

Many view this change as evidence of a breakdown in competitive market forces. In this essay, I argue against that view. Available evidence suggests that skyrocketing executive pay has actually resulted from heightened competition, reinforced by technological changes that have increased the leverage of executive decisions.

Rising executive pay has had numerous

Remedy Worse than the Disease

WHY HIGHER TAXES ARE BETTER THAN PAY CAPS

BY ROBERT H. FRANK

consequences, not all of them bad. But some of them are very bad. I will argue that it would be a good thing on balance, even for corporate executives, if their take-home pay were much smaller than current levels. Those who attribute rising executive pay to a breakdown in competitive forces often call for the government to impose caps on corporate salaries. I will argue that a few simple changes in tax policy would be a much more effective remedy for the problems caused by the growing pay gap.

Why Has Executive Pay Been Rising?

Popular accounts, as noted, often attribute the growing pay gap to a breakdown in competitive forces. In this view, executives pack their boards with weaker cronies, who then reward them with exorbitant salaries and bonuses. To be sure, such abuses occur. Market imperfections of this sort, however, are no worse now than they've always been. On the contrary, improved communications and falling transportation costs have almost certainly made them less serious. Hiring committees may not be perfectly informed, but they have more information than they used to, and this makes reputation a more effective predictor of executive performance. Similarly, increased vigilance from institutional shareholders and growing threats of hostile takeovers have placed additional constraints on executive pay abuse.

To be sure, mediocre executive performances are sometimes rewarded with high salaries, as in the celebrated instance of former General Motors CEO Roger Smith. But as Smith and his immediate successor Robert Stemple can attest, executives who fail to deliver on the corporate bottom line cannot expect to remain in command indefinitely.

In our 1995 book, *The Winner-Take-All Society*, Philip Cook and I argued that top salaries have grown in virtually every labor market because of two factors: 1) technological forces that greatly amplify small increments in performance; and 2) increased competition for the services of top performers. These factors, we argued, have caused the spread and intensification of "winnertake-all markets," a reward structure that in the past had been associated largely with entertainment and sports.

Pay by relative performance is one defining condition of a winner-take-all market. A second is that rewards tend to be concentrated in the hands of a few top performers, with small differences in talent or effort often giving rise to enormous income differences. In the music industry, for example, the enormous leverage of the most talented musicians was made possible by the development of breathtakingly lifelike recording and playback technologies. Now that most music we listen to is prerecorded, the world's best soprano can be literally everywhere at once. And since it costs no more to stamp out compact discs from her master recording, millions of us are each willing to pay a few cents extra to hear her rather than other singers who are only marginally less able. The upshot is that the best soprano lands a seven-figure recording contract while only marginally less gifted performers struggle to get by.

The same logic holds in the market for leaders of large organizations. The trustees who recruited David J. Skorton as Cornell's twelfth president three years ago knew that his most important

responsibility would be to head the university's \$4 billion capital campaign. They identified several candidates they felt would succeed in reaching that goal. But none could have handled the task nearly as well as Skorton, they eventually decided. Having seen him in that role for the past three years, I find it easy to see why. Skorton, a man of great humor, warmth, and charm, is a distinguished research cardiologist and an accomplished jazz musician. Alumni adore him. If his compellingly articulated vision of the university's future persuades them to donate only 3 percent more than the next-best candidate would have, he will have boosted the university's endowment by more than \$100 million.

Vastly larger sums are at stake in many private companies. Consider a company with \$10 billion in annual earnings that has narrowed its CEO search to two finalists. If one would make just a handful of better decisions each year than the other, the company's annual earnings might easily be 3 percent—or \$300 million—higher under the better candidate's leadership.

Decision leverage in the executive suite—always high in the largest companies—has expanded sharply in recent decades. Perhaps the most important reason has been the information revolution, which, together with falling transportation and tariff costs, recent developments in manufacturing technologies, and other factors, has helped fuel the transformation of local and regional markets into national and global ones. A firm that produced the best tire in northern Ohio was once assured of being a player in at least its regional tire market, but sophisticated consumers now choose from among only a handful of the best tire producers worldwide. Corporate performance has always depended strongly on the efforts of a handful of people at the top, but because of the broader scope of their markets, the leaders of the surviving companies have much greater leverage than their earlier counterparts.

In competitive markets, greater leverage means higher pay. As the New York University economists Xavier Gabaix and Augustin Landier argue in a 2006 paper, for example, executive pay in a competitive market should vary in direct proportion to the market capitalization of the company. In their sample of large companies, CEO compensation grew sixfold between 1980 and 2003, the same as the market-cap growth of these businesses.

Deregulation, which provides not only new market opportunities but also new competitive threats, has further enhanced the value of executive talent in the airline, trucking, banking, brokerage, and other industries in the United States. Adding to that has been the increased threat of outside takeovers resulting from the introduction of derivative securities and other new sources of financial capital. These developments have increased the potential gains from superior performance and also the potential damage from poor performance, making it all the more important to have the most talented players in key positions. For all these reasons, the marginal product of top executive talent has been growing.

But increasing decision leverage alone cannot account for the observed growth in executive pay in the United States. After all, CEOs in America's largest companies have always had enormous decision leverage, yet barely two decades have passed since the first multimillion-dollar compensation packages appeared. Moreover, globalization has increased the leverage of executives not just in the United States, but also in Germany and Japan, where executive compensation remains modest by U.S. standards. So the mere fact that a top CEO contributes millions to a company's bottom line does not by itself ensure a commensurate salary.

Large and concentrated rewards in any winner-take-all market require not only top performers who generate high value, but also effective competition for their services. In many markets, however, a variety of formal and informal rules traditionally prevented such competition.

Most major sports leagues, for example, once maintained restrictive agreements that prevented team owners from bidding for one another's most talented players. In the wake of the successful challenge of baseball's reserve clause in 1976, however, these agreements have toppled one by one. Players have now won at least limited free agency rights in all the major professional team sports. In each case, these rights were followed by sharp increases in player compensation. Figure 1 shows the trajectory for average salaries in Major League Baseball.

Unlike the owners of professional sports teams, the owners of businesses were never subject to formal sanctions against bidding for one another's most talented employees. But informal norms often seemed to have virtually the same effect. Under these norms, it was once the almost universal practice to promote business executives from within, which often enabled companies to retain top executives for less than one-tenth of today's salaries.

The anti-raiding norms of business have all but completely unraveled. Perhaps the most celebrated case in point was IBM's decision to hire Louis V. Gerstner, Jr. Gerstner was a celebrated corporate turnaround specialist who had produced record earnings at RJR Nabisco, but he had no experience in the computer industry. In earlier times, such cross-industry hires would have been almost unthinkable. But IBM's gamble paid off handsomely. Gerstner led the then-struggling computer giant to its dramatic turnaround of the 1990s.

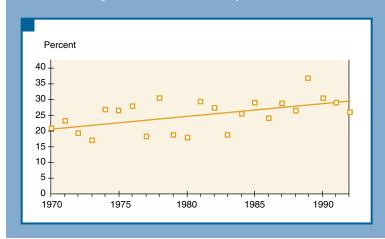
This new spot market for executive talent has affected executive salaries in much the same way that free agency affected the salaries of professional athletes in recent decades. In our study of CEOs hired by roughly 800 of the largest U.S. manufacturing and service companies, Philip Cook and I found a steady increase in the proportion of outside hires. Using *Forbes* survey data generously supplied to us by Kevin Murphy, we first defined an outside hire as an accession to the CEO position with fewer than 3 years' tenure with the firm.

We then plotted the trend line shown in Figure 2, which indicates a rise of nearly 50 percent in the percentage of outside hires between 1970 and 1992.

Although more than half of newly appointed CEOs were still insiders near the end of the period shown, the game had fundamentally changed. In the United States, leaving for an outside



FIGURE 2 Percentage of CEOs with fewer than 3 years' tenure at time of hire



post has become an increasingly available option for the best performers. To hang onto its most valued senior officers, the board must now pay them enough to keep them from jumping ship. Elimination of the reserve clause in baseball was an essential precondition for the explosive growth in the salaries of top players in recent years. Increased mobility has played a similar role in the market for top executives.

The Amplifying Effect of Social Context

No attempt to explain changes in executive pay can ignore the effect of social comparisons on salaries. In general, workers tend to be more concerned about how their salaries compare with those of closely associated co-workers than with those of people who work outside their organizations. The effect of this concern is to compress the intra-firm distribution of compensation relative to the corresponding distribution of marginal productivity. Social concerns thus suggest an additional reason that many executives were historically paid much less than their

marginal products.

Despite the general tendency for concerns about pay equity to focus on others within the firm, outside comparisons are nonetheless important in some cases. This is especially so for people who occupy unique positions, and for whom reference standards are therefore unlikely to be available within the firm. The only reasonable reference standard available to CEOs, for example, is the salary distribution of other CEOs.



External pay comparisons matter, not only because of individual concerns about equity, but also because it is often hard to measure the value of an individual's contribution to the firm's bottom line. That Lou Gerstner arrested IBM's slide and greatly enriched the corporation's shareholders is beyond question. Yet no one could have predicted precisely how much he would enrich them, and hence the natural tendency of compensation committees to rely on external benchmarks.

There is thus, in effect, an element of social construction to pay determination. A change in any one individual's productivity affects not only that individual's pay, but also the pay of others; the resulting movements in their pay, in turn, induce additional movements in the prime mover's pay, and so on. In an environment in which multimillion-dollar compensation packages were unheard of, compensation committees would be reluctant to pay that much even in the face of clear evidence that their CEO was worth it. But let another firm try to bid that CEO away, and the compensation committee will quickly begin to see matters differently. Rather than lose their CEO, they might agree to a multimillion-dollar package, despite the fire it would draw from social critics. And once implemented, this package becomes a benchmark that makes subsequent multimillion-dollar packages much easier to justify. Such contextual forces have undoubtedly accelerated the pace of executive pay growth in recent decades.

Do Widening Pay Gaps Matter?

Many argue that if markets for executive talent are competitive, the explosive growth in executive pay is not a matter of social concern. But such invisible hand claims are poorly grounded. They depend on the assumption that utility, or life satisfaction, depends primarily on absolute consumption. This assumption is contradicted by all available evidence. Absolute consumption matters, to be sure, but context also shapes evaluation heavily in almost every sphere. As Richard Layard once put it, "In a poor country, a man proves to his wife that he loves her by giving her a rose, but in a rich country he must give a dozen roses."

In like manner, a family's ability to achieve many goals depends on how its own spending compares with spending by others. To send its children to a school of average quality, for example, the median family on the earnings scale must spend as much on housing as other families with similar incomes.

That's because of the close link between school quality and the average price of housing in the surrounding neighborhood.

One cost of the rising pay gap is that it has spawned expenditure cascades that have made it more difficult to achieve basic goals. Step one in the development of such a cascade in the housing market, for example, was that higher incomes led executives and other top earners to spend more on housing. That shifted the frame of refer-

ence that defines adequate housing for those just below them, so they, too, spent more on housing, and so on, all the way down the income ladder. The median size of a newly constructed single-family house, which stood at 1,600 square feet in 1980, had grown to more than 2,300 square feet by 2007.

Since the median wage was essentially stagnant during this period, this growth cannot be explained by growth in income. Middle-income families felt they had to spend more on housing because other families like them were spending more. And those families were spending more because of an expenditure cascade launched by higher spending at the top. Failure to keep pace meant sending one's children to inferior schools, a step few middle-income parents were willing to take.

If the widening pay gap gives rise to expenditure cascades that make it harder for middle-class families to make ends meet, we should see greater evidence of financial distress in places, and during historical periods, in which income inequality was relatively high. Examining Census data for the 100 largest counties in the United States, Adam Seth Levine, Oege Dijk, and I found that counties in which income inequality grew the most also had the biggest increases in several factors known to be associated with financial distress.

One way that financially troubled families can stretch their incomes, for example, is to buy houses farther from where they work, where land is cheaper. In counties with the biggest growth in income inequality, we saw the biggest increases in the percentage of residents whose commute to work takes more than an hour each way.

Couples in financial distress are also more likely to report marriage difficulties. We found that divorce rates had grown most rapidly in counties that experienced the largest growth in income inequality. Those same counties also reported the biggest increase in the proportion of families who filed for bankruptcy.

In short, we have good reasons to believe that the widening pay gap has spawned expenditure cascades that have made economic life much more difficult for the middle class.

Why Caps on Executive Pay Aren't an Attractive Remedy

In the light of government bailouts to financial firms that paid big bonuses last year to many of the same executives who helped precipitate the current financial crisis, no one should be surprised that voter outrage over exorbitant executive pay is mounting. Nor should it surprise anyone that Congress is considering measures to limit executive pay—and not just in the financial industry. So far, the only formal legislative proposal is "say on pay," which would require a nonbinding shareholder vote on executive pay proposals. But critics complain that this would have little impact, and they are hungry for stronger measures.

One popular proposal would cap the chief executive's pay at each company at 20 times its average worker's salary. But while Congress may well have compelling reasons to limit executive pay in companies that received bailout money, voter anger is not a good reason to extend pay caps more generally. The problem is that although every company wants a talented chief executive, there are only so many to go around. Relative salaries guide job choices. If salaries were capped at, say, \$2 million annually, the most talented candidates would have less reason to seek the positions that make best use of their talents.

More troubling, if CEO pay were capped and pay for other jobs was not, the most talented potential managers would be more likely to become lawyers or hedge fund directors. Can anyone think that would be a good thing?

Tax Remedies for the Widening Pay Gap

Problems spawned by runaway growth in top salaries are much more efficiently attacked by tax policy than by caps on executive pay. In terms of economic incentives, the most efficient remedy would be to replace the federal income tax with a much more steeply progressive consumption tax. Under such a tax, people would report not only their income but also their annual savings, as many already do under 401(k) plans and other retirement accounts. A family's annual consumption is simply the difference between its income and its annual savings. That amount, minus a standard deduction—say, \$30,000 for a family of four—would be the family's taxable consumption. Rates would start low, say, 20 percent. A family that earned \$50,000 and saved \$5,000 would thus have taxable consumption of \$15,000. It would pay \$3,000, about the same as under the current income tax.

As taxable consumption rises, the tax rate on additional consumption would also rise. With a progressive income tax, marginal tax rates cannot rise beyond a certain threshold without threatening incentives to save and invest. Under a progressive consumption tax, however, higher marginal tax rates actually strengthen those incentives.

Consider a family that spends \$10 million a year and is deciding whether to add a \$2 million wing to its mansion. If the top marginal tax rate on consumption were 100 percent, the project would cost \$4 million. The additional tax payment would reduce the federal deficit by \$2 million. Alternatively, the family could scale back, building only a \$1 million addition. Then it would pay \$1 million in additional tax and could deposit \$2 million in savings. The federal deficit would fall by \$1 million, and the additional savings would stimulate investment, promoting growth. Either way, the nation would come out ahead with no real sacrifice required of the wealthy family, because when all build larger houses, the result is merely to redefine

what constitutes acceptable housing. With a consumption tax in place, most neighbors would also scale back the new wings on their mansions.

By encouraging top earners to save more and spend less, a progressive consumption tax would also help slow the expenditure cascade that has created growing financial pressures on middle-class families.

Some people worry that tax incentives for reduced consumption might throw the economy into recession. But total spending, not just consumption, determines output and employment. If a progressive consumption tax were phased in gradually, its main effect would be to shift spending from consumption to investment, causing productivity and incomes to rise faster.

Should a recession occur, a temporary cut in consumption taxes would provide a much more powerful stimulus than the traditional temporary cut in income taxes. People would benefit from a temporary consumption tax cut only if they spent more right away. In contrast, consumers who fear that they might lose their jobs in a recession are often reluctant to spend the dollars they are no longer paying as income tax.

Concluding Remarks

Apologists for outsized executive pay packages defend them as an essential component of an efficient market for executive talent. Any attempt to interfere, they warn, would jeopardize the market's ability to steer the most talented performers to the economy's most important tasks.

This is a baseless fear. The labor market, like everything else in life, is graded on a curve. Its ability to allocate talent efficiently depends far more on relative pay than on absolute pay. If the absolute value of every top earner's take-home pay were to fall by half, the same executives would end up in the same jobs as before.

Top earners would also experience no decline in life satisfaction if a change in tax policy curtailed the rate of growth of their absolute consumption. Beyond a certain point, consumption demands are almost entirely socially determined. When all CEOs build larger mansions, as they have been doing for several decades, the effect is merely to raise the bar that defines how big a mansion CEOs feel they need.

Free marketeers often warn that higher taxes on top earners would reduce economic growth. But that, too, is a baseless fear. The real threat to the continued vitality of the American economy is the enormous expansion of federal debt we face as the baby boomers enter retirement. The 40 vice presidents in a typical large company would not abandon their quest to become CEO if their tax rates went up a bit. And the resulting revenue would help maintain the public investment and macroeconomic stability necessary to support continued growth in all of our standards of living.

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