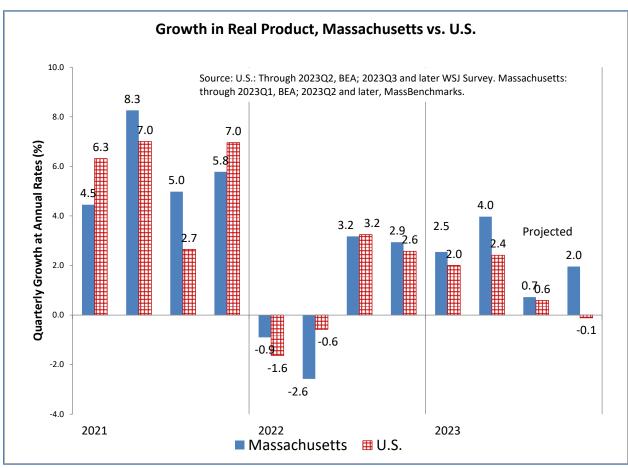
## **Massachusetts Current and Leading Economic Indices**

The Massachusetts Current Economic Index for June was 239.7, down 12.9 percent from May (at annual rates), and up 4.8 percent from June 2022. 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 1978–2022 period.



In the second quarter of 2023, Massachusetts real gross domestic product (GDP) increased at a 4.0 percent annualized rate, according to MassBenchmarks, while U.S. GDP increased at a 2.4 percent annualized rate, according to the U.S. Bureau of Economic Analysis (BEA). In the first quarter of 2023, Massachusetts GDP grew at a 2.5 percent annualized rate versus 2.0 percent for the U.S., according to the BEA.

During the second quarter, both the state and national economies performed better than expected, with surprising resilience in the labor market as employers continued to hire and labor force participation reached pre-pandemic levels for so-called "prime aged" workers 25-54 years old. It's unlikely this pace of growth can continue into the third and fourth quarters. There is little slack left in the labor market for strong employment growth, consumer spending in real terms seems to be plateauing as households exhaust excess savings from the COVID fiscal stimulus, and the Federal Reserve is expected to raise interest rates further this month and possibly again

this year after that. However, a recession is not anticipated to begin in the second half of this year.

<b>Employment and Earnings Growth at Annual</b>
Rates, Massachusetts and the U.S.

	Payroll		Wage ar	nd Salary
	Employment		Income /1	
	MA	US	MA	US
2023Q2	2.2%	1.9%	34.3%	4.8%
2023q1	2.9%	2.5%	5.8%	4.7%
22Q2 to '23Q2	2.8%	2.6%	6.2%	5.6%

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

1. Massachusetts wage and salary income for 2023Q2 is estimated by MassBenchmarks.

The Massachusetts and U.S. economies have been growing in sync with each other, with slightly higher growth in Massachusetts in the first half of this year reflected in marginally higher payroll employment growth and higher wage and salary income growth. In the second quarter, Massachusetts payroll employment grew at a 2.2 percent annualized rate versus 1.9 percent for the U.S. In the first quarter, the respective rates of employment growth were 2.9 percent for Massachusetts and 2.5 percent for the U.S.

Wage and salary growth was stronger

for Massachusetts. The MassBenchmarks estimates for wage and salary income in the most recently completed quarter are informed by state withholding tax revenues, which can fluctuate considerably from quarter to quarter depending on the timing of withholding payments. For the second quarter, the annualized rate of growth, calculated to be 34.4 percent on an annualized basis, vastly overstates the underlying trend because the comparison is with a seasonally-adjusted decline in such revenues in the first quarter. The first quarter decline was likely due to a weaker than usual bonus season tied to the poor performance of equity and financial markets in 2022, which also affected state tax revenues in April. The year-over-year growth, however, gives a good comparison of wage and salary income growth: 6.2 percent from the second quarter of 2022 to the second quarter of 2023 for Massachusetts, versus 5.6 percent for the U.S.

Unemployment Rates, Massachusetts and the							
U.S.							
	U-3 Rate		U-6 Rate				
	MA	US	MA	US			
Jun-23	2.6%	3.6%	5.2%	6.9%			
Mar-23	3.5%	3.5%	6.2%	6.7%			
Jun-22	3.7%	3.6%	5.6%	6.7%			
Sources: U.S. Bureau of Labor Statistics/ MassBenchmarks.							

The tightness of the labor market is reflected in the unemployment rate, which in June was at or near historically low levels. The June unemployment rate for Massachusetts was 2.6 percent, just under the historic low of 2.7 percent recorded at the end of the tech boom in the summer and fall of 2000. (The Massachusetts unemployment history goes back to 1969.) The U.S.

unemployment rate, which was 3.6 percent in June and reached a local nadir in January of 3.4 percent, is the lowest since the end of the 1960's boom.

The strength of the labor market is also reflected in the broader U-6 measure of unemployment, which includes part-time underemployment and marginally attached workers. This measure is at pre-pandemic levels, which were the lowest since the end of the tech boom in 2000. Both the number of persons who worked part-time but wanted full-time work, and the number of marginally-attached workers are trending lower than pre-pandemic levels.

CPI-U Inflation, Boston Metro and the U.S.					
	All Items		Core		
	BOS	US	BOS	US	
2023Q2	0.4%	2.7%	4.3%	4.7%	
2023Q1	3.1%	3.8%	4.7%	5.0%	
22Q2 to '23Q2	3.7%	4.1%	4.3%	5.2%	

Sources: U.S. Bureau of Labor Statistics, CPI-U; Core inflation excludes food and energy. For Boston, the CPI is available for odd months only -- January, March, etc. Even months are interpolated. Boston seasonally adjusted by MassBenchmarks.

Not surprisingly, the hot labor market has not been favorable for reducing inflation, which, although moderating slightly, is still stubbornly above the target of 2.0 percent. Average core CPI in the second quarter in the Boston metropolitan area was 4.3 percent higher than in the first quarter on an annualized basis. The corresponding measure for the U.S. in the second quarter was 4.7 percent. While core inflation in the Boston area has been lower than that of the U.S. in recent

quarters, it remains elevated. Relative to the second quarter of 2022, the Boston core CPI in the second quarter was 4.3 percent higher, reflecting no improvement in the trend of inflation.

Massachusetts consumer and business spending on items subject to the regular and motor vehicle sales taxes, which reflect spending on goods – largely durable goods – declined in the first and second quarters of this year, at an annualized rate of 5.8 percent in the first quarter and 2.5 percent in the second quarter. Such expenditures were 1.8 percent higher than the second quarter of 2022. These are nominal measures not adjusted for inflation. They are significantly weaker than measures of U.S. nominal spending on goods and durable goods. Spending on durable goods in the U.S. in the first quarter (the second quarter is not available yet) was 15.2 percent on an annualized nominal basis and was 3.4 percent higher than the first quarter of 2022.

The outlook for the second half of this year is for slower growth in both Massachusetts and the U.S. The MassBenchmarks leading index indicates third quarter growth of 0.7 percent for Massachusetts, while the Wall Street Survey of economists in July projects a growth of 0.6 percent for the U.S. The pace of job growth is constrained going forward, and there are some indications that employer demand for workers may be softening. Payroll employment in June in Massachusetts declined moderately by 4,500, which could indicate difficulty for employers trying to hire workers or that demand for workers has peaked. Combined with weak spending indicators and continued monetary tightening, the downside risk is significant.

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 1978-2022 trend in the growth of the ratio of output to employment. In the second quarter of 2023, these adjustments subtracted 1.7 percentage points from growth. In the first quarter of 2023, these adjustments subtracted 2.7 percentage points from growth. In the third

and fourth quarters of 2023 these adjustments are expected to subtract 1.7 percentage points from 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 second quarter of 2023 these adjustments subtracted 2.7 percentage points from growth. In the first quarter of 2023 these adjustments subtracted 0.2 percentage points from growth. In the third and fourth quarters of 2023 these adjustments are expected to add 1.9 and 0.1 percentage points to growth respectively.

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. Tax revenues for June were unavailable, so expected revenues were used instead. Withholding taxes and sales taxes are deflated by the U.S. consumer price index for all urban consumers, excluding food and energy.

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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.

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