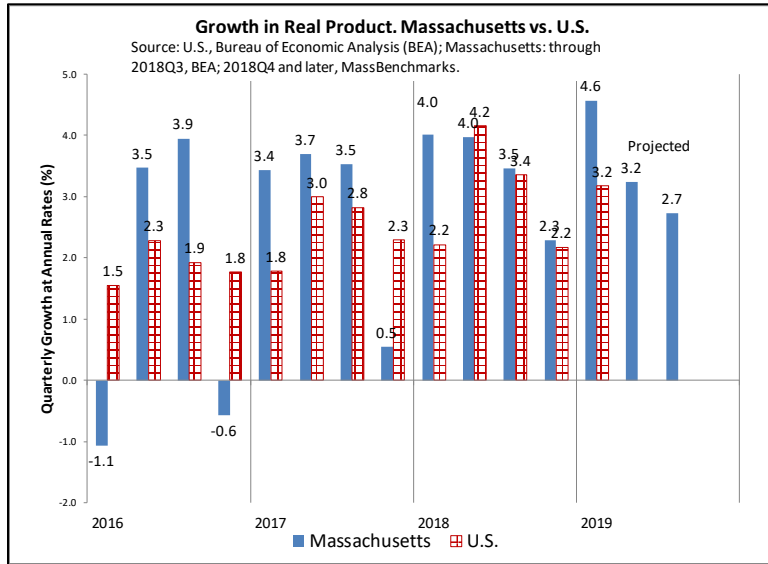


# Massachusetts Current and Leading Economic Indices

The Massachusetts Current Economic Index for March was 225.9, up 5.3 percent from February (at annual rates), and up 3.9 percent from March 2018. 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 1978–2017 period. All growth rates below are expressed at seasonally-adjusted annual rates.



The Massachusetts Leading Economic Index for March was 2.6 percent, and the three-month average for January through March was 3.4 percent. The leading index is a forecast of the growth in the current index over the next six months, expressed at an annual rate. Thus, it indicates that the economy is expected to grow at an annualized rate of 2.6 percent over the next six months (through September 2019) if productivity were at recent average rates.

In the first quarter of 2019, Massachusetts real gross domestic product grew 4.6 percent according to MassBenchmarks,

while U.S. real gross domestic product grew 3.2 percent according to the U.S. Bureau of Economic Analysis. In the fourth quarter of last year, the state’s economy grew at 2.3 percent according to MassBenchmarks, while the U.S. economy grew at 2.2 percent according to the U.S. Bureau of Economic Analysis.

	Payroll Employment		Wage and Salary Income /1	
	MA	US	MA	US
2019Q1	2.3%	1.7%	17.4%	4.4%
2018Q4	0.4%	1.7%	4.7%	4.6%
18Q1 to '19Q1	0.7%	1.8%	7.5%	4.2%

Sources: U.S. Bureau of Labor Statistics; U.S. Bureau of Economic Analysis; Mass. Department of Revenue/MassBenchmarks.

1. Massachusetts is derived from state withholding revenues for 2019Q1. U.S. is estimated by MassBenchmarks for 2019Q1.

Economic growth in Massachusetts picked up in the first quarter led by surprisingly strong jobs and earnings gains. Payroll employment in Massachusetts grew at a 2.3 percent rate in the first quarter compared to a U.S. rate of 1.7 percent. State wage and salary income grew at a remarkable 17.4 percent annual rate

in the first quarter, while U.S. wage and salary growth is expected to register a 4.4 percent rate of growth. (The U.S. Bureau of Economic Analysis will release its estimate for the U.S. on April 29.)

According to the U.S. Bureau of Labor Statistics, more jobs were added in Massachusetts in the first three months of this year than in all last year, 24,100 in January through March 2019 versus 20,000 in January through December 2018. The job estimates in the first quarter – and also for the fourth quarter of last year – are based on a sample of employers and therefore may be subject to error. In contrast, the first nine months of last year’s job estimates are based on a census of employers and so are reliable. Since there is no apparent basis for an acceleration in job gains in the first quarter over last year, it is possible that actual job growth in the first quarter was not as strong as the numbers suggest.

Also, the strong Massachusetts earnings growth estimated for the first quarter is based on withholding tax revenues which can be volatile. First quarter estimates especially can be influenced by the magnitude of bonuses paid for the prior year. This means that the income growth estimate probably overstates the actual economic contribution of wage and salary income accrued during the first quarter.

Unemployment Rates, Massachusetts and the U.S.					
	U-3 Rate		U-6 Rate		
	MA	US	MA	US	
Mar-19	3.0%	3.8%	6.5%	7.3%	
Dec-18	3.1%	3.9%	6.5%	7.6%	
Mar-18	3.5%	4.0%	7.2%	7.9%	
Sources: U.S. Bureau of Labor Statistics/ MassBenchmarks.					

One thing is clear. The economy, especially in Massachusetts, is operating at or near full employment. The state’s unemployment rate, at 3.0 percent in March, is near the all-time low of 2.6 percent recorded at the height of the “Dot-Com” bubble in 2000, and matches lows experienced at the end of the Massachusetts Miracle in 1987 and at the end of the 1960’s expansion. State-wide initial

unemployment claims are at all-time historical lows. (The data go back to January 1973.) The broader U-6 unemployment rate, at 6.5 percent in Massachusetts and 7.3 percent in the U.S. in March, is below pre-recession levels in both the state and the nation. About the only indication of slack in the labor market is that there are still 25,000 more part-time workers in Massachusetts who would like to work full-time than prior to the last recession.

The only sign of weakness in the first quarter for Massachusetts was in spending. Spending on items subject to the state regular sales and motor vehicle sales taxes declined at a 3.9 percent annual rate in the first quarter, following a strong fourth quarter when they grew at a 5.9 percent annual rate. In the first quarter, this spending was 4.4 percent higher than in the first quarter of last year.

Massachusetts economic growth is expected to be modest through September. The leading index is projecting growth of 3.2 percent in the second quarter and 2.7 percent in the third quarter of this year. Low unemployment and demographic constraints on labor force expansion mean that there are supply side limits on growth. On the demand side, there has been some weakening of

consumer confidence in Massachusetts and in the nation. The AIM index of business confidence in Massachusetts has also drifted down over the last year. Although these confidence measures have declined, they are still at relatively high levels. There is no indication yet that this long economic expansion is about to end.

The 10 indicators that comprise the leading index usually do not all move in tandem. Typically, some may indicate an expectation of faster than average growth, while at the same time others may indicate an expectation of slower than average growth. The accompanying table accounts for the contributions of each towards faster or slower growth than the recent underlying trend of 2.1 percent. The index value is their sum.

Contributions of Indicators to the Leading Index		
	March	January-March
Trend	2.1	2.1
Total Nonagricultural Employment	0.8	0.8
Withholding Taxes	0.5	0.5
Sales Taxes	0.0	0.0
Unemployment rate	0.1	0.1
Consumer Confidence	-0.2	-0.1
Interest rate spread (10-year less 3-month)	-0.2	-0.2
Bloomberg MA stock index	0.0	0.2
Initial Unemployment Claims	0.1	0.0
Construction Employment	-0.1	-0.1
Motor Vehicle Sales Taxes	-0.3	0.0
Total	2.6	3.4
<i>Note: Numbers may not add exactly due to rounding.</i>		

In March, four indicators contributed to a forecast of above-trend growth: total nonagricultural employment, withholding taxes, the unemployment rate, and initial unemployment claims. Two indicators contributed to average-trend growth: sales taxes, and the Bloomberg stock index for Massachusetts. Four indicators contributed to below-trend growth: consumer confidence, the interest rate spread between 10-year and 3-month U.S. Treasury

securities, construction employment, and motor vehicle sales taxes.

For the three-month period January through March, four indicators contributed to a forecast of above-trend growth: total nonagricultural employment, withholding taxes, the unemployment rate, and the Bloomberg stock index for Massachusetts. Three indicators contributed to average-trend growth: sales taxes, initial unemployment claims, and motor vehicle sales taxes. Three indicators contributed to below-trend growth: consumer confidence, the interest rate spread between 10-year and 3-month U.S. Treasury securities, and construction employment.

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 1978-2017 trend in the growth of the ratio of output to employment. In the first quarter of 2019 these adjustments subtracted 0.2 percentage points from growth. In the fourth quarter of 2018 these adjustments subtracted 1.3 percentage points from growth. For the forecast of state domestic product growth in the second and third quarters of this year, these adjustments are expected to subtract 1.1 percent points from growth, the average of the last five years.

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 first quarter of 2019, these adjustments subtracted 0.4 percentage points from growth. In the fourth quarter of 2018, these adjustments subtracted 0.3 percentage points from growth. For the forecast of the second and third quarters of this year, these adjustments are expected to add 0.1 percentage points to growth, the average amount of the last two years.

Several recent months of the indices 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 except interest rates refer to Massachusetts. The current index is composed of four indicators: nonagricultural employment, withholding taxes, sales taxes, and the unemployment rate. The leading index includes these four current indicators plus the other six (leading) indicators in the contributions table. All the indicators are as of March, except for interest rates and the Bloomberg stock index for Massachusetts, which are through April 22, 2019. The MassInsight Consumer Confidence Index is usually released every third month. Intervening months are interpolated, and changes in the Conference Board’s Consumer Confidence Index for the U.S. are used to extrapolate to the current month of the index, as needed. Series measured in current dollars or values, i.e., withholding taxes, sales taxes, the Bloomberg stock index, and motor vehicle 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 these indices, 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

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