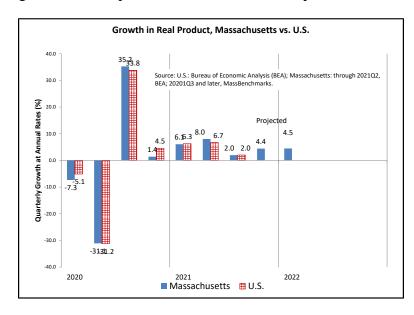
## **Massachusetts Current and Leading Economic Indices**

The Massachusetts Current Economic Index for September was 216.1, down 3.5 percent from August (at annual rates), and up 10.9 percent from September 2020. 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 1978–2020 period.



In the third quarter of 2021, Massachusetts real gross domestic product (GDP) increased at a 2.0 percent annualized rate, according to MassBenchmarks, while U.S. GDP increased at a 2.0 percent rate according to the U.S. Bureau of Economic Analysis (BEA). According to the BEA, Massachusetts real gross domestic product grew at annualized rates of 6.1 percent in the first quarter and 8.0 percent in the second quarter, while U.S. real gross domestic product grew at annualized rates of 6.3 percent in the first quarter and

6.7 percent in the second quarter.

The slowdown in growth from the second quarter reflects the effects of the Delta variant of COVID-19 restraining the pace of reopening, continued supply chain disruptions and labor shortages, and less exuberant consumer spending on goods, especially durable goods. Much of

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

	Payroll		Wage and Salary	
	Employment		Income /1	
	MA	US	MA	US
2021Q3	6.9%	6.3%	13.8%	9.5%
2021Q2	4.3%	4.8%	8.3%	8.3%
20Q3 to '21Q3	6.2%	4.6%	14.4%	9.6%

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

1. Massachusetts and U.S. wage and salary income for 2021Q3 is estimated by MassBenchmarks.

the growth that did occur reflects increased consumer spending on services and job growth in the leisure and hospitality and other services sectors. Inflation means that consumer spending's effect on real output is diminished, and this also affects real GDP growth.

Payroll employment in the third quarter expanded at a faster pace than in the second quarter. The number of jobs in Massachusetts grew at a 6.9 percent annual rate in the third quarter versus a 6.3 percent rate for the U.S. In the second quarter, the rate of jobs growth was

4.3 percent in Massachusetts versus 4.8 percent in the U.S. Relative to the third quarter of 2020, jobs grew by 6.2 percent in Massachusetts versus 4.6 percent in the U.S., but the state is still has 5.8 percent fewer payroll jobs relative to the pre-pandemic peak in February 2020. The gap in the U.S. is less, at 3.3 percent of the February 2020 peak.

Unemployment Rates, Massachusetts and the						
U.S.						
	U-3 Rate		U-6 Rate			
	MA	US	MA	US		
Sep-21	5.2%	4.8%	8.9%	8.5%		
Jun-21	4.9%	5.9%	8.9%	9.8%		
Sep-20	8.9%	7.8%	14.3%	12.8%		
Sources: U.S. Bureau of Labor Statistics/ MassBenchmark						

The unemployment rate in Massachusetts rose during the third quarter, from 4.9 percent in June to 5.2 percent in September. At the same time, it fell in the U.S., from 5.9 percent in June to 4.8 percent in September. While the rise in the unemployment rate in Massachusetts may reflect persons returning to the work force, participation rates are still well below pre-pandemic levels

and the number of unemployed in the state, at 193,000 in September is still well above the level of 105,000 in February of 2020. One piece of relatively good news is that the number of persons who are working part time but who want full-time work is back down to the pre-pandemic level. However, labor market conditions are still far from normal.

Massachusetts wage and salary income in the third quarter, estimated from state withholding taxes net of unemployment insurance withholding, grew at a 13.8 percent annual rate from the same measure in the second quarter. This compares with MassBenchmarks' estimate of U.S. wage and salary growth of 9.5 percent in the third quarter. According to the BEA, wage and salary growth in the second quarter was 8.3 percent for Massachusetts and also 8.3 percent for the U.S. The core rate of consumer price inflation – the CPI excluding food and energy – was 5.3 percent in the third quarter and 8.1 percent in the second quarter, so while average real wage and salary income per payroll worker may have advanced slightly in Massachusetts in the third quarter it did not in the U.S.; and it declined in the second quarter for both the state and the nation.

Spending on goods subject to the regular state sales taxes and motor vehicle sales taxes declined in Massachusetts in the third quarter at a 5.8 percent annual rate, after rising by a 40.3 percent annual rate in the second quarter. This decline mirrors the decline in goods spending at the national level. In Massachusetts, the decline was concentrated in motor vehicle sales, which fell at a 36.7 percent annual rate, largely attributed to supply shortages and a low inventory of vehicles.

In the fourth quarter of this year and first quarter of next year, MassBenchmarks expects moderate economic growth at a 4.5 percent annual rate, consistent with continued gradual progress in getting back to normal without a return of a winter COVID-19 surge. This reflects a dampening of the great expectations of early summer. The AIM Business Confidence Index fell in both August and September, and the Conference Board's Consumer Confidence index for the U.S. declined throughout the third quarter. However, both indexes are at levels that indicate expansion.

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 1978-2020 trend in the growth of the ratio of output to employment. In the third quarter these adjustments subtracted 5.9 percentage points from growth. In the second quarter these adjustments did not affect growth. In the fourth quarter of this year and first quarter of next year these adjustments are not expected to affect 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 third quarter these adjustments subtracted 1.9 percentage points from growth. In the second quarter these adjustments subtracted 3.8 percentage points from growth. In the fourth quarter of this year and first quarter of next year these adjustments are expected to subtract 1.1 percentage points from 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 MassBenchmarks Northeastern University, School of Public Policy and Urban Affairs October 28, 2021