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Effect of Aging on Labor Force Participation Rates in the Mountain States

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Labor force participation rates have fallen sharply since the recession started in late 2007. In the United States, participation rates among individuals age 16 and older declined from 66 percent in December 2007 to 62.8 percent in December 2013. The Mountain States have experienced even larger declines in participation during this time with rates falling 5.7 percentage points in Colorado, 5.5 percentage points in New Mexico and 4.5 percentage points in Wyoming. This issue of *The Rocky Mountain Economist* examines the decline in labor force participation across age cohorts in recent years and estimates how much of the recent decline is due to an aging population.

LABOR FORCE PARTICIPATION RATES IN THE MOUNTAIN STATES

The labor force participation rate is a common metric that provides insight into unemployment and labor force trends. Specifically, the labor force participation rate shows the percent of the civilian noninstitutionalized population age 16 and older in the labor force, including

both employed and unemployed individuals. This statistic was first recorded for the United States in January 1948 at 58.6 percent and remained relatively flat over the next 15 years. In 1962, the participation rate began steadily increasing, a climb that lasted almost 40 years to a peak in early 2000 at 67.3 percent. The primary contributor to this growth was a steady increase in the number of women entering the labor force. After reaching its peak, the labor force participation rate decreased to about 66 percent following the 2001 recession, where it remained until



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the start of the Great Recession at the end of 2007. As the recent financial crisis and recession took hold, the U.S. labor force participation rate began a steady decline, falling from 66 percent in December 2007 to 62.8 percent in December 2013—its lowest level since March 1978.¹ Chart 1 shows the evolution of the labor force participation rate over the past 10 years for the United States, Colorado, New Mexico and Wyoming.

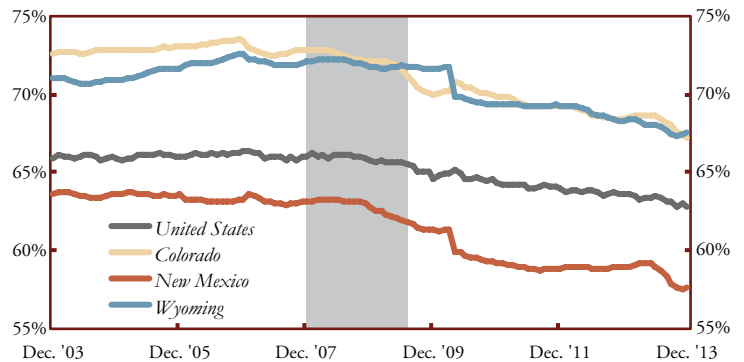
Colorado, New Mexico and Wyoming experienced similar trends to that of the nation over the past 10 years. Labor force participation rates remained fairly steady in the Mountain States in the years leading to the recent recession, with rates increasing slightly in Colorado and Wyoming and declining slightly in New Mexico. Like the nation, all three states experienced significant declines in labor force participation rates since the recession started in December 2007. New Mexico's participation rate reached its record low in November 2013 at 57.5 percent and increased slightly to 57.6 percent moving into December.² In December 2013, the labor force participation rate was 67.2 percent in Colorado, the same level as September 1976, and was 67.6 percent in Wyoming, the same level as July 1977. Between December 2007 and December of 2013, labor force participation rates for Colorado, New Mexico and Wyoming declined by 5.7, 5.5 and 4.5 percentage points, respectively.

RECENT CHANGES IN LABOR FORCE PARTICIPATION BY AGE COHORT

Although the overall labor force participation rates for Colorado, New Mexico, Wyoming and the United States have decreased, changes in participation have varied across age cohorts during the past five years. Chart 2 shows the average annual labor force participation rate by age group for the United States and the Mountain States in 2007 and 2012, and therefore reflects changes in participation since the recent recession started.

CHART 1

Labor Force Participation Rates



Source: Bureau of Labor Statistics/Haver Analytics.
Note: Gray bar indicates recession.

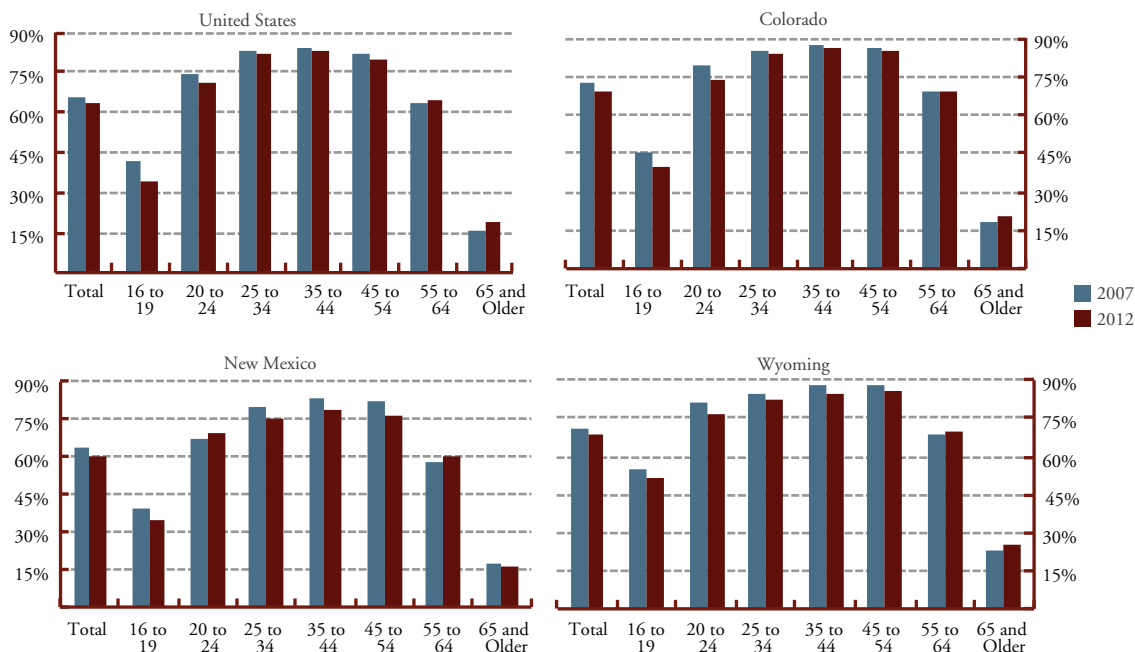
Chart 2 shows a similar pattern across the Mountain States and the United States. Labor force participation rates declined for most age cohorts between 2007 and 2012, with larger drops among younger people. Over the same period, older age cohorts increased participation. These shifts represent a combination of both long- and short-term trends. Over the long term, younger workers' participation rates have decreased as an increasing percentage pursues additional years of education, delaying entry into the labor force. Furthermore, advances in healthcare and life expectancy have allowed older populations to work longer in life, putting upward pressure on their labor force participation rates.

During economic downturns, there are also short-term, or cyclical, effects that further reinforce these long-term labor force participation trends. One measure of the cyclical effects of the recent recession on labor force participation can be seen at the national level in Chart 3, which shows the increase of marginally attached and discouraged workers, both of which are not included in the labor force. Marginally attached workers are those who want to work and have looked for a job within the past 12 months but had not searched for a job within the past four weeks. Discouraged workers, a subset of marginally



CHART 2

Labor Force Participation Rates by Age Cohort



Source: Bureau of Labor Statistics/Haver Analytics.

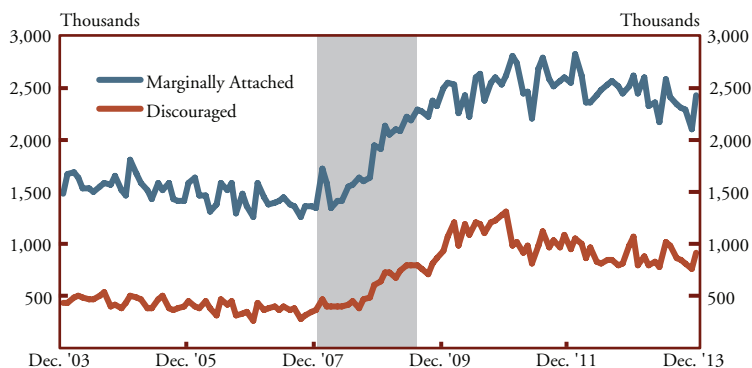
attached workers, are those who have not looked for work within the past four weeks because they do not think any jobs are available for which they would qualify.³ Chart 3 shows the cyclical effects of the recent recession have led to an increased number of discouraged workers, which has reduced the labor force participation rate.

The severity of the recent recession led to an increase in discouraged and marginally attached workers for all age groups over the past five years, including middle-aged cohorts. Before the recession started, participation rates among middle-aged cohorts had been fairly stable, indicating the decline in participation over the last five years was likely caused primarily by cyclical effects from the recession for these cohorts.

Younger and older cohorts were affected by additional short-term effects. Economic downturns frequently reduce the number of job opportunities,

CHART 3

Number of Marginally Attached and Discouraged Workers in the United States



Source: Bureau of Labor Statistics/Haver Analytics.

Note: Gray bar indicates recession.



especially for lower-skilled and less-experienced individuals. Many younger individuals may choose to postpone employment and return to school to increase their skills, lowering the labor force participation rate among younger cohorts during downturns. In addition, younger cohorts typically face higher unemployment during downturns, which may lead some to give up looking for employment—in effect, dropping out of the labor force and putting additional downward pressure on participation rates. Older generations, on the other hand, may experience a decline in retirement assets during a recession, forcing them to stay in the labor force longer to rebuild savings.

Cyclical effects had a significant effect on participation rates during the recent recession, but they explain just part of the overall decrease in labor force participation rates. The next section discusses how the aging of the population also explains part of the decrease in overall labor force participation rates for Colorado, New Mexico, Wyoming and the United States since 2007.

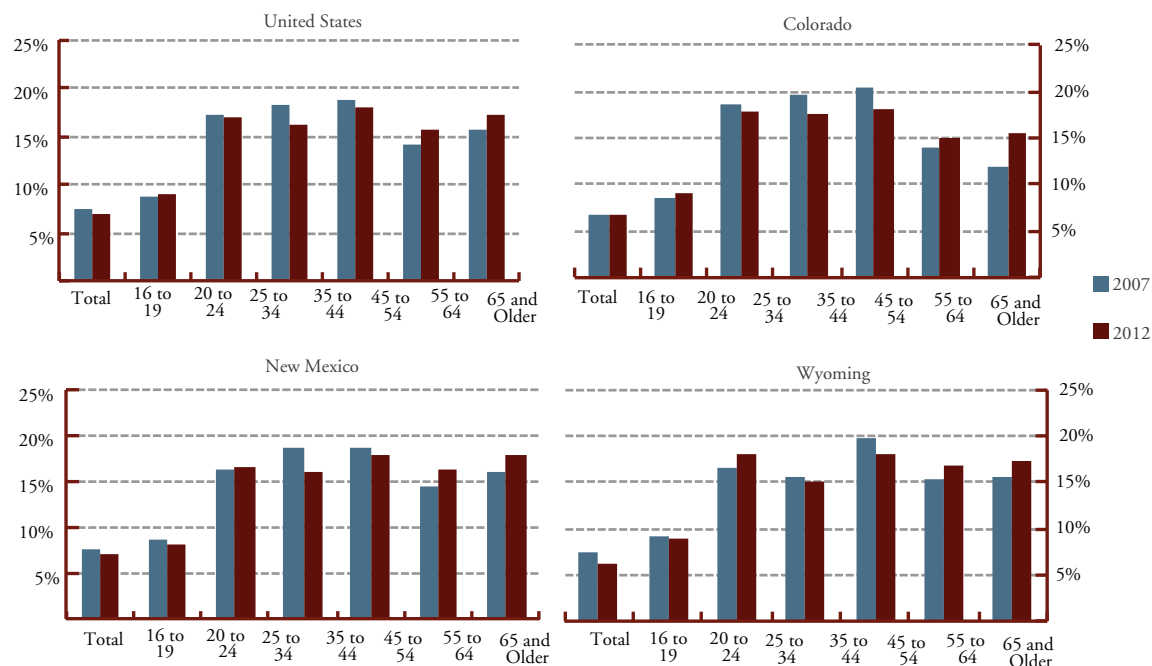
EFFECT OF AN AGING POPULATION ON LABOR FORCE PARTICIPATION

As baby boomers continue to move into retirement, the population distribution of the United States is shifting toward older age cohorts. Members of the baby-boom generation were born between about 1946 and 1964, which indicates older members are currently 68, and younger members are only 50. Chart 4 shows that between 2007 and 2012 a higher percentage of the population moved into the age cohorts including individuals 55 and older. And, as the younger baby boomers age, the population distribution will continue to shift more toward the 65 and older group for about the next 15 years.

Individuals 65 and older have the lowest labor force participation rate compared to other age cohorts (Chart 2). Therefore, as the population ages, this will put downward pressure on the overall labor force participation rate. It is possible to estimate the effect aging alone has had on lowering the participation rate between 2007 and 2012.

CHART 4

Percent of Total Population 16 and Older by Age Cohort



Source: Bureau of Labor Statistics/Haver Analytics.



Table 1 shows actual as well as estimated labor force participation rates for the United States, Colorado, New Mexico and Wyoming. The estimated 2012 labor force participation rate is the rate that would have been experienced in 2012 if the labor force participation rates had stayed constant at 2007 levels for each age cohort at the same time the population aged. To calculate the estimated rate, the 2007 labor force participation rate for each age cohort is multiplied by that age cohort's population share in 2012.

In the United States, the labor force participation rate was 66 percent in 2007. By 2012, this rate had fallen to 63.7 percent due to aging, an exiting of the labor force by discouraged workers and other factors. If labor force participation rates had remained at 2007 levels for each age cohort, the labor force participation rate would have fallen to 64.8 percent due to an aging population alone. This suggests that for the United States, aging alone explained approximately 53.7 percent of the total change in the labor force participation rate from 2007 to 2012, as shown in the last row of Table 1.

TABLE 1
Effect of Aging on Labor Force Participation Rates (LFPRs) 2007 to 2012

	Labor Force Participation Rates			
	U.S.	CO	NM	WY
Actual 2007 LFPR	66.0%	72.3%	63.3%	71.1%
Actual 2012 LFPR	63.7%	68.6%	59.7%	69.1%
Estimated 2012 LFPR Holding LFPRs constant at 2007 levels	64.8%	69.7%	61.9%	70.6%
Percent of Decline in LFPR Explained by Aging	53.7%	71.2%	39.0%	25.0%

Source: Authors' calculations using data from the Bureau of Labor Statistics/Haver Analytics.

Similar calculations can be made for Colorado, New Mexico and Wyoming. In Colorado, the actual labor force participation rate fell from 72.3 percent in 2007 to 68.6 percent in 2012. Holding labor force participation rates constant at 2007 levels suggests the labor force participation rate would have fallen to 69.7 percent by

2012 due to an aging population alone. This suggests 71.2 percent of the decline in the participation rate in Colorado can be explained by aging—the highest amount of any of the areas shown. Chart 4 shows it is evident Colorado experienced a large increase in its 65-and-older population, as well as a decline in middle-aged cohorts. The middle-aged cohorts had the highest labor force participation rates compared to the other age cohorts, and participation for this group remained relatively constant from 2007 to 2012. Thus, as the population aged and more individuals moved into the older cohorts, labor force participation rates fell. This coincides with Table 1, which indicates the drop in Colorado's total labor force participation rate was due primarily to aging and, to a lesser extent, a decrease in the participation rates within individual age cohorts.

In New Mexico, the actual labor force participation rate fell from 63.3 percent in 2007 to 59.7 percent in 2012. Holding labor force participation rates constant at 2007 levels suggests the labor force participation rate would have fallen to 61.9 percent by 2012 due to an aging population alone. Comparing the actual 2012 participation rate to the estimated rate indicates only 39 percent of the decline in New Mexico's participation rate can be explained by aging. Wyoming's actual labor force participation rate fell from 71.1 percent in 2007 to 69.1 percent in 2012. Holding labor force participation rates constant at 2007 levels suggests the participation rate would have fallen to 70.6 percent and that aging explained only 25 percent of the decline in participation over the last five years for Wyoming. New Mexico and Wyoming each experienced similar aging trends as Colorado, but not to the same degree. Chart 2 shows New Mexico and Wyoming experienced larger declines in participation within many of the age cohorts, especially the middle-aged groups, which were the primary drivers of their respective decreases in total labor force participation rates.

The analysis suggests a significant portion of the decline in labor force participation rates between 2007 and



2012 was due to aging in Colorado, New Mexico, Wyoming and the nation. At the same time, much of the decline can also be attributed to a decline in participation rates among prime-age workers, suggesting many individuals exited the labor force after becoming discouraged about finding a job. Some individuals who dropped out of the labor force for cyclical reasons during the recession may re-enter the labor force as the economy continues to recover. This will put upward pressure on the participation rate, and may also put upward pressure on the unemployment rate as individuals search for work again. However, older individuals are less likely to re-enter the labor force, and many workers in the baby-boom generation will continue to retire over the next several years. This suggests labor force participation rates overall may remain below pre-recession levels in the years to come as the population share of these older individuals continues to increase.

ENDNOTES

¹U.S. and state-level labor force participation rate definitions and data are available from the Bureau of Labor Statistics.

²State-level labor force participation rates were first collected in January 1976.

³Bureau of Labor Statistics.

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