



# **MEASURE 97**

## **DESCRIPTION AND ANALYSIS**

**RESEARCH REPORT #3-16**  
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**Note: This is an updated version of the report that was originally released in May. The original report is updated to reflect the ballot measure number. The contents of the original report remain unchanged.**

### **Legislative Revenue Office**

900 Court St NE Rm 143

Salem, Oregon 97301

(503) 986-1266

<https://www.oregonlegislature.gov/lro>

## Introduction

Measure 97 proposes a significant change to Oregon's tax system through a major modification of the state's corporate minimum tax law. If approved by voters in November, the measure would substantially increase revenue available to the state. The intention of this report is to provide a summary and analysis of how passage of the measure would affect Oregon's revenue system.

Immediately following this introduction is a summary of the key findings in the report. The body of the report contains a description of the measure, a list of examples showing how different businesses would be affected, an analysis of how the new minimum tax would be spread across corporations by size and industry, an estimate of how Oregon's overall tax burden would be affected, the implications of shifting towards a gross receipts tax base, results of a simulation of the economic and distribution impacts of the measure, followed by estimated impacts on state revenue and fiscal stability. The report concludes with a discussion of the uncertainties in assessing the measure's impact and a listing of the major conclusions.

## Key Findings

- Measure 97 is expected to generate \$548 million in new revenue in the 2015-17 biennium, \$6.1 billion in the 2017-19 biennium and \$6.0 billion in the 2019-21 biennium. These estimates are adjusted for anticipated economic and structural feedback effects.
- If it were in place for the 2012-13 fiscal year (the most recent year with complete state-by-state census data), Measure 97 would have increased Oregon's per capita state and local tax burden by roughly \$600 to \$4,501. At this level the state would have had the 20th highest per capita tax burden in that year compared to an actual rank of 28th. As a percent of income Measure 97 would have raised taxes from an actual 10.1% in 2012-13 to 11.6%. This would have moved Oregon to the 9th highest taxes as a percent of income versus an actual ranking of 26th.
- Because Measure 97 is based on Oregon sales and heavily concentrated on domestic consumer sectors, it is expected to largely act as a consumption tax on the state economy. Taxes initially born by the retail trade, wholesale trade and utility sectors are expected to result in higher prices for Oregon residents.
- Consumption taxes tend to have a more muted effect on economic activity compared to taxes on income and property which more directly affect the net returns to capital and labor. Our economic simulation shows that if Measure 97 becomes law it will dampen income, employment and population growth over the next 5 years, but all three metrics remain within 1% of the current law 2022 projection.
- The higher gross receipts taxes triggered by Measure 97 are expected to lead to higher consumer prices and higher wages. Higher wages are partly the result of substituting higher paid public sector jobs for lower paid private sector jobs, particularly in the retail trade sector.
- The impact of Measure 97 on consumer prices means that the marginal impact of the tax on the distribution of the state and local tax burden will be regressive. However, Oregon's tax system is expected to remain generally proportional, as it is now.
- Shifting the state's tax base towards gross receipts while reducing the proportional reliance on the personal income tax and virtually eliminating reliance on the corporate

net income tax will reduce the instability of state revenue over the course of the business cycle.

- Both the large size of the revenue increase under Measure 97 and its concentrated impact on a small group of large corporations add considerable uncertainty to the estimates. Measure 97 would increase total state taxes by approximately 25% and combined state and local taxes by 15%. There is very little empirical evidence on how state economies respond to such large changes because they rarely occur at the state level. The concentrated impact of the measure on a relatively few large taxpayers creates strong incentives for difficult to predict revenue reducing corporate tax planning strategies.
- Ultimately the impact of Measure 97 on the state economy will be determined by both its revenue raising mechanism and the state expenditures funded by the additional revenue. Our economic simulations account for spending shifts from the private sector to the public sector but do not incorporate the potential longer term economic capacity expanding effects of public investments in education and infrastructure.

### **Measure Description**

Measure 97 amends Oregon's corporate minimum tax statute (ORS 317.090). Prior to 2009, Oregon corporations were subject to a minimum tax of \$10. The Legislature established the current minimum tax structure with the passage of HB 3405 in 2009. A citizen referendum was filed to bring HB 3405 to the ballot. It was confirmed by voters in 2010 with the passage of Measure 67.

Measure 67 established a \$150 flat minimum tax for S-Corporations, partnerships and C-Corporations with Oregon sales less than \$500,000. A graduated scale was established for C-Corporations with sales between \$500,000 and \$100 million. The minimum tax increases in discreet increments at roughly 0.1% of sales. The minimum tax is capped at \$100,000 for C-Corporations with Oregon sales above \$100 million.

Measure 97 retains the current minimum tax structure for S-Corporations, partnerships and C-Corporations with sales less than \$25 million. For C-Corporations with sales greater than \$25 million, a new tax rate of 2.5% is imposed on sales above the \$25 million threshold. For example, a C-Corporation with Oregon sales of \$50 million would pay a corporate minimum tax of \$30,001 for the first \$25 million in sales (the current tax) plus 2.5% on the second \$25 million (\$625,000) for a total minimum tax of \$655,001.

Under Measure 97, benefit companies (as defined under ORS 60.750) would remain subject to the current minimum tax schedule even if they have Oregon sales in excess of \$25 million. In general, a benefit company is one that agrees to adopt the goal of creating a public benefit. Under Oregon law, a public benefit is defined as "a material positive impact on society and the environment, taken as a whole, from the business and operations of the company." Currently there are approximately 750 benefit companies listed on the Secretary of State's web site. A large majority of these companies are not C-Corporations and will not be affected by the measure. For larger C-Corporations there is currently no tax advantage from obtaining the benefit company status. However, that would change under Measure 97.

Finally, Measure 97 specifies that the revenue generated from the corporate minimum tax increase is to be used to provide additional funding for: public early childhood and kindergarten

through grade 12 education, health care and senior services. Components of these spending categories fall within the General Fund. However, a potential spending limitation could arise if corporate minimum taxes paid by oil companies are legally determined to be highway fund dollars.

Before proceeding to the analysis for the measure, it is important to point out key provisions of Oregon corporate tax law that are not changed by Measure 97. Measure 97 modifies the corporate minimum tax; it does not change the current tax rates based on net corporate income. These rates are 6.6% for income below \$1 million and 7.6% for income above \$1 million. Oregon corporations will continue to calculate their taxes under both the net income tax rates and the corporate minimum schedule and pay the higher of the two. Under current law, about 91% of corporate income tax revenue comes from the tax rates with the remaining 9% from the corporate minimum. These proportions will change dramatically under Measure 97, with revenue from the corporate minimum accounting for 94% of C-Corporation tax liability.

Measure 97 also does not change Oregon's corporate apportionment methods. States use apportionment formulas to divide up income for corporations that operate in multiple states. Oregon's apportionment method is based entirely on sales. What constitutes Oregon sales is defined in current statutes. Oregon sales are also used as a basis for calculating the corporate minimum. Again, Measure 97 does not change this definition.

There is a significant difference in how Oregon sales are defined for goods producing companies (tangible property) compared to services (intangibles). For goods producing corporations, sales are determined by location of the market for the product. In other words, a good produced by a corporation in Oregon and sold to a customer in Idaho would not be an Oregon sale. The exception to this rule is when a sale is to a state in which the corporation does not have nexus and therefore cannot be taxed. In this case, the sale is of goods produced in Oregon are "thrown back" to Oregon and counts as an Oregon sale for taxation purposes.

Oregon uses the "cost of performance" method to determine the location of sales for services or intangibles. Under this method, sales are allocated to the state where the service is performed or produced. This means that a service company such as a consulting or accounting firm, would allocate sales to the state where it performed the service even if the service were provided to a customer in another state. Another element to the cost of performance methodology is that income is allocated only to the state where a plurality of the service is performed. In other words, if a particular state is home to 30% of a corporation's service activity or performance, no income would be allocated to it if another state were home to more than 30% of the service performance activity—all income would be allocated to the state with the highest service performance activity level.

Under Measure 97, the definition of Oregon sales will become much more significant for those corporations with Oregon sales over \$25 million. Corporations that manufacture tangible goods in Oregon and export to markets outside the state will be relatively unaffected by the expansion of the corporate minimum tax. However, corporations that produce or perform services for sale outside the state will potentially be affected because those sales will be allocated to Oregon and not where the customer is located. Conversely, a service-based corporation that sells services into the Oregon market but performs them outside the state will not be affected by the new minimum tax.

## How Measure 97 Would Work for Different Businesses

Table 1: Impact of Proposed Minimum Tax on Hypothetical Businesses

Hypothetical Business Paying Minimum Tax	Minimum Tax Under Current Law	Minimum Tax Under Measure 97	Difference In Minimum Tax
S-Corp or Partnership	\$150	\$150	No Change
C-Corp with Oregon Sales of \$6 Million	\$4,000	\$4,000	No Change
C-Corp with Oregon Sales of \$20 Million	\$15,000	\$15,000	No Change
C-Corp with Oregon Sales of \$70 Million	\$50,000	\$1,155,001	+\$1,105,001
C-Corp with Oregon Sales of \$150 Million	\$100,000	\$3,155,001	+\$3,055,001
C-Corp with Oregon Sales of \$350 Million	\$100,000	\$8,155,001	+\$8,055,001

Source: LRO Calculations

Examples of how the new corporate minimum tax structure would affect hypothetical corporations in different situations are shown in Table 1. The minimum tax for S-Corporations and for C-Corporations with Oregon sales less than \$25 million would not be affected by Measure 97. The proportional impact increases for corporations with higher total sales. The largest impact will be on those C-Corporations currently at the \$100,000 minimum tax cap who would be liable for 2.5% of sales above \$25 million under Measure 97.

Table 2: Illustration of the Interaction of the Corporate Minimum and Tax Rates on Hypothetical Businesses under Measure 97

Hypothetical C-Corporation	Oregon Sales (\$ millions)	Net Income Apportioned to Oregon (\$ millions)	Tax Under Current Law (\$)	Tax Under Measure 97 (\$)	Difference (\$)
A	\$20	\$4	\$294,000	\$294,000	---
B	\$60	\$3	\$218,000	\$905,001	+\$687,001
C	\$60	\$18	\$1,358,000	\$1,358,000	---
D	\$90	\$6	\$446,000	\$1,655,001	+\$1,209,001
E	\$200	\$15	\$1,130,000	\$4,405,001	+\$3,275,001
F	\$200	\$30	\$2,270,000	\$4,405,001	+\$2,135,001

Source: LRO Calculations

Table 2 shows how Measure 97 would interact with the current corporate tax rate on apportioned net income. Corporation A pays taxes based on its net income as it does now under both current law and Measure 97. Corporation B's tax liability is determined by the tax rate on Oregon sales because that calculation is higher than the current excise tax on \$3 million of net income. However, Corporation C's tax bill is determined by the corporate income tax rates under both current law and Measure 97 and therefore has no change in taxes. Corporation D's liability is based on net income under current law but moves to the minimum tax under Measure 97. Both Corporation E and F move from the tax rates to the minimum tax under Measure 97, with both paying the same minimum tax because their sales are the same. But because Corporation E is less profitable in terms of net income apportioned to Oregon, it experiences a larger increase under Measure 97 than the relatively more profitable Corporation F. Approximately 400 corporate tax filers are expected to switch from paying taxes based on the corporate tax rates to the new higher minimum tax under Measure 97.

## Distribution among Corporate Taxpayers

Based on corporate income tax return data from the Department of Revenue, we are able to estimate how the distribution of the direct corporate tax burden would be affected by Measure 97 based on both Oregon sales and industry category.

Table 3: Corporate Taxes under Current Law (2013) and Measure 97 Based on Oregon Sales

Oregon Sales	Number of Filers	Current Law		Measure 97	
		Tax Under Current Law (millions)	Percent of Total Corporate Taxes	Tax Under Measure 97 (millions)	Percent of Total Corporate Taxes
< \$500,000	17,809	\$10.2	2.2%	\$10.2	0.4%
\$500,000 to \$1 million	3,016	\$6.5	1.4%	\$6.5	0.2%
\$1 to \$2 million	2,570	\$12.4	2.7%	\$12.4	0.4%
\$2 to \$3 million	1,227	\$6.9	1.5%	\$6.9	0.2%
\$3 to \$5 million	1,309	\$11.2	2.4%	\$11.2	0.4%
\$5 to \$7 million	727	\$12.2	2.6%	\$12.2	0.4%
\$7 to \$10 million	658	\$15.0	3.3%	\$15.0	0.5%
\$10 to \$25 million	1,108	\$51.0	11.1%	\$51.0	1.8%
\$25 to \$50 million	491	\$54.5	11.8%	\$148.1	5.2%
\$50 to \$75 million	189	\$39.1	8.5%	\$178.7	6.2%
\$75 to \$100 million	97	\$29.0	6.3%	\$150.8	5.2%
> \$100 million	274	\$213.0	46.2%	\$2,273.0	79.0%
Total	29,475	\$461.1	100.0%	\$2,876.0	100.0%

Source: Oregon Department of Revenue/ LRO Calculations

Overlaying Measure 97's corporate minimum tax structure on the 2013 tax returns indicates that corporations would have paid approximately \$2.9 billion in taxes instead of the \$461 million they actually paid under current law. Corporations with Oregon sales less than \$25 million would have paid the same amount as current law. Their share of total corporate taxes would fall from 27.2% to 4.4%. Corporations with Oregon sales greater than \$25 million would incur the full \$2.4 billion increase in corporate taxes. The share of corporate taxes paid by the 274 filers with sales above \$100 million would increase from 46.2% to 79.0%. The tax increase resulting from Measure 97 is expected to be heavily concentrated on a relatively small number of corporate taxpayers. 66% of the tax increase is expected to fall on the 100 largest taxpayers, while the top 50 taxpayers account for 51% of the increase.

Table 4: Corporate Taxes under Current Law (2013) and Measure 97 by Industry

Industry	Number of Filers	Current Law		Measure 97	
		Tax Under Current Law (millions)	Percent of Total Corporate Taxes	Tax Under Measure 97 (millions)	Percent of Total Corporate Taxes
Agriculture, Forestry, Fishing, and Hunting	1,405	\$6.3	1.4%	\$11.8	0.4%
Mining	79	\$0.7	0.1%	\$3.2	0.1%
Utilities	73	\$0.4	0.1%	\$104.5	3.6%
Construction	2,280	\$12.7	2.8%	\$64.0	2.2%
Manufacturing	2,073	\$42.2	9.1%	\$202.6	7.0%
Wholesale Trade	3,367	\$102.1	22.1%	\$697.3	24.2%
Retail Trade	1,877	\$69.8	15.1%	\$604.8	21.0%
Transportation and Warehousing	728	\$17.7	3.8%	\$79.5	2.7%
Information	997	\$26.3	5.7%	\$109.6	3.8%
Finance and Insurance	3,196	\$74.9	16.3%	\$350.7	12.2%
Real Estate, Rental, and Leasing	1,567	\$7.0	1.5%	\$28.1	1.0%
Professional, Scientific, and Technical Services	3,735	\$16.0	3.5%	\$49.6	1.7%
Management of Companies and Enterprises	1,376	\$48.9	10.6%	\$375.2	13.0%
Administrative, Support, and Waste Management	1,040	\$8.2	1.8%	\$26.6	0.9%
Education Services	239	\$0.9	0.2%	\$4.3	0.1%
Health Care and Social Assistance	1,366	\$7.9	1.7%	\$103.6	3.6%
Arts, Entertainment, and Recreation	345	\$0.4	0.1%	\$1.3	0.0%
Accommodation and Food Services	702	\$6.4	1.4%	\$21.0	0.7%
Other Services (except Public Administration)	1,399	\$9.9	2.1%	\$34.7	1.2%
Unknown	1,631	\$2.3	0.5%	\$3.8	0.1%
<b>Total</b>	<b>29,475</b>	<b>\$461.1</b>	<b>100.0%</b>	<b>\$2,876.0</b>	<b>100.0%</b>

Source: Oregon Department of Revenue/ LRO Calculations

All sectors experience a tax increase under Measure 97 compared to current law. The largest increases occur in the wholesale trade and retail trade sectors. The share of taxes paid by these sectors would rise from 37.2% to 45.2% under Measure 97. Other sectors experiencing an increase in their share of corporate taxes include utilities, management companies (which include holding companies that manage other corporations) and health care. A number of sectors, most notably manufacturing, would see a significant tax increase but would end up paying a lower share of total corporate taxes under Measure 97.

## Impact of Measure 97 on Oregon's Relative Tax Burden

The impact of Measure 97 on Oregon's relative tax burden is considered both in terms of business taxes and overall state and local taxes. Because there is no formal consistent revenue forecast for all the states, the most straight forward method for considering relative impacts is to use recent historical data for the individual states, impose an estimate of Measure 97 for that historical period and compare Oregon's revenue with other states. For business taxes, we use the Council on State Taxation (COST) state -by-state estimates for the 2013-14 fiscal year. The study is conducted annually by Ernst & Young. For overall state and local tax comparisons we use the 2012-13 Census data on state and local government finances.

The COST study attempts to incorporate all state and local taxes that are initially paid by business. The largest taxes on a national basis are business property taxes, general sales taxes on business inputs, corporate income taxes and unemployment insurance taxes. COST includes business taxes based on gross receipts in the corporate income tax category. The largest of these taxes are Ohio's Commercial Activity Tax, Washington's Business and Occupation Tax and Texas' Margin Tax. Since Measure 97 generates substantial revenue based on the sales or gross receipts of corporations, it appears to best fit in this category.

Because it does not have a sales tax on business inputs, Oregon's business tax burden ranks relatively low according to the COST methodology. Oregon receives an estimated 37.6% of state and local tax revenue from business entities compared to 45% nationally. Oregon's \$6.3 billion in business tax collections in 2013-14 were 4.1% of total income in the state. Nationally, business taxes were 4.9% of total income.

Table 5 shows an estimate of how implementation of Measure 97 would have affected Oregon's business tax burden compared to other states. Measure 97 would have generated an estimated \$2.4 billion for the 2013-14 fiscal year.

Table 5: Impact of Measure 97 on Oregon's Relative Business Tax Burden

State(2013-14 Fiscal Year)	Total Business Taxes (Billions)	Business Taxes as Percent of Total Taxes	Business Taxes as Percent of Total Income
Oregon-Actual	\$6.3	37.6%	4.1%
Oregon with Measure 97	\$8.7	45.4%	5.6%
U.S. Totals	\$688.7	45.0%	4.9%
Washington	\$19.5	58.0%	5.9%
Idaho	\$2.4	44.6%	4.2%
California	\$87.8	40.4%	4.7%

Source: Council on State Taxation/ LRO Calculations

Measure 97 pushes the 2013-14 total business tax burden to an estimated \$8.7 billion in Oregon. This increases the business tax share to 45.4% compared with the U.S. average of 45.0%. Washington has a relatively high business tax share of 58.0%. Idaho is near the national average and California is below average at 40.4%. Under Measure 97, business taxes as a share of total statewide income rises from 4.1% to 5.6% in Oregon. This would keep the state below Washington's 5.9%, but move Oregon above Idaho's 4.2%, California's 4.7%, and the U.S. average (4.9%).



Although the business tax burden is useful for some purposes, economists consider it only the first step toward determining the ultimate incidence of taxes. The burden of any tax is ultimately born by individuals in their role as consumers or as owners of capital, natural resources or their own labor services.

A broader look at how Measure 97 would affect Oregon's relative tax burden is shown in Table 6. This table is based on overall U.S. Census Bureau data on state and local taxes. In this data, taxes include all taxes imposed by state and local governments. One difference from the COST study is unemployment insurance taxes which are included with business taxes but are considered insurance trust revenue and not general taxes in the Census data.

Table 6: Impact of Measure 97 on Oregon's Relative Overall Tax Burden

Measure	Actual (FY 2012-13)	Estimated under Measure 97
Total Taxes Per Capita	\$3,909	\$4,501
<i>Rank among States</i>	#28	#20
Taxes as % of Income	10.1%	11.6%
<i>Rank Among States</i>	#26	#9

Source: U.S. Census Bureau/ LRO Calculations

If it were in place for the 2012-13 fiscal year, Measure 97 would have increased Oregon's per capita state and local tax burden by roughly \$600 to \$4,501. At this level Oregon would have had the 20th highest per capita tax burden in that year compared to an actual rank of 28th. As a percent of income Measure 97 would raise taxes from an actual 10.1% in 2012-13 to 11.6%. This would have moved Oregon to the 9th highest taxes as a percent of income versus an actual ranking of 26th. From a historical perspective, Measure 97 would move Oregon's relative tax burden back close to where it was prior to the phase in of Measure 5 in the early 1990s. In the 1988-89 fiscal year, Oregon state and local taxes ranked 10th on a percentage of income basis and 21st on a per capita basis.

### Implications of Shifting to the Gross Receipts Tax Base

Not only does Measure 97 have a significant effect on Oregon's revenue, it also fundamentally changes the mix of state taxes in Oregon. Oregon's current system is highly dependent on personal income taxes, which accounted for 68.7% of state tax revenue in the 2013-14 fiscal year (the most recent year for state only census data). Table 7 shows how Oregon's mix of taxes will change if Measure 97 becomes law.

Table 7: Impact of Measure 97 on Oregon's Mix of State Taxes (based on FY 2013-14)

Tax Category	Percent of State Tax Revenue Actual	Percent of State Tax Revenue Under Measure 97
Personal Income Taxes	68.7%	55.1%
Net Corporate Income Tax	4.3%	1.3%
Corporate Gross Receipts	0.4%	22.6%
General Sales Taxes	0%	0%
Selective Sales Taxes	14.9%	12.0%
Other Taxes	11.6%	9.1%
Total State Taxes	100%	100%

Source: Federation of Tax Administrators/LRO Calculations

Measure 97 would reduce Oregon's relative dependence on personal income taxes, although they would remain above 50% of total state taxes. Under current law, corporate taxes based on gross receipts make up only 0.4% of state taxes. Measure 97 would boost this proportion up to 22.6%. Corporate taxes based on net income would drop from 4.3% to 1.3% as the overwhelming majority of corporate revenue would come from gross receipts under Measure 97. The shift from minimal reliance on gross receipts taxes to over 20% reliance has significant implications for Oregon's tax system. This section reviews the states that have a significant reliance on gross receipts taxes and discusses the pros and cons of gross receipts taxes that have been identified in the public finance literature.

Gross receipts taxes have a long history of use by the states but generally fell out of favor in the latter part of the 20th century. During the Great Depression and its aftermath, 6 states enacted general gross receipts taxes (West Virginia, Mississippi, Georgia, Indiana, Delaware and Washington). By 2000, only Washington and Delaware continued to rely on gross receipts taxes as a major revenue source. However, 3 states have recently shifted toward the gross receipts tax base. Ohio enacted the Commercial Activity Tax based on gross business sales in 2005 and repealed their corporate income and franchise tax. In 2015, the Nevada Legislature approved the Nevada Commerce Tax, using a tax base similar to Ohio. The tax became effective July 1, 2015 but is now subject to a November 2016 referendum. In 2008, Texas enacted the Margin Tax which is a hybrid income/gross receipts base. In addition, Kentucky and New Jersey have experimented with gross receipts-type taxes for a limited time.

Table 8 compares the characteristics of the five major gross receipts based taxes currently operating.

Table 8: States Currently Imposing Gross Receipts Taxes

State	Tax	Year Enacted	Rates*	Revenue Yield as Percent of Total State Taxes
Delaware	Gross Receipts Tax System	1913	0.2% to 0.8%	5.6%
Nevada	Commerce Tax	2015	0.11% to 0.253%	---**
Ohio	Commercial Activity Tax	2005	0.26%	6.0%
Texas	Margin Tax	2008	0.33% to 0.75%	5.5%
Washington	Business & Occupation Tax	1933	0.14% to 1.5%	18.1%

\*General range/ some exceptions outside range

\*\*Although there is no full year data for collections of the Nevada Commerce Tax, it is projected to generate less than 5% of Nevada tax revenue.

Source: State Revenue Departments/LRO Calculation

Comparing Measure 97 with the existing general gross receipts taxes, several distinctions emerge:

- The 5 states in Table 8 impose their gross receipts tax on all business entity types while Measure 97 applies only to C-Corporations with sales greater than \$25 million. This means the Measure 97 base is considerably narrower than that used in other states.
- With the exception of Washington, gross receipts taxes generate roughly 5% to 6% of total state tax revenue. With Measure 97 estimated to raise about 22.6% of state tax revenue, it would be roughly comparable to Washington's Business & Occupation tax in terms of relative revenue generation.

- With the exception of Delaware, the other states with a general gross receipts tax also impose a retail sales tax. A retail sales tax on business input purchases has similar economic effects to a gross receipts tax. This can magnify economic distortions in those states that impose both taxes. With no existing retail sales tax, this would not be an issue for Oregon.

Because gross receipts taxes have been used at the state level for over a century, public finance economists have extensively analyzed their advantages and disadvantages. The major advantage of a general gross receipts tax is its broad base. Because it is a transaction or turnover tax, the gross receipts tax base is greater than a state's gross domestic product. For example, Washington's Business & Occupation Tax base is roughly 1.75 times the state's gross domestic product. A broad base translates into substantial revenue generation with low tax rates. Low tax rates are preferred because they minimize economic distortions. The lower the rate, the less the incentive for economic decision-makers to take steps (such as changing location) to avoid the tax. Another advantage of gross receipts taxes is their relative cyclical stability. Washington's Business & Occupation Tax has demonstrated slightly more instability than its retail sales tax, but less instability than Oregon's personal income tax and considerably less than Oregon's corporate income tax. The cyclical stability issue will be further addressed later in the report.

Gross receipts taxes also have a number of disadvantages that have been identified over the years. A major concern is the distorting impact of pyramiding. Pyramiding occurs when the gross receipts tax is built in at the time each transaction occurs and then passed on to the next stage. Because industries vary greatly in the number of transactions that occur, the effective tax rates can be considerably higher for those industries with multiple transactions compared to those that have very few. The Washington Legislature found that the degree of pyramiding ranges widely with the highest occurring in the food processing industry and the lowest in the computer programming and data processing industry. Because the degree of pyramiding varies widely, this means that effective tax rates will vary widely among industries, thereby distorting market prices and decisions. A related disadvantage is the potential impact of higher costs on particular industries and the impact on their competitiveness with respect to out-of-state companies. Finally, the gross receipts tax is subject to the same equity concerns as the retail sales tax because under most circumstances it eventually leads to higher consumer prices. Any tax that is based on general consumption will have a regressive impact on the distribution of the tax burden, meaning that lower income households will experience a higher tax burden as a percentage of their income than higher income households.

Because it is based on gross receipts, Measure 97 is generally subject to the advantages and disadvantages of a gross receipts tax. However, Measure 97's unique base also raises additional considerations. By narrowing the base to large C-Corporations, Measure 97 adds another element of potential market distortion by creating an advantage for businesses that are not directly affected compared to the large C-Corporations which are directly subject to the tax. The measure will also create a competitive advantage for out-of-state C-Corporations that sell into the state but are apportioned using the cost of performance method or do not meet corporate tax nexus requirements. However, by focusing the tax base on large C-Corporations, Measure 97 may lead to greater exporting of the tax beyond the state's boundaries. This can occur through reducing the returns to owners of the impacted corporations (stock holders) or through lower federal taxes through increased deductions of state and local taxes on federal tax returns.

## Economic Effects

To gauge the potential long run economic effects of the measure we used LRO's Oregon Tax Incidence Model (OTIM) to simulate how the tax would affect wages, prices and other state economic metrics. OTIM is used as an adjustment to the state's quarterly economic and revenue forecast when a major tax policy change occurs. The results should therefore be interpreted as deviations from the current law economic forecast.

OTIM is a long-term computable general equilibrium model of the Oregon economy. It consists of a series of equations linking different sectors of the state economy with each other and the outside world. OTIM is designed to show how the state economy responds to a major change in tax policy. It does this through introducing a change in tax policy (e.g., tax rates or deductions, new taxes, etc.) and then estimating how wages, prices, in-migration, labor force participation, capital investment and other economic variables respond based on the model's underlying assumptions. OTIM then calculates a new equilibrium level of income consistent with the changes in wages, investment and other variables initiated by the policy. The model results compare the new equilibrium with the starting point. So in effect, OTIM compares one point in time (the current situation) with a new point in time after the economy has responded to the change in tax policy. We assume that it takes roughly 5 years for the economy to fully respond to a major change in tax policy. For further details on OTIM see LRO Research Report #4-15.

We used OTIM to simulate the economic and distribution effects of Measure 97. Distribution of the corporate tax increase was allocated across industries based on the 2013 Oregon tax returns as shown in Table 4. An effective tax rate was calculated based on estimated taxable sales in each industry. The overall effective tax rate, calculated as the initial tax increase divided by total Oregon intermediate and final sales by businesses of all entity types, is estimated at 0.93%. However, this effective rate varies considerably by industry with the 5 highest taxed sectors (retail trade, wholesale trade, business services, insurance and utilities) accounting for 71% of the overall tax. The new corporate minimum accounts for 94% of total corporate taxes, with the remaining 6% collected based on the marginal corporate income tax rates. Corporate taxes paid to state and local governments are deductible on Federal income tax returns. This means that a portion of the Oregon tax increase on corporations is likely to be exported to the federal government through increased deductibility on federal returns.

Table 9: Simulated Impact of Measure 97 on Broad Economic Measures

Measure	2017 Baseline	Under Current Law			Under Measure 97			Difference: Measure 97 – Current Law	
		2022	Change 2022- 2017	Percent Change	2022	Change 2022- 2017	Percent Change	Total	Percent
Personal Income (billions)	\$188.4	\$254.7	\$66.3	35.2%	\$254.3	\$65.8	34.9%	-\$ .43	- 0.2%
Population (thousands)	4,121	4,360	239	5.8%	4,343	222	5.4%	- 16.6	- 0.4%
Employment (thousands)	2,539	2,705	166	6.5%	2,684	145	5.7%	- 20.4	- 0.7%
Wages (2017=100)	100	122.1	22.1	22.1%	122.5	22.5	22.5%	+ 0.5	+ 0.4%
Price Level (2017=100)	100	112.5	12.5	12.5%	113.5	13.5	13.5%	+ 1.0	+ 0.9%

Source: LRO, Office of Economic Analysis

Table 9 summarizes the simulation results for measures of the overall state economy. Based on the assumption that it takes 5 years for the economy to fully adjust to the new tax, the simulated result is compared with the March 2016 state economic forecast for 2022. Measure 97 essentially acts as a consumption tax, pushing up the price level but only modestly affecting the real economy. It is important to note that these results do not indicate Measure 97 will trigger a decline in Oregon’s current economic activity but rather it will modestly dampen the state’s projected growth in employment, income and population. The OTIM simulation shows income, population and employment all lower under Measure 97 than projected under current law. However, the decrease in each case is less than 1%. Overall employment is about 20,000 lower in 2022 under the Measure 97 simulation. This has the effect of reducing the projected increase in employment over the next 5 years from 166,000 to 145,000 compared to the current law forecast. Wages and prices are expected to be higher in 2022 under Measure 97. Higher consumer prices reflect the shifting of the gross receipts tax into consumer prices. The higher wage projection results partly from a shift from lower paid private sector jobs (particularly retail trade) to higher paying public sector jobs.

Table 10: Simulated Impact of Measure 97 on Employment

Employment (thousands)	2017 Baseline	Under Current Law			Under Measure 97			Measure 97 – Current Law	
		2022	Change 2022- 2017	Percent Change	2022	Change 2022- 2017	Percent Change	Differ- ence	Percent Differ- ence
Private Sector	2,251	2,400	148.2	6.6%	2,361	110.1	4.9%	-38.2	-1.6%
Public Sector	288	305	17.6	6.1%	323	35.3	12.3%	+17.7	+5.8%
Individual Sectors									
Retail Trade	263	279	16.1	6.1%	265	2.4	0.9%	-13.6	-4.9%
Wholesale Trade	99	105	4.4	4.4%	98	-0.4	-.02%	-4.7	-4.6%
Health Services	222	239	16.6	7.5%	235	13.1	5.9%	-3.5	-1.5%
Other Services	1,516	1,626	109.8	7.2%	1,615	99.3	6.5%	-10.6	-0.6%
Manufacturing & Natural Resources	439	439	19	4.3%	453	13.2	3.0%	-5.7	-1.2%

Source: LRO, Office of Economic Analysis

Measure 97 slows private sector employment growth and accelerates public sector growth. The additional revenue generated by the measure is expected to increase 2022 public sector employment growth by 17,700 jobs compared to the current law projection. This estimate assumes the mix of public sector spending does not change. The growth in public sector employment will be influenced by the types of programs policy makers decide to expand with the additional revenue. Private sector employment is reduced by 38,200 in 2022 compared to the current law forecast, thereby reducing projected private sector employment growth from 148,200 to 110,100 over the 2017-2022 period. Over half of the reduction in private sector employment growth is expected to occur in three sectors: retail trade, wholesale trade and health services.

### Distribution Effects

As discussed earlier, Measure 97 would shift Oregon's nominal tax burden from households to business. However, the business/household split only describes the initial incidence of the tax. OTIM provides an estimate of how the total tax burden will be distributed among household income groups after wages and prices have adjusted to the new tax policy. Tables 11 and 12 show how Measure 97 would affect the distribution of the tax burden among Oregon households.

These estimates are based on the wage and price changes from the economic simulation meaning that they reflect the distribution following a 5-year adjustment period.

Table 11: Simulated Change in Net Household After-Tax Income

Income Group (Thousands)	Change from Baseline	Percent Change from Baseline
Less than \$21	-\$372	-0.9%
\$21 to \$34	-\$500	-0.9%
\$34 to \$48	-\$563	-0.9%
\$48 to \$68	-\$613	-0.8%
\$68 to \$103	-\$751	-0.8%
\$103 to \$137	-\$868	-0.7%
\$137 to \$206	-\$1,063	-0.6%
Greater than \$206	-\$1,282	-0.4%

Source: LRO

All household income groups experience a reduction in net after tax income with the size of the decreases in dollar terms rising as income rises. However, the percentage reduction in after-tax income declines with increasing household income. This is a familiar pattern for consumption based taxes--they are generally distributed in a regressive manner because spending on consumption is a higher percentage of income for lower income households. This distribution pattern holds for all state sales taxes with some variation in degree depending on exemptions. In comparison with other recent OTIM simulations, the Measure 97 distribution tends to be less regressive than a retail sales tax using the Washington base but more regressive than a broad based gross receipts tax similar to Washington's Business Occupation Tax or Ohio's Commercial Activity Tax.

When considering the impact of Measure 97 on the distribution of Oregon's tax burden, it is important to view marginal changes in the context of how current state and local taxes are distributed. Table 12 shows the current estimated distribution and the estimated marginal changes triggered by Measure 97.

Table 12: Impact of Measure 97 on Distribution of Oregon's State and Local Tax Burden

Income Group (Thousands)	Effective Tax Rate under Current Law	Effective Tax Rate under Measure 97	Difference
Less than \$21	9.29%	10.09%	+0.80%
\$21 to \$34	6.32%	6.86%	+0.54%
\$34 to \$48	7.52%	8.03%	+0.51%
\$48 to \$68	8.79%	9.25%	+0.46%
\$68 to \$103	9.13%	9.54%	+0.41%
\$103 to \$137	8.93%	9.31%	+0.38%
\$137 to \$206	8.87%	9.21%	+0.34%
Greater than \$206	9.56%	9.83%	+0.27%
Overall	8.89%	9.28%	+0.39%

Source: LRO

Oregon's current law distribution is roughly proportional, meaning that the effective tax rate (total state and local taxes divided by household income) is roughly similar for all income classes. There is a regressive segment at the bottom end of the household income distribution (caused primarily by the residential property tax) and a progressive segment at the high end (caused by the personal income tax), but the system as a whole shows only minor changes in the effective tax rate with increasing household income. While the marginal effect of Measure 97 is regressive, distribution of the overall tax burden with Measure 97 included remains largely proportional with the two exceptions previously noted at the bottom and the top of the income spectrum. This result differs from the tax burden distribution found in most states which tends to be decidedly regressive, especially for those states such as Washington that are highly dependent on the retail sales tax. Because Oregon's tax system would remain relatively dependent on the personal income tax under Measure 97, the overall distribution of the tax burden in the state is expected to remain largely proportional, in contrast to the overall regressive structure found in most states.

### Revenue Effects

To estimate the revenue impact of Measure 97, we start with the 2013 corporate tax return data based on Oregon sales. Taxable gross receipts are then projected into the future based on the current law state economic forecast. This produces an estimate of corporate tax liability by tax year. This is a static revenue impact estimate prior to consideration of any "dynamic" behavioral effects attributable to the change in tax policy.

The dynamic effects are designed to capture the impact of behavioral changes on tax liability. The estimated effects come from two components. The first is the feedback caused by the estimated changes in economic activity. OTIM produces an estimate of these feedback effects on revenue resulting from economic changes induced by the tax policy change. These dynamic feedback effects are assumed to phase in over 5 years in 20% increments per year. The revenue feedback effects of consumption based taxes tend to be smaller than those triggered by income or property taxes. This explains the relatively small feedback effect (2.0% of the static revenue estimate) estimated for Measure 97. OTIM estimated feedback effects typically vary from 1% to 10% for general tax policy changes.

The second estimated dynamic effect is the anticipated impact of corporate tax planning strategies in response to the tax increase. Compared to the static estimate we expect these corporate tax planning changes to reduce revenue by 3% in 2018, gradually increasing to 10% before stabilizing in 2021. Some of these possible tax planning strategies are discussed in the next section.

Table 13: Measure 97 Impact on Tax Liability by Tax Year

Tax Liability in millions	2017	2018	2019	2020	2021	2022	2023
Static Estimate*	\$2,755	\$2,895	\$3,032	\$3,170	\$3,311	\$3,461	\$3,618
Dynamic Feedback Effects	-\$13	-\$113	-\$222	-\$309	-\$401	-\$420	-\$439
Net Impact on Tax Liability	\$2,742	\$2,782	\$2,810	\$2,861	\$2,910	\$3,041	\$3,179

\*Includes estimated impact on insurance premium retaliatory tax.

Source: LRO

Measure 97 first applies to the 2017 corporate tax year. We build in an estimated growth factor for Oregon sales between 2013 (our last data point) and 2017. This estimate is determined by national sales adjusted for increasing concentration in major industries that has been a national trend, with some offsets caused by a long term gradual shift from C-Corporation to S-Corporation status. The dynamic effects for the 2017 tax year are minimal because the economic effects have just started to take effect (they are spread over 5 years) and revenue loss due to structural changes is limited to 3%. Over the following years, the revenue lost caused by both sets of dynamic factors gradually rises from \$13 million in 2017 to \$439 million in 2023. However, the feedback effect as a percentage of tax liability remains relatively small, reaching a maximum of 12% in the 2023 tax year. While net annual growth in tax liability from Measure 97 is expected to be slow because of these feedbacks, growth is expected to occur on a year over year basis over the estimated timeframe, with net tax liability increasing from approximately \$2.7 billion in 2017 to \$3.2 billion in 2023.

Table 14 converts the tax liability estimates to a revenue collection basis. This is based on the historical timing between corporate tax liability and receipt of tax payments. Corporations have a tendency to overpay their liability and receive refunds rather than risk paying penalties for underpayments. We expect this pattern to continue under Measure 97. Roughly 20% of the 2017 tax year liability is expected to be collected in the final 6 months of the 2015-17 biennium as the collection system gears up for the new tax structure. The remainder of the 2017 liability is then collected over the next two fiscal years, this causes a slightly higher collection total of \$6.1 billion for the 2017-19 biennium. Revenue is expected to remain essentially flat in the 2019-21 biennium after the initial collection bulge works through the system.

Table 14: Measure 97 Revenue Impact Estimates by Fiscal Year and Biennium (\$millions)

<b>Fiscal Year:</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>
Net Revenue Impact	\$548	\$3,028	\$3,071	\$3,117	\$2,886	\$2,976	\$3,110
<b>Biennium:</b>	<b>2015-17</b>	<b>2017-19</b>		<b>2019-21</b>		<b>2021-23</b>	
Net Revenue Impact	\$548	\$6,099		\$6,002		\$6,086	

Source: LRO

Another aspect of analyzing revenue effects is to examine how the change in the mix of Oregon's taxes will impact the state's revenue stream over the course of the business cycle and over the long term. LRO developed a stability index to examine how the mix of state taxes affects the volatility of overall tax revenue. The index is based on national tax data from all 50 states collected by the U.S. Census Bureau. The Census Bureau collects data for 5 state tax



categories. It is reported on a quarterly basis as a 12 month moving average and is currently available from 1989 through 2015.

Table 15: Impact of State Tax Mix on Growth and Stability

State	Personal Income	Corporate Income	Sales and Gross Receipts	Excise	Other	Average Growth	Standard Deviation
	Percent of State Taxes						
Oregon-Current Law	68.7%	5.1%	0%	14.9%	11.3%	5.3%	8.2%
Oregon-Measure 97	55.3%	1.3%	22.6%	12.0%	8.8%	5.1%	6.9%
Washington	0%	0%	60.5%	17.7%	21.7%	4.4%	3.9%
California	49.2%	6.4%	27.0%	9.3%	8.1%	5.0%	6.6%
Idaho	36.4%	5.4%	31.2%	16.1%	11.5%	4.8%	5.7%

Source: U.S. Census Bureau, LRO calculations

By reducing Oregon’s reliance on the net corporate income tax base and sharply increasing the state’s reliance on gross receipts-based taxes, the revenue stability simulation indicates the state’s tax system would experience slightly slower revenue growth over time but also gain more revenue stability. Greater stability is indicated by the lower standard deviation for the Measure 97 simulation (6.9%) compared to the standard deviation for Oregon’s current mix of taxes (8.2%). Because the personal income tax would remain the major source of tax revenue for Oregon, the state’s taxes under Measure 97 are expected to grow faster but be less stable than Washington’s consumption tax dominated system.

### Uncertainties

While assessing the effects of any significant tax change is subject to uncertainty, there are two key elements that make Measure 97 particularly difficult to evaluate. The first is the magnitude of the revenue impact. Measure 97 would increase total state taxes by approximately 25% and combined state and local taxes by about 15%. Such large changes rarely occur at the state level. The most recent Oregon experience of a similar magnitude was concerning the property tax reductions triggered by passage of Measure 5 in 1990. Most economic models, including OTIM, are calibrated with historical relationships that are estimated within a narrow range. Changes outside that range run the risk of generating unexpected results. A second element of Measure 97 is its initial concentration on relatively few corporations. State corporate tax return data indicate that the largest 274 corporations based on Oregon sales will experience an annual tax increase of over \$2 billion, comprising 85% of Measure 97’s direct impact. Since these corporations are large, operate globally in many cases, and often have substantial market power; accurately predicting their behavioral response to a large tax increase presents numerous challenges. The individual behavioral response of these corporations will be a key factor in determining how the tax burden is ultimately distributed.

In broad terms we have identified two major upside risks and downside risks to the overall simulation results:

### *Upside Risks:*

- Public sector spending impacts on the economy. The simulation results build in the demand side effects of transferring resources from the private sector to the public sector. This is reflected in the shift from private sector to public sector employment. However, certain types of public sector spending, if implemented efficiently, can improve the long-run productive capacity of the state economy. For example, improvements in the transportation system reduce costs throughout the state and increase the efficiency of the overall economy. Less directly, investments in public safety make property and workers more secure. The likely result is more productive capital and labor. Finally, improvements to the education system should lead to a more productive work force over time. While economic theory would suggest these effects should occur over time, there are very few reliable estimates of how large they are. Moreover, the timing of when particular expenditures have a quantifiable impact on the state's productive resources (labor, capital and natural resources) is likely to vary widely by individual program. As a consequence of these uncertainties we have left these effects as an upside risk to the simulation.
- The second risk is the possibility of underestimating the degree of tax exporting. This could involve uniform pricing strategies across states for corporations with substantial internet sales, greater than anticipated deductibility of state and local taxes and the extent of sales to out of state residents and businesses. These factors would result in a smaller increase in the Oregon price index and more of the tax burden being shifted to non-residents.

### *Downside Risks:*

- The largest downside risk is the potential for a more pronounced negative investment impact over time. Measure 97 is modeled as an excise tax because of its gross receipts base. If the large corporations directly affected by the tax perceive it as more of a tax on capital (like a tax on net corporate income), investment in Oregon will be reduced by more than projected in the OTIM simulation. This would mean a smaller increase in the price level but a larger negative impact on state economic output and employment over time.
- Another downside risk is a more significant tax planning response to the tax increase. The economic simulations do not account for these types of changes. They could take a number of forms but essentially involve corporate restructuring in order to reduce or eliminate the increased tax triggered by Measure 97. Estimating this impact is particularly risky because the direct effect of Measure 97 is so heavily concentrated on a relatively few large corporations, thereby giving them a powerful incentive to develop tax planning strategies. Possible strategies include:
  - Shifting from a C-Corporation to an S-Corporation or non-corporation status.
  - Spinning off subsidiaries into separate businesses to reduce Oregon sales below \$25 million on the combined state corporate tax return.
  - Using mergers and acquisitions or other methods to adjust where the plurality of services are performed under the cost of performance apportionment methodology.

- Vertically integrating with intermediate suppliers in order to reduce taxable transactions.
- Converting to a benefit company.

There are likely to be many more strategies as well. Large corporations have proven adept at developing tax planning strategies in recent years. The relatively small market share that Oregon represents for many of these national and multi-national corporations may limit the incentive for these large corporations to make major organizational adjustments. Nonetheless, the decisions of a relatively few corporations will have a powerful influence on the extent to which tax planning reduces state revenue gains over time. While tax planning would reduce revenue growth, it could actually soften the economic impact because the tax would be reduced and there would be less shifting on to consumers and other sectors.

## Conclusions

- Measure 97 is expected to generate \$548 million in new revenue in the 2015-17 biennium, \$6.1 billion in the 2017-19 biennium and \$6.0 billion in the 2019-21 biennium. These estimates are adjusted for anticipated economic and structural feedback effects.
- If it were in place for the 2012-13 fiscal year (the most recent year with complete state-by-state census data), Measure 97 would have increased Oregon's per capita state and local tax burden by roughly \$600 to \$4,501. At this level the state would have had the 20th highest per capita tax burden in that year compared to an actual rank of 28th. As a percent of income Measure 97 would have raised taxes from an actual 10.1% in 2012-13 to 11.6%. This would have moved Oregon to the 9th highest taxes as a percent of income versus an actual ranking of 26th.
- Because Measure 97 is based on Oregon sales and heavily concentrated on domestic consumer sectors, it is expected to largely act as a consumption tax on the state economy. Taxes initially born by the retail trade, wholesale trade and utility sectors are expected to result in higher prices for Oregon residents.
- Consumption taxes tend to have a more muted effect on economic activity compared to taxes on income and property which more directly affect the net returns to capital and labor. Our economic simulation shows that if Measure 97 becomes law it will dampen income, employment and population growth over the next 5 years, but all three metrics remain within 1% of the current law 2022 projection.
- The higher gross receipts taxes triggered by Measure 97 are expected to lead to higher consumer prices and higher wages. Higher wages are partly the result of substituting higher paid public sector jobs for lower paid private sector jobs, particularly in the retail trade sector.
- The impact of Measure 97 on consumer prices means that the marginal impact of the tax on the distribution of the state and local tax burden will be regressive. However, Oregon's tax system is expected to remain generally proportional, as it is now.
- Shifting the state's tax base towards gross receipts while reducing the proportional reliance on the personal income tax and virtually eliminating reliance on the corporate net income tax will reduce the instability of state revenue over the course of the business cycle.
- Both the large size of the revenue increase under Measure 97 and its concentrated impact on a small group of large corporations add considerable uncertainty to the

estimates. Measure 97 would increase total state taxes by approximately 25% and combined state and local taxes by 15%. There is very little empirical evidence on how state economies respond to such large changes because they rarely occur at the state level. The concentrated impact of the measure on a relatively few large taxpayers creates strong incentives for difficult to predict revenue reducing corporate tax planning strategies.

- Ultimately the impact of Measure 97 on the state economy will be determined by both its revenue raising mechanism and the state expenditures funded by the additional revenue. Our economic simulations account for spending shifts from the private sector to the public sector but do not incorporate the potential longer term economic capacity expanding effects of public investments in education and infrastructure.