Is This Executive Paid too Much?
New Ideas for Reforming Executive Pay
SUBSCRIBE NOW!
Would you like to continue receiving a free copy of Pathways?

Sign up for hard copy delivery or PDF notification at www.inequality.com
Editors’ Note

TRENDS

Little Labor: How Union Decline Is Changing the American Landscape
Unions have been in decline for decades. Jake Rosenfeld details the shocking extent of this decline and its inequality-increasing effects.

RESEARCH IN BRIEF

Christopher Wimer and Samrawit Tessema
The surprisingly beneficial effects of teenage motherhood; an unlikely source for the increasingly positive views of gays and lesbians; the mental health of kids who “shoot for the stars”; and other cutting-edge research.

FEATURE STORIES

Tackling the Managerial Power Problem:
The Key to Improving Executive Compensation
Lucian A. Bebchuk and Jesse M. Fried argue that executive pay exceeds its fair market level and that stockholders can rein it in only if their power is increased.

What’s Right, What’s Wrong, and What’s Fixable:
A Dispassionate Look at Executive Compensation
Alex Edmans and Xavier Gabaix suggest that increasing executive pay mainly reflects the real value of executives. But they also advocate for reforms that would induce executives to attend more to long-term profits and value.

A Remedy Worse than the Disease: Why Higher Taxes are Better than Pay Caps
Robert H. Frank concludes that even if the dramatic increase in pay can be explained by simple market dynamics, it is still corrosive to American society and should be addressed by taxing excessive pay.

INTERVENTIONS

Spotlight On ... Homeboy Industries
Erin Cumberworth talks with Father Gregory Boyle, head of Homeboy Industries, about his much lauded gang intervention program – and its recent troubles. Will this venerable program be another casualty of the recession?

Crisis No More: The Success of Obama’s Stimulus Program
Critics have recently argued that the U.S. stimulus failed to turn back the recession. Gary Burtless lays out what the stimulus has and has not accomplished.

Paying for Good Behavior: Does New York City’s Experiment with Conditional Cash Transfers Offer Lessons for the Safety Net in the United States?
It is unpopular to argue that the poor should be paid to engage in positive behaviors, but Gordon Berlin and James Riccio show how this radical strategy just might be working in New York City.
The growth in executive compensation over the last 30 years has been a particularly visible illustration of the larger takeoff in earnings inequality. During the early stages of that takeoff, these dramatic changes were happening under the radar; indeed, the public was not just unconcerned by the changes but was largely unaware of them. But that's obviously no longer the case. We are in the midst of a historic moment in which public debates about the legitimacy of executive compensation have taken on a new urgency. The main purpose of this issue is to ask how such debates might be deepened by considering the leading scholarly work on offer.

The basic facts of the takeoff are not in dispute. As of 2007, the CEOs of the largest U.S. firms earned about 344 times more than the average worker, a ratio that's nearly eight times larger than what prevailed some 30 years ago. During the deregulative period (i.e., 1980s–2000s), a common view among academics and other commentators was that high CEO pay was not particularly troubling, that it was just a matter of a well-functioning market offering up rewards commensurate with the CEO's ever more consequential decisions. The economic crisis suddenly made such views quaint and naive. As the crisis played out, it became a matter of some controversy that seemingly disastrous CEO decisions were still amply rewarded, and the pendulum has swung back to the view that compensation decisions have been “captured” by the firm's management and thus were corruptly made. However fashionable that critical view now is, it no more bears a free pass than the equally pat formulation that presumes that, whatever CEO pay may be, it perfecrly reflects the work of competitive market forces. We have therefore asked some of the most prominent scholars of executive pay to identify the ways in which pay does and does not reflect the true marginal product of executives.

We have also asked them, insofar as pay is out of line with that true marginal product, what role should public policy play in correcting things? It doesn't take a careful reading of the resulting essays to appreciate that smart and empirically savvy scholars can legitimately disagree on the matter. In our lead piece, Lucian Bebchuk and Jesse Fried describe how directors have strong economic incentives to cater to the interests of executives rather than shareholders, which has resulted in not just excessive pay but also decision making that isn't fully attentive to creating shareholder value. If that's the diagnosis, the appropriate remedy is institutional reform that forces directors to take shareholders into account. In the second essay, Alex Edmans and Xavier Gabaix contend that the main problem isn't that board members have been co-opted, but that managers have incentives to maximize the value of their stock options by pumping up stock prices in the short term. This diagnosis underlies their clever institutional reforms intended, in part, to incentivize managers to take the long-term view. In the concluding essay, Robert Frank rejects all such corporate reform; rather, he argues that current pay levels indeed reflect, on average, the value that executives create. Although he would leave existing pay-setting institutions intact, he nonetheless regards pay levels as socially destructive and suggests that tax policy be deployed to curb runaway growth.

The executive pay controversy hinges fundamentally on whether pay exceeds the value that executives add. And so it should be. In the United States, the commitment to a market economy resides deep in our cultural DNA, and as such, most people are well prepared to accept high compensation—insofar as it's rightly earned. The simple but crucial question taken on in this issue of Pathways is whether this conventional American formula for justifying high pay is indeed on the mark.

―David Grusky & Christopher Wimer, Senior Editors
A recent Wall Street Journal editorial decrying the role of Big Labor in shaping the Obama administration's domestic policy expressed worry that unions' outsized clout would force higher taxes on investment income. Such articles are typical fare for a newspaper long critical of the labor movement's role in American life. But what's strange is the continued use of "Big Labor" as a shorthand moniker for trade unions in the contemporary United States. If organized labor remains big today, then back in its post–World War II peak, it was positively enormous. Fully one-third of the private sector workforce belonged to a labor union during the 1950s, and millions more resided in households reliant on a union wage. During the heyday of collective bargaining in this country, unions helped pattern pay and benefit packages among nonunion workers, as employers matched union contracts to forestall organizing drives and maintain a competitive workforce. Politicians, Democrats especially, depended on organized labor's support during elections and consulted closely with labor leaders when devising policy in office. Big Labor, then, was once quite big indeed.

The only thing that remains big about labor unions today is their problems. Figure 1 tracks unionization rates for private and public sector workers between 1973 and 2009. By the early 1970s, organized labor had already begun its decades-long decline, but still nearly a quarter of all private-sector employees belonged to a labor union at this time. The late 1970s and 1980s proved especially brutal for organized labor, with unionization rates halving during the period. The nation's intellectuals and journalists covered this phenomenon extensively, linking union decline to a new post-industrial economy increasingly open to global trade. Recent trends have garnered less attention, yet private-sector unionization rates nearly halved again between 1990 and 2009. The story for public sector unions has been a bit brighter. Rates of organization among government workers increased steadily during the 1970s, settling at slightly over one-third of all public sector workers, where they have remained relatively consistently up to the present. Three decades of stasis in public-sector organization rates suggests that the earlier expansion may have reached its limit. And over four-fifths of the U.S. workforce is employed in the private sector. Moreover, recent research has demonstrated that the benefits of union membership are much smaller in the public sector, due to the relative transparency and standardization that govern many public-sector contracts. Organized labor, then, is disappearing in the sector where historically it has had the greatest impact on people's livelihoods.

But even less understood than the overall decline in unions' prevalence is the concomitant decline in unions' activity. Academics have long debated whether high levels of unionization are a net good when it comes to global competitiveness or overall economic performance. But fewer dispute that unions have been a historically positive force in bolstering the economic prospects of union members themselves. Unions bolster workers' clout in confrontations with employers, historically winning them higher wages, better benefits, and greater workplace protections than might be offered otherwise. Strikes represent unions' most potent weapon in confrontations with employers, and this weapon used to be a regular feature of America's
industrial landscape, affecting millions of workers each year. But this has changed. Figure 2 below presents two series: the first shows the number of large strikes (involving 1,000 or more workers) over the last 45 years. The number of strikes involving 1,000 or more workers peaked at over 400 in 1974. In 2009, there were five. While the sheer precipitousness of this decline is staggering, we know that strikes of such magnitude are often unrepresentative of more typical work stoppages. But to date, no public data has been available to document strikes of all sizes in recent decades. Because of this, I filed a Freedom of Information Act (FOIA) request to obtain information on all strikes for the years in which data were collected. Figure 2 presents this data, and the trend mirrors what’s been happening with large strikes. As late as the mid-1980s, nearly 1,000 walkouts occurred in a single year. By the dawn of the 21st century, that number had fallen to just over 200, a decline of nearly 80 percent in less than 20 years. What we’ve seen, then, is a rise in what might be called “union dormancy,” whereby unions are no longer routinely agitating on behalf of their membership, at least not in the traditional form of the labor strike.

So what happened to Big Labor? Organized labor’s penetration was especially deep in core manufacturing industries. The transformation to a post-industrial economy hit union workers in these industries hard, as jobs became increasingly vulnerable to outsourcing, deskilling, and technological innovations rendering many positions redundant. The process accelerated throughout the 1970s and 1980s, as traditionally protected industries like auto manufacturing opened up to competition from abroad, pushing domestic manufacturers to search for less labor-friendly jurisdictions. Yet private sector deunionization was not limited to the manufacturing sector; across all major industries with some union presence, membership rates remain lower today than in the past. This is true even in those industries not threatened by cheaper labor overseas, such as transportation and retail. The wave of deregulation that began in the Carter administration opened up some of these sectors to cutthroat competition, pressuring employers to shed expensive contracts and the unions that bargained for them. Partly as a response to deindustrialization and deregulation, there arose a concerted, broad-based effort by employers to shift bargaining power away from labor unions. By the early 1980s, innovative tactics adopted by management and used against organizing drives and existing unions shattered the relative détente between business and labor that had predominated for decades. These sophisticated strategies took full advantage of existing policies governing labor-management relations and proved incredibly effective at pushing back at what employers felt was overreach by unions.

A New Landscape
While the causes of organized labor’s decades-long decline in the private sector are well known, the broad consequences are not. Existing research tends to focus on deunionization’s consequences for the earnings of male, blue-collar workers. But the removal of organized labor from much of the private sector also affects the economic assimilation of recent immigrants and their offspring, widens black-white wage inequality among female workers, redistributes political power, and redefines the nature of strikes in modern America. I touch on each of these consequences below.

The Disappearing Economic Ladder for Hispanic Immigrants
Unionization has always been unevenly spread across demographic groups. The labor movement’s great upsurge between the Great Depression and World War II relied heavily on European immigrants and their children, with many arrivals assuming top leadership posts in the nation’s fastest growing unions. During the labor movement’s peak, unions helped provide a firm economic foundation for these otherwise disadvantaged populations, propelling millions into the middle class. Some have argued that labor’s future is brightening once again, given the influx of Hispanic immigration since the 1960s. That is, if labor can organize recent immigrants, unions might once again reclaim a powerful position in the economic landscape. This optimism is driven by events like the labor movement’s success in organizing largely Hispanic janitors in Southern California, many of them recent immigrants.

But how is organized labor actually interacting with this new wave of immigration? Despite the historical role immigrants played in building the U.S. labor movement, in more recent decades top unions have eyed immigrant workers warily. Many assumed immigrants were largely unorganizable, due to the precarious legal status of some recent arrivals, the lower labor standards immigrants were accustomed to in their home countries, and the resulting worry that employers would use immigrant labor to undercut existing wages and benefits of native-born workers. The “Justice for Janitors” campaign in Southern California helped counter such claims and helped galvanize organizers across the nation, who sought to capitalize on the class-based solidarity exhibited by many Hispanic immigrants. And indeed, certain Hispanic subgroups, including immigrants who have lived in the United States for a number of years and immigrants including...
who are citizens, are joining unions at higher rates than native-born Whites. Figure 3 displays the odds of joining a union over a one-year period for various Hispanic subgroups compared to U.S.-born Whites. Odds ratios above 1 indicate that the Hispanic subgroup is more likely to join a union than a White nonimmigrant. U.S.-born Hispanics have over 40 percent higher odds of joining a union compared to U.S.-born whites, echoing the historical pattern of immigrant groups and their children seeking unionized employment to assimilate upward into the middle class. Hispanic immigrant citizens and Hispanic immigrants who have lived in the United States for many years are also joining unions at higher rates than native-born Whites.

But there are limits to such trends. Despite the highly publicized organizing drives of the “Justice for Janitors” campaign, the percentage of Hispanic janitors in labor unions has actually declined since 1990, as has the fraction of all janitors who claim union membership. Unlike the Southern and Eastern European migrants who once swelled the ranks of the union workforce, recent arrivals face an economic context largely hostile to trade unions. In those remaining parts of the private sector where unions retain active, Hispanics’ and Hispanic subgroups’ relative unionization rates are high, but their overall unionization rates are low—along with nearly everyone else’s. Thus, contemporary immigrants and their offspring enter labor markets that increasingly lack an established unionized pathway to the middle class, a pathway that past immigrant populations relied upon extensively.

The Declining Significance of Unions for Black Females

Aside from limiting mobility for low-skilled immigrant populations, the decline of organized labor exacerbates economic inequality between African Americans and Whites. Unionization rates for African Americans have exceeded those of Hispanics and Whites for decades now. As the labor movement began integrating its ranks, African-American workers, eager to escape discriminatory treatment institutionalized in U.S. labor markets, sought out organized labor as a partial refuge against economic inequity. This is especially true for females. Despite the stereotypical image of the blue-collar male union worker, unionization rates for African-American females rose dramatically during the 1960s and 1970s, with nearly one in four Black women in the private sector belonging to a union by the end of the 1970s. In the heavily industrialized Midwest, rates of unionization for African-American females working in the private sector peaked at 40 percent. Past work by economists John Bound and Richard Freeman has found that union decline widened wage gaps between young Black and White males, especially in the Midwest. But the ramifications of deunionization for racial wage inequality are actually larger for females, given that differences in private sector unionization rates between Black and White females far exceed differences between Black and White males. Indeed, had unionization rates remained at their peak levels, Black–White wage differences among private sector females would be nearly 30 percent smaller than where they stand today.

A Political Force Diminished

As unions vanish from the economic landscape, their presence in the political realm is reduced as well. Historically, the labor movement has channeled and organized the political energies of the working class, helping to counter the robust, positive connection between civic participation and socioeconomic status. Indeed, trade unions have historically stood as one of the few institutions equalizing political participation across income and educational divides. Nowhere was this role more pronounced than in the private sector, where voting rates run comparatively low, especially among those lacking a college education. This is not true in the public sector. The combined effects of unionization and public-sector employment are not simply additive; public-sector employment bolsters political participation, but being in a public-sector union results in only a slight increase in the propensity to vote. Figure 4 presents predicted probabilities of voting for public- and private-sector union members and nonmembers. The difference in voting turnout among public sector members and nonmembers is only 2.5 percentage points. The effect of union membership on voting in the private sector is nearly three times as large.

Today, the number of public sector union members equals the number of private sector union members, marking a dramatic break from when private sector union rolls dwarfed those of government employees. This shift has important political consequences. The already high voter turnout rates—and education levels—among government workers, union and nonunion alike, leave little room for unions to raise turnout in the public sector. Meanwhile, in the private sector, union status remains a significant indicator of whether an individual will vote or not. However, given the reduced fraction of private-sector workers in labor unions, the aggregate effect of unionization on voting turnout is now quite small, and shrinking union rolls reduce the ability of unions to drive up turnout among nonunion citizens.

The consequences of union decline described above largely focus on nonunion workers—those who in the past would have benefited from union membership but who no longer will,
it, labor’s leverage in convincing lawmakers to risk the political consequences of business opposition. The present economic climate further dampens enthusiasm for worker activism, as employees cling to their positions, while millions of others less fortunate scramble to find work.

Organized labor’s signature legislative effort is the Employee Free Choice Act (EFCA). In its most robust form, the proposed legislation would radically recast how union elections are held in the United States, bypassing the traditional election campaign in favor of a “card check” policy whereby a union is recognized after over half of workers sign up in support of collective bargaining. A compromise version of the bill would retain the “secret ballot” election procedure but would reduce election times, grant organizers greater access to employees on the worksite, and institute binding arbitration if a contract has not been agreed upon after a specified period of time. Passage of either version would shift some of the power in organizing drives to labor, although it would not address the broader economic challenges labor faces, such as the continuing decline of manufacturing employment, the pressures of international competition among remaining manufacturing firms, and aggressive competition in many deregulated domestic industries.

There are other institutional changes that, if implemented, might alter the balance of power somewhat. The Obama administration has, for example, floated a proposal to revamp the way the government allocates federal contracts to companies. The proposal would prioritize firms that offer high wages while penalizing those that had committed labor violations, thereby giving an edge to unionized companies and benefiting millions of nonunion workers by providing an incentive to nonunion firms to raise wages and improve treatment of workers. An estimated one in four workers is employed by a company that contracts with the government, so the scale of the regulatory change could be enormous. Importantly, the administration is exploring ways to change regulations through executive order, thus avoiding difficulties in generating a filibuster-proof majority in the Senate.

Any policy effort to help organized labor faces formidable political opposition, although we can’t rule out the possibility that the administration will creatively short-circuit the full legislative process. For many employers, the costs of unionization are substantial, and thus the benefits of continuing inaction are clear. Unions often reduce flexibility in hiring and firing decisions, may slow managers’ abilities to shift resources and capital as soon as opportunities arise, and substantially reduce managerial discretion in setting pay, all the while increasing wage and benefit bills. Strong employer opposition has helped push unionization down to levels unseen since before the Great Depression. Because such declines are self-perpetuating, at this point, it will take decisive legal and institutional action to reverse or even halt the trend—action that, if not taken soon, won’t have much of a constituency behind it any longer. The simple fact: Big Labor cannot get much smaller.

Jake Rosenfeld is Assistant Professor of Sociology at the University of Washington.
The Tolerant Majority

While culture wars continue to rage over gay marriage, over the military’s “Don’t Ask, Don’t Tell” policy, and over adoption by LGBT couples, a quieter sea change is under way in the average American’s perceptions of the LGBT community. The leaders of this change are, perhaps surprisingly, straight men.

According to a new report by Gallup, the percentage of adults stating that gay and lesbian relations are morally acceptable has now crossed the 50 percent mark, the first time that this symbolically freighted divide has been crossed. The growing acceptance of the LGBT community, which has accelerated since 2006, has been driven almost entirely by changes among men and, in particular, men under the age of 50. Although women are in general more tolerant than men, we now find that men are more likely than women to view gay and lesbian relations as morally acceptable. There is also evidence of increasing tolerance of LGBTs among Catholics and political moderates.

What does this mean for the struggles of the LGBT community to achieve equal rights? Because the public is now evenly split on LGBT issues, the short-term expectation is of continuing pitched battles over such matters as gay marriage. But if the momentum for equal rights continues to build, then the currently contentious period may ultimately come to be viewed as something of a last stand for oppositional groups.

---

Motherhood: A Remedy for Female Crime?

The conventional view among Americans is that early pregnancy derails teenage girls and takes them down a difficult and rocky road. In some circles, the teenage mother has become a popular symbol of delinquency and irresponsibility, the classic cautionary tale of a life gone wrong. In the face of these dire warnings of a life in ruin, it’s worth asking the radical, counterintuitive question: Is there any evidence that early pregnancy can in fact serve as a catalyst for positive behaviors?

Indeed it can. According to a recent study by Derek Kreager, Ross Matsueda, and Elena Erosheva, motherhood in fact reduces criminal and delinquent activities among young women who were predisposed to criminal behavior. By following a unique sample of low-income women in Denver over an eleven-year period, Kreager and his colleagues find that women at risk of delinquency and drug use experienced significant declines in these behaviors following the transition to motherhood. How might such a life change occur? There’s a wealth of ethnographic evidence suggesting that new mothers experience a shift in priorities, an increased wariness of taking risks, and a new commitment to refraining from nightlife.

It is no doubt an overly radical view to turn conventional sensibilities on their head and advocate for more teenage pregnancy. Benefit may nonetheless be had by letting teenagers who are already mothers in on a bit of a secret: Namely, that the new road upon which they’ve embarked, while inevitably rocky, can also be a positive one.

---

Temporary Work as a Temporary Fix

For less-skilled workers trying to get a foothold in the labor market, temporary work is sometimes sold as a means of establishing connections with employers, building social networks, and gaining skills that will ultimately lead to permanent employment. But does temporary work actually fulfill this promise in practice?

According to new research by economists David Autor and Susan Houseman, the long-term effect of temporary jobs is not all that it’s advertised to be. Their research, which was based on Detroit’s Work First program, exploited a design feature within that program in which some low-income clients were assigned to contractors who relied on temporary work assignments, while others were assigned to contractors who relied on long-term jobs. The key finding was that temporary jobs failed to improve, and sometimes even hurt, earnings and employment outcomes in the two years following placements. The clients assigned to long-term placements, on the other hand, experienced better employment outcomes in the following years and also higher earnings, approximately $500 more per quarter.

Why do temporary jobs fail to deliver? The main problem appears to be that temporary work leads to unproductive job churning; it leads workers into a short-term market, and it’s difficult for them to then transition into the long-term market. The temporary job is in this sense just a temporary fix.

---


The $100 Safety Net

Is it really a “mancession”? Although the popular press has focused on especially deep job losses among men, there is good reason to be concerned about the effects of the recession on women too, especially Black and Hispanic women. The difficulties that women face become apparent when one goes beyond the usual job and income data and examines wealth data.

According to a new report by Mariko Chang, women of color are too often left holding the short end of the stick when it comes to wealth. If one excludes the value of motor vehicles (which are an illiquid form of wealth), Chang finds that single non-Hispanic White men had a median net worth in 2007 of $43,800, a respectable showing. What about the median net worth of Black and Hispanic women? $100 and $120, respectively. Worse yet, a full 45 percent of women of color held either no wealth or negative wealth in 2007. Although Black and Hispanic men are also deeply disadvantaged (relative to their White male counterparts), their median wealth hovered around $8,000–$9,000 in 2007. And thus they are at least better positioned than Black and Hispanic women to cope with the shocks meted out by the recession.

If deeper job losses among men suggest a “mancession” moniker, Chang’s research provides a useful corrective. Men are better positioned to cope with the adverse consequences of unemployment and income shocks. Women, on the other hand, and especially women of color, occupy a more fragile economic position.


Communities on the Move

In policy circles, there is a growing philosophical divide between (1) practitioners who favor family-level interventions oriented toward improving the situation of families in poverty and (2) practitioners who favor community-level interventions oriented toward improving conditions within high-poverty communities. The Earned Income Tax Credit (EITC), which supplements the earnings of low-wage workers, may be understood as a classic example of a family-level intervention. By contrast, the Harlem Children’s Zone is the signature community-level intervention, proceeding as it does by blanketing a high-poverty community with resources intended to assist its residents.

In evaluating the community-level approach, one naturally cares whether residents of the targeted communities frequently move out of those communities because such high-frequency movers may not fully profit from place-based investments. But just how prevalent is residential mobility in low-income communities? With support from the Annie E. Casey Foundation, researchers at the Urban Institute sought to take on this question by following residents over three years as they moved in and out of ten communities across the country. The striking finding: Nearly half the residents in the ten poverty-stricken communities moved out of the target neighborhoods within three years. The study also showed that when a neighborhood did improve or decline, this was often the result of mobility processes that simply changed the mix of poor and nonpoor residents. The communities that showed improvement, for example, often secured such gains not by furthering the fortunes of their stable residents but by successfully retaining or bringing in more well-off families.

These results suggest that place-based initiatives should be attentive not just to the stayers but also to the movers. The increasingly popular place-based initiatives may prove to be yet more successful if they can find ways to hold onto residents or, failing that, find ways to assist the many out-migrants before they leave.


Should We Shoot for the Stars?

It’s no easy task for youth to succeed these days. If a high school student wants to get into college, let alone a prestigious college, lore has it that she or he must now demonstrate leadership potential, participate intensively in extracurricular activities, become involved in the community, take a rigorous course load, and deliver excellent grades to boot. The expectations that youth now face are arguably at an all-time high. What happens, then, to the vast swaths of youth being told to “reach for the stars” but who then fall short? Does falling short lead to stress, despair, and related mental health problems?

John R. Reynolds and Chardie L. Baird provide fresh evidence on this question. Using data from the National Longitudinal Survey of Youth and the National Longitudinal Study of Adolescent Health, they show that unmet expectations are indeed associated with stress and a higher risk of depression in adults. But they further find that such stress is not caused by the gap between expectations and achievement. The stressor is instead the actual low attainment. That is, most students show a tendency toward “adaptive resilience,” whereby they drop unrealistic goals in favor of more attainable ones.

The story is accordingly simple: We’re stressed when we don’t do well. Although pushing all kids to “shoot for the stars” may be unrealistic, the good news is that at least it doesn’t cause any extra mental health problems by virtue of generating unmet expectations.

Executive pay continues to attract much attention from investors, financial economists, regulators, the media, and the public at large. The dominant paradigm for economists’ study of executive compensation has long been that pay arrangements are the product of arm’s-length bargaining—bargaining between executives attempting to get the best possible deal for themselves and boards seeking only to serve shareholder interests. According to this “official story,” directors can be counted on to act as guardians of shareholders’ interests. This assumption has also been the basis for corporate rules governing compensation in publicly traded firms.
But the actual pay-setting process has deviated far from this arm's-length model. Managerial power and influence have played a key role in shaping the amount and structure of executive compensation. Directors have had various economic incentives to support, or at least go along with, arrangements favorable to the company's top executives. Collegiality, team spirit, a natural desire to avoid conflict within the board, and sometimes friendship and loyalty have also pulled board members in that direction. Although many directors own shares in their firms, their financial incentives to avoid arrangements favorable to executives have been too weak to induce them to take the personally costly, or at the very least unpleasant, route of haggling with their CEOs.

The inability or unwillingness of directors to bargain at arm's length has enabled executives to obtain pay that is higher and more decoupled from performance than would be expected under arm's-length bargaining. Indeed, there is a substantial body of evidence indicating that pay has been higher, or less sensitive to performance, when executives have more power over directors. Executives have less power over directors when shareholders are larger or more sophisticated and thus can more easily exert influence over the board. Not surprisingly, executive pay is lower and better tied to performance when there is a large outside shareholder or a greater concentration of institutional owners. Conversely, executive pay increases significantly after the adoption of anti-takeover provisions that give managers more power. Executive pay is also higher when the compensation committee chair has been appointed under the current CEO and may feel some obligation or gratitude toward that CEO.

One of the main constraints on executives' ability to extract even more value from boards is fear of shareholder outrage. Boards thus aggressively “camouflage” the amount and performance-insensitivity of executive pay in an attempt to reduce such outrage. Before 1992, for example, firms were required to disclose executive pay but were not told how they had to disclose it. Many firms thus chose to provide shareholders with long, dense narratives in which any dollar amounts were spelled out rather than expressed in numbers. A shareholder would need to spend a considerable amount of time just to find the dollar amounts, and there was generally not enough information provided to accurately add up the executive's total compensation. In 1992, the SEC required firms to disclose most compensation elements in a standardized, easy-to-read “Summary Compensation Table.” Firms responded to the new disclosure requirements by coming up with pay arrangements, such as Supplemental Executive Retirement Plans (SERPs), that did not have to be reported in the table. In 2006, the SEC revised disclosure requirements to better capture the value of such “stealth compensation.” But history has shown that compensation designers will try to develop other schemes to deliver pay to executives under shareholders' radar screens.

The desire to camouflage executive pay can explain the widespread practice of backdating executives' option grants, which came to light a few years ago. Most firms grant options to executives that are at-the-money: the exercise price is set to the grant-date stock price. The executive profits to the extent that the sale-date stock price exceeds the exercise price. It turns out that thousands of firms covertly backdated option grants to dates when the stock price was lower. This backdating secretly lowered the exercise price on executives' stock options and boosted the value of their option grants. Backdating also enabled firms to report lower compensation for executives than they actually received.

The existing flaws in compensation arrangements impose substantial costs on shareholders. First, there is the excess pay that managers receive as a result of their power—that is, the difference between what managers' influence enables them to obtain and what they would get under arm's-length contracting. The excess amounts paid to executives come directly at shareholders' expense, and these amounts are not mere pocket change. Second, and perhaps more important, executives' influence leads to compensation arrangements that dilute and distort executives' incentives. In particular, the decoupling of pay from performance reduces executives' incentives to make value-creating decisions and may even lead them to take steps that generate short-term gains at the expense of long-term shareholder value. In our view, the reduction in shareholder value caused by these inefficiencies—rather than that caused by excessive managerial pay—could well be the biggest cost arising from managerial influence over compensation.

The Need for Shareholder-Serving Directors

The problems of executive compensation arrangements are rooted in boards' failure to bargain at arm's length with executives. Greater transparency, improved board procedures, additional shareholder approval requirements, and a better understand-
ing by shareholders of the desirability of various compensation arrangements can all help improve the situation. But these remedies cannot substitute completely for effective decision making by directors striving to serve shareholder interests.

The problems of executive compensation would be best addressed by improving directors’ incentives. We need to turn the “official story” of executive compensation and board governance—which portrays directors as faithfully serving shareholders’ interests—from fiction into reality.

Directors who safeguard shareholder interests are needed not only to address executive compensation problems but also to tackle the myriad corporate governance problems that would continue to arise even if compensation arrangements were optimized. For example, having such directors is essential for our ability to rely on boards to prevent managers from engaging in empire building or from impeding acquisition offers that would benefit shareholders. The foundation of our board-monitoring system of corporate governance is the existence of directors who select, supervise, and compensate executives with shareholders’ interests in mind. Shareholders’ ability to rely on such directors is, so to speak, the Archimedean point on which this system stands. The critical question, then, is how to make directors more focused on shareholder interests.

**The Limits of Director Independence**

The main way that the corporate governance system has responded to perceived governance problems over the years is by trying to bolster board independence. Reforms have sought to make nominally independent directors more independent and expand the presence and role of such independent directors on the board. Strengthened director independence is now widely believed to be key to the effectiveness of the board-monitoring model. Attributing past governance problems to insufficient director independence, many believe that strengthened independence will prevent such governance problems in the future.

We agree that director independence is likely to be beneficial. But director independence cannot by itself ensure that boards properly carry out their critical role. Rules governing director independence cannot deliver nearly as much as their enthusiastic supporters claim.

A fundamental limitation of independence requirements is that they fail to provide affirmative incentives for directors to enhance shareholder value. These requirements merely reduce, and do not fully eliminate, directors’ incentives and inclinations to favor executives. Thus, any residual tendency among directors to favor executives may still have a substantial impact in the absence of any countervailing incentives to enhance shareholder value. What we need, then, is to provide directors with affirmative incentives to focus on shareholder interests.

**Invigorating Corporate Elections**

In our view, the most effective way to improve board performance is to increase the power of shareholders vis-à-vis directors. We should make directors not only more independent from executives but also less independent from shareholders. The appointment of directors should substantially depend on shareholders, not only in theory but in practice. Such dependence would give directors better incentives to serve shareholder interests.

Making directors dependent on shareholders could counter some of the factors that incline directors to pursue their own interests or those of executives rather than those of shareholders. Such dependence could make the desire for re-election a positive force rather than a negative one. It could also provide directors with an incentive to develop reputations for serving shareholders. And lastly, it could help instill in directors a sense of loyalty toward shareholders, especially if institutional investors take an active role in putting directors on boards.

For all of these reasons, we support the removal of barriers that have historically insulated directors from shareholders. Because of shareholders’ collective action problems, increasing shareholder power vis-à-vis directors would hardly be a perfect solution. But movement in this direction has substantial potential for improving the incentives and performance of boards.

Shareholders’ power to replace directors plays a critical role in the corporation. Although this power is not supposed to be used routinely, it should provide a critical fail-safe. “If the shareholders are displeased with the action of their elected representatives,” emphasized the Delaware Supreme Court in its well-known opinion in the case of Unocal Corp. v. Mesa Petroleum Co., “the powers of corporate democracy are at their disposal to turn the board out.”

In reality, however, this safety valve is weak. Attempts by shareholders to replace incumbents with a team that would do a better job—the kind of action referred to in the Unocal opinion above—face considerable impediments. To make directors more focused on shareholder interests, it would be desirable to reduce these impediments.

To begin, shareholders should get access to the corporate ballot. Under existing rules, only incumbents’ nominees are placed on the corporate ballot, and outside challengers have to bear the costs of distributing and collecting proxies supporting challengers’ nominees. When a significant group of shareholders wishes to run a candidate, this candidate should simply be placed on the corporate ballot.

Beyond providing shareholders with easier access to the corporate ballot, additional measures to strengthen electoral threats
should be adopted. Under existing rules of corporate law, incumbents’ “campaign” costs are fully covered by the company—providing them with a great advantage over outside candidates, who must pay their own way. To lower the financial barrier for challengers, companies should be required to reimburse reasonable costs incurred by such nominees when they garner sufficient support in the ultimate vote.

Such reimbursement arrangements could be opposed, of course, on grounds that they would be costly to shareholders. But an improved corporate elections process would be in the interests of both companies and shareholders. The proposed measures would not expend corporate resources on nominees whose initial support and chances of winning are negligible; the limited amounts expended on serious challenges would be a small and worthwhile price to pay for an improved system of corporate governance.

Incumbent directors are currently protected from removal not only by the substantial cost to challengers of putting forward a competing slate, but also by staggered boards. In a staggered board, only one-third of the members come up for election each year. As a result, no matter how dissatisfied shareholders are, they must prevail in two annual elections in order to replace a majority of the incumbents and take control away from current management. A substantial fraction of public companies have such an arrangement.

The entrenching effect of staggered boards is costly to shareholders. Companies with a charter-based staggered board have a significantly lower value than other companies, controlling for relevant differences. Legal reforms that would require or encourage firms to have all directors stand for election together could thus contribute significantly to shareholder wealth.

Another way to reduce directors’ ability to ignore shareholder interests is to remove the board’s veto power over changes to the company’s basic governance arrangements. These arrangements are set forth either in the rules of the state in which the company is incorporated or in the company’s charter. Under longstanding corporate law, only the board—not a group of shareholders, however large—can initiate and bring to a shareholder vote a proposal to change the state of incorporation or to amend the corporate charter.

Federal securities laws give shareholders the power to express their sentiments in precatory shareholder resolutions, but these resolutions are nonbinding. In recent years, shareholders of companies with staggered boards have increasingly initiated proposals recommending annual election of all directors. However, boards often choose to ignore these proposals, even when they attract a majority of the shareholder vote.

Directors’ control over the corporate agenda is often justified on grounds that the U.S. corporation is a completely “representative democracy,” in which shareholders can act only through their representatives, the directors. In theory, if shareholders could easily replace directors, that power would be sufficient to induce directors not to stray from shareholders’ wishes on major corporate issues.

As we have seen, however, the removal of directors is rather difficult under existing arrangements. It would be far from easy even under a reformed system of corporate elections. Furthermore, shareholders may be pleased with management’s general performance but still wish to put in place governance arrangements that restrict management’s power or discretion in certain ways. Shareholders should be able to make a change in governance arrangements without concurrently having to replace the board.

The absence of shareholder power to initiate and approve changes in firms’ basic corporate governance arrangements has, over time, tilted these arrangements excessively in management’s favor. As new issues and circumstances have arisen, firms have tended to adopt charter amendments that address these changes efficiently only when the amendments were favored by management. Additionally, states seeking to attract incorporating and reincorporating firms have had incentives to give substantial weight to management preferences, even at the expense of shareholder interests.

Giving shareholders the power to initiate and approve a proposal to reincorporate or to adopt a charter amendment could produce, in one bold stroke, a substantial improvement in the quality of corporate governance. Shareholder power to change governance arrangements would reduce the need for intervention from outside the firm by regulators, exchanges, or legislators.

Indeed, if shareholders had the power to set the ground rules of corporate governance, they could use it to address some of the problems we have discussed above. Shareholders could establish rules that dismantle staggered boards or invigorate director elections. Shareholders could also adopt charter amendments that improve the process by which executive pay is set or place whatever limits they deem desirable on pay arrangements.

Executive pay problems reflect underlying flaws in corporate governance. To fix these problems, the structure of corporate governance arrangements must be reformed. The power of the board and the weakness of shareholders are often viewed as an inevitable corollary of the modern corporation’s widely dispersed ownership. But this weakness is partly due to the legal rules that insulate management from shareholder intervention. Changing these rules would reduce the extent to which boards can stray from shareholder interests and would much improve corporate governance—including flawed executive pay arrangements.

Lucian A. Bebchuk is the William J. Friedman and Alicia Townsend Friedman Professor of Law, Economics, and Finance and Director of the Program on Corporate Governance at Harvard University. Jesse M. Fried is Professor of Law at Harvard University and the former Co-Director of the Berkeley Center for Law, Business, and the Economy at the University of California Berkeley. Some of the points discussed here are elaborated in their 2004 book, Pay Without Performance: The Unfulfilled Promise of Executive Compensation, published by Harvard University Press.
EXECUTIVE COMPENSATION HAS SUDDENLY BECOME a high-profile topic about which almost everyone has an opinion. Many shareholders, workers, and politicians believe that the entire system is broken and requires a substantial overhaul. The purpose of this piece is to take a hard look at the facts and assess whether the situation is as bad as some people fear. It also proposes the “Incentive Account” as a new way to improve contracts, which, compared to current proposals, may be a superior solution for any problems that do exist.
In theory, pay should be designed by boards to maximize value on behalf of shareholders, that is, to attract talented CEOs and induce them to exert effort, while minimizing the cost of doing so. However, many real-world practices appear inconsistent with the idea that contracts are set efficiently. For example, many CEOs are richly paid, even if their performance has been poor, and many receive a significant amount of compensation that is hidden from shareholders. As a result, a number of commentators, such as Lucian Bebchuk and Jesse Fried in this issue, argue that because pay is instead set by CEOs themselves—who seek to maximize their personal wealth rather than shareholder value (“stealing,” or “rent extraction”)—government intervention is necessary to reform compensation.

But intervention can do more harm than good if the current system is not broken. Thus, before engaging in reform, it is important to critically assess the above claims. Empirically, are the above practices widespread across the economy, or are they restricted to a few high-profile anecdotal examples? Theoretically, can these practices (even if they are widespread) actually be consistent with efficient contracting? In particular, while simple models may be unable to justify them, it may be that more realistic frameworks that incorporate real-life complexities of the CEO’s job can explain the facts.

This is the purpose of this essay. We first argue that many existing practices—the level, sensitivity, and structure of pay—are generally consistent with efficiency. But we highlight two main areas for improvement: the short horizon of incentives and the need for incentives to keep pace with a firm’s changing conditions. We propose a solution, Incentive Accounts, to address these issues. Moreover, our solution does not require a marked departure from the current building blocks of cash and stock, and it can be implemented at little cost.

The Level of Pay

Trends in the level of pay are perhaps the most commonly cited statistics in support of the stealing view. For example, the 25th best-paid U.S. CEO earned $9 million in 2008. This is substantially higher than in other countries and represents a sixfold increase since 1980. The level of CEO pay and its rise over time, however, can be justified by the competition for managerial talent becoming fiercer in recent years. As an analogy, take the baseball industry. Derek Jeter is probably a similar talent to Babe Ruth, but he earns substantially more, even when controlling for inflation. This is because the stakes in the baseball industry are much higher now than they were in the 1920s. Successful clubs can make millions from TV rights, replica merchandise, and sponsorship, so it is well worth offering lucrative contracts to attract the best players. The same is true in the corporate arena. Average firm size has also experienced a sixfold increase since 1980, which raises the stakes in the CEO talent market. Even if the best CEO only adds 1 percent more value than the second-best CEO, in a $10 billion firm, this translates into a $100 million difference. This “superstar” effect means it is worth paying top dollar for great talent.

The Sensitivity of Pay

Of course, it is not sufficient to simply attract talented managers; it is also necessary to motivate them. This underpins the controversy surrounding the apparently low sensitivity of CEO wealth to performance. An early study by Michael Jensen and Kevin Murphy found that the CEO loses only $3.25 for every $1,000 decline in firm value, an effective equity stake of only 0.3 percent. It also found that this sensitivity was even lower in larger firms, perhaps because governance is particularly weak in these firms, allowing managers to negotiate contracts that do not punish them for poor performance.

However, it is not clear that the above statistics are focusing on the relevant measures. Consider the CEO of GM, who is deciding whether to work an extra week to design a more efficient way to organize auto production or to take a week’s vacation. This CEO will weigh the effect of restructuring on the firm’s value against the lost holiday. Thus, measuring incentives by the dollar change in wealth for a dollar change in firm value (“dollar-dollar” incentives) only makes sense if the CEO’s actions improve firm value by a fixed dollar amount regardless of how big the firm is, and the holiday is worth a fixed dollar amount to him—for instance, it is worth $10,000 to him regardless of how wealthy he is.

This assumption is misleading because most CEO actions can be “rolled out” across the entire firm and thus have a percentage, rather than dollar, effect on firm value. A more efficient production technique can be implemented firm-wide, and thus has a greater effect on a larger firm. For example, if the technique reduces costs by 1 percent, and total production costs are $1 billion, the total savings are $10 million. In an equivalent firm twice the size, the savings are $20 million. In addition, a CEO’s actions have a percentage effect on his utility—a week’s holiday is particularly valuable to CEOs who are rich and thus can enjoy their wealth during it. Thus, the relevant measure of incentives is “percent-percent” incentives—the percentage change in CEO wealth for a percentage firm. In turn, dollar-dollar incentives equal percent-percent incentives multiplied by the CEO’s wage and divided by firm size. This identity can reconcile both of the above facts. First, since firm size is substantially larger than the CEO’s wage, low dollar-dollar incentives can translate into high percent-percent incentives. Simply put, even if the CEO earns only $1,25 for increasing firm value by $1,000, he may still have incentives to exert effort—because it can increase firm value by a large dollar amount. If redesigning production has only a 1 percent effect on firm value, in a $10 billion firm this translates into $100 million. Thus, even if the CEO only has a 0.3 percent stake, this nets him $325,000, which is likely a sufficient incentive. Second, since effort has an even greater dollar effect in a large firm, the required equity stake is even smaller in large firms. The simple conclusion: The pay-performance relationship can remain strong and properly incentivize good behavior even when the CEO has a small stake.

While CEOs are believed to be insufficiently punished for the poor performance of their own firms, which is likely under their responsibility, an additional concern is that they are rewarded...
for general market upswings outside their responsibility, that is, paid for luck. The idea here is that windfall compensation sometimes accrues to CEOs whose firms are doing well simply because the market is going up and raising the value of most every firm. This outcome has motivated some scholars to advocate “relative performance evaluation,” or the filtering out of movements in the broader market, or the company’s industry, that are outside the manager’s control.

There are three main reasons why such “filtering out” may be counterproductive. First, if the CEO’s outside opportunities are more attractive in market upswings, an increase in pay will still be necessary to persuade him to stay with the firm. Second, tying the CEO to industry performance induces him to choose which industries to operate in correctly. Third, calculations have shown that the quantitative efficiency gains from moving to relative performance evaluation from indexing the CEO are very small—in particular because insuring the CEO against market risk can reduce his effort incentives. Taken together, these three considerations suggest that “relative performance evaluation” may entail correcting for a problem that does not exist and thus generate inefficiencies rather than efficiencies.1

The Structure of Pay
We now turn from the level and sensitivity of compensation to the structure of pay packages. Particularly since the 1990s, options have become increasingly popular as compared to stock. One interpretation of the rise of options is that this constitutes another form of stealing, since most options did not have to be reported in income statements until 2006. As Bebchuk and Fried argue, they could thus be partially hidden from shareholders, in turn allowing the manager to pay himself more. Indeed, in a standard model in which the CEO chooses effort, stocks are more efficient than options at motivating the manager. But richer models are able to justify the high prevalence of options. For example, options are efficient if the CEO values downside protection or improving firm value requires undertaking desirable, but risky projects (such as investing in a new drug). Since the CEO can simply choose not to exercise his options if the stock price falls sharply, giving options rather than stock reduces his downside risk and in turn encourages him to undertake risky, valuable projects.2

Like options, defined benefit pensions and deferred compensation were largely hidden from shareholders until recent changes in disclosure requirements, and thus these forms of pay may also be viewed as stealing. Indeed, many standard models advocate the exclusive use of equity-like compensation such as stocks and options. However, the advantage of pensions and deferred compensation is that they are debt-like. If the firm goes bankrupt, the CEO loses them. Thus, they deter the CEO from taking actions to harm debtholders, such as paying excessive dividends or taking risky projects that do not add value. This in turn reduces the return demanded by creditors, which ultimately helps shareholders.

Finally, another controversial aspect of executive contracts is severance pay, which appears to reward managers for failure and is difficult to reconcile with standard models. However, as with options, severance pay can be reconciled with richer frameworks that better capture the complexity of the CEO’s job. For example, severance pay can encourage a CEO to step down if a more able replacement is available. In addition, insuring the CEO against bad luck may induce him to undertake more innovative strategies.3

Incentive Accounts: A Proposal for Compensation Reform
Our review of existing theory and evidence therefore suggests that, in general, the level and sensitivity of pay, as well as the components of compensation contracts, are not necessarily inconsistent with optimal contracting. However, we do not claim that all existing practices are fully efficient. Indeed, we see two main problems with current compensation schemes. First, stock and options typically have short vesting periods, allowing executives to “cash out” early. For example, Angelo Mozilo, the former CEO of Countrywide Financial, made $129 million from stock sales in the 12 months prior to the start of the subprime crisis. This encourages managers to pump up the short-term stock price at the expense of long-run value, since they can sell their holdings before a decline occurs. Managers can also take on excessive risks, such as making subprime loans and cashing out before they become delinquent. In addition to inducing undesirable short-term actions, short vesting periods can also deter desirable long-term actions, such as investing in R&D or human capital, because they are costly in the interim and only pay off in the long run. This is particularly a problem in the modern economy, in which intangible investment is increasingly critical to success. Long-term incentives must be provided for the manager to maximize long-term value, which we call the “long-horizon principle.”

Second, current schemes often fail to keep pace with a firm’s changing conditions. If a company encounters difficulties and its stock price plummets, an executive’s stock options become close to worthless and lose much of their incentive effect—precisely at the time when managerial effort is particularly critical. This problem may still exist even if the executive has all stock and no options in his compensation scheme. Consider a CEO who is paid $4 million in cash and $6 million in stock. If the share price halves, the CEO’s stock is now worth $3 million. Exerting effort to improve firm value by 1 percent is now only worth $30,000 rather than $60,000 to him and therefore may provide insufficient motivation. To maintain incentives, the CEO must be forced to hold more shares if firm value falls. As stated earlier, our research has shown that, to motivate a manager, a given percentage increase in firm value (say by 10 percent) must generate a sufficiently high percentage increase in pay (say by 6 percent). In the above example, this is achieved by ensuring that, at all times, 60 percent of the manager’s pay is in stock. We call this the “constant percentage principle.” The appropriate proportion will vary across firms, depending on their industry and life cycle, but we estimate 60 percent as a ballpark number for the average firm.

These two principles can be achieved by giving the executive a scheme we call an Incentive Account, which we are developing together with Tomasz Sadzik and Yuliy Sannikov. The Incentive
Account contains two critical features: rebalancing to address the constant percentage principle and gradual vesting to satisfy the long-horizon principle. Each year, the manager’s annual pay is put into a portfolio, to which he has no immediate access. In the above example, 60 percent of the portfolio is invested in the firm’s stock and the remainder in cash. As time passes and firm value changes, this portfolio is rebalanced quarterly so that 60 percent of the account remains invested in stock at all times. In the above example, after the stock price decline, the Incentive Account is now worth $7 million ($4 million cash and $3 million of stock), requiring the CEO to hold $4.2 million of equity. This is achieved by using $1.2 million of cash to buy stock. This satisfies the “constant percentage principle” and maintains the manager’s incentives, even if firm value falls. Importantly, the additional stock is accompanied by a reduction in cash; it is not given for free. This addresses a major concern with the repricing of stock options after firm value falls—the CEO is rewarded for failure.

Each month, a fixed fraction of the Incentive Account vests and is paid to the executive. Even when the manager leaves, he does not receive the entire value of the account immediately. Instead, it continues to vest gradually; full vesting will occur only after several years. By then, the long-run consequences of any actions will have come to the fore and affected the stock price, and in turn, the account’s value. Because the manager will have significant wealth tied to the firm even after departure, he has fewer incentives to manipulate earnings in the short-term.

The Incentive Account shares some features with schemes currently seen in practice but improves upon them significantly. Performance-based vesting, in which stock and options only vest when the stock price rises above a certain threshold, is an increasingly popular way to ensure that the CEO can only vest when the stock price rises above a certain threshold, currently seen in practice but improves upon them significantly. The Incentive Account itself, however, includes a few key advantages.

First, it addresses the problem of short-term actions. If performance is poor, the next period the CEO’s salary is paid exclusively in restricted stock; upon strong performance, it is paid exclusively in deferred cash.

We recognize that gradual vesting is not without cost. Compared to short-term vesting, it imposes some risk on the manager, and he may require a higher salary as compensation. For example, if the CEO is not allowed to sell stock for five years, the CEO is exposed to events that may occur in the next five years that are out of his control—for example, if the government introduces new regulation which reduces industry profitability. However, if the board wishes to reduce his exposure to risk, this can be done by indexation; the Incentive Account is a basic framework that can be enhanced by additional features, such as benchmarking to industry peers (although, as argued above, the desirability of relative performance evaluation is unclear). Moreover, the benefits of a high-powered incentive scheme are much greater than its costs. Even if an optimal contract induces the CEO to increase firm value by only an additional 5 percent, this is $500 million when applied to a $10 billion firm, which vastly exceeds any required compensation for risk. Similar to investing in a risk management system, the Incentive Account may have a small cost but will pay off in better incentives and better risk-taking. In any case, for a given vesting period and target incentive level, we calculate that Incentive Accounts are always less costly than stock options or restricted stock.

While this discussion has centered around top management, the Incentive Account may also be applicable to employees with significant profit impact (e.g., traders) and deter problems similar to those that afflicted AIG. While a lower-level trader may not have a significant effect on an entire firm’s stock price, he will have much greater control over the profit and loss of his desk, and so the stock in the account could be replaced by a bonus tied to that profit or loss.

We should also highlight that Incentive Accounts need not be imposed by regulators (although if regulators do wish to make prescriptions, Incentive Accounts are worth considering). Even in the absence of regulation, shareholders typically have sufficient incentives to implement any new scheme that is appropriate for their specific firm. Instead, we advocate that regulation should remove distortions, particularly in the tax and accounting systems, that would favor some forms of compensation over others. (The recent requirements for stock option expensing are a positive development in this light.) By removing such distortions, it will allow compensation schemes to compete on a level playing field, and the best should win the market test.

Alex Edmans is Assistant Professor of Finance at the Wharton School, University of Pennsylvania. Xavier Gabaix is the Martin J. Gruber Professor of Finance at the Stern School of Business, New York University.

1 These three justifications were introduced by Paul Oyer; Radhakrishnan Gopalan, Todd Milbourn, and Fenghua Song; and Ingolf Dittmann, Ernst Maug, and Oliver Spalt, respectively.

2 Each of these studies of stock versus option compensation was written by (a subset of) Ingolf Dittmann, Ernst Maug, Oliver Spalt, and Ko-Chia Yu.

3 Andres Almazan and Javier Suarez, and Roman Inderst and Holger Mueller have separate models justifying severance pay to encourage the CEO to step aside. Gustavo Manso models the effect on innovation.
Increases in executive compensation in recent decades have been spectacular. CEOs of the largest U.S. companies, for example, earned 42 times as much as the average worker as recently as 1980, but by 2001, they were earning more than 500 times as much.

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
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 “winner-take-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 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 reference 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 sur-
prised 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.

Robert H. Frank is the Henrietta Johnson Louis Professor of Management and Professor of Economics at Cornell University. He is also a monthly contributor to the “Economic Scene” column in The New York Times.
SPOTLIGHT ON...

Homeboy Industries

BY ERIN CUMBERWORTH

In mid-May of this year, Homeboy Industries, one of the most publicized gang intervention programs in the United States, announced that it was in financial trouble. A Los Angeles nonprofit that hires former gang members, Homeboy Industries found itself $5 million in debt and was forced to lay off 300 employees, including its entire senior staff. Among those left without a paycheck was the Reverend Greg Boyle, a Jesuit priest who founded the program in 1988 and has led it ever since. Many employees promised Father Boyle they would keep working without pay, eager to help the organization that had helped them, and for now, many of Homeboy’s services will continue to operate with volunteer labor. But that arrangement cannot go on indefinitely.

When we decided to feature Homeboy Industries in Pathways, we were unaware of the organization’s financial crisis. We were drawn to Homeboy for the same reason so many others have been drawn to it: its relentless focus on jobs and job training as a way out of the gang lifestyle. Because Homeboy recognizes that former gang members are not always welcomed into the regular labor force, the innovative tack they have taken is to build their own Homeboy labor market based on a number of successful businesses. The oldest of the businesses is Homeboy Bakery, where seasoned bakers teach trainees to make bread, cookies, cakes, and more. Next door to the bakery is Homegirl Café, staffed by female former gang members, which serves fresh organic vegetables from its own garden. Homeboy Merchandise sells clothing, backpacks, and other products bearing the Homeboy and Homegirl logos. The largest business is Homeboy Silkscreen & Embroidery, where hundreds of employees have produced custom items for church groups, schools, and other clients. In addition to its small businesses, Homeboy offers a variety of other services to its clients, including a charter high school, free tattoo removal, and a training program for installing solar panels. According to Father Boyle, this latter program has a long waiting list because it’s one of only a handful of its kind in California.

Until recently, Homeboy seemed to be thriving. According

A Homegirl Café employee wears the Homeboy Industries philosophy.
to data cited by Father Boyle, the small businesses are self-sufficient, and all together, the program has worked with over 12,000 gang members since its inception. Elements of Homeboy’s programs have been replicated in places as far away as Denmark and Uruguay, and the organization has regularly attracted attention from national media like the *New York Times* and National Public Radio.

So what went wrong? We had a chance to speak to Father Boyle recently about the source of the crisis, and he pointed to the recession and the recent, poorly timed expansion of Homeboy’s services. Because the number of clients using Homeboy’s services had been steadily growing, a decision was made to move its headquarters to a new building, and this decision, coupled with a significant decline in private donations, led to the layoffs.

This decline in giving is of course part of a larger recession-induced trend. In a recent analysis of charitable giving during the recession, the Stanford Center for the Study of Poverty and Inequality showed that, for the country as a whole, total charitable donations have fallen sharply. Although many direct-relief organizations, like food banks and shelters, have overcome the larger trend and continue to be supported at high levels, that may be because these organizations are seen as catering to the “deserving” poor. In other words, we continue to give to food banks because we regard them as serving people who, through no fault of their own, are suffering from a faltering economy. But Homeboy’s clientele tends to end up on the wrong side of this division in the public mind between the deserving and undeserving. In a recent interview with the *Los Angeles Times*, Father Boyle conjectured, “If these were puppies or little kids, we wouldn’t be in this trouble. But they’re tattooed gang members with records.”

If Homeboy Industries does not survive, Los Angeles will essentially default to a very different approach to addressing gang violence. Although the city has a generous budget for gang intervention programs, most of that budget has been directed toward programs that try to broker peace between competing gangs. The problem with relying only on this approach, Father Boyle suggests, is that it doesn’t address the main reason why gangs exist and can successfully recruit. We will always have gangs as long as gang members are unable to get jobs and forge meaningful lives outside of them. As Father Boyle puts it, gang violence is not about men trying to kill one another, but about men trying to die. “There is an absence of hope,” he explains, and he insists that addressing that hopelessness is the only way to effectively reduce gang violence in the long term.

Erin Cumberworth is a doctoral candidate in sociology at Stanford University.
No one should confuse the recent recession with the Great Depression, however. Two key features of that depression made it “Great”—its severity and its duration. Between 1929 and 1933, real GDP in the United States fell almost 27 percent. U.S. GDP did not return to its 1929 level until 1936. Real personal consumption declined more than 18 percent. In 1933, about one out of every four Americans in the labor force was jobless. The National Bureau of Economic Research (NBER), which is in the business of dating recessions, estimates that after reaching a cyclical peak in August 1929, the U.S. economy shrank for the next 43 months, by far the longest period of uninterrupted economic decline in the twentieth century. In the 10 downturns since World War II, excluding the most recent one, the average recession lasted just 10 months. Even the longest post-war recessions, in 1973–1975 and 1981–1982, lasted only 16 months.

As of this writing, NBER has dated the onset of the recession (December 2007) but has not yet determined its end date. The recession will not last 43 months, however. The economy began to grow again in the summer of 2009, and the unemployment rate started to decline late in the same year, less than 24 months after the recession began. Real GDP probably fell less than 5 percent from its previous peak. The number of private payroll jobs began to increase in the first quarter of 2010. The peak unemployment rate will almost certainly be less than 10.5 percent, far below the peak unemployment rate attained in the 1930s and somewhat below the peak unemployment rate hit during the 1981–1982 recession.

The tea leaves are clear: The Great Recession will not be a second Great Depression. And, as I argue below, President Obama’s stimulus package, though imperfect, deserves a great deal of credit for bringing us back to the positive trajectory we’re on today. Any reasonable grader of the stimulus’s effects on driving recovery and combat-
ing joblessness would give the stimulus at least a B+. In the pages that follow, I first outline the size and contours of the government’s response to the recession, paying specific attention to how this response does and does not differ from government policy in recessions past. I distinguish between standard and nonstandard responses, that is, policies typical of those in other post-war recessions and those that are unusual. Then I consider the success of the policies and the public’s surprisingly hostile reaction to them. Voters’ sour views on the stimulus make it unlikely Congress will extend or expand the program, even if the economy takes a turn for the worse.

The Scope of the Response

Last year, in fiscal year 2009, the federal government pumped stimulus amounting to about 1.25 percent of national income into the economy. This year, the stimulus package will inject about twice that amount (see Figure 1). The stimulus dollars are targeted toward four main objectives: (1) protecting the incomes and health insurance of newly laid-off workers and other economically vulnerable populations; (2) providing immediate stimulus to consumer spending by raising after-tax household income through temporary tax reductions and increases in some transfers; (3) offering temporary fiscal relief to state and local governments in order to reduce their need to boost taxes or reduce spending in the recession; and (4) providing direct federal support for infrastructure investments and research and development projects in health, science, and efficient energy production. Figure 1 combines spending on the first two items into a single category, direct income assistance and services. In the first two years of the stimulus program, spending on this category represents by far the largest component of the federal response. Understanding the composition of the response is key to understanding how the stimulus succeeded in pushing the economy toward recovery. As I argue below, the stimulus packages enacted in 2008 and 2009 contained both standard and nonstandard responses as compared to prior recessions. Understanding the scope and mix of the packages points us to a broader understanding of how and why the government response was crucial for heading off a much deeper crisis.
Standard Responses
It is not unusual for the government to accelerate spending on public infrastructure projects during a recession. Congress also often provides temporary tax cuts to stimulate consumption and business investment when the economy is weak. It did so again in this recession. In fact, the tax cuts in the American Recovery and Reinvestment Act (ARRA), mostly for households, account for about 45 percent of total stimulus spending in 2009 and 2010. In addition, Congress nearly always offers extensions of unemployment benefits when joblessness is high. It did so in this recession too.

The most important protection American workers receive when they are laid off is unemployment insurance (UI). Newly laid-off workers are typically eligible for up to six months of UI benefits after they lose their jobs. By the standards of other industrial countries, the six-month limit on benefits is rather short. Of the 21 richest industrial countries, 15 provide jobless benefits that last a year or more. Unemployed workers in these countries receive much better social protection if their unemployment lasts a long time. Unemployment protection lasts longer in the United States when the jobless rate soars. When a state’s unemployment rate rises above a certain threshold, workers in that state are supposed to receive additional weeks of benefits, with the number of extra weeks linked to the increase in the state’s unemployment rate.

In every recession since the late 1950s, Congress has enacted a federally funded extension of UI benefits. The extension in 1975–1977 was particularly generous, providing the unemployed with benefits that could last up to 65 weeks. Congress provided somewhat less generous special benefit extensions in more recent recessions. The benefit extension provided in the 2009 ARRA was far more generous than that offered in any previous U.S. recession. By the fall of 2009, laid-off workers in high-unemployment states were eligible for federally funded benefit extensions that could last up to 73 weeks, providing them with a total of up to 99 weeks of benefits after a layoff. In 2009, Congress also funded an increase in unemployment benefits equal to $25 per week, or about 8 percent of the previous average benefit amount. In sum, the 2008 and 2009 stimulus packages greatly expanded the income protection available to the unemployed, both in comparison to the protection ordinarily available in a recession and in relation to the protection offered in other industrial countries. The generosity of U.S. benefits is still far less than it is in some other rich countries, but at least in this recession we are closer to the Organisation for Economic Co-operation and Development’s (OECD) average.

Nonstandard Responses
In addition to these traditional actions, the Obama administration and Congress also took a number of more unusual steps to lessen the adverse effects of the recession. One of the most surprising was the provision of generous federal subsidies to help unemployed workers pay for health insurance. This subsidy, which was originally limited to nine months per worker, covers 65 percent of the cost to laid-off workers of continuing their coverage under their former employer’s health insurance plan.

Most working Americans who are not poor receive health insurance through an employer or the employer of another wage earner in the family. Employers typically pay for most of the premium cost of the insurance. When workers are laid off they ordinarily lose the employer subsidy. The total, unsubsidized cost of health insurance is notoriously high, around $5,000 a year for single workers and $13,000 for workers with a spouse and one or more child dependents. These premiums are 10 percent and 32 percent, respectively, of the average year-round wage of American workers. Not surprisingly, comparatively few workers can afford to pay the full cost of these premiums after they are laid off. The result is that many laid-off workers lose their health insurance when they lose their jobs. In no previous recession were laid-off workers offered a generous public subsidy to pay for an extension of their private health coverage.

Two other aspects of the 2009 stimulus package were exceptional. First the ARRA provided unusually generous fiscal relief to state governments. Second, it offered large, though temporary, incentives for states and young adults to invest in education and training.

By my estimate a little more than one-fifth of the 2009 stimulus package, or a total of $175 billion, will be devoted to providing fiscal relief to state governments. This relief is provided in a variety of forms. Some federal grants were authorized to help pay for local law enforcement, for example. Nearly $30 billion was authorized to fund aid for particular aspects of state and local education. Most of this was targeted at education for the economically disadvantaged and for children who have learning or other disabilities. Since state educational spending is fungible, however, it is likely that the extra federal funds earmarked for one educational purpose can be reallocated to other educational...
functions at the discretion of state and local policymakers.

Congress created two temporary programs to provide general fiscal relief to the states. One gives almost $50 billion to be divided among the states “in order to minimize and avoid reductions in education and other essential services.” In exchange for the grants, state governments must show they are making unspecified progress in a number of broad areas. All 50 states have submitted applications for these funds, and the applications will receive nearly automatic approval from federal officials.

A second form of fiscal relief was provided through a temporary change in the funding formula for Medicaid, the federal–state public health insurance program for low-income Americans. Medicaid is administered by state governments, but most of its costs are financed with large federal grants. The fraction of costs paid by the federal government is determined by a formula that links a state’s federal reimbursement rate to the state’s per capita income. States with high average incomes ordinarily get 50 percent of their Medicaid program costs reimbursed, while states with low average incomes receive a higher federal subsidy rate. Medicaid is one of the most costly government programs. In 2007, benefit payments under the program represented 2.8 percent of GDP. This means the federal government’s Medicaid grants to state governments are a major source of state revenues. By changing the funding formula, the federal government can dramatically raise or lower total state revenues. The 2009 stimulus package temporarily changed the matching formula to make it much more favorable to states. The CBO estimates that the cost of the temporary formula change to the U.S. Treasury will be $50 billion spread over three years.

All of the temporary measures just described provide immediate relief to state governments. Unlike the federal government, which can borrow unlimited funds to pay for its operations, state governments must generally cover the cost of their operations with current tax revenues, fees, or grants from the federal government. Because states were given generous fiscal relief, state legislatures did not have to cut spending or increase taxes as much as would have been necessary in the absence of federal aid.

Federal fiscal relief to the states is particularly important for education and for maintaining social protection to the poor. In the United States, education is primarily the responsibility of state and local governments. The federal government typically pays for only about 10 percent to 12 percent of the total cost of public primary and secondary schools. State and local governments pay for the rest. Since balanced budget rules make state and local budgets pro-cyclical, state legislatures face pressure to reduce school budgets during recessions. The federal government pays for most of the cost of social safety net programs for the poor, but state governments still pay for a substantial share of these costs. Equally important, state governments are responsible for administering some of the biggest programs targeted toward the poor, including Medicaid and Temporary Assistance for Needy Families (TANF). State governments make the rules that help determine who is eligible for benefits, and they set the level of many benefits. Even though they do not pay for the full cost of the programs, when a recession occurs, many states are tempted to curtail eligibility or cut benefits. This is the opposite policy from the one urged by most economists, who think it is important for benefits to be maintained or even improved in a recession. Thus, the federal government’s unconventional policy of temporarily easing states’ strained budgets almost certainly prevented a weakening of the state and local social safety net.

**A Success or a Failure?**

Before 2009, state fiscal relief and temporary incentives for human capital investment rarely, if ever, played a big role in federal stimulus programs. As a result, we have little evidence to predict the short-term impact of these measures on government and household consumption. Based on evidence of state spending patterns and post-secondary educational investments in the current recession, we will learn more about the counter-cyclical effectiveness of these two kinds of policies. One encouraging sign is that payroll employment in state and local government and in education has not been badly hurt by the recession. In spite of the sharp decline in state and local tax revenues, governments have been able to maintain their pre-recession employment levels. It may be that state and local employees’ annual wages and benefit costs have been trimmed, because many governments have forced their workers to accept unpaid furloughs. However, the payroll employment statistics provide little evidence of a massive cutback in the number of state and local employees.

Anecdotal evidence suggests the federal government’s efforts to support education and human capital investment have probably succeeded. Many public and private post-secondary institutions report strong demand for places in their entering classes. Profit-making training institutions also report surging demand. If the recession has made post-secondary education and training unaffordable...
Another tangible sign of a payoff from the ARRA stimulus is the continued strength in consumer spending. The severity of the recession caused private incomes to plunge. The solid dark line in Figure 2 shows the trend in real private income—labor compensation, self-employment income, interest, dividends, and other capital income—between 2007 and February 2010. Private income began to fall in the fourth quarter of 2007, fell sharply immediately after the worst of the financial crisis in late 2008, and did not stabilize until the summer of 2009. After June 2009, Americans’ private incomes were more than 6 percent below their pre-recession level.

The broken line in Figure 2 shows the trend in real personal disposable income—that is, private income plus government transfers minus personal tax payments. Federal government programs and stimulus dollars cushioned the massive blow to private family incomes. Disposable income fell less than 1 percent after the start of the recession, a stunning fact too often ignored given the severity and length of the current downturn. Reduced federal taxes and increased government benefit payments, partly funded out of the stimulus package, have kept Americans’ spendable incomes from falling as fast as their private incomes. Household consumption fell in the recession, in spite of the massive swing in taxes and public transfers, but it only fell modestly. Americans were made cautious in their spending because of the drop in their personal wealth and fear of losing their jobs. But government benefits helped boost the spending of the unemployed, and lower taxes helped insulate middle class families from some of the effect of the drop in wealth. By the beginning of 2010, personal consumption spending was close to its pre-recession level.

Could the administration and Congress have done better? The 2009 stimulus package should almost certainly have been larger. The administration’s own forecast implied that the gap between actual and potential national output was big enough to justify a bigger package than the one Congress adopted. The political reality, however, is that opposition to stimulus spending by conservatives in the Senate precluded a larger package. In fact, Congress passed a smaller stimulus than the one the president asked for. In retrospect, the package should also have included a much bigger allocation for new government capital spending—on roads, mass transit, public buildings, and environmental capital projects. This investment would directly provide jobs to workers in construction and capital goods manufacturing, industries hard hit by the recession. The objection to this kind of spending is that the money often funds questionable projects and is spent with too great a lag to do much good. These objections carry more weight when a recession is short and when petty political considerations play a big role in deciding which projects deserve funding. In this recession, the job market downturn is likely to last a long time, so even delayed capital spending is likely to do some good. The administration and Congress should have been able to fund capital projects based on their economic merits rather than influence peddling.

Even though the government’s anti-recession policies have been reasonably successful, the public regards them with deep skepticism. A CNN poll in mid-January showed that about three-quarters of Americans believe that half or more of the stimulus spending has been wasted. Forty-five percent think “most” or “nearly all” of the stimulus dollars have been wasted. This harsh verdict is unjustified, but it affects the political climate in Washington. Congress is unlikely to pass a major expansion of the stimulus, even if the economy sinks and joblessness rebounds.

The recession has been severe. Unemployment has risen more steeply than in any other post-war recession. Two administrations and Congress put into place a number of counter-cyclical policies that have prevented the recession from metastasizing into a depression. As I have argued above, there are many indications that these policies have been successful in achieving their intended goals. Unfortunately for the policymakers who supported the policies, “It could have been much worse” is seldom a winning slogan in a political campaign.

Gary Burtless is Senior Fellow in Economic Studies at the Brookings Institution.
Intervention

It is hard to design public policies that are durable in good times and in bad. Since the social safety net was first conceived in the United States as a response to the Great Depression, policymakers have attempted to balance two competing goals: reducing poverty while limiting dependence on public handouts. Just as it would have been difficult to foresee the booming 1960s from the depths of the 1930s, few predicted today’s severe downturn during the roaring 1990s. Then, with economic cycles seemingly in check and unemployment at historic lows, the nation moved to tie the social safety net more closely to work—by greatly expanding the Earned Income Tax Credit and placing time limits and strict work requirements on the cash welfare system, Temporary Assistance for Needy Families (TANF). In the grip of the Great Recession’s aftermath, the wisdom of building a safety net around work alone is in question.

But what might work better? Can we strike a better balance between protecting vulnerable families in the short run without exacerbating the intergenerational transfer of poverty? Can we maintain a focus on work without impoverishing families in periods when work is scarce?

In March, MDRC released early evaluation results from Opportunity NYC-Family Rewards, New York City’s bold (and controversial) demonstration and evaluation of a conditional cash transfer (CCT) program to help families break the cycle of poverty. Family Rewards offers cash payments to poor families to reduce immediate hardship and poverty but conditions this assistance on families’ efforts to improve children’s school performance, family preventive health care, and parents’ work and training—in the hope of reducing poverty over the longer term. Thus, the evaluation seeks to answer two basic questions: (a) does the program quickly increase families’ resources and improve the conditions in which children are raised, without causing any substantial reduction in parents’ work efforts—an unintended consequence that income transfer programs risk—and (b) does it support families as they invest in education, preventive health care, and work, which can help them exit poverty sooner and reduce the chances of their children being

Paying for Good Behavior

Does New York City’s Experiment with Conditional Cash Transfers Offer Lessons for the Safety Net in the United States?

BY GORDON BERLIN AND JAMES RICCIO
poor as adults? Although it is much too soon for a final judgment (the study will continue through 2014), the MDRC report assesses early progress against these twin goals.

The initial findings show that Family Rewards substantially reduced current poverty and material hardship and had a range of modest positive results in improving some education, health-related, and work-related outcomes. Yet, the press coverage was largely and perhaps not surprisingly negative, given that the initiative has provoked criticism from both the left and the right. At the risk of oversimplifying, the right argues that “it’s wrong to pay people for what they should already be doing” and the left says “it’s demeaning to assume that poor people aren’t doing the right thing and wrong to make them jump through hoops for money.”

What both sides seem to ignore is that the United States (with the support of both Democrats and Republicans) has already made the majority of its safety net conditioned on the work effort of beneficiaries. Are there lessons from New York City’s CCT experiment that might speak to the inadequacies of a predominantly work-based safety net? Before addressing this question, let us outline what Opportunity NYC-Family Rewards is—and what MDRC’s evaluation has found so far.

**What Is Opportunity NYC-Family Rewards?**
Opportunity NYC—Family Rewards was launched by Mayor Michael Bloomberg and New York City’s Center for Economic Opportunity in 2007 as an experimental, privately funded program to help families in six of the city’s highest poverty communities break the cycle of intergenerational poverty. Inspired by Mexico’s pioneering Oportunidades program, CCT programs have grown rapidly across lower- and middle-income countries, and evaluations have found some important successes. Family Rewards is the first comprehensive CCT program in a developed country and, as such, has been the focus of much attention domestically and internationally.

An incentives-only program (with no social services or case management component), Family Rewards is coordinated by a private, nonprofit intermediary organization, Seedco, in partnership with six community-based organizations. It is being evaluated by MDRC, which helped design the initiative, through a randomized control trial.

The program includes an extensive set of rewards, most of which are available for three years, with the following conditions:

- **Education-focused conditions**, which include meeting goals for children’s attendance in school, achievement levels on standardized tests, and other school progress markers, as well as parents’ engagement with their children’s education.

- **Health-focused conditions**, which include maintaining health insurance coverage for parents and their children, as well as obtaining age-appropriate preventive medical and dental checkups for each family member.

- **Workforce-focused conditions**, aimed at parents, which include sustaining full-time work and completing approved education or job training activities.

Overall, the program offered 22 different incentives during its first two years, ranging in value from $20 to $600. Recognizing that poverty’s causes would differ between developing and developed countries, the program designers purposely chose to test a wide variety of rewards, including academic achievement and parent’s work, education, and training, activities that were not rewarded in Mexico or most other developing countries. The objective was to see where incentives would—and would not—work. By rewarding a wide range of activities, the program also gave families many different ways in which to earn money, and it was able to avoid attaching overly large amounts of money to any one activity or outcome. Based on assessments of the program’s early operational experiences, including the complexity of administering so many different rewards, along with preliminary impact evidence, a number of rewards were discontinued for the third year. This was done to simplify the program, lower its costs, better align it with need, and make it easier to replicate should it prove to be successful.

**How Well Was the Program Implemented?**
Overall, the rapidly launched program was successfully implemented after a first year in which operational kinks were being worked out. Families were substantially engaged with the program, earning reward payments of more than $3,000 per year, on average, during each of the first two years. Nearly all families (98 percent) earned at least some rewards in both program years (mostly in the education and health domains), and 65 percent earned payments in every period in which rewards were available.

**How Was the Evaluation Conducted?**
The evaluation uses a randomized control trial involving approximately 4,800 families and 11,000 children, half of whom can receive the cash incentives if they meet the required conditions, and half who have been assigned to a control group that cannot receive the incentives. The period covered in the report, beginning in September 2007 and ending in August 2009, encompasses a start-up phase as well as a stage when the program was beginning to mature. The report presents early findings on the program’s effects on a wide range of outcome measures. For some measures, the results cover only the first program year, while for others they also cover part or all of the second year. No data are available yet on the third year. The evaluation findings are based on analyses of a wide variety of administrative records data, responses to a survey of parents that was administered about eighteen months after random assignment, and qualitative in-depth interviews with program staff and families.

**What Were the Program’s Early Effects on Reducing Material Hardship and Poverty?**
The effects on reducing poverty and material hardships and on other economic outcomes were substantial (see Figure 1). Family Rewards:
Reduced the share of families living in poverty by 11 percentage points and cut “severe poverty” (defined as having income less than 50 percent of the federal poverty level) by nearly half, reducing it from 30 percent of the control group to 17 percent among the program group.

Reduced measures of material hardship, including difficulty providing enough food for one’s family (by 7 percentage points) and not being able to “make ends meet” (8 percentage points).

Increased the likelihood that parents had bank accounts by 22 percentage points, increased their savings, and reduced their use of alternative banking institutions, such as check cashers, by 7 percentage points.

Increased the percent of parents who paid their children an allowance, the amount they paid, and share who required children to earn the allowance by completing an activity.

**What Were the Program’s Effects on Children’s Education?**

Overall, Family Rewards has had no effect so far on elementary and middle school students’ attendance or achievement. (The absence of effects on attendance was not surprising given the high rates of school attendance, averaging about 90 percent, among younger students.) However, a survey of parents indicates that Family Rewards increased the likelihood that middle school students became involved in school-related activities, such as programs to help with schoolwork or homework, school clubs, school musical programs, and dance or art lessons. In addition, parents of elementary school students were somewhat more likely to help their children with homework and to enroll them in an afterschool program that helps with homework.

Among high school students overall, Family Rewards increased the proportion of high school students with a 95 percent attendance rate by 5 percentage points—but has had no overall effect on student achievement. However, among the subgroup of incoming ninth-graders who scored “proficient” in eighth grade—that is, the students who met minimum academic standards necessary to perform high school level work and thus could take advantage of the performance incentives (although many still struggle in high school)—there were positive impacts:

- Reduced the proportion of students who repeated the ninth grade by 6 percentage points.
- Increased the likelihood of having a 95 percent or better attendance rate (in year 2) by 15 percentage points.
- Increased the likelihood of earning at least 22 credits (11 credits per year are needed to remain on track for on-time graduation) by 8 percentage points.
- Increase the likelihood of passing at least two Regents exams (New York’s statewide achievement exams) by 6 percentage points.

**What Were the Program’s Effects on Parents’ Work and Training?**

Family Rewards’ early impacts on employment outcomes are mixed. The findings point to gains in the likelihood of full-time employment and average earnings but not in jobs covered by the unemployment insurance (UI) system. According to an 18-month survey of parents, the program increased the likelihood of working at the time of the interview by 6 percentage points, driven by an increase in full-time work. At the same time, the program also led to a small reduction in average quarterly employment rates (by 1.4 percentage points) in UI-covered jobs over a 12-month follow-up period, according to administrative records data. However, the effect on average annual earnings from such jobs (a decline of $286) was not statistically significant.

Some jobs are not covered by the state’s UI system, such as self-employment, federal government employment, and

---

![Figure 1: Effects on economic well-being](image-url)

**What Were the Program’s Effects on Family Preventive Health Care?**

The health-related incentives of the Family Rewards program were designed to encourage low-income families to maintain insurance coverage and to adopt better preventive health care practices. It turned out that a higher proportion of families than the program’s designers had expected were already receiving health insurance coverage and practicing preventive health care. This finding may reflect the success of efforts by New York State and New York City to expand access to health coverage in recent years. Although the high rates of insurance coverage left little room for improvement on this outcome, the analysis found that Family Rewards still had small, positive impacts on a variety of health-related indicators (which are often difficult to move):

- Increased families’ consistency of health insurance coverage (by 2–3 percentage points).
- Reduced reliance on hospital emergency rooms for routine care (by 2 percentage points) and increased receipt of preventive medical care.
- Increased receipt of at least two preventive dental care visits by 10 percentage points.
out-of-state work. The UI system also misses informal (casual or irregular) jobs that are never reported to state agencies. It is not clear why the effects of the program would vary across types of employment. Perhaps for some parents, non-UI jobs were easier to get in a period when the economic downturn was accelerating, particularly those that offered the full-time hours necessary to qualify for the program’s work rewards. Such jobs may also have been more attractive options if they were more conveniently located, easier to obtain, or offered more flexible schedules than UI-covered jobs.

With regard to incentives for training, Family Rewards had a small but statistically significant impact (of 2 to 3 percentage points) on increasing the likelihood of receiving a training certificate or associate’s degree.

Longer-term follow-up will be important for assessing how the program’s marketing of the workforce rewards, which was intensified in years two and three, coupled with the trough of the labor market at that time, affect these results. Still, it is noteworthy that, despite transferring substantial amounts of cash to families, the program has not led to any appreciable reduction in work effort.

What Are the Implications of These Early Results for the American Safety Net?

Evaluations in other nations have convincingly shown that CCT programs can reduce poverty and improve the consumption of goods and services (for example, food consumption) among very poor families—but these results were seen in countries with undeveloped or nonexistent safety net systems. These CCT programs have also had some positive effects on human capital development outcomes, including school attendance, nutrition, and infant growth. In school attendance, the magnitude of Family Rewards’ effects is roughly comparable to what has been found in evaluations of CCTs in other countries. In other areas, for example, school achievement (as measured by standardized tests) and parents’ work, education, and training, Family Rewards is among the first to have found any effects.

The initial results from the New York City project show that CCTs can make an immediate difference in the lives of poor families in a developed country by increasing family income by 23 percent on average. Nearly all families were able to qualify for at least some rewards, mostly in the education and health domains—meaning that, even in a depressed labor market, poor families could make non-work efforts that would bring needed income. This income reduced measures of economic hardship as well, which are notoriously hard to move. It is important to emphasize that these effects on poverty did not lead to major unintended consequences, such as substantial reductions in work effort.

While many families were rewarded for efforts they would likely have undertaken without the program, Family Rewards did have modest effects on behavioral outcomes in each domain, suggesting that an income-transfer program with achievable conditions attached can provide a modest boost in positive behaviors. It’s too early to say whether these effects will be sustained or grow or whether they are worth the cost—questions that will be answered as MDRC follows these families for another year in this three-year program and then two more years after it ends this summer.

In the meantime, the nation is looking for ways to strike a better balance between fighting dependence and fighting poverty in its safety net programs, to meet short-term needs while investing in better long-term outcomes, and to do so in a way that is more responsive to economic downturns and poor labor markets. Early lessons from Opportunity NYC-Family Rewards suggest that cash transfers with reasonable conditions attached can be a feasible and effective way to boost the income of poor families, raising some out of poverty, while maintaining the ethos of reciprocity and responsibility that is valued by American society (and certainly its elected representatives). But if policymakers are interested solely in CCTs as an inducement to change behaviors thought to be at the heart of long-term and intergenerational poverty, the early effects in this area will have to grow over time to be truly cost-effective. Longer-term results at the three- and five-year points due in 2011 and 2013 will provide those answers.

Gordon Berlin is President of MDRC, a nonprofit, nonpartisan education and social policy research firm located in New York City and Oakland, California. James Riccio is Director of MDRC’s Low-Wage Workers and Communities Policy Area and Research Director for the evaluation of Opportunity NYC-Family Rewards.

---

1 These funders include Bloomberg Philanthropies, The Rockefeller Foundation, The Starr Foundation, the Open Society Institute, the Robin Hood Foundation, the Tiger Foundation, The Annie E. Casey Foundation, American International Group, the John D. and Catherine T. MacArthur Foundation, and New York Community Trust.

2 Regents exams are administered to all public high school students in New York State. Students must pass at least five tests in specified subject areas in order to graduate with a diploma recognized by the New York State Board of Regents, which sets standards and regulations for all public schools.

3 The impact evaluation tests the program’s effects on a large number of outcome variables, raising the risk that, with so many estimates produced, some will appear statistically significant simply by chance. However, positive effects take on more credibility when there are many of them, and when they are part of a broader pattern of results, as is the case in the findings that are emphasized here. For example, the positive effects on more-proficient high school students held across a range of outcome measures. Equally important, the lack of education effects for elementary and middle school students and for less-proficient high school students held across most of the outcomes examined for those groups. Furthermore, in each of the behavioral domains examined, many of the positive effects were on activities or accomplishments for which incentives were offered, such as insurance coverage and dental visits in the health domain, high attendance and passing Regents tests in the educational domain, and full-time employment in the work domain. In other words, the effects highlighted by the study were not simply a random assortment of positive impacts.