Is it Time for a Raise?

Understanding Wage Growth since the Great Recession

by Amy Watson, Senior Economist

The Montana economy has been steadily expanding for several years.

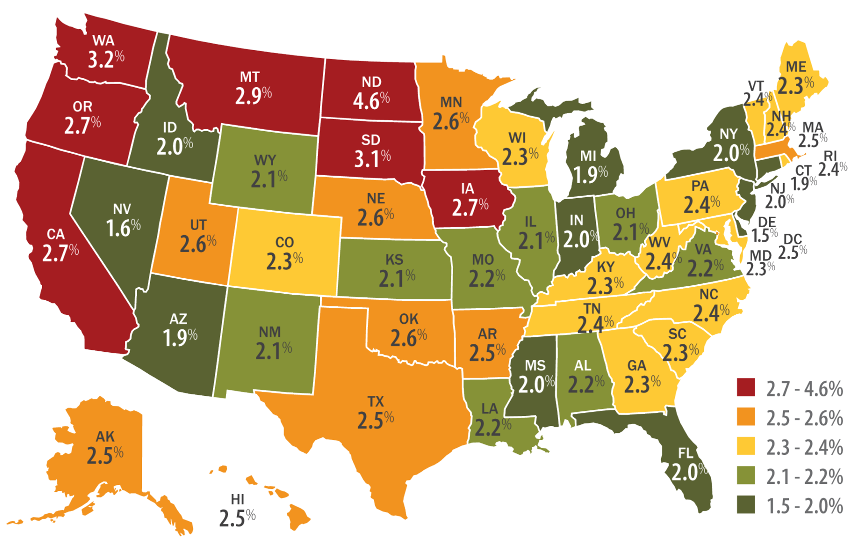
The state unemployment rate has hovered around 4% since late 2016, which is well below the long-run average. Economic growth has driven employment levels above 500,000 in Montana for the first time ever. However, employers in Montana and throughout the country are having a difficult time finding workers. As the labor market tightens, economic theory suggests employers will raise wages to compete for a limited supply of workers. However, real wage gains have been anemic during the nation's economic expansion, leaving many economists scratching their heads. Some economists point to sluggish growth in labor productivity, others to demographic changes, and some still to foreign competition and globalization.[1] As with many things in economics, there isn't one simple answer. This article explores several possible explanations for slower wage growth nationally and provides possible reasons for the relatively faster wage growth in Montana.

Tighter labor markets have led to faster wage growth for Montana

Wages in the US have grown by an average of 2.2% per year since the Great Recession ended in 2010, which is lower than projected given the growing economy and tight labor market.[2] However, Montana wages have been growing faster than the national average. In fact, Montana has experienced the 4th fastest wage growth among states through the recession and recovery.[3] **Figure 1** shows a map of the average wage growth by state from 2006 to 2016.

FIGURE 1

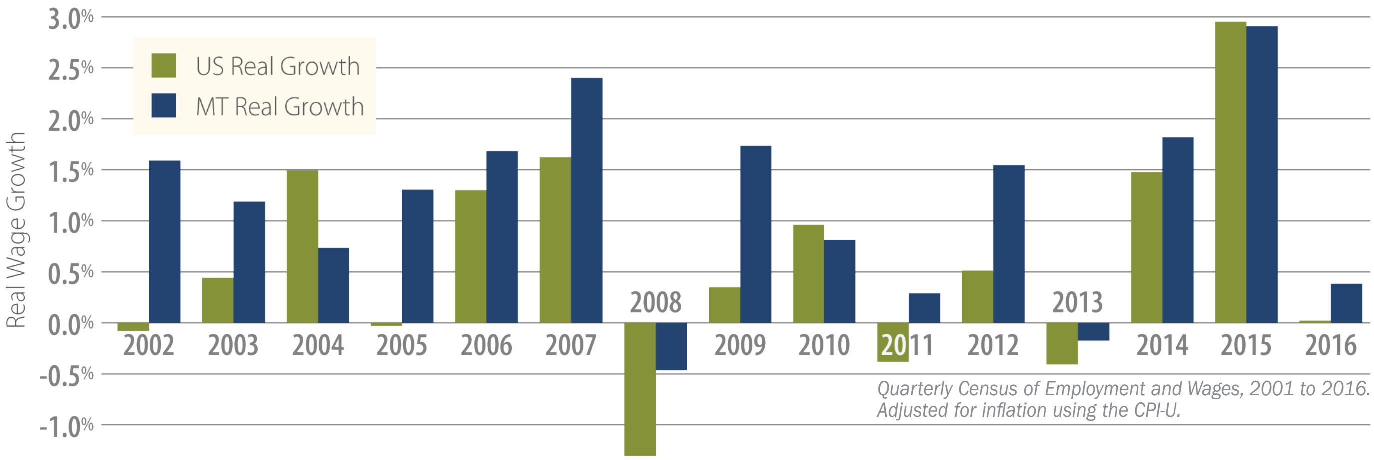
Nominal Annual Wage Growth by State, 2006 to 2010



Quarterly Census of Employment and Wages 2001 to 2016 adjusted for inflation using the CPI-U.

FIGURE 2

Real Wage Growth in Montana and the U.S. from 2002 to 2016



Montana's labor market has been tighter than the national average for a couple years. Montana's economy hit 4% unemployment in October 2016, much sooner than the US economy, which reached 4% in April 2018. A tighter labor market in Montana resulted in faster wage growth than the nation, as employers competed for a limited supply of workers.

While Montanans' wages grew by almost 3% annually from 2006 to 2016, the cost of goods and services also rose during that time. Fortunately, wage growth has outpaced inflation, resulting in an increase in the standard of living for most Montanans. Wage growth in Montana has averaged 1.1% annually since 2010 after adjusting for inflation, which is above the national average. **Figure 2** shows the growth in real wages (wages adjusted for inflation) from 2006 to 2016 in Montana and the US.

Despite faster wage growth compared to the nation, Montana's wages have grown slower than in the past. In the six years prior to the Great Recession Montanans experienced 1.5% real wage growth on average per year. Since the Great Recession, real wages have grown by 1.1%. Part of the faster wage growth in the pre-recession period was due to very tight labor markets. In addition, economic theory suggests wage growth reflects labor productivity gains. Labor productivity in Montana, as measured by GDP per work hour, has been relatively flat since 2010.[4] As Montana's labor market continues to tighten, businesses will have to look for ways to improve labor productivity, so they can continue to grow. Increasing productivity doesn't just mean asking employees to work harder. Productivity gains often result from increased mechanization or automation, quick adoption of new technologies and techniques, and investing in worker training and development.

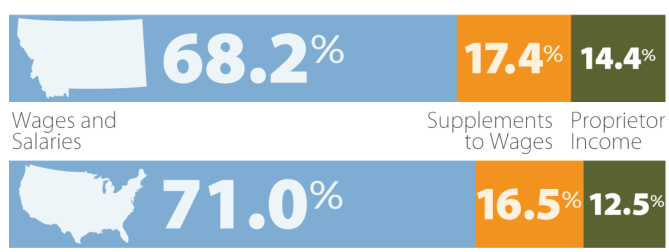
Growth in non-wage income helps compensate for sluggish wage growth

Montanans earn income through a variety of different avenues. To understand whether Montanans have seen an increase in earnings since the Great Recession, it is important to consider all forms of income. Since the Great Recession, Montanans' income has improved through increases in wages, health benefits, retirement contributions, and business income.

Montanans earn a larger portion of their income from non-wage sources than most Americans. **Figure 3** shows the breakout of earned income in Montana compared to the U.S.

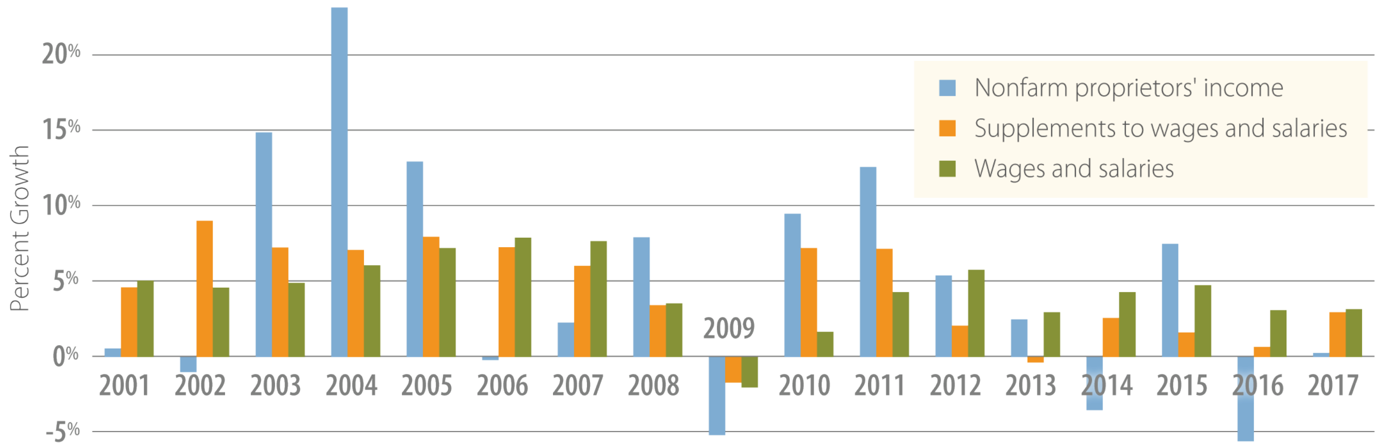
FIGURE 3

Earned Income by Type, 2016



Source: MT Labor Day Report 2017, Montana Department of Labor& Industry.

FIGURE 4
Personal Income Growth in Montana by Component



Source: BEA Personal Income by Component.

Supplements to wages include things like health insurance and retirement benefits. Proprietor income includes income from business ownership. In Montana, total personal income has grown faster than wages since the Great Recession. Since 2010, real personal income has grown by 1.9% annually, which is 0.8% faster than wages.

In the years immediately following the Great Recession, wage growth was sluggish, but supplemental and proprietor income growth compensated for the lack-luster wage growth. **Figure 4** shows the growth in personal income by component. Since 2012, wages have provided the most consistent form of income growth in Montana – outpacing supplemental income growth in the last five years.

Demographic changes dampen Montana wage growth

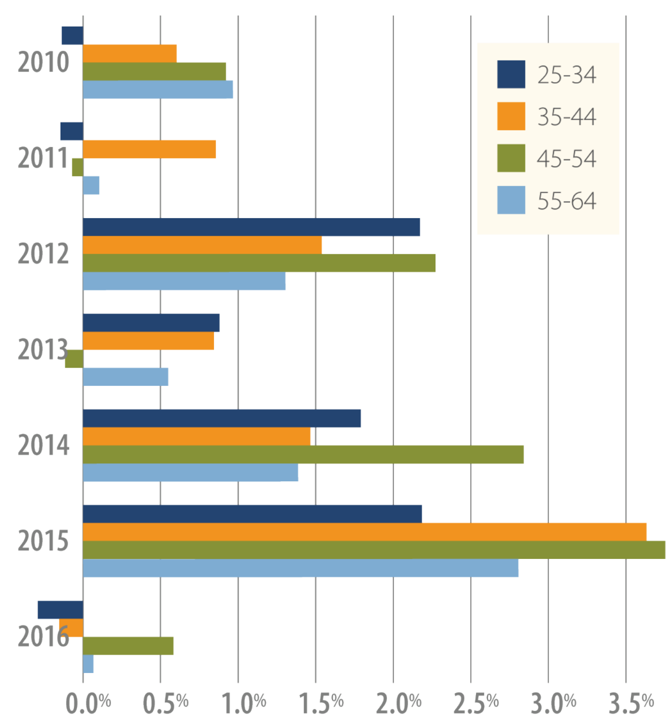
The workforce in Montana, like much of the nation, is aging. Montana's workforce aged 16 to 24 is expected to grow by 130 people per year through 2026, while the labor force over 55 is growing by almost 4,000 people per year.[5] The labor force participation rate of workers over 55 has increased over the last six years ending in 2016, resulting in an increase in the average age of the Montana workforce.

In general, younger workers tend to have faster wage growth than workers over 55, as shown in **Figure 5**. Montanans between the ages of 35 and 54, have experienced the fastest real wage growth since 2010.

Real wages for workers aged 35 to 44, and 45 to 54 have grown by 1.4% and 1.5% respectively, which is higher than the statewide average of 1.1%. By comparison, workers aged 55 and older have seen their wages grow by 1.0% per year since 2010.

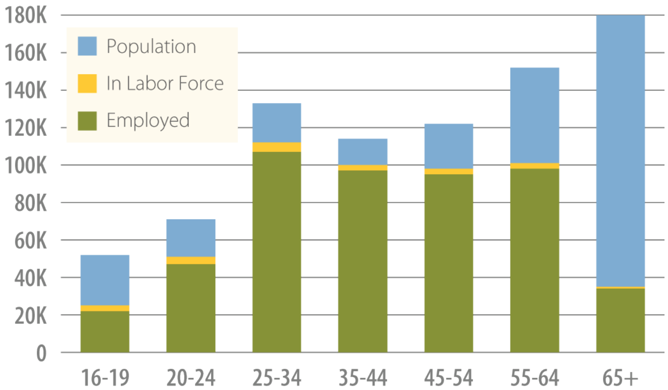
As more and more of Montana's older workers retire and exit the workforce, they are replaced by younger workers with less experience who are paid less. The average wage of workers aged 25 to 34 was $35,754 in 2016, compared to $48,500 for those aged 55 to 64.[6]

FIGURE 5
Montana Real Wage Growth by Age



Source: QWI Explorer

FIGURE 6
Montana Workforce by Age



Source: MT Labor Day Report 2017, Montana Department of Labor & Industry

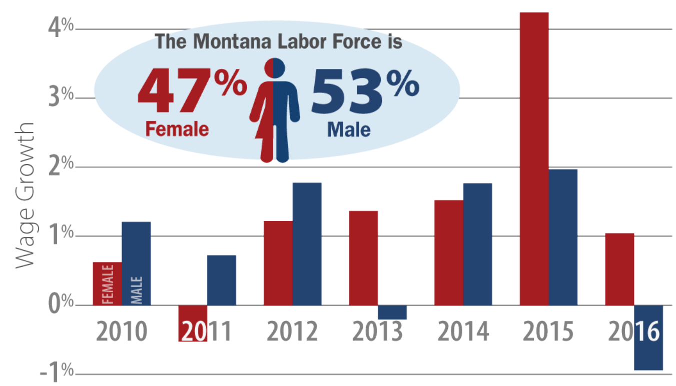
This replacement of high-wage earners with younger lower-paid workers brings down the average wage and dampens wage growth. Over 100,000 people employed in Montana are between the ages of 25 and 34, making this age category the largest. **Figure 6** shows the Montana workforce by age. Slower average wage growth doesn't necessarily reflect a slowdown in the growth of Montanans' paychecks, but instead represents the replacement of high-wage older earners with lower-wage younger earners in the state's workforce.

Female wage growth has outpaced statewide average

On average, women's real wages have risen by 1.9% since 2010 compared to 0.9% for men. **Figure 7** shows the growth in real wages in Montana by gender since 2010. Despite faster wage growth, the gender wage gap still exists. Females in Montana earned $33,400 in 2016 compared to $50,500 for men.[7]

As labor markets continue to tighten and employers look to recruit workers, many employers have focused on attracting family caregivers into the workforce through higher wages, flexible scheduling, and other family-friendly policies. Women currently make up less than half of the Montana workforce, and have lower labor force participation rates. However, the labor force participation rates for women with children under six years old rose slightly from 2011 to 2016, perhaps because of changes in recruitment practices among businesses.[8]

FIGURE 7
Montana Real Wage Growth by Gender



Source: QWI Explorer.

Conclusion

The U.S. and Montana have experienced one of the longest periods of economic expansion in the years following the Great Recession, yet wage growth has been below expectations. Slower wage growth nationally has been attributed to demographic changes, sluggish labor productivity, and foreign competition and globalization. In Montana, wage growth has been faster than the nation due to tighter labor markets and stronger employment growth. Montana's real wages have grown by 1.1% per year since 2010, meaning Montanans' standard of living has improved.

While wage growth may have been below expectations given the state's tight labor market, Montanans' earnings have grown in other ways. Non-wage compensation, including benefits and business income, has grown in years when wage growth was slower. As more of Montana's workforce retires and the labor market continues to tighten, wages should continue to grow as employers compete for an increasingly limited supply of available workers.

Sources

1 *www.wsj.com/articles/powerful-forces-seen-restraining-u-s-pay-growth-1523542097*

2 *www.clevelandfed.org/newsroom-and-events/publications/economic-commentary/2017-economic-commentaries/ec-201704-wage-growth-after-great-recession.aspx*

3 *2017 Labor Day Report.*

4 *Labor productivity calculated using BLS data on hours worked and GDP by state produced by the BEA.*

5 *Population Projections, U.S. Census.*

6 *2016 QCEW data downloaded from the QWI explorer.*

7 *QCEW data downloaded from the QWI Explorer.*

8 *5-year ACS data.*