June 2018 Economic & Revenue Outlook

May 23rd, 2018
Oregon Office of Economic Analysis
Mark McMullen
Josh Lehner
Economic Backdrop
Expansions Don’t Die of Old Age

Postwar U.S. Expansions

- End of 2019-21
  12 Years
- Today
  8 yrs, 11 mths

* Current expansion through May 2018 | Source: NBER, Oregon Office of Economic Analysis
Data flow remains healthy
  - Jobs, Income, GDP all improving
  - Leading indicators all flashing green

Probability of recession is low
  - Federal fiscal stimulus

Outlook is stable
  - 4 main risks to the outlook
    - Monetary policy
    - International relations
    - Oil prices
    - Housing affordability
Risk: Fed Policy

US Treasury Yield Curve

- Green line: Dec. 15, 2015
- Black line: Apr. 25, 2018 (Recent high)
- Blue line: Apr. 30, 2018

Interest Rate, %

Maturity

1Mo 3Mo 6Mo 1Yr 2Yr 3Yr 5Yr 7Yr 10Yr 20Yr 30Yr

Web: https://blogs.uoregon.edu/timduyfedwatch/ * Twitter: @TimDuy * Data via FRED * Chart created: 05/08/2018 14:22
International Trade with China
Value of Exports as Share of GDP

Source: BEA, WISERTrade, WTO, Oregon Office of Economic Analysis
Outlook: Growth, but Slower

Oregon Employment Gains

Latest Actual: 2017q4 | 2018q1 Estimated | Source: Oregon Emp Dept, Oregon Office of Economic Analysis
Housing, Migration, and Homelessness
Risk: Population Growth

Oregon Population

Natural Increase = Births - Deaths

Births

Deaths


Latest Data: 2017 | Source: Oregon Office of Economic Analysis
Risk: Population Growth

Oregon Population Growth

- Net Migration
- Natural Increase
- Growth Rate (rhs)

Forecast -->

Last Actual: 2017 | Source: Census, Portland State University, Oregon Office of Economic Analysis
Average income by source and migration status, Oregon: 2012-16
(calculated for those with reported income in each category)

Source: U.S. Census Bureau, ACS 2012-16 PUMS
Oregon: Gain/Loss of Aggregate Gross Income due to Migration (in million $; IRS migration data)

2009-10

- West Region (excluding CA, ID, WA) $196.6
- Midwest Region $62.9
- Northeast Region $53.5
- South Region -$12.3

Total Domestic: +$182.0 Foreign -$10.0

2015-16

- West Region (excluding CA, ID, WA) $872.4
- Midwest Region +$234.6
- Northeast Region $151.5
- South Region -$222.9

Total Domestic: +$1,489.4 Foreign -$12.1
200 Billion Slugs Can't Be Wrong!
No Metro Displacement So Far...

Households Not Yet Fleeing Portland

Domestic Migration for Households with Incomes Less Than $50,000, Inflation-Adjusted 2016$

- Into Portland MSA
- Out of Portland MSA
- Net Migration

Deflator: PCE | Source: BEA, IPUMS-USA, Oregon Office of Economic Analysis
...Nor Uptick in Housing Moves Out of Oregon

Households Leaving Oregon due to Housing
Working-Age Population (16-64), Income <$75,000

Housing Moves include those for cheaper housing, better neighborhood, new or better housing, to own not rent, and other housing.  | Data: ASEC, 3 Yr Avg  | Source: IPUMS-CPS, Oregon Office of Economic Analysis
Limited Data on Homelessness

Point in Time Homeless Count
Percent Change from 2007


California
Washington
United States
Oregon

Source: HUD, Oregon Office of Economic Analysis
At Its Root, A Housing Issue

Homelessness and Housing Costs

Data: 2016  |  Source: Census, HUD, Oregon Office of Economic Analysis

R² = 0.405
Stability for Children Matters

Economic Mobility in Oregon
Probability Child Born into the Bottom Quintile for Income Rises to the Highest Quintile as an Adult

Cities with High Levels of Upward Mobility Have:
- Less residential segregation
- Larger middle class
- Strong families
- Greater social capital
- High quality public schools

Source: Chetty, Hendren, Kline and Saez (2014), Oregon Office of Economic Analysis
Slowing Down

Income Growth from Matched Full-Year Returns (2017 Through May 8)

- 2014
- 2015
- 2016
- 2017 (P)

Categories:
- Wages
- Proprietorships
- Schedule E
- Total Income
Filing Season Winds Down

Year-End Tax Payments On Track
Oregon Cumulative Personal Income Tax Payments

Refunds Come Up Short
Personal Income Tax Refunds, Cumulative

Latest Data: May 18, 2018 | Source: Oregon Dept of Revenue, Oregon Office of Economic Analysis
# Direct Impact of Law Changes Relative to the Close of Session Forecast, $ Millions

Sources: Legislative Revenue Office, OEA

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Provisions in Federal TJCA that Flow Through to Oregon Revenues (e.g. small business accounting, capital expensing, change in itemized deductions &amp; OR deduction for federal taxes paid)</td>
<td>$149</td>
<td>$306</td>
<td>$425</td>
<td>$517</td>
<td>$217</td>
</tr>
<tr>
<td>Automatic Replication of 20% Federal Pass-through Deduction on Oregon Taxable Income*</td>
<td>($245)</td>
<td>($375)</td>
<td>($422)</td>
<td>($492)</td>
<td>($161)</td>
</tr>
<tr>
<td>Eliminating Replication (SB1528)</td>
<td>$245</td>
<td>$375</td>
<td>$422</td>
<td>$492</td>
<td>$161</td>
</tr>
<tr>
<td>OR Tuition Deduction</td>
<td>($12)</td>
<td>($12)</td>
<td>($12)</td>
<td>($12)</td>
<td>($12)</td>
</tr>
<tr>
<td>Special Session Inclusion of Sole Proprietorships for OR Preferential Rate</td>
<td>($15)</td>
<td>($25)</td>
<td>($27)</td>
<td>($29)</td>
<td>($31)</td>
</tr>
<tr>
<td>Total</td>
<td>$122</td>
<td>$269</td>
<td>$386</td>
<td>$476</td>
<td>$174</td>
</tr>
</tbody>
</table>

<table>
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</thead>
<tbody>
<tr>
<td>Provisions in Federal TJCA that Flow Through to Oregon Revenues (e.g. bonus depreciation, R&amp;D amortization &amp; limits on net interest deduction)</td>
<td>$119</td>
<td>$95</td>
<td>$201</td>
<td>$195</td>
<td>$191</td>
</tr>
<tr>
<td>Automatic Replication of Federal Dividend Received Deduction on Oregon Taxable Income (Repatriation)</td>
<td>($240)</td>
<td>($5)</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Eliminating Replication (SB1529)**</td>
<td>$240</td>
<td>$5</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Total</td>
<td>$119</td>
<td>$95</td>
<td>$201</td>
<td>$195</td>
<td>$191</td>
</tr>
</tbody>
</table>

| Grand Total                                          | $241      | $364      | $587      | $671      | $365      |

* Unlike most states, Oregon connects to federal tax law through Federal Taxable Income (not AGI). If OR had remained connected to this provision, filers would have received a deduction on Oregon taxes in addition to a deduction on their federal taxes.

** Unlike most states, filers in Oregon calculate a state-specific dividend recieved deduction. If OR had not changed its tax code, filers would have received a double deduction on Oregon taxes. $145 Million of the Revenue Recovered from SB1529 Will be Transferred out of the General Fund in BI2019-21
Just Passin’ Through

Income for Full-Year Filers, $ billions

Schedule E

Schedule C

Capital Gains

- June Wilshire 5000 (Index, Right Axis)
- June Capital Gains
- March Capital Gains
Personal and Corporate Kickers Are Now Expected

2017-19 Personal Income Tax Kicker Base
Forecast Evolution

- $18.0 to $18.2
- $18.4
- $18.6
- $18.8
- $19.0
- $19.2

2% Kicker Threshold

- 2017 COS Forecast
- Sep '17 Forecast
- Dec '17 Forecast
- Pass-Through Deduc.
- Other Forecast Changes
- Mar '18 Forecast
- Pass-Through Deduc.
- Other Forecast Changes
- Special Session Forecast
- Jun '18 Forecast
- Projected Kicker

-245
+305
+245
+273
-15
555 (+3.0%)
## Change in Resources for BI2017-19

### June 2018 Forecast Changes Relative to the March 2018 Forecast

*(millions of dollars)*

<table>
<thead>
<tr>
<th></th>
<th>2017-19</th>
<th>2019-21</th>
<th>2021-23</th>
<th>2023-25</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Fund</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenues</td>
<td>$810.6</td>
<td>-$219.9</td>
<td>$728.4</td>
<td>$843.2</td>
</tr>
<tr>
<td><strong>Other General Fund Changes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beginning Balance</td>
<td>$22.5</td>
<td>$0.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (ORDF, TANS)</td>
<td>$0.0</td>
<td>-$0.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expenditures</td>
<td>$69.8</td>
<td>$0.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Total</td>
<td>-$47.3</td>
<td>-$0.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>General Fund Ending Balance</strong></td>
<td>$763.3</td>
<td>-$220.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lottery Fund</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available Resource Change</td>
<td>$9.0</td>
<td>-$1.4</td>
<td>-$6.9</td>
<td>-$7.6</td>
</tr>
<tr>
<td><strong>Available Resource Change</strong></td>
<td>$772.3</td>
<td>-$222.0</td>
<td>$721.5</td>
<td>$835.6</td>
</tr>
</tbody>
</table>

*$550m if all saved for 2019-21*
### Forecast Changes

**Difference from March Forecast, $ millions**

<table>
<thead>
<tr>
<th>Year</th>
<th>Personal</th>
<th>Corporate</th>
<th>Lottery</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017-19</td>
<td>520.1</td>
<td>295.5</td>
<td>9.0</td>
<td></td>
<td>822.2</td>
</tr>
<tr>
<td>2019-21</td>
<td></td>
<td></td>
<td>-1.4</td>
<td>-78.9</td>
<td>822.6</td>
</tr>
<tr>
<td>2021-23</td>
<td>-89.1</td>
<td>-6.9</td>
<td>-98.5</td>
<td></td>
<td>718.3</td>
</tr>
<tr>
<td>2023-25</td>
<td></td>
<td>-6.9</td>
<td>-67.3</td>
<td></td>
<td>835.2</td>
</tr>
</tbody>
</table>

**Notes:**
- **$1,000** and **-$100** indicate significant changes.
- **$0** represents a neutral forecast change.
- **2017-19** to **2023-25** columns represent different time periods.
Biennial Revenue Growth

![Chart showing biennial revenue growth from 1995-97 to 2025-27, comparing Personal Income Taxes (blue bars) and Total Net Revenue (orange bars). The chart indicates growth rates ranging from -15% to 25%, with specific years highlighted for comparison.](chart.png)
Reserves!

Oregon Budgetary Reserves (billions)

- Gen. Fund Ending Balance
- Educ. Stability Fund
- Rainy Day Fund

Effective Reserves ($ millions)

<table>
<thead>
<tr>
<th></th>
<th>Apr 2018</th>
<th>End 2017-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESF</td>
<td>$472.9</td>
<td>$609.9</td>
</tr>
<tr>
<td>RDF</td>
<td>$578.2</td>
<td>$595.4</td>
</tr>
<tr>
<td>Reserves</td>
<td>$1,051.1</td>
<td>$1,205.3</td>
</tr>
<tr>
<td>Ending Balance</td>
<td>$1,108.2</td>
<td>$1,108.2</td>
</tr>
<tr>
<td>Total</td>
<td>$2,159.3</td>
<td>$2,313.5</td>
</tr>
</tbody>
</table>

% of GF 10.6% 11.4%

Source: Oregon Office of Economic Analysis
Chair Barnhart: Serving Oregon Over the Full Business Cycle

General Fund Resources

<table>
<thead>
<tr>
<th>General Fund Resources (Millions)</th>
<th>Mar 2007 Forecast</th>
<th>May 2007 Forecast</th>
<th>Change from March</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Personal Income Tax</td>
<td>12,235.8</td>
<td>12,329.4</td>
<td>93.7</td>
</tr>
<tr>
<td>Gross Corporate Income Tax¹</td>
<td>949.3</td>
<td>907.1</td>
<td>(42.2)</td>
</tr>
<tr>
<td>Other Revenues²</td>
<td>888.4</td>
<td>901.7</td>
<td>13.3</td>
</tr>
<tr>
<td><strong>Gross GF Revenues³</strong></td>
<td><strong>$14,073.4</strong></td>
<td><strong>$14,138.2</strong></td>
<td><strong>64.8</strong></td>
</tr>
<tr>
<td>Less Kicker Distributions</td>
<td>-$1,406.6</td>
<td>-$1,164.7</td>
<td>241.9</td>
</tr>
<tr>
<td><strong>Net GF Revenues</strong></td>
<td><strong>$12,666.8</strong></td>
<td><strong>$12,973.5</strong></td>
<td><strong>306.7</strong></td>
</tr>
<tr>
<td>Beginning Balance</td>
<td>$1,397.9</td>
<td>$1,490.2</td>
<td>92.3</td>
</tr>
<tr>
<td>Less Anticipated Administrative Actions⁴</td>
<td>-$64.3</td>
<td>-$57.3</td>
<td>7.0</td>
</tr>
<tr>
<td>LessLegislatively-Adopted Actions⁵</td>
<td>$0.0</td>
<td>-$309.4</td>
<td>(309.4)</td>
</tr>
<tr>
<td><strong>Net Available Resources</strong></td>
<td><strong>$14,000.4</strong></td>
<td><strong>$14,097.0</strong></td>
<td><strong>96.6</strong></td>
</tr>
</tbody>
</table>

Notes:  
¹ Corporate income tax figure includes Corporate Multistate taxes.  
² Other Revenues include Insurance, Cigarette, and Liquor taxes.  
³ Excludes reductions due to kicker refund/credit distributions.  
⁴ Represents costs associated with cashflow management actions, exclusive of internal borrowing.  
⁵ Transfer of surplus 2005-07 corporate income tax revenues to the Oregon Rainy Day Fund.

Source: May 2007 Economic and Revenue Forecast
Contact

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