OREGON CENTER for PUBLIC POLICY

Issue Brief

February 9, 2023

Oregon's Semiconductor Incentives Package Should Focus on People and Place

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In creating a package of incentives to attract chip manufacturers, the Oregon legislature should prioritize investments that will deepen the state's talent pool, promote equity, and strengthen its infrastructure. The drive to create an incentive package stems from the congressional enactment of the CHIPS Act, which pledges tens of billions of dollars to ramp up domestic semiconductor manufacturing.[1] Understandably, Oregon lawmakers are eager to see some of that money flow to Oregon. In putting together a package to attract chip manufacturers intent on applying for the federal funds, lawmakers should resist calls for direct corporate subsidies, which are often ineffective. At the very least, any new corporate subsidy should come with guardrails to limit the risk to Oregon.

This paper outlines the kind of incentive package that advances the interest of Oregonians. Rather than shower particular corporations with subsidies — a strategy with a track record of failure — the recommended approach is to foster a fertile environment for industry growth.

Invest in education and training

A skilled workforce is the number one factor that semiconductor manufacturers look for when deciding where to locate, according to many in the industry.[2] Having an ongoing supply of talent is essential to sustaining a competitive semiconductor ecosystem.[3] In this area, Oregon shines bright, having one of the highest concentrations of semiconductor employment in the U.S.[4] However, workforce shortages in the industry are pervasive.[5] Oregon needs to step up to meet current and future workforce demands. And building a diverse workforce within this higher wage industry makes for a stronger workforce.[6] Oregon can further strengthen its semiconductor ecosystem and encourage industry expansion by investing in high-tech education and training, while using strategies to reach Oregonians traditionally under-represented in the industry.

An incentives package emphasizing advanced manufacturing education and training not only bodes well for the long-run, it is also the kind of state package that looks attractive to the federal government. In describing its strategy for implementing the CHIPS Act, the U.S. Department of Commerce has stated that it:

> expects to prioritize support for projects that include state and local incentive packages with the potential for large spill-over benefits, are based on performance, and *maximize regional and local competitiveness as well as economic gains, including supporting a robust semiconductor ecosystem rather than a single company* [italics added].[7]

Investments in a skilled workforce fit this bill. The Oregon legislative package should direct substantial resources to shore up STEM education at all levels and enable significantly expanded workforce training tailored to ongoing industry needs.

Invest in public infrastructure equitably

Oregon's incentive package should include investments to upgrade water, sewer, stormwater management, power, communications, and transportation infrastructure systems. Advanced manufacturing hubs require highly efficient and reliable infrastructure systems. Semiconductor production in particular, requires huge amounts of electricity and clean water.[8] Localities most likely to offer high quality systems have consistently invested in them over the long term.[9] In this respect, Oregon has catching up to do to make systems more reliable, efficient, and capable of managing increased demand.

The benefits of upgrading outdated public infrastructure can spill over to the broader community and support overall economic growth. Such investments must be designed to promote equity to ensure that under-resourced communities are not left behind — to ensure that outcome gaps shrink rather than grow. For example, transportation strategies can include connecting underserved communities with areas of quality job expansion and opportunities for high-tech education and training.

Avoid corporate subsidies, which are ineffective

Extensive research shows that state and local corporate subsidies – typically direct payments, tax credits, and tax exemptions – often fail to achieve their goals. Specifically, they do little to promote new firm establishment, grow jobs, or increase overall economic growth. They can harm state fiscal health, and there is evidence that they worsen inequality.

Although industry lobbyists promote subsidies as essential, evidence shows they play a minor role, if any, in job creation and business decisions. A meta-analysis of dozens of studies found that subsidies had no effect on decisions to locate, expand, or remain in place for the vast majority of firms receiving subsidies.[10] Another study found that just 30 percent of executives at companies receiving subsidies were even aware that they were receiving a subsidy.[11] Likewise, multiple studies have concluded that state economic development incentive programs have little or no impact on job creation among recipient firms.[12,13]

Oregon's own experience points to ineffectiveness and wastefulness of tax credits. In the mid-2000s, the state expanded the Business Energy Tax Credit (BETC), an effort to incentivize renewable energy. The costs to the state quickly got out of hand, and there was scant evidence the incentives had worked. As *The Oregonian* reported, "... credits were issued to projects that quickly went bankrupt or never operated, to projects that would have been built without the credits…."[14]

Researchers increasingly question whether direct subsidies induce broader economic growth. A recent analysis of state and local business tax incentives across the U.S. concluded that they had failed to produce much, if any, net positive economic ripple effects.[15] Further, researchers note a pattern of subsidies undermining state fiscal health. Among 32 states offering incentives between 1990 and 2015, measures of dependence on federal outlays, expenditures compared to revenues, and state indebtedness, eroded.[16]

Lastly, corporate subsidies tend to worsen income inequality, with all the damaging effects that entails. Researchers found that tax incentives used by states between 1999 and 2014 had "large, long-lasting" harmful impacts on income inequality, "Despite using economic development incentives to try to generate greater prosperity," the author concluded, "state governments may be inadvertently exacerbating inequality."[17] Among its social ills, income inequality undermines economic growth, social mobility, and personal health.[18] At the same time, corporate subsidies steer limited state resources away from public services such as education and housing, undermining the state's ability to invest in the building blocks of economic opportunity for under-resourced communities. In short, corporate subsidies could result in worse outcomes for many Oregonians, especially those with the fewest resources.

Any subsidies must come with guardrails and community benefits

The right approach for Oregon is to avoid direct subsidies and instead invest in people and place. Should Oregon lawmakers choose the option of direct subsidies, they must take steps to minimize the risk of squandering public dollars and maximize the opportunity for community benefit. Smart approaches to achieving these goals include the following:

- **Target subsidies to the semiconductor industry.** Subsidies for a broad range of business enterprises are not warranted and will water down investments needed to strengthen the semiconductor ecosystem.

- **Cap total spending**. It is often difficult to predict participation in a particular economic development program, tax subsidies included. Setting a total dollar limit on subsidies prevents runaway costs. Oregon has its own painful experience with failing to consider the possibility of a bloated program. A cap would have protected Oregon's budget before the state's failed BETC program squandered large sums of public dollars.[19] Caps help limit the harm to schools, health care, and other essential services from a corporate subsidy program gone awry.

- **Require substantial community benefit.** Any firms awarded state subsidies should be required to create a meaningful number of quality jobs. Agreements should require that jobs pay living wages and that hiring include communities with barriers to employment. The agreement should be structured to prevent a firm from creating many part-time positions or simply shifting jobs from another location. Measures of job quality should include wages above the industry average, robust benefits, and explicit safety standards.[20] Those standards should apply to both in-house and contracted labor.

- **Subsidies need claw-backs.** All project-specific subsidies should come with claw-back provisions that enable the state to recoup its money if the company fails to produce agreed-upon jobs or other deliverables.

- **Make decision-making transparent.** Secrecy breeds undue influence and lavish benefits, which advantages larger companies most able to curry favor among economic development officials. In this regard, a closed process disadvantages smaller firms. To minimize the opportunity for wasteful, anti-competitive subsidies, all materials related to a deal, including cost-benefit and return on investment studies, should be publicly-available for several months prior to a decision. Meetings for approval should be open to the public.

- **Require corporate disclosure of performance.** Corporations must be required to report on performance against all contracted deliverables annually. Reports should include enough detail to determine compliance, for instance whether a reported job conforms with the standardized definition of a job and its measures of quality. Such recipient-specific data should be posted to a public website and updated at least annually.

Conclusion

Oregon should put together an investment package for semiconductor companies that prioritizes people and place. Doing so will foster growth in Oregon's already strong semiconductor ecosystem, not only now but also for the long term, while avoiding the failed strategy of direct corporate subsidies. To the extent that the Oregon legislature opts to offer direct subsidies, it should put in place strong guardrails that protect the interest of Oregonians.

Endnotes

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