

**Statement Prepared for a Hearing of the
U.S. Senate Committee on Banking, Housing and Urban Affairs
Subcommittee on Economic Policy**

**“Who is the Economy Working For?
The Impact of Rising Inequality on the American Economy”**

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“A Financial System that Works for All Americans”

There is something wrong with the U.S. economy. We all know that the Great Recession was the most severe economic downturn since the Great Depression of the 1930s. What is perhaps less well understood is that the recovery since 2009 has been dismal. From the end of recession through 2014, real economic growth has been 2.1% per year, much lower than the 3.5% average annual growth the U.S. economy generated from 1947 to 2007. The decline in the unemployment rate over the past two years should not be a cause for celebration – it is driven primarily by households leaving the labor force. Only 76% of Americans aged 25 to 54 currently have jobs, compared to 80% in 2006 and 82% in 1999. Put differently, there are currently 4 million fewer Americans aged 25-54 working today compared to 2006.¹

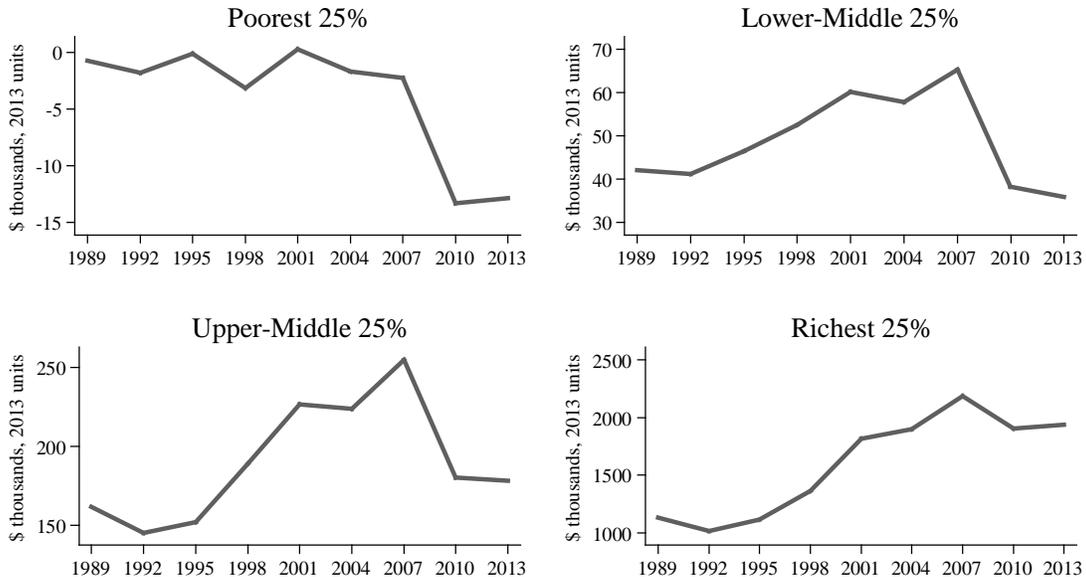
How did we get into this mess? And why is it taking so long to recover? My research with Atif Mian at Princeton University suggests that the culprit is the devastation of wealth

¹ This is based on active population of United States aged 25 to 54 of 101 million as of 2013, and a 4 percentage point difference between the employment to population ratio in 2006 versus 2013.

suffered by middle and lower income American households during the Great Recession.² The weak recovery is due in part to the lack of any rebound in wealth among these households since the end of the recession.

Americans below the top 25th percentile of the wealth distribution have lower net worth in real terms in 2013 than they did 15 years ago. For Americans below the median of the wealth distribution, it has been a disaster. For example, those in the lower-middle quartile of the wealth distribution have seen their net worth plummet from \$65 thousand in 2007 to \$40 thousand in 2010, with a further decline to \$38 thousand in 2013. This puts their wealth in 2013 below the 1989 level—the Great Recession wiped out 25 years of wealth accumulation. The chart below shows how bad the Great Recession was for the bottom 75% of the wealth distribution.

Average Net Worth of Americans, 1989-2013 By Quartile of Wealth Distribution



houseofdebt.org, @AtifRMian & @profsufi, Data source: SCF

² This research, published in economics and finance academic journals, is summarized in my book with Atif Mian: *House of Debt: How They (and You) Caused the Great Recession and How We Can Prevent It From Happening Again*, University of Chicago Press: Chicago, 2014.

The disproportionate negative impact of the Great Recession on the net worth of lower wealth Americans may at first seem surprising, but it makes perfect sense with an understanding of how the financial system operates. Richer Americans save a much higher fraction of their income, ultimately holding most of the financial assets in the economy: stocks, bonds, money-market funds, and deposits. These savings are lent by banks to middle and lower income Americans, primarily through mortgages.

There is nothing sinister about the rich financing the home purchases of the poor. But it is crucial to note that the borrowing takes the form of *debt contracts* which leave the borrower with the first losses in case house prices fall. Here is a simple example to illustrate. Imagine a homeowner in 2007 who had a \$100 thousand home, a \$60 thousand mortgage, and therefore \$40 thousand of home equity. When house prices fell by 40% from 2007 to 2010, the house plummeted in value to \$60 thousand. The mortgage in 2010 was still worth \$60 thousand, but the \$40 thousand of home equity vanished. The homeowner lost 100% of their home equity, even though house prices fell only 40%.

This is the effect of debt. The use of mortgage debt within the financial system gives the holders of financial assets protection against a fall in house prices. In the example above, the mortgage did not decline in value.³ But it provides this insurance by concentrating the brunt of economic downturns on borrowers. The standard mortgage contract is *inflexible*—the same amount is owed even if house prices and the economy collapse. Given that 85% of the financial assets in the U.S. economy are held by the top 20% of the wealth distribution, the financial system's reliance on inflexible debt contracts means it insures the rich while placing an inordinate amount of risk on middle and lower net worth households.

³ Of course if the home value declines by even more, it will also reduce the value of the mortgage, which is what happened during the Great Recession. But the losses will be more severe on home equity because by definition the mortgage only falls in value after the equity is wiped out.

As we illustrate in our research, it was the massive pullback in spending by indebted households that triggered the Great Recession. The financial system concentrated the collapse in home values on exactly the households that were prone to cutting spending most dramatically in response. Further, the lack of any increase in the net worth of lower and middle income Americans helps explain why the recovery in household spending has been so weak.

Going forward, there are two important lessons from the framework we outline in our research. First, encouraging borrowing by lower and middle income Americans may temporarily boost spending, but it is not a path to sustainable economic growth. Instead, stronger income growth for the lower and middle part of the income distribution is necessary for a balanced growth path. Second, the financial system in its present form concentrates risk on lower wealth households who are least able to bear it. The current policy and regulatory framework encourages such a system, even though it has disastrous effects for the economy. We must re-think how the financial system allocates risk. I explain these two lessons in more detail below.

Credit Growth without Income Growth: A Recipe for Disaster

A tempting solution to our current troubles is to encourage even more borrowing by lower and middle income Americans. This group of Americans is likely to spend out of additional credit, which would provide a temporary boost to consumption. But unless borrowing is predicated on higher income growth, we risk falling into the same trap that led to economic catastrophe.

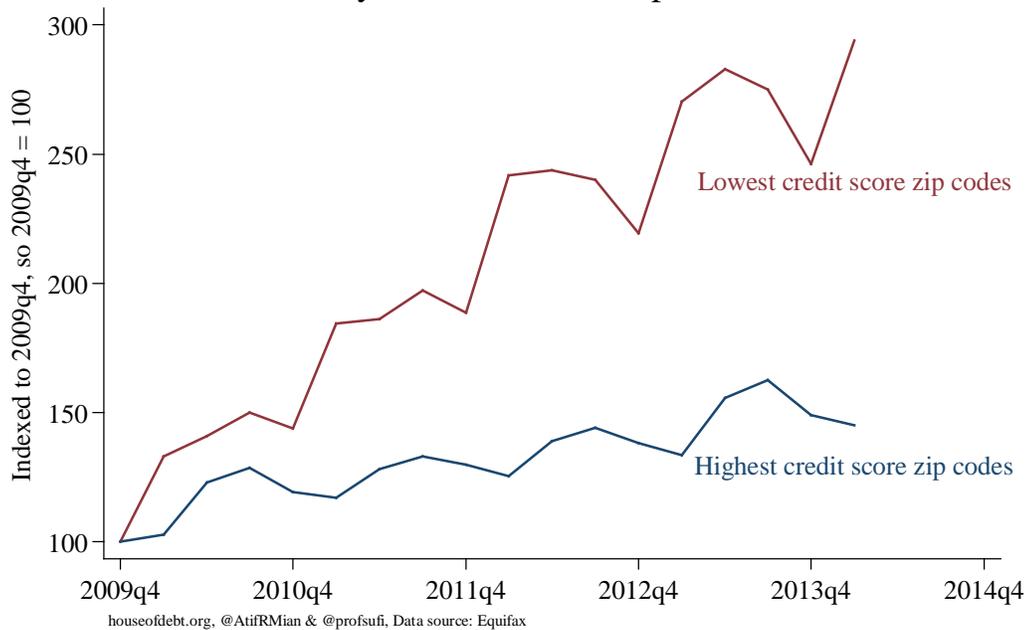
In the past three years, there has been an aggressive expansion in credit to lower credit score borrowers. While credit scores and income are not the same, they are closely related; lower

income Americans tend to have lower credit scores. More data are available that track consumers by credit score, and so the statistics I show below focus on credit scores.

In contrast to the expansion of subprime *mortgage* credit during the 2002 to 2006 housing boom, the current expansion has been concentrated in *auto* lending and to a lesser degree *credit card* lending. For example, from 2009 to the first quarter of 2014, auto loan originations grew by 300% among consumers with a credit score below 620, which is deep subprime territory.⁴ The growth has been much smaller among prime consumers with a credit score above 700: less than 50%. The chart below shows this pattern. The tremendous growth in auto loans to subprime borrowers may help explain why auto spending has been a bright spot for retail spending since the end of the Great Recession. Credit card lending to low credit score consumers has also accelerated, but the increase has been more modest and more recent. From 2011 to 2013, credit card originations grew by 30% among consumers with a credit score below 620, compared to 3% for consumers with a credit score above 700.

⁴ A credit score below 660 is considered subprime.

Auto Loan Originations By Credit Score of Zip Codes



Such rapid growth in credit to lower credit score households may not be a cause for alarm – after all, credit to lower credit score households all but disappeared during the recession, and we would therefore expect some growth from 2009 to 2014. But the key question is whether income growth among lower credit score individuals justifies the expansion in auto lending. Are lenders willing to lend more because they believe borrowers have better income prospects?

The answer to this question is worrisome: income growth among lower credit score and lower income Americans has been flat or even negative during this same time frame. A variety of data sets show this pattern. Analysis by the Economic Policy Institute based on Current Population Survey data shows that real income was between 2 and 3% *lower* in 2012 than in 2007 for the bottom 60% of the income distribution.⁵ The grand majority of Americans have not seen real income growth from 2007 to 2012. The recently released 2013 Survey of Consumer

⁵ Gould, Elise, 2014. “Why America’s Workers Need Faster Wage Growth – and What We Can Do About It,” *EPI Briefing Paper*, August 27th.

Finances of the Federal Reserve shows the same result from 2010 to 2013.⁶ During these three years, income has fallen for all but the top 10% of the income distribution.

The evidence from the 2013 SCF is especially alarming, and worth discussing in more detail. From 2010 to 2013, real income fell by 4 to 7 percent for households in the bottom 60% of the income distribution. These losses were registered *after* the Great Recession. For the 60th to 90th percentile of the income distribution, real income fell by 2 to 3%. Real income grew by 2% for the top 10% of the population. These statistics contradict the notion of a recovery since 2010 for the grand majority of American households.

Different data sets tell one consistent story: as in the subprime mortgage credit boom, credit is once again expanding to households that have declining real incomes. The magnitude of the credit expansion is smaller given that auto and credit card debt are smaller markets than mortgages. But something has to give. Income growth needs to improve, or lenders will eventually shut off the credit spigot.

Relying on lender willingness to provide credit is not a sustainable way of generating economic growth. We desperately need higher income growth for middle and lower income Americans. The best way of generating income growth in the long run is by improving the productivity of workers. Better education and strong life skill development at a young age can help achieve higher productivity. Unfortunately, such a boost in worker productivity takes time.

In the short run, policy makers should investigate whether there are policies that can boost wage and income growth among lower and middle income Americans without reducing economic efficiency. Some potential policies include expanding the Earned Income Tax Credit, or identifying public works projects that can boost aggregate productivity. Such public

⁶ See Bricker, Jesse, Lisa Dettling, Alice Henriques, Joanne Hsu, Kevin Moore, John Sabelhaus, Jeffrey Thomson, and Richard Windle, 2014. "Changed in U.S. Family Finances from 2010 to 2013: Evidence from the Survey of Consumer Finances," *Federal Reserve Bulletin*, 100:4, September.

investment could potentially pay for itself in the longer run while boosting earnings in the short run. I do not know for certain whether such policies would help. But I know for certain that stagnating income growth for the majority of American households is a serious economic threat.

Financial Reform: Making the Financial System Work for Americans

Another pressing matter is reform of the financial system, which as currently constructed does not work for the majority of Americans. Let's start with a basic indisputable point: the economy is a risky place. House prices go up and down, as do the returns to business capital. Human capital is risky – the wages one earns could potentially collapse if the economy falls into recession.

This risk must be borne by someone, and the financial system should help Americans *share* this risk with one another. Those that bear the most risk should be those who have the capacity to bear losses in case the economy crashes. In general those with a large amount of wealth have exactly such capacity. And of course, those that bear the most risk should be compensated for bearing that risk – earning high returns when the economy is strong. Investors should look to the financial system to take risk and earn a return as a result.

But how does the financial system currently operate? Does it encourage those with wealth to bear risk by compensating them for it? The answer is no. Instead, the financial system relies almost exclusively on *inflexible debt contracts*, which force borrowers to bear risk instead of investors.

Student debt offers a simple example. When the college class of 2009 entered college in 2005, many of them took on debt to pay tuition. This was a sensible decision – the income premium to a college degree is high, and students were willing to borrow in the short-run to get

the benefit of higher wages in the future. But of course, no one in the college class of 2009 understood in 2005 that the U.S. economy was about to get whacked with the worst recession since the Great Depression. The unemployment rate for recent college graduates skyrocketed from 9% to 18% from 2007 to 2009. Further, wages for those that were able to find jobs collapsed. The consequences for the class of 2009 will likely persist into the future: Research shows that there are long-run, persistent negative effects of graduating from college in the midst of a severe recession.⁷

Did the financial system help share the risk borne by the college class of 2009? No. In fact, the student debt burden and interest payments remained exactly the same for the students, even though their employment prospects collapsed. The financial system, with its reliance on inflexible student debt contracts, forced young Americans to bear risk that they were poorly equipped to bear. They are young with almost no assets – why should they bear the costs of an economic downturn?

A more sensible financial system would share the risk by having the principal and interest payments on student debt automatically adjust downward when recessions hit. The lenders should share some of the downside risk, and they should be compensated if the economy ends up being stronger than expected. A simple adjustment would be a debt contract with a higher average interest payment if the unemployment rate facing recent college graduates remained low, but automatic debt forgiveness if the unemployment rate facing college graduates increased substantially. In this way lenders would be paid a higher interest payment if the job market were strong, but would have to accept lower payments if the job market ends up being very weak.

⁷ Kahn, Lisa, 2010. “The long-term Labor Market Consequences of Graduating from College in a Bad Economy.” *Labour Economics*, 17:2, 303-316.

This example applies more broadly to financial contracts in the economy. The reliance on inflexible debt contracts forces lower income and younger Americans to bear too much economic risk. Debt contracts require the same payment regardless of what happens in the economy. As mentioned above, there is risk in the economy. That is unavoidable. But the current bias of the current financial system is to force the most vulnerable to bear the risk.

We need policies that would help move the financial system away from its current reliance on inflexible debt contracts. One such policy the government could implement in the short-run would be to lower student debt owed to the government for those who graduated in the midst of the Great Recession. The college class of 2009 should not be forced to bear the costs of the downturn with no assistance: it is not their fault they were born in 1987, 22 years before the worst recession in 80 years. This could be done with outright debt forgiveness, or by allowing borrowers to refinance into current market interest rates. Going forward, student debt provided by the government could be indexed to the unemployment rate facing college students, so that debt burdens are automatically reduced if the economy enters another recession.

More broadly, the current bias of policy encourages the financial system to use inflexible debt contracts, even though they have potentially disastrous effects for the economy. We tolerate the issuance of fragile short-term debt by financial institutions that enjoy some level of government backing, and we allow them to do so while holding very little capital. Banks then either choose or are told by regulators to take very little risk on the asset side of their balance sheets, which results in borrowers bearing the risk. We force insurance companies to hold highly rated assets, which can only be produced by debt contracts to borrowers. We encourage inflexible mortgage contracts by declaring them as “conforming” mortgages that the government sponsored entities can buy and securitize. More equity-like mortgages where the principal

adjusts downward if house prices fall do not qualify, and the private sector therefore has little incentive to provide them. Further, we give a mortgage interest deduction for inflexible debt contracts, which encourages households to use them.

Removing the strong policy bias toward inflexible debt contracts will not be easy, and it cannot be done overnight. However, I want to encourage policy-makers to think in a big-picture manner about the current financial system, what it is supposed to do, and what government can do to make it work better for Americans. We have a tendency to accept the financial system as it is, and make minor changes to help insulate it from risk. But the risk is not going away—it must be borne by somebody. A properly functioning financial system would encourage those with wealth—that is, those with risk-bearing capacity—to bear risk and earn a return for doing so. It would help those with little wealth attend college or buy a home without bearing an inordinate amount of economic risk. It may take time, but moving toward such a financial system would improve the welfare of all Americans.