Finance: Before the Next Meltdown

Simon Johnson and James Kwak

If innovation must be good, then financial innovation should be good, too. If finance is the lifeblood of our economy, then figuring out new ways to pump blood through the economy should foster investment, entrepreneurialism, and progress. Right? This, in any case, has been the mantra throughout three decades of deregulation and expansion of the financial sector.

And yet today, financial innovation stands accused of being complicit in the financial crisis that has created the first global recession in decades. The very innovations that were celebrated by former Federal Reserve Chairman Alan Greenspan—negative-amortization mortgages, collateralized debt obligations (CDOs) and synthetic CDOs, and credit default swaps, among countless others—either amplified or caused the crisis, depending on your viewpoint. The journalist Michael Lewis recently argued that the credit default swaps sold by A.I.G. brought down the entire global financial system—and found that the A.I.G. traders he talked to completely agreed.

Recent financial innovation is not without its defenders, of course. As current Fed Chairman Ben Bernanke said in a speech in May:

> We should also always keep in view the enormous economic benefits that flow from a healthy and innovative financial sector. The increasing sophistication and depth of financial markets promote economic growth by allocating capital where it can be most productive. And the dispersion of risk more broadly across the financial system has, thus far, increased the resilience of the system and the economy to shocks.

Intellectual conservatives and bankers have mounted an even more fervent defense of financial innovation. Niall Ferguson has claimed, "We need to remember that much financial innovation over the past 30 years was economically beneficial, and not just to the fat cats of Wall Street."

Bernanke and Ferguson are being too generous. For the past 30 years, financial innovation has increased costs and risks for both individual consumers and the

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global economy. To take the most obvious example, consumers bought houses they could not otherwise have bought using new mortgages they had no hope of repaying, creating a housing bubble, while new derivatives helped hide the risk of those mortgages, creating a securities bubble. The collapse of those bubbles has shaken the world for the last year. Today's challenge is to rethink financial innovation and learn how to separate the good from the bad.

Financial innovation is different from what we traditionally think of as innovation, which, in recent years, has occurred most visibly in the field of information technology. Certainly, the financial services industry has taken advantage of technological innovation; you can now access your financial statements and pay your bills online, for example. However, these innovations do not affect the core function of the financial sector, which is financial intermediation—moving money from one place where it is not needed to another place where it is worth more.

The classic example of financial intermediation is the community savings bank. Ordinary people put their excess cash into savings accounts; the bank accumulates that money by paying interest and loans it out at a slightly higher rate as mortgages or commercial loans. Savers earn interest, households can buy homes without having to save for decades, and entrepreneurs can start or expand businesses.

The main purpose of financial innovation is to make financial intermediation happen where it would not have happened before. And that is what we have gotten over the last 30 years. As Ferguson said, "New vehicles like hedge funds gave investors like pension funds and endowments vastly more to choose from than the time-honored choice among cash, bonds, and stocks. Likewise, innovations like securitization lowered borrowing costs for most consumers." But financial innovation is good only if it enables an economically productive use of money that would not otherwise occur. If a family is willing to pay $300,000 for a new house that costs $250,000 to build (including land), and they could pay off a loan comfortably over 30 years, then that is an economically productive use of money that would not occur if mortgages did not exist. But the mortgage does not make the world better in and of itself; that depends on someone else having found a useful way to employ money.

In addition, financial innovation can go too far much more easily than innovation in other sectors. Financial intermediation creates value by making credit more available to people who can use it effectively. But it is possible for the economy to be in a state where people have too much access to credit. With the benefit of hindsight, it is easy to see how the U.S. housing sector passed this

point earlier this decade. With negative-amortization mortgages (where the monthly payment was less than the interest, causing the principal to go up) and stated-income loans (where the loan originator did not verify the borrower's income), virtually anyone could buy a new house, leading developers to build tens of thousands of houses that are now rotting empty, their current value far less than their cost of construction. In short, excess financial intermediation, the result of hyperactive financial innovation, destroys value by causing people to make investments with negative returns. Put another way, we cannot say that innovation is necessarily good simply because there is a market for it. The fact that there was a market for new houses does not change the fact that building those houses was a spectacularly destructive waste of money. Therefore, when it comes to financial innovation, we must distinguish beneficial financial intermediation from excessive, destructive financial intermediation.

In the early 1970s, Mohammed Yunus lent $27 to 42 female basket weavers in a village in Bangladesh; they repaid the loan, with interest, from the proceeds of their sales. In 1976, he founded Grameen Bank to make small loans to poor villagers, often to fund startup costs for small ventures. Grameen Bank was the first modern provider of microcredit. Yunus's innovation was to recognize that poor people could be good borrowers but had been ignored by a traditional banking sector that refused to or was unable to serve them. In other words, he found an economically productive use of money that was not otherwise occurring. How does recent financial innovation in the developed world compare?

Defenders of unfettered financial innovation depict the alternative as a stale, constricted market. As Bernanke said in April, "I don't think anyone wants to go back to the 1970s. Financial innovation has improved access to credit, reduced costs, and increased choice. We should not attempt to impose restrictions on credit providers so onerous that they prevent the development of new products and services in the future." However, as finance blogger Ryan Avent pointed out on Portfolio.com, Bernanke's examples of beneficial innovation–credit cards, the Community Reinvestment Act, and securitization—all date back to the 1970s or earlier. True, securitization—the transformation of large, chunky loans into small pieces that can be easily distributed among many investors—was a beneficial innovation, because it expanded the pool of money available for lending. And securitization on its own, before the new products of the late 1990s and 2000s, did not produce the colossal boom and bust we have just lived through.

But more recent innovations in securitization led to a new generation of increasingly arcane, increasingly risky products that Bernanke, Ferguson, and others like to overlook. One of the paradigmatic products of the last ten years

was the collateralized debt obligation (CDO), in which a structurer combined a pool of assets and sold off the cash flows from those assets to investors. CDOs did promote financial intermediation; those initial assets represent loans to real people and companies, and without the CDO market to absorb them, those loans might never have been made in the first place. But, as with negative-amortization mortgages, the key question is whether those loans should have been made at all.

The magic of a CDO, as explained in the research paper "The Economics of Structured Finance" by Joshua Coval, Jakub Jurek, and Erik Stafford, lies in how CDOs can be used to manufacture "safe" bonds (according to credit rating agencies) out of risky ones. Investors as a group were willing to buy CDOs when they would not have been willing to buy all the assets that went into those CDOs. We don't have to decide who is to blame for this situation—structurers, credit rating agencies, or investors. The fact remains that at least some CDOs boosted financial intermediation by tricking investors into making investments they would not otherwise have made–because they destroyed value. Another paradigmatic product was the credit default swap, which insured a security (like a CDO) against the risk of default. But by underpricing that risk, it essentially tricked investors into buying securities that they would not otherwise have bought. The losses were borne by the companies that underpriced the credit default swaps, such as A.I.G., and by the government, which had to bail out A.I.G.—leading to the misallocation of capital to value-destroying investments. In other words, while securitization on its own provided real economic benefits, it is harder to defend the very popular, very destructive specific innovations it engendered. Contrary to Bernanke, maybe the regulatory world of the 1970s doesn't look so bad after all.

Financial innovation is good only if it results in financial intermediation: moving money to places where it is needed.

The role of financial regulation should be to discourage innovation that produces excessive intermediation and promote innovation that delivers financial services that people need. The key to any successful regulatory regime is therefore discerning the difference between good and bad financial innovation. Right now, ours doesn't. Unfortunately, the Obama Administration's financial regulatory reform proposal, despite its improvements over the status quo, follows the old conventional wisdom—that innovation is inherently good, and regulators need only watch out for abnormal excesses or "bad apples." Instead, the presumption should be that innovation in financial products is costly—it increases

transaction costs, the cost of effective oversight, and the risk of unanticipated consequences—and should have to justify itself against those costs.

Instead of a regime where any product is allowed so long as it is sufficiently disclosed, we should consider a regime where only certain types of products are allowed to exist, and they are allowed to vary only along specific dimensions. Georgetown law professor Adam Levitin has argued that all of the "innovation" in the credit card industry has simply been the invention of new, more complicated, and less transparent fee structures, while the underlying product has remained the same for decades. He proposes that regulation should standardize the terms of credit cards, so that charges cannot be hidden in fine print, and issuers should be allowed to compete on the interest rate, the annual fee, and the transaction fee. This would ensure price competition while making it harder for consumers to end up with dangerous products that encourage excessive borrowing.

This model could be applied to a wider range of financial products, even to commercial products such as interest rate swaps and credit default swaps, which baffled a fair number of supposedly sophisticated players during the boom. For example, credit default swaps could be limited to a set of standardized terms—the security being insured, the premium, the length of time, the definition of a default event, the settlement date and mechanism—eliminating the complexity that makes customized CDS difficult to price, difficult to trade, and difficult for regulators to assess. While this could reduce the ability of firms to "perfectly" hedge their risks, it would also reduce transaction costs and, most importantly, reduce the systemic risk created by large, unknown derivatives positions. Customized credit default swaps could still be allowed but should be deterred (through taxation or other means) to ensure that they are only used when "vanilla" swaps are truly inappropriate.

At the same time, regulators should look to promote those forms of financial innovation that the economy sorely needs. One is better ways of providing financial services to the "unbanked" poor and minorities. Today, many inner-city neighborhoods are forced to rely on payday lenders and other high-cost intermediaries for basic banking services. Manuel Pastor of University of Southern California's Program for Environmental and Regional Equity has shown that traditional banks can succeed in opening ordinary branches and offering ordinary services—savings accounts and accounts, mortgages, among others—in these neighborhoods. In addition to benefiting these communities, this would increase net savings and promote economic development.

Though it is not often thought about in these terms, reforming health insurance—to make it universally accessible and stable in its premiums—would be another financial innovation that would accrue both social and economic

benefits. Because individual households' economic fortunes are volatile, insurance is one of their core financial needs. It is generally possible to buy adequate auto, home, and life insurance, but for most people true long-term health insurance is simply not available. While a majority of Americans get health insurance through their jobs, many would be unable to remain insured should they become unemployed. What they have is subsidized health care during their term of employment; they don't have true insurance. While there are several ways to do it, making individual health care policies available to everyone (and not subject to an accident of fate like a layoff or divorce) would allow consumers to better plan their economic lives. There could be no better embodiment of positive financial innovation.

Just as importantly, we need innovation in financial education. A large part of our regulatory system relies on consumers being able to make intelligent choices when faced by an ever increasing and ever more complex set of financial choices. The recent crisis has shown that even large and supposedly sophisticated investors, such as municipalities and pension funds, did not fully understand the products they were buying. Economist Robert Shiller has proposed government-subsidized financial advice; this may not be a sufficient solution, but it is a start. Obama's proposed Consumer Financial Protection Agency (first proposed by Elizabeth Warren in *Democracy,* Issue #5, "Unsafe At Any Rate") could also go far in improving consumers' understanding of their financial options.

Simplifying the landscape of financial products, particularly those sold to consumers, will reduce the opportunities for service providers to generate non-interest fees from customers and will reduce the risk that households will make catastrophic financial decisions. Slowing the tendency toward excess financial intermediation will make it harder for the next credit bubble to form and reduce the severity of the next crisis. In these ways, a more critical eye toward financial innovation will help restore the balance that the American economy needs to produce long-term, sustainable growth. **D**