Americans for Financial Reform Education Fund

THE TRUMP ADMINISTRATION, WALL STREET, AND THE NEXT RECESSION

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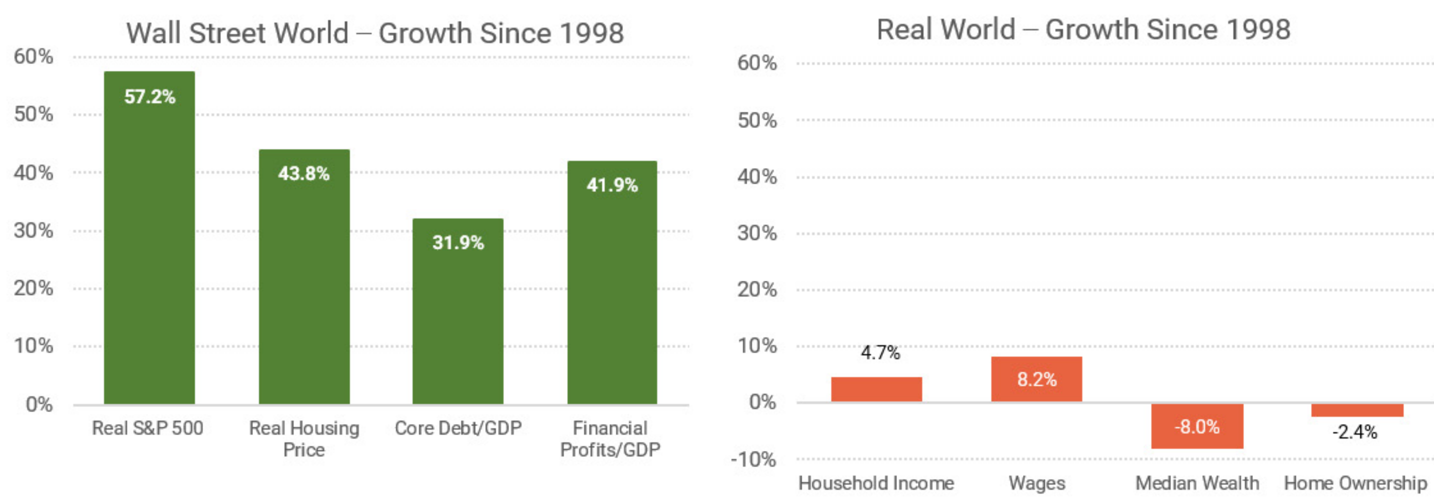
INTRODUCTION

The Trump administration's recent actions have fueled the excessive power of Wall Street relative to the rest of the economy. The 2017 corporate tax cuts granted outsized benefits to Wall Street and were well crafted to encourage financial engineering and boost stock prices rather than grow wages and investment. Regulators today are also failing to address growing issues with unsustainable levels of debt at non-financial corporations, and are actively loosening risk protections at large banks in ways that are likely to amplify the next recession and increase the pressure for government bailouts during a financial crisis.

WALL STREET, INEQUALITY, AND THE BUSINESS CYCLE

The past several decades have seen a long boom for Wall Street. But the ever-increasing centrality of Wall Street has not served most Americans. The growth since 1998 in the outputs of the financial sector – debt and lending, real asset prices such as equity and housing costs, and financial sector profits – has dwarfed the growth of real wages, income, and wealth for most Americans (see Figure 1).

Fig. 1: Wall Street versus real world growth over past two decades



Source: Data on stock prices, housing costs and ownership, real wages from Federal Reserve Economic Data (FRED), St. Louis Federal Reserve, including S&P 500 index (SP500), adjusted for inflation, Case-Shiller Housing Index (CSUSHPINSA), Real median weekly wages of full-time workers (LES1252881900Q), Home Ownership rates (RHORUSQ156N). Data on wealth from Survey of Consumer Finances, 1998 and 2016. Data on core (non-financial) debt to GDP ratios from Bank of International Settlements. Data on financial industry profits from National Income and Product Accounts (NIPA), Bureau of Economic Analysis.

The contrast is stark. The financial system is supposed to serve the rest of the economy. Financial activities like lending and speculating on asset prices are intended to facilitate the expansion of the well-being and productivity of the whole population.

But as financial markets grow ever larger and more significant to the economy, and as debt increases and the stock market soars, the income and wealth of the typical family has stagnated or declined. The wealth generated by the expansion of finance has instead accrued to a few. From 1998 to 2016 the wealth of the top one percent of households has tripled, while the wealth of the bottom half of the population has actually declined.

How has this happened? As Wall Street has grown more powerful, the business cycle has changed. Instead of strong wage increases, allowing ordinary people to build wealth, periods of economic expansion are now characterized by rapid debt and asset price growth which lay the groundwork for increasing inequality. When the economy switches into recession, these downturns have frequently been amplified by the fallout from unsustainable levels of debt and asset price crashes. This makes recessions even worse than they otherwise would be.

THE CURRENT ECONOMIC RECOVERY REPEATS PAST PATTERNS

Unfortunately, this pattern of financialized business cycles still continues. The current economic upturn has been marked by the slowest wage growth of any recovery over the last few decades:

Source: U.S. Bureau of Labor Statistics, Average Hourly Earnings of Production and Nonsupervisory Employees: Total Private, retrieved from FRED, Federal Reserve Bank of St.Louis; https://fred.stlouisfed.org/series/AHETPI, April 12, 2019.

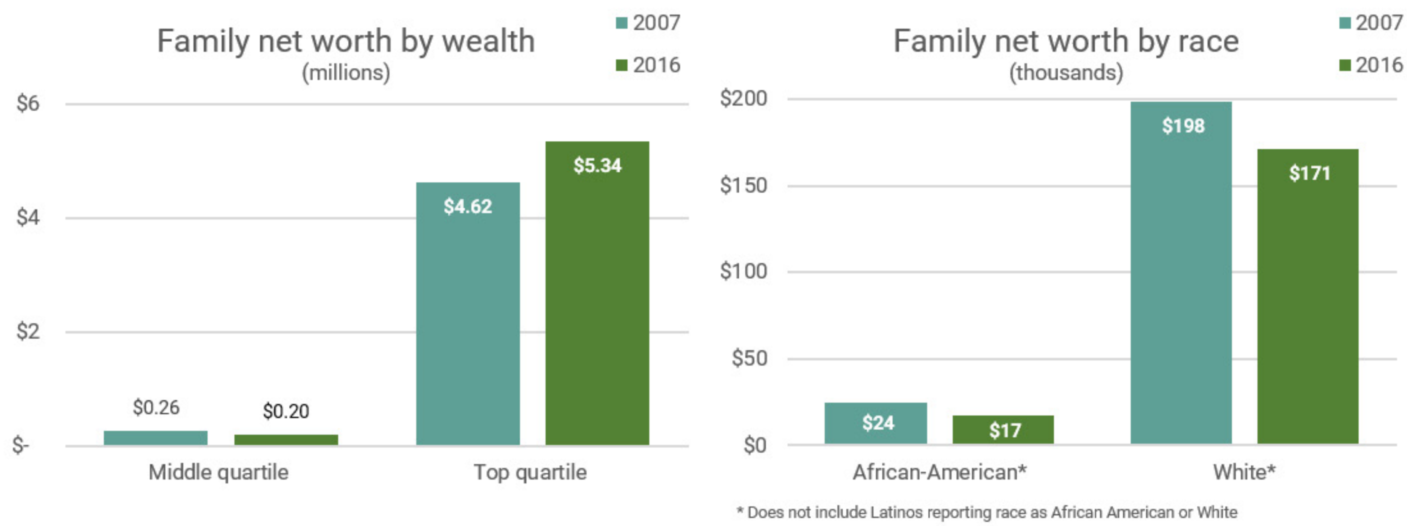
In contrast, real housing prices have grown by over 20 percent and inflation-adjusted stock market valuations have doubled since 2010. Rapid price increases are currently widespread across asset markets.[1]

Debt is growing rapidly as well. While consumer debt has dropped significantly since the extremely elevated levels prior to 2008, it has been growing rapidly since post-crisis deleveraging ended in 2013.[2] And as discussed below, non-financial corporate debt is growing even more rapidly and has now attained record levels as a share of the gross domestic product (GDP).

Low wage growth and continued growth in debt has meant that lower and middle income families have not been able to repair the damage to their household balance sheet due to the financial crisis. The decade from 2007 to 2016 saw the largest increase in U.S. wealth inequality on record.[3]

The net worth of middle class, lower-income, and minority households dropped by 25 percent or more from 2007 to 2016, while the wealth of high-income households increased significantly. The average wealth of the bottom 99 percent declined by $4,500 per family, mostly due to declining home values, while the average wealth of the top 1 percent of families increased by $4.5 million each. Minority communities that were targeted for exploitative mortgages and hardest hit by the foreclosure crisis faced the steepest declines in wealth.[4]

Fig 3: Wealth inequality, 2007 and 2016



Source: 2016 Survey of Consumer Finances, Board of Governors of the Federal Reserve System.

Entering the next recession, lower- and middle-income families will have even less wealth to cushion the downturn and draw on in the event of unemployment.

The Trump administration's signature economic policies have made these problems worse. In 2017, the Trump administration enacted a massive tax cut with an estimated ten-year cost of $1.9 trillion.[5] The greatest beneficiaries of the legislation were high-income families and corporations. In the initial years of the tax cut, over half of tax savings went to the top ten percent of families, and starting in 2025 *all* of its benefits will go to the highest income earners.[6] The largest beneficiary of the corporate tax cuts in the bill is the financial sector.[7] Delivering huge tax breaks to large corporations has also fueled unproductive financial engineering such as stock buybacks rather than investment in the real economy.

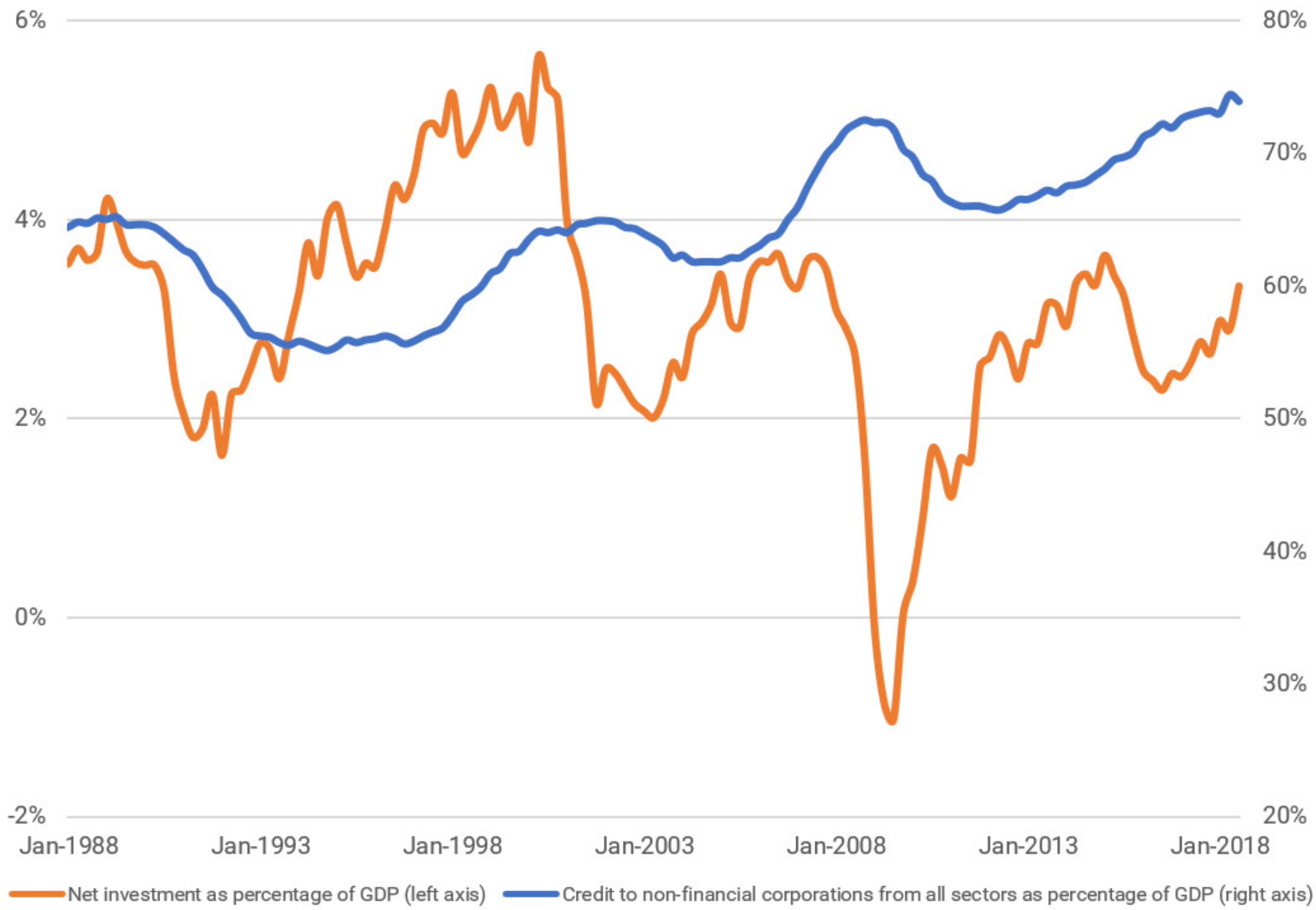
AS CORPORATE DEBT REACHES DANGEROUS LEVELS, REGULATORS ARE REDUCING OVERSIGHT

The most obvious current financial stability issue is the rapid buildup of debt in the non-financial corporate sector. The volume of what is known as "leveraged lending" – loans to companies already saddled with high levels of debt – has soared, growing more rapidly than any other major asset class since the financial crisis. Today, it stands at over $1 trillion outstanding with another $1 trillion in high-risk corporate debt outstanding from high yield bonds, a record level of corporate debt relative to GDP (see Figure 4, on next page).[8]

More disturbing, this spiraling corporate debt has not resulted in greater investment. Lending, even lending that creates high levels of leverage, is justified when it funds investment, since investment enhances the productive capacity to pay the debt. But investment growth since the financial crisis has been the lowest in any decade since WWII.[9]

Instead, companies have deployed a large share of the surging corporate debt in financial engineering schemes. Much of the growth in corporate debt, especially leveraged lending, has been fueled by a boom in private equity financed acquisitions through leveraged buyouts (LBOs). Leveraged buyouts are a mechanism by which funds force target firms to take on substantial debt to finance their own purchase by the private equity fund. The amount of leverage involved in these takeovers has been increasing to record levels.[10] The private equity fund does not experience the full risk of the excessive leverage on the target firm, as the fund itself will not be responsible for the debt if the firm goes bankrupt. While private equity firms do face some loss if a portfolio firm goes bankrupt, this loss is limited. Furthermore, funds are often able to use their control of the target firm to transfer value to the parent fund and recoup their own capital even if the firm fails.[11]

Fig. 4: Corporate debt and net investment as a percentage of GDP, 1988-2018



Source: U.S. Bureau of Economic Analysis, Gross Domestic Product [GDPA] and Net domestic investment: Private: Domestic business [W790RC1A027NBEA], retrieved from FRED, Federal Reserve Bank of St. Louis. Bank of International Settlements data on Total credit to non-financial corporations, https://www.bis.org/statistics/totcredit.htm, Accessed March 21, 2019.

This "heads I win, tails you lose" situation means that leveraged buyouts create misaligned incentives to increase corporate debt to excessive levels while allowing financial insiders to make enormous profits. The International Monetary Fund found that over half of leveraged lending in 2018 was acquisition-related.[12] Studies show that LBO acquisitions actually reduce investment as funds are diverted to debt payments.[13]

Companies are also using corporate leverage to fund other financial engineering techniques to reward shareholders and insiders. Corporations have capitalized on the post-crisis low interest rate environment for "leveraged buybacks" – the issuance of new corporate debt in order to fund share buybacks. This reduces investment and future performance but enriches shareholders in the short term by boosting stock prices.[14] Buyback debt does not enhance broader economic productivity, but transfers funds to corporate insiders. The top executives who implement the buyback can reap tremendous personal rewards by selling their own equity stakes during the buyback.[15]

Bank regulators began sounding the alarm on excessive corporate debt levels starting in 2011 but relatively little has been done to address it.[16] In 2013, they issued regulatory guidance on leveraged lending that attempted to restrict bank lending to companies with excessive debt levels.[17] But leveraged loans have continued to grow rapidly. The Trump administration recently signaled that it would greatly reduce enforcement of these underwriting protections, which has encouraged banks to increase their leveraged lending.[18]

Effective capital market regulation is also critical to address corporate debt. Although banks play a key role in the corporate debt market, the majority of leveraged loan risk ends up purchased and held by non-banks such as insurance companies, mutual funds, hedge funds, and private equity funds.[19]

The Securities and Exchange Commission (SEC) has lead responsibility for regulating these debt markets. But unlike bank regulators, the SEC has not considered financial stability policy or limiting dangerous corporate leverage levels as part of its mission. The Financial Stability Oversight Council (FSOC) was designed to coordinate regulatory efforts to address financial stability, and should be a key resource in coordinating banking and capital markets regulation to address an issue like corporate debt. But the Trump administration has systemically weakened the FSOC.[20] In the specific case of corporate debt, the current administration has abandoned FSOC efforts begun late in the Obama administration to examine systemic risks created by capital market funds holding illiquid assets such as leveraged loans.[21]

As long as profits stay high, companies can often service debt. But in an economic slowdown, the ballooning debt would drag on the economy. The latest Federal Reserve Financial Stability Report highlighted risks of excessive corporate debt if the economy slows down, ranging from potential losses at systemically significant banks to increased debt costs at borrowing firms.[22] Current and former Federal Reserve officials have amplified the warnings. Former Board chair Janet Yellen stated, "if we have a downturn in the economy, there are a lot of firms that will go bankrupt, I think, because of this debt. It would probably worsen a downturn."[23] Robert Kaplan, President of the Federal Reserve Bank of Dallas, also recently warned of the impact of elevated corporate debt as an "amplifier" of the next recession.[24]

REGULATORS ARE WEAKENING OVERSIGHT OF LARGE BANKS

Bank leverage is a crucial factor during economic downturns, because more solvent banks are more able to continue lending even during recessions. The time to address potentially excessive levels of bank borrowing is during the growth phase of the economic cycle.[25] If and when the economy weakens and asset values drop, undercapitalized banks may not have sufficient equity to continue lending.[26]

After the financial crisis, banking regulators established a number of policies, including enhanced capital requirements and stress testing, to try to ensure that banks would be solvent enough to continue to lend during an economic downturn. These policies have had some success in reducing bank leverage (the ratio of bank borrowing to the bank's own equity capital) below the levels reached during and prior to the financial crisis.

However, regulatory claims that financial sector solvency has been assured should be taken with skepticism. Leverage remains high in an absolute sense, and both economists and regulators have expressed concern that it remains much higher than its optimal level.[27]

The Trump administration is slashing bank regulations in ways that will result in even more dangerous growth in bank borrowing. Large bank leverage has increased noticeably since 2016, growing from less than $11 of borrowing per dollar of bank equity to close to $12 per dollar of equity.[28] And this is only the beginning. Many more deregulatory steps have been proposed in the last year but not yet finalized. When they take effect, bank leverage will grow further.

For example, regulators have proposed to cut minimum overall leverage requirements for the largest Wall Street banks from the current level of five to six percent of total assets (already lower than observed financial crisis losses) to a level that for some large banks would be less than four percent of assets.[29]

Regulators have also proposed to eliminate key standards for large banks undergoing so-called "stress tests" of their capacity to withstand an economic downturn. Requirements slated for elimination include minimum leverage standards in stressed conditions and minimum supervisory standards for bank risk management capacity.

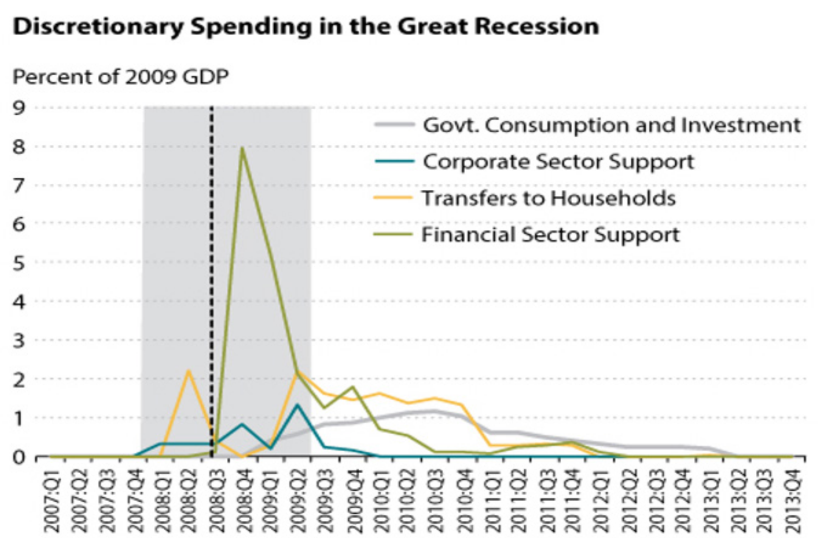
The Federal Reserve has also recently proposed weakening of a broad range of standards for large banks that are just below the size of the largest Wall Street megabanks – which includes several dozen banks with combined assets over $3 trillion in assets.[30]

Looking at the combined effect of these changes, former Federal Reserve governor Daniel Tarullo, the key figure in putting in place post-crisis banking regulations under President Obama, characterized them as a dangerous level of deregulation that risked worsening the next recession.[31] Loosening post-crisis protections facilitates increased bank borrowing that endangers the broader economy, but directly benefits bank shareholders and top executives by increasing return on equity. The benefits for insiders from increased leverage are a reason that large banks have lobbied fiercely to weaken capitalization requirements. The current growth in financial sector leverage is occurring while the economy is healthy and bank revenues are at record levels. This is the best possible time for regulators to force banks to build up capital, which can be done simply by requiring banks to retain earnings. Instead, regulators are explicitly rejecting this precautionary approach and ignoring the need to prepare for the next economic downturn.[32]

CURRENT POLICIES INCREASE THE RISK OF PRIORITIZING WALL STREET OVER MAIN STREET IN RESPONDING TO FUTURE RECESSIONS

Weakening regulation of Wall Street increases the chance of repeating the mistakes in the government response to the 2008 financial crisis and the subsequent recession. That response prioritized assistance to Wall Street over assistance to ordinary Americans impacted by the crisis. This was deeply unfair and increased the severity of the economic downturn.

Fig. 5: Fiscal assistance during the financial crisis



NOTE: The vertical line indicates 2008:Q3, which includes September 2008—the month Lehman Brothers failed and considered the peak of the Financial Crisis. See Faria-e-Castro (2018) for details on the data. Gray bar indicates recession as determined by the National Bureau of Economic Research.
SOURCE: U.S. Treasury; FDIC; Board of Governors of the Federal Reserve System; FRED®, Federal Reserve Bank of St. Louis; BEA; and author's calculations.

On the one hand, the Federal government provided an unprecedented bailout for financial institutions. One element was credit assistance. Every workday for eight consecutive months from late 2008 to mid-2009, the Federal Reserve continuously pumped over $1 trillion in loans through the financial system, peaking at $1.6 trillion during the final weeks of 2008.[33]

When large-scale credit assistance failed to stem the tide of financial crisis, the Federal Reserve joined forces with Congress and other regulatory agencies to initiate a massive program of direct fiscal assistance to the financial sector. A Federal Reserve Bank of Kansas City analysis found that during the peak of the financial crisis, fiscal assistance to financial institutions dwarfed transfers to ordinary households by a factor of at least five to one.[34] Over five million jobs were lost during this period.

The financial sector received this unprecedented credit and fiscal support with virtually no strings attached. Banks and other lenders were not required to pass on their bailout benefits by making mortgage modifications or other reductions in the crushing burden of consumer debt assumed by ordinary households in the years leading up to the financial crisis. Nor did they face any other restrictions, like limitations on lobbying efforts to provide help for distressed borrowers. The federal government instead relied on approaches that asked lenders to provide help voluntarily – an approach that severely limited benefits for victims of the housing crisis.[35]

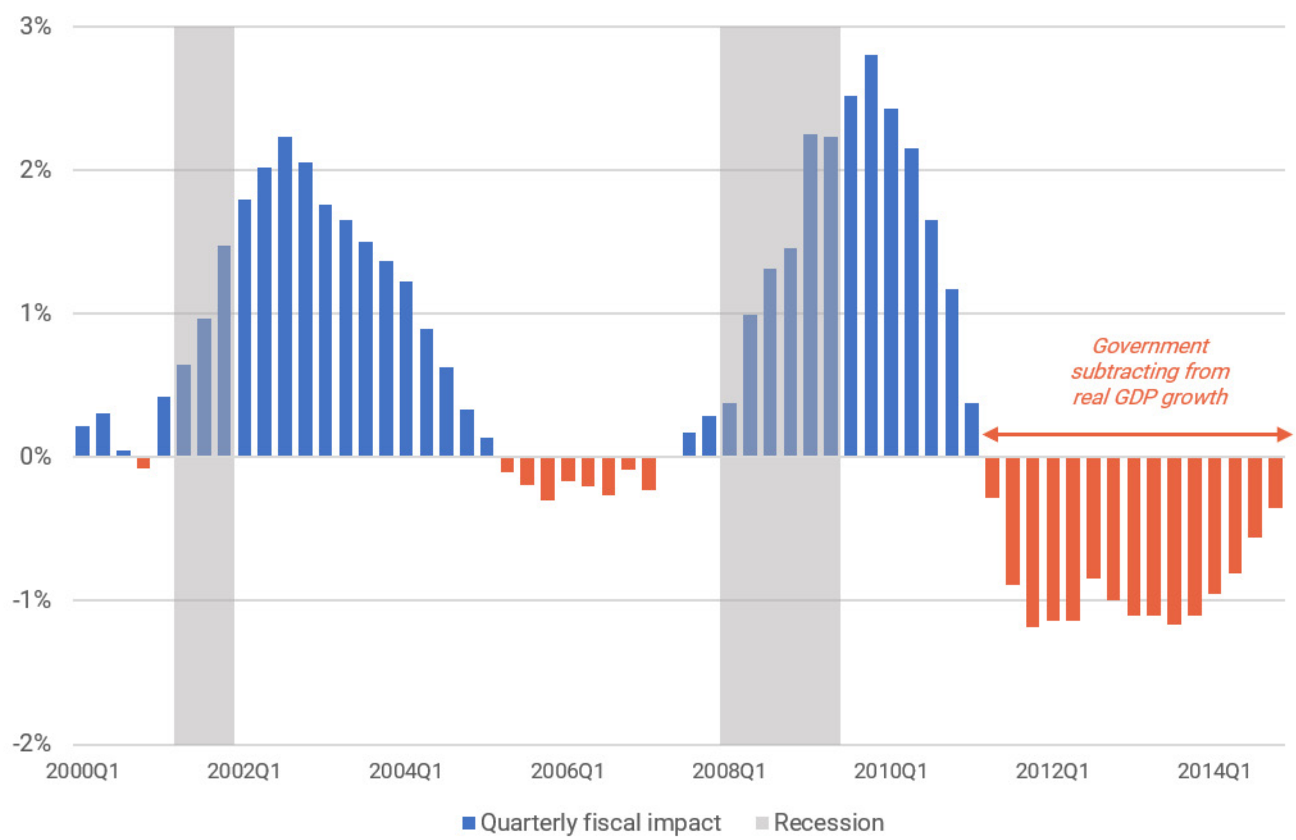
Analyses of the post-crisis recession by leading economists have found that the continued burden of mortgage debt had a major negative impact on the economy and contributed to years of economic weaknesses following the financial crisis.[36] This burden not only depressed spending, but led to millions of foreclosures that had a devastating effect on families and communities.[37]

Some of the interventions to assist failing banks likely made matters worse by keeping so-called "zombie banks" in business. Insolvent banks receiving credit and liquidity assistance may be incentivized to wait out a crisis, effectively ceasing productive lending.[38] Economists documented that assistance only kept zombie banks alive and discouraged them from clearing bad assets from their balance sheets.[39]

In contrast to the generosity to Wall Street, the relatively limited federal assistance to families harmed by the financial crisis was not aligned with the scale of the crisis. The 2009 stimulus package was only $800 billion (under half of what Obama's economic advisors recommended) and included spending on tax cuts unlikely to benefit those hardest hit by the recession.[40]

Furthermore, once the stimulus money was spent, the federal government followed up with a period of government austerity. The Brookings Institution found that the stimulus impact was fading by mid-2010 and the economic effect of government spending turned negative by 2011.

Fig 6: The impact of government spending on the economy, 2001-2014



Source: Calculations by the Hutchins Center at the Brookings Institution, drawing on Bureau of Economic Analysis Data. https://www.brookings.edu/interactives/hutchins-center-fiscal-impact-measure/

This limited level of stimulus profoundly impacted the economic recovery. For example, the inadequate level of federal assistance to state and local governments forced state and local governments to lay off workers. If the level of public sector employment had maintained its 2007 level, a million good jobs would have been saved – over ten percent of all recession job losses.[41]

Despite the obvious dangers of repeating the mistakes that were made in response to the 2008 crisis, the playing field continues to be tilted in favor of doing so. It is still far easier for the federal government to bail out the financial sector than to provide targeted assistance to those households most impacted by a recession. The Dodd-Frank Act reformed some government emergency assistance powers to improve accountability and added critical new resolution tools to help resolve failing banks rather than keep insolvent zombie banks in operation. However, there are still no limits on the size or time limits of lending programs to financial institutions without a Congressional vote. Nor did Dodd-Frank impose requirements to make assistance conditional on channeling relief to lower-income borrowers in order to blunt the impact of financial distress.

It also appears that many financial regulators and industry insiders would be entirely willing to repeat the bailout approach of 2008-2010. For example, a 2018 report on "Managing the Next Financial Crisis" by the Group of Thirty (an industry-oriented organization of bankers and regulators) concluded that U.S. emergency financial assistance powers have been excessively weakened, implying that anything short of the 2008-2009 emergency response would be a dangerously weak response to any subsequent crisis.[42]

The Trump administration has already set the stage for prioritizing Wall Street over the needs of the rest of the country in the event of another serious financial disruption and recession. First, the $1.9 trillion in tax breaks for corporations and the wealthy provided in 2017 have worsened the federal government's fiscal position. At the close of 2008, federal debt only amounted to 44 percent of GDP but today it is 78 percent of GDP and projected to rise significantly in the coming years.[43] The more constrained fiscal position would increase the pressure for fiscal austerity in the event of another recession unless the tax cuts are reversed and new sources of revenue are found.

Second, the Trump administration is weakening requirements for banks to perform advance planning designed to avoid government bailouts in the event of future bank failures.[44] Weakening these planning requirements means it will be more difficult to do a private sector resolution of a failing large bank without damaging effects to the broader economy. Especially when combined with previously discussed reductions in capital requirements and other risk controls, this will increase the pressure for a public bailout in case of a systemic financial crisis.

The actions of the Trump Administration continue the pattern of unbalanced growth that has occurred over the past two decades, which has resulted in massive windfalls for the wealthy and left the rest of the population behind. The failure to properly control Wall Street risks, combined with massive tax benefits to the wealthy and large corporations, are likely to amplify the next recession and possibly lead to a repeat of the unjust response to the 2008 financial crisis. The country needs a different approach.

Endnotes

1 Federal Reserve Board of Governors, *Financial Stability Report*, November 2018. https://bit.ly/2P7I0kG; Federal Reserve Board of Governors, *Financial Stability Report*, May, 2019. https://bit.ly/2J5OYrR

2 *Household Debt And Credit Report*, (Q4, 2018) Distributed by the Federal Reserve Bank of New York, https://nyfed.org/2Yd41EM

3 Moritz Schularick, "When The Middle Class Lost Its Wealth", Perspectives (blog), Institute For New Economic Thinking, November 15, 2018 http://bit.ly/2TUL3n5

4 Ryan Cooper and Matt Bruenig, *Foreclosed: Destruction of Black Wealth During the Obama Presidency*, Peoples Policy Project, December, 2017. https://bit.ly/2JBLdM9

5 https://www.cbo.gov/system/files?file=115th-congress-2017-2018/reports/53651-outlook.pdf

6 https://www.taxpolicycenter.org/sites/default/files/publication/150816/2001641_distributional_analysis_of_the_conf erence_agreement_for_the_tax_cuts_and_jobs_act_0.pdf

7 http://ourfinancialsecurity.org/wp-content/uploads/2017/12/Wall-Street-and-the-Tax-Bill-Americans-for-Financial- Reform.pdf

8 Federal Reserve Board of Governors, *Financial Stability Report*, November 2018. https://bit.ly/2P7I0kG

9 U.S. Library of Congress, Congressional Research Service, *Business Investment Spending Slowdown*, by Marc Labonte, (April 9, 2018) http://bit.ly/2TOk0uh

10 Schwarzberg, Jonathan, "Leverage Levels Peaking Again on U.S. Mega Buyouts", Reuters, March 22, 2019. https://reut.rs/31hWZA6

11 Appelbaum, Eileen, and Rosemary Batt, ***Private Equity At Work: When Wall Street Manages Main Street***, Russell Sage Foundation, May 1, 2014.

12 Tobias Adrian and Fabio Natalucci and Thomas Piontek, "Sounding The Alarm On Leveraged Lending", International Monetary Fund Blog (Blog), International Monetary Fund, November 15, 2018 http://bit.ly/2Jv6h6K

13 Brian Ayash, *The Origin, Ownership and Use of Cash Flows In Leveraged Buyouts*, (California State Polytechnic University, September 6, 2018) http://bit.ly/2HKnyGB

14 Zicheng Lei and Chendi Zhang, *Leveraged Buybacks* (Journal of Corporate Finance, April 19, 2016)
http://bit.ly/2Cw2AYG; William Lazonick, William, *Profits Without Prosperity*, (Harvard Business Review. September, 2014). https://hbr.org/2014/09/profits-without-prosperity
Heitor Almeida and Vyacheslav Fos and Mathias Kronlund, *The Real Effects Of Share Repurchases*, (University of Illinois at Urbana-Champlaign, October 22, 2014) http://bit.ly/2Hx78Cd

15 Commissioner Robert J. Jackson Jr., "Stock Buybacks And Corporate Cashouts," Securities and Exchanges Commission, June 11, 2018 http://bit.ly/2Fl7V5P

16 Janet Yellen, "Assessing Potential Financial Imbalances In An Era Of Accommodative Monetary Policy", Board of Governors of the Federal Reserve System, June 1, 2011 http://bit.ly/2HyyqrP

17 Board of Governors of the Federal Reserve System, "Agencies Issue Updated Leveraged Lending Guidance," News release, March 21, 2013 http://bit.ly/2U4TRqn

18 Sally Bakewell and Lisa Lee, "Wall Street Bankers Pile Leverage Onto Riskiest U.S. Buyouts," *Bloomberg*, Bloomberg, June 15, 2018 https://bloom.bg/2YcwvhQ

19 Ares Market Insights, *Opportunities in Global Direct Lending*, Ares Capital Management, April, 2018. https://bit.ly/2U6sLLu ; Ghose, Ronit, et. al, "Leveraged Lending Risks", Citi Research Equities, November 2, 2018.

20 https://www.bloomberg.com/opinion/articles/2018-12-18/trump-mnuchin-undermine-fsoc-raise-financial-crisis- risks

21 Financial Stability Oversight Council, *Review of Asset Management Products and Activities*, April 18, 2016. https://bit.ly/2VzjBZC

22 Federal Reserve Board of Governors, *Financial Stability Report*, May, 2019. https://bit.ly/2J5OYrR

23 Brian Cheung, "Leveraged Loan Growth Sparks Concerns About The Next Financial Crisis" *Yahoo Finance*, Yahoo, October 30, 2018 https://yhoo.it/2Fiuw2W

24 Robert Kaplan, *Corporate Debt As A Potential Amplifier In A Slowdown* (Federal Reserve Bank of Dallas, March 5, 2019) http://bit.ly/2FtBvqZ

25 Galo Nuño and Carlos Thomas, Bank Leverage Cycles, (Vox CEPR, March 12, 2013) http://bit.ly/2WeNmia

26 Leonardo Gambacorta and Hyun Song Shin, *Why Bank Capital Matters For Monetary Policy*, (Bank for International Settlements, April 2016) http://bit.ly/2ulQxJ2

27 Views range from a call for moderately stronger limitations on leverage to calls for far higher capital requirements. See William Cline, *The Right Balance For Banks: Theory And Evidence On Optimal Capital Requirements*, (Peterson Institute For International Economics, June 2017) http://bit.ly/2OkTwe2;
Morris Goldstein, *Banking's Final Exam: Stress-Testing And Bank-Capital Reform* (Peterson Institute for International Economics, May 2017) http://bit.ly/2FrAWxY;
Anat Admati and Martin Hellwig, *The Banker's New Clothes: What's Wrong With Banking And What To Do About It*, (Princeton University Press, 2013) http://bit.ly/2Frh1iq

28 Tier 1 leverage, Q3 2016 as compared to Q4 2018, as reported in Federal Reserve Bank of New York, "Quarterly Trends For Consolidated US Banking Organizations", Research and Statistics Group, 2018 https://nyfed.org/2FrYrH1

29 Office of the Comptroller of Currency, Treasury and the Board of Governors of the Federal Reserve System, Proposed Rule,"Regulatory Capital Rules: Regulatory Capital, Enhanced Supplementary Leverage Ratio Standards for U.S. Global Systemically Important Bank Holding Companies and Certain of Their Subsidiary Insured Depository Institutions; Total Loss-Absorbing Capacity Requirements for U.S. Global Systemically Important Bank Holding Companies," *Federal Register*, (March 19, 2018): 17317-17327, http://bit.ly/2FkMMZk

30 Vice Chairman for Supervision Quarles to Board of Governors, October 24, 2018, http://bit.ly/2HyjDxh

31 Tarullo, Daniel. "Taking the Stress out of Stress Testing", Speech at Americans for Financial Reform Conference, May 21, 2019.
http://ourfinancialsecurity.org/2019/05/speech-former-fed-governor-tarullo-decries-low-intensity-deregulation/

32 https://www.federalreserve.gov/newsevents/speech/quarles20190329a.htm
33 From Federal Reserve Balance Sheet Data available at https://www.federalreserve.gov/monetarypolicy/bst_recenttrends_accessible.htm
34 Miguel Faria e Castro, "What Are the Fiscal Costs of a (Great) Recession?" Federal Reserve Bank of Kansas City, Economic Synopses, No. 22, 2018. https://doi.org/10.20955/es.2018.22.
35 Marcus Stanley, *Designed to Fail*, American Prospect Magazine, May 17, 2011. https://bit.ly/2Wmiuwd
36 Atif Mian and Amir Sufi, *House Of Debt: How They (And You) Caused The Great Recession, And How We Can Keep It From Happening Again*, (University of Chicago Press, 2014) http://bit.ly/2ui34x8
37 Americans for Financial Reform, "Cost Of The Crisis: The Cumulative Economic Damage Caused By The Financial Crisis And Great Recession", July 2015 http://bit.ly/1tYjqT5
38 Timotej Homar and Sweder van Wijnbergen, *On Zombie Banks And Recessions After Systemic Banking Crises*, (CEPR Discussion Paper, November 2015) http://bit.ly/2Yf6NsU
39 Viral V. Acharya and Bruce Tuckman, *Unintended Consequences Of LOLR Facilities: The Case Of Illiquid Coverage*, (CEPR Discussion Paper, December 2013) http://bit.ly/2Yf5Xwg
40 John Hudson, "Could A Memo By Christina Romer Have Saved The Economy?", *The Atlantic*, February 22, 2012 http://bit.ly/2U506dN
41 Based on data from the Annual Surveys of Public Employment and on U.S. population data for 2007 through 2014. *Annual Survey Of Public Employment And Payroll (ASPEP)*, 2016, Distributed by U.S. Census Bureau, http://bit.ly/2FkJm99
42 Group of 30, *Managing the Next Financial Crisis: An Assessment of Emergency Arrangements in the Major Economies*, September, 2018. https://bit.ly/2FmFJiR
43 FRED, *Federal Debt Held By the Public*, https://bit.ly/2FvmGEh; Congressional Budget Office, *Budget and Economic Projections*, January 2019, https://bit.ly/2EPWOiR
44 Federal Reserve Board and Federal Deposit Insurance Corporation, "Notice of Proposed Rulemaking: Resolution Plans Required", 12 CFR Part 381, RIN 3064-AE93, April 16, 2019. https://bit.ly/2VXgqya