Maine Economic Indicators

March 2019

Maine Department of Administrative and Financial Services

Office of the State Economist

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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.

This report includes monthly, quarterly, and annual data released at varying points throughout the year. 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.

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
2018	Total population	1,338,404	17,388,096	327,167,434
2017-2018	Annual population percent change	0.3%	0.6%	0.6%
2010-2018	Cumulative population percent change	0.8%	2.8%	6.0%
2017	Average earnings per job	$48,622	$67,839	$60,660
2016-2017	Average earnings per job percent change	3.2%	2.8%	3.2%
February 2019	Unemployment rate (ME Lowest=3.2%; Nov. 2017-Mar. 2018)	3.4%	3.2%	3.8%
February 2019	Total private nonfarm employment	533,700	6,494,300	128,123,000

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

Real GDP	2017:Q3	2017:Q4	2018:Q1	2018:Q2	2018:Q3	CAGR 2017:Q3-2018:Q3
Maine	3.8	0.5	2.0	3.4	2.6	2.1
New England	3.1	-0.7	2.9	3.7	3.3	2.3
United States	2.8	2.3	2.2	4.2	3.4	3.0
Total Personal Income	2017:Q4	2018:Q1	2018:Q2	2018:Q3	2018:Q4	CAGR 2017:Q4-2018:Q4
Maine	2.8	6.0	2.8	3.5	3.9	4.0
New England	2.4	6.7	0.8	4.3	4.6	4.1
United States	5.0	5.3	3.4	4.4	5.2	4.6
Per Capita Personal Income	2017:Q4	2018:Q1	2018:Q2	2018:Q3	2018:Q4	CAGR 2017:Q4-2018:Q4
Maine	2.5	5.8	2.6	3.2	3.6	3.8
New England	2.0	6.5	0.5	3.9	4.2	3.7
United States	4.3	4.7	2.9	3.7	4.5	3.9
Wages & Salaries	2017:Q4	2018:Q1	2018:Q2	2018:Q3	2018:Q4	CAGR 2017:Q4-2018:Q4
Maine	0.0	7.2	1.7	4.5	3.5	4.2
New England	-0.5	9.7	-3.1	4.8	4.5	3.9
United States	3.9	5.8	2.8	5.0	4.5	4.5

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
2018	Total population	1,338,404	17,388,096	327,167,434
2017-2018	Annual population percent change	0.3%	0.6%	0.6%
2010-2018	Cumulative population percent change	0.8%	2.8%	6.0%
2018	Births	12,438	146,106	3,855,500
2018	Deaths	14,079	131,249	2,814,013
2018	Net migration	5,039	35,720	978,826
2016-2017	Annual rate of total net migration (Maine ranks 17th in the U.S.)	0.52%	0.32%	0.34%
2017	Median age	44.7 yrs	40.7 yrs	38.0 yrs
2017	Associate's degree: percent of population age 25 and above	10.3%	8.2%	8.5%
2017	Bachelor's degree: percent of population age 25 and above	19.9%	22.5%	19.7%
2017	Graduate or professional degree: percent of population age 25 and above	12.3%	17.2%	12.1%
2017	Percent of population below poverty level	11.1%	10.2%	13.4%
2017	Median family income	$72,177	$91,189	$73,891
2017	Median household income	$56,277	$71,494	$60,336
2017	Per capita personal consumption expenditures	$43,364	$50,536	$40,878
2018	Per capita disposable personal income	$43,291	$57,531	$47,451

3   Monthly and Quarterly Indicators

3.1   Gross Domestic Product (GDP)

Real GDP in Maine increased by 0.6 percent from the preceding quarter (2018:Q2 to 2018:Q3) and saw growth of 2.6 percent on an annualized basis. The annualized growth ranks 35th nationally and 5th in New England ahead of Vermont. In terms of total GDP, Maine ranked 43rd in the United States and 4th in New England. In the third quarter of 2018, real estate and rental and leasing; government and government enterprises; and health care and social assistance accounted for 14, 13, and 12 percent, respectively, of contributions towards Maine's real GDP.

Reference Period		Maine	United States
2018:Q3	Total GDP (current dollars)	$64.8 billion	$20,658.2 billion

Real GDP (billions of chained 2012 dollars) - Maine
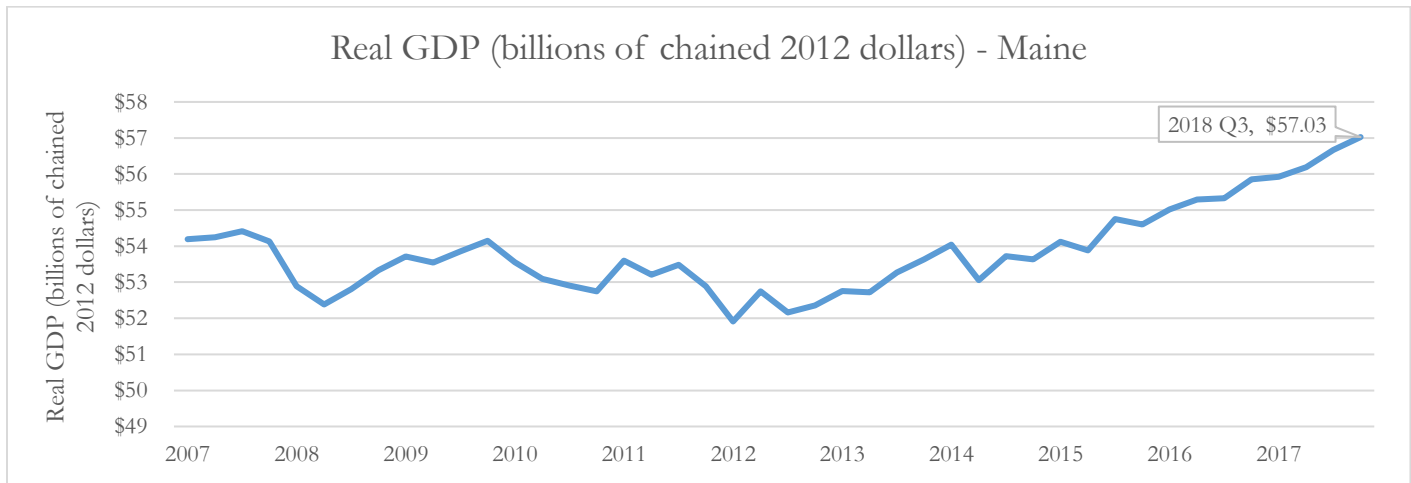
3.1.1   GDPNow

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 Bureau of Economic Analysis in their official GDP estimates and is revised each time the monthly source data is updated. The latest forecast (February 25, 2019) indicates that real GDP growth in the fourth quarter of 2018 is estimated to be 1.9 percent.


Evolution of Atlanta Fed GDPNow real GDP estimate for 2018: Q4
Quarterly percent change (SAAR)
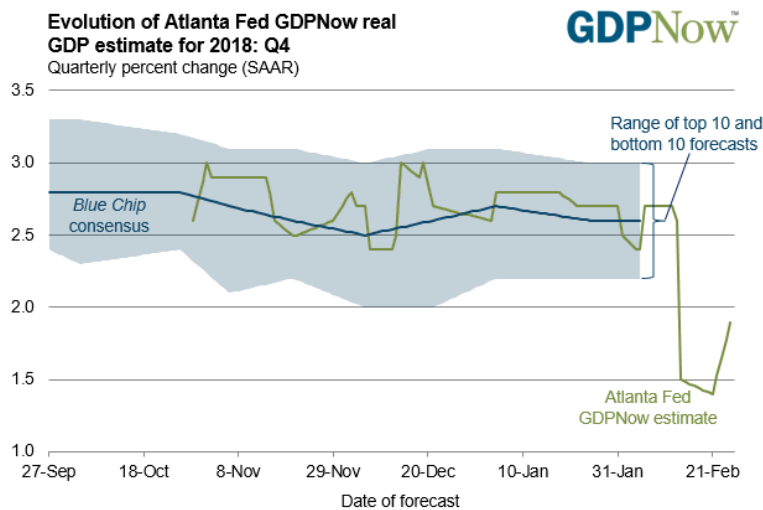
Sources: *Blue Chip Economic Indicators* and *Blue Chip Financial Forecasts*
Note: The top (bottom) 10 forecast is an average of the highest (lowest) 10 forecasts in the *Blue Chip* survey.

3.1.2 GDP-Based Recession Indicator Index

The GDP-Based Recession Indicator Index is 1.5 percent (2018:Q3), the lowest level ever seen and indicates that the national economy remains in an expansionary phase, two quarters shy of the longest expansion on record (1991: Q2 – 2001:Q1). Dr. James Hamilton, professor of economics at the University of California and creator of this indicator, attributed strong U.S. GDP growth to government spending and inventory build-up. Nationally, falling exports, a decline in new housing construction, and weak nonresidential fixed investment slowed GDP growth.

The index ranges from 0 to 100, with a value above 50 indicating that data are more consistent with a recession. Dr. Hamilton indicates that the U.S. could enter a recession when the index rises above 67 percent. Compared to National Bureau of Economics Research (NBER)'s subjective method of announcing recessionary periods, this method is purely mathematical. In addition, this index is calculated with a one quarter lag, which allows for extra insight and accounts for data revisions to order to make dependable inference. Therefore, the index does not get revised once it is published.
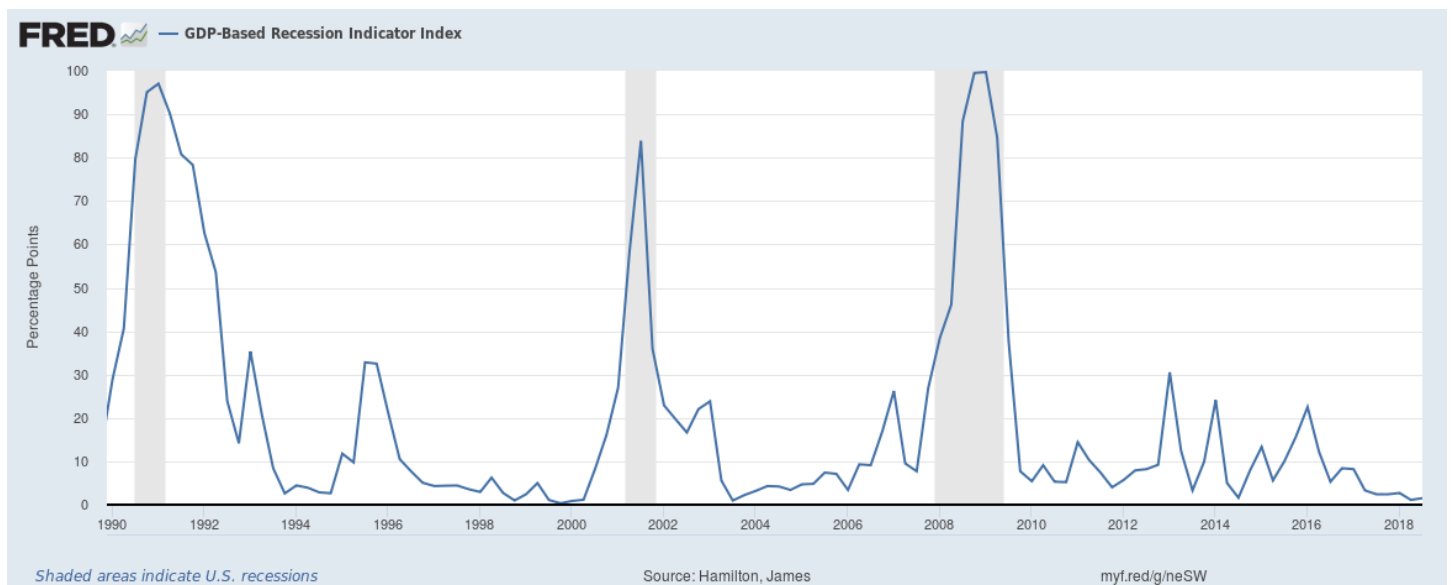
3.2 Personal Income: Total and Per Capita

State total personal income in Maine increased by 1.0 percent from the preceding quarter (2018:Q3 to 2018:Q4) and saw growth of 3.9 percent on an annualized basis. The annualized growth rate ranks 45th nationally and second to last in the region (ahead of Rhode Island). Maine's total personal income ranks 42nd nationally. In terms of per capita income, Maine ranks 30th in the United States.

Reference Period		Maine	New England	United States
2018:Q4	Total personal income	$65.41 billion	$1003.11 billion	$17,870.83 billion
2018:Q4	Per capita personal income	$48,821	$67,445	$54,484

3.3 Labor Markets and Employment

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, vary month to month in either direction, and could be revised substantially. 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.

3.3.1 Unemployment Rate: February 2019 = 3.4%

The unemployment rate in Maine and New England is lower than the national unemployment rate of 3.9. Compared to last year (February 2018), the unemployment rate in Maine was lower by 0.3 percentage points.

Unemployment Rate
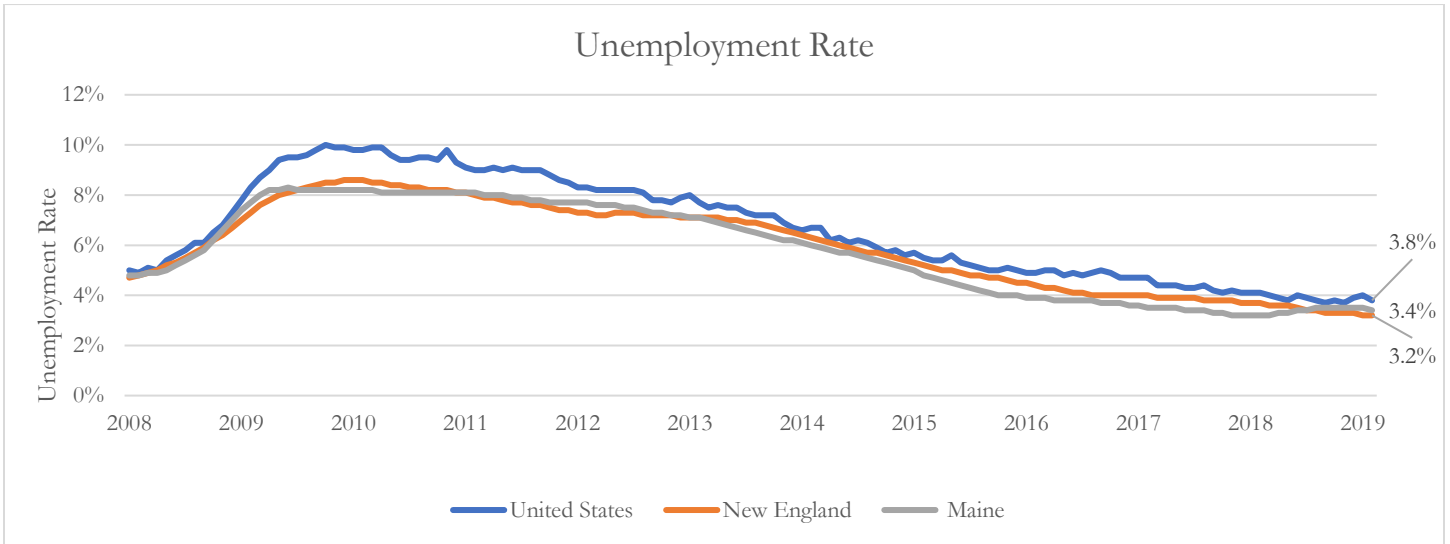
3.3.2 Labor Force Participation Rate: February 2019 = 63.1%

Labor force participation in Maine has remained relatively stable for approximately two years. Maine's participation rate dipped lower than the national rate by 0.1 percentage points in January 2019 after 33 consecutive months.

Labor participation rate
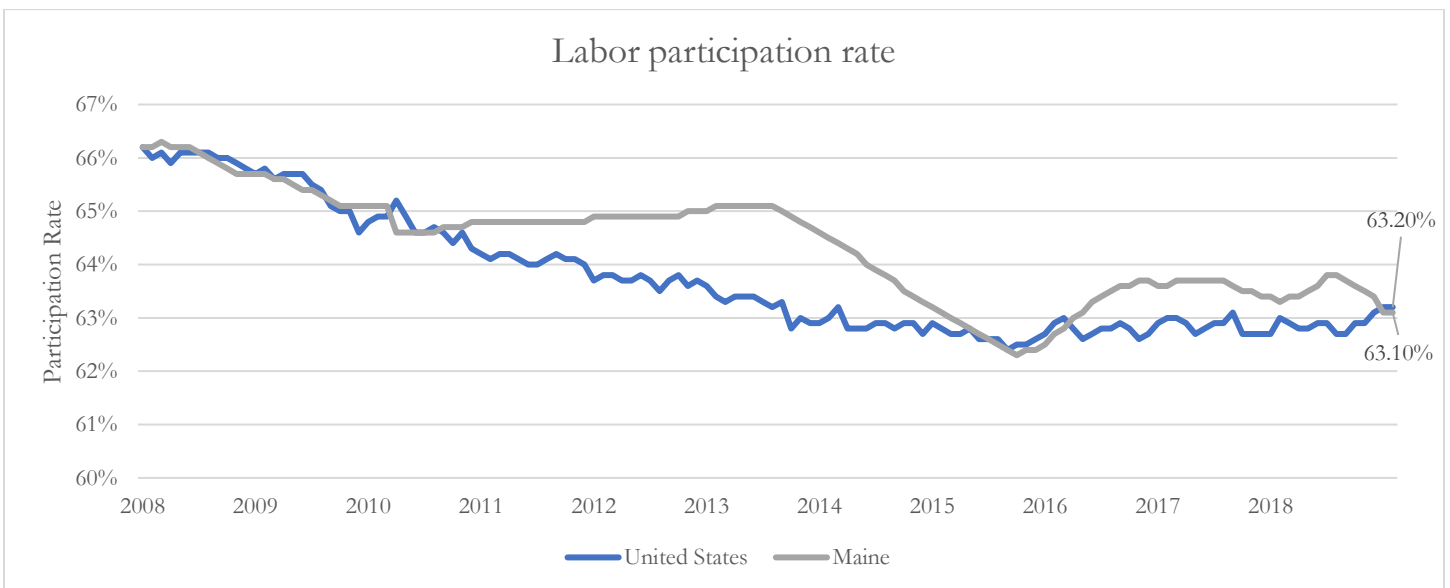
### 3.3.3 Total Nonfarm Payroll Job Estimates: February 2019 = 634,400

Compared to February 2018, total nonfarm payroll job estimates for Maine in February 2019 increased by 0.5 percent. Nonfarm payroll job estimates in February 2019 for Maine were also the highest since records began in 1969. Nonfarm payroll job estimates for New England were higher by 0.7 percent compared to last year.

Total Nonfarm employment - Maine

Percent change, year-over-year in Total Nonfarm Employment
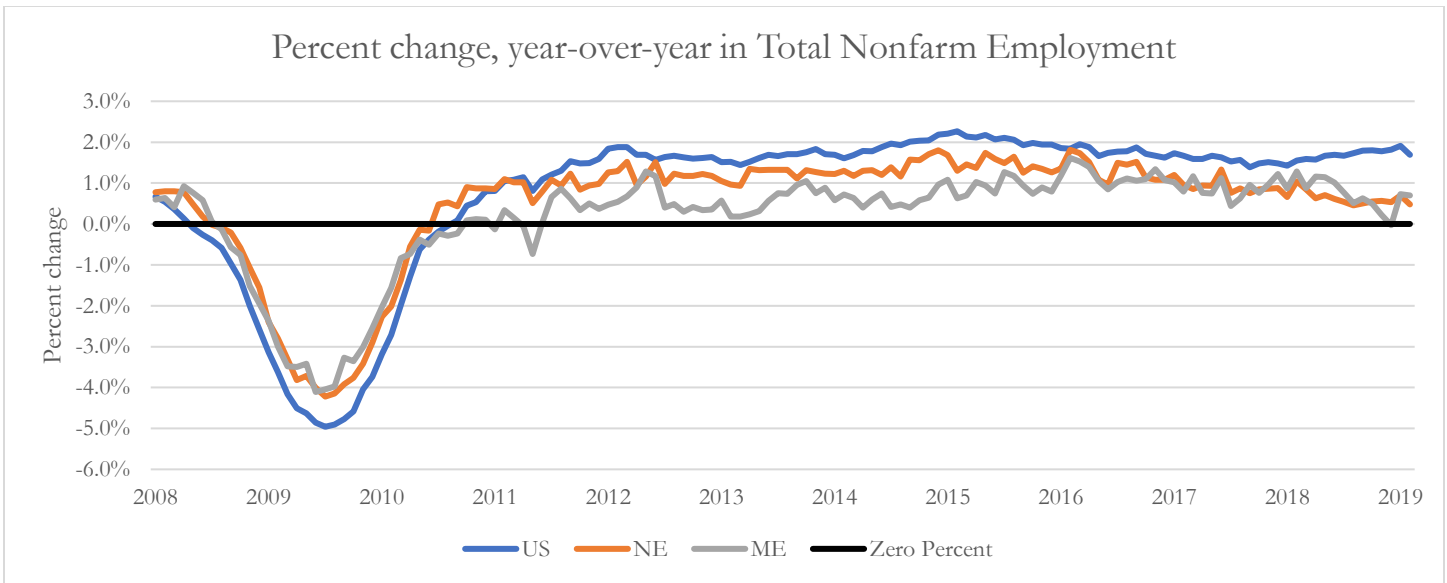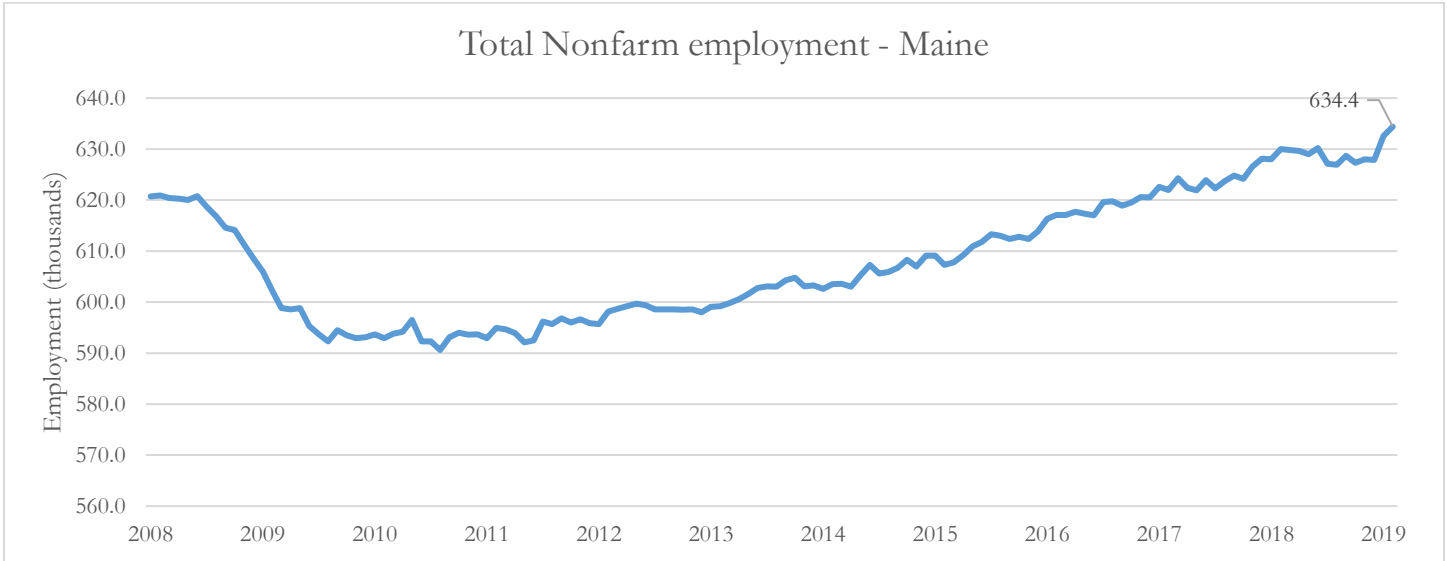
3.4 Housing Prices

In the fourth quarter of 2018, the housing price index (HPI) in Maine, New England, and the U.S. continued to rise compared to the third quarter of 2018. According to the Federal Housing Finance Agency (FHFA), the HPI "measures average price changes in repeat sales or refinancing on the same properties." Maine's HPI increased by 1.9 percent from the previous quarter (2018:Q3 to 2018:Q4). Maine's year-over-year HPI growth rate was higher than both the regional growth rate and the national growth rate.

Reference Period		Maine	New England	United States
2018:Q3 - 2018:Q4	HPI percent change from previous quarter	1.9%	1.3%	1.1%

Percent Changes, Year-over-year in FHFA House Price Index (Seasonally Adjusted)
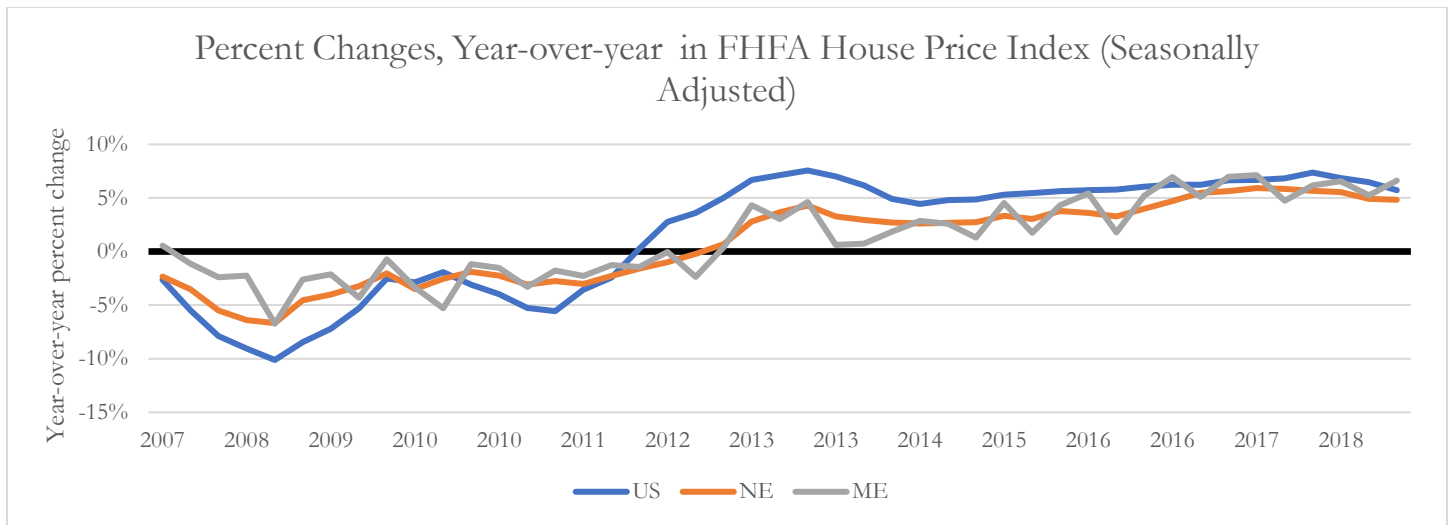
3.4.1 Median Housing Prices and Units Sold – County (February 2019)

County	No. of Units Sold	One Year Change	Median Sale Price	One Year Change	One Month Change
Androscoggin	48	2.1%	$ 160,000	3.2%	-3.0%
Aroostook	20	-33.3%	$ 70,250	-3.8%	-33.1%
Cumberland	192	4.9%	$ 302,500	7.3%	8.0%
Franklin	17	-19.0%	$ 110,000	-30.6%	0.0%
Hancock	30	-31.8%	$ 287,500	37.2%	25.5%
Kennebec	68	7.9%	$ 146,450	8.5%	-4.4%
Knox	30	7.1%	$ 222,500	26.8%	0.6%
Lincoln	25	66.7%	$ 155,000	-15.3%	-36.7%
Oxford	48	17.1%	$ 144,500	9.5%	12.7%
Penobscot	84	-8.7%	$ 142,000	6.0%	7.2%
Piscataquis	8	-33.3%	$ 136,000	76.1%	45.5%
Sagadahoc	29	3.6%	$ 203,750	1.9%	-18.2%
Somerset	36	80.0%	$ 102,000	35.1%	8.7%
Waldo	22	0.0%	$ 140,500	3.0%	-22.8%
Washington	12	-52.0%	$ 83,750	-45.3%	-34.6%
York	149	-1.3%	$ 285,000	5.6%	9.1%
Maine	**818**	**-0.5%**	**$ 200,000**	**2.9%**	**0.0%**

## 3.5 Heating Oil Prices: <u>February 4, 2019 = $2.59 per gallon</u>

In the first week of February 2019, heating oil prices were 8.5 percent lower than one year ago. It is important to note that the numbers represented below are statewide averages and spot prices. Therefore, prices vary across geographic regions within the state.
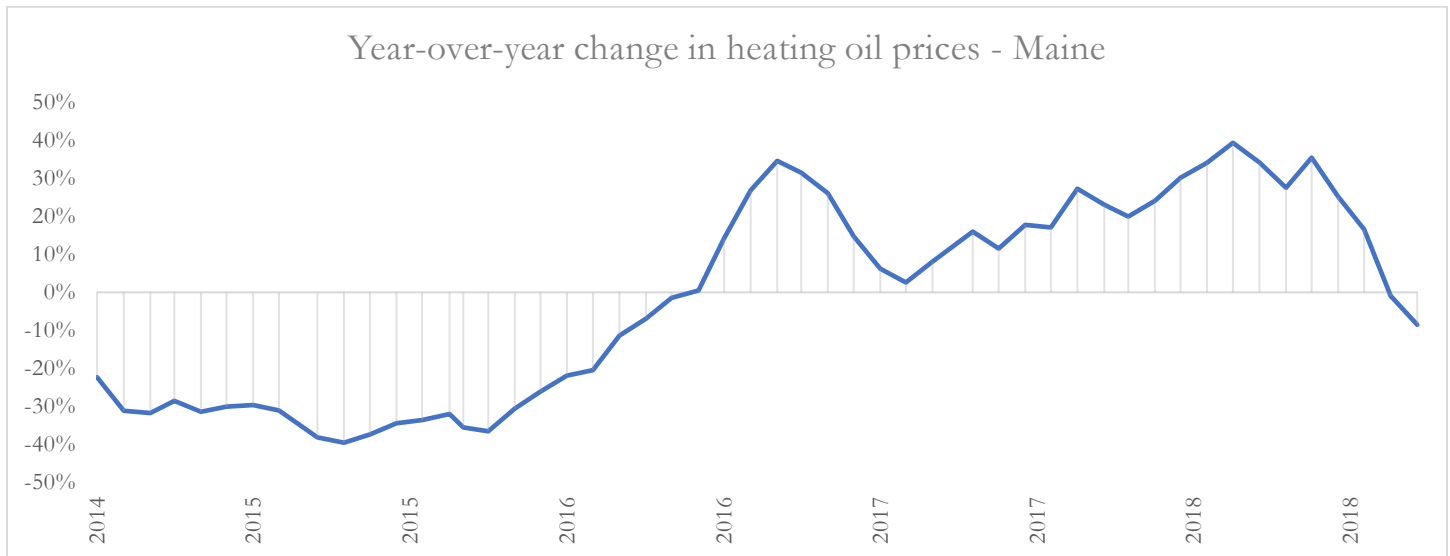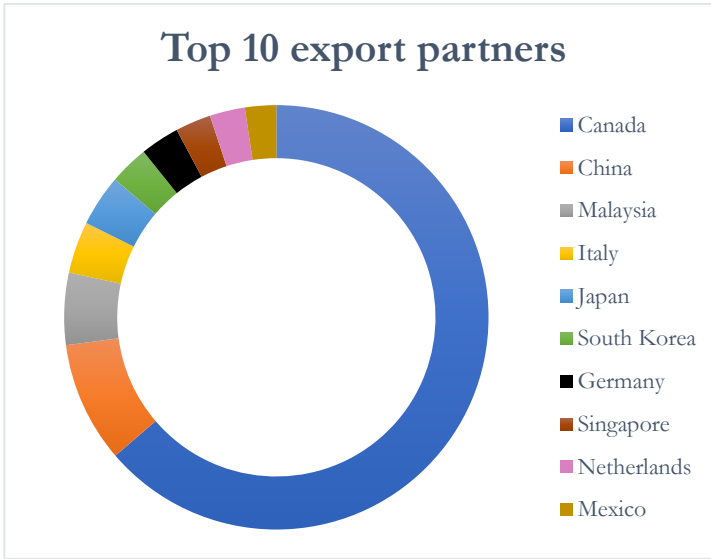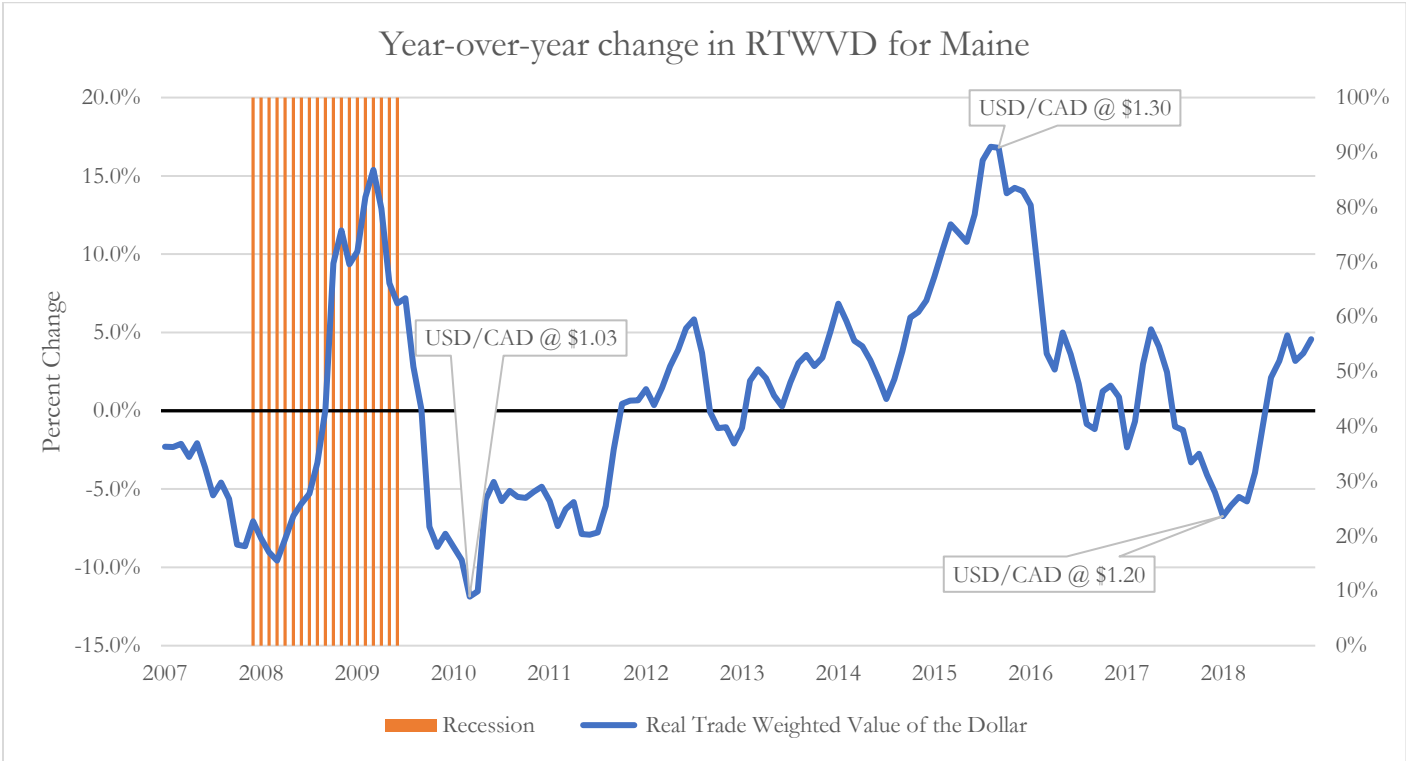

3.6 Trade Outlook

3.6.1 Exports

Year-over-year comparisons show that compared to December 2017, total exports for December 2018 in Maine decreased by 8.1 percent. Similarly, year-over-year comparisons show that total exports decreased by 1.1 percent nationally and 3.1 percent regionally. Compared to the December 2017, two export industries – paper and computer & electronic products – saw increases in total exports, while the fish industry experienced a decline in December 2018.
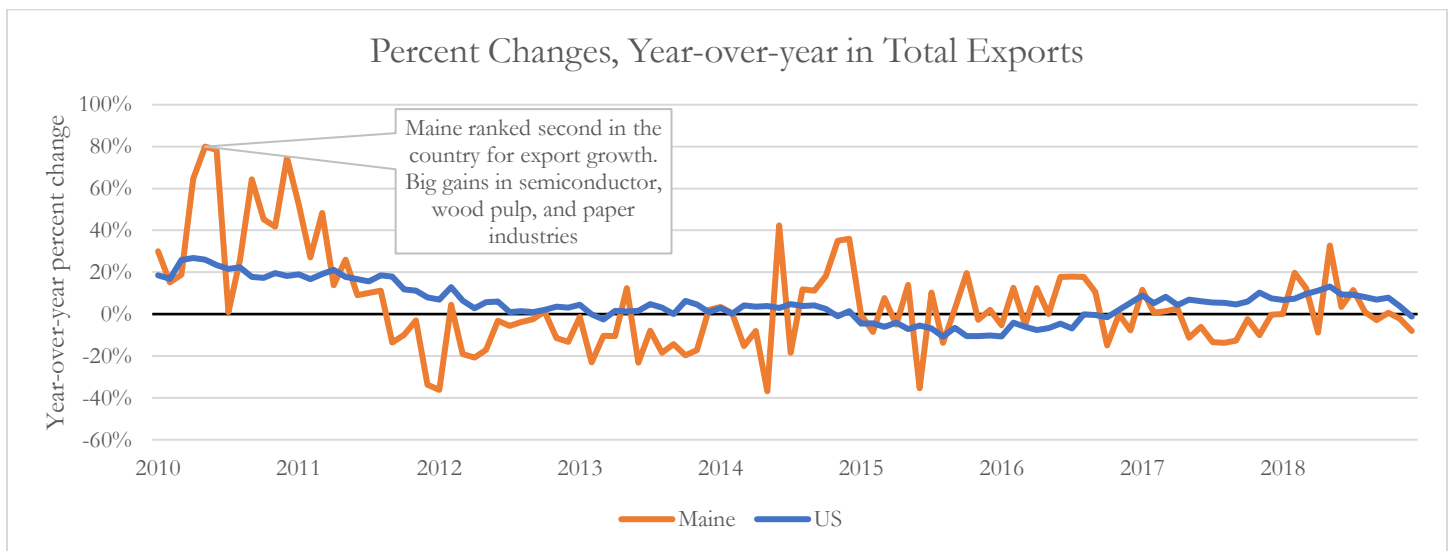
3.6.2 Real Trade Weighted Value of the Dollar (RTWVD)

This index compares the value of the dollar against the currencies of the countries with which Maine trades. Canada (50.1%), China (7.2%) and Malaysia (4.3) are the top three export destinations. Maine's top three import

partners are Canada (49.3%), China (9.1%) and Netherlands (6.2%). RTWVD represents the dollar's purchasing power relative to the foreign currencies mentioned above. When the value of the dollar increases in relation to export partners, exports to partner countries becomes more expensive.

Year-over-year change in RTWVD for Maine

Top 10 export partners

- Canada
- China
- Malaysia
- Italy
- Japan
- South Korea
- Germany
- Singapore
- Netherlands
- Mexico

Top 10 import partners

- Canada
- China
- Netherlands
- Germany
- Japan
- United Kingdom
- Vietnam
- Mexico
- Finland
- Thailand

4 Appendix

4.1 Data Sources

Indicator	Source	Reference Period	Release Date
Population: estimates and percent change	Census Bureau – Pop. Ests.	2018	December 19, 2018
Net migration: total and percent change	Census Bureau – Pop. Ests.	2018	December 19, 2018
Median age	Census Bureau – Pop. Ests.	2017	June 2018
Educational attainment	Census Bureau – ACS 1-year	2017	September 13, 2018
Poverty level	Census Bureau – ACS 1-year	2017	September 13, 2018
Income	Census Bureau – ACS 1-year	2017	September 13, 2018
Per capita personal consumption expenditure	U.S. Bureau of Economic Analysis	2017	October 4, 2018
Per capita disposable personal income	U.S. Bureau of Economic Analysis	2018	March 26, 2019
Average earnings per job	U.S. Bureau of Economic Analysis	2017	September 25, 2018
Gross domestic product	U.S. Bureau of Economic Analysis	2018:Q3	February 26, 2019
GDPNow	Atlanta Fed	2018:Q4	February 25, 2019
GDP-Based Recession Indicator Index	Hamilton, James/FRED	2018:Q3	March 1,2019
Personal income: total, per capita, and wages and salaries	U.S. Bureau of Economic Analysis	2018:Q4	March 26, 2019
Unemployment rate	U.S. Bureau of Labor Statistics	February 2019	March 22, 2019
Labor force participation	U.S. Bureau of Labor Statistics	February 2019	March 22, 2019
Nonfarm payroll job estimates	U.S. Bureau of Labor Statistics	February 2019	March 22, 2019
Housing price index	Federal Housing Finance Agency	2018:Q4	February 26, 2019
Housing: Units and Median Sale Price	Maine Association of REALTORS®	February 2019	March 22, 2019
Energy prices	Maine Governor's Energy Office	February 2019	February 4, 2019
Exports	Census Bureau – USA Trade Online	November 2018	February 6, 2019
Real trade weighted value of the dollar	Federal Reserve Bank of Dallas	January 2018	February 2019
Export and Import Partners	Census Bureau – USA Trade Online	December 2018	March 6, 2019
U.S Canada Exchange Rate	Bank of Canada	n/a	n/a

4.2 Glossary

<u>Average earnings per job:</u> 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: $= \left(\frac{Final\ Value}{Initial\ Value}\right)^{\frac{1}{No.\ of\ Periods}} - 1$

<u>Gross Domestic Product</u>**:** 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.

<u>Housing Price Index</u>**:** A weighted, repeat-sales index, meaning that it measures average price changes in repeat sales or refinancings on the same properties.

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

<u>Net Migration Rate</u>**:** The U.S. Census Bureau defines the net migration rate as **t**he 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.

<u>Personal Consumption Expenditures by State</u>**:** 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.

<u>Personal Income</u>**:** 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.

<u>Poverty Level</u>**:** 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.

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

<u>Total merchandise exports</u>**:** 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. <u>Foreign Trade Zone (FTZ),</u> 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.