

Statement of William E. Spriggs
“A Mandate for Full Employment”
Testimony prepared for
US House of Representatives Subcommittee on Monetary Policy and Trade
115th Congress, First Session
Hearing on
Examining the Federal Reserve’s Mandate and Governance Structure
April 4, 2017

Thank you to Chair Andy Barr and Ranking Member Gwen Moore for this invitation to give testimony before your subcommittee today on the issues of the Federal Reserve’s mandate and governance. I am happy to offer this testimony on behalf of the AFL-CIO, America’s house of labor, representing the working people of the United States; and based on my expertise as a professor in Howard University’s Department of Economics.

To have sustained growth, the financial system must remain stable. When banks grow too large and present systemic risks to the system, or when banks can create shadow investments trading in their own debt, the system itself becomes a risk. Glass-Steagall, the Banking Act of 1933,¹ provided a period of such stability. The financial collapse of 2007-2008 clearly demonstrated that the financial system cannot self-regulate. The fallout in the real economy was deep and far-reaching, causing a collapse in private and public investment, and the stripping of wealth of the household sector by depleting savings to keep households going. Nine years away, we have yet to restore public investment to the level needed to sustain strong growth. Household debt has returned to its pre-crisis level as household incomes have yet to recover. So, similarly to the lessons learned from the financial collapse of the Great Depression, Dodd-Frank, the Wall Street Reform and Consumer Protection Act of 2010,² addresses the excesses that the financial collapse of the Great Recession demonstrated create a system of great economic risk. For that reason, the AFL-CIO supports the Dodd-Frank reforms and continues to believe it prudent to defend them as necessary for sustained growth.

¹ Public Law 73-66 <http://www.legisworks.org/congress/73/publaw-66.pdf>

² Public Law 111-203 <https://www.gpo.gov/fdsys/pkg/PLAW-111publ203/html/PLAW-111publ203.htm>

It is key for monetary policy to provide enough liquidity to the market to allow for investment in productive capital, and enough liquidity for households to make long-term purchases like automobiles and houses; and with regulation to reduce systemic risks from market concentration and discrimination in access. A necessary condition for growth is monetary policy that adheres to the Humphrey-Hawkins Act, the Full Employment and Balanced Growth Act of 1978, to keep Americans at work, letting the economy run at a rate that keeps unemployment low.³

The Federal Reserve actions show greater concern for price stability than for its mandate in the Humphrey-Hawkins Act for full employment. This century, inflation measured by the Personal Consumption Expenditure price index has averaged 1.9 percent, virtually the Federal Open Market Committee's goal of two percent. Further, it has done so with very little deviation. On the other hand, unemployment this century has averaged 6.2 percent, though in some meetings the FOMC appears to aim for a number between five and six percent.⁴

The Federal Reserve targets unemployment based on its notion of an unemployment rate that would not lead to an acceleration in inflation, which would differ from the language of the Humphrey-Hawkins Act that calls for full employment. The year the Act passed, the unemployment rate averaged 6.1 percent. Section 2 of the Act, states among the general findings "The Congress finds that the Nation has suffered substantial unemployment and underemployment..."⁵ clearly a target of between five and six percent unemployment are not consistent with the concerns Congress was expressing when considering the Act.

To understand further the Congressional intent, it is important to remember the role of the late Mrs. Coretta Scott King, the widow of Dr. Martin Luther King, Jr., in chairing the Full Employment Action Council that spearheaded the creation of the Act. In addressing critics, from the left on the Act's final amendments that tacked on inflation targets, Mrs. King said, "It forces the Federal Reserve to work toward that employment objective. In the past, the Federal Reserve Board has often taken...steps which forced up the jobless rate. Not any more. I understand the unhappiness some of our coalition supporters have felt because the opposition succeeded in including specific targets for controlling inflation—without defining any program to achieve

³ Public Law 95-523, 92 Stat. 1887, <https://www.gpo.gov/fdsys/pkg/STATUTE-92/pdf/STATUTE-92-Pg1887.pdf>

⁴ Quoting Michael Kiley at page 6 of the transcript of the November 1, 2011 Federal Open Market Committee Meeting at <https://www.federalreserve.gov/monetarypolicy/files/FOMC20111102meeting.pdf>

⁵ 15 USC 2101 Sec. 2. (a) at <https://www.gpo.gov/fdsys/pkg/STATUTE-92/pdf/STATUTE-92-Pg1887.pdf>

them—in an obvious effort to negate the bill’s effectiveness. However, those inflation goals—while laudable objectives in their own right—do not have the same priority as the employment goals.”⁶

The Federal Reserve, on the other hand, appears to have the tools to stabilize the financial sector and asset prices. Research continues to suggest that faced with the problem of reaching zero interest rates, the Federal Reserve’s Quantitative Easing program was a success for sound economic reasons.⁷ And, it used those tools to great effect during the crisis. In particular, the panic from the onset of the foreclosure crisis led to a precipitous drop in housing prices and spike in the long term spread between mortgage interest rates and Treasuries. By 2008 when the spike became huge, the Fed had already taken aggressive steps through conventional policy means and started to adopt additional changes through the management of its balance sheet. However, when the Fed began its Mortgage Backed Securities program, it quickly restored mortgage interest rate spreads and helped to stabilize housing prices. While some argue that was related to shoring up the position of the Government Sponsored Enterprises—Fannie Mae and Freddie Mac—the foreclosure crisis continued to build and did not peak until later.⁸ Therefore, the response of the mortgage rate was more likely tied to the Fed intervention. The action did not restore private investment in residential structures, but it did help stabilize the household balance sheet. Further, because many banks wanted more liquidity, for potential draws on corporate lines of credit and to offset loan liabilities that were hard to evaluate, the MBS program was helpful to giving banks the needed liquidity.⁹

Those actions have greatly expanded the size of the Federal Reserve’s balance sheets. While some are concerned by this, it can equally be argued that the successful management of the

⁶ Letter of Coretta Scott King to the Baltimore (MD) *Afro-American*, 31 October 1978 page 4, at https://news.google.com/newspapers?nid=2205&dat=19781031&id=sYIIAAAAIBAJ&sjid=I_UFAAAAIBAJ&pg=2369,2494733

⁷ Michael Woodford, “Quantitative Easing and Financial Stability,” National Bureau of Economic Research, NBER Working Paper No. 22285 (May 2016) <http://www.nber.org/papers/w22285>, Marco Di Maggio, Amir Kermani and Christopher Palmer, “How Quantitative Easing Works: Evidence on the Refinancing Channel,” National Bureau of Economic Research, NBER Working Paper No. 22638 (September 2016) <http://www.nber.org/papers/w22638> as examples.

⁸ Johannes Stroebel and John Taylor, “Estimated Impact of the Fed’s Mortgage-Backed Securities Purchase Program,” National Bureau of Economic Research, NBER Working Paper No. 15626 (December 2009)

⁹ Marcia Cornett, Jamie McNutt, Philip Strahan and Hassan Tehranian, “Liquidity Risk Management and Credit Supply in the Financial Crisis,” *Journal of Financial Economics*, 101 (Number 2, 2011): 297-312.

portfolio shows the Fed might wish to use policies aimed at managing its portfolio when changes in interest rates might be riskier for financial stability.

However, on the other hand, the Federal Reserve did little to address the debacle of the public sector during the crisis. State and local governments struggled with dramatic declines in revenue, and the drop in public investment has yet to recover. The Federal Reserve has been very cautious to use its authority to purchase state and local debt.

It is not clear whether the Federal Reserve has sufficient diversity in its membership on the Board or among the Regional Bank Presidents to understand the dimensions of their decisions and their calculus in weighing the costs of unemployment. Others have noted that in 2011 when the unemployment crisis continued, the transcripts of the FOMC sound oblivious to the labor market conditions.¹⁰

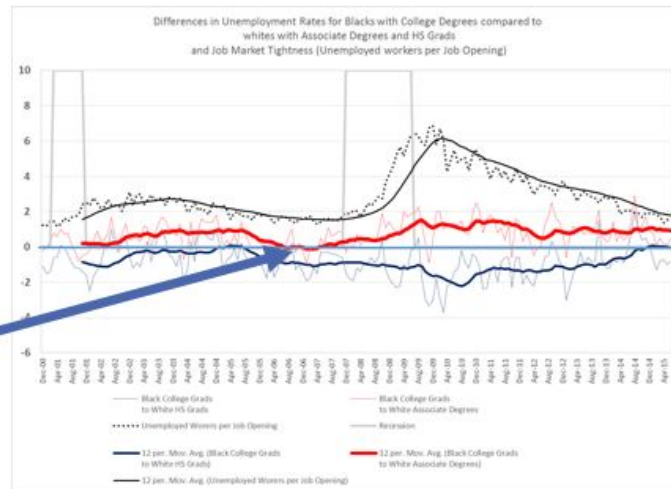
The need to understand its mandate for full employment is necessary to sustain the shared prosperity achieved during the period 1946 to 1979 when the average unemployment rate was 5.2 percent, a full point lower than this century. When the labor market tightens, glaring disparities in unemployment shrink, incomes rise and new business establishments can be created. Full employment is necessary for that growth path.

In January 2017, the unemployment rate for Blacks with college degrees converged with the unemployment rate for whites with Associate Degree's after having been more like those of white high school graduates.

¹⁰ Matt Stoller, [Federal Reserve Bankers Mocked Unemployed Americans Behind Closed Doors](https://theintercept.com/2017/01/27/federal-reserve-bankers-mocked-unemployed-americans-behind-closed-doors/), <https://theintercept.com/2017/01/27/federal-reserve-bankers-mocked-unemployed-americans-behind-closed-doors/> and Alex W. <https://alexwdc.wordpress.com/2017/01/28/federal-reserve-laughing-at-the-vulnerable-is-cruel-inhuman-callous-fomc-5-year-meeting-transcript-release-sched-is-being-abused/>

After prolonged improvement in labor tightness, Black college graduates can sustain unemployment rates of whites with associates degrees

At last labor market peak in 2007, the Black college unemployment rate and the white associates degree rate were equal



In the real economy, many policies fostered a period of shared prosperity and rapid economic growth in the United States. From 1946 to 1979, the wages of American workers grew with their productivity. Moreover, income gains were roughly equally shared throughout the income distribution. Many federal policies invested in the American people and put the government on the side of raising wages. In sum, these policies promoted shared prosperity, so incomes grew at each income quantile. Economists are converging on a consensus that equality promotes faster economic growth. In addition, equality provides the basis for enhancing social mobility and a more meritocratic society.

Several key federal programs stand out for enhancing shared prosperity. The GI Bill, gave many World War II veterans access to college by paying their tuition and giving them living stipends; home ownership through reduced down payments and low interest loans—two tickets to the middle class.

The introduction in 1946 of federal legislation to establish a national school lunch program decreased the food insecurity of children. Participation of children in interventions to address

basic food needs has been shown to improve the health of children and have lasting impacts on educational attainment.¹¹

During this period, broad political consensus maintained a neutral National Labor Relations Board that maintained balance in labor management relations. The period allowed the continued ability of workers to exercise their right to organize. Therefore, during this period, the share of workers who in unions rose, as did their diversity. At higher levels of union density all workers benefit, both union and non-union in striking deals to divide the benefits of rising productivity.¹²

Each President during the period signed legislation to raise the minimum wage and keep all wages in step with general growth in productivity and wage gains. This spread the benefits of increases in productivity to the wages of the lowest quantile; insuring that work paid. Increases in the minimum wage correlate with reducing food insecurity and lowering low-birth weight and premature babies for less educated women.¹³

Republican President Dwight Eisenhower, when the former Soviet Union launched Sputnik in October 4, 1957, got the Democratic Senate to pass legislation in less than one-year to launch the National Defense Student Loan program that assured American students could borrow enough money to cover an Ivy League education at interest rates below the prime rate. Students who the loans supported but accepted jobs in K-12 education had their loans forgiven. American became the world's most educated country with the highest share of its workforce holding college

¹¹ Craig Gundersen, Brent Kreider and John Pepper, "The impact of the National School Lunch Program on child health: A nonparametric bounds analysis," *Journal of Econometrics*, Vol. 156 (January 2012): 79-91; Peter Hinrichs, "The effects of the National School Lunch Program on education and health," *Journal of Policy Analysis and Management*, Vol. 29 (Summer 2010): 479-505.

¹² Daniel Tope and David Jacobs, "The Politics of Union Decline: The Contingent Determinants of Union Recognition Elections and Victories," *American Sociological Review*, Vol. 74 (October 2009): 842-864; Jake Rosenfeld, Patrick Denice, and Jennifer Laird, "Union decline lowers wages of nonunion workers: The overlooked reason why wages are stuck and inequality is growing," Economic Policy Institute, (August 30, 2016) at <http://www.epi.org/files/pdf/112811.pdf>

¹³ George Wehby, Dhaval Dave and Robert Kaestner, "Effects of the Minimum Wage on Infant Health," National Bureau of Economic Research, NBER Working Paper No. 22373 (June 2016); William M. Rodgers III, "The Impact of the 1996/97 and 2007/08/09 Increases in the Federal Minimum Wage on Food Security," manuscript, Rutgers University (September 2015) at https://www.researchgate.net/publication/266023361_The_Impact_of_the_199697_and_20070809_Increases_in_the_Federal_Minimum_Wage_on_Food_Security

degrees. The NDSL provided the money for the teacher corps that then produced the inventors of the personal computer and internet.¹⁴

President Eisenhower also launched one of the largest peacetime government programs in creating our current modern interstate highway system. Not only did this create many middle-class construction jobs, it vastly improved America's infrastructure and lowered transportation and production costs for American business. It spurred the expansion of new industries like motels and reduced the isolation of rural communities.

In the 1960's, President Lyndon Johnson expanded the role of the federal government in investing in the early education of America's children. The Head Start program, launched in 1965 has proven to be a valuable program in changing the long-run prospects for children from low-income families: increasing their success in school, earnings in adulthood and lowering criminal activity.¹⁵

Also in 1965, President Johnson put in place Medicaid and Medicare. Research shows Medicaid increases the educational attainment and earnings of women who had greater access to Medicaid as children, and boosts the taxes paid by young adults who were helped by Medicaid.¹⁶

Medicare ended racial segregation in the provision of health in the United States, improved the lives of older Americans and began narrowing the life expectancy gap between whites and African Americans.

These investments in American children and the American people, and the investment in public infrastructure put the federal government clearly on the side of empowering Americans to achieve a high level of productivity. It provided American corporations the largest pool of

¹⁴ Public Law 85-864 (September 2, 1958) <https://research.archives.gov/id/299869>; Saul B. Klamon, "The Postwar Pattern of Mortgage Interest Rates," in Saul B. Klamon (ed.) *The Postwar Residential Mortgage Market* (Princeton University Press, 1961) cited from: <http://www.nber.org/chapters/c2341.pdf>, University of Pennsylvania, University History, Tuition and mandated fees, Room and Board and other educational costs at Penn since 1900: 1950-1959 web page: <http://www.archives.upenn.edu/histy/features/tuition/1950.html>

¹⁵ Patrick Kline and Christopher Walters, "Evaluating Public Programs with Close Substitutes: The Case of Head Start," National Bureau of Economic Research, NBER Working Paper No. 21658 (October 2015); Hilary Shager, Holly S. Schindler, Katherine A. Magnuson, Greg J. Duncan, Hirokazu Yoshikawa and Cassandra M. D. Hart, "Can Research Design Explain Variation in Head Start Research Results? A Meta-analysis of Cognitive and Achievement Outcomes," *Educational Evaluation and Policy Analysis*, Vol. 35 (March 2013): 76-95.

¹⁶ David W. Brown, Amanda E. Kowalski and Ithai Z. Lurie, "Medicaid as an Investment in Children: What is the Long-Term Impact on Tax Receipts?" National Bureau of Economic Research, NBER Working Paper No. 20835 (January 2015).

highly educated and healthy workers to propel American growth. In addition, the government was clearly on the side of American workers in getting their fair share of the increased productivity. Wages rising with productivity insured all the correct market signals in the labor market would encourage Americans to make the investment in their skills. Moreover, by keeping unemployment rates low, fiscal, and monetary policy gave incentive to firms to train workers, invest in their productivity and aim at retaining those workers.

Since that era, most of those policies have been undermined. In the 1980s and again in the 2000s the NLRB too often took positions favorable to management to limit workers organizing; raising the minimum wage went from a bipartisan effort to a partisan battle; the wages for the middle stagnated and the real wages at the bottom fell. Profits as a share of national income rose, but taxes from corporate America shrank, putting more of the nation's tax burden on workers as the wage share of national income fell. Once the United States stood out for its highly-educated work force, as recently as 1995 ranking first for the share of workers with college degrees, but by 2012 the United States ranked 19th among 28 advanced economies.¹⁷ In 1975 state and local governments provided 63% of all expenditures on higher education, by 2010 that figure fell to 34.1% resulting in a trend of ever-rising tuition for individual students.¹⁸

The financial collapse of 2007-2008 further crippled American manufacturing, forcing American automobile manufacturing into bankruptcy and reorganization, and crushed public sector investment beyond de-investment in higher education. Falling values of pension investments and drops in revenue, led to the greatest drop in state and local public investment since the Great Depression.

Americans see politicians that argue for tax breaks for the top 1%, and a retreat on policies to invest in them while their wages stagnate and corporations get support to suppress those wages, hours and working conditions. This is a great source of cynicism, as workers no longer believe in "trickle down" economics.

Now most economists agree. The International Monetary Fund (IMF) and the Organization for Economic Cooperation and Development (OECD) find that income inequality hurts growth.

¹⁷ Liz Westin, "OECD: The US Has Fallen Behind Other Countries in College Completion," Business Insider (September 9, 2014) at <http://www.businessinsider.com/r-us-falls-behind-in-college-competition-oecd-2014-9>

¹⁸ Thomas Mortenson, "State Funding: A Race to the Bottom," American Council on Education (Winter 2012) at <http://www.acenet.edu/the-presidency/columns-and-features/Pages/state-funding-a-race-to-the-bottom.aspx>

The IMF finds that near term growth over the business cycle, roughly five years, is slower and of shorter duration in those advanced economies where net income inequality is higher; where net income inequality considers market-based income (or gross inequality) net of income transfer programs (safety-net and other redistributive programs).¹⁹ There are various reasons for this. At high levels of inequality, those at the bottom of the income distribution are more vulnerable and lack resiliency to absorb downward shocks in income. Workers also become highly leveraged to keep up when the economy expands, increasing systemic risks for the economy. Importantly, the IMF find that redistribution of income has no effect on growth, but inequality does. This means concerns that safety-net programs slow growth by reducing labor supply and effort is not shown in the data. However, the effects of inequality do show. Therefore, the net benefit of redistribution that lowers inequality is clear.

Focusing on income distribution more specifically, the IMF finds that when growth goes up disproportionately to the top 20% of the income distribution that national income growth—GDP per capita—falls. Clearly, policies that aim to increase the post-tax income of the top do not trickle down; they instead slow overall growth. They further find that programs that increase access to education and health in particular, that help the middle class and the poor specifically, reduce inequality and spur growth.²⁰ And, that labor market policies that do not exclude the poor from accessing middle income jobs spur growth. In short, the very policies pursued by the United States across Democrat and Republican Presidencies during the 1946 to 1979 era.

The IMF further investigates and finds that the growth in inequality is mainly driven by gains at the top 10% and is tied together with a reduction in the share of workers in labor unions to bargain for a higher share of gains to the middle and the lowering value of minimum wages that protect earnings at the bottom. The report also found evidence that declining top marginal

¹⁹ Jonathan D. Ostry, Andrew Berg, and Charalambos G. Tsangarides, “Redistribution, Inequality, and Growth,” IMF Staff Discussion Note, SDN/14/02 (February 2014) at <https://www.imf.org/external/pubs/ft/sdn/2014/sdn1402.pdf>

²⁰ Era Dabla-Norris, Kalpana Kochhar, Nujin Suphaphiphat, Frantisek Ricka and Evridiki Tsounta, “Causes and Consequences of Income Inequality: A Global Perspective,” IMF Staff Discussion Note, SDN/15/13 (June 2015) at <https://www.imf.org/external/pubs/ft/sdn/2015/sdn1513.pdf>

income tax rates increases inequality, as does financial deregulation. Technological change was not a driving force.²¹

The OECD research finds a sizable impact on growing inequality and slowing growth. Specifically, the decline in the share of income for the bottom 40% of income distribution hurts growth the most. The OECD finds a clear link between the shrinking income share of the bottom 40% and a drop in educational investment. Clearly, an effect of rising inequality that can be mitigated is to increase public investment in education targeted toward the bottom 40 percent. They also find that policies that can increase women's labor force participation, like supporting childcare, paid sick days and family leave also reduce inequality, and promote growth. Further, raising labor standards to reduce non-standard and irregular work, reduce poverty and inequality and promote growth.²²

OECD research also finds that increased centralized bargaining structures, like those that can come from higher labor union density, help to reduce the risk of extreme failures from economic shocks. Moreover, it is the case that higher minimum wages reduce the risks of very negative extremes from economic shocks. Perhaps explaining stability in the United States economy during the 1946 to 1979 period.²³

The evidence from the IMF and OECD that has been built on a growing economic literature on the effects of inequality are reassuring in understanding what helped form greater political and social cohesion in the United States from 1946 to 1979 when U.S. productivity, income growth and educational attainment led the world. The loss of faith of American workers in the system has risen with policies that have promoted inequality that reversed patterns of investing in America and Americans and led to rising inequality that has slowed economic growth. There can be little social cohesion when policies consistently favor those at the top, as they do not help growth.

²¹ Florence Jaumotte and Carolina Osorio Buitron, "Inequality and Labor Market Institutions," IMF Staff Discussion Note, SDN/15/14 (July 2015) at <https://www.imf.org/external/pubs/ft/sdn/2015/sdn1514.pdf>

²² OECD, *In it Together: Why Less Inequality Benefits All*, (OECD Publishing: Paris, 2015) at http://www.keepeek.com/Digital-Asset-Management/oecd/employment/in-it-together-why-less-inequality-benefits-all_9789264235120-en#..V-FiwCgrKhc

²³ Aida Caldera Sanchez and Oliver Roehn, "How do Policies Influence GDP Tail Risks?" OECD Economics Department Working Paper (forthcoming)

Since 1979, incomes have grown very unequal in the U.S.²⁴ This growth in inequality has been accompanied by several other discouraging factors. Among those factors has been a decline in new establishment creation including small businesses. The creation of new firms is related to product innovation and labor market reallocation. These two help increase aggregate productivity, a key to faster economic growth rates.²⁵

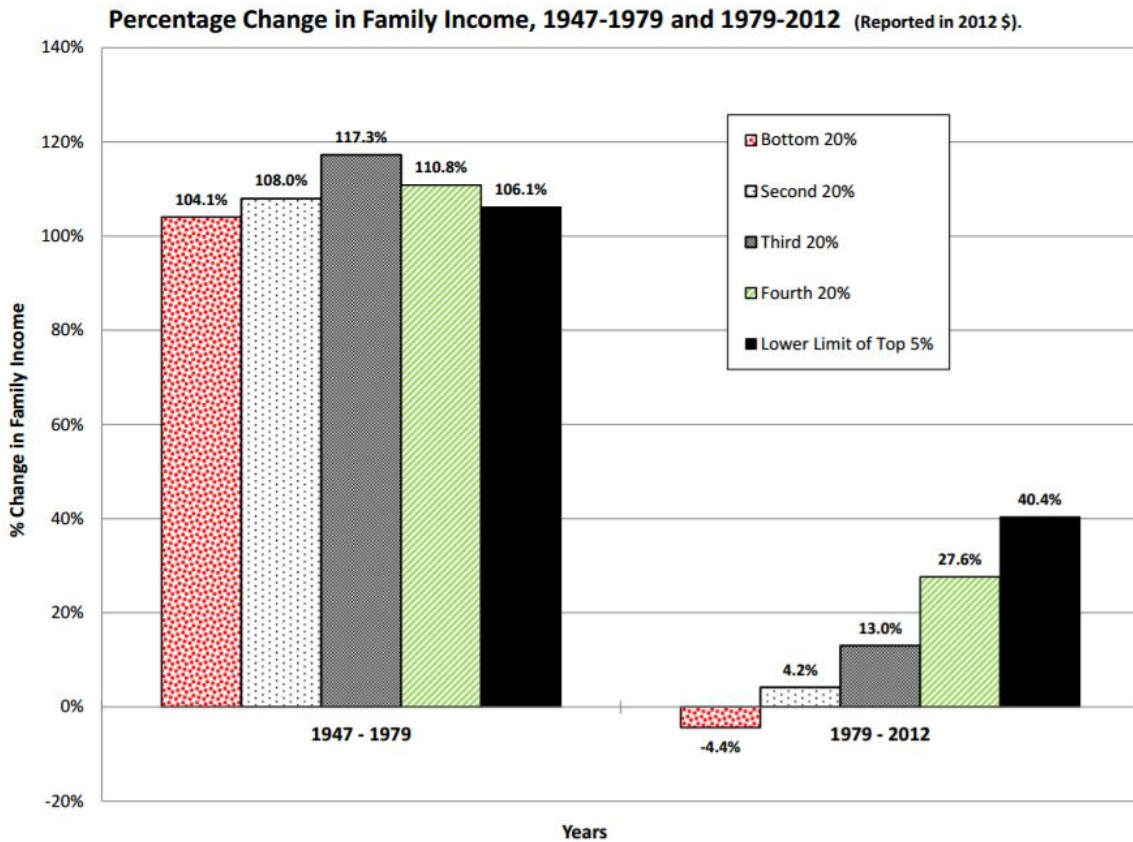
Firm growth is dependent on the growth of their customer base.²⁶ When there is broadly shared prosperity more households have their budget constraint expanded; resulting in a larger increase in potential customers. When the economy produced shared prosperity, new establishments were created without hurting the market share of large firms. However, when income growth is limited, there is a smaller increase in potential customers. Customer growth becomes a zero-sum game. Firms with adequate liquidity compete by lowering prices or buying competitors. But, lowering costs by lowering wages means a competition for customers that lowers the incomes of some households, further shrinking the aggregate customer base. In 1980 when the Federal Reserve deliberately created a slowdown in the economy, incomes dropped as did wages. The depth of the drop was the most severe since the Great Depression to that point. The slowdown was achieved and greatly limited access to liquidity. Real wages for Americans fell, accommodated by a fall in the real value of the minimum wage. The result was rise in income inequality, and a slowing of the growth of the customer base. And, a trend of declining new establishments ensued, as expected initially in the retail sector; the one tied directly most directly to need for the growth of a broad customer base.²⁷

²⁴ Congress of the U.S., Congressional Budget Office, Trends in the Distribution of Income Between 1979 and 2007, October 2011 at <http://www.cbo.gov/sites/default/files/cbofiles/attachments/10-25-HouseholdIncome.pdf>

²⁵ Ryan Decker, John Haltiwanger, Ron S. Jarmin and Javier Miranda, "Where Has All the Skewness Gone? The Decline in High Growth (Young) Firms in the U.S.," NBER Working Paper No. 21776 (December 2015) at <http://www.nber.org/papers/w21776>

²⁶ Simon Gilchrist and Egon Zakrajšek, "Customer Markets and Financial Frictions: Implications for Inflation Dynamics," Federal Reserve Bank of Kansas City, 2015 Economic Symposium: *Inflation Dynamics and Monetary Policy*, (August 2015) at https://www.kansascityfed.org/~/media/files/publicat/sympos/2015/2015gilchrist_zakrajsek.pdf?la=en

²⁷ Decker, Haltiwanger, et. al. (2015)



Data Source: U.S. Census Bureau. Table F-1. Income Limits for Each Fifth and Top 5 Percent of Families, from Historical Income Tables [http://www.census.gov/hhes/www/income/data/historical/index.html].

Figure One shows the difference between the broadly shared growth of incomes from 1947 and 1979 with the period from 1979 to 2012. Fast and equal growth before 1979 has given way to negative growth at the bottom for workers like those who keep our schools in order as crossing guards, cafeteria workers or janitors (for those workers most affected by policies that keep unemployment rates too high and away from full employment) and meager growth for the rest of America’s workers in the bottom 80 percent.²⁸

Indeed, between 1992 and 2015, there is a high correlation between income growth in each portion of the income distribution and the growth rate in the formation of new establishments in the following year. But, that correlation is more pronounced for income growth from the bottom

²⁸ Russell Sage Foundation Chartbook of Social Inequality at <http://www.russellsage.org/sites/all/files/chartbook/Income%20and%20Earnings.pdf>

up through the upper middle income fifth than between the top 20 percent and new establishment formation. When incomes grow widely, more potential customers make it easier to create a firm to take advantage. Increases among the highest income groups are more likely to increase the intensity of demand (spending more money on the same things) than demand of more goods. With this correlation, clearly the rate of new establishments will be lower in the post 1979 era of rising inequality and modest income growth for the bottom 80 percent.

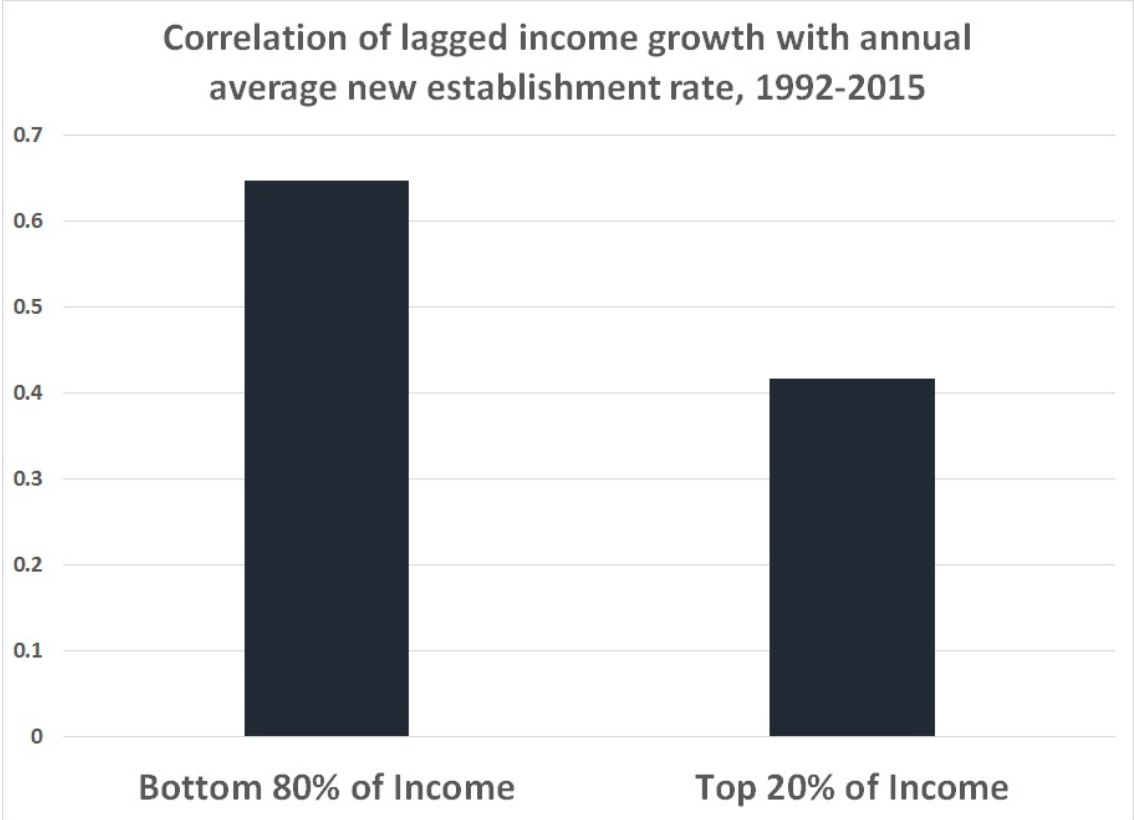


Figure Two shows the correlation between income growth of the bottom 80 percent of the income distribution, roughly households with incomes less than \$110,000 a year, and the rate of new establishment formation in the following year, and for the top 20 percent of the income distribution. The correlation for the bottom 80 percent is presented to summarize the relationship between each of the lower fifths of the income distribution (the lowest fifth of the household income distribution making less than roughly \$22,500 like meat packers and textile workers, lower-middle income households making less than \$42,600 like computer control machine tool operators and bus drivers, middle income households making less than \$68,200 like airplane mechanics and fire fighters and those in upper middle income households like air traffic

controllers and registered nurses) who are the backbone of America's working families with new establishment formation.²⁹ New establishment creation needs accommodating financial conditions, but more importantly first needs customer growth through widely shared income growth.

The causal relationship for firm formation is clear: it runs from customer growth to enabling firm formation; firms do not grow first. It follows that to form a new firm, there must be customers first, otherwise there would be a condition like a perpetual motion machine, policies would not matter if firms can create customers.

From 2014 to 2015 when all parts of the income distribution showed income growth, the share of small firms with employees reporting profitability and rising revenues increased from 15 to 27 percent, and from 21 to 26 percent. In 2015 among growing and start-up firms, credit availability ranked fourth among their challenges, mentioned half as often as the more highly ranked problems of hiring and cash flow. While only 47 percent of small firms with employees applied for funding, 61 percent did so to expand their business. Firms were more successful borrowing from small banks than large banks; overall, 79 percent of firms who applied for funding received at least some funding.³⁰ So, the data on small business financial demand point to responding to growing opportunities from rising revenue and to fuel growth. They also point to the need of financial regulation to insure there is fair access to capital.

The data suggest that promoting new establishments (including small business) requires an economy that creates broad based income growth for all workers, and supportive small banks close to the action of small business and willing to invest in their growth; that is an economy that needs regulations to protect workers and protect the viability of a competitive banking landscape. Legislation like Dodd-Frank is necessary to limit systemic risk and excesses of exploiting

²⁹ Calculations based on authors calculations from US Bureau of Labor Force Statistics, Consumer Expenditure Survey data, and Business Employment Dynamics data. The correlation is between pre-tax income growth by quintile reported in the Consumer Expenditure data and average quarterly New Establishment Rate data for each year from the Business Employment Dynamics data. The reverse correlation, using the rate of new establishments correlated to income growth the following year is much lower, suggesting the causation is more likely that income growth leads to new establishment formation.

³⁰ Federal Reserve Banks of New York, Atlanta, Boston, Cleveland, Philadelphia, Richmond, St. Louis, 2015 *Small Business Survey Report on Employer Firms* (March 2016) at <https://www.newyorkfed.org/medialibrary/media/smallbusiness/2015/Report-SBCS-2015.pdf>

consumers. Sustained growth needs conscious government investment in Americans, in their health and their education, and in the nation, in its environment and its infrastructure.