

SENATE FINANCE COMMITTEE
“Made in America: Effect of the U.S. Tax Code on Domestic Manufacturing”
TESTIMONY OF
Intel Corporation, Chief Financial Officer, George Davis
March 16th, 2021

Chairman Wyden and Ranking Member Crapo, thank you for the opportunity to address the Committee today.

Our nation and the semiconductor industry have faced unprecedented challenges due to the pandemic. Recognizing the critical role of technology and our responsibility to our communities, Intel launched a [\\$60 million](#) technology initiative to combat the coronavirus through accelerating access to technology at the point of patient care, scientific research, and ensuring access to online learning for students.¹

Semiconductor technology and Intel’s domestic R&D and manufacturing operations provide a critical foundation for U.S. economic and national security. More than fifty years ago, Intel invented the world’s first commercial microprocessor. This fueled job growth and development of new technologies with major economic benefits. Intel remains the only American semiconductor company that still designs and manufactures the most advanced logic chips and is the only company that has built leading edge fabs in the U.S. during the last five years. I am proud that the majority of our manufacturing is conducted in Oregon, Arizona, and New Mexico, and, that the majority of Intel’s intellectual property still resides here at home.²

Unfortunately, U.S. leadership in semiconductor manufacturing is at risk. Global demand for semiconductors has increased dramatically and is projected to grow five percent annually until 2030.³ However, only 12 percent of global semiconductor manufacturing is in the U.S. and just nine percent is from American companies. Currently, 80 percent of the world’s semiconductor manufacturing is concentrated in Asia.⁴

U.S. semiconductor manufacturing must regain its competitiveness. [President Biden’s Executive Order](#) reinforces the urgency of funding the bipartisan CHIPS for America Act, led by Senators Cornyn and Warner. Their legislation recognizes the importance of using federal grants to support American workers and strengthen the domestic semiconductor industry. Congress must now work to fully fund the grant program and enact its proposed investment tax credit.

¹ <https://newsroom.intel.com/news/intel-commits-technology-response-combat-coronavirus/#gs.v42r84>

² Intel Corporation, Annual Report 10-K, https://www.intc.com/filings-reports/all-sec-filings?form_type=10-K&year=2020

³ Boston Consulting Group and the Semiconductor Industry Association, “Government Incentives and US Semiconductor Manufacturing”, September 2020, <https://www.semiconductors.org/wp-content/uploads/2020/09/Government-Incentives-and-US-Competitiveness-in-Semiconductor-Manufacturing-Sep-2020.pdf>

⁴ Ibid.

An investment tax credit would encourage long-term, domestic semiconductor manufacturing. A single, advanced logic manufacturing facility costs tens of billions of dollars to build and operate. Every advancement in chip design requires retooling and reinvesting in new equipment. Over the last decade, the average rate of chip manufacturing has grown five times faster overseas than in the U.S. due to robust incentive programs offered by other countries. In fact, U.S. companies face up to a 40 percent cost disadvantage compared to Asian competitors due largely to government incentives. Moreover, 19 European Union countries recently agreed to jointly invest in semiconductor technologies to close the manufacturing gap. This targeted government support could total as much as \$60 billion.⁵

Investment in research and development is critical to advanced manufacturing. As President Biden acknowledged in his Executive Order, R&D is necessary to sustain leadership in the development of critical goods and materials. However, without Congressional action, 67 years of pro-R&D growth policy is about to be reversed.

Starting next year, businesses will be required to amortize their R&D expenses over several years. Removing this deduction will make the U.S. virtually the only developed country in the world with this policy. U.S. investment in research is already relatively flat. While other governments work to substantially increase R&D investment, this change will significantly increase the cost to perform R&D in the U.S. We applaud the bipartisan work of Senators Hassan, Young, Cortez Masto, and Portman, whose bill, the American Innovation and Jobs Act, would prevent this regressive policy from taking effect.

Right now, the U.S. is uncompetitive in attracting new semiconductor investments. Semiconductors are the building blocks of technology and must continually invest in R&D to enable chips to run faster and use less power. This is why Intel reinvests on average nearly 20 percent of its revenue into R&D, or about \$13 billion annually. The CHIPS Act, and the ability to continue to deduct R&D expenditures, enable American companies to compete on equal footing with heavily subsidized foreign companies.

The U.S. is the birthplace of semiconductor technology and has always been a leader in semiconductor development. Investments in our industry will bolster manufacturing capabilities needed to strengthen U.S. economic and national security. Virtually all modern technology, from artificial intelligence to 5G to healthcare, exists because of U.S. leadership in semiconductors.

Thank you for your time and we look forward to working with you to advance these solutions and U.S. technological leadership.

⁵ <https://www.reuters.com/article/us-europe-germany-chips/germany-predicts-chip-investments-of-up-to-50-billion-euros-in-europe-idUSKBN2A32KG>