Income Inequality:

The Battlefield Casualty of Post-Crisis Financial Policy

Karen Shaw Petrou
Managing Partner
Federal Financial Analytics, Inc.
www.fedfin.com
info@fedfin.com

Keynote Address before the

Federal Reserve Bank of Chicago/European Central Bank

Nineteenth Annual International Banking Conference

Chicago, Illinois

November 3, 2016

After such a busy day with so many fine presentations, you may think it a bit apocalyptic to start this dinner speech with thoughts about Napoleon's invasion of Russia in 1812. No worry, I have not brought in cannons or Tchaikovsky's "1812 Overture" to accompany my remarks. But I will start with a quote from Tolstoy's War and Peace which resonated with me as I was thinking about my theme tonight: the urgent need to act on increasingly clear flaws in the new financial-market structure as economies struggle to recover and political systems show stark signs of popular despair. If we aren't safer even as globalization breaks down and income inequality widens, then we have a recipe if not for Napoleonic-style invasion, then at least for still more populist marches on the capitals of the U.S., U.K., France, the Netherlands, and many other nations. Profound political discontent without robust growth is a dangerous combination and it's due at least in part to the post-crisis financial framework. Actions necessary to forestall still worse damage from the 2008 crash are eight-plus years on redesigning financial markets in ways that damage the ability of lower-income people to lift themselves up. Eight-plus years on, rules designed to make finance safer are instead redesigning markets in ways that undermine credit delivery, deposit-taking, and short-term liquidity. We all wish this weren't so, but it is. I'd like this evening to explain why I think the current situation is so dangerous and lay out action steps to financial policies that again meet their prime objective: making nations more prosperous so we all can live more peaceably.

What did Tolstoy say with importance for financial policy today? To quote first and explain later, Tolstoy in War and Peace considers why his parents' world was shattered beyond recognition, concluding that:

> Napoleon attributed the cause of the war to England's intrigues... Members of the British Parliament attributed the cause of the war to Napoleon's ambition. …Prince Oldenbourg considered the war to have been caused by the insult he received and the merchants regarded the "Continental System," which was ruining European trade, as responsible for it. Old veterans and generals saw the chief cause for the war in the necessity to find them something to do. ... Diplomats found the cause in the fact that they had not been skillful enough to hoodwink Napoleon in regard to the Russian alliance with Austria in 1809, or that there was such a thing as memorandum No. 178. ... For us now, the causes arise before us in all their innumerable quantity. The deeper we delve into the investigation, the more numerous they open up before us. Every separately-considered cause or whole series of causes appears equally efficient in its own nature, and equally fallacious by reason of its utter insignificance in comparison with the scope of the results and equally fallacious by reason of its inability without the cooperation of all the other causes combined to produce the events in question.[1]

Do we need to adopt Tolstoy's profound historical fatalism to hear the lesson for us in this dismal passage? Of course not – that's why you are all making such an important contribution not only by studying the crisis, but also by building the new rules needed to prevent a re-run. However, thinking like Tolstoy tells us that:

- First, all of us who lived through the crisis see it only in parts even as each of us and everyone with whom we share our financial systems is living with consequences that utterly redefine the policy framework, like it or not. If we wait for all the pieces of the policy response first envisioned in 2009 to be completed before we contemplate its cumulative impact, we may well be swept away in financial, economic, or political crises.

- Second, we live in a very inter-connected world in which simple cures – giant amounts of bank capital, for example – reverberate across monetary-policy transmission and regulatory-enforcement channels with intertwined, unintended, and potent consequences. These include heightened income inequality and global fragmentation.
- Third, consequences do not sit still, awaiting a regulatory pronouncement that the post-crisis framework is "finished." Each action has its own reaction. Reactions such as fragmented global finance and heightened income inequality warrant immediate action before the reactions to them turn toxic.

Perhaps because I've got the U.S. election so much on my mind, I think the income-inequality effect is so important that I'd like to spend the rest of my time with you tonight focusing on how the new financial-policy framework adversely affects U.S. income inequality. Similar trends are all too evident in other countries.

Income and wealth distribution is more than an academic construct we can plug into our macroeconomic models or ponder in our financial-inclusion efforts. When middle-income people become low-income ones and low-income people join the ranks of the poor, we have irreparably harmed the lives of individuals and damaged the national social fabric with political consequences that have historically proved to be tremendously destructive. Income inequality may well be the driving force also of increasing popular rejection of global agreements, whether they govern migration or cross-border trade.

Financial-Policy Drivers of U.S. Income Inequality

Tonight, I'll only discuss some of the most significant conclusions we have reached in a new paper by our firm on income inequality.[2] In it, we take an approach we have deployed in several other recent analyses that may also be of interest to you. The first of these looks at the new U.S. regulatory construct to determine how it affects monetary-policy transmission and macroprudential regulation.[3] Two other new papers look specifically at the policy financial-structure and monetary-policy impact of the U.S. leverage-capital rule[4] and the problems of standardizing operational risk-based capital.[5]

In all of this work, we look across the gulf that ordinarily separates thinking about money and credit from thinking about prudential regulation. We have learned the hard way during the crisis that monetary policy can stoke financial-stability risk and that financial-stability problems confound monetary-policy ambitions. As Tolstoy tells us, causality is inter-connected. Current analytical work, though, all too often still segregates thinking into the monetary-policy or regulatory silos, perhaps because macroeconomists are experts on the first and lawyers have claimed the rules as their own.

Where, though, is input from financial institutions and – even more important – their customers and counterparties? Research brings this out over time, but the real world is telling us that real changes are afoot and some of them are not only unintended, but also dangerous.

I doubt many of you will question my fundamental premise: that income and wealth distribution has become less equitable in many countries, including the U.S. I do, though, need to explain why it's important to think about income inequality in connection with financial policy.

Many central bankers have worried about the adverse impact of too much money in the hands of too few people, but most work[6] looks outside the central bank's perimeter at immutable forces such as demographics and educational immobility. Fiscal policy is of course critical here, allowing central banks not only to worry aloud about things beyond their reach, but also to point fingers at deserving targets.

This isn't enough – there is a lot central bankers and financial regulators can and should do about income and wealth inequality. To be sure, efforts by central bankers – especially the Fed – to throw everything they could at the financial crisis averted the worst-possible outcome from an income-inequality perspective. By virtue of these heroic and innovative efforts, a financial cataclysm was averted. However, even though we didn't plummet off the cliff into a Great Depression, I fear now that continued accommodative policy combined with ultra-low rates in concert with many new rules are pushing us inexorably down a cliff to dangerous, untrodden ground.

For a good source on monetary policy and what one could call the anti-wealth effect, I refer you to a recent study from the Bank for International Settlements.[7] It finds first that U.S. income and wealth inequality has not only dramatically increased since the financial crisis, but also that the rate of distributional widening has increased more quickly here than in any major nation other than France. Why?

Looking only at the impact of accommodative policy, the BIS tracks the prices of the assets held by wealthier households (stocks and bonds) versus the key wealth-producing asset held by lower-income people (housing). You will not be surprised to learn that accommodative policies designed to increase the value of financial assets worked to the great benefit of the wealthy and that low- and moderate-income households have suffered. In the U.S., the home-ownership rate has dropped an astounding eight percent since 2004.[8]

In our work, we add to the asset analysis a look also at the impact of ultra-low rates on the most important entry-level wealth-accumulation asset for low- and moderate-income households: savings accounts. You will also not be surprised to hear that real interest rates at or below zero destroy wealth accumulation. Consumption was supposed to counter this effect and return economies to robust growth and employment in short order, but this, of course, has not occurred. In a recent speech, ECB chief Mario Draghi has argued that negative rates may make the rich richer but the poor aren't getting all that much poorer.[9] I'm not particularly comforted by this defense of ultra-low rates, but even if I were, it wouldn't address the distributional impact of richer rich people, let alone the political fury they spark.

How could it be that unprecedented amounts of accommodative policy combined with rates at or below the nominal zero bound have done so little to move traumatized markets back to prosperity and restore bloodied financial systems to stability? Here's where the intersection of monetary and regulatory policy comes into play. Not only do new rules redefine financial intermediation, especially in the U.S., but they also create a negative feedback loop with post-crisis monetary policy, accelerating and exacerbating other trends that widen income and wealth distribution.

The Role of Rules

Before I tread the touchy ground of the post-crisis regulatory framework, let me emphasize that my comments are not a call to "water down" the rules – some should be a lot tougher. I am particularly distressed by the slow progress of new rules to end too-big-to-fail financial institutions – nothing would do more to restore market discipline and lighten the distorting role of financial policy than allowing financial markets to exact discipline and, if need be, vengeance.[10]

The post-crisis resolution framework is, though, taking shape far more slowly and less certainly than the new regulatory one. As a result, regulators combine with monetary-policy makers to define winners and losers in the financial sector and, by doing so, also winners and losers among their customers and counterparties.

Time tonight does not permit me to discuss how the vortex of monetary and regulatory policies collides with dangerous impact in areas like the Treasury repo market. I also cannot spend the time I would like on the market impact – adverse I fear – of any still larger FRB portfolio, especially if the book is bulked up principally with more agency MBS.

Let me instead quickly highlight a few new rules and how, together with monetary policy, they combine to make poor people poorer, at least in the U.S. One may not care about these rules given their damaging impact to big-bank profitability, and I don't blame you for that. However, banks still play critical roles as credit originators, mainstays of market liquidity, and providers of safe stores of value – i.e., deposits. In most banking systems, big banks matter the most because they do the most of each of these functions. Take them out and we need either to be comfortable with a far larger role for non-banks or governmental agencies such as GSEs and central banks or to consign ourselves to less credit, fewer places to put our money, and less market resilience.

1) Leverage Ratio

> This is a particularly challenging issue in the U.S., which has long had a leverage ratio but now has a supplementary, still-higher one for the largest banks in part because other nations allowed their banks to become dangerously over-leveraged. In the U.S., the imposition of the capital requirement in concert with FDIC-insurance premiums on excess reserves held at the FRB create strong disincentives for banks to place any more deposits than they have to with the central bank. In good times, that may be fine but now, it's dangerous and hurts lower-income depositors. Another Federal Financial Analytics paper from 2015 goes into this in depth,[11] but the problem arises because anything that limits bank deposit-taking capacity or raises its price travels through the U.S. financial system in terms of fewer places safely to accumulate wealth and less funding to fuel economic growth.
>
> The reason for this is straightforward – banks have to intermediate deposits into assets and the more assets cost, the less their appetite for deposits unless asset costs are offset by return – not possible for central-bank excess reserves. FRB rules designed to punish the biggest banks for short-term wholesale funding might reverse some of these effects over time, but only if core deposit costs are manageable because sufficient supplies of higher-yielding productive assets can be added to bank balance sheets under all of the applicable rules. These rules have forced large U.S. banks to alter their portfolios, with their holdings of productive assets dropping ten percentage points since the crisis.[12] Only productive assets – i.e., loans, not government securities – promote income equality because these are the funds that fuel market-driven economic growth. The less of them at banks, the less growth.

2) Overall Capital Requirements

Without disputing the prudential benefit of higher regulatory capital, it is important to recognize that no good deed goes unpunished. The leverage rules have specific impact, but the sum total of risk-based ones also affects credit formation and thus income equality depending on the amount of capital required and how it is calculated.

In the income-inequality context, higher capital standards have demonstrable, adverse impact on employment.[13] Although debate continues on the cost of capital to banks, it is clear from market-capitalization analysis[14] that investors are not rewarding U.S. banks for their improved regulatory-capital buffers. Even though regulators wish investors were higher-minded, investors want return and thus make it very difficult for banks to retain equity in ways that would meet regulatory-capital requirements without adversely affecting economic growth. This makes it very difficult for banks to improve capital ratios through retained earnings without adverse impact on credit availability. To raise capital, banks thus must reduce assets or issue stock. Since the crisis, they are doing a good deal more of the former, as well as optimizing capital often in ways adverse to economic equality.

A complex optimization formula leads banks to compute the total cost of all of their rules, try to out-guess the next stress-test round, and then design their asset/liability strategy. There is strong evidence that this leads banks to "barbell" their assets – i.e., to hold the no- or low-risk ones required by the liquidity rules and then to book high-risk assets to chase a bit of net-interest margin and return on equity. Long-term, sustainable loans to moderate-income individuals and established small businesses fall in between the low- and high-risk ends of the barbell and thus fall by the wayside. A look at the business lines on which many larger banks now focus – wealth management, for example – also demonstrates that strategic focus is shifting from individuals, households, and small businesses.

3) Liquidity Regulation

In addition to requiring large banks to hold large balances of non-productive assets, the LCR and NSFR penalize non-operational deposits, making it challenging for larger banks to provide small businesses with the deposit services necessary to provide secure "stores of value." Because securitization is penalized by these rules, the ability of U.S. banks to engage in non-agency retail-asset securitization is undermined. Many banks have focused instead on portfolio mortgage lending, but they do so generally only for large-balance loans ("jumbos") that do nothing for first-time and lower-income households trying to purchase a home. Due to this and the toughened credit-risk standards for agency loans, many borrowers are thus turning to rent-to-buy and other non-bank products that put them at significant risk or simply remain renters, forcing these lower-income households off the path to owning the most significant asset for wealth accumulation.

All of these regulatory impediments to financial services could be reversed for lower-income U.S. households and small businesses if non-banks were to fill in the gaps in the U.S. financial-intermediation chain that open up as large U.S. banks come under all of the rules I've described and those for which I haven't had time. However, the very different business models of these shadow banks makes it most unlikely that any short-term reversal of adverse income-distribution effects will be sustained over time. Dependent on market finance, not stable deposits, and without capital buffers to ensure continued credit under stress, non-banks are likely to prove procyclical if they take on a major role as U.S. transaction-account, payment-service, and credit-origination providers. If this procyclicality is acute, then income inequality will be further harmed due to the damage done also to financial stability and the resulting macroeconomic carnage.

In War and Peace, the casualties are, as is sadly usually the case, disproportionately the average soldiers, peasants, and women and children over whom history rides particularly rough-shod. In the 2008 financial crisis, our casualties are also disproportionately those who were most vulnerable before the global financial system blew up. These people are now the most ill-served by the combination of accommodative policies that have yet to support robust growth and financial regulation that is not rebuilding a resilient system that supports secure retail deposit-taking and sound, sustainable credit origination.

Next Steps

Central bankers and regulators around the world know that actions since the crisis have not always had their desired result. Chair Yellen has recently laid out a monetary-policy research agenda[15] and Gov. Tarullo even more recently has done the same for U.S. regulatory policy.[16] The ECB and IMF have also undertaken formidable, important research initiatives. But the voters tell us we cannot wait for definitive research of past actions that are increasingly overtaken by current events.

Decision theory has an important message for financial policy: act incrementally to solve problems and adjust along the way to avoid sunk costs. Since the crisis, financial policy has instead pursued grand schemes – Napoleonic visions, benign though they are – of rebuilding finance and macroeconomic growth back at least to pre-crisis prosperity. Eight-plus years on, these grand schemes are falling ever farther behind their goals and troubling new weaknesses are arising at least in part because of the market distortions created by these sweeping standards and economy-changing monetary policy interventions.

My suggestion tonight is that we see financial markets not as we wish they were, but as they are. As they are is what financial institutions subject to all of the new rules are making them even though most of these financial institutions also don't like the social-welfare impact of the changes they feel forced to make to preserve what profit they can. They will, though, inexorably make them because that is what private institutions do and they will not wait for research to tell them if these changes are for good or ill from a monetary-policy, financial-stability, or social-welfare point of view.

To quote a new Nobel Prize winner, the times they are a-changin'. Monetary-policy actions – once essential, now unduly prolonged – have changed how markets work and who wins or loses. These market-structure changes have combined with ill-harmonized rules to make banks safer at grave cost to overall financial stability. With banks increasingly sidelined from financial intermediation, monetary-policy wealth-distribution incentives are revved up to a still more dangerous pitch. To quote another passage from Bob Dylan's past, we don't need a weatherman to tell the weather. It's changing in financial markets. To me, it's getting uncomfortably hot.

NOTES

---

[1] Leo Tolstoy, War and Peace Volume III, 1-2, (Nathan Haskell trans., Thomas Y. Crowell & Co. (1889), (Language has been altered to enhance clarity.) available at https://play.google.com/books/reader?id=N1MEAAAAYAAJ&printsec=frontcover&output=reader&hl=en&pg=GBS.PA1.

[2] Federal Financial Analytics, *Income Inequality: U.S. Monetary-Policy and Regulatory Wealth-Distribution Drivers* (September 19, 2016), available at http://www.fedfin.com/images/stories/client_reports/FedFin%20Paper%20on%20IncomeInequality%20U.S.%20Monetary-Policy%20and%20Regulatory%20Wealth-Distribution%20Drivers.pdf.

[3] Federal Financial Analytics, *Square Pegs and Round Holes: The Effectiveness of Monetary Policy and Macroprudential Regulation in the Post-Crisis Regulatory Regime* (May 18, 2016), available at http://www.fedfin.com/images/stories/client_reports/FedFin%20White%20Paper%20on%20The%20Effectiveness%20of%20Monetary%20Policy%20and%20Macroprudential%20Regulation%20in%20the%20Post-Crisis%20Regulatory%20Regime.pdf.

[4] Federal Financial Analytics, *Mutual-Assured Destruction: The Arms Race between Risk-Based and Leverage Capital Regulation* (October 13, 2016), available at http://www.fedfin.com/images/stories/client_reports/FedFin%20Paper%20on%20Mutual-Assured%20Destruction%20-%20The%20Arms%20Race%20between%20Risk-Based%20and%20Leverage%20Capital%20Regulation.pdf.

[5] Federal Financial Analytics, *Capital's Cast-Off: Operational Risk-Based Capital and Its Critical Implications* (September 30, 2016), available at http://www.fedfin.com/images/stories/client_reports/FedFin%20Paper%20on%20Operational%20RiskBased%20Capital%20and%20Its%20Critical%20Implications.pdf.

[6] Federal Reserve Board (FRB) Chair Janet L. Yellen, *Speech at a community development research conference: "Economic Mobility: Research and Ideas on Strengthening Families, Communities, and the Economy,"* Washington, D.C. (April 2, 2015), available at http://www.federalreserve.gov/newsevents/speech/yellen20150402a.htm.

[7] Dietrich Domanski, Michela Scatigna and Anna Zabai, *Wealth Inequality and Monetary Policy* (March 6, 2016), available at http://www.bis.org/publ/qtrpdf/r_qt1603f.htm.

[8] U.S. Census Bureau, Current Population Survey/Housing Vacancy Survey, Table 14. Quarterly Homeownership Rates for the U.S. and Regions: 1964 to Present, (Third Quarter, 2016), available at http://www.census.gov/housing/hvs/data/histtabs.html.

[9] ECB President Mario Draghi, *Speech at the 2nd DIW Europe Lecture: "Stability, equity and monetary policy,"* Berlin, (October 25, 2016), available at http://www.ecb.europa.eu/press/key/date/2016/html/sp161025.en.html.

[10] Federal Financial Analytics, *Are U.S. SIFIs Still TBTF? An Assessment of the New Resolution Regime for Systemically-Important Financial Institutions* (October 22, 2012), available at http://www.fedfin.com/images/stories/client_reports/assessment%20of%20resolution%20regime%20for%20sifis.pdf.

[11] Federal Financial Analytics, *Where the Money goes and Why it Matters: The Market and Policy Impact of Reduced Custody-Bank Deposit Capacity* (August 4, 2015), available at http://www.fedfin.com/images/stories/client_reports/FedFin%20Study%20-%20The%20Market%20and%20Policy%20Impact%20of%20Reduced%20Custody-Bank%20Deposit%20Capacity.pdf.

[12] Greg Baer, Testimony before the U.S. Senate Committee on Banking, Housing, and Urban Affairs, Washington, DC: Bank Capital and Liquidity Regulation Part II: Industry Perspectives, 10 (June 23, 2016), available at http://www.banking.senate.gov/public/_cache/files/53257b19-de9a-4734-8fdebeead88a2de6/440F70F96DF111ADCEF153AFE8650672.062316-baer-testimony.pdf.

[13] Seung Jung Lee & Viktors Stebunovs, *Bank Capital Pressures, Loan Substitutability, and Nonfinancial Employment*, (April 2016), available at http://www.federalreserve.gov/econresdata/ifdp/2016/files/ifdp1161.pdf.

[14] Natasha Sarin & Lawrence Summers, *Have big banks gotten safer?* (September 15-16, 2016), available at

https://www.brookings.edu/wp-content/uploads/2016/09/2_sarinsummers.pdf.

[15] FRB Chair Janet L. Yellen, *Speech at the "The Elusive 'Great' Recovery: Causes and Implications for Future Business Cycle Dynamics," Economic Conference*, Boston, MA (October 14, 2016), available at http://www.federalreserve.gov/newsevents/speech/yellen20161014a.htm.

[16] Daniel Tarullo, *Speech At the Conference on the New Pedagogy of Financial Regulation, Columbia Law School, New York, New York: "Pedagogy and Scholarship in a Post-Crisis World"* (October 21, 2016), Federal Reserve Board, available at http://www.federalreserve.gov/newsevents/speech/tarullo20161021a.htm.