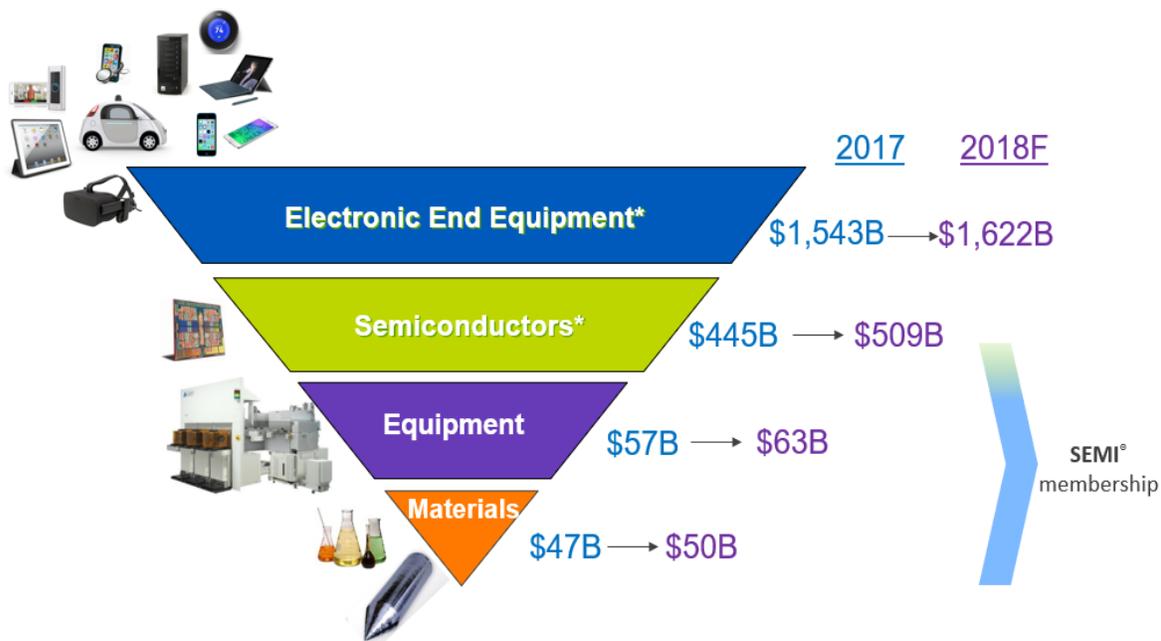


Comments Concerning the Negotiating Objectives for a U.S.-European Union Trade Agreement
Docket No. USTR 2018-0035
December 2018

SEMI appreciates the opportunity to provide input to the Trade Policy Staff Committee and the Office of the United States Trade Representative (USTR) on the Administration’s negotiating objectives for a U.S.-European Union Trade Agreement. (Docket Number USTR-2018-0035).

Background

Established in 1970, SEMI is the leading global industry association that works to advance the technology and business of the electronics manufacturing supply chain. SEMI has over 2,100 members worldwide, including more than 400 U.S.-based companies and more than 250 European-based companies. SEMI represents the full range of global semiconductor companies, including designers, equipment makers, materials producers, subcomponent suppliers, and chipmakers.¹ While SEMI’s membership includes many large companies, more than 85 percent of SEMI members are considered small businesses. Our member companies are the foundation of the nearly \$2 trillion electronics industry. This vital supply chain employs 350,000 high-skill and high-wage jobs across the United States.²



Source: SEMI, and *IC Insights, July 2018

Semiconductors Are the Building Blocks of the Modern Economy

Semiconductors are the lifeblood of the modern economy, making possible the countless products on which we rely for business, communication, transportation, healthcare, research, and more. SEMI member companies provide the innovations and manufacturing technologies that enable faster, more powerful, and more affordable electronic systems and applications. Research has shown that these products have boosted economic growth, enhanced productivity, and driven innovation.³ These products have also been central in helping to close the digital divide, bringing the power of the digital age to more people every day. This globally connected industry is vital to U.S. and global growth, productivity, and prosperity.

This industry has recently entered a new era of growth, ushered in by the continued development of emerging technologies and the creation of new technological segments, such as smart healthcare, autonomous driving, and the broader Internet of Things ecosystem. Not only do these connected devices and applications require chips to operate, but also these products produce terabytes of data, which are processed and stored on servers, which need semiconductors.

However, the single most important part of the semiconductor manufacturing industry is its valuable intellectual property. Continued technological development requires significant resource commitments, and as such, strong global intellectual property protections are a top priority. The ability to leverage this intellectual property means that companies in this industry can engage in trade and reinvest revenue into research, which drives forward innovation. SEMI strongly supports efforts to better protect intellectual property and encourages greater enforcement of trade and investment rules.

Trade and Supply Chains in the Semiconductor Industry

While other industries have largely moved offshore, the semiconductor manufacturing supply chain has remained in the United States. The United States is the global leader in the \$60 billion semiconductor manufacturing equipment market and in the \$50 billion global semiconductor materials market; across both segments, the United States holds more than 40 percent of the global market share.⁴ While Asia is often considered the hotbed of activity in the semiconductor industry, Europe remains central to this industry's well-being. There are just over 250 production fabs, which represents about 10 percent of global production capacity, in Europe.⁵ Further, many European semiconductor companies are considered market leaders in their specific segment of the semiconductor manufacturing process. These components, technologies, and tools are used in a variety of areas, from automotive electronics, medical technologies, and smart manufacturing.

The semiconductor manufacturing industry operates across the global economy and is heavily reliant on trade. For instance, over the last 15 years, U.S. companies in this sector have exported, on average, more than 80 percent of what is produced domestically.⁶ It is because of this dynamic that the United States has long held a trade surplus in the semiconductor equipment industry. The U.S. surplus in this industry was \$8.7 billion in 2017, which has

increased nearly 30 percent over the last year and has nearly quadrupled over the last 5 years.⁷ Looking specifically at trade with the European Union, U.S. exports in this sector to the European Union have increased by more than 20 percent in since 2013.⁸

This industry, however, is enabled by complex and expansive supply chains that traverse the globe. This industry—perhaps more than most industries—is one in which constituent parts cross borders many times. Indeed, there are tens of thousands of suppliers in this industry worldwide. Components are made all around the world, brought together and assembled into a single sub-system, which is then integrated into a larger tool, which is used in the chipmaking process. European semiconductor companies are fundamental to the industry at every single step of process.

By allowing companies to better tap into foreign markets, trade has enabled greater research and development (R&D), which fuels innovation and growth. In this industry, trade and innovation are intrinsically intertwined. Indeed, a change to either affects the other; without trade opportunities, innovation dries up, and without innovation, opportunities to export slow.

Negotiating Objectives for a U.S.-European Union Trade Agreement

SEMI stands strong for free trade and open markets and roundly supports efforts to increase market access and tap into more foreign economies. Free trade agreements reduce tariffs, which result in cost savings and productivity gains. But the benefits of modern free trade agreements extend well beyond tariff reduction. Indeed, trade deals enhance global trade rules that enable companies to innovate and compete fairly on a level playing field.

Taking steps to reduce tariffs, eliminate regulatory barriers, and ensure both parties are competing on level playing field would stand to benefit U.S. and European semiconductor companies, but certainly would improve the standing of the global semiconductor industry. SEMI urges policymakers across the globe to maintain high standards in modern trade agreements, including these principles:

- 1. Affirm principles of non-discrimination.**
Non-discriminatory treatment is a central tenet of the global trading system. SEMI strongly believes that any trade deal should provide that all products from a party to the deal cannot be put at a competitive disadvantage in any other party's market. Related, any agreement must be fully compliant with the World Trade Organization's rules.
- 2. Maintain strong respect for intellectual property and trade secrets through robust safeguards and significant penalties for violators.**
Protection for intellectual property are essential for the semiconductor industry. These standards enable the ability to innovate and grow. SEMI supports robust copyright standards, strong patent protections, and regulations that safeguard industrial design. SEMI also strongly supports rules that preserve trade secrets protection, including establishing criminal procedures and penalties for theft, including by means of cyber theft.

3. **Remove tariffs and end technical barriers on semiconductor products.**

Parties should eliminate tariffs and technical barriers on semiconductors and all technology products that rely on electronic chips. Removing tariffs and technical barriers is crucial for businesses, especially for small and medium-sized enterprises, in penetrating new markets. Related, any trade deal should open markets for services providers, ensuring that all face fair and transparent treatment.
4. **Simplify and harmonize the customs and trade facilitation processes.**

The trade deals should include strong commitments on customs procedures and trade facilitation to ensure that border processing will be quick, transparent, and predictable. The parties should also work to use electronic customs forms to expediate customs processing.
5. **Combat any attempts of forced technology transfer.**

All trade deals should have clear and firm rules that prohibit countries from requiring companies to transfer their technology, intellectual property, or other proprietary information to persons in their respective territories.
6. **Enable the free flow of cross-border data.**

In today's global economy, all industries, including the semiconductor industry, rely on the free flow of data. Countries should refrain from putting in place unjustifiable regulations that limit the free flow of information, which simply serve to curb innovation and impact growth. SEMI supports provisions that enable the movement of data, subject to reasonable safeguards for privacy and other protections.
7. **Eliminate forced data localization measures.**

Many countries have created laws that require physical infrastructure and data centers in every country they seek to serve, which add unnecessary costs and burdens. Forward-looking policies should eliminate the use of forced data localization measures.
8. **Harmonize global standards to achieve "one standard, one test, accepted everywhere".**

Businesses should not have to face different standards for each market they serve. Global standards, driven by industry, should be market-oriented, and there should be strong commitments on transparency, stakeholder participation, and coordination.
9. **Create transparent rules for state-owned and -supported enterprises to ensure fair and non-discriminatory treatment.**

SEMI supports a trade deal that contains robust commitments to ensure that state-owned and -supported enterprises compete based on performance, quality and price, as opposed to discriminatory regulation, opaque subsidies, favoritism, or other tools that artificially benefit state-backed businesses.
10. **Establish protections for companies and individuals that respect privacy while also balancing security.**

Any trade deal should have firm consumer protections, including privacy, that enables ease of use, but also does not forgo security. SEMI supports efforts to use encryption products in support of this venture and also believes that parties should work to advance efforts on cybersecurity through self-assessment, declaration of conformity,

increased cooperation and information sharing, all of which will help prevent cyber-attacks and stop the diffusion of malware.

Conclusion

SEMI supports the Administration's willingness to engage on this front. A high-standard trade agreement between the United States and the European Union will usher in further growth for the semiconductor industry, and each's broader economy.

¹ "About SEMI," <http://www.semi.org/en/About>, October 2018. A full list of SEMI members can be found here: <http://www.semi.org/en/Membership/MemberDirectory>.

² "Trade Policy," SEMI, <http://www.semi.org/en/trade-policy>, November 2018.

³ See "Beyond Borders: The Global Semiconductor Value Chain," Semiconductor Industry Association and Nathan Associates, https://www.semiconductors.org/semiconductors/the_global_semiconductor_value_chain/, March 2016; "McKinsey on Semiconductors," McKinsey, <https://www.mckinsey.com/~media/McKinsey/Industries/Semiconductors/Our%20Insights/McKinsey%20on%20Semiconductors%20Issue%205%20-%20Winter%202015/McKinsey%20on%20Semiconductors%20Winter%202015.ashx>, Winter 2015; Tim Zanni, Lincoln Clark, Chris Gentle, and Scott Jones, "Semiconductors: Can the Surge Continue? 2018 KPMG Global Semiconductor Industry Outlook, <https://assets.kpmg.com/content/dam/kpmg/us/pdf/2018/02/kpmg-semiconductor-outlook-2018-web.pdf>, February 2018; Diana Farrell, "The Real New Economy," Harvard Business Review, <https://hbr.org/2003/10/the-real-new-economy>, October 2003; and James Manyika, Jaana Remes, Jan Mischke, and Mekala Krishnan, "The Productivity Puzzle: A Closer Look at the United States," McKinsey Global Institute, <https://www.mckinsey.com/~media/McKinsey/Global%20Themes/Employment%20and%20Growth/New%20insights%20into%20the%20slowdown%20in%20US%20productivity%20growth/MGI-The-productivity-puzzle-Discussion-paper.ashx>, March 2017.

⁴ "Trade Policy," SEMI, <http://www.semi.org/en/trade-policy>, November 2018.

⁵ Author calculations based on data from SEMI's Market Data, October 2018.

⁶ This is based on data collected and analyzed by SEMI, November 2018.

⁷ SEMI calculations based on data from the U.S. International Trade Commission's Interactive Tariff and Trade DataWeb, November 2018.

⁸ SEMI calculations based on data from the U.S. International Trade Commission's Interactive Tariff and Trade DataWeb, October 2018.