Maine Economic Indicators

December 2022

Maine Department of Administrative and Financial Services

Office of the State Economist

Amanda Rector, State Economist

Maine Economic Indicators is a monthly report assembled by the Office of the State Economist that provides a synopsis of current economic trends and indicators for the state in comparison to New England and the United States. The intent of this report is to provide the public with a single document containing data aggregated from different sources typically used to track current economic and demographic conditions in the state.

The appendix provides comprehensive information related to the data presented herein. Data included in this report are assembled from various sources, subject to frequent revision, and provided in this report "as is" at the time of publication. Therefore, data presented in this report are subject to change over time.

Please note that changes in economic indicators cannot uniquely be interpreted as the impact of COVID-19.

Contents

1 Snapshot

Indicators in this section provide a summary of Maine's current economic status. Figures for Maine are compared to New England and the United States. Sources are given in the appendix.

Reference Period		Maine	New England	United States
2022	Total population	1,385,340	15,129,548	333,287,557
2021-2022	Annual population percent change	0.6%	0.05%	0.4%
2020-2022	Cumulative population percent change	1.6%	0.4%	0.5%
2021	Average earnings per job	$59,084	$80,834	$71,017
2020-2021	Average earnings per job percent change	4.6%	4.3%	5.0%
November 2022	Unemployment rate	3.7%	3.4%	3.7%
November 2022	Total private nonfarm employment	545,800	6,552,000	131,130,000
November 2022	Labor Force	672,700	7,980,600	164,481,000
November 2022	Labor Force Participation Rate	58.0%	N/A	62.1%

Annualized Percent Change from the previous quarter and Compound Annual Growth Rate (CAGR)

Real GDP	2021:Q4	2022:Q1	2022:Q2	2022:Q3	2021:Q4-2022:Q3
Maine	5.1	-0.5	-1.2	2.8	0.3
New England	6.1	-0.6	-2.8	2.7	-0.2
United States	7.0	-1.6	-0.6	3.2	0.3
Total Personal Income	2021:Q4	2022:Q1	2022:Q2	2022:Q3	2021:Q4-2022:Q3
Maine	4.4	3.8	6.8	14.1	8.1
New England	1.8	3.2	2.8	5.6	3.9
United States	3.1	3.1	4.9	5.3	4.4
Per Capita Personal Income	2021:Q4	2022:Q1	2022:Q2	2022:Q3	2021:Q4-2022:Q3
Maine	3.4	3.0	5.9	12.9	7.2
New England	1.7	3.2	2.7	5.5	3.8
United States	2.7	2.9	4.7	4.9	4.2
Wages & Salaries	2021:Q4	2022:Q1	2022:Q2	2022:Q3	2021:Q4-2022:Q3
Maine	11.2	6.9	10.7	6.9	8.2
New England	10.2	5.9	3.1	6.8	5.2
United States	13.1	6.9	5.0	7.0	6.3

2 Annual Indicators

Indicators summarized below are updated annually on various release dates and provide a general summary of Maine's demographic and economic status.

Reference Period		Maine	New England	United States
2022	Total population	1,385,340	15,129,548	333,287,557
2021-2022	Annual population percent change	0.6%	0.05%	0.4%
2020-2022	Cumulative population percent change	1.6%	0.4%	0.5%
2022	Births	12,030	146,423	3,688,179
2022	Deaths	17,973	149,549	3,443,099
2022	Net migration	14,125	13,421	1,010,923
2021-2022	Annual rate of total net migration, per thousand (Maine ranks 11th in the U.S.)	10.2	0.9	3.0
2021	Median age, years (American Community Survey)	44.7	41.0	38.8
2021	Associate degree: percent of population age 25 and above	10.6%	8.1%	8.8%
2021	Bachelor's degree: percent of population age 25 and above	22.2%	24.2%	21.2%
2021	Graduate or professional degree: percent of population age 25 and above	13.8%	19.0%	13.8%
2021	Percent of population below poverty level	11.5%	10.2%	12.8%
2021	Median family income	$82,842	$104,939	$85,806
2021	Median household income	$64,767	$82,987	$69,717
2021	Per capita personal consumption expenditures	$45,272	$50,154	$42,635
2021	Per capita disposable personal income	$50,559	$55,813	$47,915

## 3 Quarterly and Monthly Indicators

3.1 Gross Domestic Product (GDP)

Real GDP in Maine grew by 2.8 percent from the preceding quarter at an annual rate (2022:Q2 to 2022:Q3), ranking 22nd in the United States. Nationally, GDP grew by 3.2 percent.

The industry sectors that contributed the most to Maine's third quarter growth in GDP were retail trade; real estate and rental and leasing; healthcare and social assistance; and information. These gains were partially offset by declines in other industries including construction; utilities; and finance and insurance.

2022:Q3	Maine	United States
Nominal GDP (Current dollars)	$85.2 billion	$25.7 trillion
Real GDP (Chained 2012 Dollars)	$64.8 billion	$20.1 trillion

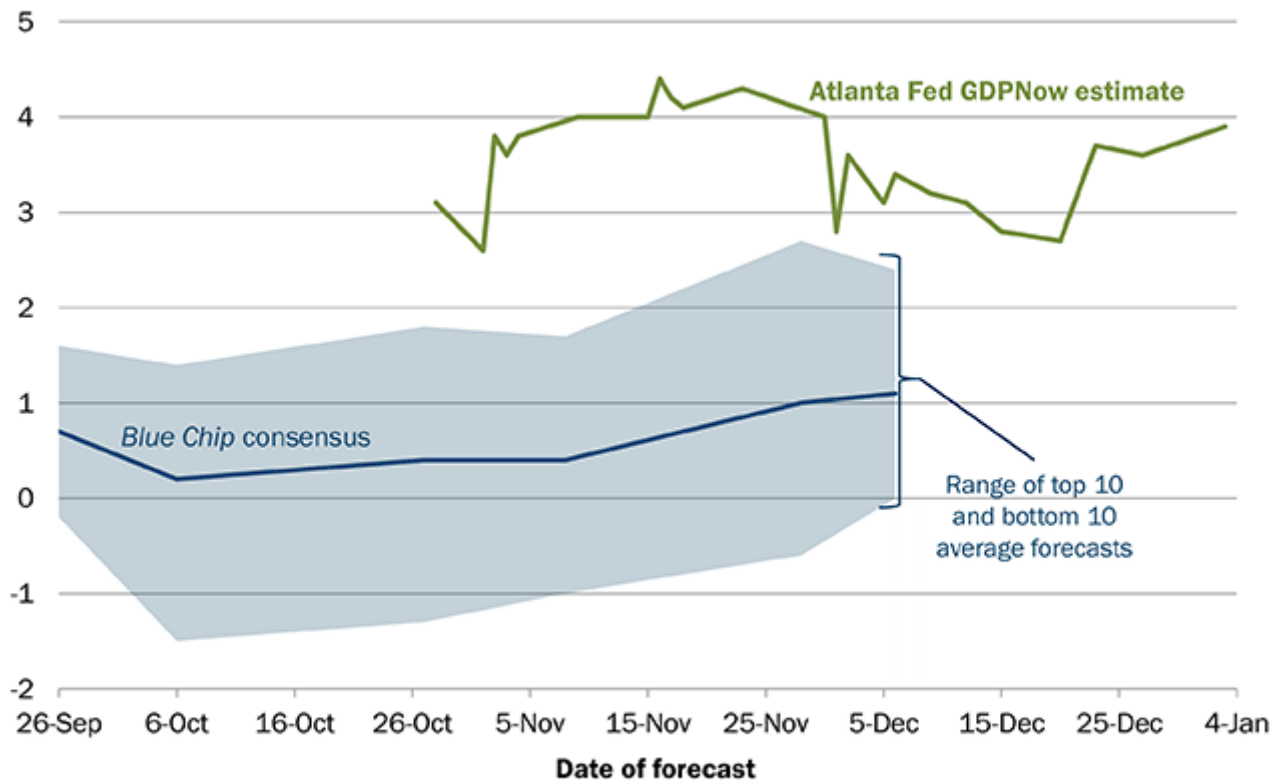## Real GDP (billions of chained 2012 dollars) - Maine
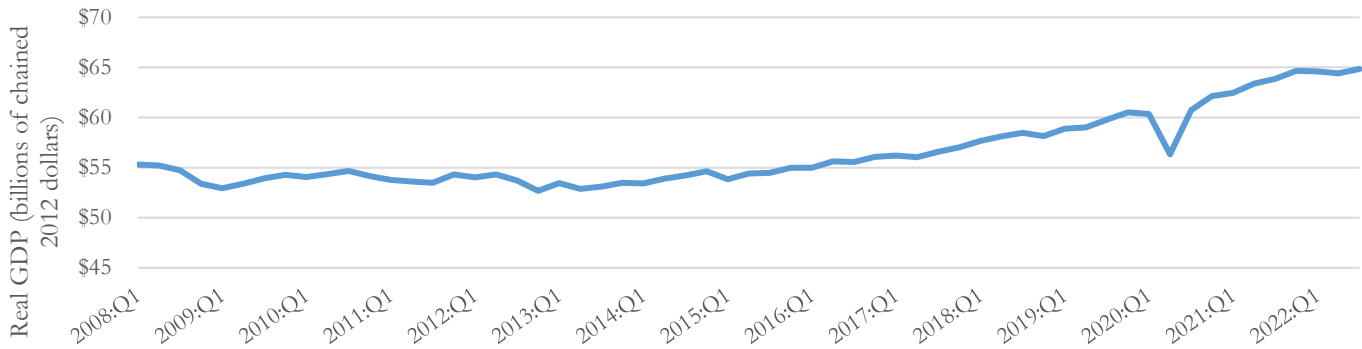
3.1.1   GDP Now from the Federal Reserve Bank of Atlanta

GDPNow, which is reported by the Atlanta Fed, is "a running estimate of real GDP growth based on available data for the current quarter." This model uses a similar methodology to the one used by the U.S. Bureau of Economic Analysis in their official GDP estimates and is revised each time the monthly source data is updated. The nowcast estimate for 2022:Q4 as of January 3, 2023, is that U.S. real GDP will **increase by 3.9 percent** at an annual rate.

Evolution of Atlanta Fed GDPNow real GDP estimate for 2022: Q4
Quarterly percent change (SAAR)

Atlanta Fed GDPNow estimate

Blue Chip consensus

Range of top 10
and bottom 10
average forecasts

Date of forecast

Sources: *Blue Chip Economic Indicators* and *Blue Chip Financial Forecasts*
**Note:** The top (bottom) 10 average forecast is an average of the highest (lowest) 10 forecasts in the *Blue Chip* survey.

3.2   Recession Indicators

NBER is the primary source in the United States that declares when recessions begin and end and defines a recession as a significant decline in economic activity that is spread across the economy and lasts more than a few months. Other recession indicators are used to estimate business cycles in real time but are not official sources for when recessions begin and end.

3.2.1   Real-time Sahm Rule Recession Indicator

The Real-time Sahm Rule Recession Indicator[1] signals a recession when the 3-month moving average of the national unemployment rate (U3) rises by at least 0.5 percentage points relative to its low in the previous 12 months. In November 2022, this indicator showed that the three-month average of national U3 was **0.07 points over its 12-month low**.
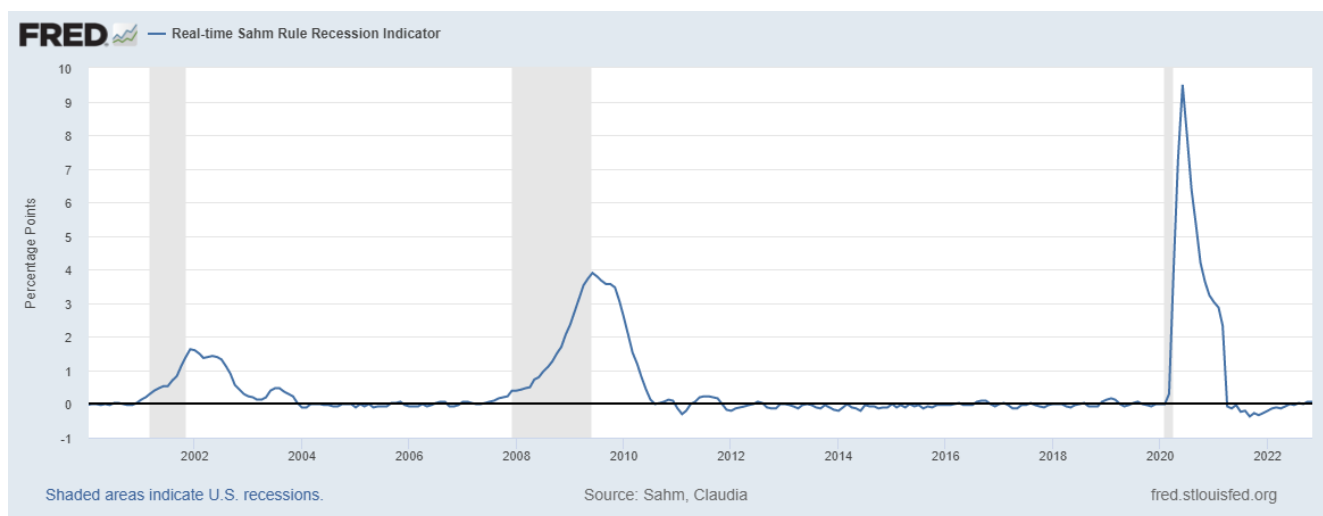
3.2.2   GDP-Based Recession Indicator Index

The GDP-Based Recession Indicator Index is 29.2 percentage points (2022:Q2), down from 37.4 in the first quarter. The index ranges from 0 to 100, and values above 67 provide a historically reliable indicator that the economy is in recession[2]. This index is calculated with a one quarter lag, which allows for extra insight and accounts for data revisions to make dependable inference. Therefore, the index does not get revised once it is published.


---
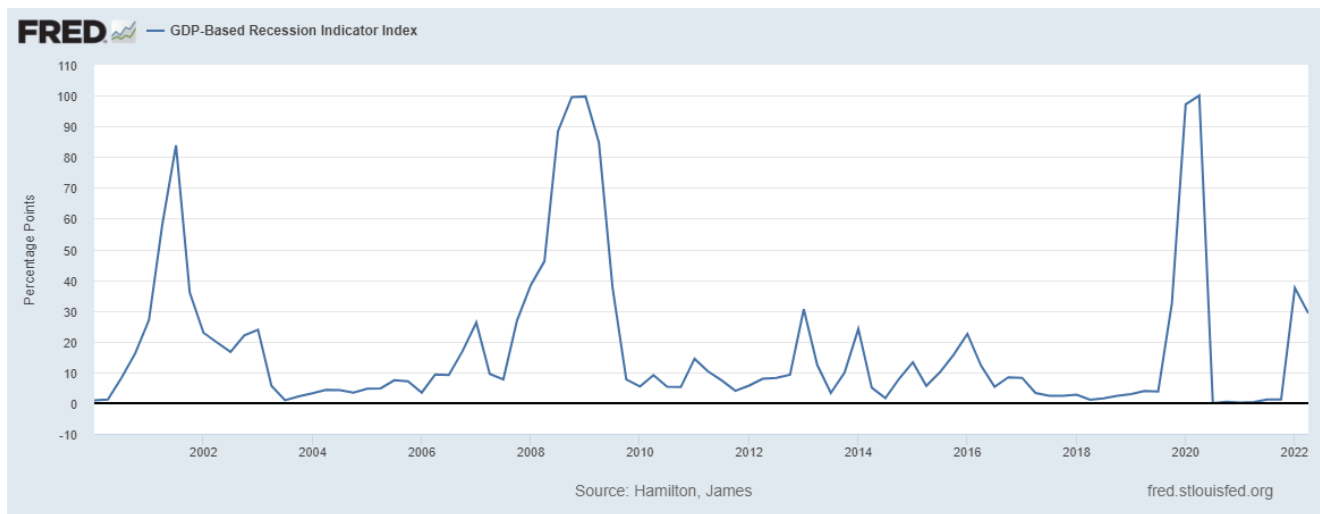
[1] Created by Dr. Claudia Sahm, Federal Reserve Board of Governors
[2] Created by Dr. James Hamilton, University of California San Diego

3.3 Labor Markets[3]

3.3.1 Unemployment Rate November 2022: 3.7%

The unemployment rate was 3.7% in November, little changed from 3.6% a month before. This is close to the U.S. (3.7%) and New England (3.4%) rates. The 3-month average unemployment rate from September-November was 3.5%, up from 3.0% for the three months ending in August. The estimate of unemployed individuals was 24,968 in November.

Unemployment Rate
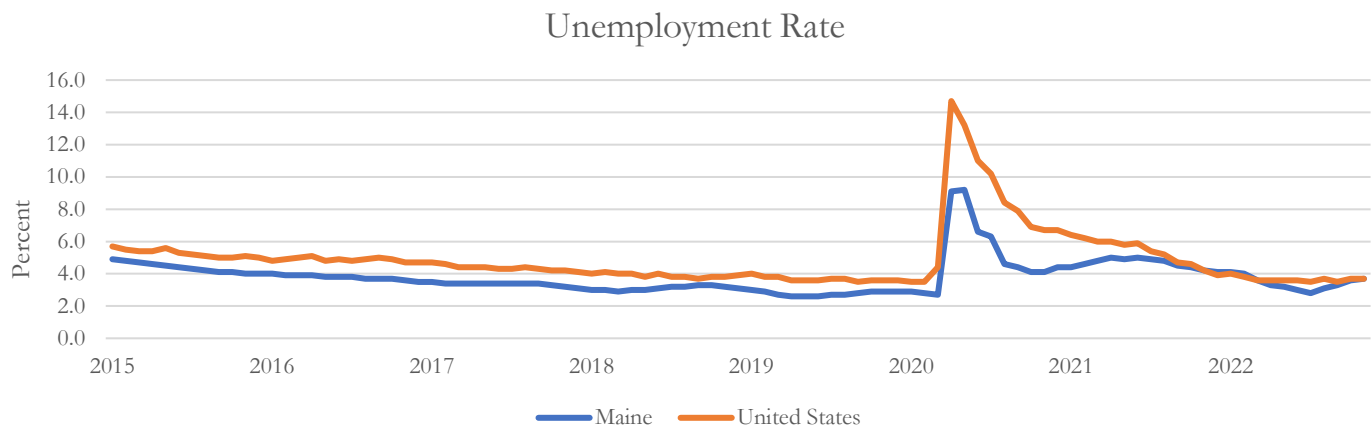
### 3.3.2 Labor Force Participation Rate November 2022: 58.0%

Labor force participation (LFP) was 58.0% in November, down 0.3 percentage points from October. The Maine Department of Labor has released an article describing the differences between the household and employer surveys. The employment to population ratio (EPOP), an alternative measure of labor market activity which measures the total number of employed working-age adults divided by the total working-age population, fell to 55.9%.

Labor Force Participation & Employment-Population Ratio (Maine)

---
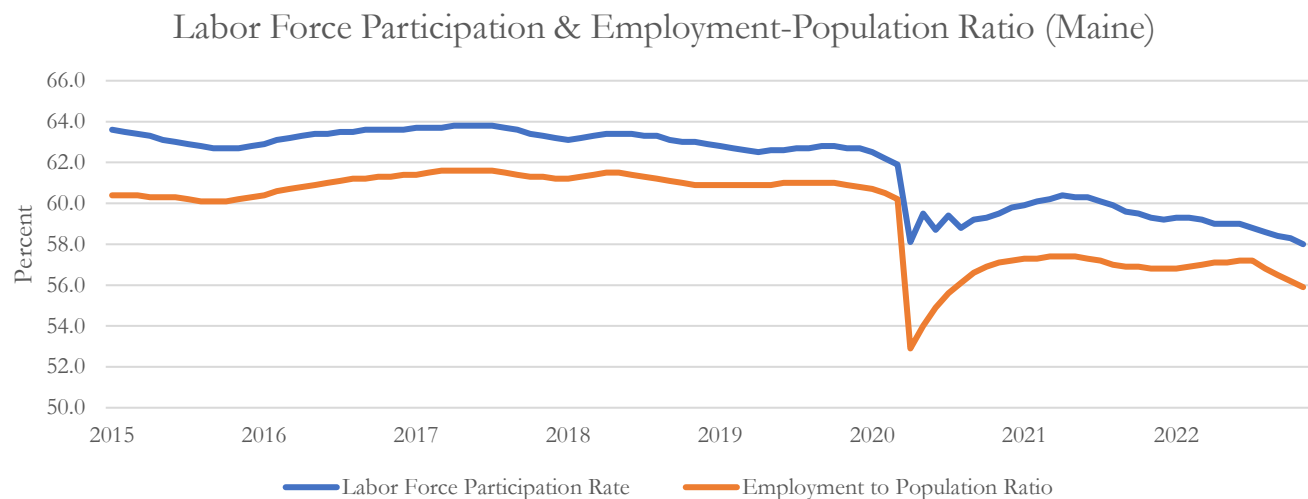
[3] The data for unemployment rates and labor force are derived from the Local Area Unemployment Statistics (LAUS) program and data for nonfarm payroll jobs are derived from the Current Employment Statistics (CES) program. The numbers presented below are estimates which vary month to month in either direction and are subject to substantial revision. The Maine Department of Labor cautions users to analyze general trends over several months as opposed to making conclusions based on changes month to month.

3.3.3

Seasonally adjusted total nonfarm employment grew by 3,000 jobs in November, with the largest increases in accommodation and food services and health care and social assistance.

Total Nonfarm Employment Maine (seasonally adjusted)
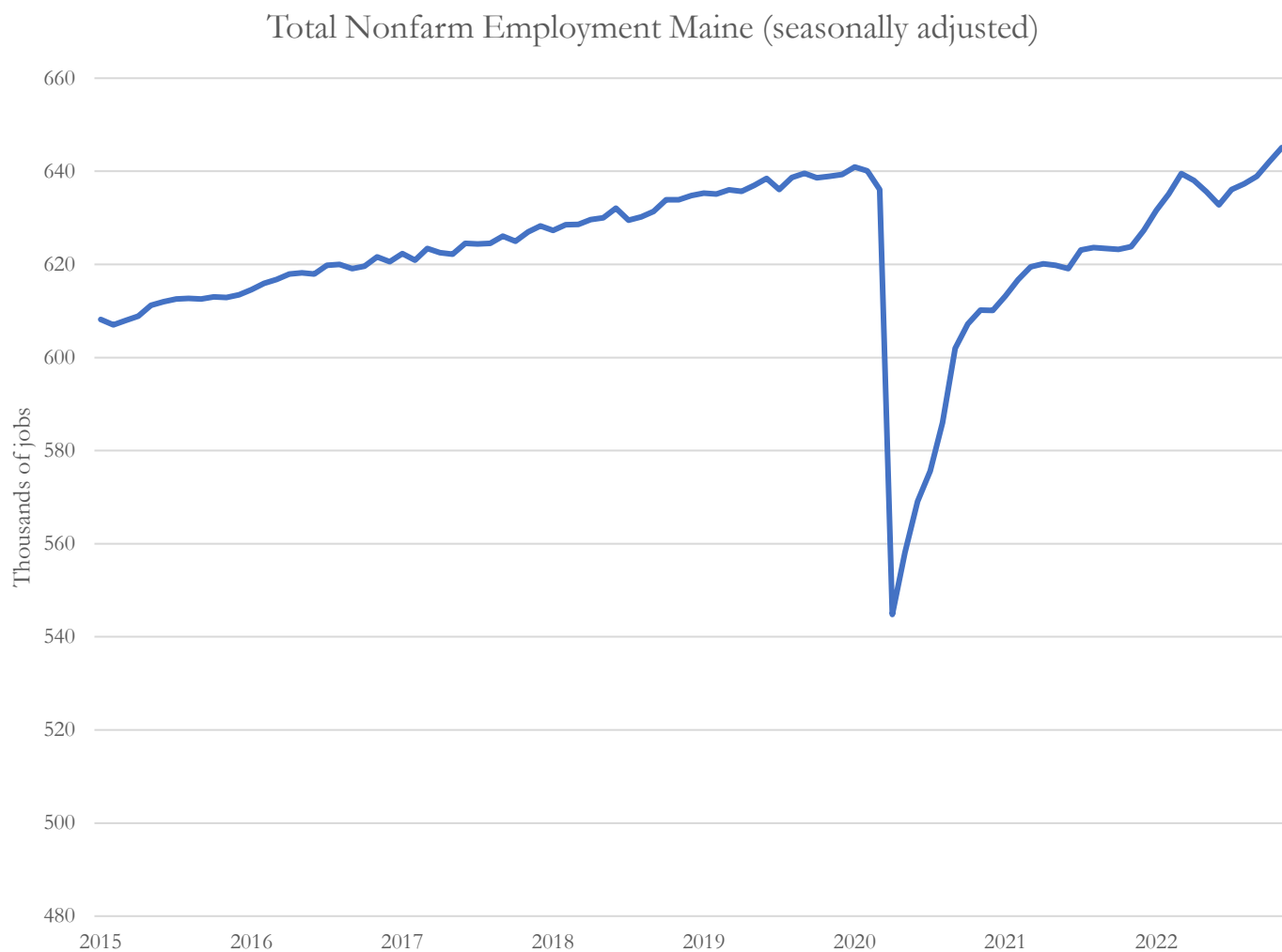
3.4   National inflation measures

3.4.1   Consumer Price Index vs. Personal Consumption Expenditures

There are two measures of inflation in the United States. The Consumer Price Index is released by the Bureau of Labor Statistics and is based on surveys of urban consumers, while Personal Consumption Expenditures price index is calculated by the Bureau of Economic Analysis and based on surveys of what businesses are selling. Both are used officially for various federal purposes, although the Federal Reserve focuses on PCE in monetary policy decisions.

In November, the PCE price index grew by 5.5% year-over-year, down slightly from October. The CPI all-items index grew by 7.1% in November before seasonal adjustment, down from 7.7% in October. On a monthly basis, the PCE price index grew 0.1% in November while the CPI grew 0.1% from October to November.

Measures of inflation, Year-Over-Year Percent Change
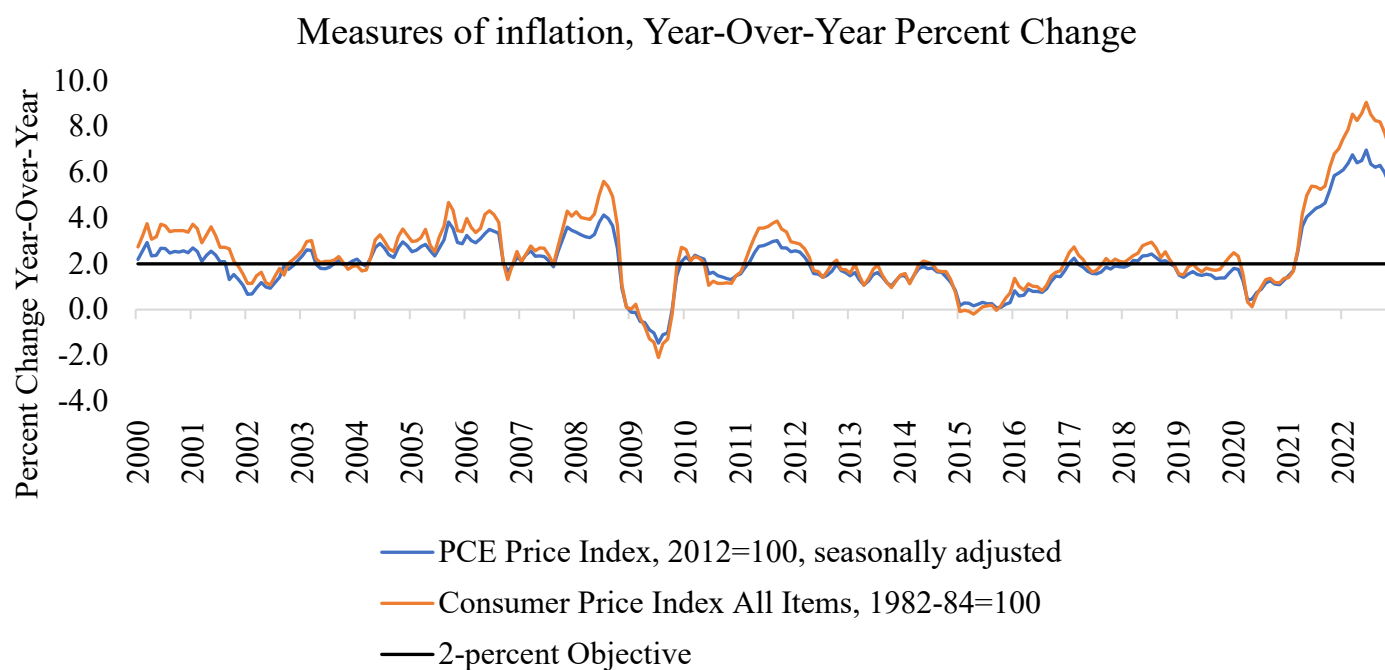
3.4.2   Expenditure categories of the CPI

The CPI for all urban consumers increased 7.1% year-over-year in November and 0.1% from a month prior. Meanwhile, core inflation, which excludes volatile food and energy prices, rose by 6.0% year-over-year and 0.2% since October. The index for shelter was the largest contributor to the rise in November.

November's inflation reading increased by a lower monthly rate than October in the all-items index, and the annual growth rate again was slightly slower than a month prior. The year-over-year energy growth rate was lower than in October and the monthly rate returned to a decline after an increase in October. The monthly increase in shelter was more than enough to offset declines in energy prices.

Table 1. Percent Change in Consumer Price Index by Expenditure Category	Year-Over-Year (not seasonally adjusted)		Month-Over-Month (seasonally adjusted)	
	October 2022	November 2022	October 2022	November 2022
All items	7.7	7.1	0.4	0.1
Food	10.9	10.6	0.6	0.5
Energy	17.6	13.1	1.8	-1.6
All items less food and energy	6.3	6.0	0.3	0.2
Commodities (less food and energy)	5.1	3.7	-0.4	-0.5
Household furnishings and supplies	8.8	8.3	-0.2	0.4
Apparel	4.1	3.6	-0.7	0.2
Transportation commodities (less motor fuel)	5.5	2.4	-0.9	-1.3
Medical care commodities	3.1	3.1	0.0	0.2
Recreation commodities	4.3	3.6	0.7	-0.4
Education and communication commodities	-9.1	-9.7	-0.9	-1.6
Alcoholic beverages	5.0	5.5	0.8	0.7
Other goods	7.2	7.5	0.6	0.6
Services (less energy)	6.7	6.8	0.5	0.4
Shelter	6.9	7.1	0.8	0.6
Water and sewer and trash collection	4.8	5.0	0.0	0.3
Medical care services	5.4	4.4	-0.6	-0.7
Transportation services	15.2	14.2	0.8	-0.1
Recreation services	3.9	5.4	0.8	1.0
Education and communication services	1.3	2.2	0.1	1.0
Other personal services	5.8	6.5	0.4	0.8

3.5   Energy

3.5.1   Gasoline

The average price of a gallon of gasoline in New England was $3.417 on January 2, 2023, $0.31 lower than a month prior and $0.03 lower compared to the same week of 2021. Overall in December, the average price of gasoline was about $0.36 lower than the November average.

New England - All Grades and Formulations Gasoline Price Per Gallon
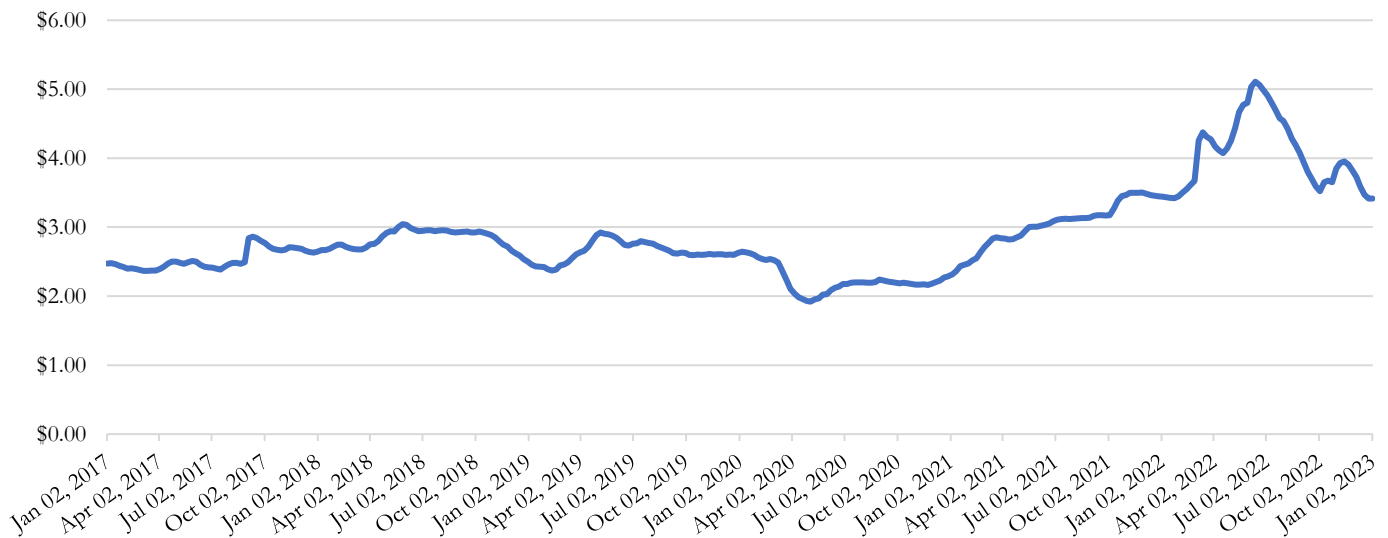
3.5.2   Brent Spot Prices

The weekly Brent spot price averaged $81.27 in December and was at $80.68 in the last week of the month. The Brent spot price has decreased by $5.72 from a month prior.

Weekly Brent Spot Price - Dollars per Barrel

The price of a gallon of heating oil in Maine averaged $4.465 in the week ending December 26, down from a historical peak of $5.690 in November, although prices have been relatively unchanged for the past three weeks and remain well above past years' averages. According to the Governor's Energy Office, the price is highest in the Northern region of the state, at $4.65 per gallon on average, and lowest in the Southwest/West-Central region, at $4.41 per gallon on average.

Maine No. 2 Heating Oil Residential Price
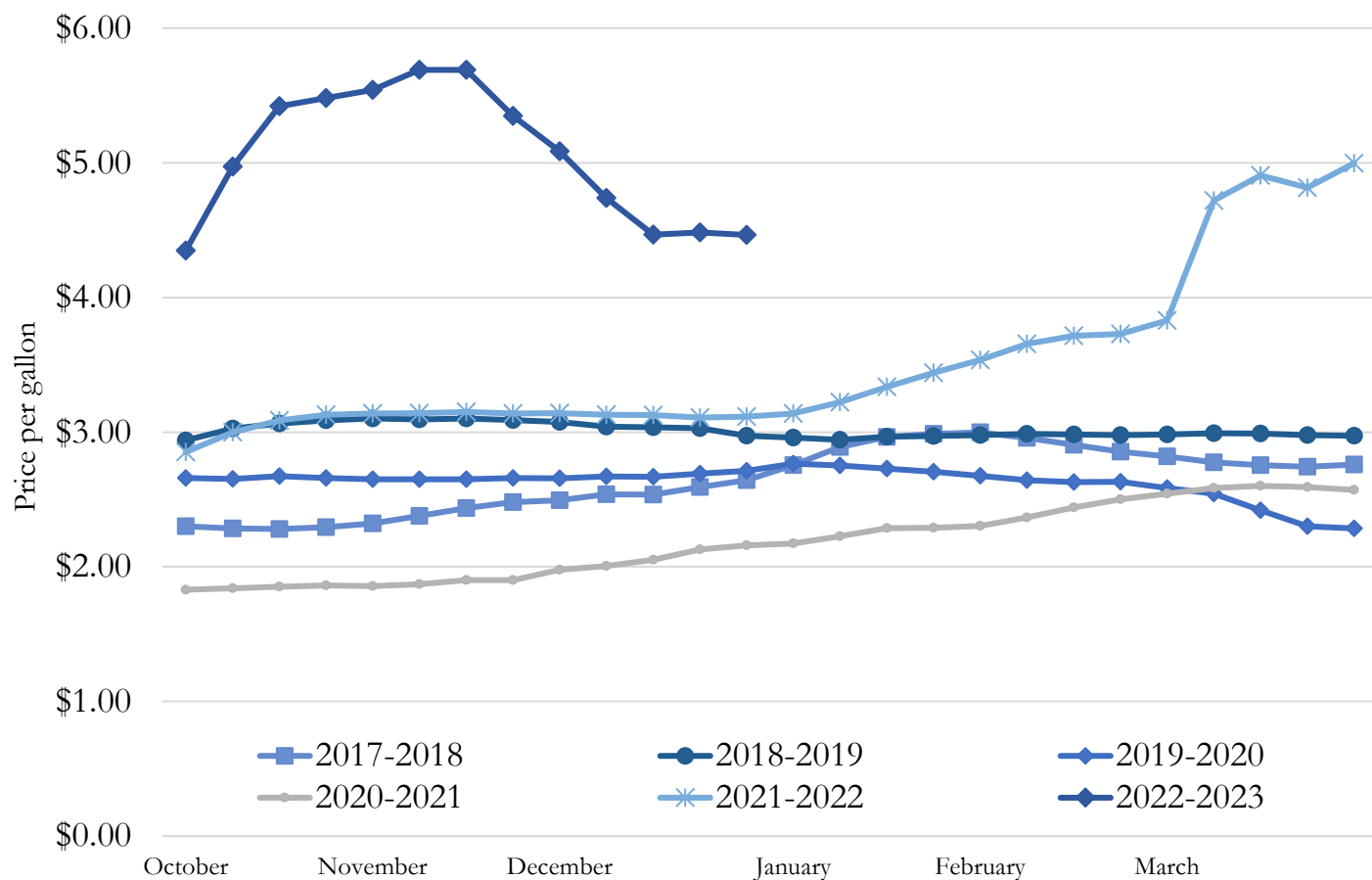
3.6   Housing

3.6.1   Sales

Home sale transactions declined by 28.7% in November relative to one year prior as the housing market continued to cool. The 1,289 single-family units sold were about 519 fewer than a year prior and 209 lower than pre-pandemic November 2019. The median sale price rose by 8.3% year-over-year. This was slightly faster than October's growth, although slower than most increases over the past two years and price growth varied heavily between counties. Cumberland and York counties had a median sale price over $400,000.

| Geography	No. of Units Sold	One Year Change (units)	Median Sale Price	One Year Change (Price)
Androscoggin	109	-12.8%	$270,000	8.0%
Aroostook	73	-14.1%	$140,000	-3.7%
Cumberland	244	-29.5%	$464,450	8.4%
Franklin	37	-19.6%	$235,000	-8.2%
Hancock	67	-22.1%	$297,700	-5.3%
Kennebec	108	-35.7%	$265,000	14.8%
Knox	43	-27.1%	$385,000	10.0%
Lincoln	31	-43.6%	$350,000	-5.2%
Oxford	67	-35.6%	$264,000	-3.1%
Penobscot	120	-34.1%	$229,000	6.5%
Piscataquis	28	-33.3%	$172,450	15.4%
Sagadahoc	32	-22.0%	$373,500	6.7%
Somerset	55	-35.3%	$189,900	8.5%
Waldo	35	-23.9%	$266,000	-8.3%
Washington	34	-37.0%	$254,500	59.6%
York	206	-27.5%	$438,250	9.3%
Maine	**1,289**	**-28.7%**	**$325,000**	**8.3%**

3.6.2   House Price Index

In the third quarter of 2022, year-over-year growth in the house price index (HPI)[4] growth rate was slower than recent quarters at 14.3%, compared to 21.9% in the first quarter and 21.7% in the second quarter. Maine's year-over-year HPI growth rate was higher than both the New England growth rate (10.8%) and the national growth rate (12.4%). On a seasonally adjusted quarterly basis, Maine's house price index decreased 0.5% from the second quarter, compared to -0.2% in New England and 0.0% in the U.S. Among Maine's metropolitan statistical areas, Lewiston-Auburn grew slightly faster, at 19.1% year-over-year, compared to 16.9% in Portland-South Portland and 16.3% in Bangor. Maine's nonmetropolitan areas collectively grew 20.6% year-over-year.

Reference Period		Maine	New England	United States
2021:Q3-2022:Q3	HPI percent change from previous year	14.3%	10.8%	12.4%

---

[4] According to the Federal Housing Finance Agency (FHFA), the HPI "measures average price changes in repeat sales or refinancing on the same properties."

Percent Changes, Year-over-year in FHFA House Price Index (not seasonally adjusted)
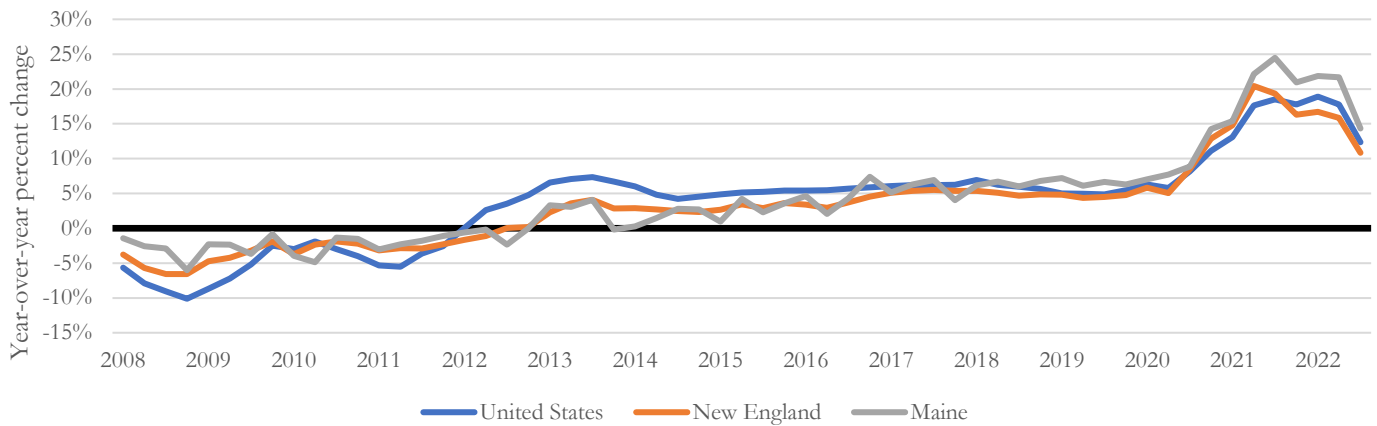

3.7 Sentiment

The Index of Consumer Sentiment from the University of Michigan was up 5.1% from a month prior in December but down 15.4% year-over-year. The survey noted that consumer were somewhat less negative in their attitudes as inflation pressures eased slightly.

The Small Business Optimism Index, as measured by the National Federation of Independent Businesses, was up 0.7% in November but down 6.6% over the past 12 months.

Consumer Sentiment and Small Business Optimism Indexes
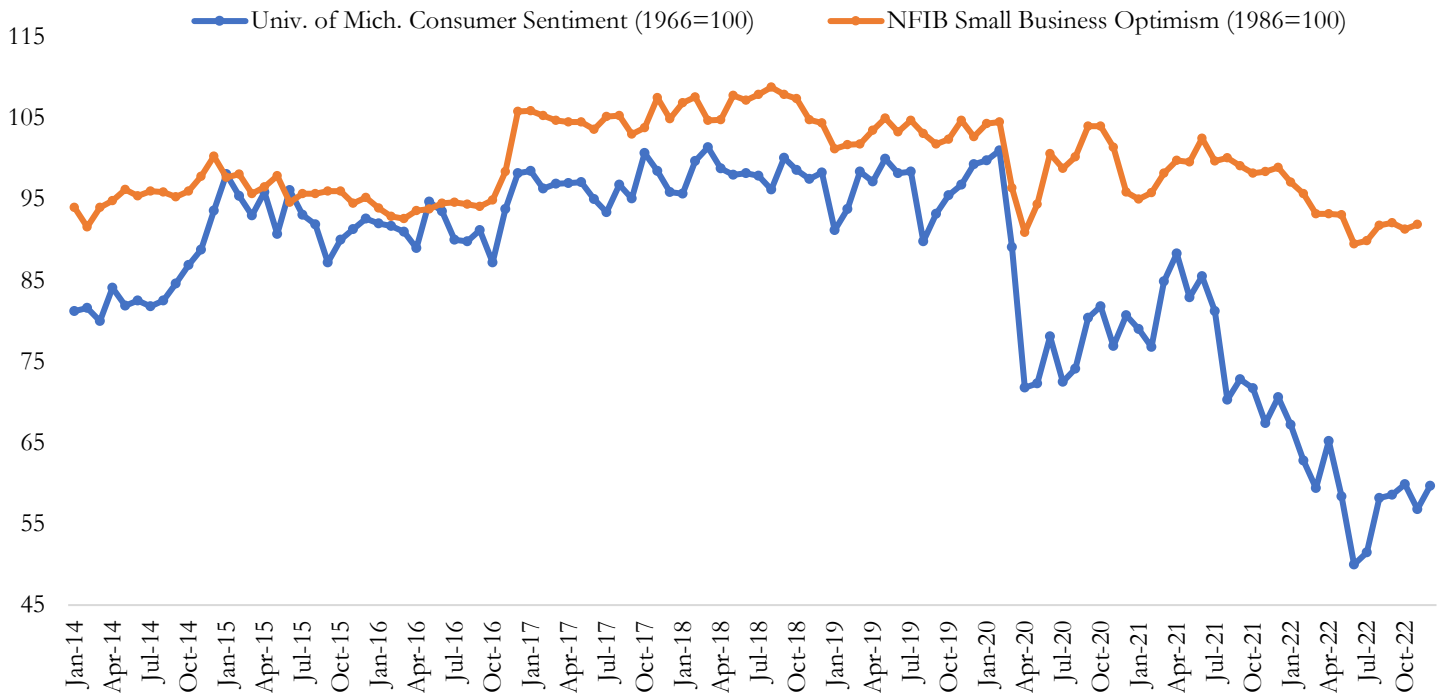
Trade Outlook

3.7.1   Exports and trade partners

In October 2022, total exports were down 7.6% in Maine and up 9.7% nationwide compared to October 2021. Year-over-year exports have been volatile since early 2021. Maine's top trade partner was Canada, which accounted for 65% of imports and 58% of exports. Total imports to Maine were valued at $605 million while exports totaled $293 million.

Value of exports to top 5 export partners

Value of imports from top 5 import partners
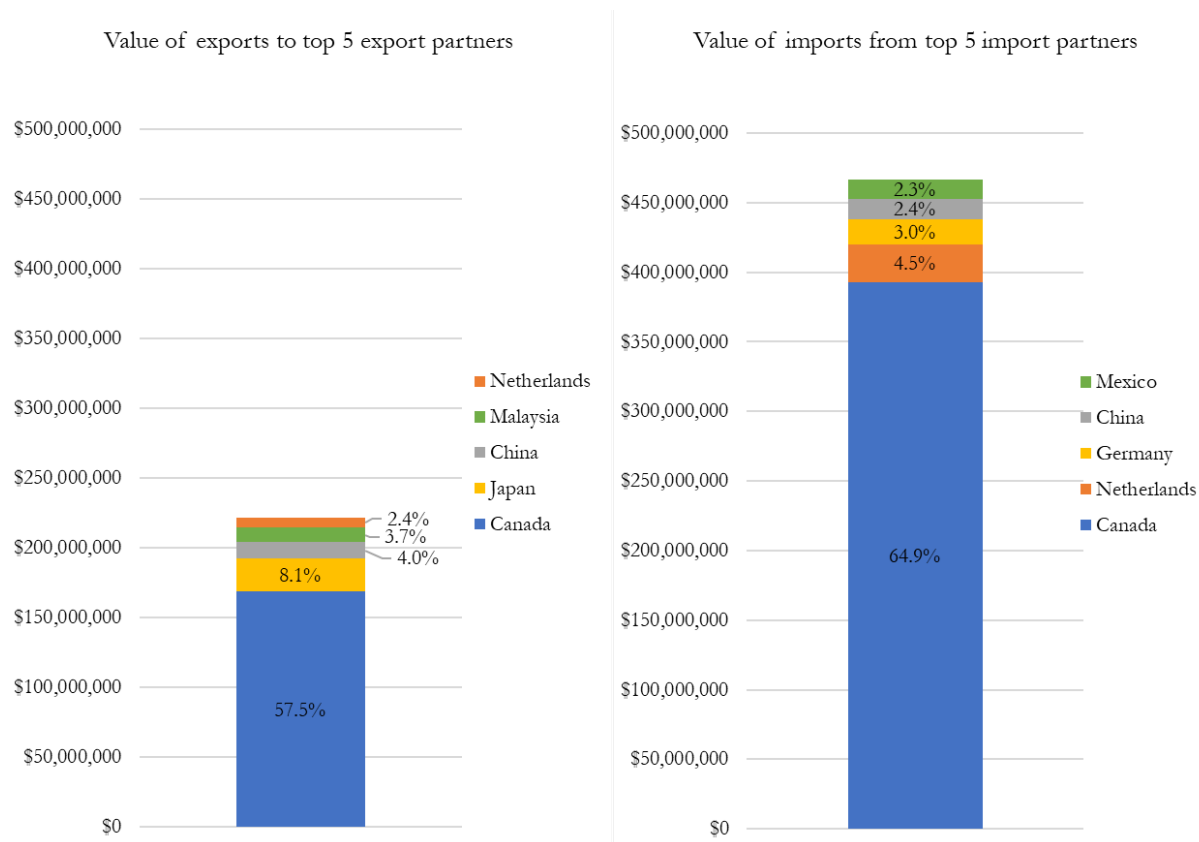
Similar to the nation, Maine's trade deficit has grown in recent months as the U.S. dollar has strengthened relative to foreign currencies, which makes imports from other countries cheaper and more attractive. Conversely, a strong U.S. dollar can lead to decreasing exports, as goods and services from the U.S. are more expensive for international consumers. Together, these dynamics contribute to a growing trade deficit, both in Maine and the U.S.

Maine exports vs. imports, 6-month moving average
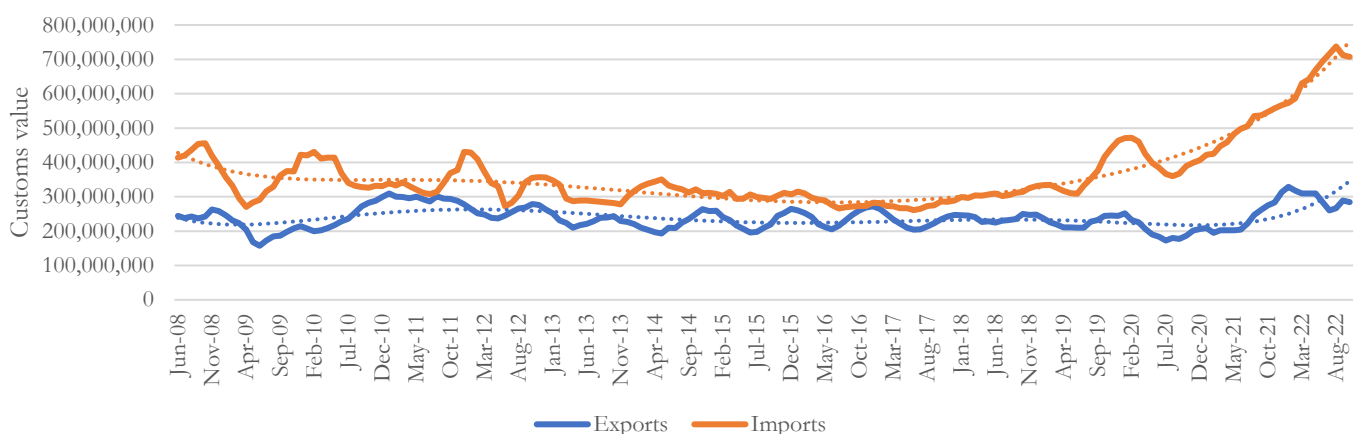
3.7.2   Real Trade-Weighted Value of the Dollar

The Real Trade-Weighted Value of the Dollar index calculates the inflation-adjusted value of the US Dollar against the currencies of countries with which the state trades, which allows for a more precise analysis of how movements in exchange rates affect demand for states' imports. In October 2022, Maine's RTWVD 6-month change was 8.7%.

Real Trade-Weighted Value of the Dollar: Maine, 6-month change

4 Appendix

4.1.1 Data Sources

Indicator	Source	Reference Period	Release Date
Population: estimates and percent change	Census Bureau – Pop. Ests.	2022	December 22, 2022
Net migration: total and percent change	Census Bureau – Pop. Ests.	2022	December 22, 2022
Median age	Census Bureau – ACS 1-year	2021	September 15, 2022
Educational attainment	Census Bureau – ACS 1-year	2021	September 15, 2022
Poverty level	Census Bureau – ACS 1-year	2021	September 15, 2022
Income	Census Bureau – ACS 1-year	2021	September 15, 2022
Per capita personal consumption expenditure	U.S. Bureau of Economic Analysis	2021	October 6, 2022
Per capita personal income	U.S. Bureau of Economic Analysis	2021	September 30, 2022
Average earnings per job	U.S. Bureau of Economic Analysis	2021	September 30, 2022
Gross domestic product	U.S. Bureau of Economic Analysis	2022:Q3	December 23, 2022
GDPNow	Atlanta Fed	2022:Q4	January 3, 2023
Real-time Sahm Rule Recession Indicator	Sahm, Claudia/FRED	Nov. 2022	December 2, 2022
GDP-Based Recession Indicator Index	Hamilton, James/FRED	2022:Q2	October 27, 2022
Personal income: total, per capita, and wages and salaries	U.S. Bureau of Economic Analysis	2022:Q3	December 23, 2022
Unemployment rate	U.S. Bureau of Labor Statistics	Nov. 2022	December 16, 2022
Labor force participation	U.S. Bureau of Labor Statistics	Nov. 2022	December 16, 2022
Nonfarm payroll job estimates	U.S. Bureau of Labor Statistics	Nov. 2022	December 16, 2022
Consumer Price Index	U.S. Bureau of Labor Statistics	Nov. 2022	December 13, 2022
PCE Price Index	U.S. Bureau of Economic Analysis/FRED	Nov. 2022	December 23, 2022
Brent Spot Prices	Energy Information Administration	Dec. 27, 2022	December 29, 2022
Gasoline	Energy Information Administration	Jan. 2, 2023	January 3, 2023
Heating oil prices	Energy Information Administration	Dec. 26, 2022	December 29, 2022
House price index	Federal Housing Finance Agency	2022:Q3	November 29, 2022
Housing: Units and Median Sale Price	Maine Association of REALTORS®	Nov. 2022	December 21, 2022
Index of Consumer Sentiment	University of Michigan Survey of Consumers	Dec. 2022	December 23, 2022
Small Business Optimism Index	National Federation of Independent Businesses	Nov. 2022	December 13, 2022
Imports & Exports	USA Trade Online	Oct. 2022	December 6, 2022
Real Trade-Weighted Value of the Dollar	Federal Reserve Bank of Dallas	Oct. 2022	December 16, 2022

5   Glossary

Average earnings per job: Total earnings, which is the sum of wages and salaries, supplements to wages and salaries, and proprietors' income, divided by total full-time and part-time employment.

Compound Annual Growth Rate: $= \left(\frac{Final\ Value}{Initial\ Value}\right)^{\frac{1}{No.\ of\ Periods}} - 1$

Gross Domestic Product: The measure of the market value of all final goods and services produced within a state in a particular period of time. GDP by state differs from national GDP for the following reasons: GDP by state excludes and national GDP includes the compensation of federal civilian and military personnel stationed abroad and government consumption of fixed capital for military structures located abroad and for military equipment, except office equipment. *Real GDP*: Real GDP by state is an inflation-adjusted measure of each state's gross product that is based on national prices for the goods and services produced within the state. The real estimates of gross domestic product (GDP) by state are measured in chained (2012) dollars.

Housing Price Index: A weighted, repeat-sales index, meaning that it measures average price changes in repeat sales or refinancing on the same properties.

Labor Force Participation Rate: The labor force as a percent of the civilian noninstitutional population ages 16 years and older.

Net Migration Rate: The U.S. Census Bureau defines the net migration rate as the difference between the number of migrants entering and those leaving an area in a year, per 1,000 midyear population. May also be expressed in percent. A positive figure is known as a net immigration rate and a negative figure as a net emigration rate.

Personal Consumption Expenditures by State: A measure of spending on goods and services purchased by, and on behalf of, households based on households' state of residence divided by the resident population of the area.

Personal Income: Income that persons residing in the area receive in return for their provision of labor, land, and capital used in current production as well as other income, such as personal current transfer receipts. *Per capita personal income:* The personal income of a given area divided by the resident population of the area. *Per capita disposable personal income:* The income available to persons for spending or saving (personal income less personal current taxes) of a given area divided by the resident population of the area.

Poverty Level: The U.S. Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who is in poverty. If a family's total income is less than the family's threshold, then that family and every individual in it is considered in poverty.

Real Trade Weighted Value of the Dollar: An index that calculates the inflation-adjusted value of the U.S. dollar against the currencies of countries with which the state trades.

Total merchandise exports: Total exports are calculated by adding domestic exports (goods that are grown, produced, or manufactured in the United States) to foreign exports (foreign-origin goods that have previously entered the United States, Puerto Rico, or the U.S. Virgin Islands for consumption, entry into a CBP bonded warehouse, or a U.S. Foreign Trade Zone (FTZ), and at the time of exportation, have undergone no change in form or condition or enhancement in value by further manufacturing).

[Total Private nonfarm employment](): Each month Current Employment Statistics (CES) surveys a sample of about 2,700 nonfarm private employers (plus federal, state, and local government employers) in Maine asking them to report the number of jobs, hours, and earnings of workers on their payroll during the week including the 12th day of each month. The sample accounts for just 7% of employers, but 34% of nonfarm jobs in the state because a high share of large employers are surveyed.

[Unemployment Rate](): Number of unemployed as a percent of the labor force. To be classified as unemployed, persons must be aged 16 years and older with no employment during the reference week, were available for work, except for temporary illness, and had made specific efforts to find employment sometime during the 4-week period ending with the reference week.

[Wages and Salaries](): Remuneration receivable by employees (including corporate officers) from employers for the provision of labor services, measured before deductions such as social security contributions, union dues, and voluntary employee contributions to defined contribution pension plans.