



# Not Your Mother's Labor Market

May 9, 2016

## Executive Summary

The labor market today looks very little like the labor market of decades past. A number of longer-term trends are reshaping the labor market in many anticipated and unanticipated ways. The recent recession made many of these trends more apparent, and they have made labor market health more difficult to diagnose going forward. A confluence of forces, with varying magnitudes, contribute to the changes that have occurred in the labor force over the course of the 20<sup>th</sup> century and into the 21<sup>st</sup>, among them technology, capital, demographics, immigration, education, and government policies.<sup>1</sup>

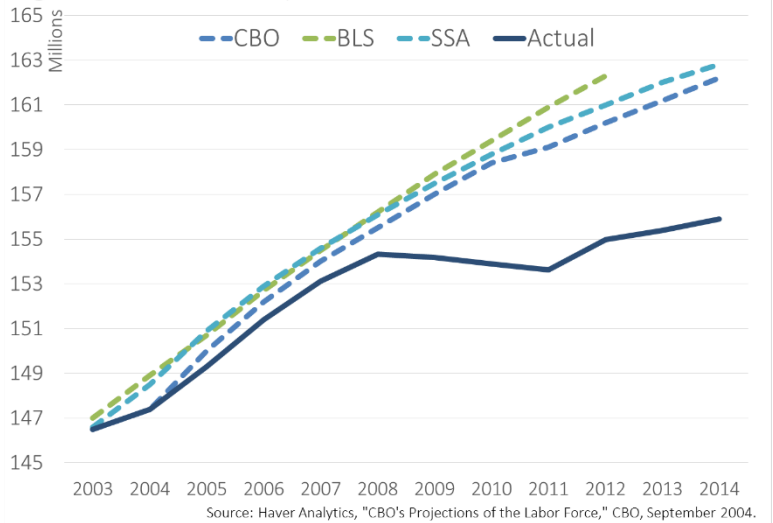
Over much of the past century, simple labor indicators like the unemployment rate provided a good proxy for the strength of the labor market. Yet today, labor force dropouts, discouraged workers, and long-term unemployment remain elevated from the December 2007-June 2009 recession, even adjusting for population changes. As noted in previous JEC Republican staff analysis, despite assertions of being near “full employment,” broader indicators continue to show significant slack in the labor market.<sup>2</sup> The makeup of our labor market in the current recovery breaks previous trends, and our conventional understanding about the labor market along with them. With the labor market having experienced a shift from a relatively young, low-skill, production-intensive juggernaut to an older, more nuanced, services-oriented and high-skill dynamism, so too should our expectations shift going forward.

As noted by the St. Louis Federal Reserve, many of the negative labor trends seen lately began before the recent recession, only to accelerate over its course and aftermath. Some of these changes were expected, particularly due to longer-term trends related to declining fertility rates, increasing longevity estimates, and the introduction of particular retirement and support programs that enhanced income security for older Americans. Thus, the decline in population growth, and subsequently, labor force growth, were known well in advance of the recent decline in the labor force participation rate. However, while declines in fertility rates and increasing longevity may change the growth rate and age composition of the population, these trends by themselves do not necessarily affect incentives to participate in the labor force in the way that retirement and support programs do.

Other trends that were unexpected or their effects were not fully understood include the impact of globalization, rapid technological advancement, an erosion of work incentives, and a paradigm shift in decisions to work while in school. The elevated share of long-term unemployed was unexpected in the most recent recession, and is likely in part a reflection of the increased difficulty of many workers to acquire new skills that are more relevant to the demands of the modern economy. Back in 2007, no one could have predicted the lasting impact that the recent recession would have on the labor market, and the extent to which the recession introduced structural changes as well as cyclical ones remains a subject of debate today. As shown in Figure 1 on the following page, the Bureau of Labor Statistics (BLS), the Congressional Budget Office (CBO), and the Social Security Administration (SSA) have known for some time that labor force growth would slow in the coming years as the Baby Boomer generation retired. Yet none of these institutions predicted that the overall trajectory would slow this fast and this soon.<sup>3</sup>

Furthermore, the trends that preceded, and in some cases were exacerbated by, the recession have made the current recovery more difficult to measure between what should be expected of a “normal” recovery and what is in fact a fundamental shift not yet fully understood. Given these underlying trends altering the labor market, as examined in the JEC work on full employment, it has been acknowledged by many institutions, including the Federal Reserve and its regional reserve banks, that no singular labor indicator can determine the relative health of the labor market.<sup>4</sup> For example, the unemployment rate may have been a useful indicator of economic recovery in the past but loses significance when many potential workers are staying outside the labor market.

**Figure 1. Labor Force Projections, 2003-2014**



Furthermore, recent research suggests that the magnitude of the recent recession may have yielded “structural” changes in the economy and hardened some trends that predate the recession, which macroeconomic tools like monetary policy cannot remedy. CBO estimates that if the unemployment rate returned to its natural rate and the labor force participation rate equaled its potential, there would have been 2.2 million more workers in the first quarter of 2016. CBO expects the unemployment rate to fall below its natural rate (which accounts for all unemployment sources except for fluctuations in aggregate demand)<sup>5</sup> from 2016 through early 2019, thus narrowing the employment shortfall, but the slack between the labor force participation rate and its potential rate is projected to persist over the same time frame.<sup>6</sup>

Among these structural changes, business and labor dynamism have fallen since the 1990s. A recent Federal Reserve working paper found that there has been a 10-15 percent decline in U.S. labor market fluidity—a measure including job switching, interstate mobility, and employers’ creation and destruction of job positions.<sup>7</sup> Slower labor turnover and the aging of firms reflect a “startup deficit” in which the creation of new firms has fallen and employment has shifted more toward older firms. As the St. Louis Fed notes, “Both the decline in firm entry and the larger share of employment in more-mature firms dampen employment growth, as large firms are less likely than small firms to hire people.”<sup>8</sup> Declining dynamism among businesses and slower labor turnover matter a great deal because they can, in turn, negatively influence labor productivity as well as wages and labor force participation.<sup>9</sup>

**The American workforce today is older, less mobile, more formally educated, more services-oriented, and increasingly near parity between men and women.**

*Workforce Demographics*

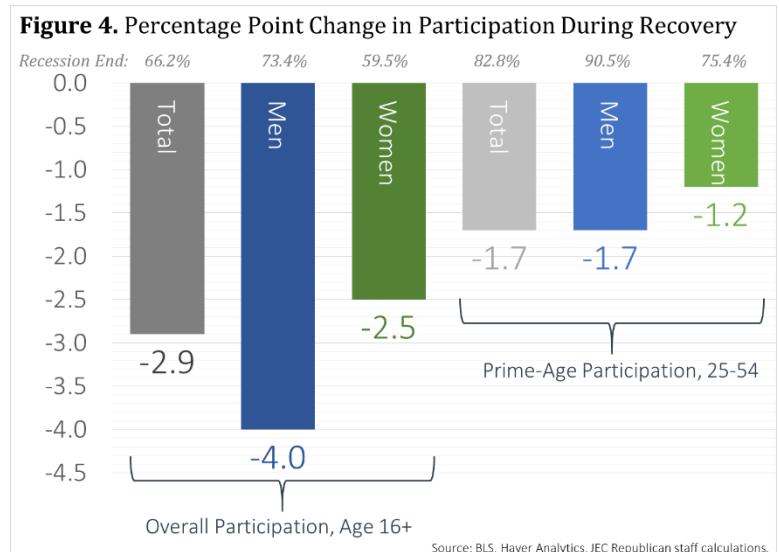
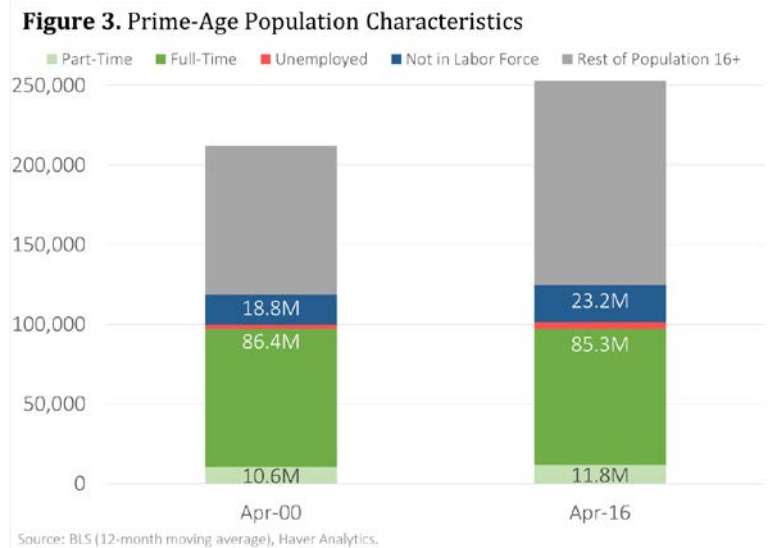
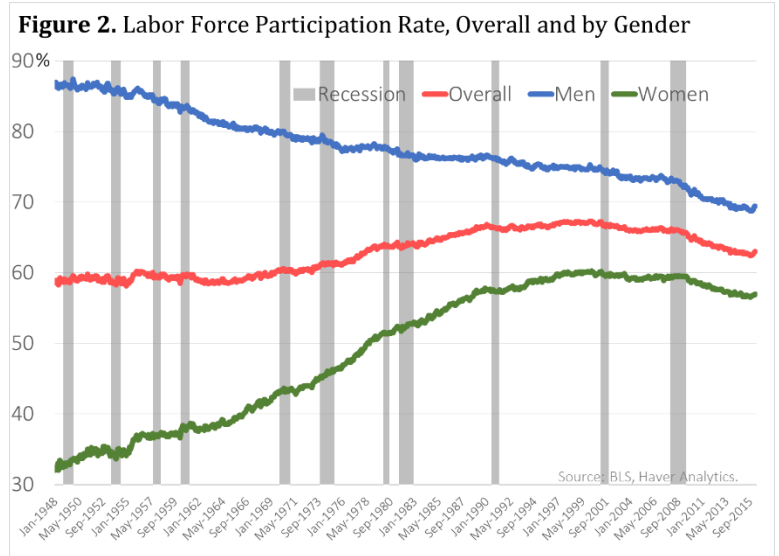
Among demographic changes associated with the change in the workforce over time, the rise of women in the workforce has been the subject of lengthy study over recent decades, and is among the most significant changes in the labor market over the course of the last century. Increased participation among women had boosted the overall rate to new heights in the early 2000s, even as men’s labor force participation steadily declined from its peak near the beginning of BLS’s labor data series in 1948. Prior to 1948, estimates from as early as 1890 suggest that women’s share of the paid labor force was a mere 18 percent,<sup>10</sup> compared to 47 percent of the labor force today. For much of the last century, the rapid rise in women’s labor force participation masked the steady decline in participation among

men. This led to record labor force participation at the turn of the 21<sup>st</sup> century, shortly after which both genders' participation leveled off and subsequently declined during and after the recent recession, as shown in Figure 2.

As of April 2016, there were nearly 253 million Americans age 16 and older, with over 158 million in the labor force and 94 million out of the labor force. However, the prime working-age population, which generally excludes persons out of the labor force while in school or retired, includes nearly 126 million Americans age 25-54. Of these, 102 million are in the labor force and 23 million are out of the labor force. Among those prime working-age, 97 million are working, and among those, 85 million work full-time and nearly 12 million work part-time, as shown in Figure 3.

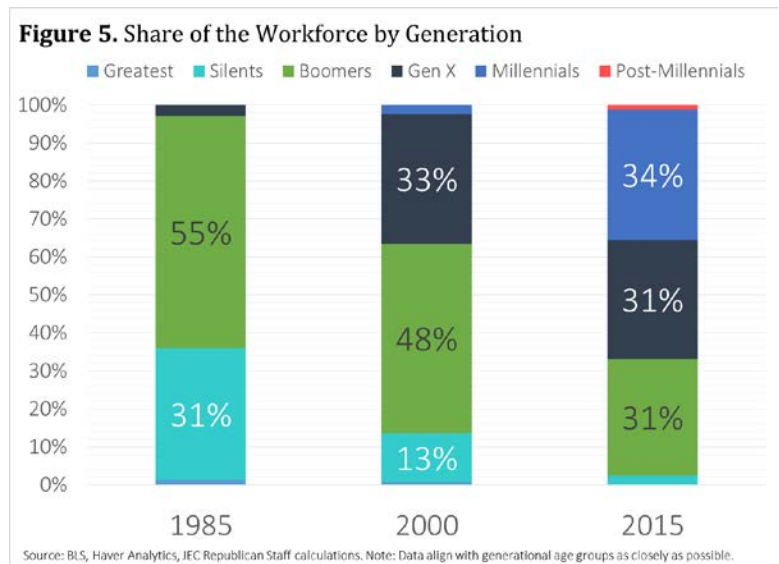
Though the prime working-age population has grown by over 5.3 million since the peak of labor force participation, the number of Americans in that age group with full-time jobs has declined by over 1.1 million. Over the same time frame, the number of individuals out of the labor force has grown by nearly 4.5 million, and an increasing share of prime working-age Americans out the labor force say they do not want a job right now.<sup>11</sup> As shown in Figure 4, the participation rate of prime-age workers (age 25 to 54) remains 1.7 percentage points below the recovery start after decelerating during the recession, reflecting a longer-term declining trend.<sup>12</sup> Indeed, the willingness to supply labor has decreased significantly amongst those in their prime earning years compared to recent decades.

Alternative metrics continue to indicate a shift in the relationship young individuals have with the labor market. Today, millions of young people in the United States and abroad are neither working nor learning.<sup>13</sup> The share of adults under age 25 who are employed has fallen, as has their participation in the labor force. This change is primarily explained by rising school enrollment over the longer term, with the remainder explained by an increase in the share who do not want a job. In fact, nearly one in five 20-24 year olds was neither enrolled in school nor working in 2013. More recent research finds that one in six people ages 17 to 20 are neither enrolled nor working after graduating from high school.<sup>14</sup> For those with



a high school diploma, the figure was nearly one in three—up from one in five in 1990, while college graduates saw an increase to nearly one-in-ten by 2013, up from one in twenty in 1990.<sup>15</sup> Unlike previous generations, this age group today is also more likely to say they don’t want a job if they are out of the labor force.

Generations have certainly had an impact not only by their marked sizes relative to one another, but in how the economy was faring as they entered the world of work and how the labor market reflected their values and expectations. The largest generation in the workforce today, the millennial generation (generally born between 1981 and 1997), comprises over one-third of the labor force. Yet millennials are only beginning to increase their labor force numbers compared to Generation X (born between 1965 and 1980) and Baby Boomers (born between 1946 and 1964), who are holding a close third and second, respectively, as shown in Figure 5.



In the 1960s and 1970s, Baby Boomers caused the labor force participation rate to rise significantly as they entered the job market, also pushing up the unemployment rate given that the youngest workers generally experience the highest unemployment rates. By the late 1980s, the youngest Boomers were older than 25, making this generation most prominent among prime working-age Americans.<sup>16</sup> By contrast, despite being an “echo-boom” as children of Boomers, millennials did not have the same effect by the time they reached their teenage years, as fewer participate in the workforce in the same way Boomers once did. Young adults in the workforce today are more likely to have started their first job later in life, as the shares of the teen population in the labor force and employed have fallen and the teen unemployment rate has risen over the decades.

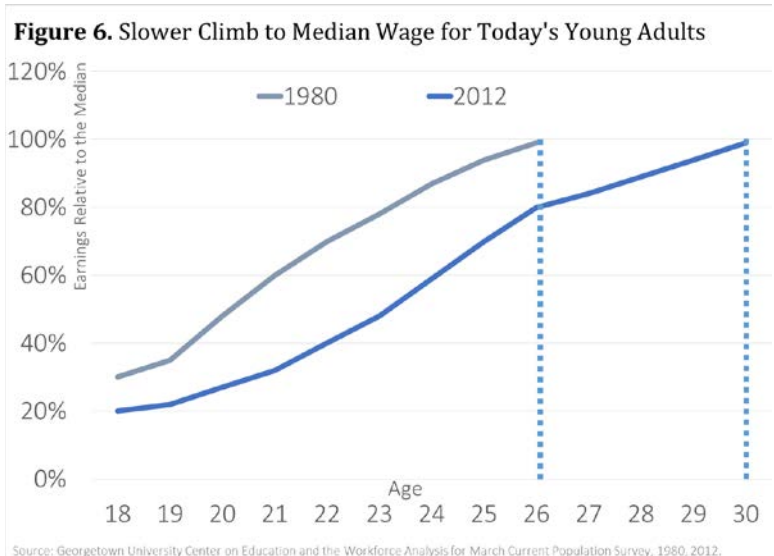
While previous generations may have faced tough labor markets as they entered the workforce, as Baby Boomers did in the 1981-82 recession, the labor market recovery for millennials has been “much less robust,” as Pew Research Center notes, following the 2007-09 recession.<sup>17</sup> A Georgetown University Center on Education and the Workforce study notes that, like those in school in their late teens and early twenties, the share of people in their late twenties (26-30 years of age) participating in the labor force has also declined, down from 88 percent in 2000 to 80 percent in 2012. This is the lowest rate in over 60 years that the data has been collected. From 2000 to 2012, the share of adults in their late twenties working full-time, year-round jobs fell by 15 percentage points for men to 65 percent. Women have also seen a six percentage-point decrease over the same time period. The study further suggests that entering the labor market in a bad economy can have negative long-term effects on earnings and employment that can last for 10 to 15 years.<sup>18</sup>

*Wage Growth*

The recent slowdown in real wage growth is among the negative and unexpected trends that pre-date the recent recession. According to the St. Louis Fed, average yearly real wage growth between 1995 and 2005 was 1.77 percent, but slowed significantly to 0.14 percent between 2010 and 2015.<sup>19</sup> Wage growth has been tepid at best since the recent recession. Heritage Foundation’s Salim Furth argues that aggregate wage growth in the past two years is close to historical averages, but that growth is still fairly mediocre along with GDP and employment growth.<sup>20</sup> Overall average hourly earnings data show annual growth rates below 2.5 percent, a pattern that continued over 73 consecutive months until October 2015.



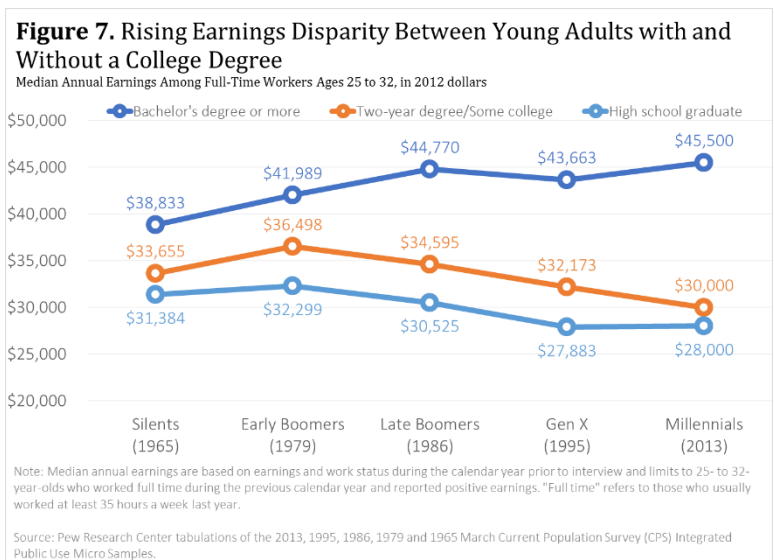
Looking only at aggregate wage growth obscures more detailed data showing where wages are growing. The San Francisco Fed points out that median weekly earnings growth for those continuously full-time employed pulls up overall median weekly earnings, but many new entrants to the labor market in the aftermath of the recent recession—particularly after the recession shed so many low-wage jobs and reduced hiring—are earning less than the typical full-time employee, pushing down earnings growth.<sup>21</sup> This has also been noted by economist Tyler Cowen, who reasons that many workers have been revalued by the market at a lower wage, but most workers that didn't lose their jobs are not taking pay cuts—new entrants are, relative to incumbent workers.<sup>22</sup> This has seemed to play out at least for younger workers entering the workforce after graduating college. The Georgetown Center on Education and the Workforce recently pointed out that the age at which young workers reach the median wage was delayed from 26 to 30 between 1980 and 2012, as shown in Figure 6, while older workers' relative earnings were much higher over that period.<sup>23</sup> Young workers in particular are finding themselves more credentialed than ever, but it's taking them longer to reach the median wage than in years past, and real starting wages have fallen.



*Education and Mobility*

Education remains key to good jobs, but emphasis should be on practical skills, not a formal homogenous solution of university education. The disparity in earnings between those with a college degree and those with less education has steadily risen over the past four decades. Pew Research Center finds that, of those employed, college graduates aged 25 to 32 earn \$17,500 more annually than those with only a high school diploma—a disparity that has more than doubled since the mid-1960s, as shown in Figure 7.<sup>24</sup>

This may lead one to conclude that a college degree is the path to good earnings and a decent living. And in fact, that is true for many, but not for all potential workers and not for all college degree types. Between 1992 and 2000, each successive graduate class of college and post-college degree holders saw an increase in the likelihood of entering jobs that require “brains” instead of “brawn” at the start and in the middle of their careers. However, this pattern began to reverse after 2000, contributing to the declining job and income prospects young work entrants currently face. In addition, the drag of graduating college during a recession can have a permanent effect on lifetime income. This seems to be true of certain college degrees over others.



Graduates with scientific and business degrees see an increase in earnings graduating into a recession, while arts and social sciences see a decrease.<sup>25</sup> Furthermore, recent data shows that although families headed by someone with a master's degree earn almost 10 percent more than they did 25 years ago, those with only college degrees have seen

their incomes decline in the aftermath of the two most recent recessions, and make about the same as they did 25 years ago.<sup>26</sup>

Americans are more “rooted” in place today than they used to be in decades past, and this trend is not primarily due to demographics or the rise of dual-income families. Americans remain much more likely to move across state lines than citizens of other countries, but between 1990 and 2012, the share of Americans moving from one state to another in a given year has fallen by half.<sup>27</sup> A study by the Federal Reserve Board of Governors found that the trend appears connected to the decline in wage gains associated with switching jobs.<sup>28</sup> Research from the Federal Reserve of Minneapolis concludes that mobility has been falling across the workforce by education, marital status, and single- and multiple-earner households. Furthermore, recent mobility trends in the United States suggest that moves are primarily motivated by cheap housing relative to other reasons (such as low unemployment rates in a high-productivity area). *The Economist* notes: “It is disconcerting to observe households passing up on high-productivity, low-unemployment markets because the high cost of housing in such places makes life there a bad deal.”<sup>29</sup>

Additional research on labor market mobility finds that in-state migration is also down, especially for those with less formal education. Economist Alex Tabarrok notes that people no longer move to better opportunities, but are now more likely to stay put and either retire early or claim disability insurance.<sup>30</sup> He further notes that low-skill workers in particular are moving to low-productivity places because high housing costs in high-productivity areas are driving them out, and this trend may be due in part to zoning and land-use restrictions.<sup>31</sup> In addition, in the aftermath of the recent recession, research suggests that migration is too slow to equalize wage, unemployment, and employment rates across the nation, as local areas hit harder than others have seen enduring joblessness and increased local economic inequality. Based on the current trend, it is estimated that employment rates will not return to “normal levels” until the mid-2020s.<sup>32</sup>

Changes in family life and associated demographics have helped to reshape the labor market as well. Today, families are more likely to have dual-income earners if there are two parents, but the share of one-parent families is also on the rise, affecting wage, and mobility trends. Traditional mother and father roles are converging as mothers have grown to represent four-in-ten primary earners in 2011 compared to just over one in ten in the 1960s.<sup>33</sup> In addition, in nearly half of two-parent families, both parents worked full-time in 2015 compared to just under one-third in 1970.<sup>34</sup> However, less than half of children live with two parents in their first marriage today, compared to nearly three-quarters in 1960.<sup>35</sup> Furthermore, just under seven-in-ten children live with two parents, down from nearly nine in ten in 1960, while more than one-quarter of children live in a one-parent family, up from one in ten in 1960.<sup>36</sup> This could have important economic mobility implications for children who grow up in single-parent households. The correlation between stable, two-parent households and better outcomes for children is striking. Brookings Institution’s Isabel Sawhill notes that gaps in family structure and parenting styles are creating “very unequal starts” for American children, affecting income inequality and potentially slowing economic mobility for those on the low end of the economic ladder.<sup>37</sup> Sawhill goes on to say that “family formation is a new fault line in the American class structure.”<sup>38</sup>

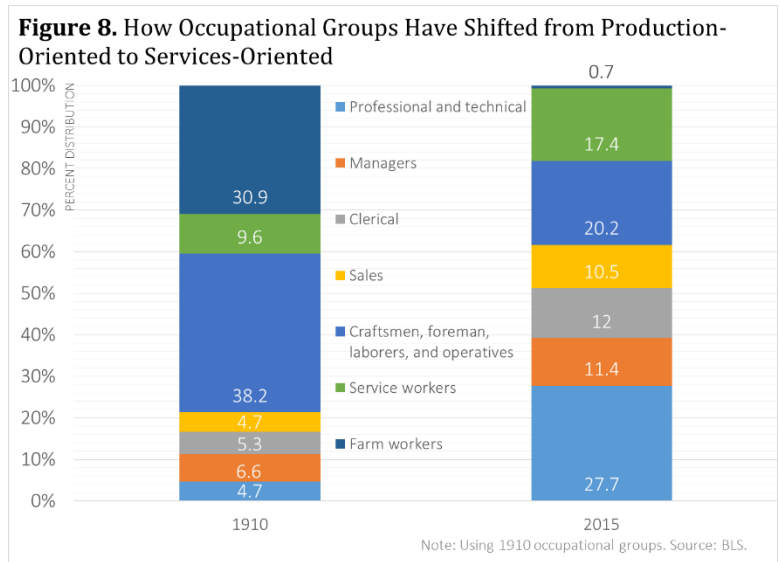
**Automation and globalization continue to “hollow out” middle-skill jobs, though certain government policies have exacerbated job polarization trends.**

Compared to the past, job security is less prevalent today, as neither employer nor employee expect to stay with one another for an entire working career. Globalization and automation have also made job stability less likely. However, today’s economy offers a greater variety of job opportunities, types and ways of working that were not possible prior to increased globalization and technological advancement. Furthermore, as the ability to reach more workers remotely and outside of the 9-to-5 work schedule expands, the desire for greater workplace flexibility is more readily granted, and this trend may continue for the foreseeable future. As technology advances and broadens across sectors

and occupations, the 40-hour work week will likely erode in favor of greater integration between work and leisure time as pressures from new business models like the sharing economy force more traditional workplaces to adapt.<sup>39</sup>

Technological change remains a driving factor in the labor market that is difficult to measure. Many workers face challenges associated with the rise in automation over recent decades.<sup>40</sup> According to Pew Research Center, 63 percent of full- and part-time workers surveyed claim they have taken steps to upgrade their skills and knowledge, and a number of those surveyed took stock of their skills and employability, particularly after the recent recession began. In the face of globalization and competition from new entrants, many feared getting passed over if they did not hone their skills.<sup>41</sup> Among many studies examining the role of automation in the workforce, Oxford researchers expect that machines may be able to do half of the jobs in the United States within two decades.<sup>42</sup> While two-thirds of Americans believe that, within the next 50 years, computers and robots will assume many of the jobs now done by humans, about eight in ten believe that their own jobs or professions will remain the same.<sup>43</sup>

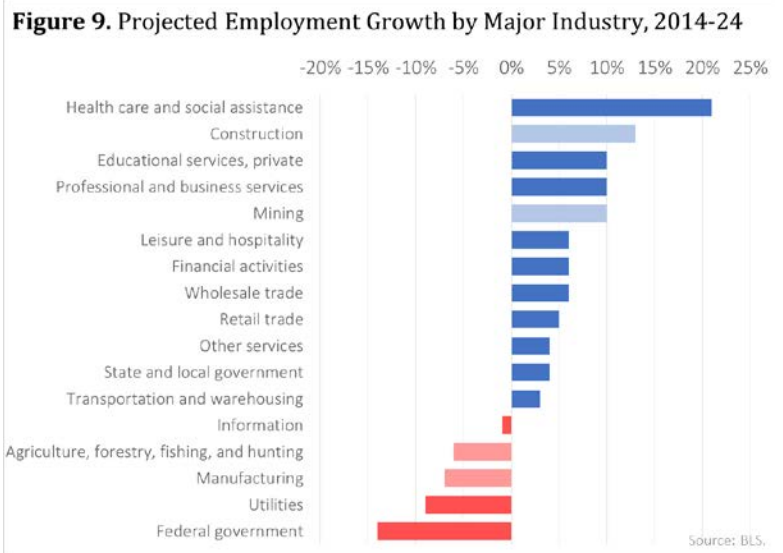
Compared to the composition of jobs available more than a century ago, today’s economy relies far more on service-based employment than production-based employment, as shown in Figure 8. Back in 1910, for example, professional, clerical, sales and managerial workers each represented near 5 percent of employment compared to craftsman, foremen, laborers and operatives at nearly 40 percent of overall employment, while farm workers represented more than 30 percent. By 2015, farm workers represented less than one percent of overall employment, the group including operatives fell to 10 percent, professional and technical workers grew to nearly 25 percent of overall employment, and managerial workers grew to nearly 15 percent.<sup>44</sup>



Even just 50 years ago manufacturing was chief among industry employment, comprising nearly as many jobs as education and health, professional and business services, leisure and hospitality, and retail combined. By 2001, both the professional and business services industry and the health and education services industry surpassed manufacturing in total number of jobs. The retail industry also surpassed manufacturing in 2002, and leisure and hospitality followed suit in 2008. *The Wall Street Journal* points out that while wages in professional, business, health and education industries generally are decent, it also takes more education for jobs in these industries, making it difficult to switch into these industries if a worker lacks the necessary skills and education.<sup>45</sup> According to Census data, health care and social assistance employment increased by 5.0 million over 1997 to 2012, while manufacturing employment fell by nearly the same amount, 5.5 million, over the same time frame.<sup>46</sup> For the manufacturing jobs that remain, the skill requirements are increasingly specialized and high-tech.

BLS expects that service-providing industries will garner nearly 95 percent of all the jobs added between 2014 and 2024, as shown in Figure 9, with goods-producing industries shown in a lighter shade. Health care and social assistance is expected to grow by more than one-fifth over that time frame, making it the largest employing major sector and displacing the state and local government sector as well as the professional and business services sector.

Manufacturing employment is expected to fall at a slower rate annually than in the previous decade. Production occupations and farming, fishing, and forestry occupations are expected to shed 339,000 jobs over the projected period. In contrast, healthcare support, practitioners, and technical occupations are expected to grow the fastest in this timeframe, collectively representing 1 in 4 new jobs.<sup>47</sup> However, the Conference Board recently reported that the supply of labor available in the next 10 to 15 years will fail to meet employer demand, particularly for occupational therapists, railroad engineers, mathematicians, machinists and other workers, likely constraining overall economic growth.<sup>48</sup>



A dynamic labor force with the ability to adapt to the skills demanded in the labor market will continue to be an imperative for a strong economy. What is commonly known as skill-biased technological change has played a major role in carving out new jobs in the labor market that were enhanced by computers and other technological equipment, and reduced the need for many other jobs that proved less compatible or substitutable for technology. While this change has placed greater emphasis on higher education as a key to economic mobility than in the past, the information technology revolution has also benefitted lower-skilled jobs in the service industry that are non-routine. The IT revolution benefitted jobs that are considered manual but require creativity, such as food preparers and security guards. This has led to a job “polarizing” effect. As middle-skills jobs continue to shrink, job polarization effects on the high-skill and low-skill jobs continue.

Indeed, a significant number of jobs being created are in low-skill, low-wage sectors.<sup>49</sup> The National Employment Labor Project notes that fast food industry jobs rose the fastest since 2000, up 23.3 percent compared to the 5.1 percent total gain in private-sector job growth.<sup>50</sup> Occupations can be generally classified into four different types based on their cognitive and routine components. The number of Americans employed in non-routine and cognitive occupations (management and professional occupations) have witnessed breakout growth since 1990, as have Americans employed in non-routine and manual occupations (i.e. service-related occupations and those involving care for others). In contrast, occupations that are either cognitive or manual, but have a routine component (sales and office occupations, or production and repair occupations) have seen a decline over the same time frame.<sup>51</sup>

Among the observations of the decline in middle-skill jobs over the past three decades, the Kansas City Fed notes that women have obtained more education and moved disproportionately toward high-skill jobs, while men shifted into high- and low-skill jobs in roughly equal numbers. Many men that shifted into low-skill jobs have struggled to obtain and keep work over that time frame. As Scott Winship pointed out in previous testimony before the JEC, one-third of the decline in labor force participation among men can be explained by a rise in disability claims among this demographic, even though health data does not indicate a rise in illness or disability. This could partially explain why prime-age men have seen a larger decline in participation as well as a significant increase in disability applications as eligibility standards have been relaxed, particularly since 1989.<sup>52</sup> In addition, workers age 55 and older have shifted into high-skill jobs as those in high-skill occupations have delayed retirement, while the youngest workers under age 25 have shifted toward low-skill jobs as more delay entering the labor force while remaining in school longer. The Kansas City Fed further finds that while job polarization has accelerated during recessions, its continuing shift indicates that it is neither a driver of the business cycle nor the primary reason for jobless recoveries.<sup>53</sup>



The experience of job polarization and the effects of skill-biased technological change are not unique to the United States, as evidenced by cross-country studies of European countries and across occupation groups.<sup>54</sup> These trends have contributed to concerns of a “middle-class squeeze” and particular sensitivity about rising income inequality. Yet more importantly, what remains to be seen, given these trends and lower labor force participation, is whether Americans can remain as economically mobile as they have been in the past.

Certain labor regulations, particularly the Administration’s recent overtime pay threshold change set to take effect in July, will hinder workers looking to improve their living standards and may make the shift in preferences toward greater flexibility with respect to work and family time more difficult for many workers. Given that the rule change will increase the compliance costs of firms, many will respond to the new costs in unintended ways, including reduction of base salaries or overall compensation, a reduction in hours, or they may replace current workers with higher-skill workers or automate.<sup>55</sup> Estimates from an Oxford Economics study amount to \$745 million in cost compliance for retail and restaurant businesses.<sup>56</sup> In turn, the unintended results for many workers is that many will see themselves reclassified from exempt to non-exempt and will lose many benefits associated with salary pay, including the ability to structure their hours around personal needs, work from home or another location, or limit work communication outside of the office. In addition, the change in overtime regulations could also reduce career opportunities and advancement, as the employer may be unable to afford to pay overtime rates for time spent on workplace training or career-enhancing opportunities.<sup>57</sup>

Regulations like the overtime rule change can end up exacerbating job polarization by effectively hollowing out middle-skill jobs as workplaces become more tiered between lower-wage hourly workers and high-skill salary occupations. More broadly, previous JEC research finds that federal intervention in wage and employment structure harms productivity, gives rise to avoidance costs, and limits business expansion and earnings opportunities for workers.<sup>58</sup>

### **Declining business dynamism and slower labor turnover are likely negatively affecting wage growth and labor force participation.**

Over the last 25 years, the vast majority of private-sector jobs has been created by businesses less than five years old. These are not just small businesses, but businesses that reflect an “up or out dynamic,” as one researcher termed it, in which successful startups either grow rapidly and create jobs or fail quickly and exit the market.<sup>59</sup> However, among the long-term trends identified as affecting the labor market, lower business dynamism began as early as the beginning of the 1980s and accelerated after 2000, according to recent research from the St. Louis Fed, coinciding with the decline in overall labor force participation.

With regard to the effect of startups on employment growth, recent research indicates that while the number of startup firms has been declining in recent decades, the existence of a number of high-growth startups had offset some of the decline until 2000.<sup>60</sup> Research from the St. Louis Fed also notes that these startups were increasing prior to 2000 and most closely trend with employment growth, but have since declined.<sup>61</sup> Using Business Employment Dynamics data, BLS finds that high-growth firms represented 2 percent of all firms in the 2009-2012 period, a slightly smaller share than before the recession, yet they were responsible for 35 percent of all gross jobs gains among firms that expanded their employment over that time. Prior to 2000, they represented over 3 percent of all firms and were responsible for nearly 45 percent of all gross job gains.<sup>62</sup>

New business creation fell by more than 30 percent during the recession and has been slow to recover.<sup>63</sup> A study by the Kauffman Foundation found that the rate of new entrepreneurial activity has fallen to new recovery lows for Americans age 20-34. In other words, millennials are not starting companies at the same pace as previous generations did in years past, and entrepreneurship is down across all age groups since the recent recession.<sup>64</sup>

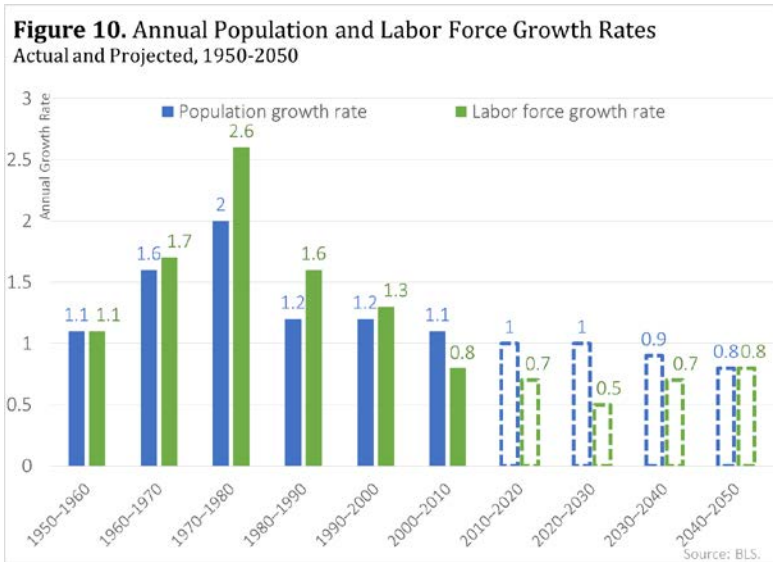
Furthermore, studies by economists at the Brookings Institution found that the share of start-ups (firms less than 1 year old) had fallen from 15 percent of all businesses in 1978 to 8 percent in 2011. By contrast, the share of older firms (older than 16 years) jumped from under a quarter to more than a third of all businesses.<sup>65</sup>

A recent Goldman Sachs report published in April 2015 found that firms with more than 500 employees grew faster after 2010 than their best historical performance over the past four recoveries, outpacing small firms. In comparison, jobs at firms with fewer than 500 employees declined over this recovery, a direct contrast to the faster growth they previously achieved over larger firms in previous recoveries.<sup>66</sup> American Enterprise Institute senior fellow Peter Wallison notes that 64 percent of net new jobs between 2002 and 2010 originated from small business, but this growth has since disappeared beyond 2010.<sup>67</sup> However, the Kauffman Foundation notes that small business activity rose in 2015 following a post-recession decline and subsequent stagnation<sup>68</sup>—it is hoped that activity will continue to rise provided that the recovery continues.

The underlying reasons for declining dynamism and turnover are not yet fully understood. Although the decline lacks complete explanation, and likely will for some time, there are some contributing factors to the trend. Insufficient access to capital, difficulty finding workers with the right skills, restrictions on talented immigrants, onerous taxes and regulations, and economic uncertainty are among the top reasons many company founders have listed as barriers to startups.<sup>69</sup>

**Population and labor force growth have been slowing in recent decades, and will continue to slow in the foreseeable future, affecting productivity and output growth.**

In the United States and abroad, populations continue to age, even prompting China to lift its one-child policy in the hopes of mitigating a shrinking workforce.<sup>70</sup> Demographic changes related to aging and birth rates will continue to be a factor in labor force participation projections for most large industrialized countries for the next several decades. According to BLS, annual growth in the labor force is expected to slow to just under 0.7 percent from 2000 to 2050, down significantly from the 1.4 percent rate seen from 1950 to 2000.<sup>71</sup> The annual growth rate by decade is shown in Figure 10. However, compared to other countries, the United States remains “demographically fortunate” over the long term given that its workforce is expected to grow 10 percent by 2050—significantly slower than the historical pace, but at least a positive trend nonetheless.<sup>72</sup>



By contrast, other advanced economies are expected to see their workforces shrink by at least one-quarter in many cases over the same time frame.

Median age of the labor force, as detailed by BLS, is one of the ways to measure the relative youthfulness or elderliness of the population over time. Prior to 2014, the median age of the labor force peaked at 40.6 years old in 1962. The median age of the labor force declined to as low as 35 years old in 1984, before climbing again and surpassing the previous peak at 41.9 years old in 2014.<sup>73</sup> The median age of the labor force is projected to rise to as much as 42.4 years old in 2024, before declining slightly to 41.6 years old by 2050.<sup>74</sup> According to a recently released Census Bureau report, in 2015 the United States ranked the 48th “oldest” nation in the world out of 228 countries, but is expected to drop to a “relatively youthful” 85<sup>th</sup> place by 2050, with American seniors comprising nearly one-

fifth of Americans by that time.<sup>75</sup> Japan is expected to retain first place over the same time frame, with its share of people age 65 and older rising from over a quarter of its population to two-fifths by 2050.<sup>76</sup>

The President's Council of Economic Advisers expects that the number of jobs added per month needed to keep the unemployment rate near its current low level will slow significantly in 2016 to only 78,000 jobs added per month,<sup>77</sup> much lower than the 150,000 to 200,000 economists previously expected as the minimum number to keep the unemployment rate flat.<sup>78</sup> For CBO, low and slow is the new expectation for nonfarm payrolls going forward. From an estimate of more than 142 million nonfarm payroll jobs in 2015, CBO expects payroll jobs growth to slow to an estimated 0.6 percent annually by the end of the coming decade, achieving 154 million total jobs in 2026.<sup>79</sup> That roughly translates to an average of nearly 1.1 million jobs added per year, or about 90,000 jobs added per month over that time frame. Meanwhile, CBO expects on average less than 200,000 jobs added per month in 2016, slowing to less than 75,000 jobs per month in 2026. However, these lower projections obscure the remaining gap in the jobs recovery, even accounting for demographic changes. A recent study from the Georgetown University Center on Education and the Workforce finds that the economy needs to add 205,000 jobs per month by 2020 to recover all jobs lost from the recession.<sup>80</sup>

As the labor force grows, it will become more ethnically diverse compared to previous decades, with white non-Hispanics comprising 59.6 percent of the labor force compared to 64.6 percent in 2014.<sup>81</sup> Immigration, particularly since the 1980s, has helped prop up slowing native population growth, and the increase in immigrants over the past decade has nearly reached proportions not seen since the early 1900s and the end of a period known as the "Great Migration." It is expected that immigration will not only continue to diversify the population and the labor force, but that it will help slow the decline in both measurements as well.<sup>82</sup>

BLS issued its latest employment projections over the 2014-24 period in December, indicating that the economy is expected to add 9.8 million new jobs, an increase of 6.5 percent over the time frame, and 7.8 million labor force participants.<sup>83</sup> As noted by the *Wall Street Journal*, this is a relatively slow pace by historical standards, as 10-year job creation averaged nearly 14 percent in the 2001-2007 expansion and almost 17 percent in the 1990s.<sup>84</sup> Most job growth will occur in healthcare occupations and particularly in those that provide services for the elderly.<sup>85</sup> GDP growth is expected to average 2.2 percent annually over the 2014-24 time frame. The projections reinforce expectations that labor force growth will slow down over the course of the next decade, and in fact, labor force participation has already been slightly weaker than projected in previous time periods.<sup>86</sup>

**To the extent that any structural changes introduced by government policy have left a negative effect on labor market health, there are a number of reforms that can remedy these effects going forward.**

Although our understanding of these trends and their underlying influences will continue to yield lessons for how the health of the labor force is measured going forward, some influences—specifically policies and regulations that alter work incentives—can be remedied to help improve labor market trends. Though many of the impediments that policy and regulations present to the workforce predate the current Administration, this Administration has simply piled on to the cumulative burdens that make obtaining work and personal advancement more difficult.

Raising taxes, increasing regulatory compliance, and other policy barriers prove unsurprisingly effective at reducing the reward of work. In a similar way, providing increasingly more subsidies absent workforce attachment to an increasingly broader share of eligible individuals encourages non-work. In some cases, the penalty of losing benefits upon employment is so great, that combined with the taxes expected to be paid on earnings in addition to transportation and other costs, they exceed 100 percent as an implicit marginal tax rate on work.<sup>87</sup>

Many unintended consequences of the cumulative burden of regulation, redistribution efforts, and the current tax and welfare structures serve to negatively affect investment and entrepreneurialism. Labor regulations including

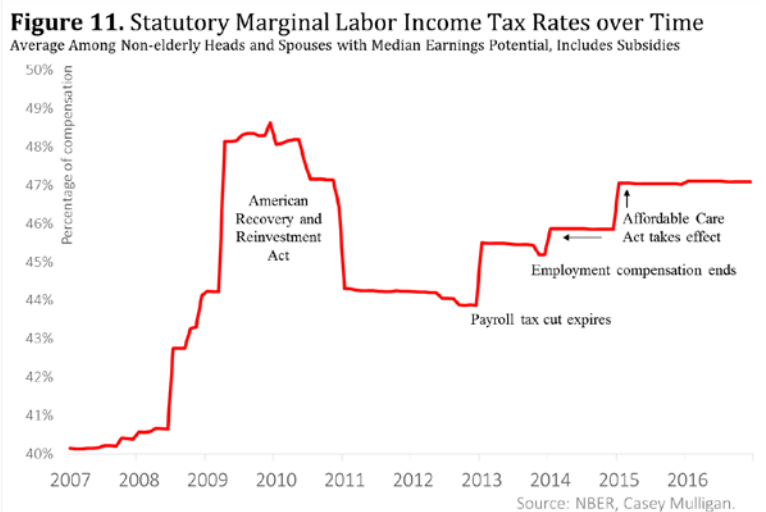
the minimum wage and the increase in the overtime-eligibility threshold negatively impact worker flexibility and the ability to obtain a job, thereby impeding workforce participation and reducing the reward of work. As economist Casey Mulligan testified in a previous JEC hearing and explained in previous writing, when it comes to the sacrifice of work, many of the programs intended to help people get back on their feet have inadvertently, by way of their design, reduced the reward to working—making work more costly as Americans strive for betterment for themselves and their families: “Another way of putting it is that taking away benefits has the same effect as a direct tax, so lower-income workers are discouraged from climbing the income ladder by working harder, logging extra hours, taking a promotion or investing in their future earnings through job training or education.”<sup>88</sup>

Mulligan identifies dozens of policies, including Supplemental Nutrition Assistance Program benefits, Medicaid, the Affordable Care Act (ACA), disability benefits, consumer bankruptcy, and mortgage-assistance among them, that make working more expensive relative to the alternative. The expansion of emergency-assistance programs to mitigate effects of the recession, as well as changes in the definition of program eligibility—including removal of the requirement to seek work—also effectively reduced the reward of work. Mulligan estimates that the combination of the new programs from the American Recovery and Reinvestment Act in the response to the recession increased the typical marginal tax rate from 40 percent to 48 percent within a span of two years, as shown in Figure 11.<sup>89</sup> To argue that individuals don’t consider this combined effect would be mistaken; Mulligan bolsters his analysis with anecdotal evidence of potential workers estimating the change in their net benefits based on taking a job, and choosing not to work. In Mulligan’s analysis of these benefits and their effect on reducing work, he estimates that they were responsible for roughly half the drop in work hours since 2007, and possibly more.

**Conclusion**

Removing policy barriers that have cumulatively affected labor force participation and the reward of work could increase labor force participation relative to its current trend. These issues can be addressed with regulatory reform, welfare reform (reducing the implicit marginal tax rate), and education reform (including emphasis on learning non-routine skills). Fundamental tax reform can also increase incentives for work as well as drive investment and productivity.<sup>90</sup>

It is possible that, despite every effort of policymakers to remove disincentives to work created by well-intentioned albeit misguided policy, the trend in participation would decline or remain at a lower level due to social or cultural trends. As Manhattan Institute scholar Scott Winship notes, most out of the labor force does not want a job. Why they don’t want a job is important, and has significant implications for policy reform. Allowing employers more flexibility, rather than imposing increasingly more rigid labor regulations, would enable employers to better reflect the tastes and composition of the workforce today rather than the one of decades past. Indeed, a variety of other factors outside of the policy realm affect labor force participation, and this is all the more reason to ensure that government policy does not continue to foster economic malaise.



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