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FIRM-SPECIFIC TAX INCENTIVES: THE BAD AND THE UGLY

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Abstract

States often compete for business by offering special tax privileges to specific firms. This practice violates every generally accepted principle of good tax policy with no measurable benefits. The costs associated with firm-specific tax incentives are seen in reduced state tax revenue, and costs are unseen in countless economic distortions. Using data from Good Jobs First, it is shown that the probability of receiving a firm-specific tax privilege over \$100 million depends partially on a firm's market value, industry classification, and number of employees. To support these results, case studies of the two largest known tax incentives are presented. Firm-specific tax incentives are bad tax policy; states should stop the practice, or at the very least report on and evaluate the programs.

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Introduction

State and local governments compete for business activity on innumerable margins: educated work forces, infrastructure, climate, zoning, labor laws—the list goes on.¹ States also compete for business using their tax codes. States can use their tax codes to compete for business in general by lowering tax rates, moving toward neutrality, and broadening their tax base, or they can use their tax codes to compete for specific industries or firms by providing specially tailored tax incentives. Using tax codes to target specific industries, however, violates every accepted principle of sound tax policy and is ineffective as economic stimulus.

Tax incentives come in various forms, including tax abatements, sales and use tax exemptions, job and investment credits, and accelerated depreciation allowances.² Defined most broadly, a tax incentive is a deviation from the stated tax base—said another way, a tax incentive is a tax expenditure designed to induce a desired activity. This definition can apply to both sound and harmful tax competition. Many tax expenditures are applied uniformly and attempt to move tax codes toward neutrality.³ When incentives are not uniform, they are called targeted tax incentives. These are tax expenditures that apply to a specific industry, firm, location, or activity. Firm-specific tax incentives are granted on a one-off basis with political discretion. Although

¹ States can compete for business on any margin that is important to firms and their employees.

² Full expensing is ideal, and should not be considered a “tax expenditure” or a privilege if given to all firms. However, under a system where all assets must be depreciated, offering accelerated depreciation or partial expensing to certain firms or industries and not others is a privilege. Even if the privilege moves that specific firm toward a more neutral tax treatment of capital, it is still a tax advantage over other firms that did not get the special accelerated depreciation. David Brunori, “Principles of Tax Policy and Targeted Tax Incentives,” *State & Local Government Review* 29, no. 1 (January 1, 1997): 51; Jason J. Fichtner and Adam N. Michel, *Options for Corporate Capital Cost Recovery: Tax Rates and Depreciation*, Mercatus Research (Mercatus Center at George Mason University, January 2015), <http://mercatus.org/sites/default/files/Fichtner-Corporate-Capital-Cost.pdf>.

³ Definitions of “baseline” and “expenditure” are subject to debate and defined differently among US states. Tax expenditures can be defined using a “conceptual baseline,” a “reference law baseline,” or a “revenue reducer list.” Depending on the definition used in a state’s expenditure report, exemptions of business-to-business income could be considered an expenditure while also moving the tax code toward neutrality. John L. Mikesell, “Tax Expenditure Budgets, Budget Policy, and Tax Policy: Confusion in the States,” *Public Budgeting & Finance* 22, no. 4 (January 1, 2002): 45–47, doi:10.1111/1540-5850.00088.

each type of tax expenditure, broad or narrow, is important in the context of tax cronyism and tax complexity, this paper will only investigate the use of firm-specific tax incentives by state and local governments.

This paper will discuss firm-specific tax incentives in the context of the largest known tax incentives granted by state and local governments. The paper will begin by outlining the basic principles of sound tax policy and their intersections with the literature on tax incentives, showing that the most basic and agreed-upon principles of sound tax policy are violated by targeted tax policy. A list of the largest known tax privileges from Good Jobs First demonstrates that high value, large-employment manufacturing firms tend to gain the most costly incentives.⁴ Two case studies, one of Boeing in Washington and another of Nike in Oregon, examine the largest firm-specific tax incentives ever granted. The paper concludes that states should work to eliminate targeted tax incentives while making their tax codes competitive by following the generally accepted principles of sound tax policy.

Sound Tax Policy: Literature Review and Theoretic Lens

Targeted tax incentives violate every principle of sound tax policy. In his book *State Tax Policy: A Political Perspective*, David Brunori describes five accepted principles: revenue stability,

⁴ “Good Jobs First is a national policy resource center for grassroots groups and public officials, promoting corporate and government accountability in economic development and smart growth for working families.” Good Jobs First’s “Subsidy Tracker brings together subsidy recipient data from more than 600 state, local and federal economic development programs and other forms of financial assistance to business.” The full database allows users “to search across many states and programs at the same time.” The Megadeals list consists of entries on every subsidy package worth at least \$60 million from the past three decades. “These entries draw not only from the official disclosure data otherwise used in the Tracker but also fills gaps in that data by using a variety of other information sources.” Source: “Subsidy Tracker 3.0,” *Good Jobs First*, (accessed: 04/30/2015), <http://www.goodjobsfirst.org/subsidy-tracker>.

neutrality, equity, efficiency, and transparency.⁵ These principles will offer an outline for a brief review of the tax incentive literature.

Revenue Stability

Although they are not always popular, taxes should bring in enough revenue to support public expenditures, including both current expenditures and adequate funding for future liabilities such as pensions and social insurance programs. To meet this goal, revenue sources should be both stable and certain. Firm-specific tax incentives are often justified as a revenue-raising measure. The belief is that the company receiving the incentive will help increase state revenue collection through economic growth and taxes on other new economic activity. Unfortunately, the effects of targeted tax incentives on growth and revenue collection are uncertain, with hundreds of studies reaching little consensus.⁶

Adding to the lack of clarity, the tax incentive literature is plagued with methodological and data driven problems. First, it is almost impossible to draw causal links between state tax expenditures and growth. Economic development programs often comprise many types of incentives, making the effects of different tax incentives difficult to tease out.⁷ Second, poor data has led to what economic development expert Terry Buss has described as “absurd” estimates of the ratio of development spending to jobs created.⁸ One survey of 48 tax studies estimates that an

⁵ David Brunori, *State Tax Policy: A Political Perspective*, 2nd edition (Washington, DC: Urban Institute Press, 2006), 11–25.

⁶ Terry F. Buss, “The Effect of State Tax Incentives on Economic Growth and Firm Location Decisions: An Overview of the Literature,” *Economic Development Quarterly* 15, no. 1 (February 1, 2001): 101, doi:10.1177/089124240101500108.

⁷ Breandán Ó hUallacháin and Mark A. Satterthwaite, “Sectoral Growth Patterns at the Metropolitan Level: An Evaluation of Economic Development Incentives,” *Journal of Urban Economics* 31, no. 1 (January 1992): 25–58, doi:10.1016/0094–1190(92)90031-F.

⁸ Buss, “The Effect of State Tax Incentives on Economic Growth and Firm Location Decisions,” 95.

increase of only \$5 million in economic development spending “could increase employment by 60,000 at a cost per job of \$83.”⁹ Real-world experience shows that such estimates are truly absurd. More realistic parsing of the data shows that governments often spend over \$100,000 per job created.¹⁰ Lastly, when examining the jobs created by privileged companies, it is next to impossible to determine unseen welfare effects on those firms and individuals that did not receive state benefits.

Neutrality

Taxes should as a general rule be neutral across industries, capital, and time. Targeted tax incentives, by design, treat similar industries differently and vary greatly over firm lifetimes. When one company is offered a tax break, other similarly situated firms are placed at an after-tax disadvantage. Special tax privileges, designed to change firm decisions about where to invest new capital, divert resources away from uses the market may value more.¹¹ The distortion of the market process can lead to inefficiencies and slow economic growth. It is important to remember that not all tax exemptions violate the neutrality principle. Often, sales tax exemptions for

⁹ Bartik (1991) finds that the mean elasticity of 48 tax studies was 0.25. Buss (2001) puts this in context: “An elasticity of 0.20 means that for a state spending \$50 million on development with employment at 3 million, an increase in only \$5 million in economic development expenditures will increase employment by 60,000 at a cost per job of \$83.” Buss, “The Effect of State Tax Incentives on Economic Growth and Firm Location Decisions”; Dick Netzer, “Tax and Spending Incentives and Enterprise Zones,” *New England Economic Review*, April 1997, 109–37; Timothy J. Bartik, *Who Benefits from State and Local Economic Development Policies?* (W. E. Upjohn Institute for Employment Research, 1991).

¹⁰ Netzer, “Tax and Spending Incentives and Enterprise Zones,” 131; Alan H. Peters and Peter S. Fisher, *State Enterprise Zone Programs: Have They Worked?* (W. E. Upjohn Institute, 2002).

¹¹ Christopher J. Coyne and Lotta Moberg, *The Political Economy of State-Provided Targeted Benefits*, SSRN Scholarly Paper (Rochester, NY: Social Science Research Network, May 30, 2014), <http://papers.ssrn.com/abstract=2443816>; Lotta Moberg, *The Political Economy of Special Economic Zones*, SSRN Scholarly Paper (Rochester, NY: Social Science Research Network, June 1, 2014), <http://papers.ssrn.com/abstract=2297871>.

business-to-business transactions look like special tax privileges but are necessary to maintain tax neutrality and keep goods from being taxed multiple times.

Equity

Treating similarly situated taxpayers similarly is an important mainstay of fair governance. Targeted tax incentives are at their core unfair, especially when two or more competitors receive disparate treatment. Tax breaks or direct subsidies encourage firms to redirect their resources toward seeking special privileges rather than value-creating, productive activity.¹² Economists call the act of currying political favor “rent-seeking” (changing firm behavior with the expectation of political privileges).¹³ Firms seek rents by spending money on political campaigns, advertising to politicians, altering hiring or contracting decisions, and currying political favor in any other way.¹⁴ Rent-seeking exacerbates inequities, because privileges are granted only to politically connected firms. Studies show that when the tax code is open to political tailoring, firms allocate resources away from productive investments and into the political process.¹⁵ As discussed in the following case studies, both Nike and Boeing spent time and money convincing state legislatures to grant their requests for tax privileges—time and money that could have been spent on payroll or research and development.

¹² William Freeland, Ben Wilterdink, and Jonathan Williams, *The Unseen Costs of Tax Cronyism: Favoritism and Foregone Growth* (American Legislative Exchange Council, July 2014), <http://www.alec.org/publications/taxcarveouts/>; Coyne and Moberg, *The Political Economy of State-Provided Targeted Benefits*.

¹³ The concept of rent-seeking was developed by Gordon Tullock in 1967, and Anne Krueger introduced the term in 1974. See Tullock, “The Welfare Costs of Tariffs, Monopolies and Theft,” *Western Economic Journal* 5 (1967): 224–32; Anne Krueger, “The Political Economy of the Rent-Seeking Society,” *American Economic Review* 64 (1974): 291–303.

¹⁴ Matthew Mitchell, *The Pathology of Privilege: The Economic Consequences of Government Favoritism* (Mercatus Center at George Mason University, July 8, 2012), 17, <http://mercatus.org/sites/default/files/Mitchell-Pathology-March-2014.pdf>.

¹⁵ Seth Giertz and Jacob Feldman, *The Costs of Tax Policy Uncertainty and the Need for Tax Reform*, Special Report (Tax Analysts, February 25, 2013).

Efficiency

The burden to both the taxpayer and the collection agency should be minimized. But targeted tax provisions introduce tax complexity, because of their specialized nature, which increases the compliance costs for both the industry and the tax administrators. As privileges accumulate, auditing and general administration become more complex and resource intensive. One national study estimates that “businesses spent \$2.94 billion [in 2008] complying with the business income tax code, which costs the US economy \$161.7 billion.”¹⁶ Nina Olson, the US national taxpayer advocate, lists tax code complexity as the most serious problem facing taxpayers and tax collectors.¹⁷ Special and temporary tax provisions often introduce uncertainty and unforeseen problems for compliance.¹⁸

Transparency

Sound tax policy is open and transparent and makes the government accountable. States and localities are notorious for obscuring tax incentives in vague language or not reporting the information at all. Attempts to account for state tax incentives have found that the information is often not reported. Even when reports do exist, they are often incomplete, outdated, and vague.¹⁹ A 2012 Pew report found 29 of the 50 US states either did not conduct any tax incentive

¹⁶ Arthur B. Laffer, Wayne H. Winegarden, and John Childs, *The Economic Burden Caused by Tax Code Complexity* (The Laffer Center, April 2011), <http://www.laffercenter.com/wp-content/uploads/2011/06/2011-Laffer-TaxCodeComplexity.pdf>.

¹⁷ Nina Olson, *The Complexity of the Tax Code*, Most Serious Problems (Internal Revenue Service, 2012), <http://www.taxpayeradvocate.irs.gov/2012-Annual-Report/downloads/Most-Serious-Problems-Tax-Code-Complexity.pdf>.

¹⁸ Brunori, “Principles of Tax Policy and Targeted Tax Incentives,” 56.

¹⁹ See Freeland, Wilterdink, and Williams, *The Unseen Costs of Tax Cronyism*; Paul Weinstein, *The State Tax Complexity Index: A New Tool for Tax Reform and Simplification*, Policy Memo (Progressive Policy Institute, April 2014), http://www.progressivepolicy.org/wp-content/uploads/2014/04/2014.04-Weinstein_The-State-Tax-Complexity-Index_A-New-Tool-For-Tax-Reform-and-Simplification1.pdf.

evaluations or did not meet basic evaluation criteria.²⁰ Even more astonishing, a 2014 US PIRG (United States Public Research Group) analysis concludes that not one state was completely transparent when reporting spending and tax expenditure data.²¹

Economic Development Incentives

Firm-specific tax incentives, and tax incentives in general, are broadly encompassed by economic development incentives in much of the literature. Although economic incentives have been used by states since colonial times, their size and prevalence seems to be growing.²² The almost universal use of incentives by states to attract business has prompted a great deal of research looking at the effectiveness of these programs. In a review of the literature, Terry Buss concludes that most studies of targeted incentives are “based on poor data, unsound social science methods, and faulty economic reasoning,” further concluding that the incentives themselves are “largely a political activity.”²³

Economic development incentives are in essence a form of government central planning. This is not to say that targeted incentives can never create jobs or increase state revenue. But wherever jobs are created or revenue is increased, the unseen cost is a distortion of the institutional environment, contributing to a less level playing field. Central planning is generally

²⁰ Susan K. Urahn, *Evidence Counts: Evaluating State Tax Incentives for Jobs and Growth*, Evidence Counts (The Pew Charitable Trusts, 2012), http://www.pewtrusts.org/~media/legacy/uploadedfiles/wwwpewtrustsorg/reports/economic_mobility/PewEvaluatingStateTaxIncentivesReportpdf.pdf.

²¹ See Benjamin Davis and Phineas Baxandall, *Following the Money 2014: How the 50 States Rate in Providing Online Access to Government Spending Data* (US PIRG Education Fund, April 2014), <http://uspirg.org/reports/usp/following-money-2014>.

²² Buss, “The Effect of State Tax Incentives on Economic Growth and Firm Location Decisions,” 93; Greg LeRoy, Philip Mattera, and Kasia Tarczynska, *Megadeals: The Largest Economic Development Subsidy Packages Ever Awarded by State and Local Governments in the United States* (Good Jobs First, June 2013), http://www.goodjobsfirst.org/sites/default/files/docs/pdf/megadeals_report.pdf.

²³ Terry F. Buss, “The Case against Targeted Industry Strategies,” *Economic Development Quarterly* 13, no. 4 (November 1, 1999): 339–56, doi:10.1177/089124249901300406.

not a good substitute for the market process. The market process, which utilizes dispersed information, coordinates the allocation of scarce resources to competing ends. To improve on the market process, policymakers must presuppose that they have a superior mechanism of discovering and utilizing the proper information to better allocate scarce resources. This presupposition seems misguided in light of Nobel laureate F. A. Hayek's observation that useful knowledge is dispersed in the economy, held by billions of economic actors around the world.²⁴ Economic development boards and state legislatures do not have the ability to centralize this time- and space-specific knowledge or create the proper incentives to target development in an efficient way.²⁵

Unfortunately, the hundreds of studies on tax incentives have failed to produce a consensus on the economic impact of development incentives. This has led many scholars to conclude that development programs probably have no systematic growth effects. Furthermore, the literature is generally missing a discussion of the unseen and unintended consequences of such programs on firms and areas not targeted.²⁶ This omission systematically biases results, overestimating positive impacts by excluding the unseen, negative effects of development incentives.

Alan Peters and Peter Fisher, in their book *State Enterprise Zone Programs*, perform a useful thought experiment to illustrate the economic concept of one unseen effect: opportunity costs with respect to economic development projects. Economic development projects of all types have substantial costs: between 1990 and 1995, the average economic development zone

²⁴ Friedrich A. Hayek, "The Use of Knowledge in Society," *American Economic Review* 35, no. 4 (September 1, 1945): 519–30; Coyne and Moberg, *The Political Economy of State-Provided Targeted Benefits*.

²⁵ Buss, "The Case against Targeted Industry Strategies."

²⁶ Coyne and Moberg, *The Political Economy of State-Provided Targeted Benefits*.

spent \$104,000 per job created.²⁷ (The largest economic development subsidies in the country cost an average of \$110,870 per job created.²⁸) Peters and Fisher ask, What else could local and state governments do with \$100,000?²⁹ Rather than creating special provisions for favored industries, they argue, this money would be better spent lowering tax burdens for all businesses or helping the unemployed in more cost-effective ways.

The uncertain benefits from economic development incentives and the clear opportunity costs associated with large state expenditures demonstrate that development incentives are not good policy. Firm-specific tax incentives, in particular, are undesirable. They do not enhance the tax system on any margin. Tax incentives undermine neutrality, create tax inequities, and raise the cost of tax compliance, all for uncertain revenue and growth effects.

Data, Hypothesis, and Methodology

The Good Jobs First Subsidy Tracker database of “Megadeals” lists the largest economic development subsidies reported by state and local governments in all 50 states.³⁰ The list does not purport to be comprehensive, because many states do not publicize the type, size, or structure of many incentive packages. Because of the lack of state transparency, the list also relies on credible third-party estimates for subsidy values. The list is extensive, compiled over 16 years, and built upon similar work done by various other research groups. The top five Megadeals as of September 2014 were granted to Boeing, Alcoa, Sempra Energy, and Nike (see table 1).

²⁷ Peters and Fisher, *State Enterprise Zone Programs*, 230–34.

²⁸ Author’s calculations from Good Jobs First Subsidy Tracker data of the 216 largest economic development subsidies, which include estimated jobs created. LeRoy, Mattera, and Tarczynska, *Megadeals*.

²⁹ Peters and Fisher, *State Enterprise Zone Programs*, 231.

³⁰ LeRoy, Mattera, and Tarczynska, *Megadeals*. The Megadeals list does not include sports stadiums, “which frequently receive nine-figure subsidies but function more as ways to boost civic pride than as vehicles for job creation or economic growth.”

Table 1. Five Largest Known Firm-Specific Subsidies Ever Granted

Rank	Company Name	Subsidy Value	Year	State
1	Boeing	\$8,700,000,000	2013	WA
2	Alcoa	\$5,600,000,000	2007	NY
3	Boeing	\$3,244,000,000	2003	WA
4	Sempra Energy	\$2,194,868,648	2013	LA
5	Nike	\$2,021,000,000	2012	OR

I examine firms that received firm-specific tax incentives of more than \$100 million as reported by Good Jobs First. Some of the subsidies from the Megadeals list are not considered in this paper because they are either generally available tax incentives or subsidies of other types. For example, the 2007 Alcoa deal did not include any tax relief. The privilege consisted of an estimated \$5.6 billion electricity subsidy over the next 30 years.³¹ Subsidies are distortionary in many of the same ways as tax incentives, but they fall outside the scope of this paper. The Sempra Energy subsidy is also outside the paper’s scope because it consists of tax credits available to other, similarly situated industries. The subsidy is a 10-year property tax exemption that is used by hundreds of other companies across Louisiana.³² The remaining three subsidies in the list above have a significant firm-specific tax incentive component that was granted through a political process.

In the Megadeals list, there are 210 unique deals reported of \$100 million or more. Each entry was researched to check for accuracy and determine the type of privilege. There are 144

³¹ James Heaney, “Alcoa Cuts Deal for Low-Cost Hydropower Proposed Deal with Massena Company Called ‘Exceptionally Lavish,’” *www.buffaloNews.com*, December 22, 2007, <http://www.buffalonews.com/article/20071222/CITYANDREGION/312229980>.

³² *Commerce & Industry Board Approvals, 2013* (Opportunity Louisiana, 2013), http://www.opportunitylouisiana.com/assets/LED/docs/Performance_Reporting/2013_CI_Board_Approvals.pdf.

firm-specific tax privileges, 32 generally available tax privileges, and 34 subsidies of other types. Michigan, Tennessee, and Alabama granted the largest number of subsidies. The total breakdown is included in the appendix. Of the 210 Megadeals, 30 were awarded to privately held firms, 10 to nonprofit institutions, and 49 to foreign firms; the remaining 121 went to publicly traded US firms. Those 121 subsidies were granted to a total of 54 unique firms.

Good Jobs First also reports dollar figures for each subsidy (as in table 1) and in some cases the number of jobs created. For this paper, the dollar figure was only used to determine which firms to include in the analysis: those granted a reported subsidy above \$100 million. The dollar figures are subject to significant reporting discrepancies. First, because of lack of transparency and poor government records, many figures are third-party estimates subject to debate. Second, dollar figures often include projections of costs over a long period of time. Most subsidy packages include multiple tax abatements over differing amounts of time. Standardizing subsidies in present value terms would be difficult for some and impossible for others. Third, many subsidy deals result in different outcomes than those that were originally approved and reported.³³ The list of Megadeals also notes the year in which the credit was granted. The year reported is when the local government and subsidy-receiving company agreed to the terms of the tax privilege.

Each deal is structured differently, and many involve multiple tax incentives over different lengths of time. The most common incentives are property and income tax abatements for 10 to 30 years. It is difficult to code such nuanced agreements. It is also difficult to take into account the uncertainty of timing and dollar amount. To address the uncertain rank order of

³³ LeRoy, Mattera, and Tarczynska, *Megadeals*.

credits, firms will be coded as a binary variable: 1 if the firm on the list of Megadeals receives a credit over \$100 million and zero if not.

The Wharton Research Data Services (WRDS) database provides a wide range of information on publicly traded US firms. I compiled yearly data for each of the 54 firms from the Compustat North America database, accessible through WRDS, from 1989–2014. I also pulled data for all listed firms in the Compustat database as a control group. For each firm, Compustat gives information on pretax income, income taxes paid, market value, North American Industry Classification System (NAICS) codes, and a “firm quality rank” measured by Standard & Poor's (S&P). NAICS is the standard used by US federal statistical agencies in classifying businesses by type of economic activity. The S&P Quality Ranking is so designed that a higher score signifies lower debt levels, higher profit margins, and higher returns on equity. Pretax income, income taxes paid, and market value are all denominated in millions of dollars. Tax credit data is matched to Compustat firms using firm ticker symbols.

In theory, an important factor for gaining tax privileges is lobbying expenditures. The Center for Responsive Politics (CRP) curates a comprehensive database of federal lobbying expenditures for firms required to report their expenses under the Lobbying Disclosure Act of 1995. A firm's federal lobbying expenditures may act as a proxy for overall political engagement. Unfortunately, the CRP does not code this data with unique firm identifiers, and thus they cannot be easily merged with data from Compustat. Although I have not been able to include lobbying data in my model, average lobbying expenditures are presented in the appendix for the 54 tax-credit-receiving firms.³⁴ The average yearly lobbying expenditure for the 54 firms

³⁴ I hand matched each of the 54 firms for this calculation. To include the data in my model, I would have had to individually match over 6,000 firms. This task could be taken on in follow-up research.

is \$3,612,594, while the average for all firms with positive expenditures is \$143,823.³⁵

Consistent with theory, firms that receive the largest tax privileges seem to spend significantly more than those that do not.

Given the available data, my hypothesis is that a firm's specific characteristics determine whether it is more likely to obtain a firm-specific tax privilege over \$100 million.

Hypothesis: Firms most likely to receive firm-specific tax privileges over \$100 million can be explained by the firm's market value, industry classification, pretax income, effective tax rate, number of employees, and financial strength.

I expect firms that are larger and more profitable, face higher effective tax rates, and have more employees and good financial strength to be more likely to receive tax privileges over \$100 million. Larger, more profitable firms tend to be more well-known and thus more attractive to government officials due to the prestige of having a well-known company in their region. Firms with higher effective tax rates have a stronger incentive and a more persuasive political case to ask for special tax rates. I hypothesize that manufacturing firms are more likely to receive a privilege, because they tend to employ the largest number of workers. Thus, politicians can more easily call the privilege a job creation program. On the other hand, technology firms bring in revenue and create jobs that are higher skilled and higher paying (although fewer in number than in manufacturing). My model includes the S&P quality score to control for the financial strength of firms.³⁶

³⁵ Lobbying firms are required to provide a good-faith estimate rounded to the nearest \$10,000 of all lobbying-related income from their clients in each quarter. Dollar figures under \$10,000 are often not reported. Data source: Open Secrets, Center for Responsive Politics (bulk lobbying data); <http://www.opensecrets.org/lobby/>.

³⁶ The financial strength of the firm does not predict tax privileges in any systematic direction. Financially insolvent car manufacturers have received large privileges, as have financially stable firms like Boeing and Nike.

To test my hypothesis, I run the following regression:

$$\begin{aligned} TaxPrivilegeDummy_{i,t} &= \beta_0 MarketValue_{i,t} + \beta_1 PreTaxIncome_{i,t} + \beta_2 EffectiveTax_{i,t} \\ &+ \beta_3 S\&PQualityRanking_{i,t} + \beta_4 ManufacturingDummy_{i,t} \\ &+ \beta_5 InformationDummy_{i,t} + \beta_6 Employment_{i,t} + e_i \end{aligned}$$

I create three different *TaxPrivilegeDummy* variables to investigate the data in three different ways. The first (*TaxPrivilegeDummy1*) only codes a company as receiving the credit for the year reported in the Megadeals data set. The second (*TaxPrivilegeDummy2*) codes a company as receiving a credit in every year after the first credit was reported. The third (*TaxPrivilegeDummy3*), uses the collapsed mean of all available data from each firm and examines firms as either appearing or not appearing on the list of largest credits (1 if receiving the credit and 0 if not). The first two dummy variables come from pooled panel sets and the third from a standard cross-sectional set. Each of these dummy variables attempts to parse the uncertainty of when the privileges are first received and over how many years the privilege is used.

Variables *MarketValue* (*mkvalue*), *PreTaxIncome* (*ptincome*), *Employment* (*emp*) and *EffectiveTax* are continuous variables. *MarketValue* and *PreTaxIncome* are denominated in millions of dollars. *EffectiveTax* is constructed by dividing taxes paid by pretax income in each year of reported data. The *Employment* variable measures the number of employees in thousands. *S\&PQualityRanking* (*spquality*) is a discrete ranking from +A to D and LIQ indicating insolvency (the worst rating). The ranking is transformed into a numeric ranking with 9 being the best rating and 1 being the worst. In six of the regressions *S\&PQualityRanking* is included in the

model as a discrete factor variable, with base 1.³⁷ *ManufacturingDummy* (*manufacturdumm*) and *InformationDummy* (*informdumm*) are indicators of the first two digits of each firms' NAICS code. Manufacturing firms are codes 31–33 and Information Technology firms are code 51 (1 indicating the presence of the code, 0 if other).

The final sample, after collecting the data as described above, is an unbalanced panel set of 6,045 firms with data from 1989 to 2014. Of the 6,045 total firms with complete data, 35 receive tax privileges over \$100 million, as reported by Good Jobs First. I report the results from three regressions with all of the three dummy variables. I first run the data with the full data set. The second regression drops from the full data set all firms with market values less than the smallest market value among firms receiving a tax privilege. The third regression drops all firms from the full data set with employment numbers less than the privilege-receiving firm with the lowest employment. Trimming the data by market value drops approximately 2,100 firms; trimming by employment drops approximately 3,300. Dropping the smaller firms does not significantly affect the results. Full descriptive statistics are included in the appendix.

For the first two dummies, I run a time series probit model. The third dummy is estimated using a standard probit model. Regressions using a random-effects generalized least squares (GLS) robust regression with cluster-adjusted standard errors produce similar results. Table 2 presents the regression outputs from *TaxPrivilegeDummy1*. Table 3 presents results from *TaxPrivilegeDummy2*. Table 4 presents results from *TaxPrivilegeDummy3*. All results are presented as marginal effects of the probability at the mean of each variable.

³⁷ The probit model for *TaxPrivilegeDummy2* would not maximize with the inclusion of a factor variable due to the complexity of the model. Thus *S&PQualityRanking* was omitted. The GLS and logit regressions showed that this omission did not significantly change the results.

Table 2. Marginal Effects on Probability of Receiving a Large Tax Privilege (Predicted by Year Privilege Received)

Variables	(full data) <i>privilegedumm1</i>	(large firms) (by <i>mkvalue</i>) <i>privilegedumm1</i>	(large firms) (by <i>emp</i>) <i>privilegedumm1</i>
<i>ptincome</i>	-2.57e-06 (8.62e-06)	-2.67e-06 (8.57e-06)	-2.44e-06 (8.57e-06)
<i>mkvalue</i>	5.97e-06*** (1.26e-06)	5.71e-06*** (1.23e-06)	5.50e-06*** (1.24e-06)
<i>effectivetax</i>	1.36e-05 (0.00602)	0.000630 (0.0245)	-0.000226 (0.0253)
<i>manufacturdumm</i>	0.503*** (0.171)	0.497*** (0.170)	0.501*** (0.173)
<i>informdumm</i>	0.0451 (0.344)	0.0108 (0.335)	0.0357 (0.342)
<i>emp</i>	0.00181*** (0.000569)	0.00157*** (0.000542)	0.00150*** (0.000543)
<i>2.spquality</i>	0.608 (0.710)	0.952 (0.659)	0.815 (0.644)
<i>3.spquality</i>	-0.231 (0.750)	0.138 (0.705)	0.266 (0.698)
<i>4.spquality</i>	0.580 (0.682)	0.723 (0.627)	0.760 (0.612)
<i>5.spquality</i>	0.539 (0.687)	0.566 (0.633)	0.571 (0.619)
<i>6.spquality</i>	0.895 (0.674)	0.850 (0.620)	0.857 (0.605)
<i>7.spquality</i>	0.342 (0.758)	0.298 (0.703)	0.289 (0.691)
<i>8.spquality</i>	0.332 (0.784)	0.248 (0.730)	0.214 (0.719)
<i>9o.spquality</i>	-	-	-
Constant	-5.169*** (0.710)	-4.923*** (0.655)	-4.860*** (0.643)
Observations	69,473	34,599	27,864
Number of gvkey	5,983	3,880	2,648

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 3. Marginal Effects on Probability of Receiving a Large Tax Privilege (Predicted by All Years after Privilege Received)

Variables	(full data) <i>privilegedumm2</i>	(large firms) (by <i>mkvalue</i>) <i>privilegedumm2</i>	(large firms) (by <i>emp</i>) <i>privilegedumm2</i>
<i>ptincome</i>	8.30e-06 (1.27e-05)	8.35e-06 (1.33e-05)	8.16e-06 (1.35e-05)
<i>mkvalue</i>	6.55e-06*** (1.88e-06)	5.61e-06*** (1.86e-06)	4.99e-06*** (1.82e-06)
<i>effectivetax</i>	-0.00152 (0.00934)	-0.0119 (0.0296)	-0.0136 (0.0308)
<i>manufacturdumm</i>	0.321 (0.245)	0.251 (0.294)	0.128 (0.323)
<i>informedumm</i>	0.113 (0.432)	0.0181 (0.515)	-0.0955 (0.562)
<i>emp</i>	0.00315*** (0.000994)	0.00221** (0.00101)	0.00176 (0.00141)
Constant	-9.174*** (0.200)	-10.30*** (0.235)	-12.04*** (0.257)
Observations	69,513	34,608	27,875
Number of gvkey	5,987	3,882	2,650

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 4. Marginal effects on probability of receiving a large tax privilege (predicted by average firm data)

Variables	(full data) <i>privilegedumm3</i>	(large firms) (by <i>mkvalue</i>) <i>privilegedumm3</i>	(large firms) (by <i>emp</i>) <i>privilegedumm3</i>
<i>ptincome</i>	-0.000101** (4.60e-05)	-8.07e-05* (4.49e-05)	-7.27e-05 (4.46e-05)
<i>mkvalue</i>	2.10e-05*** (4.48e-06)	1.81e-05*** (4.35e-06)	1.70e-05*** (4.34e-06)
<i>effectivetax</i>	-0.00236 (0.0321)	-0.0638 (0.127)	-0.0852 (0.138)
<i>manufacturdumm</i>	0.334** (0.149)	0.351** (0.165)	0.393** (0.169)

<i>informdumm</i>	-0.194 (0.338)	-0.243 (0.341)	-0.161 (0.356)
<i>emp</i>	0.00140** (0.000700)	0.00114 (0.000704)	0.00108 (0.000708)
<i>2.spquality</i>	0.739 (0.667)	-	0.829 (0.641)
<i>3.spquality</i>	0.225 (0.687)	-0.257 (0.552)	0.574 (0.677)
<i>4.spquality</i>	0.962 (0.633)	0.215 (0.444)	0.996* (0.593)
<i>5.spquality</i>	0.950 (0.636)	0.0517 (0.450)	0.891 (0.595)
<i>6.spquality</i>	1.174* (0.626)	0.196 (0.446)	1.049* (0.583)
<i>7.spquality</i>	0.689 (0.716)	-0.289 (0.569)	0.539 (0.671)
<i>8.spquality</i>	0.664 (0.732)	-0.399 (0.601)	0.392 (0.704)
<i>9o.spquality</i>	-	-0.848 (0.709)	-
Constant	-3.710*** (0.639)	-2.563*** (0.435)	-3.349*** (0.602)
Observations	5,983	2,038	1,754

Standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

The results above show that larger market values, more employees, and the presence of a manufacturing NAICS code are good predictors of gaining a large tax privilege of \$100 million or more. All nine of the regressions show a positive and statistically significant relationship between larger market value and gaining large firm-specific tax privileges. The results in tables 2–4 show that a one standard deviation increase in a firm’s market value is associated with an increase in the probability of that firm gaining a tax privilege larger than \$100 million by between 9.6 and 35.7 percentage points. Six of the nine regressions show a positive and statistically significant relationship between firm employment and gaining a large firm-specific

tax privilege. The results show that a one standard deviation increase in a firm's employment will increase the probability of that firm gaining a tax privilege by between 4.7 and 12.4 percentage points. *TaxPrivilegeDummy1* and *TaxPrivilegeDummy3* both show a positive and statistically significant relationship between gaining a tax privilege and being a manufacturing firm. The results show that manufacturing firms are between 33.4 and 50.1 percentage points more likely to gain a firm-specific tax privilege of \$100 million or more. *TaxPrivilegeDummy2* does not show a statistically significant relationship. Across all nine regressions, pretax income, effective tax rate, and the NAICS dummy have no explanatory value. It is important to keep in mind that even at the small end, with a 4.7 or 9.6 percent increase in the probability of gaining a privilege, the associated payoff of billions of dollars is very large.

Case Studies

The two firms to receive the largest firm-specific tax incentives ever are the Boeing Company and Nike Inc.³⁸ In alignment with this paper's hypothesis, both firms are giants in their state by both market value and employment numbers. Furthermore, aligning with the five accepted principles of good tax policy, each firm received tax certainty by contracting directly with the government, receiving long-term tax-structure commitments in exchange for new investment.

Boeing (2003 & 2013)

Washington State tops the list, granting the single-largest subsidy to an individual company in 2013. As we might expect from the findings above, the recipient company, Boeing, is one of the

³⁸ If this paper included a third firm (the third-largest firm-specific tax incentive), that firm would be Intel Corp. Intel received two separate \$2 billion subsidies, one in New Mexico (2004) and the second in Oregon (2014). Both of these cases fit a similar narrative to Nike and Boeing. Intel is classified as a manufacturing firm and is an exceptionally large employer in each state.

largest employers and largest overall firms in Washington, employing 172,000 people in total and 85,000 in Washington State. Furthermore, Boeing is designated a manufacturing firm and gained the subsidies described below for an expansion of its manufacturing facilities.³⁹ Boeing has an S&P quality rating of +B (*S&PQualityRanking* 6, compared to a mean of 4.1).

The Boeing deal was initially codified in 2003 when the state legislature overwhelmingly passed HB 2294 for “providing tax incentives for the retention and expansion of the aerospace industry in Washington State.”⁴⁰ The bill was signed into law on June 18, 2003, but could not take effect until “the governor and a manufacturer of commercial airplanes sign a memorandum of agreement regarding an affirmative final decision to site a significant commercial-airplane final-assembly facility in Washington State.”⁴¹ In January of 2004, Governor Gary Locke signed the memorandum with Boeing, guaranteeing that the new Boeing 7E7 would be built in the state.⁴²

Although HB 2294 does not explicitly mention Boeing or the 7E7, the legislation is structured to exclude other companies. It stipulates that “the facility is to be used to assemble a super-efficient airplane, defined to be a twin aisle airplane with capacity for 200 to 350 passengers, a range exceeding 7,200 nautical miles, a cruising speed of about 85 percent of the speed of sound, and fuel economy 15 to 20 percent better than comparable current airplanes.”⁴³

³⁹ *Puget Sound Business Journal* ranked Boeing as the largest employer in Washington State in 2013. Other lists also place Boeing in the top three. Numbers cited here are from 2012 and differ slightly from Compustat employment numbers from the same year (174,400 in 2012). Becky Monk, “Boeing Tops the List of Washington State’s Largest Employers,” *Puget Sound Business Journal*, accessed April 1, 2015, <http://www.bizjournals.com/seattle/subscriber-only/2013/07/26/boeing-tops-the-list-of-washington.html>.

⁴⁰ Passed by the House: Yeas 79, Nays 10. Passed by the Senate: Yeas 42, Nays 1.

⁴¹ Eric Pettigrew, et al., *Relating to Retaining and Attracting the Aerospace Industry to Washington State*, 2003, <http://apps.leg.wa.gov/documents/billdocs/2003-04/Pdf/Bill%20Reports/House/2294.HBR.pdf>.

⁴² David Bowermaster and Ralph Thomas, “What the State Promised Boeing,” *Seattle Times*, January 21, 2004, http://seattletimes.com/html/business/technology/2001840736_boeing21.html.

⁴³ *The Bill for Boeing*, Pbrief (Washington Research Council, June 23, 2003), <http://researchcouncil.files.wordpress.com/2013/08/thebill4boeing062203.pdf>.

These are general criteria that had been discussed for the 7E7, and in his bill-signing statement, the governor stated explicitly that the bill was written as an incentive for Boeing.⁴⁴

The bill contains eight specific tax changes, and the governor's memorandum contains at least six other major nontax subsidies. The tax provisions are only available after the company signs the memorandum with the governor. Washington's business and occupation (B&O) tax is a gross receipts tax levied on a business's total receipts, rather than traditional systems, which tax income. The following tax changes are reductions, credits, and exemptions to the B&O tax to the tune of \$3.2 billion from 2005 to 2024.⁴⁵

B&O rate reduction. The bill creates a new B&O tax category for commercial-airplane-related manufacturing. The rate drops a total of 40 percent, first in 2005 and then again when aircraft production begins. In 2003, this was projected to be 91 percent of the total tax incentive.

Preproduction development B&O credit. Aircraft manufacturers can credit against B&O taxes owed 1.5 percent of preproduction development expenditures on new products, product lines, models, or model derivatives.

Computer software and hardware B&O credit. This is a retroactive credit (1995–2003) for purchases of computer hardware and software approximately equal to sales taxes paid, up to \$20 million.

Computer software and hardware sales and use tax exemption. Purchases of computer hardware and software related to commercial aircraft are exempted.

⁴⁴ Gary Locke, "Gov. Gary Locke Signs Aerospace Tax Incentives Package into Law, Expresses Confidence in State's Bid for Boeing 7E7," *News Room*, June 18, 2003, <http://www.digitalarchives.wa.gov/governorlocke/press/press-view.asp?pressRelease=1375&newsType=1>.

⁴⁵ Incentive information comes from *The Bill for Boeing; Aerospace Manufacturers Tax Incentives*, Special Notice (Washington State Department of Revenue, June 13, 2008), http://dor.wa.gov/Docs/Pubs/SpecialNotices/2008/sn_08_MfgAerospace.pdf; Bowermaster and Thomas, "What the State Promised Boeing"; David Pritchard and Alan MacPherson, "Industrial Subsidies and the Politics of World Trade: The Case of the Boeing 7e7," *Industrial Geographer* 1, no. 2 (2004): 57–73.

Construction sales and use tax exemption. Purchases used in buildings for the manufacturing of airplanes are exempt.

Property tax B&O tax credit. B&O tax credits offset property taxes on new investments used for plants and equipment.

Leasehold excise tax exemption. Excise taxes paid in lieu of property taxes on leased public lands are exempt for new manufacturing facilities.

Property tax exemption. Privately held property in the public port district, used for manufacturing of airplanes, is exempt.

The 2004 memorandum agreement signed with Boeing authorizes the use of the tax incentives described above and stipulates that the new 7E7 will be assembled in Washington. The agreement, which was not made available to the public in its entirety, stipulates six major nontax subsidies to be carried out by various state agencies. The state and local governments agreed to

- spend at least \$10 million to design and build an Employment Resource Center dedicated exclusively to 7E7 workforce development;
- hire a “work-force-development coordinator,” in consultation with Boeing, who will develop a recruitment, screening, and training program to help Boeing and its suppliers hire workers;
- make road improvements and increase capacity to support new, higher employment levels;
- spend \$34 million to build a new 27-acre facility capable of handling cargo transported by ship directly from Japan;

- improve the runways and facilities at Paine Field to support modified 747s that will transport 7E7 parts, plus build a road at least 30 feet wide between the cargo pad, Boeing’s factory, and its suppliers’ facilities; and
- designate a “747 large cargo freighter coordinator” to help Boeing acquire and modify a small fleet of 747s to deliver 7E7 parts.⁴⁶

In a special session in November 2013, the Washington Legislature and Governor Jay Inslee overwhelmingly passed and signed into law two more bills to extend and expand the 2003 tax incentives slated to expire in 2024.⁴⁷ Both bills are contingent on Boeing’s manufacturing of a significant commercial airplane in the state. SB 5952 extends all the commercial-airplane tax breaks outlined above and expands the sales and use tax exemption to buildings used for related manufacturing. All tax provisions were extended to 2040. The tax breaks are expected to cost the state \$8.7 billion over 27 years.⁴⁸ The second bill, HB 2088, spends \$8 million to increase the number of student slots in “high-demand” aerospace training programs by 1,000. The state will spend \$500,000 to design a new training program for the Boeing 777X, \$5 million for construction of a new training center, and \$3 million for facility and equipment upgrades. Lastly, the legislature created a \$2 million fund to help Boeing navigate environmental-permitting issues for new business locations and expansions.⁴⁹

Both the 2003 and 2013 packages, passed by the Washington Legislature on behalf of Boeing, were passed under the threat of the company moving elsewhere. Missouri, South

⁴⁶ Agreement highlights from Bowermaster and Thomas, “What the State Promised Boeing.”

⁴⁷ Reid Wilson, “Washington Legislators to Hold Special Session over Boeing Benefits,” *Washington Post*, November 7, 2013, <http://www.washingtonpost.com/blogs/govbeat/wp/2013/11/07/washington-legislators-to-hold-special-session-over-boeing-benefits/>.

⁴⁸ The new \$8.7 billion estimate includes what was left of the tax breaks from 2003.

⁴⁹ *High Stakes for Washington in Competition for 777X*, Policy Brief (Washington Research Council, November 20, 2013), <http://researchcouncil.files.wordpress.com/2013/11/boeing777xnov2013.pdf>.

Carolina, Utah, and more than a dozen other states around the country were also “bidding” for Boeing’s business by offering equally generous tax incentives.⁵⁰ Washington State generally has a friendly business climate, with the exception of the B&O tax.⁵¹ Gross receipts taxes are notoriously poor tax policy, leading to double taxation and increased rates on businesses that have many stages of production, such as airplane production and petroleum refining.⁵² The tax packages passed for Boeing have been justified by politicians as reducing some of the inefficiencies inherent in the gross receipts tax.⁵³

Supporters of the Washington tax incentives justify them by pointing to the tax revenue and job creation that would have been forgone if Boeing had chosen to manufacture the 777X or 7E7 out of state. The Washington State Office of Financial Management projected that the 2013 package would support more than 56,000 jobs and generate \$21.3 billion in increased tax revenue over 16 years.⁵⁴ Similar projections were made in 2003.⁵⁵ Increased revenue projections and claims that the tax incentives keep production in the state are questionable, given constant reports of Boeing moving jobs out of the state. In 2014, Boeing announced that part of the 777X will be manufactured out of state. The company has also moved some defense engineers to

⁵⁰ Lyman Stone, “Missouri Considering ‘Massive’ Incentives for Boeing,” *Tax Foundation*, November 26, 2013, <http://taxfoundation.org/blog/missouri-considering-massive-incentives-boeing>.

⁵¹ Scott Drenkard and Joseph Henchman, *2015 State Business Tax Climate Index*, Index (Tax Foundation, October 2014), http://taxfoundation.org/sites/taxfoundation.org/files/docs/TaxFoundation_2015_SBTCL.pdf.

⁵² Andrew Chamberlain and Patrick Fleenor, *Tax Pyramiding: The Economic Consequences of Gross Receipts Taxes*, Special Report (Tax Foundation, December 2006), <http://taxfoundation.org/sites/default/files/docs/sr147.pdf>.

⁵³ Locke, “Gov. Gary Locke Signs Aerospace Tax Incentives Package into Law, Expresses Confidence in State’s Bid for Boeing 7E7”; *About That Mythical \$8.7 Billion Tax Break*, Policy Brief (Washington Research Council, July 15, 2014), <http://researchcouncil.files.wordpress.com/2014/07/aerospacetaxincentivesjuly2014final.pdf>.

⁵⁴ *Winning the Future: Washington’s Investment in Aerospace* (Office of Financial Management/Department of Revenue, November 8, 2013), http://www.governor.wa.gov/sites/default/files/documents/AerospaceTaxpayerSavingsFactSheet_20131108.pdf.

⁵⁵ *The Bill for Boeing*.

California.⁵⁶ The highest profile of these moves was Boeing's 2010 decision to open a manufacturing plant in South Carolina.

Nike (2012)

Oregon comes in third in granting firm-specific targeted incentives. Much like Boeing in Washington State, Nike is one of the largest employers in Oregon and is classified as a manufacturing firm under NAICS.⁵⁷ Nike has an S&P quality rating of +A (*S&P Quality Ranking* 9). Nike's tax privilege demonstrates the limits of empirical analysis and the difficulty of fairly describing tax privileges in a regression model. This case study is intended to add further nuance to the analysis of large tax privileges.

The Oregon legislature authorized the governor to enter into investment contracts with taxpayers who promise to invest \$150 million over five years and create at least 500 new jobs. The authorized contract for Nike allows the state to guarantee that Nike can continue to use a single sales factor when computing its corporate income tax in Oregon. HB 2400 passed through the legislature by wide margins and was signed by Governor John Kitzhaber in December 2012.⁵⁸

Corporate income of multistate firms is divided between states using an apportionment formula that assigns income based on the distribution of company sales, property, and payroll in

⁵⁶ Justin Bachman, "Boeing's Puget Sound Job Cuts Have Unions Questioning Billions in State Tax Breaks," *BusinessWeek: Politics and policy*, October 1, 2014, <http://www.businessweek.com/articles/2014-10-01/boeings-puget-sound-job-cuts-has-unions-questioning-billions-in-state-tax-breaks>; Reid Wilson, "After Huge Tax Incentive Package, Boeing Still Ships Jobs out of Washington," *Washington Post*, October 8, 2014, <http://www.washingtonpost.com/blogs/govbeat/wp/2014/10/08/after-huge-tax-incentive-package-boeing-still-ships-jobs-out-of-washington/>.

⁵⁷ Depending on the list, Nike is somewhere between the 5th and 15th largest employer. Dana Tims, "Re Oregon's Three Largest Employers, and 13 of the Top 25, Health-Care Providers? PolitiFact Oregon," *Oregon Live*, August 1, 2014, http://www.oregonlive.com/politics/index.ssf/2014/08/are_oregons_three_largest_empl.html.

⁵⁸ *Relating to Economic Development; and Prescribing an Effective Date*, 2012, <https://olis.state.or.us/liz/2012S1/Downloads/MeasureDocument/HB4200/Enrolled>.

each state. Apportionment is the way states decide who gets to tax what amount of corporate income (so they do not tax the same income twice). Some states use an “equally weighted formula,” which gives equal weight to sales, property, and payroll when distributing income. Oregon, and an increasing number of other states, allow firms to use a single sales factor that discounts property and payroll to zero, using company sales as the only metric for apportionment.⁵⁹ A company that has a high percentage of its total payroll and property in one state but has equally distributed sales across all 50 states could benefit greatly if it were only taxed based on the portion of sales in its state of residence.

The Nike agreement sits in the broader context of a California legal battle over the state’s authority to alter apportionment formulas.⁶⁰ In *Health Net Inc. et al. v. Department of Revenue*, taxpayers are also challenging Oregon’s imposition of the single sales–factor reporting method for all business.⁶¹ Legal battles in five states are challenging states’ ability to set apportionment formulas independent of the MTC—a tax compact among a majority of US states to use an equally weighted apportionment formula. Many tax professionals fear that courts may (possibly retroactively) force some states to use the agreed-upon formula. There is considerable uncertainty across all states as to the legal status of varying apportionment formulas. To the extent that the Oregon bill for Nike protects the single sales–factor apportionment formula, Nike receives future tax certainty that is not available to other companies.

⁵⁹ Kimberly A. Clausing, *Formulary Apportionment and International Tax Reform: Lessons from the U.S. State Experience*, U.S. State Tax Considerations for International Tax Reform (Tax Analysts, 2014), 69.

⁶⁰ There are similar cases pending or decided in California, Oregon, Texas, Minnesota, and Michigan all in the line of California’s *Gillette v. Franchise Tax Board*. See Billy Hamilton, *A Billion Here, a Billion There: Michigan’s Tax Compact Problem*, State Tax Notes (Tax Analysts, September 1, 2014).

⁶¹ *Health Net Inc. et al. v. Department of Revenue* (Oregon Tax Court Pending); Shonda Humphrey, *A Year in Review of State and Local Tax Legal Developments*, The Legal Front (Tax Analysts, December 24, 2012), Electronic Citation: 2012 STT 247-5.

To pass the 2012 bill, Governor Kitzhaber called the Oregon Legislature in for an “extraordinary” special session with just four days’ notice.⁶² The governor said he was approached by officials from Nike, which asked for tax certainty before expanding in Oregon.⁶³ Although the legislation was crafted so that the special privilege could be applied to other companies making similar investments, it is clear the bill was introduced on behalf of Nike.

The bill does not reduce tax rates or change the apportionment formula. The authorized contract between the state and Nike ensures that the current methods for calculating corporate income remain the same for 30 years. Oregon allows firms to apportion income based on sales only, which benefits Nike because a large share of its sales is outside of Oregon.⁶⁴ If Oregon were to adopt an equally weighted formula, Nike’s Oregon tax base would expand dramatically. The Megadeal subsidy value of \$2 billion over 30 years is calculated as if the baseline was the equally weighted formula as described by the Multistate Tax Compact (MTC).⁶⁵

The subsidy offers no tangible privilege unless Oregon changes its tax code. However, if Oregon changes its corporate apportionment formula in the future, or is forced to by the court system, Nike would be the only firm with the single sales–factor calculation. Nike’s expectation of the future value of the tax agreement is clearly that it is nonzero, as is illustrated by the time and resources spent obtaining the privilege. Businesses rely on tax certainty for long-term decision making and investment; when the future is uncertain, businesses allocate resources

⁶² Harry Esteve, “Oregon Legislature Approves Nike Tax Deal in One-Day Special Session,” *OregonLive.com*, accessed December 7, 2014,

http://www.oregonlive.com/politics/index.ssf/2012/12/oregon_legislature_approves_ni.html.

⁶³ Christian Gaston, “John Kitzhaber Calls Legislators to Special Session for Nike Jobs,” *OregonLive.com*, accessed December 7, 2014, http://www.oregonlive.com/politics/index.ssf/2012/12/john_kitzhaber_calls_legislato.html.

⁶⁴ Esteve, “Oregon Legislature Approves Nike Tax Deal in One-Day Special Session.”

⁶⁵ The Multistate Tax Compact is an interstate compact enacted in 1967. The compact was enacted to preserve individual state sovereignty while giving taxpayers the ability to choose a uniform method of reporting and calculating income taxes. Multistate Tax Compact, 1967, <http://www.mtc.gov/The-Commission/Multistate-Tax-Compact>.

away from economically productive activity, paralyzing private investment.⁶⁶ Guaranteeing the tax code will remain the same for a select firm is undoubtedly a privilege. All businesses could benefit from the privilege that only Nike was awarded.

Analysis

The data and case studies in this paper have shown that large, visible, and politically connected firms receive the biggest tax privileges. This hurts small- and medium-sized firms as well as innovation, and, in turn, economic growth and job creation. The two case studies in Washington and Oregon demonstrate what economic theory predicts: that businesses desire long-term tax certainty and lower, nondistortionary tax rates. Firm-specific tax incentives create tax certainty for companies planning long-term projects and remedy poorly constructed tax regimes that disadvantage certain industries or states. However, states can encourage economic growth and maintain sound tax policy by ensuring tax certainty and neutrality for all firms, rather than targeting incentives to specific firms.

Consistency of tax structures and rates over time is crucial for firms making long-term investment decisions.⁶⁷ In both 2003 and 2013, Boeing asked for long-term commitments in excess of 25 years. Nike originally asked for a 40-year commitment to the single sales factor, which the legislature cut to 30 years. Faced with political and legal uncertainty, firms value tax certainty, especially for their special privileges.

⁶⁶ Giertz and Feldman, *The Costs of Tax Policy Uncertainty and the Need for Tax Reform*.

⁶⁷ Jason J. Fichtner, *Increasing America's Competitiveness by Lowering the Corporate Tax Rate and Simplifying the Tax Code*, Testimony, United States Senate Committee on Finance Hearing on "Extenders and Tax Reform: Seeking Long-Term Solutions" (Mercatus Center at George Mason University, January 31, 2012), http://mercatus.org/sites/default/files/Increasing_America%E2%80%99s_Competitiveness_by_Lowering_the_Corporate_Tax_Rate_and_Simplifying_the_Tax_Code.pdf; Giertz and Feldman, *The Costs of Tax Policy Uncertainty and the Need for Tax Reform*.

In addition to tax certainty, firms work to eliminate inequities in their tax rates. Boeing's tax incentives help move Washington's historically distortionary gross receipts tax closer (although imperfectly so) to neutrality between industries. Boeing's lobbying should signal to the Washington Legislature that the gross receipts tax needs to be reevaluated. Industry advocates have made a persuasive case for lower taxes for Boeing because of the nonneutrality of the B&O tax. Gross receipts taxes are nonneutral because they tax all transactions, including business-to-business sales, which creates an extra layer of taxation at each stage of production. Economists call this "tax pyramiding."⁶⁸ A 2002 study commissioned by the Washington State Legislature found the following:

The B&O tax pyramids an average of 2.5 times, but this rate varies considerably across industries. The B&O tax on many services pyramids at about 1.5 times, whereas for some types of manufacturers the rate of pyramiding is over five or six times. This causes effective B&O tax rates (the rate paid on the value added to goods and services by an enterprise) to vary considerably from industry to industry.⁶⁹

The report found that the "aircraft and parts" sector pyramided 5.3 times, third highest in the state.⁷⁰ Rather than granting Boeing and closely related firms special tax privileges, Washington should consider a more neutral business tax—one that does not require carve-outs to compete with other states.

The most common justification for any economic development incentive is economic growth and the creation of jobs. Most economists believe that long-term economic growth is driven by research, innovation, and entrepreneurial discovery.⁷¹ Furthermore, small and start-up

⁶⁸ Chamberlain and Fleenor, *Tax Pyramiding: The Economic Consequences of Gross Receipts Taxes*.

⁶⁹ William H. Gates, *Tax Alternatives for Washington State: A Report to the Legislature* (Washington State Tax Structure Study Committee, November 30, 2002), 24, http://dor.wa.gov/content/aboutus/statisticsandreports/wataxstudy/Volume_1.pdf.

⁷⁰ *Ibid.*, 112.

⁷¹ Ana M. Aizcorbe, Carol E. Moylan, and Carol A. Robbins, "Toward Better Measurement of Innovation and Intangibles," *Survey of Current Business*, BEA Briefing, 89, no. 1 (January 2009): 12–13.

firms are often considered to produce the most socially beneficial research, leading to the most robust form of economic development.⁷² The focus of my analysis has been the largest firm-specific tax incentives ever to be doled out. However, there are many programs in every state that cater to medium and small-sized businesses, start-up firms, and even underperforming businesses. These programs are equally distortionary to the economy but are less visible because the dollar values are less than their Megadeal counterparts. The data presented in this paper suggest that the largest targeted tax-support programs are directed to the largest firms in the economy. When a large firm is given billions of dollars of tax advantages, competitors are the unseen victims of the policy. When tax incentives to large firms are examined in tandem with incentive programs for small- and medium-sized firms, the tax incentive game becomes clear. Businesses and policymakers both know that corporate taxes are distortionary and burdensome. Rather than lower the rates across the board, politicians get to pick the winners and losers. By helping politically favored firms at the expense of everyone else, politicians make it more difficult for the economy to grow.

Conclusion

Many tax experts believe the corporate income tax is an inefficient mechanism for raising revenue, a poor measure of reliance on state infrastructure, and economically distortionary. This tax fails on most of the margins by which it is usually justified.⁷³ The corporate income tax reduces employee wages, increases costs passed on to consumers, and reduces the return to

⁷² Martin Sullivan, *Putting the Research Tax Credit to the Test*, Viewpoints, Tax Notes (Tax Analysts, March 17, 2014), 1224; Zoltan J. Acs, David B. Audretsch, and Erik E. Lehmann, “The Knowledge Spillover Theory of Entrepreneurship,” *Small Business Economics* 41, no. 4 (December 1, 2013): 757–74, doi:10.1007/s11187-013-9505-9.

⁷³ Brunori, *State Tax Policy*, 107.

capital received by shareholders. Many economists agree it is inefficient to use the corporate income tax to raise revenue in an open economy.⁷⁴ The political infeasibility of completely doing away with the corporate income tax means states should independently apply the five principles of sound tax policy outlined above.

All states should work to make credible long-term commitments to broad-based, low-rate tax codes. Firm-specific tax incentives should be avoided. Tax incentives have not been shown to increase revenue, and in many cases, tax credits can erode the tax base, decreasing tax collection. Michigan, the state with the most firm-specific tax incentives, at over \$100 million, had to cut its 2014–15 budget by \$325 million to help pay for \$9.3 billion of outstanding tax credits.⁷⁵

Firm- and industry-specific tax credits are designed to be both nonneutral and inequitable. Treating different firms and industries differently has many problems, but most fundamentally, policymakers are not able to gather usable information to properly target incentives. Furthermore, the availability of tax privileges distorts firms' allocation of resources away from innovation and value creation toward rent-seeking. These inefficiencies are inherent in any regime of politically tailored tax incentives. States should compete for businesses by lowering tax rates for all firms and eliminating special tax carve-outs.

If tax credits are to be awarded, states should be transparent and accountable. Between 2012 and 2014, 11 states and the District of Columbia passed or strengthened tax incentive evaluation statutes.⁷⁶ This is a step in the right direction; however, every state that distributes

⁷⁴ Martin Feldstein, James R. Hines, and R. Glenn Hubbard, *Introduction to "Taxing Multinational Corporations"* (University of Chicago Press, 1995), 3, <http://www.nber.org/chapters/c7721>.

⁷⁵ Hamilton, *A Billion Here, a Billion There: Michigan's Tax Compact Problem*; "Michigan's Tax Credit Liability Grows to \$9.38 Billion by 2030," *Detroit Free Press*, accessed April 4, 2015, <http://www.freep.com/story/news/local/michigan/2015/02/18/tax-credit-liability-grows-billion/23623329/>.

⁷⁶ Alaska, Florida, Indiana, Louisiana, Maryland, Mississippi, North Dakota, New Hampshire, Oregon, Rhode Island, and Washington. Michelle Blackston, "Tax Incentive Evaluation Law: State Fact Sheets," *Pew Charitable Trust*, accessed April 4, 2015, <http://bit.ly/1CceAs0>.

economic development incentives should have a periodic, structured, and legally mandated review process to determine the efficacy of the program. A 2012 Pew report found more than half of US states did not perform basic tax incentive evaluations.⁷⁷ An important part of transparency and accountability is the availability of information on the existence of tax privileges. A 2014 US PIRG analysis found that not one state was completely transparent when reporting spending and tax expenditure data.⁷⁸ Although more information and better analysis may make marginal improvements, firm-specific tax incentives are bad public policy and even worse tax policy.

Results from an analysis of the largest known firm-specific incentives ever granted show that such policies go to the largest firms and often work to remedy underlying issues in state tax policy. All states should work to make credible, long-term commitments to broad-based, low-rate tax codes. Firm-specific tax incentives should be avoided.

⁷⁷ Susan K. Urahn, *Evidence Counts: Evaluating State Tax Incentives for Jobs and Growth*, Evidence Counts (The Pew Charitable Trusts, 2012), http://www.pewtrusts.org/~media/legacy/uploadedfiles/wwwpewtrustsorg/reports/economic_mobility/PewEvaluatingStateTaxIncentivesReportpdf.pdf.

⁷⁸ See Davis and Baxandall, *Following the Money 2014*.

Appendix

Company Name	Ticker	Total	Firm-Specific Tax Privileges
Alcoa	AA	1	0
Amazon.com	AMZN	1	1
Anadarko Petroleum	APC	1	1
Apple	AAPL	1	1
Avago	AVGO	1	1
AstraZeneca	AZN	1	1
Boeing	BA	5	5
Baxter International	BAX	1	1
Brunswick	BC	1	1
Bristol-Myers Squibb	BMJ	1	1
Berkshire Hathaway	BRK.B	2	0
CA Inc.	CA	1	1
Cabela's	CAB	2	0
ConAgra Foods	CAG	1	1
Canon	CAJ	1	1
CBL & Associates	CBL	1	1
Cerner	CERN	1	0
CF Industries	CF	1	0
CME Group	CME	1	1
Cleco	CNL	1	0
Convergys	CVG	1	1
Walt Disney	DIS	1	0
Dow Chemical	DOW	4	4
DST Systems	DST	1	0
Duke Energy	DUK	1	1
Entergy	ELA	1	0
Eastman Chemical	EMN	1	1
Ford Motor	F	10	8
Fiat	FCAU	2	2
Forest City Enterprises	FCE.A	1	0
FedEx	FDX	2	2
General Electric	GE	1	1
General Growth Properties	GGP	1	1
General Motors	GM	8	8
Google	GOOG	2	2
Goldman Sachs	GS	2	1
Goodyear Tire & Rubber	GT	1	0

HCA	HAC	1	1
Huntington Ingalls Industries	HII	1	1
H&R Block	HRB	1	1
IBM	IBM	2	0
Intel	INTC	6	5
Johnson Controls	JCI	1	1
JPMorgan Chase	JPM	3	2
USEC	LEU	1	1
Eli Lilly	LLY	1	1
Lockheed Martin	LMT	1	1
Cheniere Energy	LNG	1	0
MasterCard	MA	1	1
MetLife	MET	1	1
Google	MMI.3	1	1
Marathon Petroleum	MPC	1	1
Microsoft	MSFT	1	1
Micron Technology	MU	1	1
NCR	NCR	1	1
Nike	NKE	1	1
Northrop Grumman	NOC	2	2
Nucor	NUE	2	1
Delta Air Lines	NWA	1	0
Prudential Financial	PRU	2	1
Royal Dutch Shell	RDS.A	2	1
Sears	SHLD	2	1
Simon Property	SPG	1	0
Sempra Energy	SRE	1	0
Sasol	SSL	1	0
Starwood Property Trust	STWD	1	0
Teck Resources	TCK	2	2
Triumph Group	TGI	1	1
Tesla Motors	TSLA	1	1
Texas Instruments	TXN	2	2
United Continental	UAL	1	0
United Technologies	UTX	1	1
Valero Energy	VLO	1	0
Wells Fargo	WFC	1	1
Exxon Mobil	XOM	1	0
Yahoo	YHOO	1	0
General Dynamics	GD	1	0
Total		121	86

Table 6. Frequency of Subsidies over \$100 million				
State	All Subsidies	Firm-specific Tax Credits	General Tax Credits	Other Subsidies
AK	2	2	0	0
AL	10	8	2	0
AR	1	1	0	0
CA	4	3	0	1
CO	1	0	0	1
CT	8	6	1	1
DE	1	1	0	0
FL	6	1	0	5
GA	4	4	0	0
IA	2	2	0	0
ID	1	1	0	0
IL	5	2	1	2
IN	5	3	0	2
KS	3	3	0	0
KY	8	4	3	1
LA	12	1	10	1
MD	1	0	0	1
ME	2	1	1	0
MI	22	21	1	0
MN	4	2	0	2
MO	8	5	0	3
MS	5	3	2	0
NC	7	6	1	0
NE	1	1	0	0
NJ	9	6	3	0
NM	5	4	0	1
NV	1	1	0	0
NY	19	9	4	6
OH	8	7	0	1
OR	8	7	1	0
PA	3	1	0	2
RI	1	1	0	0
SC	7	5	1	1
TN	12	12	0	0
TX	9	6	1	2
UT	1	1	0	0
WA	2	2	0	0
WI	1	1	0	0
WV	1	0	0	1
Total	210	144	32	34

Table 7. Average Yearly Reported Lobbying Spending (1998–2014)	
Firm Name	Average Spending
Amazon.com	\$1,651,202
Anadarko Petroleum	\$0
Apple Inc	\$1,259,589
AstraZeneca PLC	\$4,709,188
Avago	\$0
Baxter International	\$2,397,718
Boeing Co	\$11,743,665
Bristol-Myers Squibb	\$4,194,786
Brunswick Corp	\$139,176
CA Inc	\$709,970
Canon USA	\$20,000
CBL & Associates	\$0
CME Group Inc	\$26,667
ConAgra Foods	\$247,667
Convergys Corp	\$176,545
Dow Chemical	\$5,520,604
Duke Energy	\$3,507,334
Eastman Chemical	\$1,027,765
Eli Lilly & Co	\$6,792,712
Entergy Corp	\$3,346,132
FedEx Corp	\$7,473,620
Fiat SPA	\$2,876,293
Ford Motor Co	\$6,971,167
General Electric	\$18,271,176
General Growth Properties	\$26,667
General Motors	\$8,828,481
Goldman Sachs	\$2,208,353
Google Inc	\$6,020,833
H&R Block	\$753,829
HCA Hospital Corp of America	\$197,143
Huntington Ingalls Industries	\$4,147,425
Intel Corp	\$3,788,678
Johnson Controls	\$438,096
JPMorgan Chase & Co	\$5,446,744
Lockheed Martin	\$11,518,296
Marathon Petroleum	\$1,937,500
MasterCard Inc	\$2,250,635
MetLife Inc	\$4,260,000
Micron Technology Inc	\$514,423
Microsoft Corp	\$7,513,882

Motorola Mobility	\$1,740,000
NCR Corp	\$640,609
Nike Inc	\$325,294
Northrop Grumman	\$12,855,424
Nucor Corp	\$1,679,429
Prudential Financial	\$5,873,529
Royal Dutch Shell	\$6,318,138
Sears Holdings Corp	\$605,822
Teck Resources	\$40,000
Tesla Motors	\$60,000
Texas Instruments	\$2,018,126
Triumph Group	\$134,402
United Technologies	\$7,451,846
USEC Inc	\$2,032,353
Walt Disney Co	\$3,984,235
Wells Fargo	\$2,794,338

Table 8. Summary Statistics for *privilegedumm1* and *privilegedumm2*

Variable	Observations	Mean	Std. Dev.	Min	Max
(full data)					
<i>ptincome</i>	69543	216.9638	1640.002	56493.8	103051
<i>mkvalue</i>	69543	3214.391	16005.39	0.0001	626550.4
<i>effectivetax</i>	69513	0.2330662	15.33285	-1004.8	3521
<i>emp</i>	69543	8.320667	39.5097	0	2200
(large firms by <i>mkvalue</i>)					
<i>ptincome</i>	34,613	446.6	2,295	-56,494	103,051
<i>mkvalue</i>	34,613	6,393	22,239	235.5	626,550
<i>effectivetax</i>	34,608	0.25	3.522	-167.4	429.9
<i>emp</i>	34,613	15.79	54.84	0	2,200
(large firms by <i>emp</i>)					
<i>ptincome</i>	23,594	641.2	2,755	-56,494	103,051
<i>mkvalue</i>	23,594	8,875	26,542	235.5	626,550
<i>effectivetax</i>	23,593	0.276	2.758	-167.4	165.3
<i>emp</i>	23,594	22.9	65.21	1.431	2,200

Table 9. Summary Statistics for *privilegedumm3*

Variable	Observations	Mean	Std. Dev.	Min	Max
(full data)					
<i>ptincome</i>	23,594	641.2	2,755	-56,494	103,051
<i>mkvalue</i>	23,594	8,875	26,542	235.5	626,550
<i>effectivetax</i>	23,593	0.276	2.758	-167.4	165.3
<i>emp</i>	23,594	22.9	65.21	1.431	2,200
(large firms by <i>mkvalue</i>)					
<i>ptincome</i>	19,007	790.3	2,955	-56,494	83,397
<i>mkvalue</i>	19,007	10,913	29,208	652	626,550
<i>effectivetax</i>	19,006	0.283	1.749	-167.4	38.28
<i>emp</i>	19,007	26.6	71.32	1.431	2,200
(large firms by <i>emp</i>)					
<i>ptincome</i>	19,007	790.3	2,955	-56,494	83,397
<i>mkvalue</i>	19,007	10,913	29,208	652	626,550
<i>effectivetax</i>	19,006	0.283	1.749	-167.4	38.28
<i>emp</i>	19,007	26.6	71.32	1.431	2,200

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