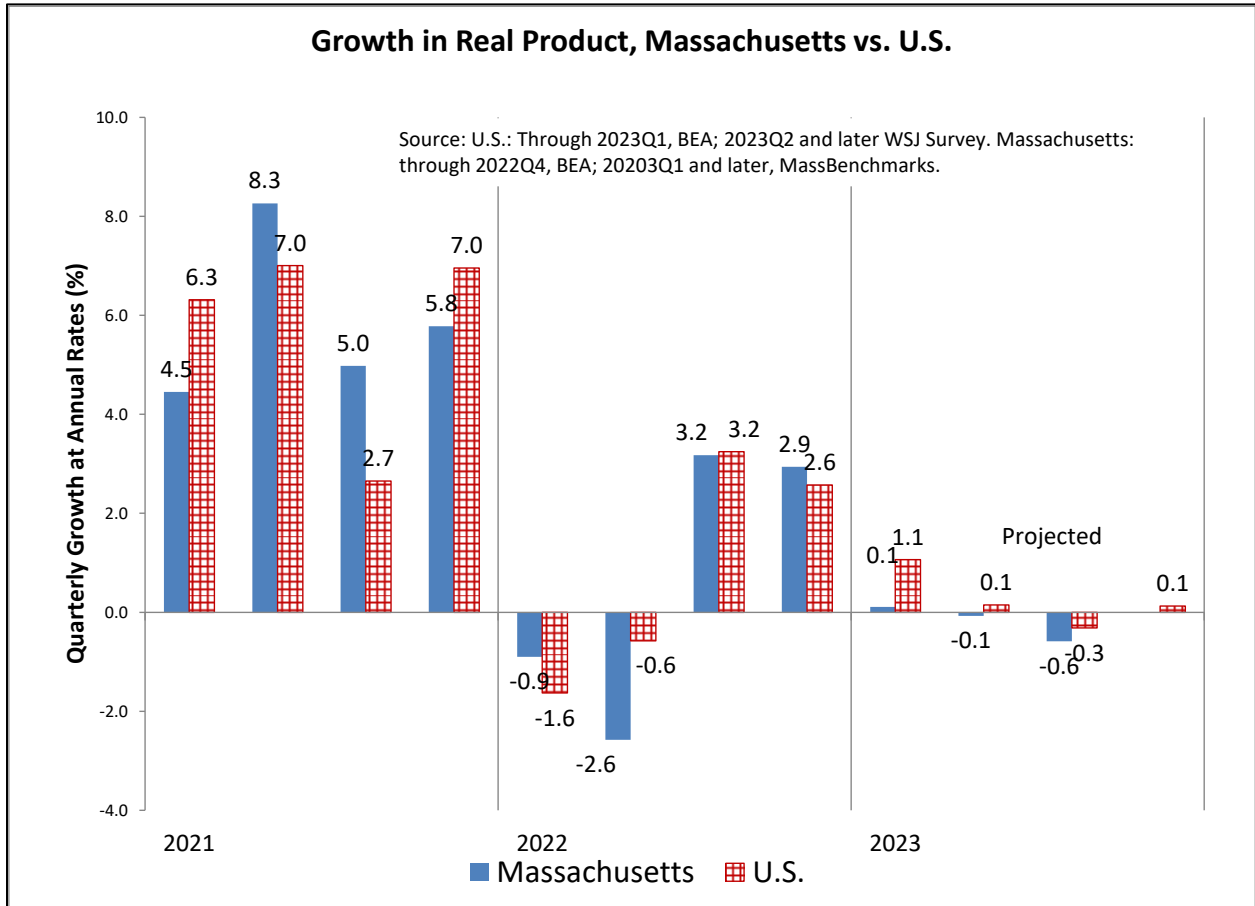


Massachusetts Current and Leading Economic Indices

The Massachusetts Current Economic Index for March was 238.5, up 21.7 percent from February (at annual rates), and up 4.9 percent from March 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 first quarter of 2023, Massachusetts real gross domestic product (GDP) increased at a 0.1 percent annualized rate, according to MassBenchmarks, while U.S. GDP increased at a 1.1 percent annualized rate according to the U.S. Bureau of Economic Analysis (BEA). In the fourth quarter of last year, Massachusetts GDP grew at a 2.9 percent annualized rate versus 2.6 percent for the U.S., according to the BEA.

Economic growth slowed in the first quarter of this year, and indications are that growth will continue to slow and perhaps turn negative later this year. A strong job market and robust consumer spending have supported growth in the face of higher interest rates, but cracks in the jobs market and waning consumer spending portend weaker demand in the months to come. Consumer spending nationally kept U.S. GDP growth positive in the first quarter, but that spending was weighted towards the beginning of the first quarter. Real consumer spending nationally fell in both February and March. In Massachusetts, nominal spending on goods

subjected to the state regular sales tax and motor vehicle sales tax declined at a seasonally adjusted 5.8 percent annual rate in the first quarter, with growth in motor vehicle spending more than offset by declines in spending on other goods.

| Employment and Earnings Growth at Annual Rates, Massachusetts and the U.S. | | | | |
|---|--------------------|------|---------------------------|------|
| | Payroll Employment | | Wage and Salary Income /1 | |
| | MA | US | MA | US |
| 2023Q1 | 3.0% | 2.7% | -7.3% | 6.4% |
| 2022Q4 | 2.5% | 2.5% | 7.0% | 6.8% |
| 22Q1 to '23Q1 | 2.8% | 3.0% | 1.2% | 7.4% |
| Sources: U.S. Bureau of Labor Statistics; U.S. Bureau of Economic Analysis; MassBenchmarks. | | | | |
| 1. Massachusetts wage and salary income for 2023Q1 is estimated by MassBenchmarks. | | | | |

On the surface, payroll employment in the first quarter was strong, at an annualized rate of 3.0 percent in Massachusetts and 2.7 percent in the U.S., and unemployment rates remained low, at 3.5 percent in March for Massachusetts and 3.5 percent for the U.S. Employment growth, however, was uneven. In Massachusetts in the first three months of this year, job growth was very strong in construction, education and health services, and leisure and hospitality, yet declined by nearly one percent from December in information services. In Massachusetts the number of jobs in the professional, scientific, and

technical services sector – the part of business services that is tech- and professional-heavy, including legal, accounting, consulting, engineering, scientific research and development, and computer systems services – was essentially flat in the first three months of the year, a deviation from the usual trend of significantly-faster than overall growth. Strong jobs gains in scientific research and development, engineering, and consulting were offset by lackluster or no growth in accounting and legal services, and a sharp decline in computer systems jobs. There have been six straight months of jobs losses in this sector, with the number of computer systems jobs in March five percent below the level in September of last year.

| Unemployment Rates, Massachusetts and the U.S. | | | | |
|---|----------|------|----------|------|
| | U-3 Rate | | U-6 Rate | |
| | MA | US | MA | US |
| Mar-23 | 3.5% | 3.5% | 6.2% | 6.7% |
| Dec-22 | 3.7% | 3.5% | 8.5% | 6.5% |
| Mar-22 | 3.7% | 3.6% | 6.1% | 6.9% |
| Sources: U.S. Bureau of Labor Statistics/ MassBenchmarks. | | | | |

Wage and salary income, estimated from state withholding taxes and seasonally adjusted, declined at a 7.3 percent annual rate in the first quarter, versus a growth of 6.4 percent for the U.S. In the fourth quarter of last year, wage and salary income grew at 7.0 percent rate in the state versus a 6.8 percent rate in the nation according to the BEA. Part of the decline in Massachusetts in the

first quarter may be related to the volatility and timing of withholding tax receipts, but two other factors may be playing an important role. One is reduced bonuses that are often received early in the year. Both the finance and tech sectors are important sources of bonuses, and the down stock market of last year and cost-cutting in technology may have reduced this significant portion of

wage and salary income in the state. Changes in the mix of new jobs, with faster growth in lower-paying sectors and tech-related layoffs in higher-paying sectors may have also contributed to falling wage and salary income in the first quarter.

The outlook for the second and third quarters is for economic growth to continue slowing, with a possible mild recession beginning later this year. The average outlook of economists surveyed by the Wall Street Journal in early April is for U.S. GDP growth to slow to 0.1 percent in the second quarter and for growth to decline by 0.3 percent in the third quarter, at annual rates.

Consumer price inflation has been stubbornly resistant so far towards the Federal Reserve’s interest rate hikes. Although the overall price index has been falling slowly in both Boston and the U.S. city average, the core rate – which excludes food and energy – has remained well above the target of 2 percent. In Boston the core consumer price inflation rate in the first quarter was 4.7 percent, versus 5.0 percent for the U.S. In the first quarter of last year, these rates were 4.3 percent for Boston and 5.6 percent for the U.S. respectively. The implication is that more tightening needs to be done, increasing the chance of a contraction later this year or next.

| CPI-U Inflation, Boston Metro and the U.S. | | | | |
|--|-----------|------|------|------|
| | All Items | | Core | |
| | BOS | US | BOS | US |
| 2023Q1 | 3.1% | 3.8% | 4.7% | 5.0% |
| 2022Q4 | 5.1% | 4.2% | 3.5% | 5.1% |
| 22Q1 to '23Q1 | 5.6% | 5.8% | 4.3% | 5.6% |
| 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. | | | | |

Leading index components for Massachusetts are suggesting a continuation of slower than U.S. growth, with a projected decline of 0.1 percent in the second quarter and 0.6 percent in the third quarter. Most of the state’s leading indicators are negative, including withholding and sales taxes, the Bloomberg stock index, and initial unemployment claims. Two national indicators, consumer confidence, and the inverted yield curve (10-year vs. 3-month rates for Treasury securities)

are also pointing in a negative direction.

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 first quarter of 2023, these adjustments subtracted 3.8 percentage points from growth. In the fourth quarter of last year, these adjustments subtracted 2.2 percentage points from growth. In the second and third quarters of 2023 these adjustments are expected to subtract 3.8 percentage points and 2.0 percentage points from growth respectively.

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 2023 these adjustments subtracted 0.3 percentage points from growth. In the fourth quarter of 2022 these adjustments subtracted 0.1 percentage points from growth. In the second and third quarters of 2023 these

adjustments are expected to add 0.0 percentage points and 1.9 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. 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
Associate Professor Emeritus
School of Public Policy and Urban Affairs and the Department of Economics
Northeastern University

May 1, 2023