



STATE OF OREGON

LEGISLATIVE REVENUE OFFICE

143 State Capitol Building
Salem, Oregon 97301

Research Report

(503) 986-1266

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TAXATION AND OREGON'S INTERSTATE COMPETITIVENESS

Executive Summary

This report focuses on how state and local taxes differ for location and expansion decisions made by corporations. The intent of this report is to provide state policy-makers with insight as to how regional tax policy influences corporate location decisions. When interpreting the results it is important to keep in mind that taxes are only one of many factors that influence corporate location decisions and that corporate location decisions are only one of many factors that influence state economic growth.

The major findings of the study are:

- When taxes are limited to those directly affecting corporations, Oregon appears to be relatively competitive within its western region. The state's sales based apportionment formula for tangible goods and the lack of a sales tax on business purchases act to reduce the corporate tax burden on most manufacturers locating in the state. From a purely tax perspective, the state appears to be well positioned to attract these types of investments.
- For export oriented service companies, Oregon's apportionment formula is not an advantage in attracting new investment. The state's use of the cost of performance approach to apportioning interstate income means that out-of-state sales will be counted as Oregon sales for purposes of apportioning income if those services are performed within the state regardless of the location of the customer. If Oregon were to shift to a market based approach, the state's effective tax rate would drop to the lowest in the region.
- Building personal income tax rates into the analysis reduces Oregon's regional tax competitiveness. Given Oregon's high degree of dependence on personal income tax revenue, addressing the possible distortions caused by high marginal personal income tax rates almost certainly involves a significant restructuring of the state's overall tax system.
- Accounting for generally available statewide tax incentives has minimal impact on the regional rankings for the investments examined. This conclusion reflects the decision of a majority of the states in the region (Oregon, Washington, California and Nevada) to employ more specific tax incentives and avoid the use of general tax incentives. This approach allows the state to more thoroughly examine the costs and benefits of these incentives while limiting erosion of the tax base.

Introduction and Scope

With the sharp recession of 2007-09 and the relatively weak recovery that has followed, state economic growth has become a dominant concern of state policy makers. There are a large number of factors that influence state economic performance. Many of these factors are fundamental in nature and not easily affected by state policy tools, especially in the short run. Others are closely linked to national and global economic conditions and beyond the scope of state and local fiscal policy. Nonetheless, both economic theory, and to some extent empirical studies, indicate that state and local fiscal policy does have a subtle, usually longer term impact on state economic growth. It is the intent of this report to explore how tax policy can influence one channel through which economic growth takes place--corporate location and expansion decisions.

To address the question of how Oregon's tax policy influences business location and expansion decisions, we use three separate but interactive approaches:

- A review of the results and methodology of two recent studies. The first of these studies was conducted by Ernst and Young for the Council on State Taxation and released in 2011. The second study, released in March of 2012, was prepared by KPMG for the Tax Foundation.
- Discussion and input from a panel consisting of tax experts working directly or indirectly with large corporations who have significant operations in Oregon. This panel was set up through the Oregon Business Association.
- Development of prototype capital investment decisions comparing Oregon with a small group of competitor states. These prototypes are based on extensions of the studies mentioned above, input from corporate auditors at the Oregon Department of Revenue as well as input from the business panel.

The first section of the report discusses the general relationship between state and local tax policy and economic growth. This section provides context for the more narrow issue of tax policy and business location decisions. The next section reviews the Ernst & Young and KPMG studies and their implications for Oregon's tax policy. This is followed by the development of prototypes to indicate how state tax policy potentially affects business location decisions under different circumstances, with an emphasis on the complex interaction between corporate characteristics and the state corporate income tax. The report concludes with a summary of general findings and conclusions.

State and Local Taxes and State Economic Growth

Regional economists view states as open economies. These open economies combine a given set of natural resources (climate, minerals, soil, etc.) with labor and capital to produce a certain level of

output. Under the rules of the open U.S. economy, workers and owners of capital are free to move their labor and capital resources to the states where the highest risk adjusted after-tax returns can be attained. State and local governments can affect the return to capital and labor in their respective states or regions by the taxes they impose. For example, state corporate income taxes affect the net return to capital and state personal income taxes factor into the calculation of net return to labor. So at least at the basic theoretical level there clearly is reason to examine state and local tax differentials in the context of state economic growth and development.

Since taxes are a cost, it follows that lower taxes would be preferred by business just as lower energy costs or lower land costs would be. However, there are at least four major complications with this simple analysis:

- Taxes are a cost but the local government services they pay for are potentially a benefit to business, especially when the revenue is used to improve the quality of labor through education and training or improve the state's infrastructure. This means that the benefits from public expenditures can potentially offset the costs associated with a higher tax burden.
- Lower taxes on labor income can make a state more attractive to workers by increasing their take home pay. However, empirical studies have shown that labor migration is affected by a wide variety of factors such as family connections, quality of life, climate and other non-tax variables. These other factors often over-power the effects of differential taxes on labor income.
- The location of labor and capital interact in complex ways, the existence of quality labor often attracts capital, and vice versa. This tends to cause labor and capital for specific industries to cluster together regardless of tax differentials or other cost related factors. In other words, the benefits of available skilled labor, proximity to suppliers and interaction with closely related businesses can more than offset relatively high land, labor and tax costs.
- Specific taxes affect industries differently. High property taxes for example increase the costs for capital intensive industries more than labor intensive industries. High personal income tax rates affect the costs of industries reliant on high wage labor more than those that depend on low wage labor.

For a perspective of where the economics profession is on the issue of state and local taxes and economic development, we turn to Timothy Bartik. He has written extensively in this field for over twenty years. His work is widely cited in the literature on the subject.

Bartik argues that declining long-term transportation and communications costs have made many businesses more footloose. Because costs such as phone service, air transport and computers have fallen relative to the output they are used to produce, state and local taxes (which have remained relatively constant as a share of the economy) have become a potentially more important factor in business location decisions. In summarizing the state of the literature, Bartik concludes that:

“Declining transport and communication costs help explain why research increasingly shows a statistically significant but modest effect of state and local tax rates on economic development. Reviews of the literature suggest that the long-run elasticity of a state or metropolitan area's

business activity with respect to state and local taxes is between -0.2 and -0.3, which means that a 10% reduction in effective state and local business tax rates, *with state and local public services held constant*, will increase the long run level of business activity by 2 or 3%.”

Putting this finding in perspective, Bartik goes on to point out that:

“Such an effect on business activity is not huge. If the state and local tax cuts are financed by cutting public services, the result may be lower business activity. The elasticities (which measure the response of economic activity to changes in tax rates) are not large enough to produce a Laffer Curve, in which cuts in tax rates would raise the tax base enough to increase revenue.”

Finally, Bartik uses the above elasticities to calculate that the gross annual cost per job in foregone state and local business tax revenue is \$10,000 on average. Applying a 10% discount rate to future benefits leads to an estimated present value cost of \$70,000 per additional job. Bartik estimates that the additional tax revenue resulting from an increase in employment offsets about 25% of the “static” revenue loss over time.

Bartik’s results are for state or overall metropolitan areas. The impact of tax rates is greater when differentials occur within a metropolitan area. Given that the Portland metro area includes Clark County, Washington; this is a particularly important consideration for Oregon policy makers.

Bartik’s findings on the revenue feedback effects are slightly higher than the results we have typically found using the Oregon Tax Incidence Model (OTIM). OTIM was developed by the Legislative Revenue Office in conjunction with economists at Oregon State University, Washington State University and the California Department of Finance at the direction of the 1999 Legislature. It was completed in 2001 and has since been used extensively to examine the economic and distribution effects of major tax change proposals. OTIM is a computable general equilibrium model of the state economy. It traces through the effects of tax changes on prices, wages, returns to capital and net-migration into the state. Depending on the specific tax changed, OTIM has produced revenue feedback effects from 10 to 20% of the original revenue gain or loss after a 5-year adjustment period. While somewhat lower than Bartik’s conclusion, the OTIM results are generally in line with his findings. For a detailed description of OTIM see LRO RR#1-01.

We also raised the issue of how state and local taxes affect economic development with our business advisory group. Their comments were generally in line with the economic literature. They agreed that state and local taxes are an important factor in location decisions under certain conditions. However, other factors, especially labor cost and quality, are generally a more important factor than tax differentials. They also pointed out that high personal tax rates, while not a direct business tax, could be important to top level management making the final location decisions. The advisory group emphasized that state and local tax differentials are most likely to be significant at the regional level where factors such as labor force quality, climate, energy costs and transportation costs tend to be similar.

Review of Recent Tax Competitiveness Studies

This section examines two recently released studies which calculate state and local tax burdens for certain types of business location and expansion decisions. These two studies are:

1. Competitiveness of state and local business taxes on new investment prepared by Ernst & Young for the Council on State Taxation (April 2011).
2. Location Matters: A Comparative Analysis of State Tax Costs on Business prepared by KPMG for the Tax Foundation (March 2012).

The two studies have similar objectives. Both set up prototype corporations making location or expansion decisions for new investment. They then compute a set of state and local taxes such as corporate income taxes, sales taxes and property taxes. This information is used to calculate the effective state and local tax rate on corporate capital investments such as a new manufacturing plant or a distribution center. States are then ranked from low to high average effective tax rates on the investment decisions.

Both studies focus exclusively on the effective tax rate calculation. In other words, the studies are designed to calculate tax rate differences, not whether state and local tax differentials are a significant factor influencing state economic performance. Both studies acknowledge the importance of non-tax factors such as labor costs and quality in the business location decision process.

Table 1 shows the types of investments analyzed in each study.

Table 1: Hypothetical Investments

Council on State Taxation (COST)	Tax Foundation
<ul style="list-style-type: none"> • Headquarters Facility • Research & Development Facility • Office and Call Center Facility • Non-durable Goods Manufacturing Facility • Durable Goods Manufacturing Facility 	<ul style="list-style-type: none"> • Corporate Headquarters • Research & Development Facility • Call Center • Labor Intensive Manufacturing Facility • Capital Intensive Manufacturing Facility • Retail Store • Distribution Center

The Tax Foundation study further divides each investment into mature and new investments. Under the KPMG methodology only “new” firms are eligible for general tax incentive programs. Table 2 summarizes the state and local taxes considered in the two studies.

Table 2: State and Local Taxes Considered in Study

Council on State Taxation (COST)	Tax Foundation
<ul style="list-style-type: none"> • Corporate Income Taxes • Corporate Franchise Taxes • Sales and Use Taxes on Business Purchases • Gross Receipts Taxes • Property Taxes 	<ul style="list-style-type: none"> • Corporate Income Taxes • Corporate Franchise Taxes • Sales and Use Taxes on Business Purchases • Gross Receipts Taxes • Property Taxes • Unemployment Insurance Taxes

The studies general coverage of taxes is similar with the major exception of unemployment insurance taxes. The Tax Foundation study includes these employer taxes but Ernst & Young does not. This difference does have a significant impact on the results of the studies.

While both studies include corporate income taxes, the complex nature of calculating a multi-state corporation’s base for state tax purposes makes it very difficult to generalize these taxes by state and type of investment. Two key factors determine taxable income for a multistate corporation. The first is nexus, which determines if a state has the legal authority to tax a corporation. Nexus, which is largely governed by federal law, generally requires a substantial connection to a state for a corporation to be subject to tax in that particular state. The second key factor is each state’s apportionment formula. Apportionment is the method used to calculate the proportion of a corporation’s national income that is subject to tax in each particular state that has a corporate income tax. Apportionment formulas generally include a factor for property, payroll and sales, though a number of states, including Oregon, have moved to a single sales factor formula in recent years. A related factor is the state’s treatment of what is known as “nowhere income”. This occurs when a corporation has sales to a state where it does not have nexus and therefore cannot be taxed. States have the choice of ignoring this income for their own tax purposes or adopting a “throwback rule” in which sales from the state where there is no nexus are included in the sales of the originating state. Oregon law does include the throwback rule. Both studies emphasize the importance of nexus, apportionment formulas and throwback rule in determining the tax burden on the hypothetical investments, particularly for those investments which produce products or services for sale outside the originating state. However, the studies make different assumptions about how these policies will apply to the hypothetical investments. This is a key factor explaining differences in the results.

Sales taxes on business inputs are a significant portion of overall business taxes in most states. Both studies attempt to incorporate tax base differences among the states by including exemptions for building materials and capital equipment purchases and other typical business related expenditures.

Both studies account for local sales tax option rates, though in different ways. The COST study uses a statewide average sales rate which includes the average local sales tax rate across the state. The Tax Foundation study assumes that the prototype investments take place in either the state's largest city (tier 1) or another large city in the state (tier 2). The sales tax rates that apply to the two cities are then used for the calculation.

In most states the single largest state-local tax paid directly by business is the property tax. The property tax is predominantly a local tax with widely differing rates around each state. The COST study uses the property tax rate applicable to the largest city in the state while the Tax Foundation study applies the rate applicable to the tier 1 and tier 2 cities for each state. Neither study incorporates the effect of widely used exemption such as abatements in enterprise zones.

It is worth noting that neither study includes personal income taxes. With the studies focused on corporate investment decisions, personal income taxes would not be a direct business tax paid by the corporations. However, they could well be a significant factor in the final corporate location decision through their impact on high income senior executives and high wage workers. Personal income taxes also take on greater significance for other business entities such as S-Corporations, LLCs, partnerships and proprietorships.

The Tax Foundation study attempts to incorporate the effects of state business tax incentives by distinguishing between mature and new firms. New firms are those that would be eligible for the incentives, mature firms would not be. New firms are also assumed to have more capital expenditures which can affect business construction expenditures (and sales tax liability) and depreciation schedules which can affect personal property tax liability of capital equipment. The specific tax incentives included in the tax Foundation study are:

- New job tax credits
- Investment tax credits
- Research and development tax credits
- Payroll withholding tax rebates
- Statewide property tax abatements (enterprise zones are not included)

Table 3 shows the summary results for the two studies individually and in a combined form. For the Tax Foundation study, the ranking for new firms and mature firms is combined. The COST study ranks the states according to effective tax rate on the value of capital investment and the total wages generated by the new jobs. The ranking in Table 3 is a combination of the two. A ranking of #1 means the lowest overall effective tax rate for the investments considered in the two studies.

Table 3: Tax Competitiveness Study Results

Combined Rank (Ranked lowest effective tax rate to highest effective tax rate)	Council on State Taxation Rank (combination of ranking based on jobs and value of capital investment)	Tax Foundation Rank (combination of mature and new firms)
1. Ohio	3	4
2. Wyoming	10	2
3. South Dakota	11	3
4. Wisconsin	4	12
5. Maine	1	21
6. Georgia	15	6
7. Kentucky	13	9
8. Delaware	7	17
9. Utah	18	8
10. New Hampshire	6	22
11. Montana	9	20
12. Oregon	2	30
13. Alaska	14	18
14. North Dakota	25	13
15. Nebraska	39	1
16. Virginia	8	32
17. Illinois	5	37
18. Oklahoma	37	7
19. North Carolina	36	11
20. Michigan	24	23
21. Indiana	21	27
22. Vermont	29	19
23. Louisiana	47	5
24. Missouri	23	29
25. Arkansas	38	14
26. Minnesota	11	41
27. Maryland	19	36
28. Texas	20	35
29. Nevada	31	26
30. Alabama	42	15
31. Kansas	48	9
32. Colorado	15	43
33. Florida	27	33
34. Iowa	15	44
35. Connecticut	34	28
36. Arizona	40	25

37. New Mexico	50	16
38. Mississippi	43	24
39. New Jersey	28	39
40. Idaho	29	40
41. Pennsylvania	22	49
42. New York	26	45
43. South Carolina	35	38
44. California	32	42
45. Tennessee	46	31
46. Massachusetts	33	46
47. Washington	44	34
48. West Virginia	41	48
49. Hawaii	44	50
50. Rhode Island	49	47

Table 3 shows that the two studies have similar rankings for a number of states but wide differences for others. In terms of similarities, six of the seven states with the highest combined ranking are in the top 15 in both studies. The three states with the lowest combined ranking are in the bottom ten of both studies. Extractive resource states such as Wyoming and South Dakota tend to do well in both studies. This is generally because these states are able to export a portion of their taxes to the consumer states of these resources through severance taxes. This allows them to keep general business taxes lower. Interestingly, Ohio is the only state that ranks in the top 5 in both overall studies. Ohio has gone through a major tax restructuring in recent years in which they eliminated the corporate income tax and imposed a broad gross receipts tax (called a commercial activity tax or CAT). The gross receipts tax is destination based meaning it is based on receipts derived from sales in Ohio.

Despite some similarities there are large differences in the results for the two studies, this is not surprising given the differences in methodologies and assumptions. The most striking differences are for Louisiana and Nebraska. Louisiana ranks #47 in the COST study and #5 in the Tax Foundation study. Nebraska's ranking varies from #39 in the COST study to #1 in the Tax Foundation study. The two states have the lowest effective tax rates for "new" investment in the Tax Foundation study. In the Tax Foundation methodology, tax incentives are included in the new firm calculation. The COST study does not explicitly incorporate business tax incentives.

In summary, the primary reasons for the differences in the results for the two studies are:

- The inclusion of the unemployment insurance tax rate in the Tax Foundation study.
 - Unemployment tax rates on employers vary widely across the states and can represent a significant business cost; however, they are not a general business tax. Employer taxes go into a trust fund that is available for eligible workers. States with strong stable trust funds

- are able to provide benefits to workers over the course of the business cycle. Many states in the wake of the Great Recession have seen their trust funds become technically insolvent. For these reasons, the COST study excluded unemployment taxes from their effective tax rate calculations.
- The explicit inclusion of tax incentives in the Tax Foundation study.
 - The inclusion of tax incentives clearly makes a major difference in the effective tax rate for new investment in some states as indicated by the results for Nebraska and Louisiana. The COST study focuses on the structure of the state and local tax system and does not include short-term tax incentives. In some cases, tax incentives may well be a critical factor; in others the general tax system is more important to long run profitability calculations. The Tax Foundation's inclusion of incentives does highlight how variations in their use can affect the tax rate calculation at a point in time, but it is not clear that their inclusion gives a more accurate portrayal of the relative competitiveness of each state's tax system.
 - Treatment of apportionment and throwback rules.
 - Results of the two studies appear to be affected by treatment of states with an over-weighted sales apportionment factor (especially those with a single sales factor) and how it interacts with the states that have a throwback rule. The COST study allocates sales based on the population of a state. It does not appear to adjust for states with a throwback rule. So small market states with a single sales factor formula, like Oregon, tend to export a large portion of their corporate income tax outside the state. The Tax Foundation study accounts for the throwback rule and allocates a large portion of sales back to the originating state for those that have adopted the throwback rule. Both studies recognize the differential treatment many states have for goods producing companies and service producing companies. Oregon, like many other states, uses a "cost of performance" approach to assigning the sales of service companies. This means that the sale is attributed to where the majority of the costs are incurred regardless of where the customer is located.
 - Treatment of local taxes.
 - Taxes with a local component such as property taxes and sales taxes receive different treatment in the two studies. The COST study calculates an average statewide sales tax, including local options that vary around the state. The Tax Foundation bases sales taxes on the taxes in a specific city (either tier 1 or tier 2 in the study). Property taxes are treated the same way. COST calculates property taxes based on the rates in the state's largest city.
 - Types of investments included.
 - The Tax Foundation considers two additional prototype investments (retail trade store and distribution center) that are not included in the COST analysis. This inclusion affects the overall average calculations for effective tax rates.

Before moving to an extension of the analysis conducted in the two studies, it is worth taking a more detailed look at the results for Oregon. Table 4 breaks down how the hypothetical investments would have been taxed under the assumptions used in the studies.

Table 4: Results for Oregon under the Two Studies

Study/Measurement	Effective Tax Rate	Ranking Among States
COST*		
Weighted by Capital Investment	3.8%	2
Weighted by Jobs	4.4%	2
Tax Foundation**		
Mature Firms	100.5	28
New Firms	106.3	28

*The national average effective tax rate in the COST study is 7.9% based on capital investment and 9.1% based on new jobs.

**Effective tax rates calculated as an index with 100 equal to the national average.

Under the COST study methodology, Oregon has the second lowest effective tax rate as a percentage of the capital investment or the new jobs created. Oregon's high ranking can be attributed to the following:

- Absence of a sales tax on business inputs. The other four states that do not impose a general sales tax also rank relatively high in the COST study (New Hampshire #6, Delaware #7, Montana #9 and Alaska #14). Taxes on the purchase of business inputs typically comprise 25 to 30% of a state's sales tax base. For most states it is the second largest direct business tax (after property taxes).
- Single sales factor apportionment of corporate income. Because Oregon is a relatively small market state, a small percentage of corporate sales are attributed to the state through the apportionment formula under the COST assumptions. This assumption applies to the sales of Oregon based companies to out-of-state markets in which they have nexus. The COST study accurately captures the tax advantages of those companies operating under this assumption. However, this advantage would not apply to corporations with sizeable sales within Oregon or those who have significant sales thrown back to Oregon because of lack of nexus in the destination state.
- No franchise tax. Franchise taxes are generally based on a corporation net worth.

Oregon's effective tax rate on investment ranks near the national average under the assumptions used in the Tax Foundation study. Oregon's tax rate is almost exactly equal to the national average for mature firms and 6.3% above average for new firms incorporating the effects of tax incentives. The primary reasons for the lower ranking (higher average effective tax rate) compared to the COST study is:

- Inclusion of unemployment insurance trust taxes as a business tax. Oregon's unemployment taxes are relatively high. However, the state's unemployment trust fund is relatively stable.

- Incorporation of the throwback rule for Oregon based companies that sell products into states in which they do not have nexus. In the Tax Foundation methodology, states with a single sales factor and a throwback rule are assumed to fully apportion the corporation's sales back to the origin state. In reality, the significance of the throwback rule depends on the company. For a major national/international company with nexus in most states, the throwback rule will have little effect. The throwback rule will increase taxable income in the origin state if the corporation is exporting to states in which it does not have nexus. In reality, the effect of the throwback rule on single sales factor states is somewhere between 0% throwback (the COST assumption) and 100% throwback (the Tax Foundation assumption).
- Oregon's tax incentives for new investment are relatively limited in the Tax Foundation methodology—a key reason why the state's effective tax rate is above the national average for new firms. The study includes the state's research and development tax credit for R & D firm investments. It also includes the state's property tax exemption through the Strategic Investment Program (SIP) for large capital investments. However, Oregon does not have a general investment tax credit (though it does have an investment tax credit for investment in renewable energy manufacturing equipment), a specific job creation credit nor a rebate on income tax withholdings. As a consequence, the tax incentives built into the study affect only 2 of the 7 investments considered (research and development facility and capital intensive manufacturing facility).

Extending the Competitiveness Studies

The studies conducted by Ernst & Young and KPMG for COST and the Tax Foundation respectively, are state-of-the-art attempts to capture how state and local taxes vary around the country for different types of investments. The differences in the results of the two studies clearly show the importance of the underlying assumptions behind the calculations. However, a theme that does emerge is the importance of destination versus origin based taxes. Destination based taxes are those that are paid at the point of consumption while origin based taxes are those paid at the point of production. Ohio's move to a destination based gross receipts tax is a key reason for its high rating in both studies. Though the two studies differ in how they calculate the interaction between apportionment formulas and the throwback rule, they both consistently show that destination based apportionment formula rules lead to lower effective tax rates for all types of new investments.

This section narrows the interstate comparison to Oregon, Washington, Idaho, California, Colorado, Utah and Nevada. This is based on input from the business advisory group. The investment examples are also narrowed to capital intensive manufacturing and export service providers. The focus of the analysis is on how rules for allocating sales for apportionment purposes influence effective tax rates and relative regional competitiveness. The section also provides an analysis of how the addition of personal income tax rates affects comparative taxes for high wage facilities such as headquarters operations. The section concludes with a comparison of the current law results with and without tax incentives as defined by the Tax Foundation.

Table 5 displays the relevant statutory tax rates for the comparison states. The taxes included are property taxes, sales taxes, gross receipts taxes and the personal income tax for the headquarters example. Franchise taxes based on the capital stock value of the corporation, which are included in both studies, are excluded because none of the comparison states imposes the tax.

Table 5: Statutory Tax Rates for Comparison States

Tax	Oregon	Washington	California	Idaho	Colorado	Utah	Nevada
Corporate Income	6.6%/7.6%	----	8.84%	7.6%	4.63%	5.0%	---
Gross Receipts	---	.484%/1.8%	---	---	---	---	---
Property*	1.661%	1.187%	1.1%	1.5%	2.666%	1.256%	1.276%
Sales*	---	8.7%	8.75%	6.0%	7.55%	6.25%	7.725%
Top Personal Income Tax Rate	9.9%	---	9.3%	7.8%	4.63%	5.0%	---

*Based on rate in second largest city.

Case 1—Capital Intensive Manufacturing Facility

Assumptions:

Total Revenue: \$200 million

Total Property Value: \$75 million

Annual Purchases: \$10 million

Federal Taxable Income: \$10 million

Share of Sales Made in State: 25%

Share of Property and Payroll in State: 100%

Table 6: Case 1--Tax Impact of Variations in Sales Thrown Back to Origin State

Tax	Oregon	Washington	California	Idaho	Colorado	Utah	Nevada
Corporate Income/Gross Receipts	(in thousands)						
100% Throwback	\$910	\$968	\$1,061	\$760	\$463	\$500	---
0% Throwback	\$226	\$242	\$265	\$475	\$116	\$313	---
10% Throwback	\$317	\$339	\$371	\$513	\$162	\$338	---
Property	\$1,137	\$890	\$825	\$1,125	\$2,000	\$942	\$957
Sales	---	\$870	\$875	\$600	\$755	\$625	\$773
Total with 100% Throwback	\$2,046	\$2,728	\$2,761	\$2,485	\$3,218	\$2,067	\$1,730
Total with 0% Throwback	\$1,362	\$2,002	\$1,965	\$2,200	\$2,870	\$1,880	\$1,730
Total with 10% Throwback	\$1,454	\$2,099	\$2,071	\$2,238	\$2,917	\$1,905	\$1,730

Case 1 highlights the importance of assumptions surrounding the throwback rule. The two extremes (100% or 0%) demonstrate the range of possible liabilities for the capital intensive manufacturing investment. For Oregon, the total tax liability on the investment varies from \$2,046,000 for 100% of sales thrown back to the state to \$1,362 with no sales thrown back, a difference of 50%. Idaho is the least affected by the throwback rule because it uses a three factor formula based on property, payroll as well as sales. The assumption that 10% of sales are thrown back to the origin state is based on a review of all manufacturing corporate tax returns for Oregon. This shows that roughly 10% of total out-of-state sales are sourced back to the state through the throwback rule. This suggests that on average, the COST assumption that no sales are thrown back is closer to reality than the 100% throw back assumption used in the Tax Foundation study. However, circumstances vary for individual companies depending on where the exports are directed and the extent of the corporation's presence in other states.

Table 7: Case 1A--Potential Tax Impact of Oregon Eliminating Thrown Back Rule

Tax	Oregon	Washington	California	Idaho	Colorado	Utah	Nevada
Corporate Income/Gross Receipts	(in thousands)						
Throwback: 0% for Oregon/10% elsewhere	\$226	\$968	\$371	\$513	\$162	\$338	---
Property	\$1,137	\$890	\$825	\$1,125	\$2,000	\$942	\$957
Sales	---	\$870	\$875	\$600	\$755	\$625	\$773
Total	\$1,362	\$2,728	\$2,071	\$2,238	\$2,917	\$1,905	\$1,730

Case 1A is based on the assumption that Oregon eliminates its throwback rule and the comparison states experience a throwback rate equal to 10% of total sales. Such a policy would marginally lower Oregon's effective tax rate relative to the other states. However, such a change would not alter the current ranking among the states—with Oregon continuing to have the lowest effective tax rate in the region for capital intensive manufacturing investments.

Case 2—Service Based Facility

Assumptions:

Total Revenue: \$75 million

Total Property Value: \$15 million

Annual Purchases: \$3 million

Federal Taxable Income: \$5 million

Share of Sales Made in State: 50%

In the case of service oriented companies the key apportionment decision is between using the cost of performance approach or the market based approach to source the origin of sales. Currently, the comparison states, with the exception of California and Utah, use a cost of performance approach. This approach allocates sales to the state where the largest percentage of the cost of the service is

incurred rather than to where the purchaser is located. Under the assumptions of Case 2, 50% of services are purchased out-of-state. Table 8 highlights the impact of the different sourcing methods on tax liability.

Table 8: Case 2--Tax Impact of Variations in Apportionment Approach to Services

Tax	Oregon	Washington	California	Idaho	Colorado	Utah	Nevada
Corporate Income/Gross Receipts	(in thousands)						
Cost of Performance Apportionment	\$378	\$675	\$442	\$380	\$232	\$250	---
Market Based Apportionment	\$188	\$675	\$221	\$190	\$116	\$125	---
Current Law: CA,UT—market, others cost of performance	\$378	\$675	\$221	\$380	\$232	\$125	---
Property	\$208	\$178	\$165	\$225	\$400	\$188	\$191
Sales	---	\$251	\$252	\$173	\$217	\$180	\$223
Total with Cost of Performance	\$586	\$1,104	\$859	\$778	\$849	\$618	\$414
Total with Market Base	\$396	\$1,104	\$638	\$588	\$733	\$493	\$414
Total under Current Law	\$586	\$1,104	\$638	\$778	\$849	\$493	\$414

Under current law, Oregon's tax liability is 3rd lowest in the region. If Oregon moved to a market based apportionment for service companies, as California has recently done, taxes on a new Oregon based facility would fall to the lowest in the region. Service companies that export a high proportion of their services out-of-state would be the primary beneficiaries of a shift away from cost of performance to market based sourcing of sales.

Case 2A is designed to examine the tax burden of a service oriented facility that serves as a regional or national headquarters for a company. Case 2A includes the potential impact of personal income tax rates on a group of high income executives affiliated with the headquarters operation. All the investment assumptions of Case 2 apply. In addition \$3 million in income for executives (6 executives averaging \$500,000 apiece) is included. Each state's highest statutory tax rate is then applied to the \$3 million. States are assumed to have their current law sourcing rules for apportioning service sales.

Table 9: Case 2A--Tax Impact of Including the Effect of Personal Income Tax on High Income Executives

Tax	Oregon	Washington	California	Idaho	Colorado	Utah	Nevada
Corporate Income/Gross Receipts	(in thousands)						
Current Law: CA,UT—market, others cost of performance	\$378	\$675	\$221	\$380	\$232	\$125	---
Property	\$1208	\$178	\$165	\$225	\$400	\$188	\$191
Sales	---	\$251	\$252	\$173	\$217	\$180	\$223
Personal Income Tax	\$225	---	\$211	\$177	\$105	\$114	---
Total	\$811	\$1,104	\$849	\$955	\$954	\$607	\$414

Not surprisingly, inclusion of personal income taxes and their impact on high income executives raises Oregon’s tax liability relative to the comparison states. Under these assumptions Utah and Nevada have a significantly lower overall effective tax rate. Although Oregon would continue to have a lower effective tax rate than four other states, the Business Advisory Group noted that high personal income tax rates can play a disproportionate role in the investment location, depending on the executives making the final decision.

All of the above cases are based on state and local tax system in the absence of specific incentives. As discussed earlier, incorporating tax incentives at the state level is complex because many apply to certain regions only (enterprise zones for example) or are at the discretion of the state government. However, the potential impact of tax incentives within the western region can be approximated by adjusting the investments in case 1 and case 2 for the statewide tax incentives used in the Tax Foundation study. Under the Tax Foundation methodology, five types of generally available incentives are included:

- Investment tax credits
- Tax credits for job creation based on payroll
- Withholding refunds
- Research and development credits
- Property tax exemptions

Table 10 shows the comparative taxes within the region before and after adjusting for tax incentives.

Table 10: Regional Tax Comparison with and without Tax Incentives

Investment Type	Oregon	Washington	California	Idaho	Colorado	Utah	Nevada
<i>Capital Intensive Manufacturing</i>	(in thousands)						
Without tax incentives	\$1,454	\$2,728	\$2,071	\$2,238	\$2,917	\$1,905	\$1,730
With Tax Incentives	\$1,454	\$2,728	\$2,071	\$2,005	\$2,877	\$1,786	\$1,730
<i>Service Facility</i>							
Without tax incentives	\$586	\$1,104	\$638	\$778	\$849	\$493	\$414
With Tax Incentives	\$586	\$1,104	\$638	\$730	\$821	\$461	\$414
<i>Headquarters Facility</i>							
Without tax incentives	\$811	\$1,104	\$849	\$955	\$954	\$607	\$414
With Tax Incentives	\$811	\$1,104	\$849	\$907	\$926	\$575	\$414

A clear distinction arises between the coastal states and the mountain states in terms of general tax incentive use. California, Washington and Oregon have R & D tax credits, but these do not affect the investments considered in cases 1 and 2. Oregon also has the Strategic Investment Program (SIP) which caps assessed value for large capital investments. However, the capital intensive manufacturing investment in case 1 would not meet the SIP threshold unless it was located in a rural area. On the other hand, Idaho, Utah, and Colorado all have a number of generally available tax incentives that met the criteria used in the Tax Foundation study. These include investment tax credits (Idaho and Colorado), property tax exemptions (Idaho, Colorado and Utah) and payroll rebates (Idaho, Colorado and Utah). Nevada, with no income tax or business gross receipts tax, is the exception among the mountain states with no generally available statewide tax incentives.

Summary and Findings

This report has focused on one aspect through which state economic growth takes place: location and expansion decisions of corporations. Though investments in large facilities do not account for the majority of jobs on a statewide basis, they are over represented among traded sector jobs. Traded sector jobs are those that are associated with the production of a good or service that is sold outside the state's borders. Most economists view traded sector output as the catalyst for secondary job growth in the domestic sector of a state economy. These jobs tend to be in smaller establishments in industry sectors such as local services and retail trade.

When taxes are limited to those directly affecting corporations, Oregon appears to be relatively competitive within its western region. The state's sales based apportionment formula for tangible goods (along with a realistic estimate of throwback sales) and the lack of a sales tax on business purchases act to reduce the corporate tax burden on most manufacturers locating in the state. These two factors give Oregon a regional competitive advantage for manufacturing investment. As long as the throwback rule is not a significant factor (and the evidence indicates that in most cases it is not), Oregon's tax environment for capital intensive manufacturing investments is the most

attractive in the region. From a purely tax perspective, the state appears to be well positioned to attract these types of investments.

For export oriented service companies, Oregon's apportionment formula is not an advantage in attracting new investment. The state's use of the cost of performance approach to apportioning interstate income means that out-of-state sales will be counted as Oregon sales for purposes of apportioning income if those services are performed within the state regardless of the location of the customer. This approach leads to higher corporate income taxes in Oregon relative to states with a market based approach to apportioning income from services. As a result, Oregon ranks below two comparative states in terms of the effective tax rate on a hypothetical service company investment. If Oregon were to shift to a market based approach, the state's effective tax rate would drop to the lowest in the region.

Building personal income tax rates into the analysis reduces Oregon's regional tax competitiveness. A hypothetical case designed to represent an investment in a headquarters operation with a group of high income executives, shows that Oregon's effective tax rate would rise relative to other states in the region. While this is a specialized case, high personal income taxes are likely to be a factor in many other cases as well, especially those involving pass-through business entities that pay income taxes through the personal income tax rather than the corporate income tax. Given Oregon's high degree of dependence on personal income tax revenue, addressing the possible distortions caused by high marginal personal income tax rates almost certainly involves a significant restructuring of the state's overall tax system.

Finally, accounting for generally available statewide tax incentives (as defined by the Tax Foundation) has minimal impact on the regional rankings for the investments examined. This conclusion reflects the decision of a majority of the states in the region (Oregon, Washington, California and Nevada) to employ more specific tax incentives and avoid the use of general tax incentives. In Oregon's case, the use of the Strategic Investment Program (SIP) applies only to very large investments (\$100 million or more in urban areas) or specific types of investments such as renewable energy manufacturing facilities. This approach allows the state to more thoroughly examine the costs and benefits of these incentives while limiting erosion of the tax base.

APPENDIX

The example firms described in this paper rely on many assumptions to make the calculations used for comparison purposes. This appendix describes these assumptions. The primary data source was the 2009 Corporation Source Book of Statistics of Income from the Internal Revenue Service, which provides aggregated tax information grouped by amount of total corporate assets. The intent was to choose “typical”, yet sizable, firms that could represent well-established manufacturing and service firms. For the manufacturing sector, the assumed profile is based on averages for firms with total assets between \$100 million and \$250 million. For tax year 2009, roughly 93 percent of the C-corporation returns reported less than \$10 million in total assets and accounted for just over 10 percent of federal taxable income. At the other end of the spectrum, corporations with at least \$2.5 billion in total assets accounted for 0.2 percent of tax returns and 76 percent of taxable income. We chose a size category that reflects corporations between the two extremes that can be representative of large, established corporations for which taxes are likely to be a more significant factor in the decision-making process.

In contrast to the manufacturing sector, where all types of manufacturing are aggregated into a single major sector, the service sectors are reported separately. Rather than combining all of them into a single service sector, we chose to focus on the Professional, Scientific, and Technical sector. Among the tax year 2009 service sectors, this sector had the largest number of C-corporation returns filed. At the federal level in tax year 2009, roughly 96 percent of the C-corporation returns reported less than \$1 million in total assets and accounted for just over eight percent of federal taxable income. At the other end of the spectrum, corporations with at least \$250 million in total assets accounted for 0.04 percent of tax returns and 67 percent of taxable income. Analogous to the manufacturing process described above, we chose to base the firm profile on corporations with total assets between \$25 million and \$50 million.

Example Manufacturing Firm

2009 IRS Data (Averages, \$M)		Example Firm (\$M)	
Total Revenue	\$216	Total Revenue	\$200
Cost of Goods Sold	\$150	Subject to Sales Tax	\$10
Depreciable Assets	\$91	Real Property	\$20
		Machinery / Equipment	\$55
		New Investment	\$5
Salaries and Wages	\$14	Salaries and Wages	\$15
		Number of Employees	233
		New Employees	11
Federal Taxable Income	\$7	Federal Taxable Income	\$10
State Additions: QPAI	\$0.3	State Additions: QPAI	\$2
		Share of In-State Sales	25%
		Throwback Percentage	10%
		Share of In-State Property & Payroll	100%
		Average Wages	\$53,554

Total Revenue

This figure is the starting point for the example firm profile. All other parameters are based on percentages of total revenue. The IRS reported that 813 corporations had a combined total revenue of just over \$175 billion, of which, business receipts accounted for \$172 billion. The average revenue was just under \$216 million. For the sample firm, the rounded figure of \$200 million was used.

Cost of Goods Sold

This parameter is used to estimate the impact of sales taxes. It is used as proxy for taxable purchases made by the corporation. The included corporations reported a combined total of just under \$122 billion for the cost of goods sold, resulting in an average of roughly \$150 million. These costs represent roughly 70 percent of the \$216 million average revenue. We used the \$150 million for the example firm. Often times, a large share of these kinds of purchases are exempt from sales taxes. We used five percent of the cost of goods sold, rounded up to \$10 million, for purchases subject to the sales tax.

Depreciable Assets

This parameter is used as the initial basis for approximating the value of property owned by the example firm for estimating property taxes. These corporations reported a total of nearly \$74 billion in depreciable assets, which translates into an average of nearly \$91 million – or 42 percent of revenue. Based on this proxy, we assumed the firm has a total property value of \$75 million, with roughly 75 percent of the total representing machinery and equipment. We also assumed that roughly 10 percent of the M&E total – or \$5 million – was a new investment made within the tax year. The amount of new investment is needed to estimate the impact of capital investment incentives.

Salaries and Wages

This parameter is used as the basis for estimating the number of new employees and the associated payroll to estimate the impact of labor investment incentives. Total salaries and wages of \$11.4 billion were reported to the IRS for this group. This translates into an average of \$14 million (seven percent of revenue). We used the rounded figure of \$15 million. In addition, the Oregon Employment Department reported the average 2009 wage in manufacturing was \$53,554. Combining this estimate (adjusted for non-wage compensation) with the IRS data results in an estimated 233 employees at this firm. To estimate the number of new employees, we assumed that labor increased at roughly five percent, which is half of the rate for capital. So the \$5 million in new investment described previously corresponds to a total of 11 new employees.

Federal Taxable Income

This parameter is primarily used as the basis for calculating state taxable income. Total federal income subject to tax was \$5.8 billion (an average of \$7.2 million), which was roughly 3.3 percent of revenue. To continue the emphasis on the sample nature of these calculations, we rounded up to an even \$10 million.

State Additions to Taxable Income

For the sake of simplicity and to remain consistent with the approach taken by the COST and Tax Foundation studies, the only modification to federal taxable income when determining state taxable income is the add-back for the Qualified Production Activities Income deduction. Of the seven states included in this study, only Oregon and California require the add-back. As reported in the IRS data, the average add-back was just under 0.2 percent of income. Keeping in mind this average likely includes many corporations that did not have the add-back, our example firm incorporates an add-back of one percent of revenue, or \$2 million. This approach assumes that the example firm does take advantage of the federal deduction.

Share of In-State Sales

This parameter is used for apportionment purposes. Based on data from tax year 2009 Oregon C-corporation tax returns, manufacturing firms that did not have any throwback sales reported that roughly 30 percent of their total sales were made in Oregon. Without additional tax years for comparison, we used 25 percent as the share of Oregon sales. This approach is consistent with the notion that the example firm is export oriented yet has a significant in-state market.

Throwback Sales

This parameter is used for apportionment purposes. Based on data from tax year 2009 Oregon C-corporation tax returns, manufacturing firms that had throwback sales reported that roughly 11 percent (in aggregate) of their total sales were throwback sales to Oregon. We used the rounded figures of 10 percent.

Property and Payroll factors

These parameters are relevant for apportionment. For the sake of simplicity, we've assumed the sample firm is entirely located in the home state so these factors are each 100 percent. This assumption is consistent with the economic development approach of focusing on creating and expanding economic activity within the state.

Example Services Firm

2009 IRS Data (\$M)		Example Firm (\$M)	
Total Revenue	\$65	Total Revenue	\$75
		Taxable Sales	\$3
Depreciable Assets	\$10	Real Property	\$8
		Machinery / Equipment	\$8
		New Investment	\$1
Salaries and Wages	\$16	Salaries and Wages	\$20
		Number of Employees	288
		New Employees	14
Federal Taxable Income	\$2	Federal Taxable Income	\$5
		Share of In-State Production	55%
		Share of Output Market	50%
		Average Wages	\$57,858

Total Revenue

This figure is the starting point for the example firm profile. All other parameters are based on percentages of total revenue. The IRS reported that 472 corporations had a combined total revenue of just under \$31 billion, of which, business receipts accounted for nearly \$30 billion. The average revenue was just under \$65 million. For the sample firm, the rounded figure of \$75 million was used.

Taxable Sales

This parameter is used to estimate the impact of sales taxes. We used \$10,000 per employee to estimate the annual amount of purchases made by the corporation that would be subject to state sales taxes.

Depreciable Assets

This parameter is used as the initial basis for approximating the value of property owned by the example firm for purposes of estimating the impact of property taxes. These corporations reported a total of nearly \$4.7 billion in depreciable assets, which translates into an average of nearly \$10 million – or 15 percent of revenue. We rounded this figure upward to \$15 million as a proxy for total property value, split evenly between real property and machinery & equipment. We also assumed that 10 percent of the M&E total – roughly \$1 million – was a new investment made within the tax year. The amount of new investment is needed to estimate the impact of capital investment incentives.

Salaries and Wages

This parameter is used as the basis for estimating the number of new employees and the associated payroll for purposes of estimating the impact of labor related incentives. Total salaries and wages of \$7.6 billion were reported to the IRS for this group. This translates into an average of \$16 million (25 percent of revenue). We used the rounded figure of \$20 million. In addition, the Oregon Employment Department reported the average 2009 wage in the PST service sector was \$57,858. Combining this estimate (adjusted for non-wage compensation) with the IRS data results in an estimated 288 employees at this firm. To estimate the number of new employees, we assumed that labor increased at roughly five percent, which is half of the rate for capital. So the \$1 million in new investment described previously corresponds to a total of 14 new employees.

Federal Taxable Income

This parameter is primarily used as the basis for calculating state taxable income. Income subject to tax at the federal level was \$0.9 billion (an average of \$1.9 million) for the group as a whole, which was just under three percent of revenue. To continue the emphasis on the sample nature of these calculations, we rounded up to \$5 million.

Share of In-State Production

This parameter is used for apportionment purposes and is assumed to be 55 percent. Tax returns do not include this kind of information. A value greater than 50 percent was chosen to highlight the potential impact of the Cost-of-Performance approach. Because Cost-of-Performance is an all-or-nothing assignment of income, the only relevant factor is that it is greater than 50 percent – the majority of production occurs in-state.

Share of Output Market

This parameter is used for apportionment purposes and is assumed to be 50 percent. Because Oregon is a Cost-of-Performance state, it is not clear from tax return data what share of aggregate sales are in-state or exported. This approach assumes that the firm is equally focused on domestic and export markets.

Incentives

States have a variety of tax incentives that affect income, sales, and property taxes. Some of these incentives are broad in nature and some are very specific and have extensive requirements. While the COST study does not incorporate the impact of such incentives, the Tax Foundation does include certain policies. To be consistent with their approach, we have attempted to include broad incentives identified in the Tax Foundation study. Of the seven states included in this paper, only three – Idaho, Colorado, and Utah – have broad incentives that affect the rankings calculated in this paper. We have assumed both example firms are able to use each of the incentives described below.

Idaho

- An income tax credit equal to three percent of capital investment
- A \$1,000 income tax credit per new job, up to 3.25 percent of net income
- A full property tax abatement for qualified personal property

Colorado

- An income tax credit equal to one percent of capital investment
- An income tax credit equal to 3.725 percent of new payroll
- A 17.5 percent property tax abatement

Utah

- A credit equal to 25 percent of new income tax revenue
- A credit equal to 25 percent of new sales tax revenue
- An income tax credit equal to 1.25 percent of new payroll
- A 50 percent property tax abatement