was just 17 percent.[13] Imagine a thought experiment in which firms are granted a zero percent corporate tax rate in a given year if they raise average pay for their rank-and-file workers by 5 percent during that year. The savings from the zeroing out of taxes would be roughly $350 billion (17 percent times $2.1 trillion), while the costs of raising corporate-sector compensation would be $425 billion (5 percent times $8.5 trillion). This is obviously only an illustrative example using too-aggregated data, but the upshot is clear—the cost of raising pay for rank-and-file workers is expensive enough to owners of corporations that it would take truly extraordinary changes in corporate taxes to make it worth their while. Essentially, the government would have to be willing to make very large changes in corporate tax rates to incentivize pay increases for rank-and-file workers.

However, another variant of tax incentives focuses on CEO-to-worker pay *ratios* rather than the absolute level of pay (or annual raises) of rank-and-file workers. In these proposals, firms could in theory laser-target high CEO pay for reduction and meet the incentives of the proposed tax change. While this prospect is very welcome, the real-world evidence indicates that shareholders today are not empowered to force CEOs into minimizing shareholder taxes if this conflicts with the CEO's personal bottom line. In short, for tax incentives to be effective in reining in CEO pay, they would need to be accompanied by strong complementary policies.

Boosting shareholder power, not just incentives

The need to change shareholders' *power*, not just their *incentive* to rein in CEO pay, is evidenced in two cases where tax law has changed in a way that could have disciplined the growth of CEO pay had shareholders been able to force their company's managers to effectively minimize the shareholders' tax bills. The most important effort along these lines was a provision of the tax bill passed in 1993.[14] This provision ended the tax deductibility of CEO pay in excess of $1 million that was not tied to performance.

As it turned out, this provision was effective in changing the *structure* of CEO pay but had little or no impact on the *level* of CEO pay. This is because, when implementing the tax changes, the Internal Revenue Service ruled that pay in the form of stock or stock options counts as "pay that is tied to performance." In response to the tax bill and the accompanying IRS ruling, companies simply shifted the structure of CEO compensation from straight salary to stock options and other forms of pay that still qualified for the deduction. As noted above, since it seems that many boards did not recognize the value of the options they were giving their CEOs, this change in the law may even have led to an unintentional increase in the average pay of CEOs. If shareholders had been empowered to make stock options and bonuses tied to genuine measures of firm performance, this bill could have worked to restrain excess pay. But it failed precisely because shareholders lacked this power.

The Affordable Care Act (ACA) included another provision that changed the tax treatment of CEO pay, albeit only for the health insurance industry. This provision ended the tax deductibility of CEO pay in the industry in excess of $500,000, regardless of the form it took. This meant that compensation in the form of stock, stock options, bonuses, or other types of pay that previously counted as performance-related would no longer be deductible as a business expense.

This change raised the cost of a dollar of CEO pay to companies in the health insurance industry by more than 50 percent. Because the tax rate at the time was 35 percent, companies had effectively been paying only 65 cents for each dollar in CEO compensation; since the ACA provision took effect in 2013, health insurance companies have been paying 100 cents for every dollar of CEO pay.

Given this large increase in the cost of CEO compensation for health insurance companies, it would have been reasonable to expect some reduction in pay to occur for top executives in the industry. Schieder and Baker (2018) test for this effect by comparing the path of CEO pay in the health insurance industry with the CEO pay trajectory for companies that were not affected by the ACA provision. A variety of tests that controlled for revenue growth, profit growth, stock price appreciation, and other relevant factors found no evidence that the loss of deductibility had any effect on the trends in CEO pay in the health insurance industry. Companies were apparently willing to absorb the additional cost from the change in the tax provision rather than reduce CEO pay.

A provision of the Tax Cut and Jobs Act (TCJA) passed by Congress in 2017 limits the deductibility of CEO pay for all firms, not just those in the health insurance industry. The provision has been in effect for only just over a year, so it is too early to make any assessments of its impact. But there is little reason to believe that the effect of ending tax deductibility more generally will be any different than the effect of ending it in the health insurance industry.

Complementing tax incentives with greater tax enforcement, transparency, and labor policy to stop 'fissuring'

One could argue that the tax changes discussed above were too small-bore and that more punitive tax penalties for companies with high CEO pay could reap better results. For example, firms could be charged a higher tax rate or face some other penalty when their CEOs receive excessive pay. But while it is possible that a high enough penalty could lead shareholders to take the initiative and finally figure out how to rein in pay, the evidence to date suggests that penalty would have to be extraordinarily large.

Of course, if measures that peg tax increases to excess CEO pay fail to rein in this pay, they would by definition raise revenue for the government. Given that this revenue would be raised from corporate equity owners, this would be a progressive tax. If this revenue were used to finance progressive spending increases, it would be eminently worth it to implement such a proposal, even if it failed to change the dynamics surrounding CEO pay.

The CEO Accountability and Responsibility Act,[15] for example, calls for increasing the corporate tax rate on those corporations with CEO-to-worker pay ratios above 100. Because so many large corporations have CEO pay far in excess of this benchmark, and precisely because shareholders' leverage is so weak, it is a near certainty that few of these large corporations would meet this benchmark and that they would hence face the higher corporate tax rate if this proposal became law. This would, in theory, yield a lot of extra revenue for the federal government that could potentially be put to progressive use.

In a sense, this is the same logic that applies to proposals to impose a small tax on financial transactions. If the financial transactions tax changes are effective in changing behavior, they will not raise much revenue, but they will serve the useful social purpose of squeezing out low-value financial transactions. If these taxes are not effective in changing behavior, then they will raise a lot of revenue.[16] Our prediction is certainly that tax incentives penalizing corporations with high CEO-to-worker pay ratios will "fail" to change corporate behavior, with the felicitous result that corporate tax collections will rise.

However, all this assumes corporations aren't able to engineer their way out of paying these taxes—a rather large assumption. If the tax penalty is high enough, CEOs will surely try to figure out how to avoid it without reducing their own pay or raising the pay of their workers. They will most likely either attempt to game the measurement of the ratio (a topic we address in the next section) or to outsource the lower-wage portions of their firms to boost the measured wages of the workers that remain. This workplace "fissuring" has already been a notable feature of the U.S. labor market for decades and has done great damage to many workers' pay growth.[17] A policy response to stop or slow this fissuring would be most welcome and would boost the effectiveness of tax incentives aimed at reducing CEO-to-worker pay ratios.

Changing rules of corporate governance to give shareholders more control

If CEOs' exorbitant pay packages come at the expense of shareholders, one obvious solution is to make it easier for shareholders to exert control over the pay of CEOs and top management. The Dodd-Frank Wall Street Reform and Consumer Protection Act, passed in 2010, included a modest step in this direction. The law requires that every three years companies hold a "say-on-pay" vote in which shareholders can vote up or down on the pay package provided to the company's top executives. The vote is nonbinding, so it doesn't require the company to alter its pay package, but it at least provides an opportunity for shareholders to communicate their preferences.

As a practical matter, it is difficult to rally shareholders in a say-on-pay vote, just as it is difficult to organize for an election to the Senate or for the presidency. Organizers must contact a large number of shareholders to have any hope of winning, and there is not much incentive to organize since, even if the measure succeeds, it's not binding.

Furthermore, the voting structure is stacked against shareholders unhappy about current managerial pay. A large portion of corporate shares are voted by mutual funds and asset management companies. BlackRock, the world's largest asset management company, with $4.6 trillion under management and control of the largest block of proxies at many of the country's largest companies, has supported management in 97 percent of say-on-pay votes. TIAA (formerly TIAA-CREF), the huge retirement fund for college and university faculty, has supported management at even higher rates (Marriage 2016). Just as directors may view corporate CEOs as their friends rather than their employees, it seems that a similar relationship exists with many of the asset managers who control the bulk of company stock. They have little reason to pick fights with the management on behalf of the people they ostensibly represent.

However, there are ways to change the incentive structure of the people in a position to act. Suppose, for example, the rules stipulated that directors lost their stipend for the year in the event of a "no" vote on management pay. Directors would stand to lose hundreds of thousands of dollars, and the risk might cause them to think about pay packages a little more carefully. Congress could institute such a measure just as it included the say-on-pay package in Dodd-Frank.

Note that this rule does not place any direct restrictions on CEO pay. Rather, it gives shareholders more power to contain pay. Since CEOs ostensibly work for the shareholders, this rule might even be considered a pro-business measure, and it would be reasonable to ask corporations to adopt it voluntarily. After all, given that less than 3 percent of say-on-pay packages are rejected, it hardly seems to be asking too much of directors to risk their pay on the possibility that they will be in the bottom-performing 3 percent of their occupation.

It is possible to envision going even further and constructing pay packages for directors that give them a direct incentive to limit CEO pay. Suppose directors were given the opportunity to share half of the savings from cutting the pay of the CEO and the next four highest-paid executives, provided that the company's subsequent stock returns matched or exceeded a peer group benchmark. For example, if the directors of a steel company cut the pay of their CEO by $3 million a year for a three-year period, and if they achieved comparable savings by cutting from the compensation packages of the next four most highly paid executives taken together, then they would save the company a total of $18 million over those three years. In return, they would be able to split a total of $9 million (half of the $18 million in savings), provided the returns on the steel company's stock at least matched those of peer companies for the three years and for a subsequent five-year period. (A long time period like this is almost surely necessary to avoid incentivizing short-term behavior.)

There are many ways to design contracts that would incentivize directors to restrict CEO pay. From the standpoint of shareholders, directors should be constantly asking whether it is possible to get comparable performance from the CEO and other top executives while paying them less, just as management tries to minimize costs by paying ordinary workers as little as possible given their levels of productivity. Remarkably few, if any, companies design compensation packages for directors along these lines.

It would probably be too much micromanagement for the government to mandate incentive packages that encourage directors to hold down CEO pay. However, it is certainly reasonable for large organizational shareholders such as pension funds, foundations, and universities to ask the companies in which they hold stock why directors have no incentive to limit CEO pay. Also, it might be desirable to restrict the ability of money management companies like BlackRock to vote on directors and CEO pay, except when they have been given explicit directions by the people whose money they hold. They should not be allowed to reward their friends in top management with other people's money.

This is consistent with maximizing returns to shareholders. After all, if a CEO is being paid more than necessary for a person with his or her abilities and performance, then shareholders are throwing away their money.

Further, a number of reforms in Senator Elizabeth Warren's proposed Accountable Capitalism Act (introduced in 2018) could help a firm's board of directors rein in CEO pay.[18] One reform would limit the ability of CEOs to sell shares of stock they receive as pay. The bill contains overall minimum time limits on how long CEOs must hold stock, as well as other limits that apply after stock buybacks. These reforms would limit CEOs' rewards for short-term luck. A larger reform included in the act would mandate that 40 percent of a firm's board of directors would have to be elected by the firm's workers. This "codetermination" feature would greatly amplify the voice of labor on corporate boards. CEO pay is clearly lower in countries with greater worker voice in corporate decision-making, and economic research confirms that one of the few effective brakes on managerial pay in the U.S. context is the presence of a union in the firm.[19] The Accountable Capitalism Act—and its codetermination provisions—is often framed as a blow against shareholder primacy, but if it leads to reining in excess CEO pay, this could actually be a blow for shareholders' interests.

Finally, any set of reforms must be aided by the best information. The rules included in Dodd-Frank mandated the reporting of CEO-to-worker pay ratios in publicly traded firms, but these rules have been so degraded through the regulatory process of defining them that the resulting pay ratios are nearly worthless to base policy on. A new administration should begin a rulemaking process that gathers the best evidence on how to report CEO-to-worker pay ratios. One potential example of a measurement decision that could reduce gaming of the ratio is to have the regulating body that mandates CEO-to-worker pay disclosure (currently the SEC) calculate the wages of typical workers employed by the firm, but base this calculation not just on easily manipulated reports provided by the firms, but also on industrywide averages of pay.

Reducing CEO pay: What is at stake for shareholders?

One argument against giving shareholders more ability to rein in CEO pay is that there is too little at stake for shareholders to be concerned about. The idea is that even salaries in the tens of millions of dollars are not a big deal for companies with billions or tens of billions of dollars of profits each year. It is worth getting a more precise assessment of how much is at stake and whether it is likely to be enough to concern shareholders.

Figure B shows top managerial pay as a share of corporate net income under three different scenarios. We analyze executive compensation data for the 350 largest corporations in the United States. For each company, we sum the annual pay of the five highest-paid executives (including the CEO) and express that sum as a share of the firm's annual net income. We then take the average of these shares over 2013 to 2017 and find that, on average, top managerial pay consumes 6 percent of corporate net income.[20] Figure B also shows what top managerial pay would be as a share of firm profits if the top five executives' pay at each firm was cut in half (essentially returning the CEO-to-typical-workers' pay ratio back to what it was in the mid-1990s) and what it would be if CEO pay was just 25 times the pay of typical workers, as it was in 1965 (with pay for the other four top executives at each firm being reduced proportionally, by the same percentage that CEO pay was reduced).

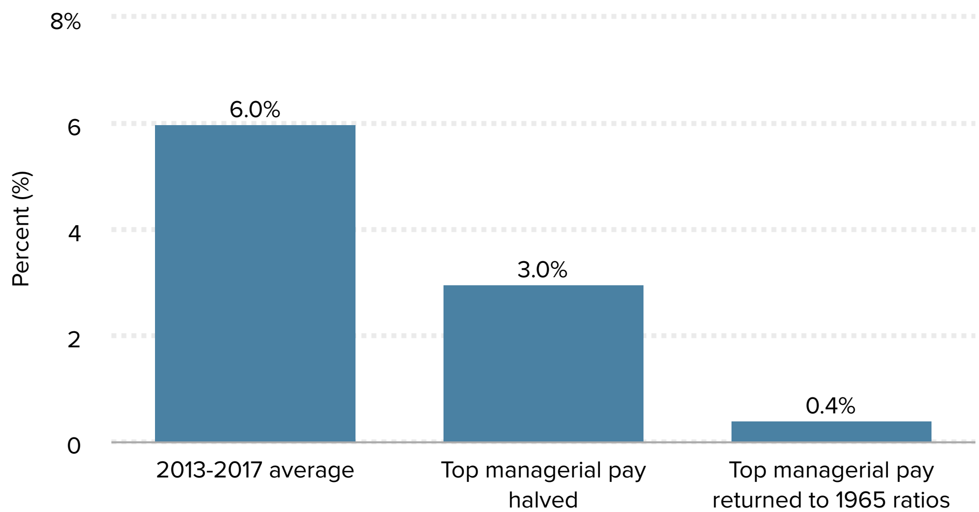
The implication is that if allowing greater shareholder control reduced the pay of CEOs and the other top four executives by 50 percent, it would increase profits by approximately 3.0 percent on average. This would still leave major company CEOs with paychecks in the neighborhood of $10 million a year. If CEO pay was pushed back down to its 1965 relative levels of 20 times the pay of an ordinary worker, profits would increase by 5.6 percent.

Is this enough of an increase in profits to concern shareholders about forgone returns from excessive managerial pay? As a practical matter, companies have often expressed great concern about policies that have had a much smaller impact on corporate profits. To take a prominent example, compliance with Dodd-Frank provisions was estimated to have cost the financial industry $10.4 billion over the first six years of implementation (Hinkes-

Figure B

CEO and top managerial pay depresses returns to shareholders

Top managerial pay as a share of corporate net income, three scenarios, averaged across 2013–2017



Notes: For the first bar, we take the average salaries of the top five executives at a company, sum them, and divide by the company's net income. We then average this (unweighted) ratio across the 350 largest firms. For the second bar, we assume pay for the top five executives is cut in half. The last bar reduces pay for the top five executives by the ratio of relative CEO pay in 1965 to relative CEO pay in 2017.

Source: Authors' analysis of data from Compustat's ExecuComp database

Economic Policy Institute

Jones 2017), or roughly $1.7 billion annually (note that these are gross costs to the companies in the industry—the act also provides benefits). Since after-tax profits for the financial sector have averaged close to $200 billion annually, this puts the Dodd-Frank costs at about 0.85 percent of profits, less than one-third the boost to profits that would come from cutting the pay of CEOs and other top executives in half. There would be similar stories for many of the other laws and regulations that have prompted intense opposition from affected industries.

Also, the savings discussed above are just from reducing the pay of the top five executives. As noted earlier, there should be a substantial spillover effect to other top layers of management that would provide considerably more savings.

Of course, the hope in advocating for these policies is not just to capture higher returns for shareholders; the hope is that these savings would also result in higher pay for ordinary workers. To take the comparison in a different direction, General Motors has roughly 50,000 hourly employees. Its after-tax profits in both 2015 and 2016 were around $9.5 billion (MarketWatch 2019). Would General Motors be concerned about a $5,600 increase in the annual pay of its workers or as a per-worker addition to their health care costs? This would also be roughly 3.0 percent of its profits—the same percent that could be saved by halving top executives' pay.

The main point is that there is a substantial amount of money at stake in the excess payments to top management. It should be enough to concern shareholders, even if they do not end up capturing all of it.

Conclusion: Shareholders as allies?

If the concern is to develop policies that benefit workers at the middle and bottom of the income distribution, it might seem peculiar to promote policies that will include the country's very richest people as beneficiaries. But the reality is that shareholders are the group most immediately in a position to effectively rein in CEO pay. And, for reasons noted earlier, we would likely have considerably less inequality in a context in which the ratio of CEO pay to the pay of ordinary workers is closer to its levels of 50 years ago, even if this implies somewhat higher corporate profits.

Further, we should be clear about just how rich CEOs and other top management at large corporations are, even relative to other quite rich people in the American economy. Mishel and Schieder (2018), for example, report that pay for CEOs at large corporations is roughly 5.5 times the average pay of the top *0.1 percent* of salary earners overall.

Empowering shareholders to rein in excessive CEO pay is obviously not sufficient to make for a fairer economy, but it is useful. There are other measures, like more progressive income taxes and a more effective estate tax, that can limit the fortunes of the very rich who make a large portion of their earnings off of corporate equities. The concern that these shareholders might become slightly richer if excess CEO pay is reined in should not be a reason for tolerating bloated CEO pay and the inequality and corruption it entails. We have an economy that has been structured to put considerable pressure on ordinary workers, preventing them from getting their share of the gains from growth over the last four decades—while CEOs have *not* been subject to the same kind of pressure and their pay has been allowed to grow unrestrained. We should end the corruption of a corporate governance system that fails to subject CEO pay to the same labor market pressures everyone else is subject to.

Finally, it is worth noting that the individual tax code can also be used to change CEO pay incentives. If the top marginal rate faced by individuals were increased, this would blunt the incentives for CEOs to take home every last penny they can at the expense of their firm's workers and shareholders. The same cautions about higher rates leading to gaming and efforts at tax avoidance that we highlighted before in the context of corporate income taxes apply to proposals about higher individual tax rates, but these individual rates actually apply a more direct incentive to the behavior of CEOs.

Endnotes

1. Compustat data.

2. Based on data available for the first half of 2017.

3. Because typical workers' pay has grown slowly and steadily over the period under discussion, almost all of the action in moving the CEO-to-typical-workers' pay ratio is driven by CEO salaries. Hence, we see movement in this ratio alone as largely informative about trends in the level of CEO pay.

4. See Mishel, Shierholz, and Schmitt 2013 for a close look at this evidence.

5. Mishel and Schieder (2018) note that their measure of the top 0.1 percent actually includes large-firm CEOs, which pulls it up on average. This means that the real wedge between large-firm CEO pay and the rest of the top 0.1 percent is even larger than the numbers in Figure A indicate.

6. See Table 2 in Mishel and Schieder 2018 for this comparison.

7. This reasoning assumes that the enormous increases in CEO and other top management salaries in recent decades was not a function of their increasing productivity. We think this is the correct assumption and defend it in later sections of this report.

8. For executive compensation at universities, see Bauman, Davis, and O'Leary 2018.

9. Note that we are asking only about returns to shareholders in discussing the value of CEO pay. For purposes of this discussion, we are ignoring the fact that CEOs may be boosting company profits by engaging in antisocial activities like violating labor laws and busting unions, harming the environment, ripping off customers with deceptive financial practices, or cheating the government out of taxes.

10. Bebchuk and Fried (2004) provide an extensive examination of the literature on the relationship between CEO pay and shareholder returns.

11. Calculations in this paragraph are based on stock market data downloadable from Shiller 2019.

12. The CEO-Employee Pay Fairness Act of 2014 (H.R. 5662, 113th Congress [2014]) proposed to make deducting CEO pay from corporate taxation contingent on minimum annual raises given to employees. The CEO Accountability and Responsibility Act (H.R. 3633, 115th Congress [2017]) instead targeted CEO-to-worker pay ratios.

13. This just divides corporate taxes paid in 2017 (reported in the National Income and Product Account [NIPA] tables from the Bureau of Economic Analysis) by NIPA corporate profits.

14. Omnibus Reconciliation Act of 1993 (Pub. Law No.: 103-66).

15. H.R. 3633, 115th Congress (2017).

16. For further explanation of the financial transactions tax and how it works, see EPI 2018.

17. See Weil 2014 for a broad overview of workplace fissuring; see Goldschmidt and Schmieder 2017 and Dube and Kaplan 2010 on the effect of workplace fissuring on wages.

18. Accountable Capitalism Act, S. 3348, 115th Congress (2018). For a discussion of the bill, see Yglesias 2018.

19. On the association with greater unionization and lower CEO pay, see Piketty 2014. On the effect of unionization in restraining managerial pay, see DiNardo, Hallock, and Pischke 2000.

20. This figure is the average of averages: We took the percentage that the pay represented for each company and then averaged this percentage across companies. This effectively provides an equal weight for each company as opposed to having the calculation determined primarily by the averages for the most profitable companies in the group.

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