Testimony from Daniel Rangel, American Economic Liberties Project - Rethink Trade

Before the Office of the United States Trade Representative
Request for Comments:
"Promoting Supply Chain Resilience"
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Good morning. My name is Daniel Rangel. I am the Research Director of the Rethink Trade program of the American Economic Liberties Project. Economic Liberties is a DC-based think tank and advocacy organization focused on addressing concentrated economic power in the U.S. Rethink Trade is an Economic Liberties program seeking to replace decades of corporate-captured trade policies to deliver on broad public interests.

Economic Liberties recently published a report regarding domestic and international competition problems in the semiconductor industry and how the implementation of the 2022 CHIPS and Science Act might be able to overcome them. This report was included in our submission for this investigation. My testimony will focus in the supply chain resilience aspects of this recent work.

We applaud USTR for undertaking the important mission of restoring America's broken supply chains after 40 years of mismanagement, hyper-globalization, and corporate control. The pandemic revealed brittle supply chains from areas as diverse as medical supplies, semiconductors, pharmaceuticals, and basic household goods. Of all of these sectors, the semiconductor industry received

the most policy attention and legislative action. Shortages of inexpensive, legacy chips led to work stoppages and factory shutdowns across the world, contributing to skyrocketing prices for many chip-dependent products such as cars.

This problem did not come suddenly out of nowhere with the pandemic. As detailed in our report, the U.S. semiconductor industry was once competitive and vibrant, with a resilient domestic industrial base. By contrast, today it is overly concentrated in a few key firms whose supply chains are unsustainably spread across the globe, but with the fabrication of silicon chips geographically concentrated in East Asia. The semiconductor industry has experienced decades of anticompetitive mergers, exclusive dealing, patent abuse, financial engineering, and the extreme concentration of the foundry market, all of which have contributed to the need for the CHIPS Act in the first place. Since 2010, intra-sector acquisitions have shrunk the number of independent U.S. semiconductor firms by over 40%. At the same time, the U.S. global share of chip fabrication has only fallen.

Our report explains how there are two segments in this market that must each be considered with respect to rebuilding supply chain resilience. For leading-edge logic chip fabrication, offshoring has gone hand-in-hand with a shift to a monopolistic, capital-light, fabless, and financialized model. High profit margins throughout the logic chip supply chain are only possible due to the market power of fabless firms and foundries. This model—facilitated by the regulatory environment of the past 40 years with weak antitrust policies, excessively strong patent rights, low- to no-tariff environment, and loose financial policy—has resulted in the direct fabrication of

leading-edge chips now being concentrated in a single Taiwanese firm, TSMC. Without additional guardrails, the CHIPS Act will throw money at monopolists, creating even greater sector imbalances and undermining the long-term viability of America's semiconductor sector.

Mature-node chips face the same offshoring problems but for different reasons. Rather than a clear monopoly problem, the mature-node market is characterized by boom-and-bust cycles, overcapacity, and thin margins. These problems, combined with China's ambitions to dominate the mature-node segment through subsidies and other government support, suggest that the CHIPS Act one-off subsidy model for domestic fabs will be insufficient to maintain a resilient domestic supply of mature-node chips.

The successful implementation of the CHIPS Act and long-term semiconductor industry vibrancy, as well as the administration's broader supply chain goals , require equal attention to *competition policy* as to *industrial policy*, using all tools available. Our report includes recommendations to reinvigorate competition, create more resilient supply chains, and stabilize the markets for both the leading-edge logic and mature-node chips markets, such as:

- Direct CHIPS funding with the goal of promoting a competitive market of at least four leading-edge foundries in the United States;
- Create guaranteed demand for new entrants;
- Establish dual sourcing requirements for chip buyers;
- Require open patent practices in the industry through the National Science and Technology Council (NSTC); and

- Enforce more aggressive limitations on buybacks and dividends so that semiconductor firms return to funding their own capital, R&D and employees.

Specifically regarding trade-related actions associated with legacy chips supply chain issues, the report includes the following recommendations:

- Increasing most-favored nation tariffs on certain electronic devices to reshore and friend-shore the end-use portions of the chips supply chain – the administration has several statutory authorities to implemente these changes; and

- Revise rules of origin in existing FTAs to increase the regional value content required for electronic goods to gain preferential access to the U.S. market.

Finally, there are other legislative actions that should be considered to protect the domestic industrial base for mature-node chips, such as:

- a tax on finished consumer electronics paid by firms that excessively offshore their chip procurement or

- a subsidy for buyers of mature-node chips fabricated in the U.S.

I close by again thanking USTR for undertaking the important work of restoring America's broken supply chains and the opportunity to share our work through this hearing.