Hawaii Economic Outlook

Eugene Tian
Department of Business, Economic Development & Tourism

Committee on Ways and Means
and
Committee on Finance

January 7, 2020
Summary of Current Hawaii Economic Conditions

Some Good News:

• General fund tax revenue was up 5.9% during first 5 months of FY 2020, while the average annual growth rate for the last 20 years was 4.5%

• Initial unemployment claims decreased 4.9% in 2019

• Air seats will increase 6.4% during first half of 2020
Summary of Current Hawaii Economic Conditions

Challenges:

- Population decreased three years in a row, lost 12,000 people from the 2016 level
- Labor force and employment decreased by 2.2% and 2.5%, respectively during first 11 months of 2019
- Unemployment rate ranked the 6th lowest during first 11 months of 2019, was lowest in 2017 & 2018
- Non-ag Payroll job grew only 0.5% during first 11 months of 2019, was 1.7% at the same time last year
- Visitor spending grew only 0.5% during first 11 months of 2019, negative growth rate if adjusting for inflation
- Construction industry is weakening with value of private building permits flat during the first 11 months of 2019, and number of residential units authorized decreased 26.3% during the same period
The U.S. and World Economies
<table>
<thead>
<tr>
<th>Trough</th>
<th>Peak</th>
<th>Expansion Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 1945 (IV)</td>
<td>November 1948(IV)</td>
<td>37</td>
</tr>
<tr>
<td>October 1949 (IV)</td>
<td>July 1953(III)</td>
<td>45</td>
</tr>
<tr>
<td>May 1954 (II)</td>
<td>August 1957(III)</td>
<td>39</td>
</tr>
<tr>
<td>April 1958 (II)</td>
<td>April 1960(II)</td>
<td>24</td>
</tr>
<tr>
<td>February 1961 (I)</td>
<td>December 1969(IV)</td>
<td>106</td>
</tr>
<tr>
<td>November 1970 (IV)</td>
<td>November 1973(IV)</td>
<td>36</td>
</tr>
<tr>
<td>March 1975 (I)</td>
<td>January 1980(I)</td>
<td>58</td>
</tr>
<tr>
<td>July 1980 (III)</td>
<td>July 1981(III)</td>
<td>12</td>
</tr>
<tr>
<td>November 1982 (IV)</td>
<td>July 1990(III)</td>
<td>92</td>
</tr>
<tr>
<td>March 1991 (I)</td>
<td>March 2001(I)</td>
<td>120</td>
</tr>
<tr>
<td>November 2001 (IV)</td>
<td>December 2007(IV)</td>
<td>73</td>
</tr>
<tr>
<td>June 2009 (II)</td>
<td>As of January 2020</td>
<td>127</td>
</tr>
<tr>
<td><strong>Average Expansion, 1945-2009 (11 cycles)</strong></td>
<td><strong>58.4</strong></td>
<td></td>
</tr>
</tbody>
</table>
U.S. Consumer Sentiment Index

Source: Federal Reserve Bank of St. Louis, University of Michigan Survey of Consumers
As of 12/18/2019
Source: Federal Reserve Bank of St. Louis

Stock Market Indicators

DJIA
SP 500

1,000 for DJIA;
1,000 for SP
Leading Economic Index for the United States

Source: Federal Reserve Bank of Philadelphia
The inverse of the yield curve: 10 year - 2 year

Source: Federal Reserve Bank of St. Louis
The inverse of the yield curve: 10 year-3 month
Most of the world economies will have slower growth in 2019 and 2020

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>1.4</td>
<td>1.5</td>
<td>2.3</td>
<td>2.9</td>
<td>2.3</td>
<td>1.8</td>
</tr>
<tr>
<td>Canada</td>
<td>0.9</td>
<td>1.4</td>
<td>3.2</td>
<td>2.0</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Japan</td>
<td>2.8</td>
<td>1.0</td>
<td>2.2</td>
<td>0.3</td>
<td>0.9</td>
<td>0.3</td>
</tr>
<tr>
<td>S. Korea</td>
<td>2.1</td>
<td>2.9</td>
<td>3.2</td>
<td>2.7</td>
<td>1.9</td>
<td>2.1</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>1.5</td>
<td>2.2</td>
<td>3.8</td>
<td>3.0</td>
<td>-1.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Taiwan</td>
<td>6.7</td>
<td>1.4</td>
<td>3.3</td>
<td>2.7</td>
<td>2.4</td>
<td>2.1</td>
</tr>
<tr>
<td>China</td>
<td>6.9</td>
<td>6.7</td>
<td>6.8</td>
<td>6.6</td>
<td>6.1</td>
<td>5.8</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1.9</td>
<td>1.8</td>
<td>1.9</td>
<td>1.4</td>
<td>1.3</td>
<td>1.0</td>
</tr>
<tr>
<td>Germany</td>
<td>1.2</td>
<td>2.2</td>
<td>2.8</td>
<td>1.5</td>
<td>0.6</td>
<td>0.7</td>
</tr>
<tr>
<td>France</td>
<td>1.8</td>
<td>1.1</td>
<td>2.4</td>
<td>1.7</td>
<td>1.3</td>
<td>1.2</td>
</tr>
<tr>
<td>Eurozone</td>
<td>2.6</td>
<td>1.9</td>
<td>2.7</td>
<td>1.9</td>
<td>1.2</td>
<td>1.1</td>
</tr>
<tr>
<td>Australia</td>
<td>-3.5</td>
<td>2.6</td>
<td>2.5</td>
<td>2.7</td>
<td>1.8</td>
<td>2.3</td>
</tr>
<tr>
<td>Brazil</td>
<td>1.4</td>
<td>-3.5</td>
<td>1.3</td>
<td>1.3</td>
<td>0.9</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Source: Blue Chip Economic Indicators, December 10th, 2019
Hawaii Economy - GDP Growth
Hawaii economic growth follows closely with the US in the current business cycle

Source: U.S. Bureau of Economic Analysis
Hawaii’s economy has gone through different growth path than the U.S.

<table>
<thead>
<tr>
<th>Period</th>
<th>U.S.</th>
<th>Hawaii</th>
</tr>
</thead>
<tbody>
<tr>
<td>1958-1968</td>
<td>4.9%</td>
<td>6.7%</td>
</tr>
<tr>
<td>1968-1978</td>
<td>3.2%</td>
<td>4.6%</td>
</tr>
<tr>
<td>1978-1988</td>
<td>3.0%</td>
<td>3.7%</td>
</tr>
<tr>
<td>1988-1998</td>
<td>3.1%</td>
<td>1.0%</td>
</tr>
<tr>
<td>1998-2008</td>
<td>2.6%</td>
<td>2.8%</td>
</tr>
<tr>
<td>2008-2018</td>
<td>1.8%</td>
<td>1.4%</td>
</tr>
<tr>
<td>1958-1988</td>
<td>3.7%</td>
<td>5.0%</td>
</tr>
<tr>
<td>1988-2018</td>
<td>2.5%</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Economic Analysis and Hawaii DBEDT
Hawaii’s economy will grow at lower pace in next few years

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Annual average growth, %</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30 years, 1988 - 2018</td>
<td>20 years, 1998 - 2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real GDP</td>
<td>1.7</td>
<td>2.1</td>
<td>2.4</td>
<td>1.2</td>
<td>1.2</td>
<td>1.3</td>
</tr>
<tr>
<td>Real personal income</td>
<td>1.7</td>
<td>1.9</td>
<td>2.3</td>
<td>1.7</td>
<td>1.7</td>
<td>1.6</td>
</tr>
<tr>
<td>Honolulu inflation rate</td>
<td>2.8</td>
<td>2.4</td>
<td>1.9</td>
<td>2.0</td>
<td>2.3</td>
<td>2.4</td>
</tr>
<tr>
<td>Non-Ag wage and salary jobs</td>
<td>1.1</td>
<td>1.1</td>
<td>0.5</td>
<td>0.4</td>
<td>0.3</td>
<td>0.4</td>
</tr>
<tr>
<td>Unemployment rate 1/</td>
<td>4.4</td>
<td>4.4</td>
<td>2.4</td>
<td>2.8</td>
<td>3.2</td>
<td>3.4</td>
</tr>
<tr>
<td>Visitor arrivals by air</td>
<td>1.6</td>
<td>2.0</td>
<td>5.2</td>
<td>5.7</td>
<td>2.5</td>
<td>2.1</td>
</tr>
</tbody>
</table>

1/ Preliminary data.
Hawaii Economy
-Labor Market
Statewide labor force & employment declining

*2019 through November
Source: Hawaii State Department of Labor and Industrial Relations
Hawaii unemployment rates were the lowest in the nation 2016-2018, now the 6th lowest

United States  3.3%
State          2.5%
Honolulu      2.4%

1/ Not seasonally adjusted, November figures
Source: U.S. Bureau of Labor Statistics, Hawaii State Department of Labor & Industrial Relations
2019 is first three quarters
Source: Hawaii DLIR
Non-ag. payroll job count has been flat

*2019 through November
Source: Hawaii State Department of Labor and Industrial Relations
Statewide gained 3,500 non-ag payroll jobs through November 2019

Source: Hawaii State Department of Labor and Industrial Relations
Initial unemployment claims continued declining in 2019

Recession

- 56.7% (2008)
- 42.7% (2009)
- 0.4% (2019)

Expansion

- -18.4% (2009)
- -11.5% (2014)
- 1.4% (2013)
- -4.9% (2019)
Hawaii Economy
- Tax Revenues
Hawaii State General Fund Tax Revenues Composition (FY 2019)

- General Excise, 49.6%
- Net Individual income, 36.0%
- Transient Accommodations
- Insurance Companies Premiums
- Net Corporate Income
- Public Service Companies
- Tobacco
- Liquor Permits
- Inheritance and Estate
- Franchise
- Other

Source: Hawaii State Department of Taxation
State General Fund Revenues

Source: Hawaii State Department of Taxation
General Excise Tax Revenue

Source: Hawaii State Department of Taxation
Hawaii Economy
- Tourism
Visitor arrivals has been increasing every month during last few years

Source: Hawaii Tourism Authority
Visitor expenditures fluctuated in 2019

Source: Hawaii Tourism Authority
<table>
<thead>
<tr>
<th>Market</th>
<th>2019</th>
<th>2018</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>13,517,518</td>
<td>13,138,502</td>
<td>2.9</td>
</tr>
<tr>
<td>US West</td>
<td>8,542,666</td>
<td>8,121,002</td>
<td>5.2</td>
</tr>
<tr>
<td>US East</td>
<td>1,181,725</td>
<td>1,098,631</td>
<td>7.6</td>
</tr>
<tr>
<td>Japan</td>
<td>2,000,502</td>
<td>2,042,595</td>
<td>-2.1</td>
</tr>
<tr>
<td>Canada</td>
<td>496,960</td>
<td>488,857</td>
<td>1.7</td>
</tr>
<tr>
<td>Other Asia</td>
<td>484,121</td>
<td>541,557</td>
<td>-10.6</td>
</tr>
<tr>
<td>Oceania</td>
<td>493,738</td>
<td>533,045</td>
<td>-7.4</td>
</tr>
<tr>
<td>Other</td>
<td>317,806</td>
<td>312,815</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Source: Hawaii Tourism Authority
## Air seats in 2020 on scheduled flights by market

<table>
<thead>
<tr>
<th>Market</th>
<th>2020*</th>
<th>2019*</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>7,133,069</td>
<td>6,702,620</td>
<td>6.4</td>
</tr>
<tr>
<td>US West</td>
<td>4,513,547</td>
<td>4,177,896</td>
<td>8.0</td>
</tr>
<tr>
<td>US East</td>
<td>655,547</td>
<td>596,457</td>
<td>9.9</td>
</tr>
<tr>
<td>Japan</td>
<td>1,062,306</td>
<td>981,290</td>
<td>8.3</td>
</tr>
<tr>
<td>Canada</td>
<td>292,379</td>
<td>306,686</td>
<td>-4.7</td>
</tr>
<tr>
<td>Other Asia</td>
<td>234,976</td>
<td>243,011</td>
<td>-3.3</td>
</tr>
<tr>
<td>Oceania</td>
<td>214,232</td>
<td>241,091</td>
<td>-11.1</td>
</tr>
<tr>
<td>Other</td>
<td>160,082</td>
<td>156,189</td>
<td>2.5</td>
</tr>
</tbody>
</table>

*January through June
Source: Hawaii Tourism Authority
Hawaii Economy
- Construction & Real Estate
Value of private construction permits

12 Month Moving Average of Building Authorizations

Source: County building departments and U.S. Census Bureau
Hawaii Resident Population

Source: U.S. Census Bureau
Net increase in housing units: State

Source: DBEDT, READ

2001-2009: AVG=7,000

2010-2018: AVG=3,300
Net increase in permitted units: State

1998-2009: AVG=6,000
2010-2018: AVG=3,600

Source: DBEDT, READ
## Real estate market statistics are mixed
(% change btw. 2018 YTD and 2019 November YTD)

<table>
<thead>
<tr>
<th>Island</th>
<th>Single Family Homes</th>
<th>Condo Homes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Closed sales</td>
<td>Median price</td>
</tr>
<tr>
<td>Oahu</td>
<td>2.7%</td>
<td>-0.6%</td>
</tr>
<tr>
<td>Maui</td>
<td>-2.4%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Hawaii</td>
<td>2.9%</td>
<td>7.0%</td>
</tr>
<tr>
<td>Kauai</td>
<td>-2.0%</td>
<td>-7.0%</td>
</tr>
</tbody>
</table>

Source: Hawaii Information Service on behalf of Hawaii Island Realtors and the Kauai Board of Realtors, the Honolulu Board of Realtors, and Realtors Association of Maui.
Home sales have been stable for local and mainland buyers.

Source: Title Guaranty of Hawaii, Inc