**Incentives and the Performance of America's Financial Sector**

House Committee on Financial Services

Hearing on Compensation in the Financial Industry

Testimony by Joseph E. Stiglitz[1]

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It is both a source of pleasure and sadness to testify before you today—I welcome this opportunity to testify on this important subject, but at the same time, it is a source of sadness that you should have to hold hearings on this matter, more than two years after the onset of the Great Recession of 2008.

In this brief testimony, I can only touch on a few key points. Many of these points I elaborate in my book *Freefall*,[2] which was published just a few days ago.

Our financial system failed to perform the key roles that it is supposed to perform for our society: managing risk and allocating capital. A good financial system performs these functions at low transaction costs. Our financial system created risk and mismanaged capital, all the while generating huge transaction costs, as the sector garnered some 40% of all of corporate profits in the years before the crisis.

The sector is also responsible for running the payments mechanism, without which our economy cannot function. But so badly did it manage risk and misallocate capital that our payments mechanism was in danger of collapse. So deceptive were the systems of creative accounting that the banks had employed that, as the crisis evolved, they didn't even know their own balance sheets, and so they knew that they couldn't know that of any other bank. No wonder then that no bank could trust another, and no one could trust our banks. No wonder then that our system of credit—the lifeblood on which the economy depends—froze. We may congratulate ourselves that we have managed to pull back from the brink, but we should not forget that it was the financial sector that brought us to the brink of disaster.

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[2] Published by W.W. Norton, 2010.

I should qualify these remarks, and much of what I shall say later, by a general caveat: parts of our financial system have done an excellent job. Later, when I write disapprovingly about the financial sector's mistakes, its misallocation of resources, its mismanagement of risk, and its predatory activities, I should emphasize that there were other parts of the financial sector that did what they were supposed to do and even tried to put a check on the misbehavior of others. America's venture-capital firms help provide finance to some of America's innovative firms and play an important role in the economy's long-term success. But these firms are a small part of the financial industry. Money that went into housing that buyers could not afford could have been used to finance new investment that would have increased the long-run productivity of our economy. Resources are scarce, and our financial sector misallocated these scarce resources on a massive scale. The crisis has reportedly forced venture-capital firms to cut back investment; these dynamic parts of America's economy will be forced to pay a high price for others' mistakes.

While the failures of the financial system that led the economy to the brink of ruin are, by now, obvious, the failings of our financial system are more pervasive. Small- and medium-sized enterprises found it difficult to get credit, even as the financial system was pushing credit on poor people beyond their ability to repay. Modern technology allows for the creation of an efficient, low-cost electronic payment mechanism; but businesses pay 1 to 2 per cent or more in fees for a transaction that should cost pennies or less.

Our financial markets not only mismanaged risk—and created products that increased the risk faced by others—but they also failed to create financial products that would help ordinary Americans face the important risks that they confronted, such as the risks of home ownership or the risks of inflation. Indeed, I am in total agreement with Paul Volcker—it is hard to find evidence of any real growth associated with the so-called innovations of our financial system, though it is easy to see the link between those innovations and the disaster that confronted our economy.

Underlying all of these failures is a simple point, which seems to have been forgotten: *financial markets are a means to an end, not an end in themselves*. If they allocate capital and manage risk well, then the economy prospers, and it is appropriate that they should garner for themselves some fraction of the resulting increases in productivity. But it is clear that pay was not connected with *social* returns—or even long-run profitability of the sector. For many financial institutions, losses after the crisis were greater than the cumulative profits in the four years preceding the crisis; from a longer-term perspective, profits were negative. Yet the executives walked off with ample rewards, sometimes in the millions. Most galling for many Americans was the fact that even when profits were negative, many financial institutions proposed paying large bonuses.

We should remember this is not the first time that our banks have been bailed out, saved from bearing the consequences of their bad lending. While this is only the second major bailout in twenty years in the US, past responses to financial crises abroad – in Mexico, Brazil, Russia, Indonesia, Thailand, Argentina, and many others – were really bailouts of American and European banks, at the expense of taxpayers in these countries, engineered through the bankers' allies at the IMF and the US Treasury. In each of these instances, the banks had made bad lending decisions, lending beyond the ability or willingness of borrowers to repay.

Market economies work to produce growth and efficiency, but only when private rewards and social returns are aligned. Unfortunately, in the financial sector, both individual and institutional incentives were misaligned. The consequences of the failures of the financial system were not borne just by those in the sector but by homeowners, retirees, workers, and taxpayers, and not just in this country but also around the world. The "externalities," as economists refer to these impacts on others, were massive. There were huge private profits in the short run, in the years before the crisis, offset by the even larger losses during the crisis. But the banks and the bankers reaped the benefits of the former without paying proportionately for the costs of the latter. Alan Greenspan, in his famous *mea culpa*, explained his misguided confidence in self-regulation—he had assumed that bankers would do a better job in managing risk, in doing what was in their own interests. Even this diagnosis was flawed: he was right about the failure to manage risk, but it was not so obvious that what they did was not in their own interests. But all of this misses the real reason for regulation. If I gamble in Las Vegas and lose, only I (and my family) suffer. But in America's casino capitalism, when the banks gambled and lost, the entire nation paid the price. We need regulation because of these externalities.

So far, I have made four key points:

1. Banks have consistently failed to fulfill their basic societal mission.
2. Banks have repeatedly been bailed out from bearing the consequences of their flawed lending.
3. Incentives within the financial system are distorted at both the individual and institutional level—at both levels private rewards and social returns are misaligned.
4. The financial sector has imposed large costs on the rest of society—the presence of externalities is one of the reasons why the sector needs to be regulated.

In previous testimony[3], I have explained what kinds of regulations are required to reduce the risk of adverse externalities. I have also explained the danger of excessive risk taking and how that can be curtailed. I have explained the dangers posed by under-regulated derivative markets (including credit default swaps). I regret to say that so far, more than a year after the crisis peaked, too little has been done on either account.

[3] Testimony at hearing on "The Future of Financial Services Regulation" House Financial Services Committee, October 21, 2008.

*Incentives and Executive Compensation*

I want to focus my remaining time on the issue of incentives and executive compensation. There are also key issues in organizational incentives, especially those that arise from institutions that are too big to fail, too big to be resolved, or too intertwined to fail. Again, I have previously testified on this critical issue[4], and again, I regret that it appears that little if anything is likely to be done about these institutions. Too much attention has been focused on how to deal with the consequences of a failure of these institutions; what is required is prevention: preventing financial institutions from becoming too big to fail or too intertwined to fail.

The one thing that economists agree upon is that incentives matter, and even a casual look at the conventional incentive structures—with payment focused on short-run performance and managers not bearing the full downside consequences of their mistakes—suggested that they would lead to short-sighted behavior and excessive risk taking. And so they did. Leverage ratios in excess of 30 to 1 meant that even a 4% decline in asset prices would wipe out an institution's net worth, and with even smaller declines a bank would fail to meet basic standards of capital adequacy. To put this in perspective: average housing prices have fallen from their peak by nearly 30%.

In some ways, the "apparent" incentive structures were worse than this, because compensation typically increased with stock prices, which provided incentives for management to provide distorted information that would result in higher stock prices. The banks excelled at this, moving risks off balance sheet, with consequences that I have already described. Markets can only work well when there is good information, and the banks' incentive structures encouraged the provision of distorted and misleading information.

Moreover, management was rewarded for higher returns, whether those returns were produced merely by increasing risk (higher beta, in the parlance of finance) or by truly outperforming the market (higher alpha). Anyone can do the former; the latter is almost impossible. Again, no wonder that all the financial wizards took the easier route—and it was this excessive risk taking that helped bring capitalism to the brink.

These problems in incentive pay have long been recognized. Unless appropriate care is paid to the quality of what is produced, those who are paid on the basis of the quantity produced will put more effort into quantity than quality. And that is what happened in finance; with fees based, for instance, on the amount of mortgages written, there was little attention paid to the quality of the mortgages—and not surprisingly, quality deteriorated markedly, especially with securitization.

[4] Joint Economic Committee hearing on "Too Big to Fail or Too Big to Save? Examining the Systemic Threats of Large Financial Institutions," April 21, 2009.

Opportunities for "product deterioration" are especially large in the financial sector, since the risks associated with, say, poorer mortgages (mortgages with a higher probability of default) won't be evident until years after the fees are earned. The financial sector has been particularly creative in finding accounting frameworks that increase apparent profits in the short run—with losses revealed only later. While some of the accounting practices may have gone outside the law, there are still ample opportunities within the law.

There is an ongoing dispute: was it poor models (which predicted that events such as those that occurred in 2007-2008 would occur less often than once in the lifetime of the universe), poor risk management, or the off-balance-sheet shenanigans that nearly brought down our banking system and with it the global economy? None of these possibilities puts a positive light on our bankers. But incentives played a key role in each of these interpretations. They had an incentive to engage in excessive risk taking, they had an incentive to engage in deceptive accounting, and they had an incentive to use—and seemingly believe—models that allowed them to undertake excessive risk. They had an incentive not to enquire too deeply into the assumptions used in those models. And they had an incentive not to think too deeply about how their incentive structures distorted, and continue to distort, behavior. And while they continue to emphasize the importance of incentive pay, they have been slow to acknowledge the failings in the incentive structures and to look for alternatives.[5]

Things might have been worse were it not for the fact that much of the so-called incentive (performance) pay was a mere charade: pay was high when performance was good, but as the country saw in 2008 and 2009, pay was also high when performance was poor. Only the name of the pay changed, e.g. from "incentive" bonus to "retention" bonus. Studies in other downturns have shown the same pattern. [6]

Indeed, had our bankers been serious about designing an efficient *performance-incentive* system, it would have been markedly different, with pay related to relative performance, not to the vagaries of the overall economy and the stock market.

While the financial sectors' failure to perform its essential functions, all the while garnering high profits, casts a poor light on the sector, their predatory lending and deceptive credit card practices cast an even darker shadow. They have used all their political muscle resisting curbing these practices. The irony is that the bankers were hoisted on their own petard—it was the subprime mortgages, irresponsible

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[5] There have been some efforts to make more of the compensation based on long-term performance, but little effort to separate out performance which is related to "better alpha" rather than "beta" or to outcomes that are the consequences of general market factors and outcomes that are the consequences of managers' contributions. (Systems based on *relative* performance can be shown to be far better than those currently in fashion. See, e.g. B. Nalebuff and J. E. Stiglitz, 1983, "Prizes and Incentives: Towards a General Theory of Compensation and Competition." *Bell Journal of Economics*, 14(1): 21–43.)

[6] See, for instance, J. E. Stiglitz, *Roaring Nineties,* New York: W.W. Norton, 2003.

loans made to uninformed individuals beyond their ability to pay, designed to generate bankers fees as they robbed the poor of the life savings, that began the unraveling of our financial system. Our bankers discovered that there was money at the bottom of the pyramid, and they did everything they could to make sure that it moved to the top.

Having done little to change either the incentives or the constraints facing the financial sector, we cannot expect a marked change in behavior. Of course, in the immediate aftermath of the crisis, they and their supervisors may be chastened, though at least for some seemingly far less than one might have thought, given the enormity of the recent calamity.

In some quarters, for instance, there is a concern that programs to restructure mortgages have given rise to new fees, added on to what is already owed. Rather than a reduction in what is owed, in some cases it may be increasing. Recorded profits—and bonuses—may increase, with little regard to the risks of non-payment in the future.

Critics of regulation worry that such regulation will stifle innovation. As I argued earlier, it is hard to identify significant social benefits – and easy to identify large social costs – associated with some of the recent financial innovations. Bankers were more innovative in figuring out ways of exploiting American consumers and extracting fees than they were at designing products that would help consumers manage the risks that they face. Their failure in this respect has had not only an economic cost, but also a large social cost: foreclosures this year, estimated between 2.5 and 3.5 million, are expected to be even larger than in the last two years.

At the same time, as I have noted, the financial sector not only has not innovated in ways that would have lowered transaction costs, increased the efficiency of capital allocation, or led to less societal risk, but in some cases they have even resisted such innovations. The new mortgages led to higher, not lower, default rates: they clearly made it more difficult for individuals to manage the risk of home ownership. In my book *Freefall,* I document other examples.

None of this should be a surprise: flawed incentives affect incentives to innovate. A better alignment of private rewards and social returns and better regulation—including regulations that affect incentive structures—holds out the prospect of better innovation.

I can summarize our discussion of incentives as follows:

1. Flawed incentives played an important role in this and other failures of the financial system to perform its central roles. They encouraged excessive risk taking and shortsighted behavior. They encouraged predatory behavior.
2. Flawed incentives also explain the failure of the financial sector to innovate in ways that would have served society better, e.g. better mortgages and an efficient electronic payment mechanism.

3. Poorly designed incentive systems can lead to a deterioration of product quality, and this happened in the financial sector. This is not surprising, given the ample opportunities provided by creative accounting.
4. Many of the compensation schemes actually provided incentives for deceptive accounting. Markets only allocate resources well when information is good; but the incentive structures encouraged distortions in the provision of information.
5. The design of the incentive system demonstrates a failure to understand risk and incentives and/or a deliberate attempt to deceive investors, exploiting deficiencies in our system of corporate governance.
6. There were alternative compensation schemes that would have provided better incentives, but few firms chose to implement such schemes.
7. Matters might have been worse but for the fact that some of the discussion of incentive pay was simply a charade: pay was high when performance was good, but pay was also high when performance was poor. Only the name of the compensation changed. There was less "pay for performance" than claimed.

*Concluding Comments*

Market economies yield growth and efficiency when private rewards and social returns are aligned. Unfortunately, in the financial sector, both individual and institutional incentives were misaligned. The result of the flawed incentives, perhaps even worse in the aftermath of the crisis, can be called ersatz capitalism, with losses socialized and profits privatized; it is an economic system that is neither fair nor efficient.

But in some critical ways, incentives are actually worse now than they were before the crisis. The way the bank bailout was managed—with money flowing to the big banks while the smaller banks were allowed to fail (140 failed in 2009 alone)—has led to a more concentrated banking system. Incentives have been worsened too by the exacerbation of the problem of moral hazard. A new concept—with little basis in economic theory or historical experience—was introduced: the largest financial institutions were judged to be too big to be resolved. We saved not just the banks, but also the bankers, the shareholders, and the bondholders.

I want to end with two broader notes on the societal impacts of compensation in the financial sector. The first has to do with the exploitive behavior of those in the financial sector, to which I have briefly referred earlier. The bankers have been criticized for their excessive greed. First-time homebuyers were deliberately exploited. Similar criticisms can be made about the exploitive behavior of credit card companies. I don't think that those who went into finance are greedier or more deficient in moral scruples than others. But the incentive structures led them to behave in the way that they did. Economists have an expression: "everyone has their price," and in finance, for too many, the rewards were simply too great to resist. The system even affected how they thought. In most professional jobs, one takes pride in one's work; one gives one's all. We don't pay heart surgeons on the basis of success, arguing higher pay will provide an incentive to exert more effort to save his patient. What kind of person says to his employer, "If you only pay me $5 million, I'll give you only half my effort? If you want me to really exert my energies, you have to pay me more if I succeed in increasing profits." But for those in finance, this kind of reasoning became not only acceptable but also became the conventional wisdom—with little thought, as we have seen, to the relationship between these "measured" profits and either long-term firm performance or, more importantly, societal returns.

Finally, I have emphasized how our financial sector failed in its essential societal roles, especially with respect to the allocation of capital, and how the sector's' incentive structures may have contributed to that failure. But there is another misallocation of resources that resulted from the sector's compensation policies, one whose effects are graver and longer lasting, and one which, as a teacher, I have felt intensely. There was a misallocation of scarce human capital, as some of America's most talented young succumbed to the lure of easy money—brilliant minds that, in another era might have made real discoveries that enhanced our knowledge or real innovations—that would have enhanced societal well being. In earlier decades, our best students went into a variety of areas—some into medicine, many into research, still others into public service, and some into business. Each found fulfillment of their potential at the same time they served their communities in one way or another. At Amherst College, where I serve as a trustee, we talk of helping our youth live lives of consequence. In this modern era of a finance-dominated economy, unfortunately, a disproportionate share of our most talented youth went into finance, lured by the outsized compensation. The costs to our society of this misallocation are incalculable.