Case Study 6.2

Micron versus UMC and Fujian Jinhua

The Cross-Border Struggle over Integrated Circuits' Trade Secrets

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1 Overview

This case study examines the dispute between Micron Technology, United Microelectronics Corporation (UMC), and Fujian Jinhua Integrated Circuit Co. Ltd. ("Jinhua") over the alleged theft of Micron's trade secrets in integrated circuits (ICs), specifically dynamic random-access memory (DRAM) chips. This dispute offers a lens through which to analyze China's strategic efforts to strengthen its semiconductor industry by overseas investment. It begins by introducing China's ambitious policy framework aimed at achieving self-reliance in the semiconductor industry, set against the backdrop of geopolitical tensions and the COVID-19 pandemic's impact on global IC supply chains. It then turns to the case adjudicated by Taiwanese courts in 2020, where UMC and Jinhua faced allegations of trade secret misappropriation from Micron. Finally, this study compares the different legal and regulatory approaches of Taiwan and the United States in addressing such disputes, highlighting the challenges in regulating global supply chains amidst evolving geopolitical and economic landscapes. Through exploring both the legal complexities and international responses to Chinese outbound investments in critical technologies, this case study delineates the strategic interplay between China's state-directed industrial goals, international commercial norms, and the pursuit of technological innovation.

2 Introduction

In October 2022, the United States promulgated a series of export controls on China's access to advanced computing chips and semiconductor manufacturing items designed or produced by American companies. Under the new regulations, restrictions on China's reach into the global semiconductor value chain are comprehensive, including high-end artificial intelligence (AI) chips, US-made chip design software, and US-built semiconductor manufacturing equipment and components. These controls illustrate the "stranglehold" or "neck choking" (*kabozi*) challenge that the Chinese authorities have long identified: that Western domination of advanced chip designs and manufacturing

can lead to weaponizing its chokepoint positions in the global semiconductor industry to gain leverage over China's economic and national security interests. From the US perspective, however, this set of new regulations may be read as a direct strategic response to China's own peculiar approach to the development of its semiconductor industry, which Americans view as highly aggressive.

China makes no secret of its ambition to become a global leader in the integrated circuits industry. Since the early 2010s, the Chinese government has launched several policy initiatives to do so.[1] Among the most crucial is the State Council's "2020 IC Notice,"[2] which replaces most of the country's previous IC-related policy instructions. Adding muscle to these policy frameworks is the China Integrated Circuit Industry Investment Fund, also known the "Big Fund." Created as a government guidance fund, the fund is designed to assist China in realizing its aim of becoming self-reliant in the semiconductor sector, aligned with the broader objectives of the "Made in China 2025" plan.[3]

While China's drive to develop its semiconductor industry may seem like part of a global trend,[4] the country's circumstances are notably distinct due to geopolitics and the aftereffects of COVID-19. The pandemic exposed vulnerabilities in the international IC supply chain, leading to disruptions and bottlenecks that wreaked havoc across multiple industries. The crisis underscored the perils of depending on a handful of key semiconductor suppliers, especially when they are concentrated in specific geographic regions. This awareness has prompted many countries, including China, to reconsider their reliance on foreign chip suppliers and explore ways to bolster domestic production and research. For China, however, the situation is compounded by additional layers of geopolitical tensions, notably the sanctions imposed by the United States. These sanctions have not only restricted China's access to cutting-edge semiconductor technology but also accelerated its drive for self-sufficiency in IC production. The confluence of geopolitics and pandemic-induced supply chain issues has made China's semiconductor landscape unique, heightening the urgent need for the country to develop a resilient and independent chip industry.

[1] See, e.g., the State Council's Notice on Several Policies to Promote the Development of the Integrated Circuit Industry and Software Industry (*Guofa* [2011] No. 4), www.gov.cn/zhengce/content/2011-02/09/content_3378.htm; Guidelines to Promote a National Integrated Circuit Industry (2014).

[2] Notice on Several Policies to Promote the High-Quality Development of the Integrated Circuit Industry and Software Industry in the New Era (*Guofa* [2020] No. 8) www.gov.cn/zhengce/content/2020-08/04/content_5532370.htm.

[3] Made in China 2025 Initiative (*Guofa* [2015] No. 28).

[4] See, e.g., White House, *Building Resilient Supply Chains, Revitalizing American Manufacturing, and Fostering Broad-Based Growth* (2021) www.whitehouse.gov/wp-content/uploads/2021/06/100-day-supply-chain-review-report.pdf; the US government's recent "Creating Helpful Incentives to Produce Semiconductors and Science Act of 2022" (CHIPS Act of 2022), promulgated on 9 August 2022, is a manifestation of the global trend toward securing domestic chip supply chains. The Act provides funding to support US manufacturing, semiconductor R&D, and workforce development, thereby aiming to localize chip production; CHIPS Act of 2022, www.congress.gov/117/plaws/publ167/PLAW-117publ167.pdf.

China's official policy documents thus reveal a pivot toward semiconductor self-reliance that diverges from the current model of global interdependencies. These policies explicitly advocate for a self-sufficient and enclosed semiconductor production system within China, positioning the country as the epicenter of global semiconductor production. This is a striking departure from the highly globalized structure of current IC supply chains and represents an ambitious goal. Contrasting with the approach for deeper global integration, Beijing's leadership perceives the status quo as a national security vulnerability. They prioritize security over efficiency or global cooperation, viewing interdependence as a threat that exposes the country to potential supply chain disruptions, notably from the United States and its allies.

As prescribed in these policy instructions, measures specified or encouraged by the state have been wide-ranging. One key measure is providing a set of tiered tax incentives such as exemptions or reductions in enterprise income tax or value-added tax. IC companies that produce chips with a line width of smaller than 28 nanometers and that have operated for more than fifteen years, for instance, will be exempt from corporate income tax for the first ten years of operation (Article 1.1, 2020 IC Notice). IC companies that have been in operation for less than fifteen years, starting from the year they become profitable, will be exempt from corporate income tax for the first and second years, and for the third to fifth years their corporate income tax will be levied at half of the statutory rate of 25% (Article 1.2, 2020 IC Notice). Other measures include inducement subsidies, concessional loans, mergers and acquisitions (M&As), and talent recruitment.

There is more to the worries about China's ambition in the semiconductor industry than meets the eye. The source of concerns stems primarily from its highly strategic, often strong-armed approach to technological advancement, which is at odds with the liberal ideal of market competition and international commercial norms. To accelerate the self-sufficiency of its chip industry, for example, China's FDI incentive scheme often encourages foreign firms to form joint ventures and share their technology with local partners in exchange for access to the Chinese semiconductor market.[5] This same tactic of technology transfer is also seen in China's overseas investment in the semiconductor industry, particularly through M&As that permit the repatriation of more advanced know-how.[6] However, alongside these more formal and sanctioned strategies, some Chinese companies have been accused of adopting more aggressive, under-the-table tactics such as talent acquisitions and the misappropriation of trade secrets or other forms of intellectual property. Owing to the controversial nature of these practices, they frequently result in legal challenges, criminal

[5] See Chris Miller, *Chip War: The Fight for the World's Most Critical Technology* (Simon & Schuster 2022) 255–61 (reporting that IBM, AMD, and Qualcomm each engaged in technology transfer with Chinese entities through joint ventures during the 2010s).

[6] Stephen Ezell, *Moore's Law Under Attack: The Impacts of China's Policies on Global Semiconductor Innovation* (Information Technology & Innovation Foundation 2021) 24–5.

charges, and regulatory crackdowns on Chinese investment in the host state's sensitive areas.

One high-profile example that encapsulates these issues is the criminal case involving trade secrets between Micron, UMC, and Jinhua, which was adjudicated by Taiwanese courts in 2020.

3 The Case

3.1 Court Case: UMC and Jinhua

China's ambition to lead in the semiconductor industry is intrinsically tied to its broader strategic objective of becoming a global powerhouse in AI. Both sectors are interdependent: Semiconductors serve as the foundational technology for AI-enabled applications. Take, for example, DRAMs. These chips are staples in everyday electronic devices like smartphones and computers, but their role has become increasingly important due to the data-intensive nature of modern AI applications. DRAM chips enable quick access to vast amounts of data, a necessity for the real-time processing performed by AI algorithms.

Despite the government's generous funding for the semiconductor industry, Chinese firms have yet to break into the DRAM market. In terms of market share, Samsung and SK Hynix in South Korea continue to dominate the industry, followed by Micron in the United States. This monopolization is largely due to the highly competitive nature of the DRAM industry, which requires not just massive capital investment for manufacturing facilities but also specialized expertise. All these factors make it difficult for latecomers to challenge the dominance of the key players. Nonetheless, this has not stopped some key Chinese companies from trying and Micron was one such target.

Founded in 1978, Micron is a multinational corporation specializing in designing and manufacturing not just DRAM but also other types of memory chips such as NAND flash memory and solid-state drives. Headquartered in Boise, Idaho, in the United States, Micron also operates many production facilities in the Asia-Pacific region. Tsinghua Unigroup's US$23 billion acquisition offer in 2015 was the first attempt to approach Micron.[7] Micron did not think this deal was realistic as it assumed that the US regulator would not approve the transaction due to national security concerns.[8] Hence, the deal did not go forward.

One year later, Micron was targeted by another Chinese company, Jinhua, a Fujian-based DRAM chipmaker. Unlike Tsinghua Unigroup's straightforward

[7] Paul Mozur and Quentin Hardy, 'Micron Technology Is Said to Be Takeover Target of Chinese Company' *New York Times* (14 July 2015) https://archive.nytimes.com/www.nytimes.com/2015/07/15/business/international/micron-technology-is-said-to-be-takeover-target-of-chinese-company.html.

[8] Stacey Higginbotham, 'Micron Really Doesn't Seem Interested in Doing a Deal with China's Tsinghua' (*Fortune*, 21 July 2015) https://fortune.com/2015/07/20/micron-really-doesnt-seem-interested-in-doing-a-deal-with-chinas-tsinghua/.

takeover bid, Jinhua took a more circuitous route. Jinhua entered into a licensing agreement with UMC, a major Taiwanese semiconductor manufacturer. UMC had just recruited the president of Micron's Taiwan branch, thereby gaining valuable insights into DRAM production. According to the Taichung District Court,[9] in January 2016 UMC struck a deal with Jinhua that provided UMC with US$700 million in exchange for developing and providing knowledge transfer about DRAM production processes. Up to this point, the deal appeared to be legally sound. However, two years later, in 2018, UMC and three individuals involved in the collaboration – Jianting Ho, Yongming Wang, and Letian Rong – were charged with criminal violations of Taiwan's Trade Secret Law.

In 2020, the Taichung District Court found them guilty of infringing Micron's trade secrets. UMC was ordered to pay a fine of NT$100 million.[10] Ho, Wang, and Rong were sentenced to five years and six months, four years and six months, and six years and six months, respectively.[11] The decision was appealed to the Intellectual Property and Commercial Court (IPCC).[12] In January 2022, the IPCC reversed the district court's decision.[13] UMC's fine was reduced to NT$20 million. Ho's sentence was reduced to one year, whereas Wang's was reduced to only six months. Rong was acquitted of all charges. The IPCC's ruling against UMC is final. The charges against individuals were appealed by prosecutors to Taiwan's Supreme Court. In August 2022, the Supreme Court reversed the decision and remanded the case back to the IPCC for further proceedings. As of September 2023, the criminal charges against Ho, Wang, and Rong are still pending in the IPCC.

According to the information presented in these decisions, the licensing collaboration between UMC and Jinhua raised some questions about potential irregularities, particularly given UMC's area of expertise. UMC is a major semiconductor manufacturer focused primarily on the design and production of logic chips, not memory chips like DRAM. This specialization made the licensing arrangement with Jinhua, a DRAM chipmaker, somewhat unusual and prompted scrutiny.

To further contextualize, in 2015 UMC recruited Stephen Chen, who had previously served as the president of Micron Memory Taiwan Co., Ltd. (hereinafter, "MMT"). Chen was tasked with leading UMC's New Business Development unit, established in January 2016 specifically to finalize a DRAM

[9] 106 Zhisu 11 Judgement (Taichung District Court, 12 June 2020) 2–3.
[10] 106 Zhisu 11 Judgement (Taichung District Court, 12 June 2020) 168. [11] ibid.
[12] The IPCC is a specialized court located in New Taipei City, Taiwan. Established initially as the IP Court on 1 July 2008, it was renamed and restructured on 1 July 2021 following its merger with the commercial court system. The IPCC holds jurisdiction over cases related to intellectual property rights and commercial law. This includes first or second instance civil and criminal cases under acts such as the Patent Act, Trademark Act, Copyright Act, and Trade Secrets Act, among others. Post merger, the court's jurisdiction expanded to incorporate commercial cases as specified by the Commercial Case Adjudication Act.
[13] 109 Xingzhishangzhongsu 4 Judgement (IPCC, 27 January 2022) 1–2, 162.

licensing deal with Jinhua. Chen also recruited two former employees from MMT, Ho and Wang, to join UMC's new unit.

Both Ho and Wang had worked at MMT for several years, during which they had gained access to Micron's confidential data and trade secrets related to memory chips. The fact that these individuals, who had access to sensitive Micron information, were now involved in a DRAM deal between UMC and Jinhua raises questions about the true intent behind the licensing arrangement.

Ho was accused of reproducing and using the trade secrets that he had acquired during his employment at MMT. Wang was introduced to UMC by Ho and was offered a salary that was equal to his position at MMT, plus an additional bonus upon signing another employment contract with Jinhua and working in Mainland China. Wang resigned from MMT on 26 April 2016 and started at UMC two days later. However, before leaving MMT, he downloaded and copied the company's trade secrets onto a USB drive and uploaded them to his Google Drive. All these actions took place between 16 April and 23 April 2016 while Wang was still employed at MMT. He then used the data to help UMC develop DRAM products.[14] As the court shows, the licensing collaboration between UMC and Jinhua involved two stages: initially conducting research and development (R&D) in Taiwan and then transferring the technology to Jinhua.[15] In the scenario presented in the court decisions, talent acquisition and trade secret theft were the major measures adopted to achieve the licensing agreement's objectives.

3.2 Regulatory Analysis

Currently, the key legislation that governs China's investment in Taiwan is the Act Governing Relations between Peoples of the Taiwan Area and the Mainland Area (hereinafter, the "Cross-Straits People Relations Act").[16] Pursuant to Article 40-1 of the Act, Mainland Area profit-seeking enterprises, as well as their investments in other territories, are prohibited from conducting any business activities within the Taiwan Area without prior authorization from the competent authorities and the requisite establishment of a local branch or liaison office. Similarly, Article 73 mandates that individuals, juristic persons, organizations, or other institutions from the Mainland Area, along with any companies they invest in within other territories, may not partake in investment activities within the Taiwan Area without explicit permission from the competent authorities.

As the court decisions reveal, the licensing agreement between UMC and Jinhua received regulatory approval from the Investment Commission of the Ministry of Economic Affairs (MOEAIC) in Taiwan,[17] making it legitimate

[14] 106 Zhisu 11 Judgement (Taichung District Court, 12 June 2020) 6–7.
[15] 109 Xingzhishangzhongsu 4 Judgement (IPCC, 27 January 2022) 143–4.
[16] In the Act, the term "Mainland Area" refers to Mainland China, which is generally understood to be the territory now controlled by the People's Republic of China.
[17] 106 Zhisu 11 Judgement (Taichung District Court, 12 June 2020) 2.

under current Taiwanese law. However, if Jinhua's objective was merely to develop or acquire expertise related to DRAM production, this collaboration seems inefficient, especially considering that UMC does not specialize in memory chips. This raises the possibility that Jinhua's strategy may have been designed to circumvent Taiwanese laws restricting the recruitment of talent from Taiwan, as prohibited in the Cross-Straits People Relations Act.

Article 34 of the Cross-Straits People Relations Act contains strict restrictions on job recruitment information for positions in Mainland China. According to this article, job positions in Mainland China cannot be advertised in Taiwan without permission. Advertisers or human resources agencies who violate this rule are subject to Article 89, Paragraph 1 of the Act. It stipulates that any person who entrusts to another, is entrusted, or acts on their own to engage in advertisement broadcast or publication, or any other promotion activity in the Taiwan Area for any goods, service, or other item of the Mainland Area other than those prescribed in Paragraph 1 of Article 34, or violates Paragraph 2 of Article 34 or the mandatory or prohibitive provisions of the rules governing the management prescribed in accordance with Paragraph 4 of Article 34, shall be punished with an administrative fine of not less than NT$100,000 and no more than NT$500,000.

In more practical terms, any company registered in Taiwan, foreign company, or foreign company branch office or representative office that is registered or approved to operate in Taiwan, is not allowed to post job advertisements that list Mainland China as the workplace. This means that advertisements for positions in Mainland China cannot be published on job search websites or any other platform, including the company's official website or social media platforms in Taiwan. According to the Regulations for Advertising Goods, Labor and General Services of the Mainland Area in the Taiwan Area, a specific exception exists for posting job advertisements. If a domestic company has received approval from MOEAIC to invest in Mainland China and establish a Taiwan-funded enterprise, it is permitted to list Mainland China as the workplace in job advertisements (Article 6, Paragraph 5).

By entering into a technology transfer agreement with a Taiwan-based chip company like UMC, neither Jinhua nor UMC needed to establish their own R&D capacity in Mainland China. Such a licensing collaboration is not unusual assuming no criminal activities related to trade secret theft are involved. However, as illustrated in a number of court decisions, talent poaching frequently leads to misappropriation of trade secrets and intellectual property in order to facilitate R&D outputs. As Wang himself revealed during the investigation, this behavior is largely motivated by financial gain: "I only have my eyes set on the output, making money, and then retiring."[18]

Under Taiwan's Trade Secret Act, trade secret theft is a serious offense. Promulgated in 1996, the Act initially did not have a criminal clause to regulate

[18] 109 Xingzhishangzhongsu 4 Judgement (IPCC, 27 January 2022) 144.

misappropriation of trade secrets. It was not until 2013 that it criminalized such wrongdoing by adopting a dual-track model. Article 13-1 specifies the penalties for committing acts related to trade secret theft, embezzlement, fraud, and unauthorized reproduction, usage, or disclosure, and outlines the fines that may be imposed in addition to imprisonment. Under Article 13-1, the maximum penalty for trade secret misappropriation is five years' imprisonment in addition to a fine of between NT$1 million and NT$10 million.

Article 13-2 adds additional penalties for committing these crimes with the intention of using the trade secret in foreign jurisdictions, including Mainland China, Hong Kong, or Macau, and increases the potential fines that may be imposed for such offenses. Under Article 13-2, the penalty for committing such an offense with the intention of using the trade secret in foreign jurisdictions is imprisonment of between one and ten years, in addition to a fine of between NT$3 million and NT$50 million. The penalties outlined in Article 13-2 are generally considered to be harsher than those in Article 13-1, which may serve as a stronger deterrent against trade secret misappropriation with the intention of using the information in foreign jurisdictions.

The issue at the heart of the UMC-Jinhua case pertains to the potential violation of Article 13-2 of Taiwan's Trade Secret Act by the three individuals in question, namely Ho, Wang, and Rong. The Taichung District Court concluded that they had indeed violated this provision, while the IPCC reversed this decision on appeal, finding that the defendants did not meet the legal standard required for a conviction under Article 13-2. However, the decision was later remanded by Taiwan's Supreme Court, which required the IPCC to consider the following evidence and issues: Wang's confession regarding his knowledge of the UMC-Jinhua licensing collaboration; Ho's statement regarding his employment contract signed with Jinhua during October and November 2016; a witness's statement that UMC planned to arrange for employees involved in the collaboration to open bank accounts in Mainland China with incentive bonuses being wired to their accounts once product development was complete; Wang's communication with his friends where he stated "Conducting R&D in Taiwan and transferring the technology to Mainland"; and UMC's application to MOEAIC for the approval of the UMC-Jinhua licensing collaboration.[19] The Supreme Court indicated that the evidence listed above seemed to suggest that the three individuals had the intention of using Micron's trade secrets in Mainland China.

3.3 International Responses

The UMC-Jinhua licensing collaboration has faced legal challenges not only in Taiwan but also in the United States. In September 2018, the US government indicted UMC and Jinhua for conspiracy to commit economic espionage and

[19] 111 Taishang 3655 Judgement (Supreme Court, 17 August 2022) 4–5.

to steal trade secrets from Micron.[20] The following month, the US Department of Commerce added Jinhua to its export restriction list, prohibiting the company from purchasing components, software, and technology goods from US firms.[21] In 2020, UMC pleaded guilty to a single count of criminal trade secret theft and offered to pay a US$60 million fine. In November 2021, the US Department of Justice dismissed other allegations against UMC, including conspiracy to commit economic espionage, and UMC and Micron agreed to a global settlement.[22] Jinhua, on the other hand, denied any wrongdoing related to the allegations. However, the consequences for Jinhua were severe. In the wake of the US export restrictions, Jinhua was forced to cease production of memory chips within a few months, and it did not resume operations until 2022 when it received assistance from Huawei and shifted its focus to manufacturing logic chips.[23]

It is worth noting that the US Department of Justice indicted Jinhua as a major defendant largely due to its technology cooperation agreement with UMC that took place in or around January 2016. The US government's indictment against Jinhua reflects its discourse that China engages in unfair and illegal practices to acquire technology, and as a Chinese state-owned enterprise, Jinhua is particularly vulnerable to such a perception. The statement released by the US Department of Justice implied just that:

> The theft of intellectual property on a continuing basis by nation-state actors is an even more damaging affront to the rule of law. We in the Northern District of California, one of the world's great centers of intellectual property development, will continue to lead the fight to protect U.S. innovation from criminal misappropriation, whether motivated by personal greed or national economic ambition.[24]

Compared to the legal and political backlash in the United States against the UMC-Jinhua licensing collaboration, Taiwan's justice system has taken a more restrained approach. Jinhua has never been considered a defendant in the case and the collaboration was not seen as Jinhua's involvement in a conspiracy to commit economic espionage or steal trade secrets. The court decisions in

[20] United States v. UMC et al., CR 18-465 MMC (LHK/SVK 27 September 2018) www.justice.gov/opa/press-release/file/1107251/download.

[21] 83 FR 54519, www.govinfo.gov/content/pkg/FR-2018-10-30/pdf/2018-23693.pdf.

[22] Micron, 'Micron and UMC Announce Global Settlement' (25 November 2021) https://investors.micron.com/news-releases/news-release-details/micron-and-umc-announce-global-settlement.

[23] Cheng Ting-Fang and Shunsuke Tabeta, 'China's Chip Industry Fights to Survive U.S. Tech Crackdown' (*Nikkei Asia*, 30 November 2022) https://asia.nikkei.com/Spotlight/The-Big-Story/China-s-chip-industry-fights-to-survive-U.S.-tech-crackdown.

[24] Office of Public Affairs, US Department of Justice, 'PRC State-Owned Company, Taiwan Company, and Three Individuals Charged with Economic Espionage' (1 November 2018) www.justice.gov/opa/pr/prc-state-owned-company-taiwan-company-and-three-individuals-charged-economic-espionage.

Taiwan have only implicated UMC and its three employees, Ho, Wang, and Rong, in the theft of trade secrets. Jinhua's role in facilitating the theft of Micron's trade secrets was not confirmed in the court decisions.

In February 2024, Jinhua was cleared of charges related to economic espionage and other criminal allegations in the United States.[25] Judge Chesney ruled that the evidence presented by US prosecutors did not sufficiently demonstrate that Jinhua, with state support, had unlawfully acquired confidential information from Micron.[26] Nonetheless, this case, initiated in 2018, has garnered considerable attention, spotlighting concerns over China's pursuit of semiconductor self-sufficiency, which includes acquiring technologies from abroad.[27] Key stakeholders in the global IC supply chain have closely monitored the UMC-Jinhua conflict.

4 Conclusion

Semiconductors have emerged as critical components within contemporary geopolitics, holding significant implications for national security due to their incorporation in both civilian and military applications. Recognizing the strategic imperative of these technologies, China's pursuit of semiconductor development and acquisition is a strategic initiative aimed at enhancing its technological autonomy and may influence the reorientation of the global supply chain to a more China-centric model. This move presents a potential shift from the established supply chain dynamics, traditionally influenced by US-centric alliances.

Taiwan's leading role in manufacturing chips places it at the heart of these geopolitical tensions, particularly considering its political relationship with China. This environment amplifies the sensitivity of semiconductor technology as a point of international contention, where economic ambitions intersect with national security priorities. The UMC-Jinhua case illustrates the challenges in differentiating between sanctioned technological collaboration and the misappropriation of trade secrets. The incident reveals how an endorsed collaboration can potentially lead to unlawful activities, highlighting the importance of thorough oversight in cross-border technological partnerships. While this case involves China, it exemplifies a global concern where informal business engagements require scrutiny to align with the host state's legal and regulatory frameworks.

[25] In December 2023, Micron had reached a global settlement agreement with Jinhua, see Debby Wu, 'Micron Settles IP Theft Lawsuit Amid Push to Repair Beijing Ties' (*Bloomberg Law*, 24 December 2023) https://news.bloomberglaw.com/ip-law/micron-settles-ip-theft-lawsuit-amid-push-to-repair-beijing-ties.

[26] Rachel Graf and Robert Burnson, 'Chinese Chipmaker Cleared in US Criminal Trade Secrets Case' (*Bloomberg*, 28 February 2024) www.bloomberg.com/news/articles/2024-02-27/chinese-chipmaker-cleared-in-us-criminal-trade-secrets-case.

[27] See, e.g., Miller (n 5) ch 50.

5 Discussion Questions and Comments

5.1 For Law School Audiences

5.1.1 Law and Politics

The legal dispute involving Micron, UMC, and Jinhua centered on accusations of unauthorized use of Micron's trade secrets. Taiwanese courts primarily assessed the conduct of UMC and certain employees, while the US Department of Justice extended its scrutiny to Jinhua, indicting the company as a major defendant.

The divergent approaches by Taiwanese and US legal systems may stem from their distinct legal frameworks and enforcement priorities. Taiwan's focus on individual and corporate conduct within its jurisdiction aligns with its legal traditions, emphasizing direct involvement and evidence of misappropriation. The United States, conversely, may have broader geopolitical and economic considerations, employing legal instruments as part of its strategic enforcement against perceived threats to its technological leadership.

The indictment of Jinhua by the US government could be interpreted within the larger context of allegations against China's methods of acquiring advanced technology. This framing raises critical legal questions about the international standards of corporate behavior, the enforcement of intellectual property rights, and the nexus between government actions and corporate strategies. The UMC-Jinhua case, initially sanctioned by Taiwanese authorities, now invites scrutiny under the lens of these broader geopolitical conflicts.

1. What legal principles underpin the different approaches taken by Taiwan and the United States, and how do these principles manifest in cross-border enforcement and extraterritorial application of laws?
2. How do these legal actions reflect and impact the regulatory challenges inherent in managing international supply chains, particularly in the high-tech sector?
3. Does the UMC-Jinhua case serve as a microcosm of the broader geopolitical struggle between the world's two largest economies, the United States and China? Why or why not?

5.2 For Policy School Audiences

5.2.1 Economic Espionage and Policymaking

In the UMC case heard by Taiwanese courts, Jinhua was not identified as the primary agent of economic espionage; the focus was rather on UMC and certain employees. The absence of direct evidence in court records tying Jinhua to espionage directives suggests that worries about economic espionage are broader and not necessarily confined to the actions or policies of any one

nation.[28] Therefore, it is essential to approach each case on its merits without preconceived notions tied to the national origin of the entities. Many countries are currently challenged with promoting innovation and international cooperation while simultaneously protecting intellectual property rights and ensuring national security. The entanglement of these conflicting goals presents a need for policy considerations beyond the trend of reducing reliance on foreign entities, commonly referred to as "decoupling." Further questions to be discussed include:

1. What legal and regulatory measures can be implemented to impartially address economic espionage, ensuring equal treatment across different national contexts?
2. How might nations tactically support innovation and uphold intellectual property and security without resorting to complete disengagement from international collaboration?
3. What collaborative efforts between the public and private sectors are necessary to mitigate the risks of economic espionage in critical industries like semiconductor manufacturing, without impeding the flow of trade and technological progress?

5.3 For Business School Audiences

5.3.1 Business Strategies and the US-China Tech War

Amid escalating US-China tensions in technology, the outcomes of the UMC-Jinhua case are likely to shape global tech industry practices going forward. US regulatory actions, including the addition of certain Chinese entities to the Entity List and the application of Export Administration Regulations (EAR), have increased scrutiny of international transactions involving sensitive technologies.[29] Consequently, companies worldwide, including those in Taiwan with core technology specializations, are assessing their international partnerships.

In addressing these developments, companies are advised to enhance their strategies for intellectual property protection to align with current international trade regulations. This may include evaluating current alliances, especially those potentially affected by US-China technological disputes and

[28] It should be noted that, according to the Center for Strategic and International Studies, from 2000 through March 2023, there were 224 known cases of Chinese espionage targeting the United States. This number of Chinese spying incidents directed at America far exceeds that of any other country over the same period, surpassing even Russian espionage efforts, see 'Survey of Chinese Espionage in the United States Since 2000,' www.csis.org/programs/strategic-technologies-program/archives/survey-chinese-espionage-united-states-2000.

[29] See US Department of Commerce, 'Country Commercial Guides: China – U.S. Export Controls' (7 April 2023) www.trade.gov/country-commercial-guides/china-us-export-controls.

considering engagement with emerging markets for diversification. Key strategic measures could involve:

- strengthening internal protocols to secure intellectual property, aligning them with international best practices, and engaging in regular audits;
- enhancing transparency and communication channels with international partners to foster trust and align business strategies with the global regulatory environment; and
- exploring diversification in customer bases and supply chains, to reduce reliance on a particular market, thereby mitigating risks associated with geopolitical uncertainties.

From a business strategic perspective, consider the following questions for further discussions:

1. In what ways can firms recalibrate their international collaboration models to ensure trust and compliance amidst stringent regulations like the US Entity List and EAR restrictions?
2. What strategic shifts should companies undertake to diversify their market engagement and supply chain dependencies in the face of escalating geopolitical tensions in technology?
3. What specific measures should tech companies adopt to bolster intellectual property protection and foster better communication with international partners to build trust and minimize risks associated with the current US-China frictions over technological supremacy?