Economic Inequality:

A Pivotal Question for Central Banks

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Policy Brief Prepared for the
IMF Spring Meeting
Washington, D.C.

May 3, 2017

Key Points

- Even if central banks think that addressing economic inequality is outside their reach, many top policy officials and voters think central banks bear a large part of the responsibility for widening income and wealth distributions since the crisis. This is not wrong – valuation gaps due to large portfolios, ultra-low rates, and new rules all have demonstrable, adverse impact on economic equality.
- Central banks that fail to take action where they can and show what else needs to be done will face still more acute threats to their political independence.
- Key features of the post-crisis regulatory framework could also be undone in an attempt to reverse economic inequality unless rules with unintended inequality impact are revised or mitigated through other policy action.
- Although accommodative policy is intended to improve economic equality through enhanced employment, it has a demonstrably adverse impact due to safe-asset scarcity and resulting yield-chasing. The assets of most value to lower-income households for wealth accumulation (homes, savings accounts) are disproportionately devalued due to accommodative policy and ultra-low rates. Employment growth, which remains sluggish, does not compensate for lost wealth. Trillions in lost savings cannot be made up by fiscal policy, with these policies also incurring profound opportunity cost on lower-income households.
- New rules alter financial-institution incentives, redefining the ability and willingness of regulated companies to offer savings and lending products that reach low- and moderate-income households. Non-banks and fintech may substitute for banks, but at uncertain effect due to consumer-protection, financial-inclusion, and systemic-stability concerns.
- A stable financial system protects economic equality, but monetary policies promoting yield-chasing and rules empowering "shadow banks" pose systemic risks that further widen income and wealth distribution as well as lead to still more popular discontent.
- Substantial evidence demonstrates that new rules redefine U.S. deposit-taking and lending, explaining why unprecedented accommodative monetary policy has failed to boost recovery beyond the slow, low rate that sparks political discontent. Central banks should immediately expand their analytical frameworks beyond long-established consideration of employment and price stability to include distributional impact. This analysis should be comprehensive and consider unintended interactions among new rules and between these rules and monetary policy. Portfolio and rate normalization should begin as quickly as possible to advance economic equality in concert with revisions to rules that inadvertently target credit products with the most value for economic development and financial inclusion. Where risks do not warrant relief, consideration should be given to public-private partnerships, tax preferences, and other strategies to enhance credit availability. Governmental savings products targeted to lower-income households should be developed in areas such as automatic investment in government bonds and match or tax-preferred contributions to insured-savings accounts.

Central banks have had their hands more than full since the great financial crisis, making it understandable that many have pointed to fiscal policy, demography, gender, educational immobility and other causes outside their control as prime drivers of increasing economic inequality. However, the shock treatment administered through unprecedented accommodative interventions has also played a significant role exacerbating embedded inequality drivers and creating new, powerful ones directly attributable to post-crisis monetary and regulatory policy. Medical research has recently discovered that patients saved by intensive-care units (ICUs) come out cured of what put them into the ICU, but all too often then come down with a new form of post-traumatic stress disorder (PTSD). This paper will demonstrate that the ICU into which the Federal Reserve thrust the U.S. economy saved the patient but gave the economy PTSD in the form of heightened economic inequality and the political discontent it fuels.

We build here on prior Federal Financial Analytics (FedFin) research[1] to address actions central banks and financial regulators can quickly take to mitigate the equality impact of their post-crisis actions – in essence, ways to cure this PTSD. The analysis below considers monetary and regulatory policy actions not only as freestanding factors, but also by taking into account the interaction among the rules and between rules and monetary policy. We also consider these policy drivers in the context of financial-institution business imperatives – central bankers and regulators may hope that banks and other private-sector financial services firms act in concert with policy objectives, but companies in fact only do so if policies comport with profitability. Rules can of course try to compel compliance, but companies then seek other ways to satisfy ever-demanding investors, ways that alter the nature of the products on offer and/or the structure of the financial-services industry itself. This can be clearly seen in the dramatic shift since the crisis by many large banks to wealth management, not traditional lending, and in the radical realignment of traditional intermediation to "shadow banks." Research on the interplay between the post-crisis U.S. financial-policy and bank-profitability drivers has in fact found that the new rules are regressive.[2]

Aspects of this analysis and our recommendations are of course open to debate. What is not is that, even if central bankers are right that their actions are immaterial to widening inequality, the public and many policy-makers disagree. Failure carefully to consider unintended effects and quickly to correct for them thus would not only worsen a critical social-welfare problem, but also threaten central-bank political independence and the rigor of post-crisis financial regulation. This paper thus also provides specific recommendations for immediate action by the Federal Reserve to ensure careful advance consideration of adverse distributional effects and policy realignment to mitigate those identified here.

The Critical Importance of Central Banking to Economic Equality

Central banks are critical to economic equality because economic equality in part depends on the economic and regulatory engines they control. Monetary policy in the U.S. is by law aimed at promoting employment and price stability – two goals with significant economic equality impact. However, these are the results of Federal Reserve actions – or so it is hoped. Many other factors – trade policy, energy prices, and so forth – also play critical roles. The engines more directly within the Fed's control are:

- the return and valuations on the financial assets generally held by wealthier households versus those accessible to low- and moderate-income households as a result of central-bank portfolio holdings;
- the real rates savers receive based on central-bank rate-setting actions;

- the ability of financial intermediaries (especially regulated banks) to convert savings into lending. The extent to which these intermediation services are inclusive and easily accessible also falls within the Federal Reserve's reach, although regulatory responsibility is shared with other agencies as described below; and
- the financial stability essential to output growth, economic prosperity, and political stability. As with employment and inflation, financial stability depends in part on factors beyond the Fed's reach (e.g., cyber-attacks, non-banks). However, its statutory responsibility for financial stability brings this clearly in scope as an economic-equality driver for which the Fed must take responsibility.

With the exception of demographics, most other acknowledged drivers of economic equality are directly linked to each of these central-bank actions. For example, educational immobility is often attributed to poor school systems, insufficient spending, and the like. Transfer payments and infrastructure support would of course be very useful engines for driving equality, but private-sector factors subject to Federal Reserve actions are also critical. If families cannot achieve sufficient funding to ensure higher education due to ultra-low rates and low or even losing valuations on the assets they are able to save, then the financing of higher education will be tied to debilitating debt levels or may not be achieved at all. Government policy (e.g., loan guarantees, securitization) can play a significant role supporting the primary source of moderate-income household wealth – home ownership,[3] but not if mortgage lenders remain unwilling to originate loans for riskier borrowers. Fiscal policy could make up some of the wealth lost during the great financial crisis through tax cuts or other mechanisms, but its ability to do so for savings lost since 2008 due to ultra-low rates set by the Federal Reserve – estimated at $2.23 trillion[4] – is at best unlikely. The interaction of ultra-low rates with post-crisis regulation and bank-profitability requirements has also been shown to reduce lending – a result directly contrary to the Federal Reserve's intentions.[5]

It is thus clear that the U.S. central bank – the setter of monetary policy and a key regulatory agency – is critical to economic equality. Specific examples of unintended economic-equality effects related to Federal Reserve actions on each of the "engine" factors described above include:

- Although the Federal Reserve's unprecedentedly large portfolio of Treasury obligations, agency debt, and mortgage-backed securities (MBS) is designed to stoke lending by starving the market of safe assets with limited productive capacity, the FRB's quantitative-easing (QE) program has in fact been found in studies by the Bank for International Settlements (BIS) and others to exacerbate economic inequality. This is because of the way in which it alters asset valuation in favor of assets most likely to be held by higher-wealth households.[6,7,8] Pricing incentives resulting from QE also appear to reduce the willingness of U.S. banks to make commercial loans, loans among the most critical to long-term growth.[9]
- Mandating stringent capital standards not offset by reduced cost of capital adversely affects lending capacity when capital requirements exceed the capitalization banks believe appropriate for economic risk and investor return.[10] Data suggesting that U.S. loan growth has not been adversely affected by stringent capital regulation often fail to differentiate lending provided by banks (down, especially in comparison to GDP growth) versus that obtained from non-banks or the capital market, with data also often not differentiated to identify credit scarcity in sectors most critical to economic equality. For example, arguments that U.S. mortgage lending – vital as noted for wealth accumulation – is robust do not differentiate refinancing used to pay down mortgage debt now that higher-priced

houses have increased in value in contrast to the higher-risk lending needed to spur entry-level ownership and thus advance wealth accumulation.[11] Small-business lending depends in part on access to mortgage finance through home-equity loans[12] or through direct bank lending now subject to particularly stiff risk-based capital charges under the Federal Reserve stress-test standards.[13]

- As has been demonstrated,[14] savings tends to increase during recessions because individuals, households, and businesses focus on repairing their balance sheets, not taking on new risks. Under ultra-low rates, these savers must struggle still longer and harder to accumulate the resources needed for resilience in the face of a lost job or unexpected medical bills and to amass the cushions needed for home ownership, education, and secure retirement. Ultra-low rates also exacerbate the valuation differences resulting from accommodative policy because large companies borrow more but often use this debt not for productive investment, but rather for capital distributions to shareholders through higher dividends and share repurchases because slow growth and policy uncertainty stymie productive investment in plants and machinery. Between the third quarters of 2012 and 2015, nonfinancial companies added $1.4 trillion in debt yet spent $1.3 trillion repurchasing stock.[15]
- High-capital requirements also stifle growth because banks are still rebuilding their capital buffers to new, higher levels instead of lending the funds that spur consumption and employment. A new study from the Bank of England[16] has found that higher capital may well lead to more loans, but only during periods in which the economy is growing. When it is not, higher capital is used for balance-sheet repair, not employment-generating and income-distribution benefit. This finding is echoed in a recent Federal Reserve paper, which looks at the link between capital requirements and employment related to the U.S. manufacturing sector.[17] Another recent study [18] demonstrates that the beneficial credit-availability impact expected from higher capital is generally obtained when a bank elects on its own to hold this higher capital, not when it is required to do so regardless of underlying risk and thus at cost to its risk-adjusted rate of return.
- Requiring banks to hold large books of high-quality liquid assets (HQLAs) to comply with post-crisis liquidity regulation has a significant adverse impact on bank lending capacity because these low-return, no or low-risk assets require capital – already scarce as noted above – that cannot be deployed for more profitable and productive purposes. The Federal Reserve's large holdings of HQLAs has combined with other market forces and central-bank actions to create significant HQLA shortages and sharp price distortions that pose additional risks due to ultra-low and even negative rates. Banks holding large HQLA balances thus absorb significant costs as they deploy limited balance-sheet capacity due to the new capital rules toward assets with little, if any growth-generating and credit-availability benefits.
- Although banks are flush with deposits that are favored funding sources under the new liquidity rules, these deposits often cannot be profitably deployed into new loans or other assets for the regulatory reasons described above. Banks can accept more deposits without necessarily making more loans because they can intermediate these funds into riskless excess reserves held at the central bank. Excess reserves pay significantly lower interest rates than productive assets such as mortgages and small-business loans, but banks choose excess reserves over lending because of the capital costs associated with new loans and the risks of making loans when economic recovery is uncertain and interest rates could rise.[19]
- If banks do not need to or cannot profitably intermediate deposits, then they will not raise rates to attract them even if other market participants begin to do so. Discontinuities between bank liability rates and those offered by non-bank deposit-takers and money-fund

managers will thus continue to adversely affect economic equality because low- and moderate-income households that rely on banks will be disadvantaged relative to more affluent investors using capital-market instruments (i.e., equity and bond investments or those provided by asset-management firms).

- Where banks do transmit higher rates, they will first and perhaps only do so for the deposits they must accept from customers (e.g., large asset-management firms, major corporations) that generate profits to the bank via fees or interest rates on extended credit facilities. Indeed, as the Federal Reserve has raised rates, core deposit rates have so far remained relatively flat compared with large corporate deposits. Small depositors generally do not generate cross-sell opportunities, especially given the obstacles described above to extending credit to them. Although deposit rates will climb as rate rises become institutionalized, it is likely to take years before savers catch up to the trillions lost since the financial crisis, undermining wealth accumulation and slowing economic growth that would otherwise result from increased consumption.
- New rules demand that the largest U.S. banks issue large amounts of long-term debt to meet requirements for "total loss-absorbing capacity" (TLAC). This long-term debt must also be deployed into assets to avoid severe and adverse profit effects, reducing the ability of large banks to hold core deposits despite the favorable treatment given to them in the post-crisis liquidity rules.
- The HQLAs described above must generally be funded with unsecured short-term wholesale funds to minimize duration and related risk, further reducing deposit-taking capacity. Deposits could be used to fund loans above and beyond HQLA holdings, but capital restrictions limit balance-sheet capacity both to meet the liquidity rules and generate new loans.

When defending the financial-stability benefit of the post-crisis framework, regulators typically point to the tough new capital rules. As described above, the new capital rules – more stringent in the U.S. than any other nation – are critical factors adversely affecting economic equality because of their direct impact on providing credit, especially higher-risk loans, and their indirect impact constraining balance-sheet capacity given the requirements that large banks also hold large HQLA balances governed by both leverage and risk-based capital requirements. These costs might be warranted if financial stability were ensured by higher capital given the profound, adverse impact on economic equality resulting from financial crises. However, a recent governmental literature survey of the effect of capital regulation on financial stability 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."[20] Indeed, a new study from the Federal Reserve Bank of San Francisco[21] cites empirical evidence concluding that higher capital is correlated with higher crisis risk. Rather than capital, the most meaningful indicator of financial stability found by this study in a data sweep across seventeen countries from 1870 onward is not capital ratios, but rather credit growth to GDP.

Even were capital a critical bulwark against risk, FedFin research[22] also finds that financial crises can be triggered by factors with little relation to bank capital and liquidity regulations – indeed, some possible crisis drivers such as the operational risk resulting from a cyber-attack are adversely affected by new capital rules to the extent these discourage operational-risk mitigation, constrain investment in operational resilience due to reduced profitability, and/or distracted management and supervisory resources. As global regulators well know, risks may also come from the concentrated holdings of critical infrastructure such as central counterparties and from the transfer of key activities outside regulatory reach. Correlation risk resulting from the demands of new capital and stress-test rules are also possible systemic-risk drivers, as the Office of Financial Research has noted.[23]

Are Banks Necessary for Economic Equality?

Given the size of the Federal Reserve's portfolio and the impact of ultra-low rates, it is clear that the central bank has significantly altered the ability of the market to value assets and reward savers as it otherwise might in response to market fundamentals. However, the impact of the new rules on economic equality could be reduced if non-banks substitute for banks and their newfound market prominence does not then threaten financial stability. To assess this, it is helpful to review the U.S. mortgage market. A significant cause of the great financial crisis, risk in this sector clearly has systemic potential. Although Fannie Mae and Freddie Mac are now in conservatorship with an "effective" federal guarantee and Ginnie Mae has a full-faith-and-credit backstop, there is still significant risk in these agencies that could disrupt financial markets even if liquidity and stability are ultimately restored by the U.S. taxpayer.

The post-crisis rules adversely affect the ability of banks to originate mortgages for their own portfolios, to do so for these government agencies, and to service (i.e., handle payments and foreclosures) outstanding loans. These rules include not only those described above, but mortgage-specific ones such as high capital requirements on mortgage-servicing rights. Rules affecting all mortgage entities such as those imposed by the Bureau of Consumer Financial Protection (CFPB) also have disproportionate impact on banks due to the way they interact with regulatory-capital requirements. New research finds that CFPB mortgage-servicing requirements designed to protect borrowers from poor servicing practices that prompt undue foreclosures in fact lead to loss given defaults (LGDs) of as much as forty percent on higher-risk mortgage loans – those necessary for first-time buyers. LGDs are a factor dictating risk-based capital for larger banks, and a forty percent LGD results in a prohibitive regulatory-capital requirement. Reflecting all of these factors, another new study[24] has found that the "shadow bank" share of the U.S. mortgage market has almost tripled since 2007, with these non-banks now holding 75% of the FHA market guaranteed by Ginnie Mae. These non-banks do not enhance economic equality by substituting for banks in mortgage lending for low- and moderate-income households. Recent data show that U.S. home ownership levels have dropped precipitously since the financial crisis, with younger and poorer people increasingly renting, not owning because of challenges in amassing down payments and meeting stringent credit-risk criteria.[25]

What Should Central Banks Do?

This short summary of the unintended implications of U.S. monetary and regulatory policy is based on extensive research that addresses many aspects of these issues in far greater depth. There is, though, no greater indication of the unintended impact of recent financial-policy actions than the painfully slow pace of the U.S. recovery since the great financial crisis and resulting, profound political discontent.

The Federal Reserve has been stymied by the inability of its unprecedented portfolio and ultra-low rates to stimulate growth. Federal Financial Analytics' research[26] indicates that at least one cause of these impediments to output growth and employment improvement is the sum total of the conflicting interactions between monetary and regulatory policy. This research also demonstrates significant risk to long-term financial stability due to the transition of key financial services and infrastructure outside the regulated-banking sector, making it unlikely that the macroprudential rules on which central banks hope to rely will actually be effective crisis mitigants.

The first thing central banks can thus do is to step back from doggedly pursuing traditional monetary policy (albeit through non-traditional mechanisms such as their portfolios). Just because a central bank thinks its policies should work does not mean that they will work. It is past time to consider the cumulative impact of U.S. monetary and regulatory policy to identify unintended distributional results and then quickly to correct them. The International Monetary Fund has taken on the challenge of considering new policies to ensure economic equality from an international perspective[27] and the Financial Stability Board has haltingly begun to do so with regard to the post-crisis prudential and resolution framework.[28] Although senior FRB officials have scoped out sweeping research agendas,[29] none has yet identified the unintended economic-equality impact of the central bank's actions as a research priority. It is past time to do so.

As almost ten years have passed since the financial crisis began, the U.S. under traditional economic thinking may be about set to enter a new recessionary business cycle. Given the low rate of GDP and fragile employment from which any such downturn would begin, the output results would be very costly, especially if accompanied by sharp downturns in financial-market valuations that further curtail lending and destroy savings. This would of course widen wealth distribution at considerable cost to income equality and, quite likely, already-fragile political stability. Tightening monetary-policy now only to give the FRB more room to loosen later in any such scenario will not affect the underlying instabilities caused by economic inequality. Indeed, it would only exacerbate them in the absence of a more coherent, balanced policy framework modulating regulation to reflect monetary-policy objectives and recalibrating monetary policy to enhance financial stability.

Specific actions could include:

- clear guidance as to near-term reductions in the Federal Reserve's balance sheet so that asset valuations begin to assume more normal configurations and offset the distributional impact of HQLA shortages. The Federal Reserve is laying extensive groundwork for allowing its QE positions to run off over time, but how much in fact will run off and whether any portfolio reductions will be replaced under stress is uncertain. Policy deliberations to date are principally focused on the interaction of the central bank's portfolio with interest rates and collateral shortages, not distributional impact. Economic inequality should be immediately added to this analytical framework;
- normalized interest rates to enhance return to savers to encourage wealth accumulation and support prudent consumption. Again, the Federal Reserve is increasing rates, but this is largely determined by traditional indicators such as what the central bank considers to be full employment and inflation. The analytical framework again should immediately consider distributional impact, here focusing on factors such as the ability of low- and moderate-income Americans to save enough to regenerate consumption, ensure economic stability, and accumulate wealth;
- realigned regulatory-capital standards that create balance-sheet capacity. To avoid indirect credit allocation by skewing risk-based capital ratios to reflect social-policy – not credit-risk – incentives, capital rules should be relaxed principally for low- or no-risk assets such as excess reserves. In the near term, this could encourage still more excess reserves, but the combination of rising rates and more balance-sheet capacity should generate greater lending capacity as long as the U.S. recovery is sustained;

- recognition that macroprudential rules are unlikely to ensure financial stability in the U.S. given the rapid shift of key activities to non-banks and the inability of the Federal Reserve to govern them. Alternative macroprudential measures should be developed, recognizing the power of the FRB as central bank and regulator to address yield-chasing and regulatory arbitrage; and
- fiscal policy incentives for the savings accounts and lending most critical to economic equality. The U.S. now has tremendous taxpayer risk associated with residential mortgages, but the bulk of these subsidies go to middle- and upper-class homeowners by sustaining the pre-payable penalty-free thirty-year fixed-rate mortgage. Federal credit support to small businesses is limited at best. More efficient, better targeted, and explicitly guaranteed facilities for entry-level home owners, start-up small businesses and other equality-generating credit creation warrants careful review in concert with a critical review of why programs aimed at these goals have generally failed to support equality-critical lending. The role of financial technology (fintech) also warrants careful review to ensure its promise of greater financial inclusion will not come with greater consumer-protection and financial-stability risk.

Endnotes

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