

# THE IMPACT OF AGING BABY BOOMERS ON LABOR FORCE PARTICIPATION

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## Introduction

The United States is in the process of a dramatic demographic change – the rapid aging of the population – and that change has implications for the labor force participation and unemployment figures that we see every month. Since older people have lower labor force participation than the young, as more of the population moves into older age groups the national labor force participation rate will fall. On the positive side, older workers who do participate have lower unemployment rates than younger workers, so the same aging of the population will lower the unemployment rate – all else equal. This *brief* explores the implications of the aging of the baby boom generation for labor force participation over a 40-year span and since the onset of the Great Recession in 2007.

The discussion proceeds as follows. The first section summarizes the history of demographically adjusting labor force statistics – particularly to determine the “natural rate of unemployment.” The second section shows the impact on labor force participation rates of the baby boom moving from prime-age to older age groups over the last four decades. The third section attempts to separate cyclical from demographic effects on labor force participation

since 2007. The final section concludes that the aging of the population has dramatically reduced labor force participation since 2000, so not all the decline should be attributed to two recessions and viewed with alarm. The decline in labor force participation will continue until 2020, when all baby boomers have moved out of their prime working years.

## Adjusting Statistics for Demographic Changes

The original work in this area pertained to the unemployment rate. Policymakers were interested in determining the natural rate of unemployment (also referred to as the equilibrium rate of unemployment or the non-accelerating inflation rate of unemployment), the rate at which supply and demand were in balance. As the baby boom entered the labor force, economists quickly recognized that the natural rate was not a fixed number but could change in response to the characteristics and composition of the labor force.<sup>1</sup>

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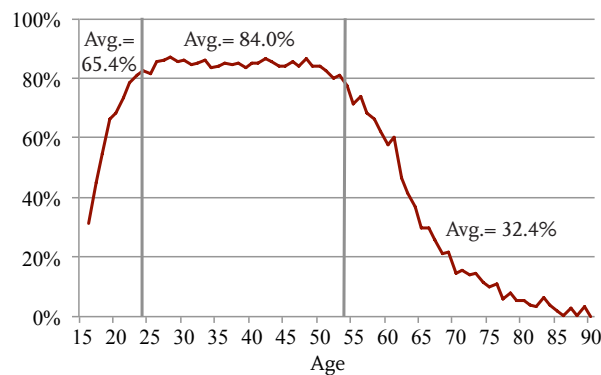
The entry of the baby boomers in the late 1960s and 1970s initially caused an increase in the natural rate of unemployment. Younger people (16-24) have higher levels of unemployment as they try to find their first job, move between school and work, and shift from one job to another. Since the 1970s, the share of the young in the labor force has declined significantly, reducing the natural rate of unemployment by 0.3-0.5 percentage points between the mid-1980s and the late 1990s.<sup>2</sup>

Changes in the composition of the labor force by sex also played an important role in explaining an increase in the natural rate of unemployment during the 1960s and 1970s. At that time, women experienced higher rates of unemployment than men, as they moved into and out of the labor force to care for children. So, as the share of women in the labor force increased, the natural rate of unemployment rose. Since the early 1980s, women's share in the labor force has continued to grow, but the unemployment rate for men and women has been about the same on average.

## The Aging of the Baby Boom

While the age-adjusted unemployment rate reflects shifts in the composition of the labor force, an "age-adjusted labor force participation rate" will reflect shifts in the composition of the working-age population.<sup>3</sup> Figure 1 presents labor force participation rates by age in 2000, which show the typical pattern.<sup>4</sup>

FIGURE 1. LABOR FORCE PARTICIPATION RATES BY AGE, 2000



Source: U.S. Census Bureau, *Current Population Survey* (CPS) (2000).

The rates are very low for young people and increase sharply to age 25 when they level off; at age 55 they start declining sharply and continue to do so as age increases. Therefore, the labor force participation rate for the population will depend on the share of the working-age population in each of the three age groups.

As shown in Table 1, the share of the population 55 and older was relatively stable between 1980 and 2000, but beginning in 2000 began to increase sharply. The Bureau of Labor Statistics projects that the share of the 55-and-older population will continue to increase until 2020.<sup>5</sup> The reason for the increase is that, in 2000, baby boomers were age 36-54 and were entirely in the prime-age group. Every year after 2000, a portion of the baby boom generation moved from the prime-age group to the 55-and-older category. By 2020, this transition will be complete, and the entire cohort – then age 56-74 – will be 55 and older. At that point, this older group will account for 37 percent of the civilian non-institutional population – a fraction that remains relatively constant thereafter.<sup>6</sup>

TABLE 1. SHARE OF THE POPULATION AGE 16 AND OLDER BY AGE, 1980-2020

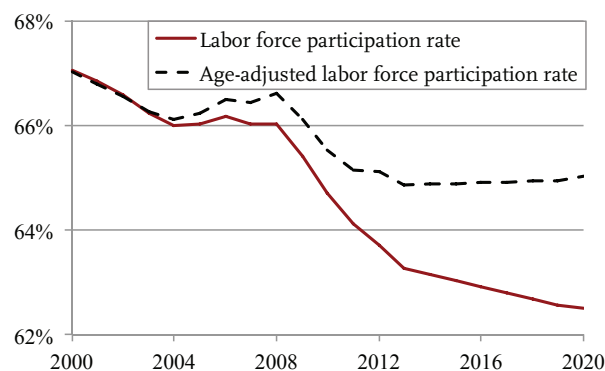
Age	1980	1990	2000	2010	2020
16-24	22.2%	17.1%	16.1%	16.0%	14.5%
25-54	50.5	55.9	56.8	52.7	48.9
55 and older	27.3	26.4	27.1	31.4	36.6
Total 16 and older	100.0	100.0	100.0	100.0	100.0

Sources: Fullerton and Toossi (2001); and Toossi (2012a).

The movement of the baby boom generation into an age range where the average labor force participation rate is less than half of the participation rate of prime-age individuals contributes significantly to the decline in the overall labor force participation rate over the period 2000-2020. Figure 2 on the next page shows, through 2020, the actual and projected participation rates and the participation rates if the age distribution of the population had remained unchanged from 2000.

The exercise in Figure 2 does not simply assume a constant labor force participation rate of those 55 and older. This rate increased substantially between 1990 and 2010 and is projected to continue to increase through 2020, when it is scheduled to reach 43 percent

FIGURE 2. ACTUAL AND AGE-ADJUSTED LABOR FORCE PARTICIPATION RATES, 2000-2020



Note: The calculations were based on the following nine age categories: 16-19, 20-24, 25-34, 35-44, 45-54, 55-64, 65-69, 70-74, and 75+.

Sources: 2000-2013 CPS; and Toossi (2012a).

(see Table 2). This increase is attributed to many factors: the rise in Social Security’s Delayed Retirement Credit (which increases benefits for those who retire later), the movement away from traditional defined benefit plans with their early retirement incentives to 401(k) plans, a better educated workforce with less physically demanding jobs, and the desire in the face of rising health care costs to maintain employer health coverage until reaching Medicare eligibility at 65.<sup>7</sup> Without this continued gradual increase, the impact of the aging of the population would be even greater.

TABLE 2. LABOR FORCE PARTICIPATION RATES FOR POPULATION AGE 16 AND OLDER BY AGE, 1980-2020

Age	1980	1990	2000	2010	2020
16-24	68.1%	67.3%	65.4%	55.2%	48.2%
25-54	78.6	83.5	84.0	82.2	81.3
55 and older	32.8	30.1	32.4	40.2	43.0
Total 16 and older	63.8	66.5	67.1	64.7	62.5

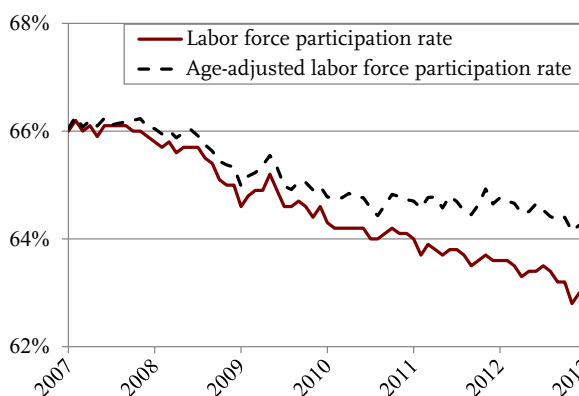
Sources: Fullerton and Toossi (2001); and Toossi (2012a).

## Demographics and Cyclical Factors

The previous discussion reported on the long-run impact of population aging on the labor force participation rate. The business cycle also plays a role.

Between the peak of the business cycle in December 2007 and December 2013, the labor force participation rate (seasonally adjusted) for those 16 and older declined from 66.0 percent to 62.8 percent (see Figure 3). The commentary surrounding the monthly employment report often equates the decline in labor force participation to discouraged workers withdrawing from the labor force. Indeed, a large number of workers are discouraged and have withdrawn. But that is not the whole story. As shown in Figure 3, which presents an age-adjusted labor force participation rate, more than 40 percent of the decline reflects the aging of the population.

FIGURE 3. ACTUAL AND AGE-ADJUSTED MONTHLY LABOR FORCE PARTICIPATION RATES, 2007-2013

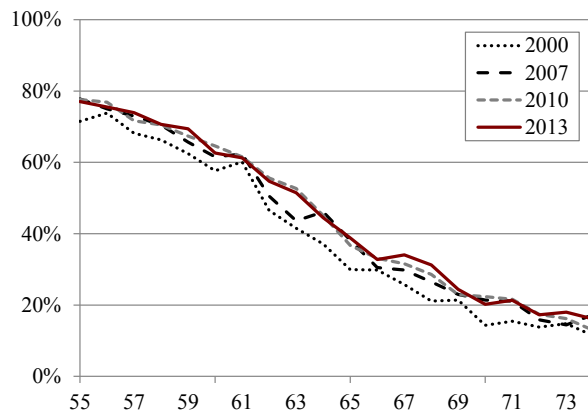


Source: 2007-2013 CPS.

Some have asserted that the decline in labor force participation in recent years reflects an increase in the retirement rates of older workers, perhaps due to the improvement of the stock market.<sup>8</sup> Figure 4 on the next page shows the actual labor force participation rate by age for the years 2000, 2007, 2010, and 2013. At older ages, labor force participation does not appear to have declined at all since 2007. If anything, the labor force participation rate for those 55 and older in 2013 is slightly higher than in either 2007 or 2010. Older workers are not retiring at an increasing rate. The decline in labor force participation, instead, has occurred at much younger ages.

Finally, the aging of the population also has an impact on the unemployment rate, but the effect on the workforce is beneficial – that is, unemployment would have been higher without the aging of the workforce – and much smaller than the effect on labor force participation.<sup>9</sup> For example, in Decem-

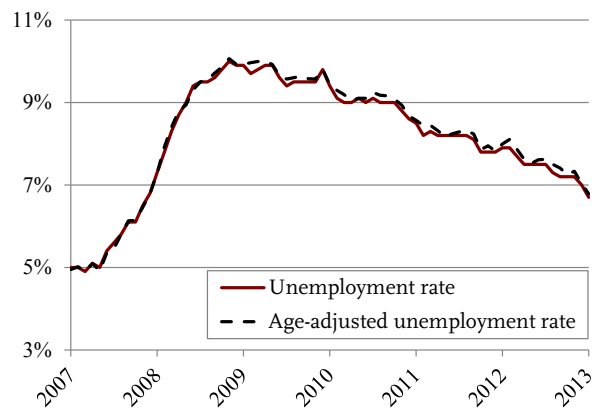
FIGURE 4. LABOR FORCE PARTICIPATION RATES FOR THOSE AGE 55-74, 2000, 2007, 2010, AND 2013



Source: 2000, 2007, 2010, and 2013 CPS.

ber 2013 the unemployment rates were 13.5 percent for those 16-24; 5.8 percent for prime age; and 5.1 percent for those 55 and older. If the age distribution of the labor force had remained at its December 2007 level, the unemployment rate in December 2013 would have been 6.8 percent instead of 6.7 percent (see Figure 5).

FIGURE 5. ACTUAL AND AGE-ADJUSTED MONTHLY UNEMPLOYMENT RATE, 2007-2013



Source: 2000-2013 CPS.

## Conclusion

The bottom line is that the United States is in the process of a dramatic demographic change – the rapid aging of the population – and that change has implications for the participation and unemployment figures that we see every month. It is important to keep in mind that, regardless of general economic factors, we should expect to see labor force participation continue to decline for the remainder of this decade due to the retiring of baby boomers.

## Endnotes

1 Perry (1970); Summers (1986). In recent years, analysts have considered a number of other factors that could affect the natural rate. In terms of the composition of the labor force, these are the increased rate of incarceration, increased disability rolls, and changes in levels of education. In terms of changes in the operation of labor markets, these include the increased use of the temporary help industry, Internet job searches, declining job stability, and job mismatch created by the increased pace of technological change. See Congressional Budget Office (2002).

2 Katz and Krueger (1999); Horn and Heap (1999); and Shimer (1998).

3 Other researchers who have looked at the impact of demographics on labor force participation include Hotchkiss (2009); Shimer (1998); and Goldman Sachs (2013). Kapon and Tracy (2014) examine the impact of demographics on the employment rate.

4 The year 2000 was close to the business cycle peak that occurred in March 2001. The economy reached a trough in November 2001. The economy reached its next peak in December 2007 and trough in June 2009. See National Bureau of Economic Research Business Cycle Dating Committee (2014).

5 See Toossi (2012a).

6 See Toossi (2012b).

7 Munnell (2011).

8 See Fujita (2013).

9 Valetta and Hodges (2005) also examined the impact of an aging population on the unemployment rate.

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