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Senator Amy Klobuchar, Vice Chair

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The Millennials:
Economic Challenges and Opportunities

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Generations entering adulthood during difficult economic times face many challenges. Millennials who came of age in recent years have done so during and in the aftermath of the deepest and most protracted economic downturn since the Great Depression. While unemployment rates for young workers have come down from their recent peaks, they remain above prerecession averages. As many Millennials have struggled to get their careers off the ground, life milestones such as getting married and buying a home may seem out of reach. Record levels of student debt are further limiting savings and wealth building. The challenges Millennials have faced during their early working lives could impact them for years to come.

Despite these challenges, Millennials are the best-educated generation in history, and they have the potential to fuel economic growth as they advance in their careers and establish households of their own. This report provides a preliminary look at how the recession has affected Millennials. It compares today's young adults with prerecession cohorts of early-career workers ages 18 to 34 and describes policies to support economic opportunity for Millennials and future generations.

Snapshot of the Current Economic Situation of Millennials

Millennials range in age from about 14 to 34 years old. The oldest Millennials entered the labor force before the recent recession started while the youngest either entered it during the past several years of the recovery or remain in school. Even though most were not seeking their first jobs at the deepest point of the downturn, the recession remains a defining event in the early careers of all Millennials. As the economic outlook has brightened over the past few years, opportunities have also increased for young adults. But as is the case with other age groups, unemployment and underemployment rates for 18- to 34-year-olds remain elevated relative to prerecession averages.

Unemployment: Over the past 12 months, the unemployment rate for adult Millennials (18 to 34 years old) has averaged 8.9 percent, down from an annual peak of 12.7 percent in 2010. Despite this improvement, the unemployment rate for this age group is still about 1.7 percentage points above its prerecession average (**Table 1**).[1] By comparison, the unemployment rate for prime-age workers (35 to 54 years old) has averaged 4.7 percent over the past 12 months, less than one percentage point above its prerecession average.

Who Are the Millennials?

Generational cohorts are often fluid and lack clear age cutoffs. There is no consensus among researchers on when exactly the Millennial generation began or when the last Millennials were born. Most consider Millennials to be those who were born roughly in the two decades leading up to the turn of the millennium.[1] Applying this definition, today Millennials range in age from about 14 to 34 years old.

Millennials currently make up about one-third of the labor force, a share that will increase in the coming years as the youngest Millennials finish their schooling.[2] This report generally focuses on adult Millennials 18 years of age and older since they are more likely to be in the labor force and to have been impacted by the recent recession.

Sources:

[1] Pew Research Center, *Millennials in Adulthood* (March 2014), http://www.pewsocialtrends.org/files/2014/03/2014-03-07_generations-report-version-for-web.pdf.

[2] JEC Democratic staff calculations based on data from the Bureau of Labor Statistics, Current Population Survey.

Table 1. Unemployment and Underemployment Rates by Age and Educational Attainment

	Unemployed			Underemployed (U-6 Index)		
	Current	**Peak**	**Prerecession**	**Current**	**Peak**	**Prerecession**
Overall rate	6.3%	9.7%	5.3%	12.2%	16.8%	9.1%
Age						
18 to 34	8.9%	12.7%	7.2%	16.8%	21.8%	12.2%
18 to 24	12.7%	17.3%	10.3%	23.8%	29.4%	17.2%
25 to 29	7.4%	11.0%	5.8%	14.3%	18.7%	10.0%
30 to 34	6.0%	9.3%	4.8%	11.4%	16.1%	8.2%
35 to 54	4.7%	7.9%	3.8%	9.5%	13.9%	6.8%
Education: 25 to 34 years of age						
High school or less	10.0%	14.9%	7.7%	19.2%	26.3%	13.5%
Some college or associate degree	7.4%	10.5%	5.0%	13.9%	17.4%	8.2%
Bachelor's degree or higher	3.4%	4.9%	2.7%	6.4%	8.4%	4.4%

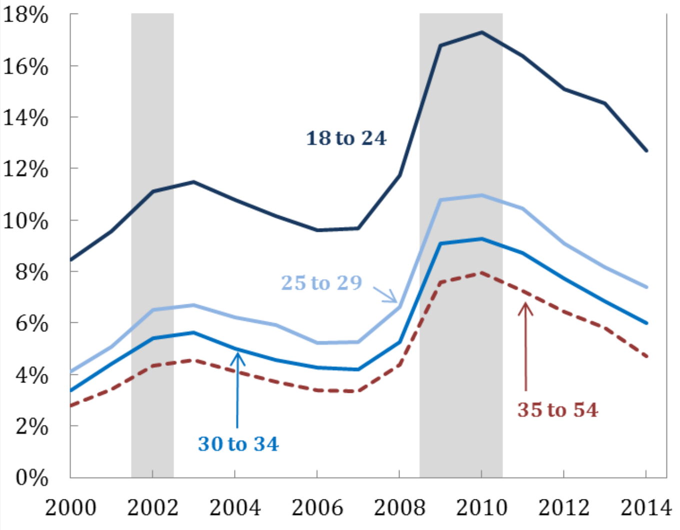
Note: 'Current' represents 12-month average through November 2014. 'Peak' represents highest annual rate since 2007. 'Prerecession' represents average rate from 2001-2007. 'Overall rate' represents rate for individuals 16 years and older.
Source: JEC Democratic staff based on data from the Bureau of Labor Statistics, Current Population Survey.

While younger workers typically have a higher unemployment rate than prime-age workers regardless of economic conditions, the spread between the unemployment rates for workers ages 18 to 34 and those ages 35 to 54 widened during the recession – increasing from an average of 3.4 percentage points over the prerecession period to nearly five percentage points in 2009.[2] Though it has narrowed somewhat, this spread remains more than four percentage points.[3]

Unemployment rates vary considerably by age (**Table 1 and Figure 1**). The youngest adult Millennials (ages 18 to 24) have the highest unemployment rate – 12.7 percent over the past 12 months – due in part to the higher share of labor force participants in this age group without college degrees as well as other factors that tend to raise the unemployment rate for the youngest workers.[4]

Older Millennials (25 to 34 years old) are more likely than younger Millennials to have completed their education. Among this group, the current 12-month average unemployment rate for those with at least a bachelor's degree is 3.4 percent, less than half the rate for workers ages 25 to 34 with some college education and about one-third the rate for those with only a high school degree or less (**Table 1**). At its annual peak in 2010, the unemployment rate for 25- to 34-year olds without any college education reached 14.9 percent.

Figure 1. Unemployment Rates by Age
Annual unemployment rates, 2000 to 2014



Note: 2014 rate represents 12-month average through November 2014. Grey areas represent periods of recession as determined by the National Bureau of Economic Research.
Source: JEC Democratic staff based on data from the Bureau of Labor Statistics, Current Population Survey.

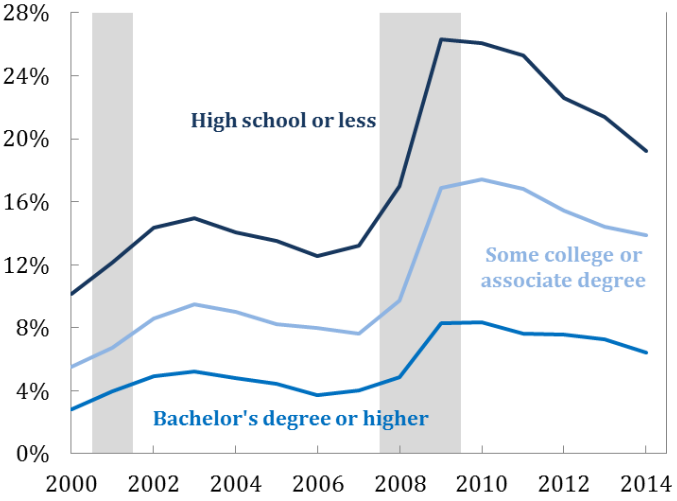
Unemployment rates for Millennials vary from state to state (**see Appendix Tables**). In general, differences in Millennial unemployment rates are in line with differences in overall unemployment rates across the states.

Underemployment: Underemployment is also important to consider when assessing the employment situation of Millennials. When full-time work is unavailable, workers may have to take part-time jobs. Others may give up actively searching for a job but have looked within the past year and want and are available for work. The Department of Labor publishes a measure of labor underutilization that includes these workers.[5]

Using this measure, 16.8 percent of Millennials are underemployed (recent 12-month average), down from a peak of nearly 22 percent of young adults ages 18 to 34 in 2010, but still well above the roughly 12 percent rate that prevailed on average in the years leading up to the recession.[6] By comparison, 9.5 percent of workers ages 35 to 54 are underemployed. Underemployment also varies considerably by age and educational attainment (**Table 1 and Figure 2**). Nearly 20 percent of Millennials ages 25 to 34 without any college education are underemployed, versus only 6.4 percent of those with a bachelor's degree.[7]

Figure 2. Underemployment Rates by Educational Attainment, 25 to 34 Years of Age

Annual underemployment rates, 2000 to 2014



Note: 2014 rate represents 12-month average through November 2014. Grey areas represent periods of recession as determined by the National Bureau of Economic Research.
Source: JEC Democratic staff based on data from the Bureau of Labor Statistics, Current Population Survey.

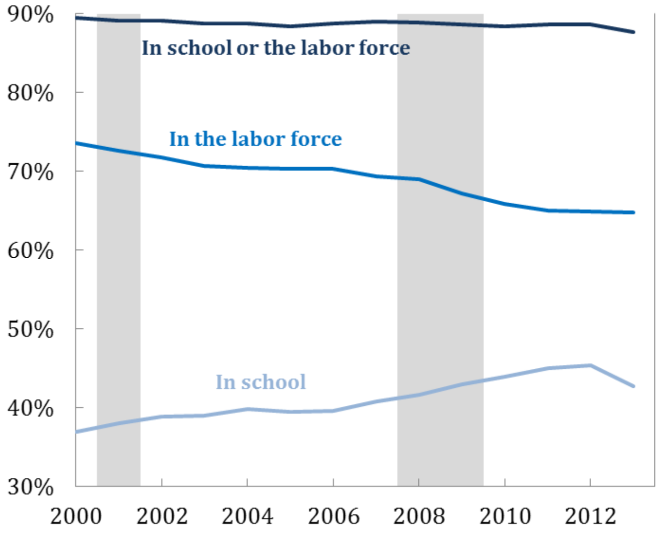
As with unemployment rates, the spread between the underemployment rates for younger and prime-age workers widened during the recession – from a prerecession average of 5.3 percentage points to nearly eight percentage points in 2010 and 2011.[8] This means that underemployment rates for younger workers rose more sharply than for workers ages 35 to 54. Moreover, this measure of underemployment does not take into account the sizable contingent of young people employed in jobs that do not fully utilize their skills and education.[9]

Labor force participation: Labor force participation rates can also shed light on the impact of the recession on Millennials. Since the start of the recession, the labor force participation rate has declined by about two percentage points for 30- to 34-year-olds, three percentage points for people ages 25 to 29, and four percentage points for those ages 18 to 24.[10] Among 18- to 24-year-olds, the share either enrolled in school or in the labor force has held roughly constant over the recession and recovery (**Figure 3**).[11]

Young adults who spend time out of the labor force to obtain more education will have better job prospects as the recovery continues.[12] Conversely, those who become frustrated with the job search and leave the labor force but do not go back to school may experience long-term harm as their skills atrophy and networking connections fade.[13] For these Millennials, knowledge and skills from prior schooling may degrade, and they may lose valuable early-career skills-building opportunities.

Figure 3. Share of People in School or the Labor Force

18 to 24 years of age, 2000 to 2013

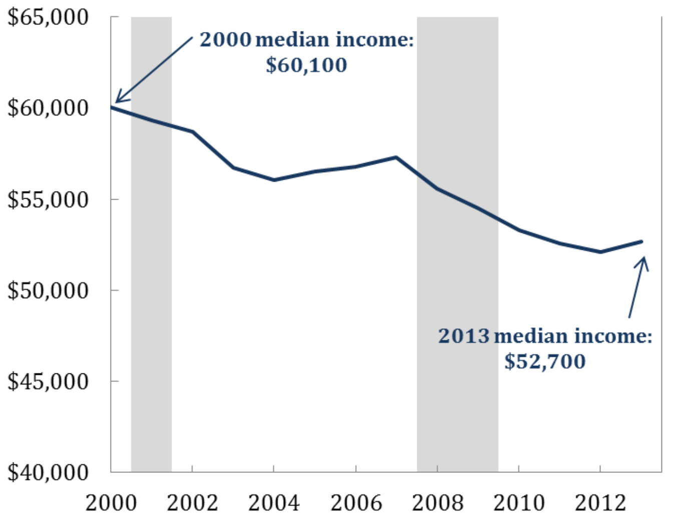


Note: Grey areas represent periods of recession as determined by the National Bureau of Economic Research.
Source: JEC Democratic staff based on data from the Bureau of Labor Statistics, Current Population Survey.

Earnings and income: Millennials have faced stagnant or declining wages in addition to difficulty securing employment. Last year, real (inflation-adjusted) median weekly earnings for full-time workers ages 20 to 24 were down by more than five percent from 2007, and they were still slightly below their 2007 level for 25- to 34-year-olds as well.[14] Real median weekly earnings for full-time workers ages 25 to 34 are at roughly the same level as the turn of the millennium, while they have fallen for the youngest workers and increased for workers in all other age brackets.[15]

Annual household income incorporates not only workers' weekly wages but also the number of weeks worked per year and the number of workers in a household earning an income. Using this measure, annual real median income for households headed by a 25- to 34-year-old is down by more than 10 percent from its peak in 2000, though it did tick upward last year after five consecutive years of declines (**Figure 4**).

Figure 4. Median Household Income: Heads of Household 25 to 34 Years of Age
2013 dollars, 2000 to 2013

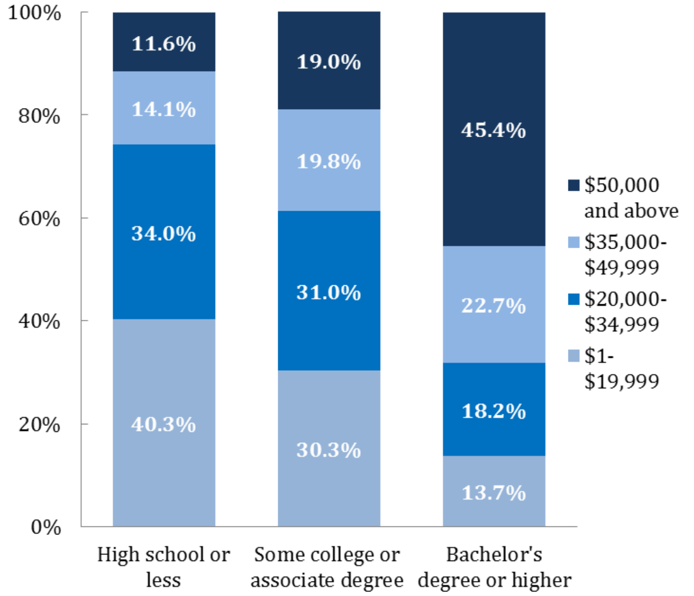


Note: Grey areas represent periods of recession as determined by the National Bureau of Economic Research.
Source: JEC Democratic staff based on data from the U.S. Census Bureau.

According to an analysis by the Council of Economic Advisers, college graduates turning 23 in the mid- to late-1990s typically saw their wages increase by 50 percent by the time they turned 28. But those turning 23 in the midst of the recent recession only saw their wages increase by about half as much over that five-year period.[16] While other age cohorts have also recently experienced stagnant wages, slow early-career wage growth can have especially detrimental long-term effects.

Although wages have stagnated for young workers regardless of educational attainment, there remain substantial returns to college education.[17] Young people with higher levels of education are much likelier to be in higher income brackets.[18] Among 25- to 34-year-olds with a bachelor's degree, 45 percent earned more than $50,000 last year. By comparison, 19 percent of those ages 25 to 34 with some college education were in this income bracket, versus only 12 percent of those with a high school education or less (**Figure 5**).

Figure 5. Earnings by Educational Attainment
Share of 25- to 34-year-olds, 2013 total earnings



Note: Data does not include those without earnings.
Source: JEC Democratic staff based on data from the U.S. Census Bureau.

The Impact of the Recession on Millennials

Young workers are disproportionately impacted during economic downturns. These effects are compounded by a persistent gap in earnings and savings relative to workers who enter the labor market during stronger economic times.[19]

Economists cite several factors that contribute to higher rates of unemployment among young workers, both in general and especially during difficult economic times.[20] Young people may be more likely to be in jobs that are not an ideal fit for their skills and interests, which can lead them to spend more time in transitions between jobs.[21] In addition, less-experienced workers may have trouble competing during job searches with more-experienced workers, in part because they may have less-developed professional networks and job-search skills.[22] This can pose a particular challenge during economic downturns when many experienced workers are also looking for jobs.[23] Moreover, young people often have less job-specific knowledge and can require more on-the-job training to get up to speed. Some employers may also have "last in, first out" policies which may make recent hires more vulnerable to layoffs.[24]

Another challenge for Millennials stems from recent increases in labor force participation rates among older workers.[25] As older workers remain in their jobs longer than in the past, advancement opportunities for Millennials could be limited.

Lasting impact on Millennials and the economy: Economic research focusing on prior recessions finds that young people who enter the labor force at a time of high unemployment and stagnant wage growth often experience persistently lower earnings for much of their careers.[26] According to one estimate, average first-year earnings for young people graduating college in the midst of a major recession are about 10 percent lower, and the effect persists with earnings almost two percent lower on average over the first 10 years of these workers' careers.[27] This is due to a variety of factors including difficulty securing quality employment, limited opportunities for early-career raises and promotions, and reduced development of knowledge and skills valuable in the workplace.

In addition, those graduating into a weak economy may undergo "cyclical downgrading," in which they accept jobs that pay less or do not utilize their skills and education, and then struggle to get back on track even as the economy recovers.[28] Some young people may choose jobs that offer greater flexibility than traditional nine-to-five jobs but that may result in lower earnings.[29] Because most wage growth tends to occur in the first decade of a person's career, experiencing less early-career wage growth can put people on a lower career earnings trajectory.[30] While studies show some especially capable or mobile workers can overcome this effect by upgrading jobs and earnings as the economy recovers, the lingering effects of lower starting wages and less skill development can persist for a decade or more.[31] One important indicator of job mobility and possible wage growth is the rate at which workers move from one employer to another. This rate has ticked up modestly the past couple years after declining sharply during the recession.[32]

Even if young people land new, better-paying jobs at some point, lower earnings earlier in their careers may result in permanently lower retirement savings and net worth than might have been the case if economic conditions had been better when they first entered the labor force. Recent data show that a smaller proportion of heads of household under 35 had retirement accounts in 2013 than at any point since 1992, and the typical balance for those with accounts remains more than 10 percent below prerecession (2007) levels in inflation-adjusted dollars.[33] Real median net worth for households headed by someone under 35 in 2013 was about half what it was for young households in the mid-1990s.[34] Millennials' lower net worth and savings makes them vulnerable to future economic shocks, since many lack the financial cushion needed in the event of an economic downturn or life emergency.[35]

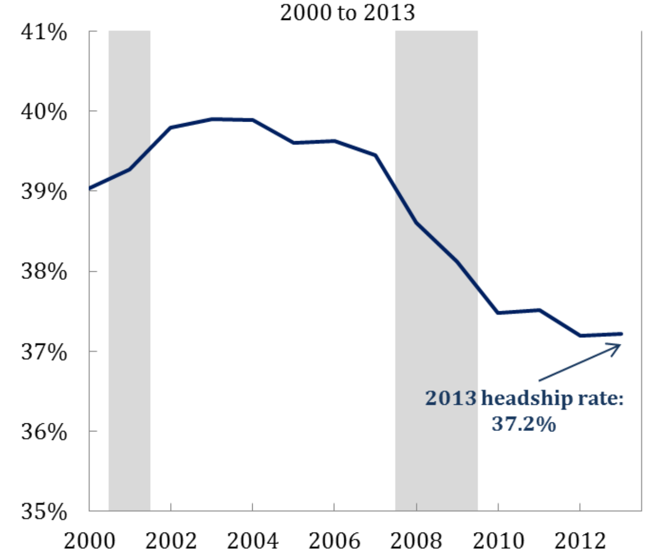
Not only can tough economic times make it difficult for young people to launch their careers, high underemployment among young adults can itself lower overall economic growth.[36] With nearly 70 percent of the U.S. economy based on consumer spending, young people having less disposable income means fewer major purchases such as homes, cars and other consumer goods.[37]

In addition, productivity growth stems in part from knowledge-sharing in the workplace.[38] Millennials' lower employment rates in recent years could lead to less intergenerational transfer of knowledge, negatively impacting future economic growth.[39]

Millennial Household Formation

One sign of the recession's impact on Millennials is the declining rate at which young people are starting households, getting married and buying homes. To some extent, this is a result of longer-term trends toward getting married and starting a household later.[40] But research shows a substantial portion can be attributed to recent economic conditions as well.[41]

Figure 6. Share of 18- to 34-Year-Olds Who Head Households
2000 to 2013

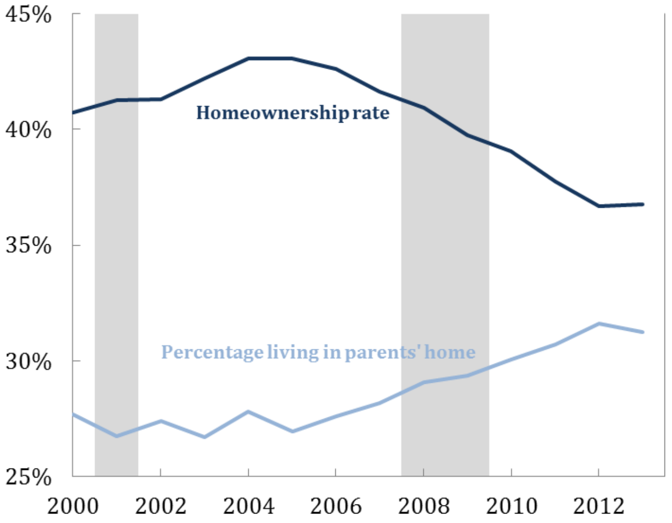


Note: Grey areas represent periods of recession as determined by the National Bureau of Economic Research.
Source: JEC Democratic staff based on data from the U.S. Census Bureau, Current Population Survey.

Household formation among young adults – which includes both homeowners and renters – has slowed in the years since the start of the recession, turning negative at times or growing only modestly.[42] According to an analysis by the Federal Reserve Bank of Cleveland, nearly two million fewer households were formed by people ages 18 to 34 over the 2007-to-2011 period than would have been expected based on the underlying demographics alone.[43] While household formation rates have generally stabilized, they have not yet returned to levels consistent with past trends.[44]

Another way to analyze household formation is to consider headship rates – the odds that a person is a head of household as opposed to, for example, living at home with their parents or cohabitating with a number of roommates.[45] During the prerecession period (2001-2007), headship rates for 18- to 34-year-olds averaged 39.6 percent.[46] But the recession helped drive those rates down. As of last year, the headship rate for Millennials overall was 37.2 percent (**Figure 6**). It was 21.2 percent for 18- to 24-year-olds, 44.9 percent for those in their late twenties and 52.3 percent for Millennials in their thirties.[47]

Figure 7. Homeownership Rate and Share of 18- to 34-Year-Olds Living in Parents' Home
2000 to 2013



Note: Grey areas represent periods of recession as determined by the National Bureau of Economic Research.
Source: JEC Democratic staff based on data from the U.S. Census Bureau, Current Population Survey.

At the same time, the share of young adults ages 18 to 34 living at home with their parents has increased to its highest rate in four decades, rising to an average of about 31 percent over the past four years (**Figure 7**).[48] While the increase in the share of 18- to 24-year-olds living with their parents may reflect an increase in people enrolled in school (college students living in a dorm are counted as living with their parents for the survey's purposes), this is less likely to be the case for those ages 25 to 34 – for whom the share living with their parents increased from an average of about 11 percent before the recession to nearly 14 percent last year.[49] According on one analysis, nearly 2.5 million more adults in their twenties and thirties lived at home last year than would have been the case had the shares living at home stayed at 2007 levels.[50]

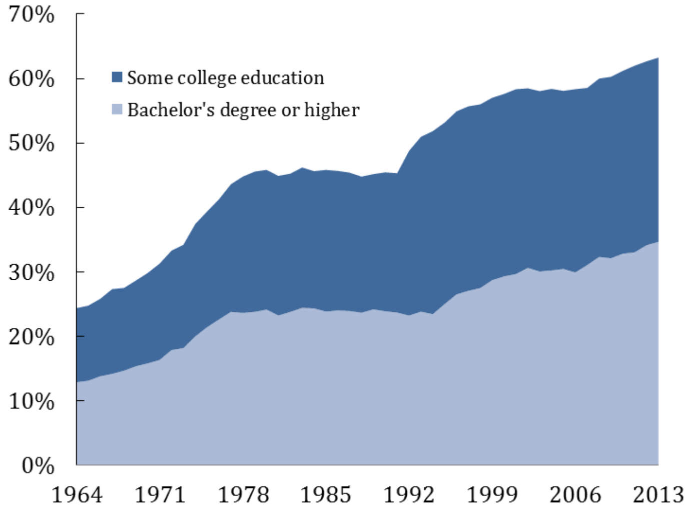
The share of young adults who are homeowners has declined as household formation has declined and the share of young people living with their parents has increased. The share of those under 35 who are homeowners declined from more than 43 percent in 2005 to about 36 percent over the first three quarters of 2014.[51] According to one survey, the share of homebuyers that are first-time buyers, many of them young people, remains below typical levels.[52] This reduced demand for first homes can restrain increases in home prices, housing starts and sales of existing homes, which undercuts the ability of housing to contribute to economic recovery.[53]

Difficulty obtaining a mortgage as lenders have tightened credit standards in the aftermath of the housing market crash could be contributing to Millennials' lower homeownership rates, in particular because young people tend to have limited credit histories.[54] In addition, record levels of student debt could be limiting Millennials' ability to qualify for or be willing to take on a mortgage loan.[55]

High rental housing costs are another factor that could make it more difficult for Millennials to strike out on their own. Young adults are more likely to rent than people in older age brackets. Renting can offer numerous benefits for them, including: flexibility to move as jobs and personal relationships change, lower upfront costs, less financial risk and limited responsibility for addressing home maintenance issues.[56] Nearly 80 percent of Millennials under age 25 who live on their own rent their homes, versus about two-thirds of Millennials in their late twenties and more than half of Millennials in their early thirties.[57] These shares have increased over the past decade along with the decline in homeownership among younger adults.[58]

An increase in renter households across all age groups in recent years has contributed to a spike in rental housing costs and declining rental vacancy rates.[59] In most metropolitan areas, rental housing price increases have well outpaced general price inflation the past several years.[60] Overall, the share of "cost-burdened" renter households is near a record high. About half of renters spend more than 30 percent of their income on housing, and more than one-quarter spend more than 50 percent of their income.[61] These cost burdens mean that securing affordable rental housing can pose a major challenge for young adults, and even for those who find housing, high rent can limit their ability to buy other necessities or grow their savings.

Figure 8. Educational Attainment of Young Adults Ages 25 to 34
1964 to 2013



Note: Prior to 1992, the source of these data did not identify whether a person received a degree. For the purposes of this analysis, those with four years or more of college education are counted as having a bachelor's degree.
Source: JEC Democratic staff based on data from the U.S. Census Bureau.

Opportunities for Millennials

Despite the challenges they have faced early in their careers, Millennials remain poised to make major contributions to the economy in the years ahead. Millennials are the best-educated generation in history.[62] Sixty-three percent of 25- to 34-year-olds today have at least some college education, compared with 52 percent 20 years ago in 1994 (**Figure 8**). Thirty-five percent of

Millennials ages 25 to 34 have a bachelor's degree or higher, up from 23 percent in 1994.[63] As discussed above, employment prospects are considerably better for those with college education.

For those who graduated college, the long-term earnings premium from completing college could substantially outweigh the negative effect on their earnings of graduating during a recession.[64] This includes those who pursued further education instead of entering a weak job market. Moreover, Millennials often have strong computer skills, which will help them compete for the jobs of the future.[65]

There are a number of other reasons for optimism with regard to the economic prospects of Millennials. While they have more student loan debt than past generations, they tend to have less debt overall including less credit card debt. The median value of debt for families headed by a householder under 35 fell by more than $10,000 from 2010 to 2013 (in 2013 dollars).[66] Median credit card balances for young householders declined by one-quarter from 2007 to 2013, and the share of young householders with credit card balances fell by more than 10 percentage points over that period.[67]

In addition, the Affordable Care Act (ACA) has brought greater stability to the health care market for young people.[68] Those under the age of 26 are now able to stay on their parents plans, contributing to a 13.2 percentage-point decline in the uninsurance rate among 19- to 25-year-olds from the time the ACA took effect through the first quarter of 2014.[69] For older Millennials, the ACA exchanges can reduce "job lock" wherein people may feel tied to a job to maintain health care benefits even if that job is not the best match for them.[70] This could encourage entrepreneurship and risk-taking among Millennials.

Moreover, while today's young people may be buying homes at reduced rates and waiting longer to marry, this also means they are more mobile and able to move to parts of the country with better job opportunities.[71] Proliferation of online job boards and social networking in recent years may help Millennials overcome challenges that earlier generations faced in searching for jobs in other locations. Young people may also benefit from increased prospects to work remotely and on flexible schedules as technology continues to advance.[72]

Finally, greater opportunities will come as the recovery continues at the same time that members of the baby-boom generation retire.[73] This will open up more jobs for Millennials, while pent-up demand to form households and buy homes could further contribute to economic growth.[74]

Policy Options to Support Millennials

Millennials will benefit from increased job opportunities as the recovery continues. There are a number of policy options that could further support economic opportunity for Millennials and future generations:

Investing in long-term economic growth: Forward-looking economic policies that foster long-term growth are critical to improving Millennials' economic opportunities. This includes investing in research and development, education and infrastructure.[75] It also means working to mitigate the ongoing risks and challenges of global climate change so today's young people do not bear the substantial economic costs of climate change that will occur in their lifetimes if appropriate actions are not taken.[76]

Ensuring opportunity for all: Millennials are diverse. The share of 20- to 34-year-olds born overseas is at its highest point since the early 20th century, and the share of 15- to 34-year olds who describe themselves as Hispanic or Asian-Pacific Islander has roughly tripled over the past three decades.[77] More women head households and have college degrees than in prior generations,[78] and Millennials are more likely to support enhanced protections for members of the LGBT community facing discrimination.[79] As they enter adulthood, there is a need for policies that ensure equal opportunity for all Millennials, such as equal pay for women, improved access to paid family leave and prevention against discrimination for LGBT workers.[80]

The Paycheck Fairness Act (S. 2199) would help promote equal pay by protecting women who inquire about pay within their workplace from retaliation. It would also establish training programs to help women negotiate wages while increasing penalties for employers that pay men and women different wages for the same work. The Employment Non-Discrimination Act, known as ENDA (S. 815), would provide LGBT workers with critical employment protections nationwide by prohibiting discrimination against workers based on their sexual orientation or gender identity.

Increasing the minimum wage and sustaining social insurance programs: Increasing the minimum wage would help millions of Americans of all ages and backgrounds, and support economic growth by spurring consumer spending.[81] Last year, more than two-thirds of wage and salary workers paid at or below the minimum wage were under 35 years old.[82] If the minimum wage were raised to $10.10 per hour, as currently proposed in the Minimum Wage Fairness Act of 2014 (S. 2223), millions of people would get a raise and nearly one million would be lifted out of poverty.[83]

In addition, policymakers should ensure that critical social insurance programs remain available to support Millennials throughout their working lives and into retirement.[84] Such programs include unemployment insurance as a financial lifeline for people who lose their jobs and are looking for work, disability benefits for those unable to work, and Social Security and Medicare for older Americans.

Bolstering workforce training and apprenticeship programs: On-the-job training programs and apprenticeships can help people develop the skills needed for the jobs of the future. They can be especially beneficial for the more than one-third of today's 25- to 34-year olds without education past high school.[85]

The Workforce Innovation and Opportunity Act (P.L. 113-128) will improve the targeting of workforce training programs to jobs in growing sectors of the economy and better align them with economic development and education initiatives. The law includes provisions from the SECTORS Act (S. 1226) to promote partnerships between employers, educators and local workforce administrators to train workers for jobs in growing industries. Additionally, it includes provisions from the AMERICA Works Act (S. 453) to support programs that provide workers with the skills they need to fill in-demand occupations.

Policymakers can also take steps to prepare the youngest Millennials, who are still in high school, for the jobs of the future. The Innovate America Act (S. 1777) would double the number of high schools that focus on science, technology, engineering and math (STEM). It would also promote computer science training and expand research opportunities for STEM undergraduates.

Promoting affordable housing: For many families, buying and owning a home is the most important financial decision they will make.[86] While the sharp decline in home prices that contributed to the financial crisis may make some potential buyers reluctant to make such a major purchase, and trends toward delaying marriage and major life milestones may push back the age at which young people first look to buy, homeownership remains a goal for most Millennials.[87] But reduced availability of mortgage credit coupled with higher down payment requirements can put homeownership out of reach even for those Millennials who have weathered the economic downturn and want to buy a home.[88]

Policymakers should consider steps to improve access to homeownership for responsible, creditworthy first-time buyers. These could include tax incentives for homeownership and supporting regulatory actions that improve credit availability for responsible buyers. In addition, policymakers should monitor rental housing affordability measures and pursue policies that help Millennials who rent but are not yet prepared to buy a home.[89] Policies to improve rental housing affordability could include supporting credit availability for multifamily mortgages, protecting rental housing assistance programs and bolstering the Low Income Housing Tax Credit, which helps to finance affordable housing development.

Reducing the burden of student debt: Record levels of student debt can restrict career choice for Millennials, lead them to delay major purchases and generally restrain consumer spending.[90] Policymakers should take steps to reduce the burden of student debt and provide refinancing opportunities for responsible borrowers. The American Opportunity Tax Credit (AOTC), originally enacted in 2009, saves middle-class families up to $2,500 per year on college tuition.[91] The American Taxpayer Relief Act of 2012 (P.L. 112-240) extended the AOTC for five years through December 2017. The Bank on Students Emergency Loan Refinancing Act (S. 2432) would allow student loan holders to refinance their loans at the lower rate currently offered to new borrowers, which could help up to 25 million borrowers save an average of about $2,000 per year.[92] These measures can help Millennials to focus on the future, as opposed to devoting such a large share of their monthly income to paying off their loans.[93]

Helping young people save for retirement: Although retirement is a long way off for Millennials, starting to save early is critical. High unemployment and stagnant earnings during and in the aftermath of the recession have made it challenging for Millennials to start to build their retirement nest eggs. Moreover, many Millennials continue to work in part-time jobs that do not offer health care or retirement benefits as they seek full-time employment.[94] Even among those who are employed full time, Millennials are less likely to have access to high-quality retirement plans in the workplace than past generations.[95] Young people will also switch jobs or even careers a number of times over the course of their working lives, leading them to hold a variety of retirement plans and accounts.[96] Some may cash out a portion of their savings prematurely before reaching retirement age.[97]

Steps to help young workers start saving early for retirement could include automatic enrollment in Individual Retirement Accounts. In addition, beginning in 2015, low- and middle-income workers without access to employer-sponsored retirement plans will be able to set up a *my*RA (*my* Retirement Account) through a recently developed program offered by the Department of the Treasury. These *my*RA accounts will operate similarly to a Roth IRA and earn interest at the same variable rate as the government securities retirement fund offered to federal employees.[98]

Conclusion

Millennials will continue to make their mark on the economy over the coming years. While many Millennials have endured a rocky start to their careers as a result of the recent recession, they are poised to make major contributions to future growth as they enter the workplace, innovate and start businesses, and raise their families. The recession will have persistent effects for many Millennials – lowering earnings trajectories and making it harder to save for retirement. But as the economy continues to recover, there will be more opportunities for today’s young people, and the Millennial generation is prepared to rise to the occasion. Policymakers should work to improve the economic prospects for all Millennials so the promise of America – that every generation is a bit better off than the one before it – continues to hold true.

Appendix Table 1. Unemployment Rates for Young and Prime-Age Workers

	18- to 34-year-olds			35- to 54-year-olds		
	Current rate (12-month average)	Recession-era peak	Prerecession average rate	Current rate (12-month average)	Recession-era peak	Prerecession average rate
United States	8.9%	12.7%	7.2%	4.7%	7.9%	3.8%
Alabama	11.5%	16.9%	7.7%	4.6%	8.3%	3.4%
Alaska	9.7%	10.5%	9.6%	5.3%	6.5%	5.4%
Arizona	10.1%	13.4%	6.6%	4.6%	9.1%	3.1%
Arkansas	7.6%	12.2%	8.6%	5.1%	7.1%	3.6%
California	10.2%	15.3%	7.6%	6.2%	10.3%	4.5%
Colorado	6.1%	10.7%	6.0%	3.4%	7.2%	3.5%
Connecticut	9.4%	13.1%	6.7%	5.4%	7.3%	3.3%
Delaware	8.6%	12.5%	5.2%	5.4%	6.8%	3.1%
District of Columbia	8.2%	11.6%	8.1%	6.9%	9.6%	5.9%
Florida	9.4%	14.3%	5.9%	5.2%	9.2%	3.4%
Georgia	12.0%	14.5%	6.5%	4.5%	8.7%	3.6%
Hawaii	7.3%	10.5%	5.5%	2.9%	6.8%	2.6%
Idaho	7.0%	13.4%	5.7%	3.2%	7.0%	3.4%
Illinois	9.3%	13.1%	7.5%	5.7%	8.5%	4.4%
Indiana	9.0%	16.4%	7.2%	4.4%	8.1%	3.7%
Iowa	6.2%	9.2%	5.7%	4.4%	5.0%	2.9%
Kansas	6.0%	10.2%	6.8%	3.6%	6.2%	3.5%
Kentucky	9.9%	14.5%	8.5%	5.2%	8.9%	3.8%
Louisiana	9.8%	12.2%	8.8%	4.1%	5.5%	3.8%
Maine	9.4%	13.4%	6.6%	4.8%	6.5%	3.4%
Maryland	8.4%	10.6%	5.9%	3.7%	5.9%	2.9%
Massachusetts	8.0%	11.1%	6.5%	4.6%	7.3%	3.9%
Michigan	11.2%	16.6%	8.8%	5.3%	11.9%	5.1%
Minnesota	5.4%	9.5%	6.0%	3.3%	6.8%	3.2%
Mississippi	13.4%	16.5%	9.7%	5.1%	9.6%	4.3%
Missouri	8.7%	12.6%	7.4%	5.3%	7.9%	3.7%
Montana	5.8%	10.4%	6.1%	4.0%	6.3%	3.3%
Nebraska	4.5%	6.1%	5.0%	2.1%	4.5%	2.4%
Nevada	9.5%	17.5%	5.9%	6.9%	12.9%	3.5%
New Hampshire	5.9%	8.3%	5.2%	3.0%	5.5%	2.8%
New Jersey	9.4%	12.7%	6.6%	5.2%	8.2%	3.9%
New Mexico	11.7%	11.8%	7.5%	4.9%	7.0%	3.7%
New York	9.3%	11.8%	7.6%	4.7%	6.9%	3.9%
North Carolina	9.8%	15.2%	7.8%	4.2%	8.8%	3.9%
North Dakota	3.7%	6.0%	5.4%	2.1%	3.0%	2.2%
Ohio	7.4%	14.5%	8.1%	4.6%	8.5%	3.9%
Oklahoma	7.0%	9.9%	6.7%	3.8%	6.0%	3.4%
Oregon	9.5%	14.2%	8.5%	5.5%	10.1%	5.2%
Pennsylvania	8.2%	11.8%	7.1%	4.6%	6.7%	3.9%
Rhode Island	10.9%	14.9%	6.9%	6.4%	9.2%	3.8%
South Carolina	10.0%	16.5%	9.4%	4.6%	10.2%	4.3%
South Dakota	4.3%	7.7%	5.2%	2.7%	3.8%	2.3%
Tennessee	10.2%	15.1%	7.2%	4.6%	8.0%	3.9%
Texas	7.3%	11.0%	7.6%	3.7%	6.5%	3.9%
Utah	4.8%	10.1%	5.5%	3.2%	6.7%	2.9%
Vermont	6.5%	9.9%	5.6%	3.1%	4.6%	2.8%
Virginia	8.4%	11.2%	5.6%	3.7%	5.8%	2.5%
Washington	9.3%	13.6%	7.9%	4.5%	7.9%	4.6%
West Virginia	11.2%	13.5%	8.3%	5.6%	7.3%	3.8%
Wisconsin	7.7%	12.0%	7.0%	3.7%	7.6%	3.6%
Wyoming	6.2%	9.7%	5.7%	3.2%	5.2%	2.3%

Note: 'Current rate' represents 12-month average through November 2014. 'Recession-era peak' represents highest annual rate since 2007. 'Prerecession average rate' represents average rate from 2001-2007.

Source: JEC Democratic staff based on data from the Bureau of Labor Statistics, Current Population Survey.

Appendix Table 2. Unemployment rates for Millennials, by Age and Level of Education

	Current 12-month average, by age group			Current 12-month average, by level of education, 25- to 34-year-olds		
	18 to 24 years	25 to 29 years	30 to 34 years	High school or less	Some college or associate degree	Bachelor's degree or higher
United States	12.7%	7.4%	6.0%	10.0%	7.4%	3.3%
Alabama	14.0%	11.0%	8.8%	17.4%	5.3%	3.9%
Alaska	13.2%	7.8%	7.5%	10.0%	9.9%	2.7%
Arizona	15.9%	5.5%	6.9%	9.8%	5.6%	2.8%
Arkansas	11.4%	6.3%	4.4%	8.0%	6.4%	1.5%
California	14.0%	8.7%	7.1%	10.3%	9.0%	5.0%
Colorado	9.3%	4.0%	5.0%	6.1%	5.1%	3.3%
Connecticut	11.3%	7.7%	8.6%	14.6%	7.6%	3.4%
Delaware	13.2%	5.2%	6.2%	9.7%	5.8%	1.4%
District of Columbia	14.9%	7.3%	4.8%	20.8%	13.6%	2.7%
Florida	13.7%	8.0%	6.6%	10.0%	8.9%	3.2%
Georgia	15.7%	11.9%	8.4%	13.8%	12.7%	4.3%
Hawaii	10.9%	5.8%	4.2%	7.9%	4.5%	2.7%
Idaho	10.1%	5.6%	4.2%	6.6%	5.3%	2.5%
Illinois	14.1%	7.2%	5.5%	11.0%	6.6%	3.2%
Indiana	12.5%	7.9%	6.4%	10.9%	6.8%	2.5%
Iowa	7.1%	5.2%	6.0%	8.5%	7.0%	1.7%
Kansas	8.2%	5.2%	3.9%	7.2%	5.2%	2.3%
Kentucky	14.7%	7.1%	6.3%	9.2%	8.5%	2.5%
Louisiana	12.3%	8.2%	8.0%	12.7%	7.3%	2.6%
Maine	11.4%	8.0%	7.8%	12.3%	8.0%	3.8%
Maryland	12.6%	7.4%	5.4%	9.6%	8.0%	3.4%
Massachusetts	13.4%	5.7%	4.2%	8.2%	6.6%	2.7%
Michigan	15.5%	8.7%	7.8%	10.3%	9.4%	5.7%
Minnesota	8.2%	4.1%	3.5%	8.8%	3.3%	1.6%
Mississippi	18.7%	10.6%	10.2%	14.8%	10.2%	3.3%
Missouri	12.1%	7.5%	6.0%	10.8%	7.4%	1.8%
Montana	7.9%	4.9%	4.1%	7.5%	3.5%	2.4%
Nebraska	6.0%	4.3%	2.8%	7.4%	3.8%	0.9%
Nevada	13.5%	8.5%	5.7%	10.2%	5.4%	4.0%
New Hampshire	8.4%	4.4%	4.2%	7.5%	3.6%	2.5%
New Jersey	13.6%	7.2%	6.8%	10.4%	9.5%	3.7%
New Mexico	15.0%	12.4%	7.2%	14.7%	9.2%	3.8%
New York	12.4%	9.2%	6.5%	14.0%	8.6%	4.0%
North Carolina	13.7%	8.8%	6.4%	13.7%	6.3%	2.2%
North Dakota	5.3%	2.7%	2.9%	5.0%	1.5%	2.5%
Ohio	11.2%	5.4%	4.7%	6.5%	6.3%	2.7%
Oklahoma	10.1%	5.7%	5.0%	5.8%	7.6%	1.7%
Oregon	15.0%	6.8%	6.6%	6.4%	8.3%	5.7%
Pennsylvania	12.4%	6.2%	5.0%	9.3%	6.5%	2.3%
Rhode Island	14.9%	8.6%	7.4%	12.8%	10.6%	2.5%
South Carolina	14.0%	8.1%	7.2%	10.2%	8.5%	3.8%
South Dakota	6.9%	3.5%	2.4%	6.5%	2.3%	0.7%
Tennessee	13.9%	8.3%	7.6%	10.7%	9.5%	3.8%
Texas	10.8%	5.5%	5.1%	6.5%	6.0%	3.3%
Utah	7.3%	5.4%	1.7%	5.2%	3.6%	1.5%
Vermont	10.6%	4.4%	3.7%	8.1%	3.7%	1.2%
Virginia	12.2%	7.4%	5.7%	12.0%	7.2%	2.9%
Washington	16.7%	6.2%	4.5%	7.1%	7.0%	2.6%
West Virginia	14.0%	13.1%	6.1%	14.7%	8.6%	3.1%
Wisconsin	11.3%	7.7%	4.0%	8.8%	5.8%	3.3%
Wyoming	8.9%	5.6%	4.1%	7.3%	3.7%	2.6%

Note: 'Current 12-month average' represents the 12-month average through November 2014.

Source: JEC Democratic staff based on data from the Bureau of Labor Statistics, Current Population Survey.

Sources

[1] JEC Democratic staff calculations based on data from the Bureau of Labor Statistics, Current Population Survey Public Use Files, January 2001 to October 2014.

[2] Ibid.

[3] Ibid.

[4] For a discussion of factors that contribute to higher unemployment for the youngest workers, see U.S. Congress Joint Economic Committee Democrats, *Understanding the Economy: Unemployment Among Young Workers* (JEC, May 2010), http://www.jec.senate.gov/public/?a=Files.Serve&File_id=adaef80b-d1f3-479c-97e7-727f4c0d9ce6; Heidi Shierholz, Alyssa Davis, and Will Kimball, *The Class of 2014: The Weak Economy Is Idling Too Many Young Graduates*, Briefing Paper 377 (Economic Policy Institute, May 2014), http://s2.epi.org/files/2014/Classof2014FINAL.pdf.

[5] Bureau of Labor Statistics, "Alternative Measures of Labor Underutilization" (accessed December 16, 2014), Table A-15, http://www.bls.gov/news.release/empsit.t15.htm. The U-6 index of underemployment does not include those employed in positions that do not fully utilize their education and skills, for example those with bachelor's degrees employed in jobs that do not require a college degree. According to some analysts, this could be a sizable contingent. See Jaison R. Abel and Richard Deitz, "Are the Job Prospects of Recent College Graduates Improving?" *Liberty Street Economics* (blog entry, September 4, 2014), http://libertystreeteconomics.newyorkfed.org/2014/09/are-the-job-prospects-of-recent-college-graduates-improving.html#.VGy4e8nYvyU; Board of Governors of the Federal Reserve System, *In the Shadow of the Great Recession: Experiences and Perspectives of Young Workers* (Board of Governors of the Federal Reserve System, November 2014), http://www.federalreserve.gov/econresdata/2013-experiences-and-perspectives-of-young-workers-201411.pdf; Heidi Shierholz, Alyssa Davis, and Will Kimball, *The Class of 2014: The Weak Economy Is Idling Too Many Young Graduates*, Briefing Paper 377 (Economic Policy Institute, May 2014), http://s2.epi.org/files/2014/Classof2014FINAL.pdf.

[6] JEC Democratic staff calculations based on data from the Bureau of Labor Statistics, Current Population Survey Public Use Files, January 2001 to October 2014.

[7] Ibid.

[8] Ibid.

[9] Jaison R. Abel and Richard Deitz, "Are the Job Prospects of Recent College Graduates Improving?" *Liberty Street Economics* (blog entry, September 4, 2014), http://libertystreeteconomics.newyorkfed.org/2014/09/are-the-job-prospects-of-recent-college-graduates-improving.html#.VGy4e8nYvyU; Board of Governors of the Federal Reserve System, *In the Shadow of the Great Recession: Experiences and Perspectives of Young Workers* (Board of Governors of the Federal Reserve System, November 2014), http://www.federalreserve.gov/econresdata/2013-experiences-and-perspectives-of-young-workers-201411.pdf; Heidi Shierholz, Alyssa Davis, and Will Kimball, *The Class of 2014: The Weak Economy Is Idling Too Many Young Graduates*, Briefing Paper 377 (Economic Policy Institute, May 2014), http://s2.epi.org/files/2014/Classof2014FINAL.pdf.

[10] JEC Democratic staff calculations based on data from the Bureau of Labor Statistics, Current Population Survey Public Use Files, January 2001 to October 2014.

[11] Stephanie Aaronson and others, *Labor Force Participation: Recent Developments and Future Prospects* (Brookings Institute, Fall 2014), http://www.brookings.edu/~/media/Projects/BPEA/Fall%202014/Fall2014BPEA_Aaronson_et_al.pdf.

[12] Sarah Ayres, *The High Cost of Youth Unemployment* (Center for American Progress, 2013), http://cdn.americanprogress.org/wp-content/uploads/2013/04/AyresYouthUnemployment1.pdf.

[13] U.S. Congress Joint Economic Committee Democrats, *Long-Term Unemployment in the United States* (JEC, April 2013), http://www.jec.senate.gov/public/?a=Files.Serve&File_id=ee31ad2d-5eb0-4f60-a852-87a27d559457; Stephanie Aaronson and others, *Labor Force Participation: Recent Developments and Future Prospects* (Brookings Institute, Fall 2014), http://www.brookings.edu/~/media/Projects/BPEA/Fall%202014/Fall2014BPEA_Aaronson_et_al.pdf.

[14] Bureau of Labor Statistics, "Median Usual Weekly Earnings: Full-Time Wage and Salary Workers" (accessed December 16, 2014), Table 3, http://www.bls.gov/webapps/legacy/cpswktab3.htm. Annual averages adjusted for inflation using the Personal Consumption Expenditures deflator.

[15] Ibid.

[16] Council of Economic Advisers, *15 Economic Facts About Millennials* (October 2014), http://www.whitehouse.gov/sites/default/files/docs/millennials_report.pdf.

[17] David H. Autor, "Skills, Education, and the Rise of Earnings Inequality Among the 'Other 99 Percent,'" *Science,* vol. 344, pp. 843-850, http://seii.mit.edu/wp-content/uploads/2014/05/Science-2014-Autor-843-51.pdf; Council of Economic Advisers, *15*

Economic Facts About Millennials (October 2014), http://www.whitehouse.gov/sites/default/files/docs/millennials_report.pdf; Anthony P. Carnevale, Andrew R. Hanson, and Artem Gulish, *Failure to Launch: Structural Shift and the New Lost Generation* (Georgetown University, September 2013), https://georgetown.app.box.com/s/8tchnjo0wq9meamwwn5f.

[18] United States Census Bureau, "Current Population Survey Annual Social and Economic Supplement" (accessed December 16, 2014), Table PINC-03, Both Sexes, 25 to 34 Years, Worked Full-Time, Year-Round, All Races, https://www.census.gov/hhes/www/cpstables/032014/perinc/toc.htm.

[19] There is a large literature that discusses the impact of entering the labor market during a weak economy on short- and long-term employment and earnings outcomes. This literature is discussed in Council of Economic Advisers, *15 Economic Facts About Millennials* (October 2014), http://www.whitehouse.gov/sites/default/files/docs/millennials_report.pdf; Anthony P. Carnevale, Andrew R. Hanson, and Artem Gulish, *Failure to Launch: Structural Shift and the New Lost Generation* (Georgetown University, September 2013), https://georgetown.app.box.com/s/8tchnjo0wq9meamwwn5f; Heidi Shierholz, Alyssa Davis, and Will Kimball, *The Class of 2014: The Weak Economy Is Idling Too Many Young Graduates*, Briefing Paper 377 (Economic Policy Institute, May 2014), http://s2.epi.org/files/2014/Classof2014FINAL.pdf. Selections from this literature include: Philip Oreopoulos, Till von Wachter, and Andrew Heisz, *The Short- and Long-Term Career Effects of Graduating in a Recession: Hysteresis and Heterogeneity in the Market for College Graduates* (Columbia University, June 2008), http://www.columbia.edu/~vw2112/papers/cycl_upgr_oreovonwaheisz.pdf; Lisa B. Kahn, "The Long-Term Labor Market Consequences of Graduating from College in a Bad Economy," *Social Science Research Network* (September 2006), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=702463; Paul Beaudry and John DiNardo, "The Effect of Implicit Contracts on the Movement of Wages Over the Business Cycle: Evidence from Micro Data," *The Journal of Political Economy*, vol. 99, no. 4 (August 1991), pp. 665-688, http://www-personal.umich.edu/~jdinardo/Pubs/beaudry_dinardo1991.pdf; Joseph G. Altonji, Lisa B. Kahn, and Jamin D. Speer, *Cashier or Consultant? Entry Level Market Conditions, Field of Study, and Career Success,* Working Paper 20531 (National Bureau of Economic Research, September 2014), http://www.nber.org/papers/w20531; Ayako Kondo, *Differential Effects of Graduating During a Recession Across Race and Gender,* Working Paper 07-05 (Institute for Social and Economic Research and Policy, 2007), http://academiccommons.columbia.edu/catalog/ac%3A129007.

[20] Council of Economic Advisers, *15 Economic Facts About Millennials* (October 2014), http://www.whitehouse.gov/sites/default/files/docs/millennials_report.pdf; Martin Gervais and others, *What Should I Be When I Grow Up? Occupations and Unemployment over the Life Cycle,* Working Paper 20628 (The National Bureau of Economic Research, October 2014), http://www.nber.org/papers/w20628.pdf; Anthony P. Carnevale, Andrew R. Hanson, and Artem Gulish, *Failure to Launch: Structural Shift and the New Lost Generation* (Georgetown University, September 2013), https://georgetown.app.box.com/s/8tchnjo0wq9meamwwn5f.

[21] Martin Gervais and others, *What Should I Be When I Grow Up? Occupations and Unemployment over the Life Cycle*, Working Paper 20628 (The National Bureau of Economic Research, October 2014), http://www.nber.org/papers/w20628.pdf; Testimony of Heidi Shierholz, Labor Market Economist, Economic Policy Institute, before the Subcommittee on Economic Policy of the Senate Committee on Banking, Housing, and Urban Affairs, *Dreams Deferred: Young Workers and Recent Graduates in the U.S. Economy* (June 25, 2014), http://s1.epi.org/files/2014/shierholz_testimony_062514.pdf.

[22] Anthony P. Carnevale, Andrew R. Hanson, and Artem Gulish, *Failure to Launch: Structural Shift and the New Lost Generation* (Georgetown University, September 2013), https://georgetown.app.box.com/s/8tchnjo0wq9meamwwn5f.

[23] Ibid.

[24] Ibid; Testimony of Rory O'Sullivan, Deputy Director, Young Invincibles, before the Subcommittee on Economic Policy of the Senate Committee on Banking, Housing, and Urban Affairs (June 25, 2015), http://www.banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=29580fd6-03a0-451f-b915-6d21ca4f4a9c.

[25] Anthony P. Carnevale, Andrew R. Hanson, and Artem Gulish, *Failure to Launch: Structural Shift and the New Lost Generation* (Georgetown University, September 2013), https://georgetown.app.box.com/s/8tchnjo0wq9meamwwn5f; Stephanie Aaronson and others, *Labor Force Participation: Recent Developments and Future Prospects* (Economic Studies at Brookings, Fall 2014), http://www.brookings.edu/~/media/Projects/BPEA/Fall%202014/Fall2014BPEA_Aaronson_et_al.pdf.

[26] See endnote 19 for selected citations.

[27] Joseph G. Altonji, Lisa B. Kahn, and Jamin D. Speer, *Cashier or Consultant? Entry Level Market Conditions, Field of Study, and Career Success,* Working Paper 20531 (National Bureau of Economic Research, September 2014), http://www.nber.org/papers/w20531.

[28] For a discussion of "cyclical downgrading," see Philip Oreopoulos, Till von Wachter, and Andrew Heisz, *The Short- and Long-Term Career Effects of Graduating in a Recession: Hysteresis and Heterogeneity in the Market for College Graduates* (Columbia

University, June 2008), http://www.columbia.edu/~vw2112/papers/cycl_upgr_oreovonwaheisz.pdf; For recent survey evidence demonstrating that Millennials are often working outside their fields in jobs that are not ideal matches for their education, skills and interests, see Board of Governors of the Federal Reserve System, *In the Shadow of the Great Recession: Experiences and Perspectives of Young Workers* (Board of Governors of the Federal Reserve System, November 2014), http://www.federalreserve.gov/econresdata/2013-experiences-and-perspectives-of-young-workers-201411.pdf; Pew Research Center Social & Demographic Trends, *Young, Underemployed, and Optimistic: Coming of Age, Slowly, in a Tough Economy* (Pew Research Center, 2012), http://www.pewsocialtrends.org/files/2012/02/SDT-Youth-and-Economy.pdf.

[29] Adam Belz, “Millennials thinking outside the cubicle,” *Star Tribune* (December 14, 2014), http://www.startribune.com/lifestyle/285723551.html.

[30] Anthony P. Carnevale, Andrew R. Hanson, and Artem Gulish, *Failure to Launch: Structural Shift and the New Lost Generation* (Georgetown University, September 2013), https://georgetown.app.box.com/s/8tchnjo0wq9meamwwn5f; Lisa B. Kahn, “The Long-Term Labor Market Consequences of Graduating from College in a Bad Economy,” *Social Science Research Network* (September 2006), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=702463; For a discussion of the importance of starting job salary, see Paul K. Devereux, *The Importance of Obtaining a High-Paying Job*, Working Paper 49326, (Munich Personal RePEc Archive, January 2002), http://mpra.ub.uni-muenchen.de/49326/1/MPRA_paper_49326.pdf.

[31] Philip Oreopoulos, Till von Wachter, and Andrew Heisz, *The Short- and Long-Term Career Effects of Graduating in a Recession: Hysteresis and Heterogeneity in the Market for College Graduates* (Columbia University, June 2008), http://www.columbia.edu/~vw2112/papers/cycl_upgr_oreovonwaheisz.pdf; See additional sources cited in endnote 19.

[32] Steven J. Davis and John Haltiwanger, *Labor Market Fluidity and Economic Performance* (Federal Reserve Bank of Kansas City, October 27, 2014), http://www.kc.frb.org/publicat/sympos/2014/083014-1.pdf.

[33] Federal Reserve, “2013 SCF Chartbook” (accessed December 16, 2014), pp. 441-442, http://www.federalreserve.gov/econresdata/scf/files/BulletinCharts.pdf.

[34] Ibid, p.46.

[35] Josh Zumbrun, “Younger Generation Faces a Savings Deficit,” *The Wall Street Journal* (November 9, 2014), http://online.wsj.com/articles/savings-turn-negative-for-younger-generation-1415572405.

[36] Sarah Ayres, *The High Cost of Youth Unemployment* (Center for American Progress, 2013), http://cdn.americanprogress.org/wp-content/uploads/2013/04/AyresYouthUnemployment1.pdf.

[37] U.S. Congress Joint Economic Committee Democrats, *Income Inequality in the United States* (JEC, January 2014), http://www.jec.senate.gov/public/?a=Files.Serve&File_id=04a5e372-05d5-4f06-a95e-ede43027c6cd; Derek Thompson and Jordan Weissmann, “The Cheapest Generation: Why Millennials Aren’t Buying Cars or Houses, and What That Means for the Economy,” *The Atlantic* (August 22, 2012), http://www.theatlantic.com/magazine/archive/2012/09/the-cheapest-generation/309060/?single_page=true.

[38] Gustavo Crespi and others, *Productivity Growth, Knowledge Flows, and Spillovers* (accessed December 16, 2014), http://www.ceriba.org.uk/pub/CERIBA/KnowledgeFlows/prod_information_spillovers_final_0308.pdf.

[39] For a discussion of the importance of knowledge transfer, see Wang Xin and Dong Xiaoying, “Intergenerational Knowledge Transfer in the Workplace: A Sociological Perspective,” *Proceedings of the International Conference on Intellectual Capital* (2010), p.498, http://connection.ebscohost.com/c/articles/59352553/intergenerational-knowledge-transfer-workplace-sociologcial-perspective; Debby McNichols, “Optimal Knowledge Transfer Methods: A Generation X Perspective,” *Journal of Knowledge Management*, vol. 14, issue 1, pp. 24-37, http://www.emeraldinsight.com/doi/abs/10.1108/13673271011015543.

[40] Council of Economic Advisers, *15 Economic Facts About Millennials* (October 2014), http://www.whitehouse.gov/sites/default/files/docs/millennials_report.pdf.

[41] Sources that discuss the cyclical contribution to household formation include: Jason Furman, “America’s Millennials in the Recovery” (remarks at The Zillow Housing Forum, July 24, 2014), http://www.whitehouse.gov/sites/default/files/docs/americas_millenials_in_the_recovery_jf_7.24.14.pdf; Andrew D. Paciorek, Divisions of Research & Statistics and Monetary Affairs, Federal Reserve Board, *The Long and Short of Household Formation* (Federal Reserve Board, Finance and Economics Discussion Series, 2013), http://www.federalreserve.gov/pubs/feds/2013/201326/201326pap.pdf; Timothy Dune, “Household Formation and the Great Recession” *Federal Reserve Bank of Cleveland* (blog entry, August 23, 2012), http://www.clevelandfed.org/research/commentary/2012/2012-12.cfm; For a discussion of how homeownership tracks trends in income, see Joint Center for Housing Studies of Harvard University, *The State of the Nation’s Housing* (Joint Center for Housing Studies of Harvard University, 2014), http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/sonhr14-color-full.pdf; For recent

survey evidence demonstrating that young people may be delaying marriage and household formation due to economic reasons, see Pew Research Center Social & Demographic Trends, *Young, Underemployed, and Optimistic: Coming of Age, Slowly, in a Tough Economy* (Pew Research Center, 2012), http://www.pewsocialtrends.org/files/2012/02/young-underemployed-and-optimistic.pdf.

[42] There are a variety of data sources that can be used to measure household formation. These include the Housing and Vacancy Survey, the Current Population Survey, the American Community Survey and the decennial Census. Recent years have seen a large divergence between the readings from these various measures, but the general trends toward lower household formation in recent years is consistent across the data sources. For a discussion of household formation rates and measurement challenges, see Joint Center for Housing Studies of Harvard University, *The State of the Nation's Housing* (Joint Center for Housing Studies of Harvard University, 2014), http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/sonhr14-color-full.pdf; Timothy Dune, "Household Formation and the Great Recession" *Federal Reserve Bank of Cleveland* (blog entry, August 23, 2012), http://www.clevelandfed.org/research/commentary/2012/2012-12.cfm; Jason Furman, "America's Millennials in the Recovery" (remarks at The Zillow Housing Forum, July 24, 2014), http://www.whitehouse.gov/sites/default/files/docs/americas_millenials_in_the_recovery_jf_7.24.14.pdf.

[43] Andrew D. Paciorek, Divisions of Research & Statistics and Monetary Affairs, Federal Reserve Board, *The Long and Short of Household Formation* (Federal Reserve Board, Finance and Economics Discussion Series, 2013), http://www.federalreserve.gov/pubs/feds/2013/201326/201326pap.pdf; Timothy Dune, "Household Formation and the Great Recession" *Federal Reserve Bank of Cleveland* (blog entry, August 23, 2012), http://www.clevelandfed.org/research/commentary/2012/2012-12.cfm.

[44] For example, the Current Population Survey Annual Social and Economic Supplement shows that household formation dropped under 500,000 in 2013 after three consecutive years above one million, see United States Census Bureau, "Historical Income Tables: Households" (accessed December 16, 2014), Table H-10: Age of Head of Household by Median and Mean Income, https://www.census.gov/hhes/www/income/data/historical/household. According to this survey, household formation for 25- to 34-year-olds was negative in 2013 following three years of growth, while formation for those under the age of 24 has been positive for the past two years following six consecutive years of declines. According to another measure of household formation, the Housing Vacancy Survey, household formation for those under 35 has averaged 76,000 households per year over the past four years after two years of declines averaging 250,000 households per year. United States Census Bureau, "Housing Vacancies and Homeownership (CPS/HVS)" (accessed December 16, 2014), Table 12: Annual Estimates of the Housing Inventory by Age of Householder: 1982 to Present, http://www.census.gov/housing/hvs/data/histtabs.html.

[45] For a discussion of the concept of a headship rate, see Timothy Dune, "Household Formation and the Great Recession" *Federal Reserve Bank of Cleveland* (blog entry, August 23, 2012), http://www.clevelandfed.org/research/commentary/2012/2012-12.cfm; Jason Furman, "America's Millennials in the Recovery" (remarks at The Zillow Housing Forum, July 24, 2014), http://www.whitehouse.gov/sites/default/files/docs/americas_millenials_in_the_recovery_jf_7.24.14.pdf.

[46] JEC Democratic staff calculations based on data from the Bureau of Labor Statistics, Current Population Survey Public Use Files, January 2001 to October 2014. In the Current Population Survey, the household head is the one adult that is identified as the "householder" for each household. Those young adults living with a parent or in someone else's house are not counted as householders. Whenever multiple young adults are living together as housemates, only one is counted as a householder.

[47] Ibid.

[48] Richard Fry, *A Record 21.6 Million In 2012: A Rising Share of Young Adults Live in Their Parents' Home* (Pew Research Center, August 1, 2013), http://www.pewsocialtrends.org/files/2013/07/SDT-millennials-living-with-parents-07-2013.pdf; Pew Research Center, *Millennials in Adulthood: Detached from Institutions, Networked with Friends* (March 2014), http://www.pewsocialtrends.org/files/2014/03/2014-03-07_generations-report-version-for-web.pdf.

[49] United States Census, "Families and Living Arrangements: Living Arrangements of Adults" (accessed December 16, 2014), Table AD-1, https://www.census.gov/hhes/families/data/adults.html.

[50] Joint Center for Housing Studies of Harvard University, *The State of the Nation's Housing* (Joint Center for Housing Studies of Harvard University, 2014), http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/sonhr14-color-full.pdf.

[51] United States Census, "Housing Vacancies and Homeownership," Table 19. Quarterly Homeownership Rates by Age of Householder: 1994 to Present (accessed December 16, 2014), http://www.census.gov/housing/hvs/data/histtabs.html.

[52] National Association of Realtors, "2014 Profile of Home Buyers and Sellers" (accessed December 16, 2014), http://www.realtor.org/sites/default/files/reports/2014/2014-profile-of-home-buyers-and-sellers-highlights.pdf.

[53] Jason Furman, "America's Millennials in the Recovery" (remarks at The Zillow Housing Forum, July 24, 2014), http://www.whitehouse.gov/sites/default/files/docs/americas_millenials_in_the_recovery_jf_7.24.14.pdf; Andrew D. Paciorek,

Divisions of Research & Statistics and Monetary Affairs, Federal Reserve Board, *The Long and Short of Household Formation* (Federal Reserve Board, Finance and Economics Discussion Series, 2013), http://www.federalreserve.gov/pubs/feds/2013/201326/201326pap.pdf; Timothy Dune, "Household Formation and the Great Recession" *Federal Reserve Bank of Cleveland* (blog entry, August 23, 2012), http://www.clevelandfed.org/research/commentary/2012/2012-12.cfm; For a discussion of impact of declining household formation on housing markets and economy, see Testimony of Janet Yellen, Chair, Board of Governors of the Federal Reserve System, before the U.S. Congress Joint Economic Committee, *The Economic Outlook* (May 7, 2014), http://www.jec.senate.gov/public//index.cfm?a=Files.Serve&File_id=86425f45-483b-4474-a274-16469c2daf5a.

[54] Meta Brown and Sydnee Caldwell, "Young Student Loan Borrowers Retreat from Housing and Auto Markets," *Liberty Street Economics* (blog entry, April 17, 2013), http://libertystreeteconomics.newyorkfed.org/2013/04/young-student-loan-borrowers-retreat-from-housing-and-auto-markets.html#.VGzSx8nYvyU; Andrew D. Paciorek, Divisions of Research & Statistics and Monetary Affairs, Federal Reserve Board, *The Long and Short of Household Formation* (Federal Reserve Board, Finance and Economics Discussion Series, 2013), http://www.federalreserve.gov/pubs/feds/2013/201326/201326pap.pdf; Timothy Dune, "Household Formation and the Great Recession" *Federal Reserve Bank of Cleveland* (blog entry, August 23, 2012), http://www.clevelandfed.org/research/commentary/2012/2012-12.cfm. According to various survey measures, lenders are seeking people with higher credit scores than in the past – and even those previously considered very good credit risks have struggled to obtain mortgages in recent years. See Melvin L. Watt, "Remarks at the Mortgage Bankers Association Annual Convention" (remarks at the Mortgage Bankers 2014 Annual Convention, October 20, 2014), http://www.fhfa.gov/Media/PublicAffairs/Pages/Prepared-Remarks-of-Melvin-L-Watt,-Director,-Federal-Housing-Finance-Agency-at-the-MBA-Annual-Convention.aspx; Elizabeth Campbell and Lorraine Woellert, "You Know It's a Tough Market When Bernanke Can't Refinance," *Bloomberg* (October 3, 2014), http://www.bloomberg.com/news/2014-10-02/you-know-it-s-a-tough-market-when-ben-bernanke-can-t-refinance.html; Joint Center for Housing Studies of Harvard University, *The State of the Nation's Housing* (Joint Center for Housing Studies of Harvard University, 2014), http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/sonhr14-color-full.pdf; William Gale and others, *Student Loans Rising: An Overview of Causes, Consequences, and Policy Options* (Brookings Institute, May 2014), http://www.brookings.edu/~/media/research/files/papers/2014/05/student%20loan%20debt%20rising%20gale%20harris/student_loans_rising_gale_harris_09052014.pdf.

[55] Joe Valenti, Sarah Edelman, and Tobin Van Ostern, "Student Loan Debt Has a Rippling Negative Effect on the Broader Economy," *Center for American Progress* (April 10, 2013), http://www.americanprogress.org/issues/higher-education/news/2013/04/10/60173/student-loan-debt-has-a-rippling-negative-effect-on-the-broader-economy; Melvin L. Watt, "Remarks at the Mortgage Bankers Association Annual Convention" (remarks at the Mortgage Bankers 2014 Annual Convention, October 20, 2014), http://www.fhfa.gov/Media/PublicAffairs/Pages/Prepared-Remarks-of-Melvin-L-Watt,-Director,-Federal-Housing-Finance-Agency-at-the-MBA-Annual-Convention.aspx; Meta Brown, Sydnee Caldwell, and Sarah Sutherland, "Just Released: Young Student Loan Borrowers Remained on the Sidelines of the Housing Market in 2013," *Liberty Street Economics* (blog entry, May 13, 2014), http://libertystreeteconomics.newyorkfed.org/2014/05/just-released-young-student-loan-borrowers-remained-on-the-sidelines-of-the-housing-market-in-2013.html#.U3Jb_61dXIol; Rohit Chopra, "Student Debt Swells, Federal Loans Now Top a Trillion" (July 17, 2013), http://www.consumerfinance.gov/newsroom/student-debt-swells-federal-loans-now-top-a-trillion/.

[56] Joint Center for Housing Studies of Harvard University, *America's Rental Housing: Evolving Markets and Needs* (Joint Center for Housing Studies of Harvard University, 2013), http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/jchs_americas_rental_housing_2013_1_0.pdf.

[57] Ibid.

[58] Ibid.

[59] Ibid; Joint Center for Housing Studies of Harvard University, *The State of the Nation's Housing* (Joint Center for Housing Studies of Harvard University, 2014), http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/sonhr14-color-full.pdf.

[60] Joint Center for Housing Studies of Harvard University, *The State of the Nation's Housing* (Joint Center for Housing Studies of Harvard University, 2014), http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/sonhr14-color-full.pdf.

[61] Ibid.

[62] Council of Economic Advisers, *15 Economic Facts About Millennials* (October 2014), http://www.whitehouse.gov/sites/default/files/docs/millennials_report.pdf.

[63] JEC Democratic staff calculations based on data from the U.S. Census Bureau, "Educational Attainment: CPS Historical Time Series Tables" (accessed December 16, 2014), http://www.census.gov/hhes/socdemo/education/data/cps/historical/index.html.

Note: Prior to 1992, the source of these data did not identify whether a person received a degree. For the purposes of this analysis, those with four years or more of college education are counted as having a bachelor's degree.

[64] Brad Hershbein and Melissa Kearney, *Major Decisions: What Graduates Earn Over Their Lifetimes* (The Hamilton Project), http://www.hamiltonproject.org/files/downloads_and_links/Major_Decisions_Lifetime__Earnings_by_Major.pdf; Federal Reserve Bank of Atlanta, *The Economic Plight of Millennials*, vol. 16, no. 1, https://www.frbatlanta.org/~/link.aspx?_id=0E2CB3E2D12B43F9AFEC46FB00E3B39B&_z=z.

[65] Council of Economic Advisers, *15 Economic Facts About Millennials* (October 2014), http://www.whitehouse.gov/sites/default/files/docs/millennials_report.pdf; Pew Research Center, *Millennials in Adulthood: Detached from Institutions Networked with Friends* (Pew Research Center, March 7, 2014), http://www.pewsocialtrends.org/files/2014/03/2014-03-07_generations-report-version-for-web.pdf.

[66] Federal Reserve, “2013 SCF Chartbook” (accessed December 16, 2014), http://www.federalreserve.gov/econresdata/scf/files/BulletinCharts.pdf.

[67] Ibid.

[68] Council of Economic Advisers, *15 Economic Facts About Millennials* (October 2014), http://www.whitehouse.gov/sites/default/files/docs/millennials_report.pdf.

[69] Ibid.

[70] Ibid; Jason Furman, Council of Economic Advisers, “Six Economic Benefits of the Affordable Care Act” (February 6, 2014), http://www.whitehouse.gov/blog/2014/02/06/six-economic-benefits-affordable-care-act; Congressional Budget Office, *Labor Market Effects of the Affordable Care Act: Updated Estimates* (February 2014), http://www.cbo.gov/sites/default/files/cbofiles/attachments/45010-breakout-AppendixC.pdf.

[71] Tim Sablik, *Are New Graduates Left Behind in a Recession?* (Federal Reserve Bank of Richmond, 2012), http://www.richmondfed.org/publications/research/region_focus/2012/q2-3/pdf/research_spotlight.pdf.

[72] Adam Belz, “Millennials thinking outside the cubicle,” *Star Tribune* (December 14, 2014), http://www.startribune.com/lifestyle/285723551.html.

[73] The first baby boomers reached retirement age in 2011. For a discussion of the demographics of the baby boomers, see Sandra L. Colby and Jennifer M. Ortman, *The Baby Boom Cohort in the United States: 2012 to 2060 Population Estimates and Projections* (United States Census, May 2014), http://www.census.gov/prod/2014pubs/p25-1141.pdf.

[74] Joint Center for Housing Studies of Harvard University, *The State of the Nation’s Housing* (Joint Center for Housing Studies of Harvard University, 2014), http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/sonhr14-color-full.pdf.

[75] For a discussion of the impact of federal investment in education, infrastructure and research and development on long-term growth, see Congressional Budget Office, *Federal Investment* (December 2013), http://www.cbo.gov/sites/default/files/44974-FederalInvestment.pdf.

[76] Council of Economic Advisers, *The Cost of Delaying Action to Stem Climate Change* (July 2014), http://www.whitehouse.gov/sites/default/files/docs/the_cost_of_delaying_action_to_stem_climate_change.pdf; Risky Business, *Risky Business: The Economic Risks of Climate Change in the United States* (Risky Business, June 2014), http://riskybusiness.org/uploads/files/RiskyBusiness_Report_WEB_09_08_14.pdf.

[77] Council of Economic Advisers, *15 Economic Facts About Millennials* (October 2014), http://www.whitehouse.gov/sites/default/files/docs/millennials_report.pdf.

[78] Wendy Wang, Kim Parker, and Paul Taylor, *Breadwinner Moms: Mothers Are the Sole or Primary Provider in Four-in-Ten Households with Children; Public Conflicted about the Growing Trend* (Pew Research Center, May 29, 2013), http://www.pewsocialtrends.org/2013/05/29/breadwinner-moms; United States Census Bureau, “Figure 6: Percent of Population 25 Years and Older, and 25 to 29 Years old with Bachelor’s Degree or higher by Sex: 1947-2013” (accessed December 16, 2014), http://www.census.gov/hhes/socdemo/education/data/cps/historical/fig6.jpg; Council of Economic Advisers, *15 Economic Facts About Millennials* (October 2014), http://www.whitehouse.gov/sites/default/files/docs/millennials_report.pdf.

[79] Robert P. Jones, Daniel Cox, and Elizabeth Cook, *Generations at Odds: The Millennial Generation and the Future of Gay and Lesbian Rights* (Public Religion Research Institute, August 29, 2011), http://publicreligion.org/site/wp-content/uploads/2011/09/PRRI-Report-on-Millennials-Religion-Gay-and-Lesbian-Issues-Survey.pdf; Sarah Ayres, *Promoting Good Jobs for Millennials* (Center for American Progress, November 19, 2013), http://cdn.americanprogress.org/wp-content/uploads/2013/11/Jobs4Millennials.pdf; Pew Research Center, *Millennials in Adulthood: Detached from Institutions,*

Networked with Friends (March 2014), http://www.pewsocialtrends.org/files/2014/03/2014-03-07_generations-report-version-for-web.pdf.

[80] For a discussion of the importance of family leave and LGBT protections to Millennials, see Sarah Ayres, *Promoting Good Jobs for Millennials* (Center for American Progress, November 19, 2013), http://cdn.americanprogress.org/wp-content/uploads/2013/11/Jobs4Millennials.pdf.

[81] David Cooper and Doug Hall, *Raising the Federal Minimum Wage to $10.10 would give working families, and the overall economy, a much-needed boost* (Economic Policy Institute, March 13, 2013), http://www.epi.org/publication/bp357-federal-minimum-wage-increase; Economic Policy Institute, "Over 600 Economists Sign Letter in Support of $10.10 Minimum Wage" (January 14, 2014), http://www.epi.org/minimum-wage-statement/.

[82] U.S. Bureau of Labor Statistics, *Characteristics of Minimum Wage Workers, 2013* (March 2014), http://www.bls.gov/cps/minwage2013.pdf.

[83] According to an analysis by the Congressional Budget Office earlier this year, at least 16.5 million people would get a raise and nearly one million (900,000) people would be lifted out of poverty. Note that this estimate predates minimum wage increases passed in several states via ballot initiatives this year. Changes in state minimum wages can affect the estimated impact of a federal minimum wage increase. Congressional Budget Office, *The Effects of a Minimum-Wage Increase on Employment and Family Income* (February 2014), p.6, http://www.cbo.gov/sites/default/files/cbofiles/attachments/44995-MinimumWage.pdf.

[84] For a discussion of Millennials' concerns regarding these programs, see Common Sense Action, *The 2014 Agenda for Generational Equity* (Bipartisan Policy Center, June 2014), http://bipartisanpolicy.org/wp-content/uploads/sites/default/files/Agenda%20for%20Generational%20Equity.pdf.

[85] JEC Democratic staff calculations based on data from the U.S. Census Bureau, "Educational Attainment: CPS Historical Time Series Tables" (accessed December 16, 2014), http://www.census.gov/hhes/socdemo/education/data/cps/historical/index.html. For a discussion of the importance of workforce training programs to Millennials, see Common Sense Action, *The 2014 Agenda for Generational Equity* (Bipartisan Policy Center, June 2014), http://bipartisanpolicy.org/wp-content/uploads/sites/default/files/Agenda%20for%20Generational%20Equity.pdf.

[86] Ben S. Bernanke, "Financial Regulation and Financial Stability" (speech at the Federal Deposit Insurance Corporation's Forum on Mortgage Lending for Low and Moderate Income Households, July 8, 2008), http://www.federalreserve.gov/newsevents/speech/bernanke20080708a.htm.

[87] The Demand Institute, "Millennials and Their Homes: Still Seeking the American Dream" (September 16, 2014), http://www.demandinstitute.org/blog/millennials-and-their-homes.

[88] Melvin L. Watt, "Prepared Remarks of Melvin L. Watt, Director, FHFA, At the Mortgage Bankers Association Annual Convention" (Mortgage Bankers 2014 Annual Convention, October 20, 2014), http://www.fhfa.gov/Media/PublicAffairs/Pages/Prepared-Remarks-of-Melvin-L-Watt,-Director,-Federal-Housing-Finance-Agency-at-the-MBA-Annual-Convention.aspx; Julian Castro, "Remarks of Secretary Julian Castro at the Mortgage Bankers Association 2014 Annual Convention and Expo" (Mortgage Bankers Association 2014 Annual Convention, October 20, 2014), http://portal.hud.gov/hudportal/HUD?src=/press/speeches_remarks_statements/2014/Speech_102014.

[89] For a discussion of rental housing affordability, see Joint Center for Housing Studies of Harvard University, *The State of the Nation's Housing* (Joint Center for Housing Studies of Harvard University, 2014), http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/sonhr14-color-full.pdf; Joint Center for Housing Studies of Harvard University, *America's Rental Housing: Evolving Markets and Needs* (Joint Center for Housing Studies of Harvard University, 2013), http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/jchs_americas_rental_housing_2013_1_0.pdf.

[90] William Gale and others, *Student Loans Rising: An Overview of Causes, Consequences, and Policy Options* (Tax Policy Center, Urban Institute and Brookings Institution, May 2014), http://www.brookings.edu/~/media/research/files/papers/2014/05/student%20loan%20debt%20rising%20gale%20harris/student_loans_rising_gale_harris_09052014.pdf; Testimony of Rohit Chopra, Assistant Director, the Consumer Financial Protection Bureau, before the Senate Committee on the Budget (June 4, 2014), http://www.consumerfinance.gov/newsroom/written-testimony-of-rohit-chopra-before-the-committee-on-the-budget/; Meta Brown and Sydnee Caldwell, "Young Student Loan Borrowers Retreat from Housing and Auto Markets" (blog entry, April 17, 2013), http://libertystreeteconomics.newyorkfed.org/2013/04/young-student-loan-borrowers-retreat-from-housing-and-auto-markets.html#.VGzSx8nYvyU.

[91] Internal Revenue Service, "American Opportunity Tax Credit" (accessed December 16, 2014), http://www.irs.gov/uac/American-Opportunity-Tax-Credit.

[92] Democratic Policy and Communications Center, "Easing the Burden of Student Loan Debt to Give Everyone a Fair Shot to Afford College" (accessed December 16, 2014), http://www.dpc.senate.gov/docs/fs-113-2-127.pdf.

[93] Diana G. Carew, "How Much Does Student Debt Burden Young People?" (blog entry, May 3, 2013), http://www.progressivepolicy.org/2013/05/how-much-does-student-debt-burden-young-people/.

[94] See discussion of underemployment on pp. 2-3 of this report.

[95] Ruth Helman and others, "The 2013 Retirement Confidence Survey: Perceived Savings Needs Outpace Reality for Many," *Employee Benefit Research Institute*, no.384 (March 2013), http://www.ebri.org/pdf/surveys/rcs/2013/EBRI_IB_03-13.No384.RCS.pdf; Heidi Shierholz, Alyssa Davis, and Will Kimball, *The Class of 2014: The Weak Economy Is Idling Too Many Young Graduates*, Briefing Paper 377 (Economic Policy Institute, May 2014), http://s2.epi.org/files/2014/Classof2014FINAL.pdf; Center for American Progress, "Why Millennials Aren't Saving for Retirement and What We Can Do to Change That" (July 31, 2014), https://www.americanprogress.org/issues/economy/news/2014/07/31/94933/why-millennials-arent-saving-for-retirement-and-what-we-can-do-to-change-that/.

[96] Ann Carrns, "What to Do With Your Retirement Plan if You Change Jobs," *The New York Times* (October 3, 2013), http://www.nytimes.com/2013/10/03/your-money/what-to-do-with-your-retirement-plan-if-you-change-jobs.html?_r=0.

[97] Fidelity Viewpoints, "Beware of cashing out: There are better alternatives than liquidating your 401(k)" (February 12, 2014), https://www.fidelity.com/viewpoints/retirement/cashing-out.

[98] U.S. Department of the Treasury, "About *my*RA" (accessed December 16, 2014), https://myra.treasury.gov/about/.