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Why Opportunity and Inclusion Matter to America's Economic Strength

Remarks by

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I want to thank Neel Kashkari for launching the Opportunity and Inclusive Growth Institute and for inviting me to join the deliberations of this distinguished group today. This new Institute is another great example of how individual Reserve Banks are taking the initiative in illuminating key dimensions of our work and shaping the agenda of the Federal Reserve System.¹

While it has long been understood that opportunity is central to the strength of America's social fabric, it is now increasingly clear that opportunity and inclusion are central to the strength of America's economy. I will touch on the key ways that opportunity and inclusion matter for policymaking at the Federal Reserve, ranging from our dual-mandate goal of maximum employment to our monitoring of household financial health to our engagement in low- and moderate-income communities all over the country. I will focus on how our work intersects with the groundbreaking work of the accomplished group of researchers assembled here.

In the original design of the Federal Reserve, it was recognized that the American economy is not monolithic; that is why the Congress created our system of 12 Federal Reserve Districts. We are present in communities all across America through our Reserve Banks and Branches and their boards and advisory councils. This local presence, by design, gives us valuable perspectives on how Americans are experiencing the economy in different communities around the country and critical insights about the varied challenges that lie beneath the aggregate numbers. In turn, our local engagement helps stakeholders in these communities partner to improve opportunity and inclusive growth.

¹ These remarks represent my own views, which do not necessarily represent those of the Federal Reserve Board or the Federal Open Market Committee.

Inclusion and Maximum Employment

Inclusion is an enduring goal of public policy that is embodied in our maximum-employment mandate. The Employment Act of 1946 charges the federal government with creating “conditions under which there will be afforded useful employment for those able, willing, and seeking to work, and to promote maximum employment, production, and purchasing power.”² Maximum employment is inherently an inclusive goal. In 1977, the Congress amended the Federal Reserve Act to make achieving maximum employment an explicit objective of monetary policy, along with stable prices. In fulfilling its dual mandate, the Federal Open Market Committee (FOMC) has set a target of 2 percent for inflation but does not have a similarly fixed numerical goal for maximum employment. That is because the level of maximum employment depends on “nonmonetary factors that affect the structure and dynamics of the labor market,” which can change in important ways over time.³

The recognition that maximum employment evolves over time to reflect changes in the economic landscape serves us well. It puts the onus on members of the FOMC to analyze the changing features of the labor market and develop a nuanced understanding of the different margins of slack. This approach to maximum employment has allowed the FOMC to navigate the current recovery in a way that has likely brought more people back into productive employment than might have been the case with a fixed, aggregate

² See the Employment Act of 1946, Pub. L. No. 79-304, § 2, 60 Stat. 23, 23 (1946).

³ The FOMC’s inflation target was adopted in January 2012 in the Statement on Longer-Run Goals and Monetary Policy Strategy. It was amended in January 2017 to clarify that the target is symmetric around 2 percent; the most recent Statement on Longer-Run Goals and Monetary Policy Strategy (in which the quoted text appears in paragraph 3) is available on the Board’s website at https://www.federalreserve.gov/monetarypolicy/files/fomc_longerrungoals.pdf. For the interim period, Thornton (2012) and Steelman (2011) document the evolution of views among FOMC members on the dual mandate.

unemployment-rate target based on pre-crisis norms, in effect, achieving more inclusive growth. This is especially true at a time when the traditional Phillips curve relationship between unemployment and inflation is extremely flat for reasons we do not fully understand.

When we disaggregate the economy-wide labor market statistics, we often find significant and persistent racial disparities.⁴ For many decades, the unemployment rate of African Americans has been nearly double the national unemployment rate, with little indication that the relative difference is narrowing or that it can be fully accounted for by education or sectoral mix; the unemployment rate for Hispanics also has consistently been higher than the national unemployment rate.⁵ Similarly, during the Great Recession, the unemployment rates of African Americans and Hispanics rose more sharply and rapidly than for workers as a whole.⁶ Even though the unemployment rates of these groups are back around their pre-recession levels, they remain higher than the national average. We can also see persistent disparities by gender, such as the well-known wage premium earned by men relative to women with similar experience and expertise.⁷ With its focus on inclusive growth, this Institute could give us important insights on how far the overall economy is from full employment, as well as the barriers

⁴ Board of Governors (2016) discusses some recent trends. See also Altonji and Blank (1999) and references therein for research on racial and gender differences in the labor market.

⁵ Cajner and others (2017) find that the higher, more cyclical unemployment of African Americans than whites cannot be fully accounted for by differences in education, age, marital status, and state of residence.

⁶ See the box “Have the Gains of the Economic Expansion Been Widely Shared?” in Board of Governors (2016).

⁷ See Yellen (2017a) and the studies referenced therein.

that could be limiting the economy's potential, by studying labor market outcomes of men and women of different racial and ethnic backgrounds in more depth.⁸

Research on the drivers of disparities in labor market outcomes can also help the Federal Reserve better assess potential tradeoffs in monetary policy. In meetings with community groups, we often hear from advocates who point to the stark discrepancy they see between the economy's aggregate U-3 unemployment rate, which many forecasters estimate to be at or approaching full employment, and the much higher rates of unemployment among the people in their neighborhoods. For instance, Rod Adams, a neighborhood advocate here in Minneapolis, noted the unemployment rate for African Americans locally was still almost 9 percent late last summer and observed that "if the labor market were truly healthy, people in my community would all be able to find full-time jobs at decent wages."⁹ While the policy tools available to the Federal Reserve are not well suited to addressing the barriers that contribute to persistent disparities in the labor market outcomes of different groups, understanding these barriers and efforts to address them is vital in assessing maximum employment as well as potential growth.

The Federal Reserve's community development work is invaluable in supporting our efforts to understand and improve the labor market experiences of different groups.¹⁰

For instance, during the Great Recession, workforce development organizations in

⁸ Aaronson and others (2014) and Barnichon and Mesters (2016) are examples of using details from demographic groups to assess overall labor market trends. In September, the Board of Governors is hosting a conference, "Disparities in the Labor Market: What Are We Missing?" <https://www.federalreserve.gov/conferences/disparities-in-the-labor-market-about-2017.htm>.

⁹ On August 25, 2016, the Federal Reserve Bank of Kansas City hosted a listening session with the Center for Popular Democracy for members of the Federal Reserve; a video of the session is available at <https://www.kansascityfed.org/publications/research/escp/symposiums/escp-event>.

¹⁰ See Yellen (2017b) for an overview. In October, the Federal Reserve Bank of Dallas will host a conference, "Investing in America's Workforce: Improving Outcomes for Workers and Employers." <https://www.dallasfed.org/cd/events/2017/17workforce.aspx>.

Atlanta found themselves overwhelmed by the sharp rise in unemployment, which highlighted the need for a better connected and stronger network of job training and placement services. I recently spent time with these organizations, along with community members and some of our Atlanta staff, who have been working on the creation of the Metro Atlanta eXchange (or MAX) for Workforce Solutions, the region's only comprehensive directory for workforce development services.

Just as there is a connection between maximum employment and inclusive growth, so, too, there is an important connection between potential output and opportunity. If there are large disparities in opportunity based on geography or race or gender, such that households' enterprise, exertion, and investments are not rewarded commensurately, then families and small businesses will invest less in the future and potential growth will fall short.¹¹ Indeed, one worrisome trend is the decline in the labor force participation of prime-age workers with less education, a trend that has been going on for decades among men and that has more recently begun to be mirrored in the participation rate of women.¹² Understanding this growing detachment from work is important to improving both opportunity and potential growth.

In visits to Detroit, Milwaukee, North St. Louis, and Baltimore, I have heard from residents and community organizations about the challenging barriers standing between the many workers seeking jobs and the many jobs seeking workers. The local barriers separating jobs from job seekers can be as concrete as the physical isolation created by major traffic arteries or poorly designed transit systems.¹³ I have visited Los Angeles,

¹¹ See Marrero and Rodriguez (2013).

¹² See Council of Economic Advisers (2016) and the studies cited therein.

¹³ The information is from community development visits in 2015 (Baltimore and North St. Louis) and 2016 (Detroit and Milwaukee).

where our staff have been actively engaged with businesses, transit authorities, and community groups in efforts around “equitable transit-oriented development” so that public transit systems are designed to enhance access for low- and moderate-income residents.¹⁴

Household Financial Health

Inclusion and opportunity also figure prominently in our work on financial resilience. While the resilience of the financial system has long been central to Federal Reserve policy, in recent years we have come to more fully appreciate that a resilient financial system rests on the foundations of financially resilient households and businesses.

The ability to manage the ups and downs in family income and expenses without hardship and the ability to make sound investments for the future are both crucial to financial health. Yet we see from the latest edition of the Federal Reserve’s Survey of Household Economics and Decisionmaking (SHED) that a strikingly high 40 percent of American households with high school degrees or less report that they are struggling financially.¹⁵ And the in-depth research in the U.S. Financial Diaries Project provides insights into the large amount of time and effort these families with thin financial buffers must devote to managing their volatile cash flows.¹⁶

A seemingly modest mismatch between income and expenses can threaten to send the finances of some families into a downward spiral from which it can be expensive and

¹⁴ The information is from community development visits in 2014.

¹⁵ The SHED is an annual survey, representative of the U.S. population, conducted at the Board of Governors since 2013. It is available on the Board’s website at <https://www.federalreserve.gov/consumerscommunities/shed.htm>.

¹⁶ The U.S. Financial Diaries project, led by Jonathan Morduch and Rachel Schneider, is a detailed, ethnographic study of financial conditions among low- and moderate-income households. More information is available on the project’s website at www.usfinancialdiaries.org.

difficult to recover. The results of the 2016 SHED show that nearly one-fourth of all households are unable to pay their current month's bills in full, nearly one-third would rely on borrowing or selling something to cover a \$400 emergency expense, and one in eight would not be able to cover a \$400 emergency expense by any means. Over half of households lack savings to cover three months' expenses if they lost their main source of income.¹⁷ This finding corroborates the evidence found in the financial diaries of low- to moderate-income families that show it is all too common for households to have no short-term savings to cover emergencies. According to the Survey of Consumer Finances, on average from 1989 to 2013, about 80 percent of households in the bottom quintile of the income distribution had less than \$3,000 adjusted for inflation in liquid assets (cash, checking, or savings accounts). Even among households in the middle quintile of income, about half do not meet this threshold for liquid assets.

In addition, the financial crisis demonstrated that household financial imbalances can have important consequences for overall financial stability in extreme circumstances. The rapid and widespread rise in poorly underwritten mortgage debt prior to the Great Recession is widely viewed as a key contributor to the financial crisis.¹⁸ This suggests the potential value of better understanding the specific patterns in household finances that would give an early warning of a crisis. In carrying out our responsibilities to monitor and safeguard the stability of the financial system, although much of the work has

¹⁷ See Board of Governors (2017).

¹⁸ See, for example, Rajan (2010); Dynan (2012); and Mian, Rao, and Sufi (2013) on how high levels of mortgage debt may have made the Great Recession more severe and slowed the recovery. While low-income households were particularly vulnerable to the consequences of the collapse in house prices, rise in unemployment, and tightening of credit in the Great Recession, the preceding rise in mortgage debt was widespread, also including higher-income households, as documented by Bhutta (2015) and Adelino, Schoar, and Severino (2016).

focused on marketwide risks, core financial institutions, and macro-level shocks, we are also developing a more granular understanding of the distribution and strength of household balance sheets.¹⁹ Progress on this frontier is being aided by greater access to timely, account-level, and geographically specific data on consumer credit, mortgages, and spending, although more research in this area would be valuable.

Slower income growth, as well as substantial volatility in income, has raised the financial stress faced by low- and moderate-income families and may be limiting absolute mobility across generations. Over time, the “American Dream” that each generation can expect to be better off than their parents’ generation has gone from being widespread to increasingly out of reach for much of the population.²⁰ Researchers have found that the reduction in economic mobility has been driven primarily by a more unequal distribution of economic growth, with slower overall gross domestic product (GDP) growth a secondary factor.²¹

Many households had been contending with volatile incomes even before the large negative shocks of the Great Recession and the increase in contingent work

¹⁹ See, for example, Parker (2014) and Sufi (2014) for useful, research-founded ideas for assessing and monitoring the potential for financial fragility among households in the context of the financial system; see also Palumbo (forthcoming) for a particular application. The *Quarterly Report on Household Debt and Credit* from the Federal Reserve Bank of New York, which draws on its Consumer Credit Panel, is another example of new monitoring efforts on household finances in the Federal Reserve System. More information is available on the Federal Reserve Bank of New York’s website at <https://www.newyorkfed.org/microeconomics/hhdc.html>.

²⁰ Chetty and others (2017) estimate that rates of absolute mobility fell from about 90 percent for children born in 1940 to 50 percent for children born in the 1980s. Some research, such as Winship (2017), reaches different conclusions on the magnitude of the change, although not on the direction.

²¹ Chetty and others (2017) estimate that the slower overall GDP growth experienced by the 1980 birth cohort relative to the 1940 birth cohort can account for about 10 percentage points of the decline in absolute mobility, while the less equal distribution of income can account for about 30 percentage points of the decline. Commenting on this work, Katz and Krueger (2017) underscore that stagnant growth of median household income since the 1970s has been central to the decline in absolute mobility.

arrangements (and the “gig” economy).^{22 23} Unpredictable income and dangerously low emergency savings raise the strain on households and, over time, have pushed them to rely on other means, such as borrowing and government transfers, to try to meet their spending needs.²⁴

Education and homeownership have long been key paths to opportunity, but the Great Recession has raised some important questions about asset building strategies. The sharp decline in house prices and the substantial rise in student loan debt have made it clear that investments in homeownership and education are not without risk, and the payoff can vary depending on the circumstances.²⁵

Homeownership for many has been a way to turn a regular expense into an asset-building investment in the future, which is especially important given the wide and persistent disparities in wealth by race and ethnicity. But the experience of the past decade suggests that owning a home can, in some circumstances, exacerbate financial difficulties for vulnerable families in a downturn. The lesson that even a moderate decline in house prices can erase home equity applies broadly, along with the importance of sound underwriting and servicing, but the painful consequences in the recession were greater among minority and low-income homeowners.²⁶ The fact, discussed earlier, that

²² See Brainard (2016) on the gig economy and the growth of contingent work.

²³ Dynan, Elmendorf, and Sichel (2012) documented a rise in household income volatility from the early 1970s to late 2008. In contrast, studies such as Celik and others (2012) do not find a rise in household income volatility in the 2000s. Koo (2016) shows a rise in earnings volatility in the Great Recession. Studies of annual income may even understate the volatility, as the financial diaries showed considerable month-to-month fluctuations in income among low- and middle-income households.

²⁴ See Gorbachev (2011).

²⁵ See Brainard (2015).

²⁶ Bhutta and Ringo (2015) and the studies discussed therein argue that the Community Reinvestment Act, and its encouragement of lending in low- and moderate-income communities, was not a significant contributor to the financial crisis. Well-serviced and correctly-structured mortgages performed well for low-income borrowers even during a decline in house prices.

African American and Hispanic homeowners households are more likely to lose their jobs in a recession and are also more likely to live in neighborhoods with concentrated job loss led to even larger house price declines and more foreclosures among these households.²⁷ Indeed, there are many low-income neighborhoods in which many homeowners remain “underwater” on their mortgages even today.

Community development organizations are putting this more nuanced view of asset building into practice and thereby increasing opportunities for individuals to make smart investments in their future. Better Family Life, a community group I visited in North St. Louis, provides would-be homebuyers with education and counseling on how to manage the costs of homeownership, tools to navigate real estate markets, and information on lending.²⁸ There is ample research demonstrating that housing counseling makes a notable improvement in the likelihood that asset building through homeownership will pay off for first-time buyers in low- to moderate-income communities.²⁹

Similarly, under the right circumstances, education can be a critical investment in the future and a path to opportunity, leading to higher wages and improved financial outcomes. Over the past several decades, the earnings premium for those with a college degree relative to those with a high school education has risen substantially, making higher education, on average, even more valuable.³⁰

²⁷ See research by Emmons and Noeth (2015) and the related symposium; more information is available on the Federal Reserve Bank of St. Louis’s website at <https://www.stlouisfed.org/household-financial-stability/events/past-events/does-college-level-the-playing-field>. Boshara (2017) provides an overview of the conference findings.

²⁸ The information is from community development visits in 2015.

²⁹ See, for example, Collins and Schmeiser (2013) and Smith, Hochberg, and Greene (2014).

³⁰ See Autor (2014).

Nonetheless, even though education is a sound investment for most students, the benefits can vary with the quality and type of education received.³¹ The SHED finds that fewer than 40 percent of nongraduates or graduates from for-profit institutions say their education was “worth the cost,” compared with two-thirds of graduates from public or nonprofit institutions.³² The downsides from such low-return education are compounded for those who took out student loans, in some cases leaving them worse off than before. As an indication of this problem, nearly three-fourths of recent borrowers who attended for-profit schools failed to make progress on paying off their student loans in the first few years, and almost half were in default within five years.³³ Investments in education that do not pay off can set these individuals back on asset building as well as on other life goals they may have. To advance more inclusive growth and opportunity, it is essential to help people, especially first-time and nontraditional college students, access smarter educational investments with more reliable and better returns.³⁴

Communities of Opportunity

The connection between the conditions in a community and individual opportunity has been demonstrated in powerful research that many of you have pioneered, and we see this connection every day in our work in communities around the country. The neighborhood where a family lives can have profound implications for their economic opportunities and their children’s prospects. Families living in neighborhoods with high concentrations of poverty and low economic or demographic diversity are more

³¹ See Brainard (2015).

³² See Board of Governors (2017).

³³ See Looney and Yannelis (2015).

³⁴ See Chou, Looney, and Watson (2017) as an example of research on policy tools that could improve educational choices.

likely to experience a range of negative outcomes, including exposure to crime and violence, physical and mental health problems, and weak academic performance.³⁵ Low-skilled workers who live far from potential employers or accessible transportation networks have more difficulty finding and keeping jobs.³⁶

These effects of geography on opportunity can stretch from one generation to the next. Raj Chetty and his collaborators have shown that upward mobility varies immensely across the country and even within a single metro area.³⁷ Taken together, this research underscores the urgency of understanding how we can make communities work better for all their members. Since communities play a central role in determining opportunity, policy to promote inclusion often focuses on improving local conditions. With our presence in communities around the country and our efforts under the Community Reinvestment Act, the Federal Reserve is a source of high-quality research and region-specific expertise as well as a trusted convener and catalyst on community development approaches for lenders, community groups, and local and regional governments.

One important area of focus is housing, which connects families concretely to place and can be a source of strength or fragility. Last year, I met with Milwaukee community development groups and residents in one of the more racially segregated

³⁵ In an early evaluation of the Moving to Opportunity program, Katz, Kling, and Liebman (2001) find improvements of better neighborhoods on children's health and safety. Sampson (2016) summarizes much of the recent evidence.

³⁶ Kain (1968) first advanced the "spatial mismatch" hypothesis. More recently, Hellerstein, Neumark, and McInerney (2008) find evidence for a "spatial-racial mismatch"--namely, that employment among low-skilled black men depends on proximity to employers who hire black workers.

³⁷ In one of many studies on opportunity, Chetty and others (2014) use Internal Revenue Service tax return data from 40 million adult children to estimate the relative upward mobility across the 741 commuting zones (both metro and rural) in the United States.

residential markets in the country. They highlighted the challenges facing the highly insecure rental population in Milwaukee, which were brought alive by Matthew Desmond's careful research.³⁸ Other communities across the nation face similar challenges. In the recently released SHED, we found that among renters who had recently moved, 12 percent of African Americans, 16 percent of Hispanics, and 8 percent of whites had moved because of eviction or the threat of eviction.³⁹

The barriers to safe and affordable housing often take on a different form in rural areas, where ownership of manufactured housing is often coupled with insecure land ownership. The geographic footprint of the 12 Federal Reserve Districts gives us a valuable presence in rural America as well as in towns and cities of all sizes and economic fortunes. Near El Paso, our team has developed important analysis of housing challenges in the colonias neighborhoods, where the lack of basic infrastructure and costly financing of warranty deeds pose special hurdles for local families.⁴⁰ We have also seen successful models of providing affordable and safe housing when community development organizations and financial institutions, along with banks and local residents, work together collaboratively. On a recent visit in El Paso, I saw the value of these approaches, as a single mother with significant health challenges received the keys to a new home in a stable community, after many long years. While the densely wooded hills and hollers of Eastern Kentucky are a sharp contrast to the desert and floodplain expanses of the southwest, the keys to affordable housing in a healthy community can bring just as great an improvement in opportunity. These successes would not be

³⁸ See Desmond (2016).

³⁹ See Board of Governors (2017).

⁴⁰ See Federal Reserve Bank of Dallas, Community Development Department (2015).

possible without the ingenuity and collaboration of community development financial institutions, local officials, banks, and community members. As I have witnessed, whether it be for a retiree in Helena, Arkansas; a single mom in El Paso, Texas; or a dad on disability in Emlyn, Kentucky, the keys to affordable housing in a stable community can unlock opportunity for future generations.⁴¹

In some parts of the country, rural residents and small businesses also face increasing challenges in accessing financial services as small community banks close and larger banks close branches in low-population areas. Consequently, as I learned from the Mayors of Itta Bena and Moorhead, Mississippi, some rural residents, small businesses, and even municipalities have to drive long distances to reach a bank.⁴² In the Mississippi Delta, Community Development Financial Institutions (CDFIs) such as HOPE Credit Union and Southern Bancorp are acquiring bank branches earmarked for closing in order to maintain financial services for some rural communities.⁴³

Although both pockets of opportunity and of persistent poverty are found in large metro and rural areas alike,⁴⁴ a greater share of the new jobs and business establishments created in the recovery following the Great Recession have been in larger metro areas than was the case in previous recoveries.⁴⁵ In countless communities, especially in rural towns and small to midsize cities, we have seen how a deep setback can leave a profound and long-lasting mark. These experiences challenge common assumptions about the ability of the economy to recover from an economic setback. This could be the legacy of

⁴¹ Community visits in El Paso (2016), Mississippi Delta (2016), and Eastern Kentucky (2017),

⁴² Discussions with Mayor Collins of Itta Bena, Mississippi and Mayor Holland of Moorhead, Mississippi (2016).

⁴³ Community Development visit in Mississippi Delta (2016).

⁴⁴ See Goetz, Partridge, and Stephens (2017).

⁴⁵ See Economic Innovation Group (2016).

concentrated reliance on an industry that experiences decline due to trade or technology or the byproduct of lack of connectivity-whether by highways or broadband.

Technological change, globalization, and other shifts in demand and costs are not new to the U.S. economy, but there are troubling signs that less diversified or more isolated localities have diminished ability to recover. And there is increasing evidence that such concentrated economic shocks can also lead to severe labor market stress, as well as broader consequences for health and mortality.⁴⁶ Over the past 30 years, the convergence in income across regions of the country has slowed dramatically.⁴⁷

Even so, some localities fare better than others in establishing new paths to opportunity and inclusive growth, and their successes provide actionable lessons. The Boston Fed's Working Cities Challenge undertook an in depth study of 25 medium-sized cities nationwide that had experienced a post-industrial decline and identified 10 that experienced an economic resurgence. The critical determinant of success was the ability of leaders in those cities to collaborate across sectors around a long-term vision for revitalization. To encourage such collaboration in other cities, the Boston Fed facilitated competitions that reward effective public-private collaboration in developing plans to reach community-wide goals. For example, Holyoke, Massachusetts, proposed a plan to simplify the city's permitting and licensing systems in order to raise the presence of Latino-owned businesses. On economic revitalization, as in other areas of community development, effective solutions start with the community setting its own goals, are powered by broad collaboration, and rely on evidence to drive results.

⁴⁶ See Autor, Dorn, and Hanson (2013) and Pierce and Schott (2016).

⁴⁷ See Ganong and Shoag (2015) and references therein.

Conclusion

We all have our work cut out for us in helping to understand the state of opportunity and inclusion for different groups and communities across our country, and ensuring that policy is informed by those important insights. At the Federal Reserve, we will continue to navigate the recovery to ensure we reach and sustain our long-term goals of maximum employment and price stability. We will remain attentive to the financial health of vulnerable households. And we will remain committed to helping illuminate the specific challenges faced by low- and moderate-income communities around the country and to supporting banks and other financial institutions as they partner in strengthening these communities. In all of these efforts, our work will be greatly strengthened by the cutting-edge research and policy insights of the outstanding group gathered here tonight.

References

- Aaronson, Daniel, Luojia Hu, Arian Seifoddini, and Daniel G. Sullivan (2014). “Declining Labor Force Participation and Its Implications for Unemployment and Employment Growth,” Federal Reserve Bank of Chicago, *Economic Perspectives*, vol. 38 (Fourth Quarter), pp. 100-38, <https://www.chicagofed.org/publications/economic-perspectives/2014/4q-aaronson-et-al>.
- Adelino, Manuel, Antoinette Schoar, and Felipe Severino (2016). “Loan Originations and Defaults in the Mortgage Crisis: The Role of the Middle Class,” *Review of Financial Studies*, vol. 29 (July), pp. 1635-70.
- Altonji, Joseph G., and Rebecca M. Blank (1999). “Race and Gender in the Labor Market,” in Orley Ashenfelter and David Card, eds., *Handbook of Labor Economics*, vol. 3. New York: North-Holland.
- Autor, David H. (2014). “Skills, Education, and the Rise of Earnings Inequality among the ‘Other 99 Percent,’” *Science*, May 23.
- Autor, David H., David Dorn, and Gordon H. Hanson (2013). “The China Syndrome: Local Labor Market Effects of Import Competition in the United States,” *American Economic Review*, vol. 103 (October), pp. 2121-68.
- Barnichon, Regis, and Geert Mesters (2017). “How Tight Is the U.S. Labor Market?” FRBSF Economic Letter 2017-07. San Francisco: Federal Reserve Bank of San Francisco, March, www.frbsf.org/economic-research/publications/economic-letter/2017/march/how-tight-is-labor-market/?utm_source=mailchimp&utm_medium=email&utm_campaign=economic-letter-2017-03-20.
- Bhutta, Neil and Daniel Ringo (2015). “Assessing the Community Reinvestment Act’s Role in the Financial Crisis.” FEDS Notes. Washington: Board of Governors of the Federal Reserve System, May 26, <https://www.federalreserve.gov/econresdata/notes/feds-notes/2015/assessing-the-community-reinvestment-acts-role-in-the-financial-crisis-20150526.html>.
- Bhutta, Neil (2015). “The Ins and Outs of Mortgage Debt during the Housing Boom and Bust,” *Journal of Monetary Economics*, vol. 76 (November), pp. 284-298.
- Board of Governors of the Federal Reserve System (2016). *Monetary Policy Report*. Washington: Board of Governors, June, https://www.federalreserve.gov/monetarypolicy/mpr_20160621_part1.htm.

- (2017). *Report on the Economic Well-Being of U.S. Households in 2016*. Washington: Board of Governors, May, <https://www.federalreserve.gov/consumerscommunities/shed.htm>.
- Boshara, Ray (2017). "Black College Graduates Are Losing Wealth. Here's What Can Help," *Washington Post*, April 12.
- Brainard, Lael (2015). "Coming of Age in the Great Recession," speech delivered at "Economic Mobility: Research and Ideas on Strengthening Families, Communities, and the Economy" conference, Washington, April 2, <https://www.federalreserve.gov/newsevents/speech/brainard20150402a.htm>.
- (2016). "The "Gig" Economy: Implications of the Growth of Contingent Work," speech delivered at "Evolution of Work" conference, New York, November 17, <https://www.federalreserve.gov/newsevents/speech/brainard20161117a.htm>
- Cajner, Tomaz, Tyler Radler, David Ratner, and Ivan Vidangos (forthcoming). "Racial Gaps in Labor Market Outcomes in the Last Four Decades and over the Business Cycle," Finance and Economics Discussion Series. Washington: Board of Governors of the Federal Reserve System.
- Celik, Sule, Chinhui Juhn, Kristin McCue, and Jesse Thompson (2012). "Recent Trends in Earnings Volatility: Evidence from Survey and Administrative Data," *B.E. Journal of Economic Analysis and Policy*, vol. 12 (June), pp. 1-24.
- Chetty, Raj, David Grusky, Maximilian Hell, Nathaniel Hendren, Robert Manduca, and Jimmy Narang (2017). "The Fading American Dream: Trends in Absolute Income Mobility since 1940," *Science*, April 24.
- Chetty, Raj, Nathaniel Hendren, Patrick Kline, and Emmanuel Saez (2014). "Where Is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States," *Quarterly Journal of Economics*, vol. 129 (December), pp. 1553-1624.
- Chou, Tiffany, Adam Looney, and Tara Watson (2017). "Measuring Loan Outcomes at Postsecondary Institutions: Cohort Repayment Rates as an Indicator of Student Success and Institutional Accountability," NBER Working Paper Series 23118. Cambridge, Mass.: National Bureau of Economic Research, February.
- Collins, J. Michael and Maximilian D. Schmeiser (2013). "The Effects of Foreclosure Counseling for Distressed Homeowners," *Journal of Policy Analysis and Management*, vol. 32 (January), pp. 83-106.
- Council of Economic Advisers (2016). *The Long-Term Decline in Prime-Age Male Labor Force Participation*. Washington: Executive Office of the President of the United States,

- June, https://obamawhitehouse.archives.gov/sites/default/files/page/files/20160620_cea_primeage_male_lfp.pdf.
- Desmond, Matthew (2016). *Evicted: Poverty and Profit in the American City*. New York, N.Y.: Crown Publishers.
- Dynan, Karen (2012). “Is a Household Debt Overhang Holding Back Consumption?” *Brookings Papers on Economic Activity*, Spring, pp. 299-362, https://www.brookings.edu/wp-content/uploads/2016/06/2012a_Dynan.pdf.
- Dynan, Karen, Douglas Elmendorf and Daniel Sichel (2012). “The Evolution of Household Income Volatility.” *The B.E. Journal of Economic Analysis and Policy*, vol. 12 (December).
- Economic Innovation Group (2016). *The New Map of Economic Growth and Recovery*. Washington: EIG, May, <http://eig.org/wp-content/uploads/2016/05/recoverygrowthreport.pdf>.
- Emmons, William R., and Bryan J. Noeth (2015). “Why Didn’t Higher Education Protect Hispanic and Black Wealth?” In the Balance: Perspectives on Household Balance Sheets, no. 12. St. Louis: Federal Reserve Bank of St. Louis, August, https://www.stlouisfed.org/~media/Publications/In-the-Balance/Images/Issue_12/ITB_August_2015.pdf.
- Federal Reserve Bank of Dallas, Community Development Department (2015). *Las Colonias in the 21st Century: Progress along the Texas-Mexico Border*. Dallas: Federal Reserve Bank of Dallas, April, <https://www.dallasfed.org/~media/documents/cd/pubs/lascalonias.pdf>.
- Federal Reserve Bank of Kansas City and Center for Popular Democracy (2016). “Federal Reserve and the Center for Popular Democracy Listening Session,” August 25, <https://www.kansascityfed.org/publications/research/escp/symposiums/escp-event>.
- Ganong, Peter, and Daniel Shoag (2015). “Why Has Regional Income Convergence in the U.S. Declined?” working paper. Cambridge, Mass.: Harvard Web Publishing, January, https://scholar.harvard.edu/files/shoag/files/why_has_regional_income_convergence_in_the_us_declined_01.pdf.
- Goetz, Stephen, Mark Partridge, and Heather Stephens (2017). “The Economic Status of Rural America in the Trump Era,” MPRA Paper 77830. Munich: Munich Personal RePEc Archive, March, <https://mpra.ub.uni-muenchen.de/77830>.
- Gorbachev, Olga (2011). “Did Household Consumption Become More Volatile?” *American Economic Review*, vol. 101 (August), pp. 2248-70.

- Hellerstein, Judith K., David Neumark, and Melissa McInerney (2008). "Spatial Mismatch or Racial Mismatch?" *Journal of Urban Economics*, vol. 64 (September), pp. 464-79.
- Kain, John F. (1968). "Housing Segregation, Negro Employment, and Metropolitan Decentralization," *Quarterly Journal of Economics*, vol. 82 (May), pp. 175-97.
- Katz, Lawrence F., Jeffrey R. Kling, and Jeffrey B. Liebman (2001). "Moving to Opportunity in Boston: Early Results of a Randomized Mobility Experiment," *Quarterly Journal of Economics*, vol. 116 (May), pp. 607-54.
- Katz, Lawrence F., and Alan B. Krueger (2017). "Documenting Decline in U.S. Economic Mobility," *Science*, April 24.
- Koo, Kyong Hyun (2016). "The Evolution of Earnings Volatility during and after the Great Recession," *Industrial Relations*, vol. 55 (October), pp. 705-32.
- Looney, Adam, and Constantine Yannelis (2015). "A Crisis in Student Loans? How Changes in the Characteristics of Borrowers and in the Institutions They Attended Contributed to Rising Loan Defaults," *Brookings Papers on Economic Activity*, Fall, pp. 1-68, <https://www.brookings.edu/wp-content/uploads/2015/09/LooneyTextFall15BPEA.pdf>.
- Marrero, Gustavo A., and Juan G. Rodríguez (2013). "Inequality of Opportunity and Growth," *Journal of Development Economics*, vol. 104 (September), pp. 107-22.
- Mayer, Christopher, Karen Pence, and Shane M. Sherlund (2009). "The Rise in Mortgage Defaults," *Journal of Economic Perspectives*, vol. 23 (Winter), pp. 27-50.
- Mian, Atif, Kamalesh Rao, and Amir Sufi (2013). "Household Balance Sheets, Consumption, and the Economic Slump," *Quarterly Journal of Economics*, vol. 128 (November), pp. 1687-1726.
- Palumbo, Michael G. (forthcoming). "Assessing the Contribution of Household Leverage to Systemic Risk in the U.S.," Finance and Economics Discussion Series. Washington: Board of Governors of the Federal Reserve System.
- Parker, Jonathan A. (2014). "LEADS on Macroeconomic Risks to and from the Household Sector," in Markus Brunnermeier and Arvind Krishnamurthy, eds., *Risk Topography: Systemic Risk and Macro Modeling*. Chicago: University of Chicago Press, pp. 183-203.
- Pierce, Justin R., and Peter K. Schott (2016). "Trade Liberalization and Mortality: Evidence from U.S. Counties," NBER Working Paper Series 22849. Cambridge, Mass.: National Bureau of Economic Research, November.

- Rajan, Raghuram G. (2010). *Fault Lines: How Hidden Fractures Still Threaten the World Economy*. Princeton, N.J.: Princeton University Press.
- Sampson, Robert J. (2016). “Individual and Community Economic Mobility in the Great Recession Era: The Spatial Foundations of Persistent Inequality,” in Federal Reserve Bank of St. Louis and Board of Governors of the Federal Reserve System, eds., *Economic Mobility: Research and Ideas on Strengthening Families, Communities, and the Economy*. St. Louis: Federal Reserve Bank of St. Louis, pp. 259-87, https://www.stlouisfed.org/~media/Files/PDFs/Community-Development/EconMobilityPapers/Section3/EconMobility_3-1Sampson_508.pdf?la=en.
- Smith, Marvin M., Daniel Hochberg, and William H. Greene (2014). “The Effectiveness of Pre-Purchase Homeownership Counseling and Financial Management Skills.” Philadelphia, PA: Federal Reserve Bank of Philadelphia, <https://www.philadelphiafed.org/~media/community-development/homeownership-counseling-study/2014/homeownership-counseling-study-042014.pdf?la=en>.
- Steelman, Aaron (2011). “The Federal Reserve’s ‘Dual Mandate’: The Evolution of an Idea,” Economic Brief EB11-12. Richmond, Va.: Federal Reserve Bank of Richmond, December, https://www.richmondfed.org/~media/richmondfedorg/publications/research/economic_brief/2011/pdf/eb_11-12.pdf.
- Sufi, Amir (2014). “Detecting ‘Bad’ Leverage,” in Markus Brunnermeier and Arvind Krishnamurthy, eds., *Risk Topography: Systemic Risk and Macro Modeling*. Chicago: University of Chicago Press, pp. 205-212.
- Thornton, Daniel L. (2012). “The Dual Mandate: Has the Fed Changed Its Objective?” Federal Reserve Bank of St. Louis, *Review*, vol. 94 (March/April), pp. 117-33, <https://files.stlouisfed.org/files/htdocs/publications/review/12/03/117-134Thornton.pdf>.
- Winship, Scott (2017). *Economic Mobility in America*. Washington: Archbridge Institute, March, <https://www.archbridgeinstitute.org/2017/03/20/economic-mobility-in-america>.
- Yellen, Janet L. (2017a). “So We All Can Succeed: 125 Years of Women’s Participation in the Economy,” speech delivered at “125 Years of Women at Brown Conference,” sponsored by Brown University, Providence, R.I., May 5, <https://www.federalreserve.gov/newsevents/speech/yellen20170505a.htm>.
- (2017b). “Addressing Workforce Development Challenges in Low-Income Communities,” speech delivered at “Creating a Just Economy,” the 2017 annual conference of the National Community Reinvestment Coalition, Washington,

March

28, <https://www.federalreserve.gov/newsevents/speech/yellen20170328a.htm>.