

Introduction

This edition of Kevin's Corner uses data from the Current Employment Statistics (CES) program to review seasonal variations in Vermont employment by industry.

Sources

Current Employment Statistics is a program of the Labor Market Information Division in cooperation with our federal partners at the United States Bureau of Labor Statistics. CES provides monthly estimates of payroll employment for Vermont and the Burlington – South Burlington Metropolitan NECTA by industry.

Data from Current Employment Statistics program is published in both seasonally-adjusted and not-seasonally-adjusted figures. This publication relies on data from the not-seasonally-adjusted series. 2020 is excluded from the analysis because the COVID-19 pandemic led to significant changes in employment patterns. Those changes are likely temporary and the size of employment changes dwarf typical seasonal patterns.

Of note for this analysis: Monthly employment counts are based on the week that contains the 12th day of each month.

Seasonality in Total Nonfarm Employment.

The highest average monthly level of Vermont employment (total nonfarm) is in December. Average monthly December employment between 1991 and 2019 stood at 302,400 with a maximum of 323,100 in December of 2017 and a minimum of 254,300 in December of 1991. December recorded the highest total nonfarm employment each year except 1991, 1992, 1993 and 2008.

The lowest monthly average employment was found in July (288,800). In the 29 years under consideration July was the lowest in all but eight years. Other months that recorded the lowest level of

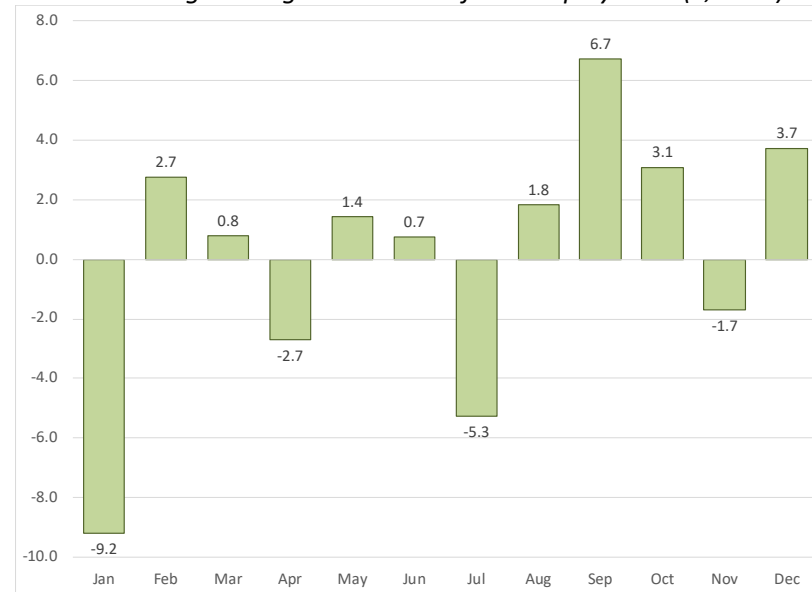
total nonfarm employment include January (1992, 1993, 1994, 1997, 1998, 1999, 2018) and April (1991).

Monthly changes

On average the largest monthly employment gains each year occurred in September. During that month the Vermont economy added an average of 6,700 jobs (2.3%). The largest September gain was +9,000 in 2006 followed by +8,900 in 2004 and +8,700 in 2008. Other months with large average employment gains include December (+3,700 or +1.2%) and October (+3,100 or +1.0%).

The largest average monthly employment losses each year occurred in January (-9,200 or -3.1%) followed by July (-5,300 or -1.8%) and April (-2,700 or -0.9%). The largest single-month loss between 1991 and 2019 was 12,700 jobs in January of 2018. See table 1 below.

Table 1: Average Change in Total Nonfarm Employment (1,000's)



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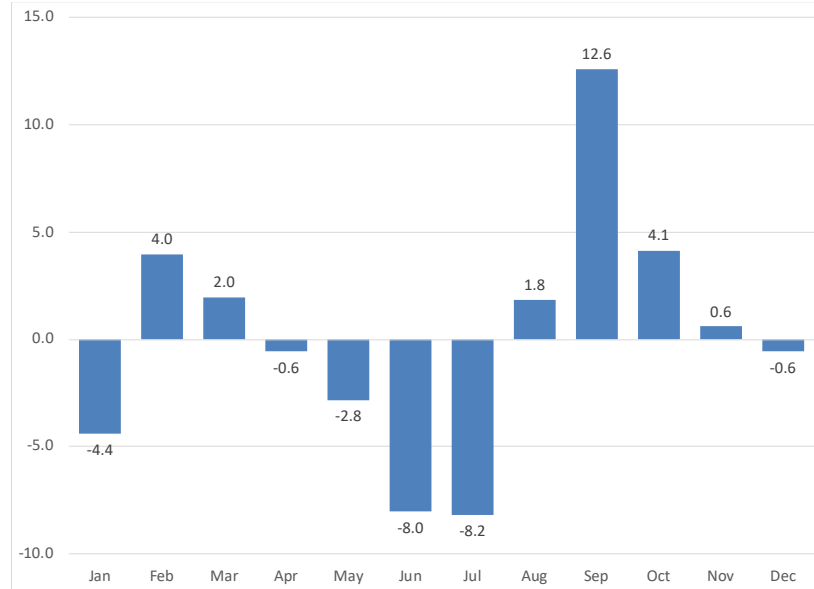
Kevin's Corner: Seasonal Variations in Employment

These monthly changes were of course driven by changes at the industry level. December increases, for example, were typically driven by increases in Retail Trade and Accommodation & Food Service. Below we review industries with significant seasonal variations.

Education

Education is defined here as the sum of four separate series: Colleges, Universities & Professional Schools; Private Educational Services; Local Government Educational Services; and State Government Educational Services. In 2019 the four series were responsible for 54,000 jobs, 17.1% of statewide total nonfarm employment.

Table 2: Average Change in Education Employment (1,000's)



Seasonal variations in Education employment are the single largest driver of seasonal employment changes. The changes are most

pronounced in summer months; the series averages a loss of 8,000 jobs in June and 8,200 in July. Due to the nature of the school calendar, the reported declines in June and July should be viewed primarily as a single event – the end of the school year. In some years that event is captured primarily in June data while in other years it is captured in the July data.

August sees an increase of 1,800 and September adds an additional 12,600. The September increase is equivalent to 34.3% of August Education employment each year and accounts for 188.1% of the average increase in total nonfarm employment for that month each year. Changes to Education employment in January and February are also large but not quite as pronounced: January averages a loss of 4,400 jobs and February averages a gain of approximately 4,000. See table 2 above.

Accommodation & Food Services

The industry with the next most significant impact on seasonal employment variations is Accommodation & Food Services. With average 2019 employment of 32,700 this industry is responsible for approximately 10.3% of all employment in the state.

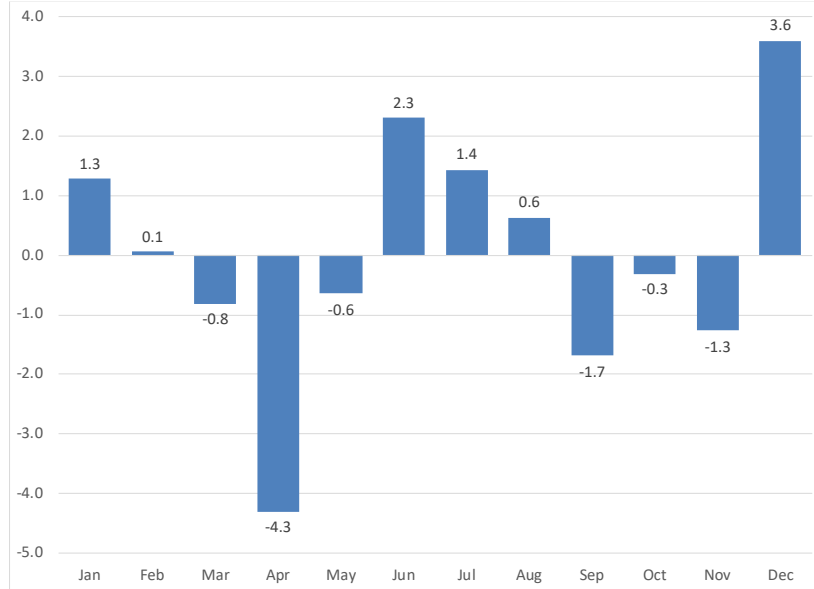
The highest employment levels for Accommodation & Food Services typically come during January and February of each year, the heart of ski season. December averages a gain of 3,600 (+13.3%) jobs each year followed by 1,300 in January. One interesting note about this series: Despite the deep recession that started in December, 2007 employment increases grew from 2,800 in December of 2006 to 4,700 in both December 2010 and December 2011.

March and April experience average declines of 800 (-2.5%) and 4,300 (-13.8%) respectively. In fact, neither month has ever shown job growth in the history of the series. The summer months – June, July and August - combine to add an average of 4,400 jobs. Despite the popularity of leaf-peeping season each fall, September through

Kevin's Corner: Seasonal Variations in Employment

November shows steep employment declines. September averages a loss of 1,700 and November, 1,300. October averages a more modest loss of 300 with six of the twenty-nine years in this series showing October growth. See table 3 below.

Table 3: Average Change in Accommodation & Food Services Employment (1,000's)



One final note on this series: The Accommodation portion of Accommodation & Food Services constitutes about 37% of employment in the series. However, it is responsible for a much larger share of the seasonal volatility. For example while the combined series averages a loss of 13.8% of employment each April, Accommodation loses 30.0%. In December while the combined series increases by 13.3% Accommodation increases by 33.7%. On average the monthly change in Accommodation is 87.1% of the change in the series as a whole.

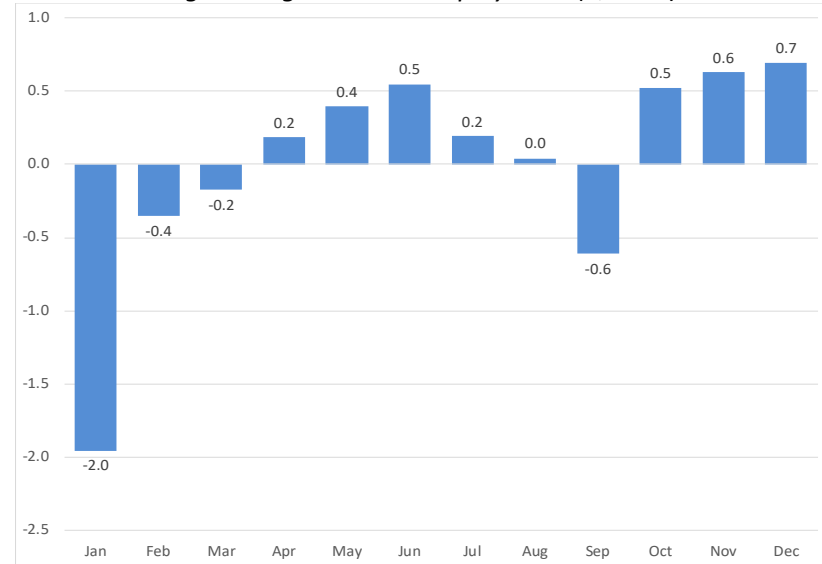
Retail Trade

Retail employment has generally been on the decline since averaging just over 40,000 between 2004 and 2008. By 2019 average monthly employment fell to 36,700.

On an annual basis the highest level of employment in Retail Trade each year occurs during the buildup to the December holiday season. September retail employment averaged 37,400 over the period from 1991 to 2019. By November the average increased to 38,600. Gains the final three months of each year combined to average 1,800.

The end of the holiday shopping season leads to a steep decline in retail employment. January losses average 2,000 over the period. February and March continue the downward trend with average losses of 400 and 200 respectively. The arrival of summer leads to modest gains. On average employment increased 1,300 between April and July of each year. See table 4 below.

Table 4: Average Change in Retail Employment (1,000's)



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Kevin's Corner: Seasonal Variations in Employment

Construction

The final industry we review is Construction. In 2019 employment in construction averaged about 15,300 jobs or 4.8% of total nonfarm employment. Much construction work occurs outside and therefore weather conditions have a major impact on the industry. Peak employment each year typically occurs in July and August; Between 1991 and 2019 July employment averaged 16,100 while August averaged 16,200. February shows the lowest monthly average at just below 12,000.

As the cold recedes each year hiring in Construction begins to pick up. March is a transition month – most years employment increases modestly but some years it continues to decline. On average March sees an increase of 100 jobs. April (+1,200), May (+1,600) and June (+900) see significant increases as the building season begins in earnest.

The transition back towards employment losses begins in August each year. Most years see a small decline during the month but many still show growth. On average the industry loses 400 jobs in September followed by a loss of 100 in October, 600 in November and 900 in December. The largest losses come in January with an average change of -1,700. See table 5 below.

Table 5: Average Change in Construction Employment (1,000's)

