The Inexorable Will of the Financial Market: Profit Imperatives and Financial-Policy Design

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Key Points

- Monetary-policy transmission blockages and heightened economic inequality are intertwined with post-crisis regulatory policy into a negative feedback loop that frustrates growth and exacerbates income and wealth distributional disparity.
- Wider income and wealth inequality is not the Fed's fault, but post-crisis policy has inadvertently made it worse. Correcting this is well within the Fed's mandate.
- Action steps should add financial stability to the Fed's objectives and ensure that inequality-increasing impacts are identified and, wherever possible, corrected. The Fed should also reduce reliance on representative-agent models and aggregate data as well as add key equality indicators (e.g., a "living-return" interest rate, portfolio-valuation impact, financial inclusion) to financial-policy cost-benefit analyses.
- The Fed can be a force for positive good without taking an undue role in private markets. Your formidable analytical firepower can and should identify new ways to help private capital achieve public purpose. For example, legislation will shortly be introduced to encourage institutional investment in early-stage biomedical cures and treatments for blindness. Developing financial-instrument models to facilitate this goal while also ensuring taxpayer protection is a challenge for which the Federal Reserve is ideally suited.

It is a true honor to come before you today as your "distinguished speaker." The list of Nobel laureates, Treasury Secretaries, and influential academics who preceded me to this day is humbling. I'd like to pick up on the issues these speakers have raised to focus on how the unintended consequences of post-crisis policy derive from the disconnect between what the Fed wants banks to do in the wake of monetary-policy and regulatory actions and what banks and their competitors actually do to advance their own objectives. The Fed can send all the forward signals you want, try to raise or lower rates, or even re-allocate asset holdings across the nation, but you're still pushing on a string if financial-institution incentives do not align with your macroeconomic wishes. Banks can be totally compliant with all of the new rules. But, how they redesign their business thereafter and the extent to which this puts financial markets at still more risk is up to them.

As Bridgewater's Ray Dalio recently observed, "we 'finance people' see the world very differently from the way economists do."[1] Since he and his friends move the money, the way they think is a critical driver of monetary- and regulatory policy – like it or not, model it or not, and having seen it before or not notwithstanding.

It probably won't surprise you much to hear that private financial institutions are not managed or owned by philanthropists – CEOs and shareholders are in it for the money. If they weren't, they would be public servants such as you. And, even if private financial institution directors pine for public service, their fiduciary duty to shareholders requires them to make money first, making nice later, if at all. This is what I hear in boardrooms and what I'd like to discuss this afternoon.

I'll turn first to how unconventional monetary policy collides with post-crisis regulation to redefine financial intermediation in dangerous ways. The Federal Reserve Bank of New York has done ground-breaking research in this area and I'll rely a lot on your insights to show why monetary-policy transmission has hit so many disconnects since the Fed took the U.S. back from the brink in 2008.

Next, I'll take on a particularly problematic unintended consequence of post-crisis financial policy: still worse economic inequality. Yes, economic inequality is due to many factors over which the Fed has neither control nor mandate, but the Fed is fundamentally about how money flows through the economy. The incentives resulting from post-crisis policy have concentrated more and more money in fewer and fewer hands. This has profound, dangerous consequences, meaning that the Fed must do what it can as fast as it can to remedy inadvertent inequality accelerants of its own making.

Finally, I'll ask you for help. Many critical social-welfare needs are unmet because private incentives are not philanthropic and public policy is couched in high-minded goals seemingly immune from market forces. Finding ways to capture private incentives to serve public objectives is an increasingly urgent challenge as U.S. fiscal policy heads to an ever larger deficit. I'll outline one possible solution that could drive billions of institutional-investment dollars into curing and treating diseases. With all of the Fed's awesome analytical firepower, I challenge you to come up with other constructs to make finance serve both profit and purpose.

The Disintermediation Dilemma

Cutting to the chase, the fundamental purpose of the Fed's unprecedented adventure in unconventional policy has been to force safe assets out of the banking system so that funds flow to productive-asset generation and the output and employment recovery that would then happily result. As an important speech in 2016 from Janet Yellen made clear,[2] a lot didn't go as planned and there's still a great deal to learn about why this happened ahead of the next crisis. Much rightly has been said about the problems of relying on representative-agent models and frictionless assumptions, and you all at the New York Fed have in fact said a lot of what needs to be considered. What's still missing, I think, is an understanding of how monetary policy intersects with post-crisis rules and the business realities confronting financial institutions. Banks will save themselves, competitors will go for the business banks can't price advantageously or conduct efficiently, and many monetary-policy transmission channels are flowing slowly, if at all, because they expect banks to do what banks once did. But, banks in fact now pursue a business model relying less and less on the financial intermediation on which policy still is premised.

I agree with former Chair Yellen that the crash would have been worse if the Fed had stayed its hand. I also agree with those who think the economy has improved in recent months, although I would point out that the recovery is not only still remarkably sluggish, but also that it has been profoundly unequal.

The reason for slow growth and heightened inequality can be seen in an important recent analysis of post-crisis monetary policy by staff at the Bank for International Settlements.[3] It found that the impact since these asset-purchase policies first began after the crisis faded over time to zero in terms of any contribution to macroeconomic growth. This BIS staff paper also concludes that QE's peak impact – that is, its impact across the years and all of its trillions – in the U.S. had ten times more effect on stock prices than on maximum output. Adding QE together with ultra-low interest rates combined with post-crisis market conditions is found also to have contributed to yield-chasing and resulting risks to financial stability.

Of course, QE combined with ultra-low rates wasn't supposed to spur yield-chasing and stock-market booms. The goal was lots more productive lending based on more borrowers demanding low-cost loans. But credit growth has consistently lagged traditional levels, especially for the types of long-term, low-risk loans critical to output, employment, and economic equality.

Why? The reason for QE's impact on financial-asset valuations and the combined clout it and ultra-low rates have on yield-chasing has its roots in how the financial system redefined itself as new rules redefined banking. Some of the problems generating demand for high-rate, low-capital loans are due to the balance-sheet recession discussed in important detail in Reinhart-Rogoff.[4] But this same balance-sheet damage also deterred the banks that survived the crisis as they first confronted their losses. Just as banks began to climb out of the crisis and recover, new capital and liquidity rules put them right back in balance-sheet rebuild. Banks try to make you happy and somehow keep their shareholders content at the same time – it's not easy and new lending thus gets very short shrift even at banks that regulators expect to re-enter the market.

I'm not saying that the rules are wrong – clearly, the pre-crisis framework was porous at best. I am, though, saying that when monetary policy combines with regulatory changes to undermine financial-intermediation profitability, bad things happen both to monetary-policy transmission and economic equality.

All of the QE in the world couldn't in fact conquer the low profitability engendered by ultra-low rates and post-crisis rules. A study of over a hundred global banks found that reductions in short-term rates are less effective as growth stimulants when interest rates are ultra-low, even after controlling for reduced loan demand after a financial crisis and differences among the banks surveyed.[5] A study by your Federal Reserve Bank of New York colleagues[6] narrows this question to the U.S., also finding that lending drops as rates approach the zero lower bound because banks simply can't make money making ultra-low interest rate loans. This same study finds that banks adjusted to persistent low rates by changing their asset/liability mix away from deposit-taking and longer-term lending to less costly funding sources and short-term, interest-bearing investments such as excess reserves.

Another New York Fed study is also instructive: its study of QE and particularly of excess reserves shows[7] that banks lend up to the point at which it profits them to do so, not past it even though the Fed is throwing money at them. Indeed, excess reserves resulting from the Fed's massive asset purchases proved contractionary – that is, they are found to make output and employment growth even harder. Researchers elsewhere in the Fed have shown[8] in fact that lending as QE grew long in the tooth became increasingly risky. The study found that a shift in bank lending to higher-risk, less productive loans correlated with the last two of the Fed's three QE rounds, the time during which all of the post-crisis rules were announced, anticipated by the market, and then implemented.

One more contribution from the New York Fed to the critical question of monetary policy, financial regulation, and unintended consequences is a still-vital 2015 report from the Committee on the Global Financial System chaired by Bill Dudley.[9] Much of the research I've cited today is more recent, but no one has yet matched this paper for its survey of why trillions in portfolio purchases, real negative rates, and post-crisis rules have done so little to boost growth and ensure financial stability. Indeed, the situation since 2015 is still more alarming as that report did not anticipate the sharp rise in non-traditional financial-product delivery mechanisms – "shadow banking" first and fintech now. The profit pressures on bank intermediation power up these non-traditional providers. As a recent Financial Stability Board report made clear,[10] this transformation is still more certain and dangerous if giant technology platform companies deploy their AI advantage, huge customer bases, and regulatory exemptions to devastatingly destructive effect on bank intermediation capacity. No wonder the biggest banks are scurrying into fee-based wealth management as fast as they can.

Should the Fed care if banks lose out to Amazon? Absolutely not if Amazon, large asset managers, or whomever else takes out banks does what banks do better and there is little prospect of renewed or even worse systemic risk. I'm not at all sure that the less-risk scenario is sensible, but assume it is. Fed models and regulatory premises based on banks as they were will still fall ever farther behind the changing nature of monetary-policy transmission and regulatory impact if it's non-banks that make the financial market, not the banks you all know so well.

Reflecting these alarming trends, some have suggested that monetary policy be focused also on financial stability. I think this warrants careful consideration and would create a framework for the Fed also to understand better the link between financial stability and economic inequality. For example, contemplating financial-stability risk would alert the Fed to heightened inequality and vice-versa. A high ratio of private wealth in relation to national income creates significant structural risk to which the Fed must be attuned. During the 1970s, this ratio was between 200 and 350 percent in most advanced countries, spiking to 550 percent right before the crisis. In the U.S., the percentage in 1970 was approximately 320 percent; by 2007, it was 500 percent, falling during the crisis to about 410 percent and bouncing back in 2015 to the pre-crisis peak of 500 percent.[11] Private wealth thus grew in terms both of volume and price, not only exacerbating inequality, but also creating significant financial-market structural weakness. This is due to the inability of national authorities to counter economic stress or of most households to stand on their own without government intervention. The greater the stress, the more vulnerable the economy in the absence of public and private resilience.

A study from the Federal Reserve Bank of San Francisco[12] expands on these structural points to show still more clearly the link between economic inequality and financial-crisis risk. This paper deploys exhaustive research across decades in 17 countries based on statistical correlations of inequality, productivity, credit growth, and crises. Although productivity has a strong impact on crisis risk, widened income share of the top 1% is the most predictive antecedent to a crash even when controlling for an array of other possible causes, including asset-price bubbles with distorted risk premia. No wonder the U.S. had one massive financial crisis in 1930 and then decades of relative economic stability until 2008, with the intervening period marked by high productivity and unprecedented economic equality.

Clearly, financial stability and economic inequality are intertwined and warrant careful central-bank monetary-policy consideration. At the very least, I urge you to realign your models to ensure a far better understanding of heterogeneous data. Chair Yellen urged this in 2016[13] and it's a vital, immediate priority in my view. The models on which post-crisis policy is premised do not account for few very rich households with large chunks of the U.S. economy in their hands and very different marginal propensities to consume and few deposits in banks or any need for loans.

The Economic-Inequality Effect

Ahead of more recent efforts to develop a new monetary-policy transmission channel to fix the problems of all the old ones, Ben Bernanke recently said:

> The degree of inequality we see today is primarily the result of deep structural changes in our economy that have taken place over many years, including globalization, technological progress, demographic trends, and institutional change in the labor market and elsewhere. … [T]he effects of monetary policy on inequality are almost certainly modest and transient.[14]

Under questioning in Congress, former Chair Yellen[15] and Chair Powell[16] have said much the same thing. In the U.K., Mark Carney more frankly acknowledged that monetary policy is distributional, but went on to say that fiscal policy needed to clean up after a central bank if crisis cures had inequality side-effects.[17] I think it is evident first that post-crisis policy has had overtly distributional effects all its own and secondly that, given the profound social, political, and macroeconomic cost of economic inequality, central banks must take great care to avoid distributional impact and repair it quickly if damage cannot be prevented.

I am in the midst of writing a book on the relationship between U.S. monetary and regulatory policy to economic inequality. It will say that Ben Bernanke is right in that there was a lot of economic inequality before he took unprecedented action in 2008. However, both income and wealth equality have gotten dramatically worse since 2010, as the charts from the World Wealth and Income Database I have included at the end of this speech make abundantly clear. Sure, demographics make an equality difference, but did everyone get suddenly older in 2010? Is this shift in productivity or globalization or pretty much anything else sudden and large enough to account for the sharp spike in both income and wealth inequality we see after 2010? The only thing with real economic-equality impact that changed so much so fast in 2010 and thereafter is monetary and regulatory policy, and we cannot ignore the correlation. Even if these policies are only partially causal, they are among the very few inequality drivers we can change fast and that thus might make a meaningful difference reversing increasingly toxic U.S. distributional disparities.

The first reason that post-crisis policy is severely distributional is that it didn't work. The Fed defense voiced by Messrs. Bernanke and Powell and Ms. Yellen is that post-crisis policy was equalizing because it prevented a Great Depression and that the Great Recession is transitioning to "full" employment, thus reversing short-term income-inequality effects. Employment is, though, "full" only if you think that multiple wage-earners per family each working multiple jobs makes for prosperity despite the lack of meaningful wage growth in recent decades. GDP is similarly robust if you average productivity across the population as a whole. Account for distributional effects and all too many Americans are stuck in seemingly-endless recession. They said so in 2016, but many of us missed the depth of this economic discontent because the data didn't show it.

Moving from macroeconomic trends to critical microeconomic divides shows still more clearly adverse distributional effects attributable to post-crisis monetary and regulatory policy. The first distributional effect directly due to monetary policy derives from altered asset valuations. Scarce safe assets have sparked yield-chasing and asset-price bubbles at considerable benefit, at least so far, to the richest among us. One of the most influential recent studies of QE's equality impact was also conducted by BIS staff.[18] It finds that the U.S. has become sharply more economically unequal, going on to determine that this is due to QE-driven, higher financial-asset valuations versus the value of assets (savings accounts and homes) critical to lower-income household wealth accumulation. In the period immediately following the crisis, the asset-growth differential between the richest quintile and second-poorest quintile was between four and eight percent. Even though housing started to function as an inequality-decreasing force around 2012, stock returns have still grown at a faster rate, resulting in asset growth differentials generally around two percent in this period.

Why? Back to the problems of aggregate data. In the U.S., low-and-moderate income (LMI) households and upper-bracket ones hold their wealth – when they have any – very differently than the rich. The top ten percent hold about half their wealth in financial assets (stocks, bonds, cash, etc.). Financial asset holdings dwindle as one gets below the 75 percent wealth threshold until one gets to the bottom 25 percent of the population, which has more debt than assets and relies on housing for the bulk of what it owns.[19]

Another recent study[20] also shows the equality divide in asset ownership, laying out stark differences in asset ownership in the U.S. Here, home values constitute 67 percent of middle-class wealth but only nine percent of wealth for the richest one percent. Importantly, house prices have grown sharply for higher-priced houses since about 2012 but remain depressed for lower-cost homes across the country, with many regions still experiencing significant amounts of negative equity a decade since the housing "bust."[21]

Secondly, ultra-low rates have done grievous damage to those who can least afford it. Just as low rates throttle macroeconomic growth because banks simply can't make money by making loans, they also suppress the ability of lower-income households to get ahead by putting a little bit aside in a savings account or contributing to a retirement plan. As one might expect in a balance-sheet recession, households are putting away what they can to protect themselves and their families. Savings balances of moderate-income households have slightly increased since the crisis.[22] But – in sharp contrast to the rapid rise in valuation and return on the financial assets wealthy households own – these savings accounts have been particularly hard hit by ultra-low rates. One recent study has estimated a total loss across the U.S. economy of $2.4 trillion in savings-accounts and similar balances.[23]

All this lost wealth puts the equality engine in reverse because it is extremely unlikely that a decade or more of lost savings can be recouped as millennials age into the demographic sector seeking to start a household, fund their children's education, and otherwise remain in or enter the middle class. Indeed, given the newly-lower neutral rate, increasing inflation, and Fed projections of years of interest rates set around two or three percent, saving will remain a losing game unless monetary policy is quickly and structurally realigned in concert with post-crisis regulatory changes and fiscal action.

Over to the post-crisis rulebook. There's a lot of confidence at the Fed that the full weight of all the new capital, liquidity, and resolution tools have made the U.S. financial system virtually bullet-proof, even if it's not yet invulnerable. Maybe banks will indeed be only the eye of the next storm, but storms will nonetheless rage around them – U.S. financial intermediation is simply far too dependent on non-banks for bullet-proof banks to do more than comfort bank regulators.[24,25]

Not only can risks come from outside the reach of the banking agencies – the rules themselves also contribute to economic inequality due to the disincentives to safeguard household savings at a reasonable rate of return and to low-rate, long-term, low-risk lending to under-served communities.

First to regulatory disincentives for paying average depositors what I'll call a "living return." The confluence of post-crisis liquidity and capital rules is particularly problematic in this regard. Turning again to all your great work here at the New York Fed,[26] there is considerable evidence that the liquidity rules create strong incentives for low "neutral" rates. In short, banks can comply with post-crisis liquidity rules by holding either large balances of liquid deposits or large balances of very short-term funds. Because assets provide returns and liabilities are costly, the bank profit motive leads to liquidity-rule compliance by holding large balances of liquid assets, not the core deposits that house family savings and transaction accounts. In one fell swoop, policy has lowered interest rates at long-term cost to wealth accumulation, reduced the ability of average households to safeguard hard-earned funds, and limited the balance-sheet capacity of banks to make more loans.

The combination of the way the FDIC charges deposit-insurance premiums[27] and the enhanced supplementary leverage ratio (SLR)[28] also constrain deposit-taking because U.S. banks must pay a high cost for the assets into which deposits are placed even if these assets are short-term riskless excess reserves. The sharp differences between excess reserve balances of exempt foreign banks and U.S. ones makes this clear.[29]

Further, bank lending capacity is limited not only by regulatory incentives that constrain deposit-taking, but also by direct application of the capital rules. There is a great deal of literature about the impact of the cost of capital and its impact on bank lending in concert with growing doubts about the extent to which more capital makes for safer banks. A BIS survey article in 2015 assessing this critical question found that, "In conclusion, both theoretical and empirical studies are not conclusive as to whether more (stringent) capital (requirements) reduces banks' risk-taking and makes lending safer."[30] A more recent paper from the Federal Reserve Bank of San Francisco looking at data from seventeen countries from 1870 to 2013[31] finds that higher leverage capital is positively correlated with crisis risk, with capital at its best right before a crash. This is consistent with greater risk due to the need to boost return to make costly capital make profit sense.

When it costs more to hold an asset, the asset has to provide a greater return to the asset-holder vis-à-vis its equity to ensure ongoing profitability. Regulators had hoped that the cost of capital would drop in concert with raising required amounts of capital, but this has not happened. Likely due to the fact that new rules alter the amount of capital banks have to hold in ways not accepted as necessary risk reductions by bank shareholders, banks have generally reduced their overall asset holdings and altered resulting risk composition. The thinking behind new capital requirements is that banks will sacrifice profitability and thus social-welfare gains will be advanced, but in fact banks cannot sacrifice profitability beyond what investors consider a reasonable and competitive rate of return and still sustain a successful business model. A new look at the redistributive impact of regulatory-capital standards thus unsurprisingly finds that banks sacrifice lending to low-wealth and low-income borrowers sooner than themselves.[32]

Recent studies by The Clearing House in fact find that "surplus" capital leads to more lending only when this surplus is set by the bank itself – i.e., set to reflect risk that both it and investors recognize.[33] To be sure, banks and investors got this very wrong before the crisis, but it would appear that the post-crisis rules have over-corrected. Another industry study of how the Fed's supervisory stress test and its resulting, binding capital standard affects the ability of large banks to make small-business loans and residential mortgages[34] is also instructive in this regard.

I could go on to demonstrate from much recent research that more capital demanded by regulation affects business decisions to damage the most vulnerable customers, not the bank's always-essential investors. However, I know this also from my firm's practice. We undertake what we call comparative analytics for large financial services firms. In these projects, we hold constant external business conditions (e.g., interest rates, market demand) and run a business line or financial product through the regulatory wringer. Time after time, the cost for a bank to offer a product is considerably higher than that for a non-bank due in large part to the capital rules. Raising prices compensates for higher costs, but only for products where supply is limited – again, the longer-term, higher-risk loans of which other institutions are understandably wary.

Many of these loans violate other prudential standards – understandably, I might add. As a result, the sum total effect of the liquidity and capital rules is to push big banks into fee-based businesses – wealth management, asset management, and the like. These all have their place, but none of them does anything for economic equality or for output and employment growth.

Should the Fed alter its rules to advance economic equality? Some have pushed this, but here I stand with those at the Fed and other central banks wary of "cooking the books" even for so great a goal. We have too many examples of disastrous capital risk weightings calibrated for political or social-policy goals to warrant any redesign of the risk-based standards for social-welfare purposes. These date back to the "net worth certificates" that fudged S&L capital in the 1980s and continue even now to over-generous risk weightings for high-risk mortgages and "investment-grade" obligations. Sole reliance on a leverage ratio is not the cure for this as some propose – see above for its adverse-equality and higher-risk impact.

What is? First, I again urge careful consideration of the inequality effect. Mortgages are an important case in point. High loan-to-value (LTV) mortgages have very different credit-risk profiles depending on why the LTV is in fact so high. A first-time homeowner with a low down payment stretching for a better house in a safer neighborhood is a different borrower than a high-LTV borrower whose loan amount results from cash-out refinancings used to fund a lot of otherwise unaffordable consumption. Some internal models reflect this, perhaps resulting in the disparity between bank judgments about mortgage risk and those in the Fed's stress test. But the standardized approach is a crude LTV measure that does even-handed damage to those with low down payments.

In the wake of Basel's latest agreement on the global capital accord, the U.S. has much to revise in our own framework. I'll leave for another day the discussion about whether just to scrap the advanced approach – which I recommend. Regardless, it's time to ensure that the standardized approach that forms the floor of the current capital framework recognizes differences born of opportunity, not leverage.

How to Help

In addition to modulating policy wherever revised analytics warrant – and there will be lots of these – I urge you and others at the Fed to turn your formidable analytical abilities to the challenge of finding ways to make private profit serve public purpose. There is a great deal of talk about "social-impact finance," but remarkably few dollars back any of it up.

My own experience in this field leads me to conclude that a major reason for the short supply of hard dollars for social-welfare goals lies in the analytical complexity of understanding transactions that are not based on traditional market expectations. Private investors know how to profit, or at least they bet with their money because they think they do. Asked to assess complex risk/reward relationships with an eye to others – not to themselves – most investors will look back at you blankly. If they invest on behalf of others, then this blank stare hides a fiduciary duty that demands profit maximization, a job that comes naturally to private capital. To turn this bottom-line discipline to public goals requires hard thinking about the best way to redirect funds to unmet social-welfare needs without emboldening self-interested actors who recognize ill-designed government backstops for the profit-maximizing opportunities they all too often turn out to be.

The simple solution, saying that private markets determine winners and losers, leaves too many innocent bystanders as collateral damage under this ruthless "invisible hand." Is there a way to capture private incentives to serve the public good?

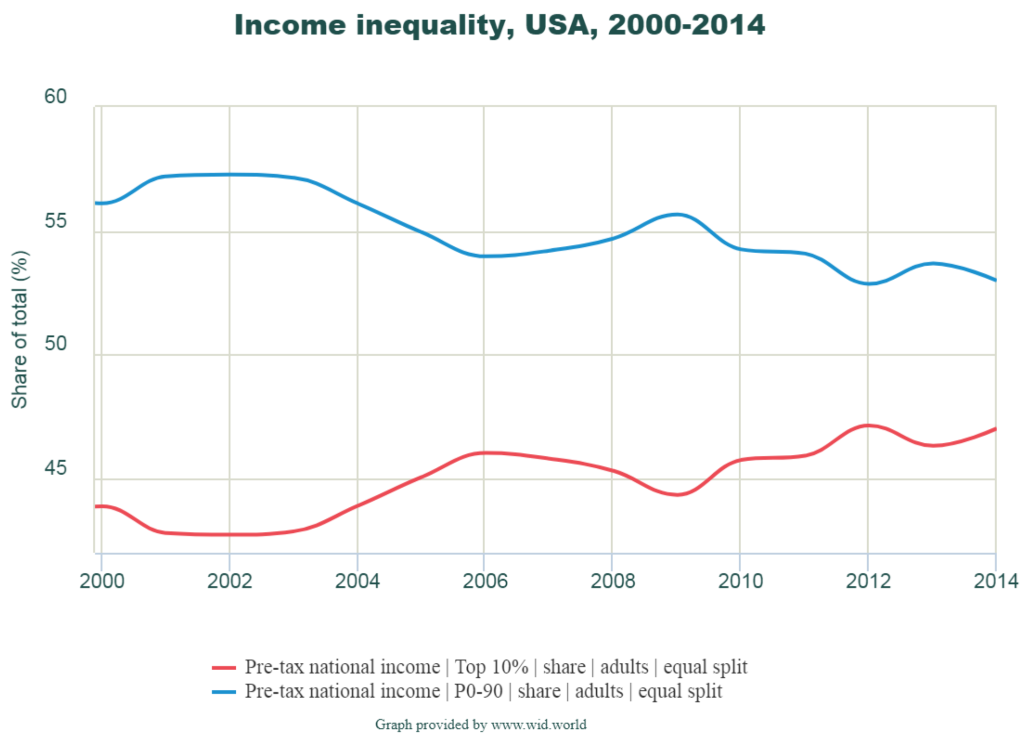
Let me turn to just one case: the challenge of mobilizing the billions of institutional-investor dollars sitting on the sidelines to fund rapid advancement of the treatment and cures for many diseases and disabilities moving all too slowly through costly clinical trials. There are all too many areas in which promising research is stymied by nothing more than funding limitations, but I've focused a lot on one: ways to treat or cure a wide array of blinding disorders, including my own.

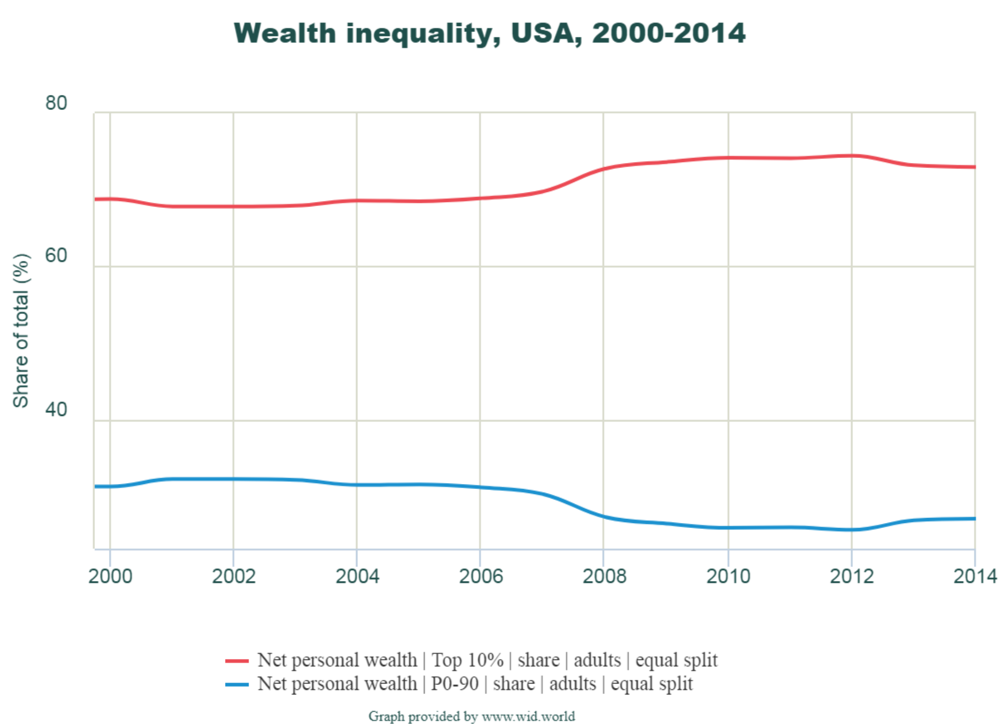
We call this instrument an "Eye-Bond" and you can find out more about it in a speech I gave a few years ago at MIT.[35] The idea hasn't changed much since then, but the process of explaining it, drafting legislation, and enlisting Congressional and Administration support has been a lengthy one. The reason for this goes back to my analytical challenge to you: it is hard to run models on complex projects with high risk profiles to structure debt instruments with a limited federal guarantee that meet necessary taxpayer conflict-of-interest and financial-risk requirements.

We hope we've finally done it and that Eye-Bond legislation will shortly be introduced in a bipartisan bill by senior Members of Congress. We would be delighted if those of you at the Federal Reserve Bank of New York interested in advancing social-impact finance would turn your formidable minds to this challenge, testing our financial models, refining them, and determining the best way to structure the limited federal guarantee our legislation will propose.

Blindness is just one vital, unmet need. I know you all will make an enormous difference in any to which you turn your attention and I urge you quickly to consider new ways to end old, unsolved ills.

Appendix


Income inequality, USA, 2000-2014
60
55
50
45
Share of total (%)
2000
2002
2004
2006
2008
2010
2012
2014
Pre-tax national income | Top 10% | share | adults | equal split
Pre-tax national income | P0-90 | share | adults | equal split
Graph provided by www.wid.world


Wealth inequality, USA, 2000-2014
80
60
40
Share of total (%)
2000
2002
2004
2006
2008
2010
2012
2014
Net personal wealth | Top 10% | share | adults | equal split
Net personal wealth | P0-90 | share | adults | equal split
Graph provided by www.wid.world

End Notes

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