

SEMICONDUCTOR INVESTMENT REVISITED: THE USMCA, MEXICO, AND *MAQUILADORAS*

Abstract: The COVID-19 pandemic and subsequent supply chain crunch brought a significant shortage to global semiconductor manufacturing, affecting a multitude of businesses and consumers. The Biden Administration recognized this serious issue with the passage of the CHIPS Act and the significant amount of investment allocated toward domestic semiconductor manufacturing. The Trump Administration has taken a different approach and has thus far relied on tariff applications to gain favorable policy concessions. At the Trump Administration's fingertips, however, is the most modernized trade agreement in the world, the USMCA. Through the agreement, North America—specifically the United States and Mexico—is primed to facilitate broad semiconductor investment throughout the continent. This Note argues that the USMCA should include a provision specific to semiconductor investment in the 2026 joint review. Additionally, this Note proposes that a semiconductor provision could take lessons from the *maquiladora* system of the past, existing USMCA provisions, NAFTA investment arbitration, and current geopolitical tension to guide its construction.

INTRODUCTION

The COVID-19 pandemic caused economic disarray across the globe.¹ Along with affecting healthcare systems internationally, the virus disrupted entire commercial industries through pandemic-induced lockdowns enforced by governments worldwide.² The lockdowns made the international semiconductor

¹ See, e.g., Robin Wright, *The Global Panic Over Coronavirus*, NEW YORKER (Mar. 2, 2020), <https://www.newyorker.com/news/our-columnists/the-coronavirus-is-causing-a-global-panic-but-thats-a-good-thing> [<https://perma.cc/9J2C-SSUY>] (describing how governments around the world struggled to implement sufficient COVID-19 mitigation measures); Marianna Baggio, *Here's Why Society Is Reacting with Panic to Coronavirus*, WORLD ECON. F. (Mar. 10, 2020), <https://www.weforum.org/agenda/2020/03/dont-panic-how-human-behaviour-can-fuel-the-coronavirus/> [<https://perma.cc/CW3K-6XLQ>] (describing several factors that contributed to public panic during the early stages of the COVID-19 pandemic lockdowns such as mixed information coming from government sources and panic buying at stores). In early March 2020, the United States began to feel the effects of the COVID-19 pandemic as cases began to rise across the East Coast and the Midwest—spreading from the West Coast where cases were initially isolated. See Wright, *supra* (explaining how COVID-19 spread through communities across the United States).

² See, e.g., *COVID-19 Timeline*, DAVID J. SENCER CDC MUSEUM, <https://www.cdc.gov/museum/timeline/covid19.html#print> [<https://perma.cc/BQ63-ARLB>] (providing a daily chronology of the COVID-19 pandemic by highlighting key events from 2019 to 2022); Mariano Sánchez-Talanquer et al., *Mexico's Response to COVID-19: A Case Study*, UCSF INST. FOR GLOB. HEALTH SCIS. 10–13

market, which relies on a small number of stakeholders, especially vulnerable and caused a supply shortage.³ The semiconductor supply crunch's catastrophic impact can be seen in the response that followed—in 2022, President Biden signed legislation allocating \$280 billion to semiconductor investment in the United States.⁴ The reason for this substantial and immediate reaction from an oft gridlocked Congress and an eager Executive is clear—semiconductors, also known as chips, are essential in electronics, operating as the brains of the end-user technology that you use every day and your employer relies on in its daily business.⁵ Local semiconductor investment in the United States must span our

(2021), <https://globalhealthsciences.ucsf.edu/wp-content/uploads/2024/02/mexico-covid-19-case-study-english.pdf> [<https://perma.cc/64HB-MF8G>] (reviewing the policies that Mexico enacted during the beginning of the COVID-19 pandemic and the consequences that followed); Xiang Yu & Na Li, *Understanding the Beginning of a Pandemic: China's Response to the Emergence of COVID-19*, 14 J. INFECTION & PUB. HEALTH 348, 350 (2021) (providing a review of China's public health and political response to the COVID-19 pandemic). The U.S.'s response to COVID-19 included a mixture of federal and state action. See, e.g., Justus Myers & Philip A. Wallach, *The Federal Government's Coronavirus Response—Public Health Timeline*, BROOKINGS INST. (Mar. 31, 2020), <https://www.brookings.edu/articles/the-federal-governments-coronavirus-actions-and-failures-timeline-and-themes/> [<https://perma.cc/H33W-JS83>] (providing an overview of the initial federal response to COVID-19); Paul C. Erwin, Kenneth W. Muecke & Ross C. Brownson, *Different Response to COVID-19 in Four US States: Washington, New York, Missouri, and Alabama*, 111 AM. J. PUB. HEALTH 647, 648–49 (2021), <https://pmc.ncbi.nlm.nih.gov/articles/PMC7958009/> [<https://perma.cc/K4CL-G2W3>] (comparing the responses of Washington, New York, Missouri, and Alabama to COVID-19 through a review of when certain measures, like a mask mandate, were passed, if at all).

³ See Ian King, Debby Wu & Demetrios Pogkas, *How a Chip Shortage Snarled Everything from Phones to Cars*, BLOOMBERG (Mar. 29, 2021), <https://www.bloomberg.com/graphics/2021-semiconductors-chips-shortage/> [<https://perma.cc/MQ6J-LTCW>] (describing how social distancing standards and an unexpected increase in semiconductor demand led to a supply chain crunch); Debby Wu, Sohee Kim & Ian King, *Why the World Is Short of Computer Chips, and Why It Matters*, BLOOMBERG (Feb. 17, 2021), <https://www.bloomberg.com/news/articles/2021-02-17/the-world-is-short-of-computer-chips-here-s-why-quicktake> [<https://perma.cc/DR2D-FW7A>] (describing the effects that a semiconductor shortage had on end-user products and how everyday products such as vehicles and video game consoles rose dramatically in price).

⁴ See, e.g., Catie Edmondson, *Senate Passes \$280 Billion Industrial Policy Bill to Counter China*, N.Y. TIMES (July 27, 2022), <https://www.nytimes.com/2022/07/27/us/politics/senate-chips-china.html> [<https://perma.cc/2EQ5-HLRB>] (describing how the CHIPS Act is aimed at curbing Chinese encroachment in a variety of advanced technology industries, all of which rely on advanced semiconductors).

⁵ See Shiona McCallum, *What Are Semiconductors and How Are They Used?*, BBC (Aug. 3, 2023), <https://www.bbc.com/news/technology-66394406> [<https://perma.cc/ZU74-G8MZ>] (explaining that a semiconductor is made of microscopic fragments of silicon and other materials). Prior to the advent of the semiconductor, large and heavy analog vacuum tubes transferred digital information. See *Integrated Circuit*, ENCYC. BRITANNICA, <https://www.britannica.com/technology/integrated-circuit> [<https://perma.cc/24NZ-KTAL>] (providing a broad overview of integrated circuits, or semiconductors). A semiconductor, also known as a chip or integrated circuit, shrinks analog vacuum tubes into a microscopic solid-state device. See *id.* (explaining how a solid-state device can perform similar operations as a vacuum tube but is more reliable and cost-effective). A semiconductor is an amalgam of electrical components called transistors, each of which can control the flow of electricity and by extension, the flow of digital information. See *id.* (explaining how an integrated circuit contains hundreds of thousands

domestic borders and incorporate all of North America if the United States wants to curb any potential semiconductor shortages in the future.⁶

The Biden Administration understood this, evidenced by the signing of the Creating Helpful Incentives to Produce Semiconductors For America Act (CHIPS Act), and it seems the Trump Administration does as well.⁷ Since assuming office, President Trump announced a five hundred billion dollar, private-sector led investment plan into artificial intelligence infrastructure.⁸ In a speech to House Republicans, the President said that foreign semiconductor companies “needed an incentive” to establish factories in the United States.⁹

of transistors in a miniscule space). In 1958, Texas Instruments and Fairchild Semiconductor Corporation discovered a way to combine thousands of transistors together, creating the first semiconductor and paving the way for the information revolution. *See id.* (explaining the advent of the semiconductor); *see also* Peter F. Drucker, *Beyond the Information Revolution*, THE ATLANTIC (Oct. 1999), <https://www.theatlantic.com/magazine/archive/1999/10/beyond-the-information-revolution/304658/> [<https://perma.cc/K7QE-UG5T>] (providing an outlook on the impact of the information revolution and what may come in the twenty-first century). *See, e.g.,* Sarah A. Binder, *Going Nowhere: A Gridlocked Congress*, BROOKINGS INST. (Dec. 1, 2000), <https://www.brookings.edu/articles/going-nowhere-a-gridlocked-congress/> [<https://perma.cc/F2ZB-F289>] (describing how partisan lines, the filibuster, and policy distance between both houses of Congress led to congressional gridlock in the 2000s). Legislative intransigence has arguably been heightened in today’s political climate, making attempts at bipartisan legislating difficult. *See* Gabriele Gratton, Marc Jacob & Barton Lee, *Is a Gridlocked Congress Causing More Polarization?*, PROMARKET, <https://www.promarket.org/2024/06/26/is-a-gridlocked-congress-causing-more-polarization/> [<https://perma.cc/MT4H-D5BS>] (explaining how congressional gridlock today is more polarizing than in recent decades).

⁶ *See Joint Statement on the Launch of the North American Semiconductor Conference and North American Ministerial Committee on Economic Competitiveness*, WHITE HOUSE (May 24, 2023), <https://www.whitehouse.gov/briefing-room/statements-releases/2023/05/24/joint-statement-on-the-launch-of-the-north-american-semiconductor-conference-and-north-american-ministerial-committee-on-economic-competitiveness/> [<https://perma.cc/SVK9-68BM>] (describing how the United States, Mexico, and Canada collaborated to establish international dialogue around semiconductor investment in North America). As the United States, Mexico, and Canada have begun tri-lateral communication on semiconductor investment, discussions have focused on Taiwan Semiconductor Manufacturing (TSMC) investing in Arizona. *See id.* (explaining how strengthening cooperation in North American semiconductor investment involves the construction of fabrication facilities that support TSMC’s fabrication plants in Arizona and other states).

⁷ *See* Samuel K. Moore, *U.S. Passes Landmark Act to Fund Semiconductor Manufacturing: CHIPS and Science Act of 2022 Provides Billions for New Fabs and Other Incentives*, IEEE SPECTRUM, <https://spectrum.ieee.org/chips-act-of-2022> [<https://perma.cc/LL3F-2XHA>] (Mar. 22, 2024) (explaining how the CHIPS Act will allocate funds for semiconductor investment in the United States).

⁸ *See* Steve Holland, *Trump Announces Private-Sector \$500 Billion Investment in AI Infrastructure*, REUTERS (Jan. 21, 2025), <https://www.reuters.com/technology/artificial-intelligence/trump-announce-private-sector-ai-infrastructure-investment-cbs-reports-2025-01-21/> [<https://perma.cc/97QW-45RV>] (describing how large American corporations, including Oracle and OpenAI, have partnered to create a joint venture called “Stargate” to provide critical infrastructure funding for artificial intelligence).

⁹ *See* Anton Shilov, *Trump to Impose 25% to 100% Tariffs on Taiwan-Made Chips, Impacting TSMC*, TOM’S HARDWARE (Jan. 27, 2025), <https://www.tomshardware.com/tech-industry/trump-to-impose-25-percent-100-percent-tariffs-on-taiwan-made-chips-impacting-tsmc> [<https://perma.cc/3PXM->

As consumer and enterprise demand for products from nascent industries including artificial intelligence increases, limiting supply chain shocks in the semiconductor industry will only become more important.¹⁰

However, the Trump Administration's modern mercantilist strategy of threatening tariffs to force other actors to enact economic policies more favorable to the United States will not be effective.¹¹ In the same speech to House Republicans, President Trump argued that threatening one hundred percent tariffs on foreign semiconductor producers would be the incentive to bring production to the United States.¹² While that may induce cooperation from foreign firms in the short-term, such a strategy fails to build any sort of long-term structural relationship that close economic partners require.¹³ Additionally, the Trump Administration's aggressive approach does not consider the important national security benefits that a closer partnership with foreign semiconductor manufacturers would provide.¹⁴ This Note argues for a path that ensures semiconductor infrastructure is deeply integrated with the U.S. economy and builds off the Biden Administration's work.¹⁵

Considering the significant challenges faced by the United States as a result of the semiconductor shortage, this Note builds on the efforts already made by the United States, Mexico, and Canada to create a more robust and localized semiconductor manufacturing regime.¹⁶ It analyzes the United States-

S3YN] (describing how President Trump claims the global semiconductor industry "left us" and went to Taiwan).

¹⁰ See King et al., *supra* note 3 (describing how by 2030, 45% of newly manufactured automobiles will rely on semiconductors to operate); *Semiconductors*, NAT'L INST. OF STANDARDS & TECH., <https://www.nist.gov/semiconductors> [<https://perma.cc/28TS-GB4P>] (providing an overview of the importance of semiconductors in a modern economy and explaining the steps that the U.S. government is taking to ensure supply is maintained in the future).

¹¹ See Michael Gasiorek & Nicolo Tamperi, *The Bazooka Diplomacy of Trump's Tariffs*, VOXEU CEPR (Feb. 15, 2025), <https://cepr.org/voxeu/columns/bazooka-diplomacy-trumps-tariffs> [<https://perma.cc/EJ6G-EHCY>] (describing how reactive and unfocused President Trump's economic policy has appeared in the first thirty days of his second presidential term).

¹² See Shilov, *supra* note 9 (describing how President Trump is looking to establish tariffs against allies).

¹³ See Ingo Borchert & Mattia Di Ubaldo, *Trade Preferences Need Predictability*, VOXEU CEPR (Jan. 11, 2021), <https://cepr.org/voxeu/columns/trade-preferences-need-predictability> [<https://perma.cc/FFS3-WGPN>] (reviewing EU trade preferences and concluding that in the face of trade policy uncertainty, trade flows are often adversely affected).

¹⁴ See, e.g., DAN DAY, AM. SEC. PROJECT, FREE TRADE AGREEMENTS AND NATIONAL SECURITY: FIVE KEY ISSUES 2–4 (2014), <http://www.jstor.com/stable/resrep06003> [<https://perma.cc/K6C9-VZG9>] (describing how free trade agreements promote national security by signaling commitments to allies, promoting global stability, and enhancing a country's global influence, among other benefits).

¹⁵ See *infra* notes 23–214 and accompanying text.

¹⁶ See *Semiconductor Conference & Committee Joint Statement*, *supra* note 6 (providing a high-level commitment between the United States, Mexico, and Canada to collaborate on semiconductor infrastructure and development).

Mexico-Canada Agreement (USMCA) and argues for the trade agreement to govern semiconductor manufacturing in North America through a new semiconductor-specific chapter within it.¹⁷ Using the North American Free Trade Agreement (NAFTA), the USMCA, and other examples from investment mechanisms as the framework, this Note reviews key elements that could be included in a provision centered on semiconductor investment.¹⁸ These include how the *maquiladora* system can be incorporated in a modernized regime that includes the USMCA's labor reforms, how international semiconductor arbitration may bear out under the proposed semiconductor chapter of the USMCA, and why the USMCA governing semiconductor manufacturing is a national security issue.¹⁹

Part I of this Note begins with an overview of the history of the semiconductor industry and a review of NAFTA, the USMCA, and the *maquiladora* system.²⁰ Part II of this Note explores possible provisions that could be included in the USMCA following the treaty's review period in 2026.²¹ Part III of this Note concludes by arguing for the inclusion of semiconductor-specific provisions within the USMCA to facilitate semiconductor manufacturing and ensure that the industry is protected as an important national security interest.²²

I. TRADE PRECEDENT AND PROCESSORS: THE ROAD TO SILICON SOVEREIGNTY

To better understand the intricacies of the semiconductor industry and North American investment, it is important to review the history of each.²³ This Part chronicles the development of the global semiconductor industry, international investment between the United States and Mexico, and invest-

¹⁷ See United States-Mexico-Canada Agreement, Dec. 10, 2019, Pub. L. No. 116-113, 134 Stat. 11 (2020) [hereinafter USMCA]; Akayla Gardner & Josh Wingrove, *President Biden Really Wants to Boost Chip Manufacturing and He Needs Mexico's Help to Do It*, FORTUNE (Jan. 10, 2023), <https://fortune.com/2023/01/10/biden-chip-manufacturing-mexico/> [<https://perma.cc/VE4A-DD3H>] (highlighting the United State's interest in creating a robust semiconductor manufacturing partnership with Mexico).

¹⁸ See *infra* notes 29–214 and accompanying text.

¹⁹ See *infra* notes 29–214 and accompanying text.

²⁰ See *infra* notes 29–150 and accompanying text.

²¹ See *infra* notes 151–181 and accompanying text.

²² See *infra* notes 182–214 and accompanying text.

²³ See ANTONIO VARAS, RAJ VARADARAJAN, JIMMY GOODRICH & FALAN YINUG, BOS. CONSULTING GRP. & SEMICONDUCTOR INDUS. ASS'N, STRENGTHENING THE GLOBAL SEMICONDUCTOR SUPPLY CHAIN IN AN UNCERTAIN ERA 40–44 (Apr. 2021), https://www.semiconductors.org/wp-content/uploads/2021/05/BCG-x-SIA-Strengthening-the-Global-Semiconductor-Value-Chain-April-2021_1.pdf [<https://perma.cc/Z36B-6MJ8>] (providing examples of historical semiconductor supply chain disruptions, including natural disasters and trade decreases, and discussing how addressing future risks must consider past failures).

ment arbitration abroad.²⁴ Section A of this Part discusses TSMC to illustrate its unique nature in global economics and the semiconductor industry.²⁵ Section B of this Part discusses the United States' own history with semiconductor manufacturing.²⁶ Section C of this Part provides an overview of the *maquiladora* system employed by firms from the United States to erect manufacturing facilities in Mexico.²⁷ And finally, Section D investigates investment provisions from NAFTA and the USMCA.²⁸

A. Taiwan Semiconductor Manufacturing Company

The global semiconductor industry's health relies on a single firm, TSMC, and its majority share of the global semiconductor fabrication market.²⁹ Out of this majority market share, TSMC produces nearly every single advanced processor used in the world—approximately ninety-two percent of the planet's manufacturing capacity for advanced semiconductors.³⁰ Despite

²⁴ See *infra* notes 29–150 and accompanying text.

²⁵ See *infra* notes 29–39 and accompanying text.

²⁶ See *infra* notes 40–68 and accompanying text.

²⁷ See *infra* notes 69–90 and accompanying text.

²⁸ See *infra* notes 91–150 and accompanying text.

²⁹ See Shu-Ching Jean Chen, *Meet Taiwan's Little-Known but Elite Semiconductor Makers*, FORBES (Aug. 28, 2023), <https://www.forbes.com/sites/shuchingjeanchen/2023/08/28/meet-taiwans-little-known-but-elite-semiconductor-makers/?sh=4f4f5fd12908> [<https://perma.cc/Y3SG-SBDX>] (describing how TSMC rose to dominance and achieved a hold on the fabrication of approximately 90% of the advanced semi-conductor chips used today); Chris Miller, *The Chips That Make Taiwan the Center of the World*, TIME (Oct. 5, 2022), <https://time.com/6219318/tsmc-taiwan-the-center-of-the-world/> [<https://perma.cc/C2PK-G7BU>] (describing how TSMC controls more than 50% of the global market for all semi-conductor chip manufacturing); Yang Jie, Stephanie Yang & Asa Fitch, *The World Relies on One Chip Maker in Taiwan, Leaving Everyone Vulnerable*, WALL ST. J. (June 19, 2021), <https://www.wsj.com/articles/the-world-relies-on-one-chip-maker-in-taiwan-leaving-everyone-vulnerable-11624075400> [<https://perma.cc/2LJ6-4BXX>] (describing how global reliance on TSMC contributed to a production glut that adversely affected consumers, industries, and local economies around the world).

³⁰ See David Sacks, *Will China's Reliance on Taiwanese Chips Prevent a War?*, COUNCIL ON FOREIGN RELS. (July 6, 2023), <https://www.cfr.org/blog/will-chinas-reliance-taiwanese-chips-prevent-war> [<https://perma.cc/24KM-2WV5>] (describing how Chinese-American-Taiwanese tensions revolve around the semiconductor industry and TSMC's role in the geopolitical tension); Jie et al., *supra* note 29 (describing how the majority of smartphone processors in use today utilize TSMC semiconductors); Bo-jiun Jing et al., *Taiwan Holds All the Chips in US-China Tech Showdown*, EASTASIAFORUM (Dec. 3, 2022), <https://www.eastasiaforum.org/2022/12/03/taiwan-holds-all-the-chips-in-us-china-tech-showdown/> [<https://perma.cc/C9CB-ZX67>] (describing the importance of Taiwan's semi-conductor industry for international technology sectors); Jeff Sommer, *How Silicon Chips Rule the World*, N.Y. TIMES (Sept. 9, 2022), <https://www.nytimes.com/2022/09/09/business/silicon-markets-china-taiwan.html> [<https://perma.cc/T9Q6-FEHL>] (providing an overview of how essential semiconductor silicon chips are in the global economy). What makes TSMC an essential firm for the global economy is its advanced semiconductor manufacturing capabilities. See Sommer, *supra* (explaining how TSMC manufactures more than 90% of the advanced semiconductors in use today while domestic American firms lack the capability to manufacture the same type of advanced semiconductors). An advanced semiconductor gains its name from its capabilities relative to its size—the smaller the chip, the more

TSMC's significant market domination, however, the firm does not sell any of its products to consumers directly.³¹

In 1984, American technology firms with costly in-house fabrication capabilities dominated the international semiconductor market.³² At the same time,

advanced it is. *See id.* (explaining how smaller semiconductors allow more of them to be utilized within a product, which in turn allows that product to utilize more computing power). For example, TSMC can produce chips with a size of five nanometers (a millionth of a millimeter) and they are the chip of choice for organizations from the U.S. military to Apple. *See id.* (describing the utility of TSMC semiconductors). Since 2019, TSMC has been developing semiconductors as small as two nanometers, with production beginning in 2024. *See* Hideaki Ryugen, *TSMC to Make Cutting-Edge 2-nm Chips at New Plant in Southern Taiwan*, NIKKEIASIA, (Aug. 10, 2023), <https://asia.nikkei.com/Business/Tech/Semiconductors/TSMC-to-make-cutting-edge-2-nm-chips-at-new-plant-in-southern-Taiwan> [<https://perma.cc/S8FY-MKMG>] (explaining how production of TSMC's most recent semiconductors began in 2024).

³¹ *See* Jason Hsu, *What the World's Most Important Company Must Do*, PROJECT SYNDICATE (Dec. 15, 2022), <https://www.project-syndicate.org/commentary/taiwan-tsmc-must-balance-diversification-with-deterrence-by-jason-hsu-2022-12> [<https://perma.cc/6ECQ-RLQ3>] (describing TSMC as an indispensable company that corporations and consumers rely on, in part because of TSMC's unique manufacturing capabilities); Mark Liu, *Taiwan and the Foundry Model*, 4 NATURE ELECS. 318, 318–20 (2021) (providing the background for why the foundry model provided the necessary backdrop for TSMC to grow). When Dr. Mark Liu, the former Chairman of TSMC, developed the foundry model, Taiwan already had an established semiconductor industry, but the industry lacked design and product development capacities. *See id.*; *see also* TSMC Announces Dr. Mark Liu Not to Participate in Next Board of Directors Election, TSMC (Dec. 19, 2023), <https://pr.tsmc.com/english/news/3095> [<https://perma.cc/UX2N-BNNN>]. The foundry model allowed Taiwan to leverage its competitive advantage in manufacturing and engineering while leaving development to other firms. *See* Liu, *supra* (explaining the reasons why Taiwan decided to make semiconductor manufacturing a matter of national interest).

³² *See* Gregory Arcuri & Samantha Lu, *Taiwan's Semiconductor Dominance: Implications for Cross-Strait Relations and the Prospect of Forceful Unification*, CTR. FOR STRATEGIC & INT'L STUD. (Mar. 22, 2022), <https://www.csis.org/blogs/perspectives-innovation/taiwans-semiconductor-dominance-implications-cross-strait-relations> [<https://perma.cc/7NF9-SN9T>] (explaining how Intel, Texas Instruments, and other American companies controlled the semiconductor industry in the mid-1980s). In the late 1970s, international firms began to gain semiconductor market share because American firms were increasingly focused on creating large and unwieldy analog semiconductor precursors, instead of attempting to develop smaller models. *See* Charlie Campbell, *Inside the Taiwan Firm That Makes the World's Tech Run*, TIME (Oct. 1, 2021), <https://time.com/6102879/semiconductor-chip-shortage-tsmc/> [<https://perma.cc/H76T-SGSG>] (charting the history of TSMC's rise globally). For example, the technology that controlled Apollo 11's lunar mission in 1969 included thousands of semiconductors which weighed approximately seventy pounds. *Id.* By the mid-1980s, international semiconductor firms were creating more advanced chips at a faster pace than American stalwarts. *See* David E. Sanger, *Pushing America Out of Chips*, N.Y. TIMES (June 16, 1985), <https://www.nytimes.com/1985/06/16/business/pushing-america-out-of-chips.html> [<https://perma.cc/GL75-MS5W>] (describing how international firms leapfrogged American firms in driving semiconductor demand by the mid-1980s); *see also* Michael Schrage, *Hard Times Descend on Silicon Valley*, WASH. POST (Apr. 28, 1985), <https://www.washingtonpost.com/archive/business/1985/04/28/hard-times-descend-on-silicon-valley/9d80e3f4-9b6b-45e3-ac73-025e6c524249/> [<https://perma.cc/FDR8-GC6C>] (describing the 1985 semiconductor industry crash for American semiconductor producers); *1985 Semiconductor Slump Isn't Over Yet, Intel Corp. Says*, CHI. TRIB. (Aug. 9, 2021), <https://www.chicagotribune.com/1986/02/17/1985-semiconductor-slump-isnt-over-yet-intel-corp-says/> [<https://perma.cc/U72E-CQNB>] (Aug. 9, 2021) (describing how the tumult American semiconductor firms experienced in 1985 continued through

Taiwan recognized that its own semiconductor designs were deficient when compared to the competition.³³ Attempting to exploit the market inefficiencies of American firms, the Taiwanese government directed Morris Chang, the founder of TSMC, to propose a business model for a new type of semiconductor firm in 1985.³⁴ The state recognized the exorbitant technologic and financial costs associated with quality semiconductor engineering and committed to injecting the new entity with public funds to foster international competitiveness.³⁵ Chang settled on the foundry model, a method that incorporated no proprietary semiconductor designs and instead fabricated the designs of other firms.³⁶ The Taiwanese government accepted the proposal and invested nearly half of the capital needed to create TSMC, the world's first foundry model semiconductor firm.³⁷

1986). By 1985, American firms held only 8% of the market for large storage semiconductors. See Sanger, *supra* (explaining the market dynamics of the semiconductor industry prior to TSMC). At the same time, companies like Intel were experiencing their largest decrease in order volume in over a decade. See Sanger, *supra* (explaining how American semiconductor firms were confronting a market downturn).

³³ See Liu, *supra* note 31, at 318–19 (explaining how the Taiwanese government invested heavily in the burgeoning semiconductor industry); Meng-Fan Chang et al., *The Role of Government Policy in the Building of a Global Semiconductor Industry*, 4 NATURE ELECS. 230, 232 (explaining how Taiwan's government supported the semiconductor industry and financed large commercial endeavors that paved the way for the state's current industry domination). In 1974, during the global recession, Taiwan established the Electronics Industrial Research Centre of the Industrial Technology Research Institute (ITRI-ERSO). See Chang et al., *supra*, at 230) (explaining the origins of Taiwan's state-supported semiconductor industry). ITRI-ERSO recruited engineers to build out Taiwan's semiconductor industry, and by 1976, the program fabricated its first semiconductor. *Id.* at 231. The Taiwanese government continued to invest heavily in ITRI-ERSO and began spinning off unique corporate entities such as United Microelectronics Corporation. *Id.*

³⁴ Liu, *supra* note 31 (explaining how the Taiwanese government charged Morris Chang with creating a new model for a semiconductor manufacturing firm); Chang et al., *supra* note 33 (explaining how Morris Chang became the architect of the foundry model); *Taiwan and the Global Electronics Industry*, *supra* note 33 (explaining how Morris Chang grew TSMC). Morris Chang moved to the United States from Taiwan to work at Texas Instruments in 1955. See Liu, *supra* note 31, at 318–19. In 1985, after becoming the head of Texas Instruments's semiconductor business, he returned to Taiwan to become the President of the ITRI-ERSO. *Id.* Immediately upon his arrival, he began developing a new semiconductor firm that ITRI-ERSO could support and most importantly, could compete in the international market. *Id.* In response, Chang proposed to leverage Taiwan's efficient fabrication plants and engineers and fabricate the designs that other firms create. *Id.* The model is also known as the "pure-play" model. See *id.* (describing how pure-play semiconductor firm models are dedicated to manufacturing).

³⁵ See Liu, *supra* note 31, at 318 (explaining that the Taiwanese government knew the state would have to support any large-scale business endeavor to ensure international competitiveness).

³⁶ See *id.* (describing how the foundry model revolutionized the semiconductor industry because major firms previously fabricated their own designs in-house through a vertically integrated commercial structure); Chang et al., *supra* note 33, at 232 (describing how TSMC was part of the ITRI-ERSO prior to becoming its own independent firm in 1987).

³⁷ See Liu, *supra* note 31, at 318–19; Jess Macy Yu, *TSMC's Chang, Known as Father of Taiwan's Chip Industry, to Retire*, REUTERS (Oct. 7, 2017), <https://www.reuters.com/article/idUSKCN1C70NN> [https://perma.cc/G5CL-TGE4] (recounting Morris Chang's career upon his retirement).

The contemporaneous rise of Silicon Valley startups that did not have semiconductor fabrication capacity, such as Qualcomm, gave TSMC immediate customers.³⁸ The firm's reputation grew and today, TSMC is an essential stakeholder in the "foundry-fabless" semiconductor system and indeed, is nearly the entire system itself.³⁹

B. Semiconductors and the United States

In the United States, the once dominant in-house fabrication model quickly eroded following the advent of TSMC's foundry model.⁴⁰ American-based firms saw value in relying on an expert third-party to fabricate their own chip designs because building semiconductors requires vast amounts of capital and

Notably, the Taiwanese government did not become the majority shareholder in TSMC. *See* Liu, *supra* note 31, at 318–19. The government did not want international investors and customers to believe that potential political instability or economic decline following the rapid rise of East-Asian economies would threaten the firm. Young Whan Kihl, *East Asia's Rise to Economic Prominence: Aspects of the Political Economy of Development*, 11 *ASIAN PERSP.* 248, 252–54 (1987) (providing the reasons for the rapid rise of East-Asian economies through the 1980's). Thus, the state Taiwan invested 48% of the necessary capital to create TSMC and required the firm to raise the remaining 52% through international investment. *See* Liu, *supra* note 31, at 319 (explaining the Taiwanese government's approach to supporting the budding firm).

³⁸ *See* Mark Liu, *Taiwan and the Foundry Model*, 4 *NATURE ELECS.* 318, 319 (2021). Prior to TSMC and the foundry-model, Silicon Valley firms focused on developing products that relied on prefabricated semiconductors from existing American semiconductor firms. *See id.* (explaining how Silicon Valley startups were reliant on industry-leading domestic firms with in-house semiconductor fabrication units). TSMC, however, offered these firms an ability to use their own designs in their own products while reducing the vast overhead costs of semiconductor fabrication. *See id.* (describing TSMC's competitive advantage).

³⁹ *See id.* (describing TSMC's impact on the semiconductor industry through 2019). The model's importance is founded in the ability for the firms without fabrication capabilities to essentially out-source fabrication of their designs while retaining high-quality fabrication. *See id.* (explaining how fabless firms grew their revenue share by over 20% from 2000 to 2018).

⁴⁰ *See, e.g.,* MING-JER CHEN & JIN LEONG, *NVIDIA AND THE GREAT EAST-WEST SEMICONDUCTOR GAME* (Univ. of Va. Darden Bus. Publ'g 2022), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4085010 [<https://perma.cc/9SZN-AU42>] (recounting global competition between western and eastern semiconductor firms following the COVID-19 pandemic); Darren Fonda, *How Global Conflict Led to a Surprising Plan to Make Apple Chips in a Desert*, *BARRON'S* (Oct. 15, 2023), <https://www.barrons.com/articles/apple-computer-chips-taiwan-trade-geopolitics-1605f116> [<https://perma.cc/3SJG-DXL7>] (describing the strong partnership between Apple and TSMC); Willy Shih, *Why Are Automotive Chips Still in Short Supply?*, *FORBES* (Nov. 20, 2022), <https://www.forbes.com/sites/willyshih/2022/11/20/why-are-automotive-chips-still-in-short-supply/> [<https://perma.cc/SGJ2-YMW4>] (describing how the automotive industry is directly reliant on semiconductors); George Calhoun, *The U.S. Still Dominates in Semiconductors; China Is Vulnerable (Pt 2)*, *FORBES* (Oct. 11, 2021), <https://www.forbes.com/sites/georgecalhoun/2021/10/11/the-us-still-dominates-in-semiconductors-china-is-vulnerable-pt-2/> [<https://perma.cc/A5Y3-BYET>] (describing how while the United States dominates the international semiconductor market, domestic firms' inability to fabricate their own designs poses a threat to market share).

large, expensive facilities to maintain.⁴¹ Since TSMC's foray into the market, American semiconductor firms have largely transitioned from vertically integrated companies that fabricate their own semiconductors to fabrication-less (fabless) firms that focus on research, design, and development.⁴² One reason for this transition is the significant increase in firm-wide value and capital availability that fabless semiconductor firms enjoy over their foundry counterparts.⁴³

Nvidia, for example, is the most valuable semiconductor firm and the third-most valuable firm in the world.⁴⁴ Unlike TSMC, the firm focuses on developing and selling its own designs direct-to-consumer or to other companies to use in their own products.⁴⁵ Today, the firm is on the forefront of de-

⁴¹ See ANTONIO VARAS, RAJ VARADARAJAN, JIMMY GOODRICH & FALAN YINUG, SEMICONDUCTOR INDUS. ASS'N & BOS. CONSULTING GRP., GOVERNMENT INCENTIVES AND US COMPETITIVENESS IN SEMICONDUCTOR MANUFACTURING 1 (Sept. 2020), <https://www.semiconductors.org/wp-content/uploads/2020/09/Government-Incentives-and-US-Competitiveness-in-Semiconductor-Manufacturing-Sep-2020.pdf> [<https://perma.cc/P4TG-4U6V>] (describing how constructing a new facility where semiconductors are fabricated costs 30% more in the United States than in Taiwan).

⁴² See CHEN & LEONG, *supra* note 40, at 2 (explaining how American firms saw reliance on the fabless model as a way to cut large infrastructure costs from their bottom line and focus on chip development rather than manufacturing). In the early 1980s, start-up firms from Silicon Valley began to create a different model than a vertically integrated manufacturer. By the mid-2000s, firms like Nvidia and Qualcomm became household names in large part because of the flexibility that the fabless model provides. See *id.*

⁴³ See Calhoun, *supra* note 40, at 10–12 (explaining how the companies adopting the fabless model enjoy an enterprise value 40% greater than their foundry counterparts); see also *Enterprise Value (EV)*, CFI, <https://corporatefinanceinstitute.com/resources/valuation/what-is-enterprise-value-ev/> [<https://perma.cc/4VYC-25JE>] (explaining that a firm's enterprise value is a measure of market capitalization and debt less cash, effectively indicating a firm's theoretical price). Additionally, fabless firms enjoy a higher price to sales ratio than that of their foundry counterparts, a figure that represents the enterprise value created per dollar of sales, than foundry firms. See Calhoun, *supra* note 40, at 10–11. Moreover, domestic firm valuation is an effective measure of geopolitical power in a globalized industry. See *id.* at 12 (recalling how Huawei's smartphone sales market share dropped from over 50% to 8% because of the U.S.'s trade embargo on its semiconductor).

⁴⁴ See Ryan Vlastelica, *\$1.72 Trillion AI Chip Giant Nvidia Has Rocketed in Value So Fast It's About to Pass Amazon as the 4th-Most Valuable U.S. Company*, FORTUNE (Feb. 9, 2024), <https://fortune.com/2024/02/09/how-valuable-nvidia-amazon-billionaire-jensen-huang/> [<https://perma.cc/TU9V-G9TY>] (providing a high-level explanation of why Nvidia is so valuable). Nvidia was founded in 1993 by Chris Malachowsky, Curtis Priem, and Jen-Hsun Huang, in San Jose, California. See Aaron Tilley, *The New Intel: How Nvidia Went from Powering Video Games to Revolutionizing Artificial Intelligence*, FORBES (Nov. 30, 2016), <https://www.forbes.com/sites/aarontilley/2016/11/30/nvidia-deep-learning-ai-intel/?sh=64c4dabc7ff1> [<https://perma.cc/LZ5X-BVTZ>] (providing an overview of Nvidia's history). As of March 2025, Nvidia's market capitalization stood at \$3.19 trillion. *Nvidia Market Cap 2010–2025*, MACROTRENDS, <https://www.macrotrends.net/stocks/charts/NVDA/nvidia-market-cap> [<https://perma.cc/46PE-AUA7>] (Mar. 26, 2025).

⁴⁵ CHEN & LEONG, *supra* note 40, at 4; Noel Randewich, *Nvidia's Stock Market Value on Verge of Overtaking Amazon*, YAHOOFINANCE! (Feb. 7, 2024), <https://finance.yahoo.com/news/nvidias-stock-market-value-verge-190519685.html> [<https://perma.cc/453W-ZSBL>] (providing an overview of the reasons for Nvidia's high valuation). Nvidia's founders predicted that graphics-based computing would become ubiquitous and to get ahead of the market, the firm focused on creating stand-alone GPUs that could plug into a computer and dramatically increase graphic processing performance. See

signing AI-focused graphics processing units (GPUs).⁴⁶ These high-powered GPUs, however, are all powered by TSMC semiconductors, representing incredible reliance on the foundry model despite being the most valuable firm in the entire semiconductor industry.⁴⁷

Intel, a veteran domestic semiconductor firm, embraces a slightly different model than Nvidia and continues designing and fabricating its own semiconductors.⁴⁸ Like TSMC, Intel is capable of fabricating advanced semiconductors, but has consistently trailed the market benchmark for over a decade.⁴⁹ Moreover, despite being vertically integrated, Intel has purchased approximately fourteen billion dollars' worth of TSMC's advanced chips over the next

CHEN & LEONG, *supra* note 40, at 4. Nvidia's products were so advanced that they were eventually able to secure contracts with organizations like Microsoft and Sony to develop GPUs for Xbox and PlayStation video game systems. *Id.* This is just one example of Nvidia's wholesale dominance of computer processing space. *Id.*

⁴⁶ See James Vincent, *Nvidia Reveals H100 GPU for AI and Teases 'World's Fastest AI Supercomputer'*, THE VERGE (Mar. 22, 2022), <https://www.theverge.com/2022/3/22/22989182/nvidia-ai-hopper-architecture-h100-gpu-eos-supercomputer> [<https://perma.cc/36C3-U4BX>] (describing how the H100 GPU—a GPU capable of performing complex tasks that would take weeks with other GPUs, in days—contains eighty billion transistors and is the most advanced GPU in the world); Madhumita Murgia et al., *Saudi Arabia and UAE Race to Buy Nvidia Chips to Power AI Ambitions*, FIN. TIMES (Aug. 14, 2023), <https://www.ft.com/content/c93d2a76-16f3-4585-af61-86667c5090ba> [<https://perma.cc/X56Q-DD6R>] (describing how Saudia Arabia alone has purchased three thousand H100 GPUs for King Abdullah University's AI labs). Moreover, Nvidia is planning on shipping an H200 GPU in the second quarter of 2024. See Jacob Kastrenakes, *Nvidia Is Launching a New Must-Have AI Chip—as Customers Still Scramble for Its Last One*, THE VERGE (Nov. 13, 2023), <https://www.theverge.com/2023/11/13/23958823/nvidia-h200-ai-gpu-announced-specs-release-date> [<https://perma.cc/8HNV-FCYV>] (providing an overview of the Nvidia H200 GPU). Today, the firm has been supplying high-powered, AI-focused GPUs that power products including OpenAI's GPT-3 system and Meta's Metaverse project. See Vincent, *supra*.

⁴⁷ See Lisa Wang, *TSMC Rallies on Deeper Nvidia Partnership*, TAIPEI TIMES (June 3, 2023), <https://www.taipeitimes.com/News/biz/archives/2023/06/03/2003800880> [<https://perma.cc/3QK6-SDDX>] (describing how Nvidia partnered with TSMC to create the H100 GPU with TSMC's four nanometer semiconductors); Jane Lahnee Lee, *Nvidia Billionaire Jensen Huang Dines with TSMC Execs in Taiwan to Discuss the Great AI Chip Shortage*, FORTUNE (Jan. 25, 2024), <https://fortune.com/2024/01/25/nvidia-billionaire-jensen-huang-dinner-taiwan-tsmc-founder-ceo-semiconductor-ai-chips/> [<https://perma.cc/2ZYL-MYY3>] (describing how the ability of TSMC and NVIDIA to scale their semiconductor production and GPUs, respectively, is essential to emerging technologies). As a prophylactic measure, Nvidia has attempted to diversify its H100 supply-chain by utilizing multiple TSMC fabrication facilities, including a proposed facility in Arizona. See Wang, *supra*.

⁴⁸ See Steven Leibson, *Intel Clarifies Internal Foundry Model, Filled with Accountability*, FORBES (June 26, 2023), <https://www.forbes.com/sites/tiriasresearch/2023/06/26/intel-clarifies-internal-foundry-model-filled-with-accountability/?sh=1ff4dd7b3eb3> [<https://perma.cc/Q9SV-SV4H>] (explaining how Intel's internal foundry model builds on an already integrated framework to save on fabrication costs).

⁴⁹ See Cheng Ting-Fang & Yifan Yu, *How Intel Plans to Rival TSMC and Samsung as a Chip Supplier*, NIKKEI ASIA (Nov. 4, 2022), <https://asia.nikkei.com/Business/Business-Spotlight/How-Intel-plans-to-rival-TSMC-and-Samsung-as-a-chip-supplier> [<https://perma.cc/F446-Q9PC>] (explaining how Intel has decided to become a foundry as well as a vertically integrated semiconductor firm); see also CHEN & LEONG, *supra* note 40, at 4 (explaining how Intel publicly admitted that TSMC's semiconductors were “two to three generations” ahead of its own products).

year to use in its own products for enterprise personal computing clients.⁵⁰ A similar fate has befallen other legacy American chip-making firms.⁵¹

As a result of this limited domestic manufacturing capacity, semiconductor firms from the United States are reliant on TSMC to fabricate their designs at capacity.⁵² Moreover, direct-to-consumer firms like Apple are reliant on TSMC as well, with TSMC fabricating a number of Apple's proprietary semiconductor designs.⁵³ Accordingly, if anything were to affect TSMC and its manufacturing capacity, a bulk of the losses would fall on customers of products and services offered by firms like Nvidia and Apple.⁵⁴

The COVID-19 pandemic fully exposed the vulnerabilities of the foundry-fabless model.⁵⁵ The pandemic triggered a simultaneous supply chain crunch and a spike in semiconductor demand.⁵⁶ Combined with inflationary

⁵⁰ See Matthew Connatser, *Intel Will Spend \$14 Billion on Manufacturing Its New Chips at TSMC: Report*, TOM'S HARDWARE (Nov. 29, 2023), <https://www.tomshardware.com/news/intel-will-spend-14-billion-on-manufacturing-chips-at-tsmc-report> [<https://perma.cc/VRS7-9CAZ>] (explaining how and why Intel is ordering chips from TSMC).

⁵¹ See *id.* (noting how Intel relies on the high-level expertise of TSMC to produce competitive products). In 2016, ON Semiconductor absorbed Fairchild Semiconductor, a California-based company responsible for the invention of the semiconductor. *ON Semiconductor Successfully Completes Acquisition of Fairchild Semiconductor for \$2.4 Billion in Cash*, BUS. WIRE (Sept. 19, 2016), <https://www.businesswire.com/news/home/20160919005796/en/ON-Semiconductor-Successfully-Completes-Acquisition-of-Fairchild-Semiconductor-for-2.4-Billion-in-Cash> [<https://perma.cc/TC55-2W5S>].

⁵² See Yifan Yu, *Nvidia's Boom Gives TSMC a Lift but Does Less for Other Chipmakers*, NIKKEI ASIA (Sept. 1, 2023), <https://asia.nikkei.com/Business/Tech/Semiconductors/Nvidia-s-boom-gives-TSMC-a-lift-but-does-less-for-other-chipmakers> [<https://perma.cc/PS2L-C95F>] (explaining how Nvidia is reliant on TSMC to manufacture the semiconductors for its most advanced GPUs).

⁵³ See Wayne Ma, *How Apple Will Save Billions of Dollars on Chips for New iPhone*, THE INFO. (Aug. 7, 2023), <https://www.theinformation.com/articles/how-apple-will-save-billions-of-dollars-on-chips-for-new-iphone> [<https://perma.cc/ATL2-NWH9>] (describing how TSMC will fabricate Apple's next generation of proprietary semiconductor designs).

⁵⁴ See Arjun Kharpal, *How the World Went from a Semiconductor Shortage to a Major Glut*, CNBC (July 27, 2023), <https://www.cnbc.com/2023/07/28/how-the-world-went-from-a-semiconductor-shortage-to-a-major-glut.html> [<https://perma.cc/L59K-8VDZ>] (describing how a shortage in semiconductors caused production shortages in products ranging from vehicles to smartphones to gaming consoles).

⁵⁵ See Rebecca Heilwell, *Chips Are the New Oil. There Are No Reserves*, VOX (Sept. 28, 2022), <https://www.vox.com/recode/2022/9/28/23375712/chips-semiconductors-china-taiwan-conflict> [<https://perma.cc/P36S-UYZ7>] (explaining how the COVID-19 pandemic affected the semiconductor industry and subsequently affected consumers); Ian King, Debby Wu & Demetrios Pogkas, *supra* note 3 (describing how the COVID-19 pandemic caused shortages in consumer facing products across the world).

⁵⁶ See Nikhil Pachhandara, *Impact of the Global Chip Shortage and How to Prepare as the Backlog Stabilizes*, FORBES (May 19, 2022), <https://www.forbes.com/sites/forbestechcouncil/2022/05/19/impacts-of-the-global-chip-shortage-and-how-to-prepare-as-the-backlog-stabilizes/?sh=257e96eb24d7> [<https://perma.cc/96QC-WR4Q>] (describing how the semiconductor shortage began). As a result of the COVID-19 pandemic, customers experienced longer wait times and higher prices for consumer electronics, vehicles, and everyday grocery items). *Id.* For example, vehicle manufacturers halted production and by November 2021, the annual inflation for vehicles reached 14.4%. *Id.*; see also

pressure, the semiconductor shortage caused the U.S. economy to lose approximately \$240 billion in 2021 alone.⁵⁷

Following the enactment of legislation that immediately addressed the COVID-19 pandemic's economic effects, the United States addressed facets of the economy that proved especially vulnerable during the pandemic.⁵⁸ In mid-2022, Congress enacted the CHIPS Act.⁵⁹ Of the \$280 billion allocated by the CHIPS Act, \$52.7 billion is appropriated specifically through grants intended

Nami Matsuura & Ryo Mukano, *Global Chip Demand to Rise by 2nd Quarter of 2024, Experts Say*, NIKKEI ASIA (Jan. 4, 2024), <https://asia.nikkei.com/Business/Tech/Semiconductors/Global-chip-demand-to-rise-by-2nd-quarter-of-2024-experts-say> [<https://perma.cc/LPA9-LH2D>] (predicting that semiconductor demand would increase in 2024 as a result of an increase in AI development and electric vehicle manufacturing).

⁵⁷ See Omar Villafranca, *Chip Shortage Cost U.S. Economy Billions in 2021*, CBS (Jan. 28, 2022), <https://www.cbsnews.com/news/chip-shortage-cost-us-economy-billions-in-2021/> [<https://perma.cc/6FL8-RSJS>] (describing the losses the U.S. economy faced because of the COVID-19 pandemic and the subsequent semiconductor shortage). In 2021, Congress passed the American Rescue Plan, a nearly two-trillion-dollar aid package that kept families afloat during the pandemic. See Jacob Pramuk, *Biden Signs \$1.9 Trillion Covid Relief Bill, Clearing Way for Stimulus Checks, Vaccine Aid*, CNBC (Mar. 11, 2021), <https://www.cnbc.com/2021/03/11/biden-1point9-trillion-covid-relief-package-thursday-afternoon.html> [<https://perma.cc/8B7Z-LY56>] (describing how the American Rescue Plan supported individuals but fell short of addressing the root causes of the economic shock the United States experienced during the pandemic); Wendy Edelberg & Louise Sheiner, *The Macroeconomic Implications of Biden's \$1.9 Trillion Fiscal Package*, BROOKINGS INST. (Jan. 28, 2021), <https://www.brookings.edu/articles/the-macroeconomic-implications-of-bidens-1-9-trillion-fiscal-package/> [<https://perma.cc/732W-UNGR>] (describing how the American Rescue Plan provided direct payments and tax credits to support American families).

⁵⁸ See Bayley Holland, Caitlin McDuffee, Jonathon Mills & Summer Williamson, *U.S. Versus China: The Fight to Dominate the World's Semiconductor Production*, 25 CURRENTS: J. INT'L ECON. L. 104, 104 (2023) (describing the U.S.'s investments in the semiconductor manufacturing space); JOHN F. SARGENT JR. & KAREN M. SUTTER, CONG. RSCH. SERV., IF12016, SEMICONDUCTORS, CHIPS FOR AMERICA, AND APPROPRIATIONS IN THE U.S. INNOVATION AND COMPETITION ACT (Jan. 13, 2022), <https://www.congress.gov/crs-product/IF12016> [<https://perma.cc/V7BX-6HAK>] (describing the U.S.'s capacity for fabrication and citing various concerns surrounding the current domestic semiconductor manufacturing scheme); MANPREET SINGH, JOHN F. SARGENT JR. & KAREN M. SUTTER, CONG. RSCH. SERV., R47508, SEMICONDUCTORS AND THE SEMICONDUCTOR INDUSTRY (Apr. 19, 2023), <https://www.congress.gov/crs-product/R47508> [<https://perma.cc/7YP4-K2QE>] (describing the U.S.'s efforts to shore up the young North American semiconductor industry and outlining various challenges the country faces in the coming years).

⁵⁹ See Ana Swanson, *The CHIPS Act Is About More Than Chips: Here's What's in It*, N.Y. TIMES (Feb. 28, 2022), <https://www.nytimes.com/2023/02/28/business/economy/chips-act-childcare.html> [<https://perma.cc/DX7S-XA9A>] (describing the provisions of the CHIPS Act). The CHIPS Act includes a host of provisions that reflect a broad attempt at reshaping the United States' semiconductor industry. See generally CHIPS and Science Act, 15 U.S.C. §§ 4651–4659 (outlining the various investment schemes that the U.S. government intends to undergo to boost domestic semiconductor manufacturing through the CHIPS and Science Act). For example, the legislation outlines the standards for a domestic manufacturing program that is geographically diverse and flexible. See *id.* §§ 4656(d)–(f) (describing the requirements for the creation of the “Manufacturing USA Program”). Additionally, the Act outlines the establishment of a subcommittee on semiconductors in the National Science and Technology Council. See *id.* § 4656(a). (outlining the Act's semiconductor subcommittee requirements and membership).

to spur domestic semiconductor investment in manufacturing, research, and workforce development.⁶⁰

In December 2022, TSMC announced that it would increase the size of its previously announced factory investment into Arizona.⁶¹ To support TSMC's Arizona plant and encourage future investment, certain provisions of the CHIPS Act operate as a funding vehicle where various programs, including the National Semiconductor Technology Center (NSTC), partner with private entities to encourage domestic semiconductor development.⁶²

In addition to allocating funds for domestic investment, the United States has engaged in discussions about cross-border semiconductor investment with Mexico and Canada.⁶³ In 2023, at the North America Semiconductor Conference, the three states promised an open flow of information, partnerships for future training, and future investment as a basic framework for a continental

⁶⁰ See Swanson, *supra* note 59. The CHIPS Act aimed to fund research and development of semiconductors in the United States by providing grants and tax credit opportunities to semiconductor firms. See Gregory Arcuri, *The CHIPS for America Act: Why It Is Necessary and What It Does*, CSIS (Jan. 31, 2022), <https://www.csis.org/blogs/perspectives-innovation/chips-america-act-why-it-necessary-and-what-it-does> [<https://perma.cc/3LGL-CEBU>] (describing that the CHIPS Act is essential legislation because it acts as an incentive to encourage long-term domestic semiconductor investment not only through tax and other financial benefits, but also because it promotes the research and development necessary to support a sophisticated semiconductor industry).

⁶¹ See Monica Miller, *Taiwanese Chip Giant Invests \$40b in US Plant*, BBC (Dec. 6, 2022), <https://www.bbc.com/news/business-63883047> [<https://perma.cc/4A75-XYB8>] (describing how TSMC is planning on building two semiconductor fabrication facilities in Arizona); Don Clark & Ana Swanson, *T.S.M.C Is Set to Build a U.S. Chip Facility, a Win for Trump*, N.Y. TIMES (May 14, 2020), <https://www.nytimes.com/2020/05/14/technology/trump-tsmc-us-chip-facility.html> [<https://perma.cc/T8PL-53ER>] (describing how TSMC agreed to invest in the United States and build a semiconductor fabrication plant in Arizona).

⁶² See Fact Sheet: *Biden-Harris Administration Announces Over \$5 Billion from the CHIPS and Science Act for Research, Development, and Workforce*, WHITE HOUSE (Feb. 9, 2024), <https://www.whitehouse.gov/briefing-room/statements-releases/2024/02/09/fact-sheet-biden-harris-administration-announces-over-5-billion-from-the-chips-and-science-act-for-research-development-and-workforce/> [<https://perma.cc/2RNN-QNEA>] (describing how the National Semiconductor Technology Center (NSTC) is a public-private entity that finances research and development and workforce training for semiconductor fabrication). Notably, Taiwan utilized the ITRI-ERSO, an entity similar to the NSTC, in the development of its domestic semiconductor industry. See Chang et al., *supra* note 33, at 230. Like Taiwan realized decades ago, the United States is ensuring that a domestic semiconductor industry has significant state support. See WHITE HOUSE, *supra* (describing the different ways the CHIPS Act provides state-support in the semiconductor industry).

⁶³ See Catherine Osborn, *The 'Three Amigos' Talk Microchips*, FOREIGN POL'Y (Jan. 13, 2023), <https://foreignpolicy.com/2023/01/13/us-mexico-canada-summit-immigration-semiconductors/> [<https://perma.cc/R8DN-84JS>] (describing how the North American states discussed an agenda to create a semiconductor manufacturing hub in North America); Maria Verza, *U.S. Invites Mexico to Join Semiconductor Production Effort*, L.A. TIMES (Sept. 12, 2022), <https://www.latimes.com/world-nation/story/2022-09-12/us-invites-mexico-to-join-semiconductor-production-effort> [<https://perma.cc/75RA-L9FJ>] (describing how Mexico's role in a potential partnership is viewed as a commodity exporter where Mexico would supply lithium to firms in the United States).

semiconductor development regime.⁶⁴ Moreover, in 2024, Mexico grew to become the United States' largest trading partner in goods, overtaking China.⁶⁵ At the same time, the United States has remained the largest provider of foreign direct investment (FDI) inflows for Mexico, making the bilateral relationship especially important for both states.⁶⁶

In 2025, within the first month of taking office, the Trump Administration threatened Mexico with tariffs and only reneged when Mexico agreed to certain border security reforms.⁶⁷ Because of the bilateral reliance between the two countries, it is difficult to see why the Trump Administration would levy substantial tariffs on Mexico, but the policy is in line with the President's carrot-stick economic approach.⁶⁸

C. The Maquiladora System

This Section provides an overview of Mexico's appetite for FDI prior to NAFTA's implementation and outlines the *maquiladora* system and its significance in the United States-Mexico bilateral relationship.⁶⁹

Revolutionary struggles and foreign invasions rendered Mexico's political economy fragile throughout the nineteenth century, making it difficult to build

⁶⁴ See *Joint Statement on the Launch of the North American Semiconductor Conference and North American Ministerial Committee on Economic Competitiveness*, WHITE HOUSE (May 24, 2023), <https://www.whitehouse.gov/briefing-room/statements-releases/2023/05/24/joint-statement-on-the-launch-of-the-north-american-semiconductor-conference-and-north-american-ministerial-committee-on-economic-competitiveness/> [<https://perma.cc/SVK9-68BM>] (outlining the commitments made by each North American state). The commitments include robust information exchange surrounding semiconductor investment and development, academic and industry partnerships to help educate and train the budding semiconductor workforce, and investment in the development and manufacturing of semiconductors in North America. *Id.*

⁶⁵ See, e.g., Paul Wiseman, *Mexico Overtakes China as the Leading Source of Goods Imported by U.S.*, GLOBE & MAIL (Feb. 7, 2024), <https://www.theglobeandmail.com/investing/markets/commodities/YMM22/pressreleases/23911050/mexico-overtakes-china-as-the-leading-source-of-goods-imported-by-us/> [<https://perma.cc/XR8L-8WTP>] (describing how the value of goods imported from Mexico rose to \$475 billion from 2022 to 2023, while imports from China fell to \$427 billion in the same year).

⁶⁶ See *2023 Investment Climate Statements: Mexico*, U.S. DEP'T OF STATE, <https://www.state.gov/reports/2023-investment-climate-statements/mexico/> [<https://perma.cc/88DS-YCTT>] (providing a review of the Mexican investment environment). The United States accounts for approximately 35% of all FDI in Mexico, most of which is concentrated in Northern Mexico near United States border cities. *Id.*

⁶⁷ See Ana Swanson & Alan Rappeport, *Trump Whipsaws on Tariffs, Giving Mexico and Canada Reprieve*, N.Y. TIMES (Mar. 6, 2025), <https://www.nytimes.com/2025/03/06/us/politics/trump-mexico-tariffs-suspended.html> [<https://perma.cc/E6BA-GZ9B>] (noting how the Trump Administration has instituted tariff measures only to renege on them shortly).

⁶⁸ See *id.* (describing how, following a flurry of similar tariff measures, President Trump spoke with President Sheinbaum of Mexico shortly after instituting the tariffs, and their discussion led to the tariffs' withdrawal the following day).

⁶⁹ See *infra* notes 70–93 and accompanying text.

an economic plan.⁷⁰ Around the turn of the century, the hardline President Porfirio Díaz instituted a broad tariff regime and simultaneously sought foreign investment in a variety of Mexico's industrial sectors.⁷¹ The Mexican dictator was a war hero from his time serving in the Mexican-American War, but later gained executive power in a coup and created an oppressive and militarized domestic regime.⁷² In the foreign policy arena, President Díaz opened up foreign investment opportunities to firms from the United States that were entering periods of rapid industrialization, and by 1914, American companies had invested more than \$110 million in Mexico's railway system and dominated certain Mexican industries through FDI schemes.⁷³

Following the Mexican Revolution in 1920, FDI inflows from the United States declined in every sector except oil and gas.⁷⁴ A new constitution pre-

⁷⁰ See LINDA M. AGUILAR, FED. RSRV. BANK OF CHI., NAFTA: A REVIEW OF THE ISSUES 12 (1993), <https://www.chicagofed.org/-/media/publications/economic-perspectives/1993/ep-jan-feb1993-part2-aguilar-pdf.pdf> [<https://perma.cc/EFZ8-FEQ6>] (providing a review of NAFTA and the negotiations that preceded it); Graciela Marquez Colin, *The Political Economy of Mexican Protectionism, 1868–1911*, 63 J. ECON. HIST. 532, 533 (2003), <https://www.jstor.org/stable/3132450> [<https://perma.cc/LCL9-2ZRY>] (recounting that Mexico was a highly protectionist state prior to the codification of NAFTA); M. ANGELES VILLARREAL, CONG. RSCH. SERV., RL34733, NAFTA AND THE MEXICAN ECONOMY 1–3 (2010), <https://sgp.fas.org/crs/row/RL34733.pdf> [<https://perma.cc/5THD-U2GN>] (describing the reasons for why Mexico sought to enter into a free trade agreement with the United States despite its protectionist past); Kathleen Staudt, *How NAFTA Has Changed Mexico*, 117 CURRENT HIST.: LATIN AM. 43, 43–48 (2018), <https://www.jstor.org/stable/10.2307/48614318> [<https://perma.cc/HCSN-5HY7>] (providing a review of the effects NAFTA has had on the Mexican economy following implementation). See generally *Independence of Mexico*, ENCYC. BRITANNICA, <https://www.britannica.com/place/Mexico/Independence> [<https://perma.cc/3262-FSCL>] (providing a high-level overview of the revolutionary struggles Mexico experienced throughout the nineteenth century, up to the Mexican Revolution in 1910). During the nineteenth century, Mexico fought the Mexican War of Independence from 1810 to 1821, the Mexican American War from 1846 to 1848, the Reform War from 1857 to 1861, and the French Invasion and subsequent conquest from 1861 to 1867. *Id.*

⁷¹ See Colin, *supra* note 70, at 532. Through the 1870s, Mexico implemented a series of reforms that tightened regulations on contraband and simultaneously tightened customs proceedings. See *id.* at 533. In the beginning of the 1880s, financial instability led to Mexico to attempt to recoup revenue through foreign-trade taxes. *Id.* In 1887, officials released a new tariff schedule that focused on establishing greater control over imports. See *id.* Tariff negotiations were consolidated and brought entirely within the Mexican government, as opposed to incorporating members of the private sector, both domestic and abroad. *Id.*

⁷² See Porfirio Díaz, ENCYC. BRITANNICA, <https://www.britannica.com/topic/Porfiriato> [<https://perma.cc/43W4-LXZ9>] (explaining how President Porfirio Díaz, through a campaign of intimidation and violence, ruled with a strong grip over domestic labor and ensured that citizens did not step out of line).

⁷³ See 1942: *Bracero Program*, LIBR. OF CONG., <https://guides.loc.gov/latinx-civil-rights/bracero-program> [<https://perma.cc/YL39-6EMA>] (providing a broad outline of the Porfirio Díaz regime). By 1907, some Mexican commodity sectors were majority-owned by foreign firms. *Id.* For example, in Chihuahua, Mexico, foreign firms—with the United States holding the largest single share—owned more than 75% of mineral production. *Id.* Moreover, the largest mercantile firms in Chihuahua were owned by firms from the United States. *Id.*

⁷⁴ See David Aviel & JoAnn B. Aviel, *American Investments in Mexico*, 22 MGMT. INT'L REV. 83, 84 (1982) (describing FDI from the United States to Mexico from the Revolution to 1980). From

vented newly independent Mexico from focusing on foreign corporate interests and imposed several restrictions on foreign investment.⁷⁵ For example, Article 27, a provision in the Mexican Constitution, nationalized natural resources throughout Mexico.⁷⁶

To maintain investment returns despite restrictions such as Article 27, investment from firms headquartered in the United States increased substantially in the manufacturing sector.⁷⁷ Through WWII and the early 1950s, Mexican administrations lost sight of the Revolutionaries' anti-commercial spirit, and the country became an attractive host country for manufacturing operations from the United States.⁷⁸

Along with policies that catered to foreign investment, Mexico operated a commercial scheme with firms from the United States to take advantage of proximity and lure further foreign investment to Mexico.⁷⁹ The *maquiladora* system is simple—it involves a *maquiladora*, or a manufacturing factory, that

1910 to 1939, investment from U.S. firms decreased in nearly every sector, in part due to the Great Depression, but also because of political risk calculations following the Mexican Revolution. *Id.*

⁷⁵ See CHRISTY THORNTON, *REVOLUTION IN DEVELOPMENT: MEXICO AND THE GOVERNMENT OF THE GLOBAL ECONOMY: RECOGNITION AND REPRESENTATION* 40–41 (2021) (describing how Article 27 caused immediate concern among foreign capital, causing lobbyists to go to their home governments to protect their Mexican investments from potential expropriation).

⁷⁶ See *id.* (describing Article 27's nationalization scheme and subsequent investor reactions).

⁷⁷ See Aviel & Aviel, *supra* note 74, at 84 (describing how Mexican administrations supported American manufacturing investment despite legislation that facially limited that very same investment). In 1944, President Avila Camacho's office issued a presidential decree to limit foreign investment to minority ownership only. See *id.* But American firms—and even Mexican government officials—enjoying the benefits of foreign inflows ignored the decree. See *id.*

⁷⁸ See *id.* (explaining how the Gustavo Ordaz regime selectively encouraged foreign investment into specific industries and heavily supported the manufacturing sector). The United States dominated FDI inflows into Mexico in the late 1970s. See *id.* at 85. By 1989, the Mexican government liberalized trade and recalled several FDI regulations, signaling the country's renewed readiness to accept a spree of FDI in other industries, coinciding with the rise in popularity of NAFTA. See Manuel Pastor & Carol Wise, *The Origins of Sustainability of Mexico's Free Trade Policy*, 48 INT'L ORG. 459, 460 (1994) (describing how President de la Madrid loosened Mexico's restrictive import regime and opened further foreign investment from U.S. firms). From 1940 to 1945, American FDI into Mexico's manufacturing sector tripled. See Aviel & Aviel, *supra* note 74, at 84. By 1952, investment into the manufacturing sector had doubled to reach \$728 million in total capital. *Id.*

⁷⁹ See, e.g., Jorge Carrillo & Robert Zarate, *The Evolution of Maquiladora Best Practices: 1965–2008*, 88 J. BUS. ETHICS 335, 335–38 (2009) (describing the history of the *maquiladora* program and how it facilitated investment in the Mexican manufacturing sector from U.S. firms); Leslie Sklair, *Transnational Across the Border: Mobilizing US Support for the Mexican Maquila Industry*, 24 J. AM. STUD. 167–85 (1990) (describing the history of the *maquiladora* program and describing what the program could look like in the future); Benedikt Heid, Mario Larch & Alejandro Riano, *The Rise of the Maquiladoras: A Mixed Blessing*, 17 REV. DEV. ECON. 252, 254 (2013) (describing the importance of the *maquiladora* system in attracting FDI from the United States and growing the Mexican manufacturing industry); Sklair, *supra*, at 168 (describing how in 1990, the *maquiladora* program boasted 1,500 individual *maquilas*, or manufacturing plants, and employed more than 400,000 workers); Carrillo & Zarate, *supra*, at 336 (describing what a *maquiladora* is and providing the best practices for the scheme's operation).

operates under a favorable duty-free regime.⁸⁰ American firms can own a Mexican entity outright while enjoying the favorable tax regime, allowing a free flow of goods that takes advantage of lower labor costs.⁸¹ The system is not an original formulation, however, being preceded by two distinct work programs between the United States and Mexico—the Bracero Program and the Border Industrialization Program.⁸²

Following WWII, the United States enacted the Bracero Program, a work-visa initiative designed to address the domestic labor shortage.⁸³ American farmers and factory owners benefitted economically from the program, and the Mexican economy benefitted as well.⁸⁴ Significant unemployment in the northern states forced the Mexican government to find a way to protect the domestic economy while limiting capital expenses and protecting the treasury.⁸⁵ Although not solving the unemployment crisis in Mexico alone, by the time the program ended in 1965, more than four million Mexican workers had

⁸⁰ See *What Is a Maquiladora in Mexico?*, MFG. IN MEXICO, <https://manufacturinginmexico.org/maquiladora-in-mexico/> [<https://perma.cc/2HBE-KV6T>] (providing a high-level overview of what a *maquiladora* is). Prior to the *maquiladora* program, components originated in the United States were subject to duties if they were sent across the border. See Carrillo & Zarate, *supra* note 79, at 336. To spur further foreign investment, the program reversed that idea. *Id.* The *maquiladora* programs allowed foreign-owned firms to operate duty free, thereby allowing U.S. firms to slash manufacturing costs due to the reduced cost of labor in Mexico relative to the United States. See Sklair, *supra* note 79, at 168 (describing the utility of the *maquiladora* program).

⁸¹ See, e.g., Sklair, *supra* note 79, at 168 (describing how a Mexican entity can be wholly owned by a foreign firm).

⁸² See Charles E. Rumbaugh, *American Utilization of the Mexican Border Industrialization Program*, 1 CAL. WEST. INT'L L.J. 128, 133–34 (1970) (describing the facets of the Mexican Border Industrialization Program).

⁸³ See Philip Martin, *Mexican Braceros and U.S. Farm Workers*, WILSON CTR. (July 10, 2020), <https://www.wilsoncenter.org/article/mexican-braceros-and-us-farm-workers> [<https://perma.cc/2CYC-82TG>] (providing a detailed analysis of the Bracero Program and its WWII roots).

⁸⁴ See Carrillo & Zarate, *supra* note 79, at 336 (describing how the *maquiladora* program evolved from existing work programs). The Border Industrialization Program preceded the *maquiladora* program. *Id.* Northern Mexican states faced high unemployment rates due to the termination of the Bracero Program. See Rumbaugh, *supra* note 82, at 128 (describing the facets of the Mexican Border Industrialization Program).

⁸⁵ See Rumbaugh, *supra* note 82, at 130 (describing Mexico's startling unemployment rate). In 1942, the United States codified the Mexican Farm Labor Program, creating the Bracero Program. See, e.g., *Bracero Agreement (1942–1965)*, IMMIGR. HIST., <https://immigrationhistory.org/item/bracero-agreement/> [<https://perma.cc/6T39-QLV7>]. The need for labor directed at the war effort during WWII caused labor shortages in commercial industries throughout the United States. See Martin, *supra* note 82 (providing analysis on why the Bracero Program was enacted). In response, the United States and Mexico enacted the Bracero Program, a farm workers program that allowed Mexican immigrants to apply for work visas. See *id.*; Jessie Kratz, *The Bracero Program: Prelude to Cesar Chavez and the Farm Worker Movement*, NAT'L ARCHIVES (Sept. 27, 2023), <https://prologue.blogs.archives.gov/2023/09/27/the-bracero-program-prelude-to-cesar-chavez-and-the-farm-worker-movement/> [<https://perma.cc/X6AD-9FBR>] (describing how U.S. labor shortages and Mexican unemployment led to the creation of the Mexican Farm Labor Program).

participated.⁸⁶ However, the termination of the Bracero Program returned Mexico to the same problem it faced in 1942—high unemployment.⁸⁷

The Mexican government promulgated the Border Industrialization Program to alleviate the unemployment crisis towns faced by granting licenses for the duty-free import of heavy machinery to be used in manufacturing plants.⁸⁸ The program allowed foreign firms to own Mexican manufacturing facilities outright and came to be known as the *Maquiladora Program*.⁸⁹ The legislation built on the Border Industrialization Program to make *maquiladoras* the dominant FDI investment form for U.S. firms prior to NAFTA.⁹⁰

D. NAFTA and the USMCA

NAFTA's implementation reflected a fundamental paradigm shift for the North American economy.⁹¹ Trade liberalization eliminated most tariffs and continental trade tripled.⁹² Subsection 1 of this Section provides an overview of NAFTA and the USMCA.⁹³ Subsection 2 of this Section discusses key se-

⁸⁶ See 1942: *Bracero Program*, LIBR. OF CONG., <https://guides.loc.gov/latinx-civil-rights/bracero-program> [<https://perma.cc/6KJX-542K>] (providing a high-level overview of the Bracero Program); Rumbaugh, *supra* note 82, at 130 (describing how the Bracero Program's termination exacerbated unemployment in the northern Mexican states once again). Ultimately, the United States terminated the program over concerns that rising wages of U.S. farm workers and the industrialization of cash crop harvesting were decimating the U.S.'s farm-labor industry. See Martin, *supra* note 82 (describing the reasons for the Bracero Program's termination). The end of the program resulted in strong increases in farm wages for Mexican workers, with a contracted farm worker's minimum wage exceeding the federal minimum wage at the time. *Id.*

⁸⁷ See, e.g., Rumbaugh, *supra* note 82 (describing how following the end of the Bracero Program, approximately 400,000 Mexican farm workers chose to remain along the northern border rather than return to their homes, exacerbating an already precarious unemployment situation).

⁸⁸ See *id.* (describing how the Mexican government enacted the Border Industrialization Program to try to combat northern unemployment). In 1961, Mexico passed the Programa Nacional Fronterizo (PRONAF). *Id.* The program aimed to rehabilitate the northern border towns and limit the economic dependency that the Bracero Program had fostered. *Id.* After the Bracero Program ended and struggling areas received an influx of workers back from the United States, the government modified PRONAF to create the Border Industrialization Program, an industrialization vehicle intended to attract foreign investment to northern Mexico. *Id.* (describing the benefits of the Border Industrialization Program to U.S. manufacturing firms). Notably, companies participating in the program were required to export finished goods from Mexico to a foreign country and only hire Mexican labor. See *id.*

⁸⁹ See Sklair, *supra* note 79, at 168 (describing how foreign entities could own Mexican manufacturing plants outright); Aureliano Gonzalez Baz, *What Is a Maquiladora?*, <https://www1.udel.edu/leipzig/texts2/vox128.htm> [<https://perma.cc/2U9A-63AD>] (describing the differences between the *Maquiladora* Program and the Border Industrialization Program).

⁹⁰ See Sklair, *supra* note 79, at 168 (describing that in 1990, Mexico had 1,500 *maquiladora* factories in operation that employed over 400,000 Mexican citizens).

⁹¹ Andrew Chatzky, James McBride & Mohammed Aly Sergie, *NAFTA and the USMCA: Weighing the Impact of North American Trade*, COUNCIL ON FOREIGN RELS., <https://www.cfr.org/background/naftas-economic-impact> [<https://perma.cc/HN5D-GVNJ>].

⁹² See *id.*

⁹³ See *infra* notes 96–114 and accompanying text.

lections from the USMCA.⁹⁴ Subsection 3 of this Section provides a review of various investment arbitration schemes under NAFTA.⁹⁵

1. NAFTA and the USMCA: The United States and Mexico

With NAFTA's implementation, *maquiladoras* were not as attractive to American firms as they once were.⁹⁶ Any duty benefits were effectively moot and firms from the United States found it easier to operate through NAFTA's provisions.⁹⁷ While the country had sought to limit its reliance on the United States in the past, the passage of NAFTA represented Mexico embracing the relationship.⁹⁸

For the United States, the treaty resulted in immediate job losses in the domestic automotive industry, but over time, the agreement produced a yearly net benefit of over one hundred billion dollars in traded goods.⁹⁹ Moreover, approximately fourteen million domestic jobs relied exclusively on NAFTA.¹⁰⁰

⁹⁴ See *infra* notes 115–133 and accompanying text.

⁹⁵ See *infra* notes 134–150 and accompanying text.

⁹⁶ See David Brill Jr. & Cheryl Schechter, *Maquiladoras: Will the Program Continue?* 23 ST. MARY'S L.J. 697, 699–700 (1992) (describing the facets of the *maquiladora* program and why it is so attractive to foreign investors); Sklair, *supra* note 89, at 168 (describing how the Mexican economy had rallied around *maquiladora* development); North American Free Trade Agreement (NAFTA), Dec. 17, 1992, 32 I.L.M. 289 (1993); see Aguilar, *supra* note 70, at 14–16 (providing a review of NAFTA and the negotiations as well as the history that preceded it). Mexico attempted to shed its cost-effective manufacturing state identity by attempting to liberalize its trade regime, partly because NAFTA made the *maquiladora* program seem moot upon the treaty's inception. *Id.*

⁹⁷ See Brill & Schechter, *supra* note 96 (describing how NAFTA superseded the *maquiladora* program).

⁹⁸ Compare Rumbaugh, *supra* note 82, at 133–34 (describing how the Mexican government created PRONAF to try and limit reliance on the United States), with Chatzky et al., *supra* note 91 (describing how NAFTA has advanced trade prospects within North America and Mexico is looking toward the future with the USMCA). Opponents of NAFTA's implementation argued that the prospect of trade liberalization would result in significant capital outflows from the United States to Mexico along with deepening importation from Mexico. Mary E. Burfisher, Sherman Robinson & Karen Thierfelder, *The Impact of NAFTA on the United States*, 15 J. ECON. PERSPS. 125, 125–27 (2001). Those who supported the treaty, however, argued that economic growth would outweigh any losses and as the Mexican economy grew, the United States would be a primary beneficiary, spurring job growth domestically. *Id.* at 137–39.

⁹⁹ See Chatzky et al., *supra* note 91 (describing how the United States felt the immediate effects of low-cost competition). For example, the American automotive industry has lost approximately 350,000 jobs due to NAFTA while the Mexican automotive industry has gained 430,000 jobs. See Mauro Guillen, *NAFTA's Impact on the U.S. Economy: What Are the Facts?*, KNOWLEDGE AT WHARTON (Sept. 6, 2016), <https://knowledge.wharton.upenn.edu/article/naftas-impact-u-s-economy-facts/> [<https://perma.cc/L97B-59Z8>] (describing the impact of NAFTA on the U.S. economy).

¹⁰⁰ See Guillen, *supra* note 99 (describing how NAFTA has created millions of jobs, including more than 200,000 jobs that pay higher average salaries than the jobs that were lost due to NAFTA); Gary Clyde Hufbauer & Cathleen Cimino-Isaacs, *NAFTA Rejoinder: The US Effects Are Clearly Positive for Most Workers (Part II)*, PIIIE (July 30, 2014), <https://www.piie.com/blogs/trade-and->

In Mexico, NAFTA brought some benefits, but those benefits were unevenly distributed.¹⁰¹ In the mid-1990s, a financial crisis that impacted the Mexican economy negatively affected NAFTA's programming.¹⁰² However, even in the face of economic downturn, Mexican leadership argued that NAFTA would spur foreign investment and increased trade that would result in real Mexican wage growth.¹⁰³ Throughout the treaty's life, per capita income, however, grew at around one percent per year, while millions of Mexican farmers were displaced.¹⁰⁴

Although Mexico faced a financial crisis separate from NAFTA's implementation, some have pointed out that external competition, not policy, caused Mexico's unfortunate history with NAFTA.¹⁰⁵ China's ascension to the WTO in 2001 is the most popular disrupting culprit.¹⁰⁶

In 2002, Mexico accounted for approximately 11.6% of U.S. imports, while China accounted for 12.1% in 2003.¹⁰⁷ In 2010, well after NAFTA's implementation, China accounted for 19.1% of imports while Mexico had only grown to a share of 12.1%.¹⁰⁸ Similarly, in 1999, the United States held ap-

investment-policy-watch/nafta-rejoinder-us-effects-are-clearly-positive-most#_ftns [https://perma.cc/3K26-PXA9] (describing how NAFTA, overall, is a boon for American workers).

¹⁰¹ See M. Angeles Villarreal, CONG. RSCH. SERV., RL34733, NAFTA AND THE MEXICAN ECONOMY (June 3, 2010), <https://sgp.fas.org/crs/row/RL34733.pdf> [https://perma.cc/8K4B-FQPH] (describing the impact of NAFTA on Mexico).

¹⁰² See NORA LUSTIG, BROOKINGS INST., THE MEXICAN PESO CRISIS: THE FORESEEABLE AND THE SURPRISE 1 (1995), <https://www.brookings.edu/wp-content/uploads/2016/06/bdp114.pdf> [https://perma.cc/GXM7-6CT8] (describing the reasons for the Mexican Peso Crisis and its aftermath).

¹⁰³ See Chatzky et al., *supra* note 91 (describing how Mexican leadership attempted to sell NAFTA to the populace).

¹⁰⁴ See MARK WEISBROT, STEPHAN LEFEBVRE & JOSEPH SAMMUT, CEPR, DID NAFTA HELP MEXICO? AN ASSESSMENT AFTER 20 YEARS (Feb. 2014), <https://cepr.net/documents/nafta-20-years-2014-02.pdf> [https://perma.cc/2KKT-ZWME] (providing an overview of how NAFTA affected Mexico, including a discussion on competition from China).

¹⁰⁵ See Chatzky et al., *supra* note 91 (describing how China's entry into the WTO in 2001 presented a challenge that the Mexican economy had to contend with, a factor that neither the NAFTA states nor the rest of the global economy foresaw); DAVID H. AUTOR, DAVID DORN & GORDON H. HANSON, NAT. BUREAU OF ECON. RSCH., CHINA SHOCK: LEARNING FROM LABOR MARKET ADJUSTMENT TO LARGE CHANGES IN TRADE (2016), <https://www.nber.org/papers/w21906> [https://perma.cc/2KKT-ZWME] (describing the effect of China entering the market on the American and Mexican labor markets).

¹⁰⁶ See Enrique Dussel Peters & Kevin P. Gallagher, *NAFTA's Uninvited Guest: China and the Disintegration of North American Trade*, 110 CEPAL REV. 83, 86–89 (2013) (providing an analysis of China's entrance into the North American market and its effects on NAFTA and the members states); AUTOR ET AL., *supra* note 105, at 1–3 (describing how wages in China were lower than those in the United States and Mexico, resulting in a glut of manufacturing moving East).

¹⁰⁷ See Peters & Gallagher, *supra* note 106, at 5 (describing how Mexican import share remained stagnant while the Chinese share grew).

¹⁰⁸ See *id.* (describing how in 2010, China accounted for almost double the share of American imports as Mexico did).

proximately 65% of Mexican imports, but saw that percentage decrease to 48% in 2009 due to China's increasing market share.¹⁰⁹

When the United States approached renegotiation of NAFTA in 2017, President Trump centered the focus on labor and job losses to the American automotive sector, as well as competition coming from China.¹¹⁰ The renegotiated agreement, the USMCA, is similar to NAFTA in most respects, but is markedly different in key aspects.¹¹¹ The revised trade agreement represents a modernized treaty that includes provisions geared toward a globalized, interconnected, and technologically advanced North American economy.¹¹² In 2020, the USMCA entered into force following a multi-year negotiation among the North American states.¹¹³ While the USMCA's effect on trade is notable, the agreement made additional changes to intellectual property rights and digital trade, encouraging a modernized North American economy.¹¹⁴

¹⁰⁹ See *id.* (describing how China's entrance into the North American market delivered an economic shock to the United States, significantly reducing its share of Mexican imports through 2009).

¹¹⁰ See Doug Palmer & Parmora Soni, *Trump Promised to Rebalance Trade in North America. The US Trade Deficit Keeps Climbing*, POLITICO (Feb. 7, 2024), <https://www.politico.com/news/2024/02/07/donald-trump-trade-deficits-00140101> [<https://perma.cc/W5CQ-BBBM>] (describing how President Trump marketed the USMCA as a tool to combat Chinese encroachment and to recoup jobs in the American manufacturing sector lost to NAFTA); see also Salvador Rizzo, *President Trump's Claims About NAFTA and the U.S. Auto Industry*, WASH. POST (Sept. 24, 2018), <https://www.washingtonpost.com/politics/2018/09/24/president-trumps-claims-about-nafta-us-auto-industry/> [<https://perma.cc/P6MM-ZBVH>] (describing how President Trump attributed NAFTA to significant manufacturing job losses in the United States). Before championing the USMCA, President Trump boasted that he intended to terminate NAFTA and halt any renegotiation. Karen DeYoung, Damian Paletta, Ashley Parker & Philip Rucker, *'I Was All Set to Terminate': Inside Trump's Sudden Shift on NAFTA*, WASH. POST (Apr. 27, 2017), https://www.washingtonpost.com/politics/i-was-all-set-to-terminate-inside-trumps-sudden-shift-on-nafta/2017/04/27/0452a3fa-2b65-11e7-b605-33413c691853_story.html [<https://perma.cc/27PV-SAAW>].

¹¹¹ See Robert Hudson, Note, *The USMCA: An Ideal "New NAFTA?"*, KY. L.J. ONLINE 1, 2–4, <https://static1.squarespace.com/static/5d28bbdff1b73800019f9a52/t/6084c0b06a87341dd3e61082/1619312816987/Hudson+Final+PDF.pdf> [<https://perma.cc/W7S4-BXL9>] (providing an overview on the differences between the USMCA and NAFTA); Avidan Kent & Valentine Kunuji, *The Investment-Sustainability Conundrum Under the USMCA: An Evolution?* 46 VT. L. REV. 293, 293–96 (2021) (describing the differences between the USMCA and NAFTA in how the treaties govern international investments); Joshua P. Meltzer, Earl Anthony Wayne & Diego Marroquín Bitar, *USMCA at 3: Reflecting on Impact and Charting the Future*, BROOKINGS INST. (July 19, 2023), <https://www.brookings.edu/articles/usmca-at-3-reflecting-on-impact-and-charting-the-future/> [<https://perma.cc/R6Y5-XCEY>] (describing how the USMCA has provided for more interconnected trade opportunity in the three years following its implementation, in part because of its multiple forward-thinking provisions).

¹¹² See *USMCA vs NAFTA: Major Differences Between USMCA and NAFTA in Key Chapters*, INT'L TRADE ADMIN., <https://www.trade.gov/usmca-vsnafta> [<https://perma.cc/M7TC-WZKE>] (providing a comparison between NAFTA and the USMCA).

¹¹³ See Hudson, *supra* note 111, at 2–4 (providing an overview of the USMCA and its history); Meltzer et al., *supra* note 111 (providing a review of the negotiations that went into the USMCA's passage).

¹¹⁴ See USMCA, *supra* note 17, ch. 19 (providing the regulations governing the USMCA's digital trade provisions); *id.*, art. 20.14 (providing the regulations governing the USMCA's IP provisions).

2. Select Provisions Within the USMCA

The USMCA includes multiple novel components that make the trade agreement stand out in the international arena.¹¹⁵ One of them is Chapter 19, establishing digital trade between the North American states.¹¹⁶ With this provision, the agreement now accounts for digital aspects including regulating goods ordered online, digitally delivered services, and applying digital technologies to supply chain infrastructure.¹¹⁷

The provision is the first digital trade-related agreement included within a trade treaty and allows the North American states to consider establishing a forum to discuss any provision within the article.¹¹⁸ Chapter 19 also encourages the protection of trade secrets, barring the parties from disclosing source code and any corresponding algorithms as a result of a sale.¹¹⁹

Another novel provision is Chapter 20, which governs intellectual property rights.¹²⁰ Although negotiators included intellectual property rights in NAFTA, the internet was a relatively new phenomenon at the time.¹²¹ Accordingly, the

¹¹⁵ See Hudson, *supra* note 111 (providing an overview the differences between NAFTA and the USMCA); John S. Baker Jr. & Lindsey Keiser, *NAFTA/USMCA Dispute Settlement Mechanisms and the Constitution*, 50 U. MIA. INTER-AM. L. REV. 1, 4–7 (2019) (describing the differences between NAFTA and the USMCA's investor dispute settlement mechanisms); Jerry L. Lai, *A Tale of Two Treaties: A Study of NAFTA and the USMCA's Investor-State Dispute Settlement Mechanisms*, 35 EMORY INT'L L. REV. 259, 273–75 (2021) (providing a review of the differences between the USMCA and NAFTA's investor-state dispute mechanisms).

¹¹⁶ USMCA, *supra* note 17, ch. 19.

¹¹⁷ See *id.* (providing provisions for digital trade within the USMCA); David A. Gantz, *USMCA Provisions on Intellectual Property, Services, and Digital Trade*, BAKER INST. (Jan. 17, 2020), <https://www.bakerinstitute.org/research/usmca-provisions-intellectual-property-services-and-digital-trade> [<https://perma.cc/Q49T-VNTW>] (finding that the USMCA includes a host of novel components, many of which have not been utilized within a multilateral trade agreement until now); see also Meltzer et al., *supra* note 111, at 3–4 (describing the significant inflows and outflows the first three years of the USMCA); Anupam Chander, *The Coming North American Digital Trade Zone*, COUNCIL ON FOREIGN RELS. (Oct. 9, 2018), <https://www.cfr.org/blog/coming-north-american-digital-trade-zone> [<https://perma.cc/WS4J-YYK4>] (describing the prospects for a digital trade regime within North America and the advantages one would bring); Patrick Leblond, *The USMCA and Digital Trade in North America*, BROOKINGS INST. (Feb. 2022), <https://www.brookings.edu/articles/usmca-forward-building-a-more-competitive-inclusive-and-sustainable-north-american-economy-digital/> [<https://perma.cc/LK8K-4JX6>].

¹¹⁸ See Gantz, *supra* note 117, at 10–11 (providing a review of the digital trade section of the USMCA); USMCA, *supra* note 17, art. 19.14 (providing provisions for cooperation with digital trade and the establishment of a forum).

¹¹⁹ See USMCA, *supra* note 17, art. 19.16 (outlining the provisions governing source code); Chander, *supra* note 117 (describing the importance and necessity of a modernized digital trade regime).

¹²⁰ USMCA, *supra* note 17, ch. 20.

¹²¹ See Gantz, *supra* note 117, at 1–5 (describing how the USMCA built upon a small framework for intellectual property trade arrangements to create a vast and expansive new governing system for intellectual property within the USMCA).

intellectual property rights section within the USMCA has been renegotiated to include specific changes that make the section more suitable for modern economies.¹²² For example, the section discusses cooperation and provides for the establishment of a committee on intellectual property rights, an addition not seen in NAFTA.¹²³ Among other requirements, the committee is charged with freely exchanging information and disseminating technical knowledge, overseeing educational programs, and implementing multilateral agreements regarding intellectual property.¹²⁴ The section also seeks to enforce intellectual property rights, providing multiple new requirements to stay in line with the agreement and punitive measures for violations.¹²⁵

Chapter 23, another new chapter, incorporates the strongest labor provisions of any trade agreement currently in force.¹²⁶ Chapter 23 builds substantially on labor provisions found in NAFTA, but rather than leave a labor agreement outside of the main text, USMCA negotiators made labor obligations fully enforceable by the agreement itself.¹²⁷ One example of the USMCA's labor obligations is the requirement to ensure migrant workers are not subject to discrimination.¹²⁸ Another example is that Chapter 23 requires Mexican firms to comply with a series of worker-protection reforms.¹²⁹ If these

¹²² See *id.* (describing the changes made to the USMCA's intellectual property section compared to the intellectual property section of NAFTA). The USMCA provides for full national treatment for copyrights, extends copyright lifetimes, provides for a minimum of fifteen years for industrial design intellectual property protection, and provides strong civil and criminal recourse for trade secret activity. *USMCA vs NAFTA: Major Differences Between USMCA and NAFTA in Key Chapters*, INT'L TRADE ADMIN. (May 2021), <https://www.trade.gov/usmca-vs-nafta> [<https://perma.cc/5ZC6-PQ7D>].

¹²³ See USMCA, *supra* note 17, art. 20.14 (outlining various intellectual property provisions within the USMCA); Gantz, *supra* note 117, at 2 (describing the new committee on intellectual property rights and explaining its importance).

¹²⁴ See USMCA, *supra* note 17, art. 20.14 (establishing a committee on intellectual property rights).

¹²⁵ See Gantz, *supra* note 117, at 2 (describing the new committee on intellectual property rights and explaining what it is charged with doing and how it can go about carrying out those directives, per the USMCA).

¹²⁶ See USMCA, *supra* note 17, ch. 23 (outlining the labor provisions within the USMCA); Kevin Kolbe, *Labor Chapters Improve Supply Chain Resilience; The Case of the USMCA*, BROOKINGS INST. (Feb. 2023), <https://www.brookings.edu/articles/usmca-forward-2023-chapter-7-labor-standards/> [<https://perma.cc/NW2M-VLG9>] (describing the USMCA's labor provisions as building on provisions from past treaties while also introducing novel elements).

¹²⁷ USMCA, *supra* note 17, ch. 23. To enforce Chapter 23, the USMCA includes a slew of obligations that each state must comply with. See *id.* Each state must appoint inspectors, conduct monitoring of firms, keep records of compliance with the USMCA, and provide for labor arbitration services in the event of a dispute—or the party could face sanctions or fines. See *id.* art. 23.5 (providing an outline of how the USMCA enforces labor laws).

¹²⁸ *Id.* ch. 23.

¹²⁹ See *id.* (describing how the USMCA requires Mexico to adhere to certain reforms in its domestic labor market). Notably, the USMCA requires Mexico to reform its labor justice system and provide for arbitrations, provide for the recognition of collective bargaining and guarantee that collec-

reforms are broken, the aggrieved party may adjudicate its claim within the USMCA before the Rapid Response Labor Mechanism Panel.¹³⁰

Importantly, the North American states included a provision in the USMCA to renegotiate the treaty on its sixth anniversary.¹³¹ In 2026, in accordance with Article 34.7, the USMCA will undergo a joint review to deliberate on any recommendation submitted by a party.¹³² While it is unclear how the Trump Administration views the USMCA, President Trump's aggressive rhetoric with Canada and Mexico seems to imply that the United States may recommend, at the very least, a review of the treaty or replacement altogether.¹³³

3. International Investment Arbitration: Semiconductors, NAFTA, and the USMCA

A key component to modern trade agreements is the inclusion of international investment arbitration schemes.¹³⁴ Discussing such agreements in the

tive bargaining agreements votes are done in secret, and ensure that union votes are done in a democratic fashion to ensure fair competition between the United States and Mexican labor. *See id.* annex 23-A (describing what labor reforms "Mexico shall" adopt and comply with throughout the life of the USMCA).

¹³⁰ *Id.* annex 31-A. Under the USMCA, the Rapid Response Labor Mechanism Panel (the Panel) may convene to review specific claims under Chapter 23 or Annex 31-A of the agreement. *See id.* The Panel may then impose specific penalties such as preferential tariffs or sanctions on offending parties. *See id.* (describing the remedies available to the Panel). In August 2023, the United States filed a claim under Annex 31-A, requesting the Panel to review a claim for the first time since the USMCA's enactment. *See United States Requests First Ever USMCA Rapid Response Labor Mechanism Panel at Grupo Mexico Mine*, OFF. OF THE U.S. TRADE REPRESENTATIVE (Aug. 2023), <https://ustr.gov/about-us/policy-offices/press-office/press-releases/2023/august/united-states-requests-first-ever-usmca-rapid-response-labor-mechanism-panel-grupo-mexico-mine> [<https://perma.cc/A9PW-SZGH>] (describing how the United States filed a claim against Grupo Mexico Mine, alleging violations of Annex 31-A's collective bargaining provisions specific to Mexico).

¹³¹ *See* Meltzer et al., *supra* note 111 (explaining how any of the three parties to the USMCA may propose a recommendation to enact and debate in during the 2026 joint review of the USMCA).

¹³² *See* USMCA, *supra* note 17, art. 34.7 (describing how the USMCA is set to be reviewed in 2026, six years after the agreement's entrance in North America).

¹³³ *See, e.g.,* Matina Stevis-Gridneff, *Trump Intensifies Statehood Threats in Attack on Canada*, N.Y. TIMES (Mar. 11, 2025), <https://www.nytimes.com/2025/03/11/us/politics/canada-trump-statehood-attacks.html> [<https://perma.cc/8GHU-PX9A>] (describing how President Trump has been flippantly attacking Canadian sovereignty since returning to office); Muriel Brooks & Alfonso Gonzales Toribio, *The Real Reason Behind Trump's Tariffs on Mexico and Military Buildup*, AL-JAZEERA (Mar. 7, 2025), <https://www.aljazeera.com/opinions/2025/3/7/the-real-reason-behind-trumps-tariffs-on-mexico-and-military> [<https://perma.cc/XHQ3-7MM2>] (explaining how President Trump has directed the military to deploy additional troops to the southern border).

¹³⁴ *See* Susan D. Franck, *Development and Outcomes of Investment Treaty Arbitration*, 50 HARV. INT'L L.J. 435, 442–43 (2009) (describing how investment treaties contain some sort of dispute resolution mechanism in them); *Primer on International Investment Treaties and Investor-State Dispute Settlement*, COLUMBIA CTR. ON SUSTAINABLE INV., <https://ccsi.columbia.edu/content/primer-international-investment-treaties-and-investor-state-dispute-settlement> [<https://perma.cc/7FPE-P6VY>] (Jan. 2022) (providing an overview on the relationship between FDI and investor-state disputes).

context of semiconductor investment is of particular importance because of how specialized, valuable, and closely-held semiconductor trade secrets are considered.¹³⁵ International investment arbitration is borne from a historical understanding that the investor requires more protection than the recipient of the investment can provide.¹³⁶

Modern international free trade agreements that include standard settlement dispute mechanisms work in much the same way—a foreign investor can levy claims against a host state and receive a hearing before an arbitrator.¹³⁷ These claims can include allegations of disparate treatment, inequitable conduct by the host state, or claims for compensation following expropriation.¹³⁸

Within NAFTA, international investment disputes were settled through the treaty's Investor-State Dispute Settlement (ISDS) provision.¹³⁹ Under Chapter 11, investors could unilaterally seek a binding decision from an arbitration panel and forego domestic courts entirely.¹⁴⁰ These tribunals were alleged to favor investor parties and as a result, were claimed to be unfair to host states who were unable to seek redress in their own domestic courts following a claim.¹⁴¹

In *Metalclad Corporation v. United Mexican States*, a U.S. waste disposal company alleged breaches of NAFTA by Mexico and instituted arbitration pro-

¹³⁵ See SEMICONDUCTOR INDUS. ASS'N, SEMICONDUCTORS & THE WORLD TRADE ORGANIZATION: HOW GLOBAL TRADE RULES HAVE SPURRED SEMICONDUCTOR GROWTH & INNOVATION 4 (2020), https://www.semiconductors.org/wp-content/uploads/2020/11/The-WTO-and-the-Semiconductor-Industry-Nov-2020_2.pdf [<https://perma.cc/Q3E2-TB7C>] (describing how trade secrets may make up to 80% of a semiconductor firm's inherent value).

¹³⁶ See COLUMBIA CTR. ON SUSTAINABLE INV., *supra* note 134 (describing how international trade agreements typically include protections for foreign investors through settlement dispute mechanisms); JAN PAULSSON, DENIAL OF JUSTICE IN INTERNATIONAL LAW 10–13 (2005) (explaining the historical elements of international arbitration).

¹³⁷ See COLUMBIA CTR. ON SUSTAINABLE INV., *supra* note 134, at 57–59 (describing how arbitration following a denial of justice works today).

¹³⁸ See *id.* (explaining how international arbitration's roots are historical); Lai, *supra* note 115 (explaining the various claims that an investor can allege against a host state).

¹³⁹ See *The Rise and Demise of NAFTA Chapter 11*, CCPA 1, 4–12 (2021), https://policyalternatives.ca/sites/default/files/uploads/publications/National%20Office/2021/04/The_Rise_and_Demise_of_NAFTA_Chapter_11.pdf [<https://perma.cc/RUP7-5GZX>] (describing the innerworkings of NAFTA's ISDS mechanism); NAFTA, Chapter 11 (outlining the agreed upon provisions of investor state dispute resolution within the treaty).

¹⁴⁰ See NAFTA ch. 11, Dec. 17, 1992, 32 I.L.M. 289, 639 (1993) (outlining the investor-state dispute mechanisms within the chapter).

¹⁴¹ See *The Rise and Demise of NAFTA Chapter 11*, *supra* note 139, at 6 (describing how ISDS arbitration serves to negatively impact host states). Following the end of USMCA negotiations, then Canadian Foreign Affairs Minister, Chrystia Freeland, stated that ISDS unfairly elevated the rights of wealthy corporations over sovereign governments within their own borders. See Baker & Keiser, *supra* note 115, at 5 (describing how ISDS arbitration schemes are supported by corporate interests and derided by labor groups).

ceedings under the ISDS provision.¹⁴² In the dispute, Metalclad alleged that the Mexican government expropriated its property after receiving notification that Metalclad did not hold the requisite construction permits.¹⁴³ An ISDS tribunal found that the Mexican government violated Article 1110 of NAFTA after establishing an ecological decree over the construction zone, effectively expropriating Metalclad's property, and fined Mexico millions of dollars.¹⁴⁴ Canada and Mexico appealed the *Metalclad* award and the tribunal's interpretation of Chapter 11.¹⁴⁵ Ultimately, the appeal failed and the tribunal finalized an award of over fifteen million dollars to Metalclad, adding to a chorus of criticism against ISDS dispute resolution.¹⁴⁶

Because cases like *Metalclad* were too controversial to ignore, the USMCA altered investment arbitration provisions and removed ISDS procedures as an avenue for recourse between the United States and Canada.¹⁴⁷ Notably, however, a form of ISDS arbitration remains for a select number of Mexican and American investors who are party to covered government contracts.¹⁴⁸ Before an entity

¹⁴² See *Metalclad Corp. v. United Mexican States*, ICSID Case No. ARB(AF)/97/1, Notice of Claim (Jan. 13, 1997) (outlining Metalclad's allegations under Chapter 11). In 1993, Metalclad, a landfill management firm incorporated in Delaware, obtained construction permits to build a hazardous waste landfill in Guadalupe, San Luis Potosi, Mexico, from the state and federal governments. See *Metalclad*, ICSID Case No. ARB(AF)/97/1, Award of the Tribunal, ¶¶ 1–3, 31, 35 (Aug. 30, 2000), 5 ICSID Rep. 212 (2002). In 1994, construction of the landfill ceased because Metalclad failed to obtain a municipality construction permit issued by Guadalupe. *Id.* ¶ 40. A few months later, in 1995, the Mexican federal government conducted an ecological audit of the construction site and determined that it required additional engineering to be operational. *Id.* ¶ 44. Later that year, the Guadalupe Town Council denied Metalclad's municipal construction permit based on the ecological audit. *Id.* ¶ 90. In response, in 1998, Metalclad brought a claim under NAFTA's Chapter 11 provision for expropriation of the landfill in Guadalupe. *Id.* ¶ 8. Metalclad alleged that the Mexican federal government assured it that a municipal construction permit was only necessary as a "matter of course," but nevertheless, knew that a municipal construction permit would be required to build. *Id.* ¶¶ 41, 53. The ISDS Tribunal held that the Guadalupe Town Council relied on improper evidence in denying the permit because the ecological audit was not associated with "any problems . . . with the physical construction of the landfill or to any physical defects therein." *Id.* ¶ 92. Thus, the permit denial constituted expropriation. *Id.* ¶¶ 92, 112. While not deciding the issue, the Tribunal suggested that the ecological audit itself may "constitute an act tantamount to expropriation." *Id.* ¶ 111. The Tribunal awarded Metalclad \$16,685,000. *Id.* ¶ 131.

¹⁴³ See Lai, *supra* note 115, at 261 (describing *Metalclad*).

¹⁴⁴ *Metalclad*, ICSID Case No. ARB(AF)/97/1, Award of the Tribunal (Aug. 30, 2000), 5 ICSID Rep. 212 (2002) (describing the procedure and facts of the case).

¹⁴⁵ See Lai, *supra* note 115, at 265 (providing an overview of *Metalclad*).

¹⁴⁶ CCPA, *supra* note 139, at 10.

¹⁴⁷ See Lai, *supra* note 115, at 278 (explaining why ISDS arbitration was altered in the USMCA).

¹⁴⁸ See *USMCA, Curbs How Much Investors Can Sue Countries—Sort of*, INT'L INST. FOR SUSTAINABLE DEV. (Oct. 2, 2018), <https://www.iisd.org/articles/usmca-investors> [<https://perma.cc/39DL-X9DS>] (providing an overview of Chapter 14, the USMCA's investment arbitration scheme. The USMCA defines "covered government contract" as a written agreement between a member state and a party in a covered sector. See *USMCA*, *supra* note 17, annex 14-E(6)(a). A "covered sector" includes,

party to a covered government contract submits a claim to arbitration, it must receive a decision from a domestic court of its state or must wait thirty months after initiating proceedings in said court.¹⁴⁹ Thereafter, the claimant may only allege two separate causes of action: national treatment and expropriation.¹⁵⁰

II. REPROGRAMMING THE USMCA: SECURING SUPPLY AND CONTINENTAL SOVEREIGNTY

In 2026, the three member-states of the USMCA will undergo a joint review of the agreement's terms.¹⁵¹ Section A of this Part explores how the North American states may renegotiate provisions of the USMCA.¹⁵² Section B of this Part explores why a semiconductor provision within the USMCA could be a useful national security tool for the United States and a modernizing North America.¹⁵³

A. Renegotiating the USMCA

In July 2026, the North American states are set to meet and propose recommendations to amend the operation of the USMCA.¹⁵⁴ Chapter 34 of the USMCA governs the trade agreement's life span and within the chapter, Article 34.7 dictates the specific details of the USMCA's renegotiation.¹⁵⁵ The USMCA's joint review provision is unique compared to other trade agreements the United States is party to.¹⁵⁶ For example, the United States is currently in-

oil and natural gas, power generation services, telecommunications services, transportation services, and management of roads, bridges and railways. *See id.* annex 14-E(6)(b).

¹⁴⁹ *See* USMCA, *supra* note 17, annex 14-D (providing the framework for investment arbitration with Mexico and the United States).

¹⁵⁰ *Id.*

¹⁵¹ *See id.* (describing what the joint review period entails); *see also* Meltzer et al., *supra* note 111 (explaining that the joint review of the USMCA is an important date to look toward).

¹⁵² *See infra* notes 154–181 and accompanying text.

¹⁵³ *See infra* notes 182–214 and accompanying text.

¹⁵⁴ *See* M. ANGELES VILLAREAL, KYLA H. KITAMURA & DANIELLE M. TRACHTENBERG, CONG. RSCH. SERV., IF 10997, U.S.-MEXICO-CANADA (USMCA) TRADE AGREEMENT 1 (Dec. 6, 2024), <https://crsreports.congress.gov/product/pdf/IF/IF10997> [<https://perma.cc/J6VH-W6UX>] (providing a high-level overview of the key provisions within the USMCA, including when the joint review period will occur); Luz María de la Mora, *With Elections in Mexico and the US, 2024 Is a Pivotal Year for North American Trade*, ATL. COUNCIL (Jan. 22, 2024), <https://www.atlanticcouncil.org/blogs/new-atlanticist/with-elections-in-mexico-and-the-us-2024-is-a-pivotal-year-for-north-american-trade/> [<https://perma.cc/4AY2-BQYB>] (describing what to expect from the joint review period in 2026).

¹⁵⁵ USMCA, *supra* note 17, ch. 34, art. 34.7. Aside from the USMCA's joint review period, the trade agreement is scheduled to expire in 2036, sixteen years from the date of its promulgation into force. *See id.*

¹⁵⁶ *See* de la Mora, *supra* note 154 (explaining how the joint review period is unique to the USMCA).

volved in free trade agreements with twenty nations, but only the USMCA provides a joint review period prior to any termination date.¹⁵⁷

On the campaign trail, President Trump pledged to renegotiate the agreement “upon taking office,” in order to force action and meet his policy goals.¹⁵⁸ Since entering office, the Trump Administration has levied substantial tariff measures on Canadian and Mexican goods.¹⁵⁹ Notably, however, goods that comply with the USMCA have been exempted from the Administration’s updated tariff schedule, underscoring the importance of the agreement.¹⁶⁰

Taken together, the Trump Administration’s economic rhetoric and actions appear to have primed it to attempt to extract concessions from Mexico and Canada in any renegotiation.¹⁶¹ The Administration’s core justifications for

¹⁵⁷ See *Free Trade Agreements*, OFF. OF THE U.S. TRADE REPRESENTATIVE, <https://ustr.gov/trade-agreements/free-trade-agreements> [<https://perma.cc/JU74-UYJB>] (providing links to overviews of the various free trade agreements the United States participates in and any enactment provisions they contain).

¹⁵⁸ See *Former President Trump Delivers Remarks at Detroit Economic Club*, C-SPAN (Oct. 10, 2024), <https://www.c-span.org/program/campaign-2024/former-president-trump-delivers-remarks-at-detroit-economic-club/650204> [<https://web.archive.org/web/20241213175727/https://www.c-span.org/program/campaign-2024/former-president-trump-delivers-remarks-at-detroit-economic-club/650204>] (providing an overview of his economic policies and discussing his intent to renegotiate the USMCA); Ana Swanson, *Trump Is Said to Push for Early Reopening of North American Trade Deal*, N.Y. TIMES (Jan. 21, 2025), <https://www.nytimes.com/2025/01/21/business/economy/trump-usmca-trade-deal-mexico-canada-autos.html> [<https://perma.cc/HDB6-R244>] (describing how the Trump Administration may pressure Canada and Mexico to agree to an early renegotiation of the USMCA).

¹⁵⁹ See *Fact Sheet: President Donald J. Trump Adjusts Tariffs on Canada and Mexico to Minimize Disruption to the Automotive Industry*, WHITE HOUSE (Mar. 6, 2025), <https://www.whitehouse.gov/fact-sheets/2025/03/fact-sheet-president-donald-j-trump-adjusts-tariffs-on-canada-and-mexico-to-minimize-disruption-to-the-automotive-industry/> [<https://perma.cc/JRF4-8GAU>] (providing an overview of the Trump Administration’s latest North American tariff schedule); Ana Swanson, *Trump Has Said ‘No Exceptions’ to His Tariffs. Will That Last?*, N.Y. TIMES (Mar. 10, 2025), <https://www.nytimes.com/2025/03/10/business/economy/trump-tariffs-exceptions.html> [<https://perma.cc/2EC6-47PH>] (describing how President Trump has continuously undercut his own position in the North American trade war and as a result, deteriorated the United States’s bargaining power).

¹⁶⁰ See WHITE HOUSE, *supra* note 159 (exempting goods that fall under the USMCA from the latest tariff adjustment).

¹⁶¹ See Meltzer et al., *supra* note 111 (describing how the USMCA has been the backdrop to a substantial increase of FDI throughout North America, with FDI inflows in the United States and Mexico increasing at 134% year-over-year and 48% year-over-year, respectively); Andrew I. Rudman & Christopher Sands, *At Three Years, the US-Mexico-Canada Agreement Has Proven Its Worth*, WILSON CTR. (July 18, 2023), <https://www.wilsoncenter.org/article/three-years-us-mexico-canada-agreement-has-proven-its-worth> [<https://perma.cc/XYK2-4TKV>] (describing how it is likely that the North American states renegotiate the USMCA for an even more dependent relationship); *Fact Sheet: President Donald J. Trump Imposes Tariffs on Imports from Canada, Mexico and China*, WHITE HOUSE (Feb. 1, 2025), <https://www.whitehouse.gov/fact-sheets/2025/02/fact-sheet-president-donald-j-trump-imposes-tariffs-on-imports-from-canada-mexico-and-china/> [<https://perma.cc/8ZQ4-GB7L>] (using language that positions the justification for tariffs on Canada and Mexico as a response to policy failures from those states); Michelle L. Price, *How Trump Justifies His Tariffs—from Budget Balancing to Protecting ‘The Soul’ of America*, ASSOCIATED PRESS (Mar. 6, 2025), <https://apnews.com/>

the updated tariff measures include balancing the budget, thwarting the flow of drugs and undocumented immigrants over the border, and spurring domestic manufacturing.¹⁶² Since implementing the tariffs in early February 2025, however, the Trump Administration has withdrawn or altered the tariffs at a rapid pace, casting doubt on its own reasoning and policy goals.¹⁶³

With President Trump eager to renegotiate the USMCA but implementing tariffs on the agreement's member states through unsettled economic policy, it is difficult to parse out any potential concessions the Administration would seek in an early renegotiation.¹⁶⁴ It is certain, however, that the agreement will be renegotiated by the member states in some capacity with the United States leading the forum.¹⁶⁵

B. National Security Implications of a Semiconductor Provision in a Renewed USMCA

However, there is a possibility that renegotiation of the USMCA may not primarily exist in an economic context.¹⁶⁶ Just prior to President Biden's exit from office, he issued an array of rules that limited the purchase and sale of semiconductors from Chinese companies.¹⁶⁷ And as of late February 2025, the

article/trump-tariff-justifications-50f0b4416234e63c7136eaa5c5f96759 [https://perma.cc/YQN8-26GD] (explaining how President Trump has claimed that the tariffs are justified because Mexico is not policing its northern border and Canada is allowing a flow of fentanyl into the United States).

¹⁶² See Price, *supra* note 161 (explaining the justifications for the Trump Administration's tariff measures).

¹⁶³ See, e.g., Matt Egan, 'Personally, I Think It's Stupid': Businesses Are Struggling Under Trump's Chaotic Tariff Back-and-Forth, CNN (Mar. 6, 2025), <https://www.cnn.com/2025/03/06/business/tariff-trade-trump-uncertainty-economy/index.html> [https://perma.cc/6K83-QU9J] (describing how small business owners are already feeling the effects of having to keep track of an ever-evolving tariff regime); Eric Boehm, *Trump's Theory of Tariffs Makes No Sense*, REASON (Feb. 3, 2025), <https://reason.com/2025/02/03/trumps-theory-of-tariffs-makes-no-sense/> [https://perma.cc/96QN-6RG4] (explaining how the Trump Administration's policy goals are at odds with its policy).

¹⁶⁴ Julieta Contreras, Gary Clyde Hufbauer, Jeffrey J. Schott & Ye Zhang, *The Future of the USMCA*, PIIIE (Mar. 10, 2025), <https://www.piiie.com/microsites/2025/future-usmca> [https://perma.cc/JW7T-BPBN] (explaining that the Trump Administration could elect to withdraw from the USMCA, continue instituting its tariffs, or pursue more drastic policy such as devaluation); Ravi Agrawal, *What Is Trump's China Policy?*, FOREIGN POL'Y (Mar. 10, 2025), <https://foreignpolicy.com/2025/03/10/rush-doshi-trump-china-policy/> [https://perma.cc/D3N9-E9CB] (touching on how the Trump administration makes many different arguments and makes it difficult to figure out what they are actually focused on).

¹⁶⁵ See Contreras et al., *supra* note 164 (explaining how the United States has been aggressive since President Trump's return to office).

¹⁶⁶ See Makenzie Holland, *Trump Tariffs Raise USMCA Trade Agreement Questions*, TECH-TARGET (Mar. 7, 2025), <https://www.techtarget.com/searchcio/news/366620420/Trump-tariffs-raise-USMCA-trade-agreement-questions> [https://perma.cc/GQB2-DAY5] (explaining how a renegotiation of the USMCA could be framed as deepening cooperation in the face of Chinese competition).

¹⁶⁷ Ana Swanson, *Biden Administration Adopts Rules to Guide A.I.'s Global Spread*, N.Y. TIMES (Jan. 13, 2025), <https://www.nytimes.com/2025/01/13/us/politics/biden-administration-rules-artificial->

Trump Administration was exploring ways to strengthen those sanctions and adopt more stringent controls on the import of Chinese semiconductors.¹⁶⁸ The Trump Administration, then, could potentially attempt to implement these policies into the USMCA as a way to curb the inclusion of Chinese semiconductors into North American infrastructure and goods.¹⁶⁹ Moreover, viewing a renegotiation of the USMCA through a national security perspective could be seen as a response to Chinese encroachment over Taiwan and a way to protect the global semiconductor industry.¹⁷⁰ In this lens, the USMCA could operate as

intelligence.html [https://perma.cc/S7S4-QFP8] (describing how the Biden Administration pushed for a wide array of rules that targeted Chinese semiconductors); Karen Freifeld & Fanny Potkin, *Exclusive: US Ordered TSMC to Halt Shipments to China of Chips Used in AI Applications*, REUTERS (Nov. 10, 2024), https://www.reuters.com/technology/us-ordered-tsmc-halt-shipments-china-chips-used-ai-applications-source-says-2024-11-10/ [https://perma.cc/W45N-4P9Z] (describing how the Biden Administration imposed export restrictions over TSMC shipments of its most advanced chips because of national security concerns). Importantly, the United States's distrust of China is not new and within the last two decades, Washington has accused the Chinese government of hacking into U.S. government agencies, including the FDIC. See Christina Lam, *A Slap on the Wrist: Combatting Russia's Cyber Attack on the 2016 U.S. Presidential Election*, 59 B.C. L. REV. 2167, 2172 (2018).

¹⁶⁸ Mackenzie Hawkins, Cagan Koc & Jenny Leonard, *Trump Team Seeks to Toughen Chip Controls Over China*, BLOOMBERG, https://www.bloomberg.com/news/articles/2025-02-25/trump-administration-seeks-more-restrictions-on-china-tech-weighs-nvidia-curbs?embedded-checkout=true [https://perma.cc/V98D-4PHQ] (Feb. 25, 2025) (describing how the Trump Administration is seeking tighter sanctions and controls over the importation of Chinese-made semiconductors). At the same time, however, President Trump has voiced his support for totally repealing the CHIPS Act. See Tripp Mickle & Ana Swanson, *Trump's Call to Scrap 'Horrible' Chip Program Spreads Panic*, N.Y. TIMES (Mar. 11, 2025), https://www.nytimes.com/2025/03/10/technology/trump-chips-act.html [https://perma.cc/L9M4-AMTU] (noting how President Trump called the CHIPS Act a "horrible, horrible thing"). To President Trump's dismay, Republican leaders in Congress have signaled that they are not inclined to repeal the bipartisan legislation. Allan Smith, Frank Thorp V & Sahil Kapur, *Congressional Republicans 'Don't See a Huge Appetite' for Trump's Push to Repeal the CHIPS Act*, NBC (Mar. 5, 2025), https://www.nbcnews.com/politics/congress/republicans-trump-push-repeal-chips-act-rcna194910 [https://perma.cc/VJJ5-5GVV].

¹⁶⁹ See Kosuke Shimizu & Rintaro Tobita, *China Tensions Keep Mexico in Spotlight, 3 Years on from USMCA*, NIKKEI ASIA (July 4, 2023), https://asia.nikkei.com/Economy/Trade/China-tensions-keep-Mexico-in-spotlight-3-years-on-from-USMCA [https://perma.cc/BQ6S-E8FB] (explaining how the USMCA could act as a bulwark against China); GT Voice, *Why Can't US Contain China's Mature Chip Manufacturing?*, GLOBAL TIMES (Mar. 9, 2025), https://www.globaltimes.cn/page/202503/1329794.shtml [https://perma.cc/KUJ2-56JZ] (describing how China's semiconductor exports have rapidly increased over the last decade).

¹⁷⁰ See, e.g., Michael J. Green & Bonnie S. Glaser, *What Is the U.S. "One China" Policy, and Why Does It Matter?*, CSIS (Jan. 13, 2017), https://www.csis.org/analysis/what-us-one-china-policy-and-why-does-it-matter [https://perma.cc/TQ9M-6P4F] (providing an overview of China's territorial goals). At the end of WWII, China claimed Taiwan as a part of the Chinese state. See *China and Taiwan: A Really Simple Guide*, BBC (Jan. 7, 2024), https://www.bbc.com/news/world-asia-china-59900139 [https://perma.cc/U2UC-FG2P] (providing a very basic overview of Taiwanese-Chinese relations). Following Mao Zedong's emergence as leader of the People's Republic of China in 1949, the previous Chinese government—led by Chiang Kai-shek—fled to Taiwan, claiming it as the "Republic of China." *Id.* Since then, Taiwan has slowly drifted into its own sovereignty. *Id.* Thirty years ago only 20% of Taiwan's citizens considered themselves Taiwanese, but today that number is over 60%.

a bulwark against foreign encroachment over Taiwan and TSMC by facilitating efficient and interconnected supply chains across North America.¹⁷¹ China has a longstanding objective of integrating Taiwan into its territory that is driven by history, but China also has an economic advantage over Taiwan and disapproves of the CHIPS Act's goals.¹⁷² In late February 2025, a representative for the Chinese-Taiwan Affairs Office criticized Taiwan, saying that it was giving away its semiconductor industry to the United States.¹⁷³ With the USMCA focusing on semiconductor investment, TSMC's fabrication capabilities would

Id. China has maintained, however, that Taiwan is the rightful property of China. *Id.* The "One China" policy is the U.S.'s response to this dilemma. See Steven M. Goldstein, *Understanding the One China Policy*, BROOKINGS INST. (Aug. 31, 2023), <https://www.brookings.edu/articles/understanding-the-one-china-policy/> [<https://perma.cc/TPD7-CXZG>] (explaining that the One China policy recognized the People's Republic of China as the sole legitimate government of China). Notably, this policy attempts to straddle Chinese and Taiwanese interests, acknowledging that Taiwan is part of China, but not accepting that conclusion outright. *Id.* Moreover, the United States has been a party to a mutual defense treaty with Taiwan for nearly eighty years. *Id.* Today, China routinely carries out naval and military aircraft exercises a few dozen miles off of Taiwan's coast. See Dzirhan Mahadzir, *Chinese Warships, Fighters Hold Snap Live Fire Drills 40 Miles Off Taiwan, Say Officials*, USNI (Feb. 26, 2025), <https://news.usni.org/2025/02/26/chinese-warships-fighters-hold-snap-live-fire-drills-40-miles-off-taiwan> [<https://perma.cc/9VGH-AEC7>] (providing one example of China's frequent military drills that encroach on Taiwanese waters).

¹⁷¹ See, e.g., Gil Lan, *The "Poison Pill" in the USMCA: The Erosion of WTO Principles and Its Implications Under a U.S. China Trade War*, 53 VAND. L. REV. 1265, 1273 (2021) (explaining how the USMCA will automatically terminate if Mexico or Canada enters into a free trade agreement with a non-member state); James McCarten, *Mounting Push in U.S. Congress to Bring Latin American Countries Under the USMCA Umbrella*, GLOBE & MAIL (Sept. 15, 2023), <https://www.theglobeandmail.com/business/article-mounting-push-in-us-congress-to-bring-latin-american-countries-under/> [<https://perma.cc/QW9G-YXFD>] (describing how members of Congress sought to incorporate other Latin American states into the USMCA to, in part, act as a bulwark against China). See generally *United States-Mexico-Canada Agreement*, OFF. OF THE U.S. TRADE REPRESENTATIVE, <https://ustr.gov/trade-agreements/free-trade-agreements/united-states-mexico-canada-agreement> [<https://perma.cc/8GUN-J5J6>] (providing an overview of how the USMCA will connect business by modernizing supply chains and ensuring efficient cross-border trade).

¹⁷² See, e.g., Chong Ja Ian, *The Many 'One Chinas': Multiple Approaches to Taiwan and China*, CEIP (Feb. 9, 2023), <https://carnegieendowment.org/research/2023/02/the-many-one-chinas-multiple-approaches-to-taiwan-and-china?lang=en> [<https://perma.cc/R6TK-B7BV>] (explaining how China has accused the United States of deviating from its One China policy, given recent efforts to improve relations with Taiwan).

¹⁷³ See *China Says Taiwan Seeks to Give Away Chip Industry to US*, REUTERS (Feb. 26, 2025), <https://www.reuters.com/technology/china-says-taiwan-seeks-give-away-chip-industry-us-2025-02-26/> [<http://perma.cc/G295-D9W4>] (describing how a Chinese official compared Taiwan's involvement with the CHIPS Act to Taiwan providing the United States with a "souvenir"). Since then, the President of Taiwan has committed an additional one hundred billion dollars to semiconductor investment in the United States. See Chris Buckley, Meghan Tobin & Amy Chang Chien, *Taiwan's President Tries to Ease Fears Over U.S. Chip Investment*, N.Y. TIMES (Mar. 6, 2025), <https://www.nytimes.com/2025/03/06/world/asia/taiwan-tsmc-chips-arizona.html> [<https://perma.cc/X6BK-LP47>] (explaining that the United States-Taiwan relationship grows stronger and more competitive through cooperation).

be protected in North American borders and spread out across three countries rather than concentrated in a sole state as it historically has been.¹⁷⁴

The Biden Administration saw the opportunity to court TSMC into growing its footprint in North America through the CHIPS Act and provided the firm billions of dollars in grants to build a fabrication facility in Arizona.¹⁷⁵ Notably, however, TSMC does not fabricate its most advanced chips outside of Taiwan because of the facilities, expertise, and assets required to build those models.¹⁷⁶ A North American commitment to providing the framework for that level of investment through the USMCA could be the driver to move more advanced fabrication outside Taiwanese borders.¹⁷⁷ In an attempt to spurn that investment, President Trump threatened to apply tariffs on foreign-produced semiconductors, including those manufactured by TSMC.¹⁷⁸ President Trump argued that an economic stick is all that is needed to encourage more foreign semiconductor-fabrication investment in the United States, but as Taiwanese

¹⁷⁴ See Ramish Zafar, *TSMC Might Have Secured Taiwan's Approval to Make Advanced 2nm Chips in US*, WCCFTech (Jan 13, 2025), <https://wccfttech.com/tsmc-might-have-secured-taiwans-approval-to-make-advanced-2nm-chips-in-us/> [<https://perma.cc/BX2D-KBP7>] (explaining how Taiwan has closely held TSMC's most advanced fabrication methods within its borders, but as a result of the CHIPS Act, fabrication of the latest generation of chips may take place in Arizona).

¹⁷⁵ See Katherine Bourzac, *The U.S. Will Start Manufacturing Advanced Chips*, IEEE (Dec. 27, 2024), <https://spectrum.ieee.org/tsmc-arizona> [<https://perma.cc/8JGK-8HDV>] (explaining how the TSMC Arizona plant is meant to be a testing ground to facilitate efficient implementation of the CHIPS Act). Since opening, however, the plant has been plagued by supply chain and labor issues. See, e.g., Prasanth Aby Thomas, *Delays in TSMC's Arizona Plant Spark Supply Chain Worries*, CIO (Jan. 21, 2025), <https://www.cio.com/article/3806430/delays-in-tsmcs-arizona-plant-spark-supply-chain-worries.html> [<https://perma.cc/3XJ3-4EHG>] (describing how the Arizona TSMC plant has also faced construction challenges because of a lack of building regulations sufficient to ensure the safe construction of a semiconductor fabrication facility).

¹⁷⁶ See Zafar, *supra* note 174 (describing how TSMC fabricates its most advanced designs in Taiwan to ensure quality control standards are met).

¹⁷⁷ *Id.*

¹⁷⁸ Chris Buckley & Catie Edmondson, *Taiwan Prepares for Trump's Tariffs, and a Changed Washington*, N.Y. TIMES (Feb. 13, 2025), <https://www.nytimes.com/2025/02/13/world/asia/taiwan-tariffs-trump.html> [<https://perma.cc/66WC-2L8F>]. On April 2, 2025, the Trump Administration levied "reciprocal" tariffs against a range of goods, including semiconductors from Taiwan. Exec. Order No. 14257, 90 Fed. Reg. 15041, 15045–46 (Apr. 2, 2025). A week later, those same duties were increased to 125% by an unpublished executive order. Exec. Order of April 9, 2025, *Modifying Reciprocal Tariff Rates to Reflect Trading Partner Retaliation and Alignment*, <https://www.whitehouse.gov/presidential-actions/2025/04/modifying-reciprocal-tariff-rates-to-reflect-trading-partner-retaliation-and-alignment/> [<https://perma.cc/F2NV-FT6R>]. Days later, however, the U.S. Customs and Border Patrol issued guidance to exclude phones, computers, and semiconductors from the duties altogether. U.S. CUSTOMS & BORDER PROT., CSMS MESSAGE NO. 64724565, *UPDATED GUIDANCE—RECIPROCAL TARIFF EXCLUSION FOR SPECIFIED PRODUCTS* (Apr. 11, 2025), https://content.govdelivery.com/bulletins/gd/USDHSCBP-3db9e55?wgt_ref=USDHSCBP_WIDGET_2 [<https://perma.cc/6D5Z-GBRZ>].

President Lai Ching-te noted, economic sticks do not “create a win-win scenario” for mutual economic growth.¹⁷⁹

A renegotiation in 2026 is an opportunity to maintain the USMCA’s framework—a modernized trade agreement—while responding to negative economic effects brought on by a semiconductor supply shortage and an evolving geopolitical landscape.¹⁸⁰ To ensure that the United States is protected, the USMCA should be renegotiated to include a specific provision that governs North American semiconductor investment.¹⁸¹

III. FABBITING THE FUTURE: A PROPOSED SEMICONDUCTOR CHAPTER WITHIN THE USMCA

Given the upcoming USMCA joint review period in 2026, the member-states should heed the lessons from the COVID-19 pandemic and China’s growing semiconductor fabrication prowess to integrate semiconductor fabrication within the trade agreement.¹⁸² This Part outlines what a semiconductor fabrication chapter within the USMCA might look like.¹⁸³

In some ways, the inclusion of a semiconductor provision within the USMCA is the logical outgrowth of the member-states’ discussions during the Biden Administration.¹⁸⁴ The countries have already discussed a tripartite framework for semiconductor investment in North America, despite that discussion not yielding any robust fruit.¹⁸⁵ And while the Trump Administration’s economic policies have differed dramatically from the Biden Administration’s,

¹⁷⁹ *Taiwan’s President Pledges More U.S. Investment and Better Communication Hours After Trump Orders Reciprocal Tariffs*, FORTUNE (Feb. 14, 2025), <https://fortune.com/asia/2025/02/14/taiwan-president-pledges-more-us-investment-trump-reciprocal-tariffs/> [<https://perma.cc/5A4J-KH48>] (describing how the semiconductor industry is a complex and ever-evolving ecosystem that requires mutually beneficial actions and stable actors).

¹⁸⁰ See Ian King, Debby Wu & Demetrios Pogkas, *supra*, note 3 (describing how an inability to balance work and social distancing standards and an unexpected increase in demand led to a semiconductor supply chain crunch).

¹⁸¹ See de la Mora, *supra* note 154 (describing how the USMCA is a popular agreement amongst the parties and there is no desire among any of the North American states to end the agreement at present).

¹⁸² See USMCA, *supra* note 17, art. 34.7 (describing the joint review period).

¹⁸³ See *infra* notes 184–214 and accompanying text.

¹⁸⁴ See Catherine Osborn, *The ‘Three Amigos’ Talk Microchips*, FOREIGN POL’Y (Jan. 13, 2023), <https://foreignpolicy.com/2023/01/13/us-mexico-canada-summit-immigration-semiconductors/> [<https://perma.cc/R8DN-84JS>] (providing an example of North American semiconductor discussions that preceded the CHIPS Act).

¹⁸⁵ *Id.*

the end goal of increasing domestic semiconductor-fabrication capabilities remains the same.¹⁸⁶

The CHIPS Act is a positive attempt to diversify the domestic semiconductor-fabrication sector, but American manufacturing comes with more quirks than Taiwan's market.¹⁸⁷ For example, at the TSMC Arizona plant, approximately half of the 2,200 employees working at the facility are Taiwanese and worked at TSMC's Taiwan facilities.¹⁸⁸ TSMC hires college graduates with STEM degrees for its fabrication roles and is known for arduous working hours.¹⁸⁹ Because of the firm's strict quality control and selection requirements, it has found it difficult to find American workers with the requisite education who are willing to work those hours.¹⁹⁰

Shifting domestic semiconductor investment under the auspices of the USMCA would provide North America with a combination of Mexico's strong manufacturing history and the U.S.'s capital and technical expertise.¹⁹¹ Cities in Mexico, like Monterrey, are vibrant hubs for technological development and investment that boast an educated workforce and proximity to the United States.¹⁹² Moreover, the United States and Mexico could see such a shift exist

¹⁸⁶ Compare Shilov, *supra* note 9 (discussing how President Trump takes a "stick" approach to economic policy), with Osborn, *supra* note 184 (describing how the Biden Administration led its economic policy with carrots).

¹⁸⁷ See Swanson, *supra* note 59 (describing how the CHIPS Act will seek to diversify American semiconductor manufacturing); Michael Sainato, *They Would Not Listen to Us: Inside Arizona's Troubled Chip Plant*, THE GUARDIAN (Aug. 28, 2023), <https://www.theguardian.com/business/2023/aug/28/phoenix-microchip-plant-biden-union-tsmc> [<https://perma.cc/6GRC-D575>] (explaining how construction of the first TSMC Arizona fabrication facility has been affected by cultural differences between Taiwanese managers and their American counterparts).

¹⁸⁸ See Anton Shilov, *Half of TSMC's Arizona Staff Are Taiwanese, Despite Recent Controversies*, YAHOO! (Jan. 1, 2025), <https://www.yahoo.com/news/half-tsmcs-arizona-staff-taiwanese-134657828.html> [<https://perma.cc/5DU4-2MZK>].

¹⁸⁹ See Jeff Butts, *TSMC Arizona Struggles to Overcome Vast Differences Between Taiwanese and US Work Culture*, TOM'S HARDWARE (Aug. 8, 2024), <https://www.tomshardware.com/tech-industry/semiconductors/tsmc-arizona-struggles-to-overcome-vast-differences-between-taiwanese-and-us-work-culture> [<https://perma.cc/4G88-4LCW>] (explaining how Taiwanese managers and American employees have had difficulty collaborating with each other at the TSMC Arizona plant because of discrepancies in work culture).

¹⁹⁰ See *id.* (highlighting that TSMC engineers are all required to be highly educated and those with the requisite educational qualifications may not be comfortable working in a factory-like environment).

¹⁹¹ See Meltzer et al., *supra* note 111 (describing how the USMCA's implementation led to a substantial increase in FDI capital outflows in the United States while Mexico has been a beneficiary of an increase in FDI inflows).

¹⁹² See David Gomez, *Technology Sector in Mexico in 2025*, ALCOR (Nov. 27, 2024), <https://alcor-bpo.com/overview-of-the-technology-industry-in-mexico/#:~:text=Monterrey%20is%20the%202nd%20Mexican,%2C%20Robin%20Academy%2C%20and%20others> [<https://perma.cc/XUT8-JRUZ>] (explaining how Monterrey, Mexico, is home to hundreds of tech companies and multiple universities focused on technology).

under a renewed *maquiladora* system built on the USMCA's existing provisions and mutual trust, rather than economic coercion.¹⁹³ And this proposal could be governed by a newly established subject-matter specific semiconductor provision negotiated in 2026.¹⁹⁴

The new semiconductor provision could include components from Chapters 19 and 20 of the USMCA.¹⁹⁵ First, from Chapter 19, the semiconductor provision could include the imposition of a forum to establish trilateral discussions over semiconductor investment and incorporate the new intellectual property definition that already exists in the USMCA.¹⁹⁶ Second, from Chapter 20, the provision could incorporate sections that ensure the free flow of information, dissemination of technical knowledge, and support to educational programs.¹⁹⁷

This language would ensure that semiconductor investment would include the requisite knowledge needed to manufacture semiconductors through the protection of the USMCA.¹⁹⁸ Language from Chapter 23 could also be amended to ensure that workers hired at semiconductor plants have the necessary technical skills to be employed in the factory and are protected from overworking conditions from an overenthusiastic TSMC.¹⁹⁹

Additionally, a semiconductor provision would incorporate the lessons from NAFTA's Chapter 11 arbitration and cases like *Metalclad* to ensure that domestic legislation potentially concerning negative externalities from semiconductor investment would not be offended.²⁰⁰ Incorporating those reforms into the semiconductor provision would help to facilitate buy-in from the three states and their citizens.²⁰¹

Assuming that the fabrication plants are a success, the *maquiladora* program could potentially be codified within the USMCA itself to ensure that workers are sufficiently supervised.²⁰²

¹⁹³ See Sklair, *supra* note 79, at 167–85 (discussing American appetite for the *maquiladora* system).

¹⁹⁴ See Meltzer et al., *supra* note 111 (discussing the USMCA's renegotiation period in 2026).

¹⁹⁵ See USMCA, *supra* note 17, ch. 19, 20 (providing the provisions for digital trade and intellectual property in the USMCA). Through shared portions within the chapters, like forums for the member-states to participate in, the technology-focused provisions of the USMCA are complementary and work together. See *id.*

¹⁹⁶ See *id.* ch. 19 (providing the provisions of the digital trade chapter).

¹⁹⁷ See *id.* ch. 20 (providing the provisions of the intellectual property chapter).

¹⁹⁸ *Id.*

¹⁹⁹ See *id.* ch. 23 (explaining more specific portions of the labor chapter such as labor rights, enforcement mechanisms, and specific protections from violence or coercion).

²⁰⁰ *Metalclad Corp. v. United Mexican States*, ICSID Case No. ARB(AF)/97/1 (Aug. 30, 2000), 5 ICSID Rep. 209 (2002).

²⁰¹ See Lai, *supra* note 115, at 290 (describing how ISDS arbitration was becoming a “threat” to transnational trade, but its rigor instills investor confidence and thus, is not meritless).

²⁰² See Gustavo A. Vargas & Thomas W. Johnson, *An Analysis of Factors in Selecting a “Maquiladora” Operational Mode*, 33 PROD. & INVENTORY MGMT. J., no. 4, 1992, at 46, 49, reprinted in 111 URBANA, ANALISIS Y METODOS 2, 5 (1996), <https://urbanauapp.org/wp-content/uploads/2011/>

If TSMC, for example, sought to establish a facility in Monterrey, Mexico, it would require significant oversight to hire labor that has technical competence and can maintain the production standards seen in Taiwan.²⁰³ The *maquiladora* system already provides for that close oversight—it allows the American firm to solely own and dominate the Mexican subsidiary.²⁰⁴ Just because the tax benefits of the old *maquiladora* system would be moot under the TSMC does not mean the knowledge of cross-border management would be unusable.²⁰⁵ The *maquiladora* system would not focus on duty-free exportation of goods, but would rather serve as a requirement for semiconductor investment under the USMCA—to participate, the parent company must be in the United States and the Mexican entity must be owned outright.²⁰⁶

Additionally, a proposed semiconductor chapter would largely incorporate provisions from existing chapters within the USMCA, to ensure clarity.²⁰⁷ For example, semiconductor fabrication could be considered a “covered government sector” and subject to reformed ISDS arbitration in Mexico.²⁰⁸ Additionally, the provision in Chapter 23 that allows entities to adjudicate labor violations themselves could be amended to allow even more control over semiconductor claims than ISDS arbitration may provide.²⁰⁹

For Taiwan and TSMC, such a relationship would be the “win-win” described by President Lai Ching-te by finding certainty outside the auspices of

07/Urbana-1996_2.pdf[https://perma.cc/9QT8-HA6B] (describing how one of the positive aspects of the *maquiladora* model is full and direct control of a subsidiaries operations within Mexico).

²⁰³ See *id.* (describing how the *maquiladora* model was sought after because of the control it provided); John Liu & Jack Healy, *Arizona's Tiny Taipei: How a Taiwanese Chip Factory Seeded a Community*, N.Y. TIMES, <https://www.nytimes.com/2024/12/29/business/tsmc-phoenix-taiwan.html> [https://perma.cc/Y5TV-TVVA] (Jan. 5, 2025) (describing how TSMC's Arizona plant has wrestled with balancing strict American labor laws and the company's more rigorous working standards); Complaint for Employment Discrimination at 7–14, *Howington v. Taiwan Semiconductor Mfg. Co.*, No. 24-cv-05684, 2025 U.S. Dist. LEXIS 34963 (N.D. Cal. Feb. 26, 2025) (alleging that TSMC has engaged in discriminatory practices for allegedly favoring Taiwanese workers over their American counterparts).

²⁰⁴ Vargas & Johnson, *supra* note 202.

²⁰⁵ See *id.* (describing how the *maquiladora* system provides quality control, supervision, and labor benefits beyond a reduction of duties).

²⁰⁶ Cf. *id.* (describing how, unlike the proposed semiconductor provision, which requires participating in the *maquiladora* system to invest in semiconductors, the original *maquiladora* system did not mandate participation for foreign entities investing in Mexican manufacturing).

²⁰⁷ See de la Mora, *supra* note 154 (explaining how any proposed renegotiation of the USMCA would have to be familiar to each party given the popularity of the agreement).

²⁰⁸ See Baker & Keiser, *supra* note 115, at 6–7 (explaining how because of corporate interests enjoying ISDS protection over their Mexican investments, Mexico sought to retain ISDS arbitration in the USMCA).

²⁰⁹ See USMCA, *supra* note 17, ch. 23 (highlighting how parties may contract out labor violation enforcement).

China.²¹⁰ Since 1949, China has viewed Taiwan as a rogue territory and has sought to reincorporate Taiwan back into mainland China in a variety of ways.²¹¹ Chief among those ways is China threatening the use of force to achieve this goal.²¹² With TSMC being the single most important firm in the global economy, the United States should be especially vigilant in maintaining the status quo and ensuring that it will be a global leader in semiconductor fabrication for decades to come.²¹³ Accordingly, incorporating semiconductor fabrication into the USMCA would act as a strong hedge against any sort of attempt by China to bring Taiwan into their control.²¹⁴

CONCLUSION

The COVID-19 pandemic brought the unique problem of semiconductor fabrication to the forefront of consumers' minds as a global shortage in semiconductors resulted in a similar shortage of end-user electronics. With a single firm, TSMC, representing nearly the entire advanced semiconductor fabrication industry, another global shortage in semiconductors could prove even more disastrous. Following the passage of legislation aimed at recovering from the pandemic, the U.S. government sought to address the semiconductor question by passing large spending bills. The Trump Administration, however, is employing a carrot and stick approach by utilizing the threat of tariffs as a tool of coercion to force states like Mexico and Taiwan to adopt favorable policy. To properly address the unique semiconductor question and ensure that the United States has the domestic semiconductor fabrication strength that President Trump desires, the United States should campaign to incorporate a chapter specific to semiconductor investment in 2026, the year of the USMCA joint review. Utilizing pre-existing provisions of the USMCA, including investment arbitration, and a reimagination of the *maquiladora* system, a semiconductor chapter would provide the stability that the United States craves while providing Mexico with a valuable and technologically advanced domestic manufacturing sector.

NICOLAS VALDEZ

²¹⁰ See, e.g., Lindsay Maizland, *Why China-Taiwan Relations Are So Tense*, COUNCIL ON FOREIGN RELS., <https://www.cfr.org/background/china-taiwan-relations-tension-us-policy-biden> [<https://perma.cc/HAJ4-EY6J>] (Mar. 19, 2025) (providing a review of the history between China and Taiwan); Sacks, *supra* note 30 (describing the precarious geopolitical relationship between China and Taiwan).

²¹¹ See, e.g., Green & Glaser, *supra* note 170 (explaining China's territorial goals).

²¹² See *id.* (explaining how China may even use military force to attempt to reincorporate Taiwan into mainland China).

²¹³ See Sacks, *supra* note 30 (explaining how TSMC fabricates more than 90% of the most advanced semiconductors in the world).

²¹⁴ See *id.* (explaining China's fervor over re-incorporating Taiwan).