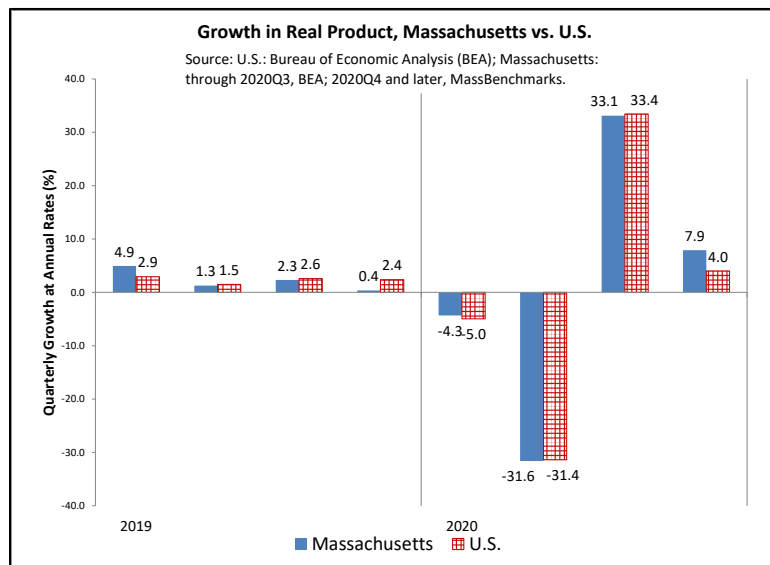


Massachusetts Current and Leading Economic Indices

The Massachusetts Current Economic Index for December was 200.4, down 10.2 percent from November (at annual rates), and down 10.7 percent from December 2019. The current index is normalized to 100 in July 1987 and is calibrated to grow at the same rate as Massachusetts real gross domestic product over the 1978–2019 period.

In the fourth quarter of 2020, Massachusetts real gross domestic product (GDP) increased at a 7.9 percent annualized rate of growth, according to MassBenchmarks, while U.S. GDP increased at a 4.0 percent rate according to the U.S. Bureau of Economic Analysis (BEA). In the third quarter, Massachusetts GDP increased at a 33.1 percent rate while U.S. GDP increased at a 33.4 percent rate according to the BEA.



The sharp slowdown from the third quarter was expected and reflects a transition from the strong growth due to the economy opening up in the summer and fall to a more restrained pace as the limits to a full recovery were reached as winter approached and the virus failed to be contained. Another factor limiting growth in the fourth quarter was the lack of the income and unemployment compensation support given by the CARES Act and related stimulus programs. The quarter ended with economic growth stalled in

December in the midst of a virulent resurgence of COVID cases. Payroll employment declined in both the U.S. and Massachusetts last month.

Massachusetts fared better than the U.S. in terms of GDP growth in the fourth quarter with faster growth in employment and wage and salary income.

Payroll employment in Massachusetts grew at a 7.8 percent annual rate in the fourth quarter versus a 5.2 percent rate for the U.S. In the third quarter employment in the state also grew faster than the nation, at a 29.5 percent rate in Massachusetts versus a 23.0 percent rate in the U.S. In this respect, Massachusetts was playing “catch up” relative to the U.S. as its shutdown in the Spring was deeper. Payroll employment in Massachusetts in the fourth quarter was still 9.2 percent below the fourth quarter of 2019, versus a shortfall of 6.0 percent for the U.S. from the fourth quarter of the prior year.

Employment and Earnings Growth at Annual Rates, Massachusetts and the U.S.

	Payroll Employment		Wage and Salary Income /1	
	MA	US	MA	US
2020Q4	7.8%	5.2%	26.1%	8.9%
2020Q3	29.5%	23.0%	19.9%	24.5%
19Q4 to '20Q4	-9.2%	-6.0%	2.2%	2.0%

Sources: U.S. Bureau of Labor Statistics; U.S. Bureau of Economic Analysis; MassBenchmarks.

1. Massachusetts and U.S. wage and salary income for 2020Q4 is estimated by MassBenchmarks.

Massachusetts wage and salary growth in the fourth quarter was very strong with growth at a 26.1 percent annual rate. This estimate is based on state withholding taxes net of unemployment insurance withholding. The corresponding estimate for the U.S. was wage and salary growth at an 8.9 percent annual rate. The strong showing for Massachusetts may reflect in part a good bonus season. The S&P stock index finished 2020 16.3 percent above the end of 2019. These estimates would mean that wage and salary income in the fourth quarter exceeded that of the fourth quarter 2019, by 2.2 percent in

Massachusetts and 2.0 percent in the U.S. The contrast between the return of workers' income to pre-pandemic levels and the lack of the return of employment to pre-pandemic levels reflects the incidence of job losses. Low-wage sectors such as leisure and hospitality and personal services were hit the hardest in the shutdown and remain the sectors with the highest level of job losses.

Unemployment Rates, Massachusetts and the U.S.

	U-3 Rate		U-6 Rate	
	MA	US	MA	US
Dec-20	7.4%	6.7%	11.3%	11.7%
Sep-20	9.8%	7.9%	14.3%	12.8%
Dec-19	2.8%	3.5%	6.2%	6.7%

Sources: U.S. Bureau of Labor Statistics/ MassBenchmarks.

Unemployment rates fell during the fourth quarter but remain higher in Massachusetts than in the U.S., and substantially higher than before the pandemic. In December, the unemployment rate for Massachusetts was 7.4 percent versus 6.7 percent for the U.S. In September, unemployment rates were 9.8 percent in Massachusetts versus 7.9 percent in the U.S. A year ago in

December 2019, they were 2.8 percent in Massachusetts versus 3.5 percent in the U.S.

The labor market is weaker than the unemployment rates suggest, since people who drop out of the labor force because they can't find work or have to stay at home are not counted as unemployed. The labor force in Massachusetts in December was 175,800 less than in December 2019, reflecting a drop in labor force participation of 3.4 percentage points. Labor force participation rates for the U.S. dropped 1.7 percentage points over the same period of time.

The U-6 unemployment rate – which includes persons working part-time but who want full-time work and persons who want work but have not looked for work in the last four weeks – was 11.3 percent in Massachusetts in December versus 11.7 percent for the U.S. These rates are lower than at the end of the prior quarter in September, when they were 14.3 percent in Massachusetts

and 12.8 percent in the U.S. In December 2019, they were 6.2 percent in Massachusetts and 6.7 percent in the U.S.

Spending in Massachusetts remained strong in the fourth quarter. As estimated by state regular and motor vehicle sales taxes, spending on these taxable items was up 6.8 percentage points at an annual rate in the fourth quarter. In the third quarter, such spending was up at an annualized rate of 85.6 percent. Compared to the fourth quarter of 2019, this spending was up 6.4 percent. The rebound in this spending on goods to above pre-pandemic levels reflects robust wage and salary growth, higher wealth due to the stock market, and income support from federal stimulus programs.

The slowdown in growth at the end of the fourth quarter is expected to continue into the first quarter of this year as COVID case levels are expected to be high, the cold weather limits safer outside activity, and lifting of restrictions on business activity will be delayed or slowed more than previously hoped. The federal stimulus passed in late December and the expected additional stimulus forthcoming later this winter will offset this slowdown somewhat in the first quarter. Moreover, the cumulative increase in the vaccinated population during the winter and spring should allow a gradual and steady reopening of the economy. For these reasons, the average estimate of U.S. GDP growth in the first and second quarters of this year from the Wall Street Journal survey of economists is 2.2 percent in the first quarter and 4.9 percent in the second quarter. Massachusetts should expect to see similar impacts on its economic growth.

The current and historical quarterly estimates for state domestic product growth include adjustments for changes in productivity growth. These adjustments are estimates of the quarterly deviations from the 1978-2019 trend in the growth of the ratio of output to employment. In the fourth quarter, these adjustments subtracted 3.0 points from growth. In the third quarter these adjustments added 6.7 percentage points to growth. In the second quarter these adjustments added 12.5 percentage points to growth.

The current and historical quarterly estimates also include “cyclical” adjustments, as the relationship between the growth in the current indicators and that of gross domestic product changes over the course of the business cycle. In the fourth quarter these adjustments subtracted 6.8 percentage points from growth. In the third quarter these adjustments subtracted 21.8 percentage points from growth. In the second quarter these adjustments added 22.8 percentage points to growth.

Several recent months of the current index are revised each release. These revisions are a result of the statistical method used to create the index, as well as revisions in the underlying indicators.

All the indicators in the current index refer to Massachusetts. The current index is composed of four indicators: nonagricultural employment, withholding taxes, sales taxes, and the unemployment rate. Withholding taxes and sales taxes are deflated by the U.S. consumer price index for all urban consumers, excluding food and energy.

For a description of the methodology used to construct this index, see: Alan Clayton-Matthews and James H. Stock, “An application of the Stock/Watson index methodology to the Massachusetts economy”, *Journal of Economic and Social Measurement*, vol. 25 (1998/1999), pp. 183-233.

Alan Clayton-Matthews
*Mass*Benchmarks
Northeastern University, School of Public Policy and Urban Affairs

January 28, 2021