Comments of Mark A. Cohen Director and Distinguished Senior Fellow Berkeley Center for Law and Technology University of California, Berkeley Law School "The Federal Trade Commission's Notice of Proposed Rulemaking on A Non-Compete Clause Rule and Its International Impact"

These comments are respectfully submitted by the undersigned in his personal capacity in response to the January 5, 2023, Federal Trade Commission (FTC) Notice of Proposed Rulemaking (NPRM) on a Non-Compete Clause Rule.<sup>1</sup>

I am a former career US government official who led the China intellectual property team at the US Patent and Trademark Office and served at the US Embassy in Beijing as its first IP Attaché. I currently teach Chinese intellectual property law at UC Berkeley, where I serve as Distinguished Senior Fellow at the Berkeley Center for Law and Technology, and I direct the law school's Asia Intellectual Property Law Project. I have no personal commercial interest in this rulemaking, nor am I currently subject to any form of non-compete agreement.

I take no position in these comments on the impact of the NPRM on domestic competition in labor markets in the United States. These comments are directed exclusively to the NPRM's failure to consider the international consequences of a nationwide ban on non-compete agreements.

In my view, the FTC should promptly consider issuance of another NPRM directed to the international consequences of its proposed rulemaking. The current proposed rule would seriously undermine US trade secrets protection and compromise economic security internationally in three related ways: (a) by facilitating large-scale misappropriation of trade secrets by China or other hostile economic competitors, (b) by impairing the global innovation position of the United States, and (c) by impairing the ability of the United States to achieve its goals in semiconductor self-sufficiency. These issues are discussed, in seriatim, below.

(A) Non-Compete Agreements and Trade Secret Protection in China

The FTC's focus on domestic competitive consequences in the NPRM has led it to conclude that it "is not aware of any evidence [that] non-compete clauses reduce trade secret misappropriation or the loss of other types of confidential information."<sup>2</sup> At least with respect

<sup>&</sup>lt;sup>1</sup> Notice of Proposed Rulemaking, Non-Compete Clause Rule 88 Fed. Reg. 3482 (Jan. 19, 2023) (to be codified at 16 C.F.R. § 910 (2023) (hereinafter, NPRM).

<sup>&</sup>lt;sup>2</sup> NPRM, p. 92.

to the protection of trade secrets in China, there is both qualitative and quantitative evidence to the contrary.

It is well-understood by Chinese judges, legal practitioners, and academics that a well-drafted non-compete agreement can be of critical importance to protecting trade secrets in China and many other regions of the world.<sup>3</sup> This assumption has been supported by the experience of numerous judges and attorneys in protecting trade secrets in China, as well as by limited but important empirical data.<sup>4</sup>

The use, in China, of non-compete agreements to protect trade secrets is well-acknowledged as a critical tool to protect technological trade secrets. Cao Jianming, a former Justice of China's Supreme People's Court who later became Supreme People's Procurator (Attorney General), stated in 2005 that trade secret enforcement was the area with the "greatest difficulties" for the courts. A major Chinese treatise on judicial protection of trade secrets written by several of China's most prominent intellectual property judges, including Kong Xiangjun (China's former Chief IP Judge), has noted that a non-compete agreement has a "utility when compared to other common measures of protecting trade secrets that is especially strong" and that it also "reduces the litigation burden" on the parties.<sup>5</sup> Benjamin Bai, a well-known China intellectual property lawyer, has similarly noted that "[e]nforcement of non-compete [agreements] is much more straightforward than misappropriation of trade secrets," including providing for

<sup>&</sup>lt;sup>3</sup> See Catherine L. Fisk, Working Knowledge: Trade Secrets, Restrictive Covenants in Employment, and the Rise of Corporate Intellectual Property, 52 HASTINGS L J. 441 (2001); Jay D. Marinstein and Carl J. Rycheik, Strengthening Your Clients' Non-Compete Agreements: Important Checkpoints, Allegheny County Bar Association's Lawyers Journal, Oct. 12, 2007, at p. 7, available at https://www.foxrothschild.com/jay-d-

marinstein/publications/strengthening-your-clients%E2%80%99-non-compete-agreements-important-checkpoints (regarding careful drafting of key provisions of agreements), Protecting Trade Secrets in China: Update on Employee Disclosures and the Limitations of the Law; Marisa Anne Pagnattaro, *The Google Challenge: Enforcement* of Noncompete and Trade Secret Agreements for Employees Working in China, 44 AM. Bus. L.J. 603 (2007) (hereafter "The Google Challenge").

<sup>&</sup>lt;sup>4</sup> See Association of Corporate Counsel, *Multi-Country Survey on Covenants not to Compete* (2018), available at <u>https://www.gtlaw.com/en/-/media/files/insights/alerts/2018/3/gtnoncompeteeuroinfopak.pdf;</u> World Law Group, *Global Guide to Non-Competition Agreements* (Oct. 2018), available at

https://www.theworldlawgroup.com/writable/documents/news/119001 118937 P1623-WLG-Non-Competition-Guide-2-TD-V3.pdf; DLA Piper, *Post-Termination Restraints*, available at:

https://www.dlapiperintelligence.com/goingglobal/employment/index.html?t=15-post-termination-restraints; Meritas, *Guide to Employee Non-Compete Agreements in Europe, Middle East and Africa* (2017), available at: https://assets.website-files.com/5fed988aacad01db88e78ec3/600ed66aa9f70329ab00ffee\_80-dpc-meritas-guideto-employee-non-compete-agreements-in-emea-2017-773.pdf; White & Case, *Non-competes and other restrictive covenants in a foreign* jurisdiction (2012), available at:

https://www.lexology.com/library/detail.aspx?g=1f5a21c4-88bd-4de8-b9fa-97ff12e04849.

<sup>&</sup>lt;sup>5</sup> Jianjun Yao, Zhongguo Shangye Mimi Baohu Sifa Shiwu (商业秘密司法保护实务) [Judicial Practice of Trade Secret Protection in China], 28, 238 (2012), see also Mark Cohen, China's Judiciary Publishes Its Views on Trade Secret Protection (July 5, 2013), available at <a href="https://chinaipr.com/2013/07/05/chinas-judiciary-publishes-its-views-on-trade-secret-protection/">https://chinaipr.com/2013/07/05/chinas-judiciary-publishes-its-views-on-trade-secret-protection/</a>.

"injunctions and damages."<sup>6</sup> An intellectual property consulting firm, Rouse, has similarly noted that, in 89% of the trade secret cases where the plaintiff prevailed, "there [were] one or more protective agreements in place, such as NDA's and confidentiality clauses in employment contracts."<sup>7</sup> Mary Pagnattaro, a professor at the University of Georgia's business school, in reviewing Chinese cases on trade secrets and non-compete agreements, has observed that "[t]aken together, these cases create some sense that Chinese courts will uphold noncompete and secrecy agreements. The cases underscore the importance of documenting steps to keep proprietary information secret. At a minimum, all employees with access to trade secrets should be required to sign agreements."<sup>8</sup>

A recently published study of Chinese trade secret protection by the University of Hong Kong law faculty has also noted that "non-competition clauses are now widely adopted by employers in employment contracts with core technicians and senior management—all in a bid to protect valuable trade secrets."<sup>9</sup> Academics and observers have also observed that "former management-level employees with access to proprietary know-how and confidential information are often lured to work for competitors in China."<sup>10</sup> Two attorneys from Rouse have observed that Chinese trade secret law is "is more suited to addressing compensation after infringement has occurred, when the damage may be irrevocable." The likelihood of such irreversible damage in trade secret enforcement in China is especially likely "[g]iven the rarity of preliminary injunctions to prevent damage from trade secret leakage before it happens." These attorneys based their conclusions on a case involving "white hot" lithium battery technology misappropriation.<sup>11</sup>

High labor mobility, in addition to fair restrictions on competition, may be responsible for China's success as an innovator in lithium batteries and other fields. Dan Wang has recently written in *Foreign Affairs* that it is "process knowledge," namely, "skills that can only be learned by doing," that "are part of what has helped China become a major tech innovator." Furthermore, in Dan Wang's view, "the rise of Shenzhen as a global tech center is itself a validation of process knowledge."<sup>12</sup>

http://dx.doi.org/10.2139/ssrn.4225187, (hereinafter Uncovering Trade Secrets).

<sup>&</sup>lt;sup>6</sup> Benjamin Bai, *Protecting Trade Secrets in China, Tips and Lessons Learned*, Allen & Overy (Apr. 2013), available at: <u>https://www.uschina.org/sites/default/files/tradesecrets.pdf</u>.

<sup>&</sup>lt;sup>7</sup> CIELA, Trade Secret Litigation in China, Rouse, at p. 1, available at <u>https://rouse.com/media/n5uadjtn/ciela-</u> <u>trade-secret-litigation-in-china.pdf</u> (hereinafter "Trade Secret Litigation in China").

<sup>&</sup>lt;sup>8</sup> The Google Challenge, *supra* note 3, at p. 631.

<sup>&</sup>lt;sup>9</sup> Jyh-An Lee, Jingwen Liu, and Haifeng Huang, *Uncovering Trade Secrets in China: An Empirical Study of Civil Litigation from 2010 to 2020*, 17 J. INTELLECTUAL PROP. L. & PRACTICE (2022), available at:

<sup>&</sup>lt;sup>10</sup> Daniel C.K. Chow, *Navigating the Minefield of Trade Secrets Protection in China*, 47 VANDERBILT L. REV. 1007, 1014 (2021).

<sup>&</sup>lt;sup>11</sup> Sophia Hou and Chris Bailey, "Building a Trade Secret Barrier Through Non-Competition Agreements: A review of China's Leading Battery Maker's Suits Against Former Employees" (Dec. 20, 2022), available at

 $<sup>\</sup>underline{https://rouse.com/insights/news/2023/building-a-trade-secret-barrier-through-a-non-competition-agreement}\,.$ 

<sup>&</sup>lt;sup>12</sup> Dan Wang, *China's Hidden Tech Revolution*, 102 FOREIGN AFFAIRS 65, 71, 73 (2023).

Chinese data also demonstrates that a party seeking relief from trade secret misappropriation is more than twice as likely to win if the employee has signed a non-compete agreement. Success rates for enforcing non-compete clauses are approximately 66%, while success rates were 32.4% for trade secret misappropriation cases in first instance cases and 44.3% of the cases decided by appellate courts.<sup>13</sup> Success rates in trade secret cases litigated in Taiwan have historically been even lower. Before Taiwan amended its Trade Secrets Act in 2013, the plaintiffs' win rate at the trial courts was 24.8% in civil cases and 30.8% in criminal cases. <sup>14</sup>

As Benjamin Bai has noted, the "evidentiary burden for a plaintiff to bring a trade secret misappropriation case in Chinese courts is relatively high."<sup>15</sup> Generally speaking, China, like most civil law jurisdictions, does not utilize discovery procedures to compel production of evidence from an adversary. The lack of discovery makes it especially difficult to prove that an adversary has misappropriated a victim's trade secrets, and places additional burdens on plaintiffs unless the burdens of proof are reversed. Comparative data that is easily accessible from the popular Chinese IP litigation database www.ciela.cn shows that trade secret litigation in China has the lowest "win rate" of any IP right in civil litigation.<sup>16</sup> In China these historically low trade secret win rates may have been partially mitigated by recent amendments to China's Anti-Unfair Competition Law, which require that the plaintiff make a "reasonable showing that its trade secret has been infringed upon" and that the defendant thereafter prove that a trade secret does not subsist.<sup>17</sup> These changes to China's law are recent and most trade secret cases are not published. It is therefore difficult currently to determine the impact of these changes in improving litigation outcomes. These difficulties are compounded by the low utilization by foreigners of China's civil trade secret litigation system. To date, only 5 civil cases of 621 total published trade secret cases involved a foreigner as plaintiff.<sup>18</sup>

<sup>&</sup>lt;sup>13</sup> Compare Hui Shangguan, A Comparative Study of Non-Compete Agreements for Trade Secret Protection in the United States and China, 11 WASH. J.L. TECH & ARTS 405 (2016) (looking at all final Chinese judgments on noncompete cases decided by intermediate or higher courts from March 2014 to February 2015 and finding "[t]hirtysix of these cases were related to the validity of the non-compete; twenty-four of which were regarded by courts as 'valid and enforceable.'" In other words, two out of three non-compete cases were held to be "valid and enforceable" by Chinese courts) and Uncovering Trade Secrets, surpra., n. 9.

<sup>&</sup>lt;sup>14</sup> Jyh-An Lee and Jerry G. Fong (李治安&馮震宇), Taiwan Yingye Mimi Chinhai Susong Zhi Shizhong Yanjiu (臺灣營 業秘密侵害訴訟之實證研究) [An Empirical Study of Trade Secret Litigation in Taiwan] (216 TAIWAN L. REV. 151, 154 (2013).

<sup>&</sup>lt;sup>15</sup> J. Benjamin Bai and Guoping Da, *Strategies for Trade Secrets Protection in China*, 9 Nw. J. TECH. & INTELL. PROP. 351 (2011).

https://scholarlycommons.law.northwestern.edu/njtip/vol9/iss7/1.

<sup>&</sup>lt;sup>16</sup> For example, trade secret cases in China are won at a 54% rate compared to 77% for patents of all types, and 85% for copyright cases, <u>https://www.ciela.cn/en/analysis</u> (research completed on March 1, 2023). This data is inconsistent with the lower win rates discussed in "Uncovering Trade Secrets", supra, n. 5. Assuming that collection methodology in <u>www.ciela.cn</u> is uniform across all IP rights, it offers a comparative, but not necessarily fully comprehensive approach of analyzing trade secret success compared to other IP rights.

<sup>&</sup>lt;sup>17</sup> Anti-Unfair Competition Law of the People's Republic of China (promulgated by the Standing Comm. Nt'l People's Cong., Apr. 23, 2019, effective Apr. 23, 2019) art. 32, 2019. Such reversals of burdens of proof in trade secrets are a rarity in global trade secret litigation.

<sup>&</sup>lt;sup>18</sup> Trade Secret Litigation, supra n. 8 at p. 1; Uncovering Trade Secrets, supra n. 5 at p. 21.

Violation of non-compete agreements are a valuable alternative cause of action to trade secret litigation to mitigate deficiencies in civil procedure rules for litigating trade secret misappropriation in China. Another important use of non-compete agreements and nondisclosure agreements in China is that the courts use them to satisfy requirements that a company has taken necessary steps to protect trade secrets.<sup>19</sup>

Plaintiffs also run increased risks of secondary disclosure in trade secret cases through the release of their confidential information to the alleged perpetrator's counsel, witnesses, and experts. Non-compete clauses may not demand a similar disclosure of confidential information. Chinese practices regarding protection against secondary disclosure are also still comparatively non-developed. Dr. Li Chong, a scholar in Chinese law and procedure, was unable to find a single case involving protective orders in his study of confidentiality measures in Chinese civil litigation. Dr. Li further noted that "the standards for issuing protective orders in practice are relatively vague, and a unified view has not yet been formed."<sup>20</sup>

As an example of this vague judicial practice regarding Chinese protective orders, the Jiangsu High Court in 2021 issued the revised "Guidelines for Trade Secret Infringement Case Adjudication" (侵犯商业机密案件审理指南). These guidelines devote one scant paragraph (Art. 8.1) to the issuance of protective orders and may not apply outside of trade secret misappropriation cases. Most courts do not even have this type of limited guidance in place, nor are copies of case decisions on protective orders available. In fact, the Chinese government has recently taken the position at the World Trade Organization that "there is no such obligation… for China to respond" to a European request to produce interim "behavior preservation orders," which are similar to protective orders.<sup>21</sup> The United States government has joined in this case along with 15 other countries, as part of a formal WTO dispute initiated this year.<sup>22</sup>

Chinese trade secret cases risk involuntary secondary disclosure to local competitors, the government or the Communist Party. These risks increase in judicial proceedings due to the presence of judicial governing entities, "Adjudication Committees," in each court. Adjudication

<sup>&</sup>lt;sup>19</sup> See, e.g., Guangzhou Tinci Materials Technology Co., Ltd et al. vs Anhui Newman et al, (2019) SPC Zhi Ming Zhong No.562 (广州天赐公司等与安徽纽曼公司等侵害技术秘密纠纷案[(2019) 最高法知民终 562 号, 最 高人民法院) (listed as a typical case for punitive damages by the Supreme People's Court for 2021); *Guilin Peizheng Culture and Languages Training School v. Li Lifei et al.*, Guilin Intermediate People's Court, (2016) Gui 03 Min Zhong No. 109, (硂林市培正文化语言培训学校与桂林市斯坦教育咨询有限公司、李立飞侵害经营 秘密纠纷二审民事判决书) (2016) (桂 03 民终 109 号).

<sup>&</sup>lt;sup>20</sup> Li Chong, Shangye Mimi Anjian zai Minshi Susong Jieduan de Baomiling Zhidu zhi Goujian – Yi Zhongmei Bijiaofa Yanjiu wei Shijiao (商业秘密案件在民事诉讼阶段的保密令制度之构建一以中美比较法研究为视角) [The Construction of a Protective Order System in Commercial Secret Cases in Civil Litigation Stage– Based on the study of comparative law between China and the United States], Jingheng Research (2021) available at: <u>https://mp.weixin.qq.com/s/AaZTtkwUEJzImzQnM3qDWw</u>)..

<sup>&</sup>lt;sup>21</sup> Mark Cohen, China Responds to EU Article 63 Request, (Sept. 8, 2021) available at:

https://chinaipr.com/2021/09/08/china-responds-to-eu-article-63-request/.

<sup>&</sup>lt;sup>22</sup> Dispute Settlement, *China – Enforcement of intellectual Property Rights*, WTO Doc. WT/DS611 (panel established, but not yet composed on Jan 27, 2023).

Committees are typically composed of senior judges and party officials who are authorized to review the evidence and make final decisions on cases. According to Susan Finder, a well-known expert on the Chinese judicial process, Adjudication Committees are also more likely to play a role in cases that are "sensitive, major, and difficult," including high-profile foreign IP cases.<sup>23</sup> Due to China's great interest in acquiring US technology, it would not be surprising if members of an Adjudication Committee took considerable interest in a US trade secret case in a technology area of concern to the Chinese government, such as semiconductor technology.<sup>24</sup> The risks of having to identify confidential information are more circumscribed if a plaintiff is only claiming breach of a non-compete agreement.

Studies such as those cited by the NPRM, which have sought to analyze the impact of noncompete agreements on trade secret protection in the United States, are primarily relevant to the circumstances prevailing in the United States and may have little relevance to determining how foreign litigants in China could protect their trade secrets. The United States legal system provides robust protection to trade secrets on a nationwide basis. The United States system also afford due process to all litigants. Judgments from any state are entitled to full faith and credit in another state, ensuring greater finality and economy of final judicial decisions. United States counsel can be admitted pro hac vice before other state or federal courts, ensuring that there is an efficiency of enforcement in handling an issue that crosses state borders. Extensive discovery is available. The federal judicial system provides an alternative jurisdictional basis to minimize bias in favor of local plaintiffs when there is diversity of citizenship among them. The use of protective orders is widely understood. United States courts will also decline to take jurisdiction over trade secret matters where there is a more appropriate venue for the proceeding. Preliminary injunctions are available and are published for the public to understand their impact. Substantive trade secret laws and procedures are well-harmonized between the states. Even in the absence of an effective non-compete agreement, US companies have fair, if expensive and time-consuming, measures available to protect trade secrets anywhere in the federal or state judicial systems. Whatever the challenges that might exist in California due to the absence of effective non-compete agreements, when a California employee has relocated to another state, the availability of judicial venues within the United States to fairly litigate trade secret matters means that the employer/trade secret holder is still likely to be fairly treated in that out-of-state court despite the invalidity of a non-compete agreement under applicable California law.

American companies seeking to protect their trade secrets in China encounter a wide range of challenges that are not present in inter-state litigation. For example, in contrast to the US civil process, trade secret litigation in China is handled by a judiciary that is not politically

<sup>&</sup>lt;sup>23</sup> Susan Finder, *SPC Updates its Guidance on Judicial (Adjudication) Committees* (Oct. 4, 2019) <u>https://supremepeoplescourtmonitor.com/2019/10/04/spc-updates-its-guidance-on-judicial-adjudication-committees/</u>.

<sup>&</sup>lt;sup>24</sup> Christopher Wray, *The Chinese Communist Party—believes it is in a generational fight to surpass our country in economic and technological leadership*, FBI News (July 7, 2020) <u>https://www.fbi.gov/news/speeches/the-threat-posed-by-the-chinese-government-and-the-chinese-communist-party-to-the-economic-and-national-security-of-the-united-states</u>.

independent from the Communist Party and that views itself as an instrumentality of the state and Party. Civil judgments are not easily enforced between the United States and China. Substantive law and civil process vary greatly from practice in the United States. Very few American lawyers read or speak Chinese and even fewer have a rudimentary understanding of the Chinese legal system. Lack of discovery in Chinese civil process requires that plaintiffs extensively prepare for proposed litigation in advance. If a plaintiff is foreign, documentation will need to conform to Chinese judicial formalities, including potentially time-consuming notarization and consularization requirements. Chinese domestic evidence, when available, may also need to be prepared by a civil notary. Litigation involving foreigners can extend for much longer periods of time than domestic litigation. Court cases are not fully available to review in making strategic plans about enforcement. Interim decisions on protective orders are particularly opaque. Fraught geo-political relations and industrial policy goals are also more likely to influence judicial decision making. Despite recent improvements, China's trade secret regime is also relatively new, and judicial procedures are being developed. Certain aspects of China's trade secret regime also remain biased against foreigners as a matter of law. For example, China's extensive administrative system for trade secret protection does not afford protection to foreigners seeking protection from misappropriation of their trade secrets,<sup>25</sup> nor do changes appear likely based on proposed amendments to China's trade secret administrative enforcement regime.<sup>26</sup>

The NPRM identifies federal criminal prosecution of trade secrets as another important alternative for protection trade secrets in the United States, and states that "intellectual property law already provides significant legal protections for an employer's trade secrets.<sup>27</sup> However, there is no international obligation for WTO members to have an available criminal trade secret remedy. WTO members are only required to have criminal remedies to address "commercial scale" copyright counterfeiting and trademark counterfeiting.<sup>28</sup> The NPRM does not cite any relevant data to justify the wide-spread availability of criminal remedies for trade secret violations in the United States. According to China's own official adjudication statistics, criminal trade secret cases, in fact, are quite rare. Criminal trade secret cases constituted only 61 out of 6,046 criminal intellectual property cases concluded in 2021, or about 1% of the criminal IP docket, and about .01% of the civil intellectual property docket of 550,263 cases.<sup>29</sup>

The NPRM notes that "trade secret law may serve as an alternative to the patent system."<sup>30</sup> Much as with trade secret law, international differences in the scope of patent protection may force companies to rely more on different approaches to protection their innovations in

 <sup>&</sup>lt;sup>25</sup> World Trade Organization, Review of Legislation, WTO Doc. IP/C/W/374 at p. 44 (2002) (question posed concerning why foreigners are denied national treatment in China's administrative enforcement regime).
<sup>26</sup> Mark Cohen, SAMR Releases Draft Trade Secret Rules for Public Comment, China IPR (Sept. 12, 2020) https://chinaipr.com/2020/09/12/samr-releases-draft-trade-secret-rules-for-public-comment/.

<sup>&</sup>lt;sup>27</sup> NPRM, at pp. 96, 98.

<sup>&</sup>lt;sup>28</sup> World Trade Organization, TRIPS Agreement, Art. 61.

<sup>&</sup>lt;sup>29</sup> China National IP Administration, Er Yilingyinian Zhongguo Zhishi Chanquan Baohu Zhuangkuang (二〇二一年中 国知识产权保护状况) [The State of Intellectual Property Protection in China in 2021] (2022), at p. 4.

<sup>&</sup>lt;sup>30</sup> NPRM at p. 94.

different countries. The uncertain scope of patent protection in some key technology areas in the United States, such as software patenting, fintech, and genomics, in the words of one former International Trade Commission official, may "induce firms to rely more on trade secrets."<sup>31</sup> This may also increase reliance on trade secrets for leading technologies in both the United States and China, as the disclosure in China of a patent would invalidate the protection afforded by the trade secret in the United States.

United States companies have already encountered disclosures of United States trade secret technology by their former employees in China. Weak trade secret protection in China and Chinese government rewards for filing patents may incentivize individuals conducting research in the United States to disclose trade secrets in China, thereby jeopardizing the confidentiality of the trade secret infromation and causing significant financial harm to the innovator company in the United States. In one of several well-known cases<sup>32</sup> in the United States involving the filing of a patent in China on confidential United States technology, a scientist working at Virginia Tech was alleged to have violated the terms of his "non-disclosure clause, non-communication clause, and covenant not to compete" by anonymously filing a patent application in China that was "nearly identical" to the trade secrets of the United States innovator. Chinese law permits anonymous patent filing, which in this case was used to minimize detection by the plaintiff.<sup>33</sup> As this case suggests, if non-compete and non-disclosure agreements were invalidated in the United States, the legal position of the victim US company would likely have been greatly harmed in both Chinese *and* United States courts hearing cross-border cases.

Internationally, patents are often a poor substitute for trade secret protection, as patent applications require disclosure of the underlying technology to the public. In addition, China may decline to grant patents due to political pressure in accordance with Chinese industrial policies. The criminal enforcement for trade secret protection is also quite low. If patents are

<sup>&</sup>lt;sup>31</sup> Katherine Linton, *The Importance of Trade Secrets: New Directions in International Trade Policy Making and Empirical Research*, J. INTL COMM. & ECON., at p. 4 (2016).

<sup>&</sup>lt;sup>32</sup> See, e.g., USDOJ, *Chinese Citizen Convicted of Economic Espionage, Theft of Trade Secrets, and Conspiracy* (June 26, 2020) (semiconductor technology), available at <a href="https://www.justice.gov/opa/pr/chinese-citizen-convicted-economic-espionage-theft-trade-secrets-and-conspiracy">https://www.justice.gov/opa/pr/chinese-citizen-convicted-economic-espionage-theft-trade-secrets-and-conspiracy</a>; see also speech by Christopher Wray at the Hudson Institute, *The Threat Posed by the Chinese Government and the Chinese Communist Party to the Economic and National Security of the United States* (July 7, 2020), available at

<sup>&</sup>lt;u>https://www.fbi.gov/news/speeches/the-threat-posed-by-the-chinese-government-and-the-chinese-communist-party-to-the-economic-and-national-security-of-the-united-states</u>; see also statement of Rep. Darrell Issa, "There are countless examples of that including Qualcomm, Intel, and Google, and Apple who have been the victims of technology developed, trade secrets developed, simply going to another country. And again, if they go to China, they often end up in patents that are the fruit of that -- that otherwise unknown or developing technology." House Judiciary Committee, Courts, Intellectual Property, and the internet Subcommittee Hearing: "Intellectual Property and Strategic Competition with China: Part I" (March 8, 2023), available at https://youtu.be/4RcagM1DtQA.

<sup>&</sup>lt;sup>33</sup> Bonomous Biochem, LLC. v. Yiheng Percival Zhang et al, Civil Action No. 3:17-cv-00033 (W.D. Va. 2018) (May 21, 2018), available at

http://www.vawd.uscourts.gov/OPINIONS/HOPPE/bonumose%20biochem%20llc%20v%20zhang%20et%20al.pdf.

not available, and trade secret success rates are low, non-compete agreements may be the default and only effective avenue for enforcement.

The case for patents as an alternative to trade secret protection in China is also weakened by the politicization of China's patent system.<sup>34</sup> Research done by Dr. Su Li at the University of California at Berkeley<sup>35</sup> demonstrated a marked decline in the availability of patent protection for foreign applications in three key patent classifications of semiconductor-related technology from 1985-2014 to less than a 10% grant rate:



US patent application numbers and granting rate in China 1985-2014 in three main fields

Dr. Li's study demonstrates that it can be more difficult to obtain a semiconductor patent, with a low 10% or less grant rate, than it is to protect trade secrets, where there was an already low 32.4% chance of success in first instance trade secret litigation in China.<sup>36</sup> Of course, even if the semiconductor patent were granted, the patentee might still encounter difficulties in enforcing the patent against a Chinese infringer, as has been the experience of US companies in other semiconductor-related patent cases. Data on these cases could be incomplete because of China's reluctance to publish cases that may have been decided for political reasons.<sup>37</sup> Nonetheless, data that I had compiled in 2018 revealed a

<sup>&</sup>lt;sup>34</sup> See Gaetan de Rassenfosse, and Emil Raiteri, *Technology Protectionism and the Patent System: Evidence from China*, J IND. ECON., 70: 1-43 (2022). <u>https://doi.org/10.1111/joie.12261</u>.

<sup>&</sup>lt;sup>35</sup> Dr. Su Li, "Does China's Industrial Policy Affect US Patents' Approval Rates in China?" 13 pp., figure 2 at p. 10 (2018) (unpublished paper on file with the author).

<sup>&</sup>lt;sup>36</sup> See text at fn. 13, supra.

<sup>&</sup>lt;sup>37</sup> Mark Cohen, Semiconductor Patent Litigation Part 2: Nationalism, Transparency and Rule of Law, www.chinaipr.com (July 4, 2018), available at <u>https://chinaipr.com/2018/07/04/semiconductor-patent-litigationpart-2-nationalism-transparency-and-rule-of-law/</u> (describing *Veeco v. AMEC*, a patent dispute involving the company founded by Gerald Yin [AMEC], a United States company [Veeco], the United States and Chinese courts,

semiconductor patent litigation success rate of 38.34%, which is considerably lower than national averages for other patent technology areas of approximately 80%. <sup>38</sup> Owing to the increased political focus of China's leadership on semiconductors, it is not surprising that the case databases may not adequately reflect the full scope of semiconductor-related IP litigation.<sup>39</sup>

I encourage the Commission to draw on the full range of data on non-compete and nondisclosure agreements, trade secret protection, patent protection and patent enforcement, from the numerous countries that already enforce non-compete agreements to reach a more balanced conclusion on the international consequences of making non-competes illegal. As the above data indicates, there is no basis at this time to assume that the experience in the United States litigating trade secret matters, including alternative protection mechanisms such as criminal procedures or patent protection, will be matched in foreign jurisdictions to protect key confidential information. In some cases, a non-compete agreement may be the only reasonable alternative for enforcement in the United States or overseas. The FTC needs to carefully consider the international implications of its rulemaking to protect US economic and national security vis a vis China and other countries.<sup>40</sup>

(B) The Role of Non-Compete Agreements in Facilitating Innovation in the United States.

The NPRM singles out California as a jurisdiction that has declined to enforce non-competes since 1872 and that nonetheless is highly competitive in technology and labor markets. It has also relied extensively on a 2021 study by Prof. Zhaozhao He, which studied the impact on patenting activity in Michigan.<sup>41</sup> In the FTC's view, the study "suggests innovation is largely

and Chinese customs, where many of the underlying decisions by the Chinese government were not disclosed to the public).

<sup>&</sup>lt;sup>38</sup> Mark Cohen, A Data Download on Semiconductor Patent Litigation in China (June 25, 2018), available at <u>https://chinaipr.com/2018/06/25/a-data-download-on-semiconductor-patent-litigation-in-china/</u>,

<sup>&</sup>lt;sup>39</sup> A search conducted by this author on March 19, 2023 on Iphouse.cn for semiconductor (半导体) and integrated circuit (集成电路) invention patent and utility model patent litigation on the Chinese IP litigation database did not reveal win rates for cases semiconductors, or integrated circuits. There were also no trade secret cases reported for semiconductors or integrated circuits involving Americans, which may suggest that such cases were never published or removed from official databases. There were no semiconductor patent cases of any kind reported after June 1, 2021. There have, however, several high-profile cases involving Chinese companies such as Fujian Jinhua and Micron and AMEC and Veeco. As I noted in a 2018 blogpost, "[t]he AMEC case now joins a short list of not-so-distinguished cases involving foreigners, where the court has yet to publish or has significantly delayed publishing the final decision." Mark Cohen, 'Semiconductor Patent Litigation Part 2: Nationalism, Transparency and Rule of Law" (2018), supra at fn. 37.

<sup>&</sup>lt;sup>40</sup> Mark Cohen, Are Chinese Courts Out to "Nab" Western Technology- An Inconclusive WSJ Article, China IPR (Feb. 24, 2023) <u>https://chinaipr.com/2023/02/24/are-chinese-courts-out-to-nab-western-technology-an-inconclusive-wsj-article/</u>.

<sup>&</sup>lt;sup>41</sup> Zhaozhao He, *Motivating Inventors: Non-Competes, Innovation Value and Efficiency*, at 21 (May 15, 2021) <u>https://ssrn.com/abstract=3846964</u>.

harmed by non-compete clause enforceability" and that "increased non-compete clause enforceability broadly diminishes the rate of innovation."

The FTC's reliance on the study by Dr. He is surprising, as the NPRM also notes that patents "may or may not reflect the true level of innovation."<sup>42</sup> The FTC's description of the role of patenting and its critique of the various studies is both confusing and contradictory. It appears to support the indiscriminate use of patents as a measure of innovation without regard to field of use, while dismissing a more discriminate use of patents in the cited literature based on field of use or exploratory nature of the invention.<sup>43</sup> As further evidence of this inconsistent approach, the FTC seems to support Gilson's endorsement in his 1999 article of what he calls "knowledge spillovers" from labor mobility in technology clusters that are unimpeded by noncompete agreements.<sup>44</sup> However, Prof. Gilson was far more attentive to the selective need to protect intellectual property reflected in the NPRM. The conclusions reached in his study were that "policymakers in other states should consider the characteristics of local industries, weighing the advantages to those industries of knowledge spillovers against the reduced incentives for initial innovation." I agree with his assessment that invalidating non-compete agreements as a one-size-fits-all approach to addressing trade secret misappropriation is fraught with potential for harm. This approach has also been adopted by other researchers, who reject a one-size-fits-all approach of the type advocated by the FTC.<sup>45</sup>

Among its other deficiencies, the FTC does not: (a) use any qualitative data, (b) evaluate the impact on overseas labor mobility, (c) consider the legal challenges arising from cross-border misappropriation of trade secrets (the words "China," "CHIPS Act," "international" and "semiconductor" do not appear in the NPRM), (d) discuss the impact of non-compete agreements on a nation's ability to innovate, nor (e) consider how revisions to US practice by affording compensation to an employee for the duration of a non-compete might impact non-compete enforcement.

<sup>&</sup>lt;sup>42</sup> NPRM, at p. 43.

<sup>&</sup>lt;sup>43</sup> See, e.g., Gerald A. Carlino, *Do Non-Compete Covenants Influence State Startup Activity? Evidence from the Michigan Experiment*, Fed. Reserve Bank of Phila., at 16 (2021) <u>https://www.philadelphiafed.org/the-economy/regional-economics/do-non-compete-covenants-influence-state-startup-activity-evidence-from-michigan-</u>

experiment#:~:text=Specifically%2C%20we%20find%20that%20a,high%2Dtech%20employment%20in%20Michiga n.

<sup>&</sup>lt;sup>44</sup> Ronald J. Gilson, *The Legal Infrastructure of High Technology Industrial Districts: Silicon Valley, Route 128, and Non-Compete Clauses*, 74 N.Y.U. L. REV. 575 (1999).

<sup>&</sup>lt;sup>45</sup> "Given the potential value of NCAs in some settings, the standard of evidence to support a broader ban, or occupational bans (other than those initiated by professional organizations), should be quite high. Policymakers should await clarity from research specific to occupations or industries in the absence of very compelling motivations that may not require evidence. Subsequent regulations may then consider the new empirical findings that become available as data on NCAs continues to expand." Kurt Lavetti, *Non-Competes in Employment Contracts* IZA World of Labor (2012) <u>https://wol.iza.org/articles/noncompete-agreements-in-employment-contracts/long</u>.

In order to judge the effect on innovation, the NPRM cites Gilson's study on California innovation clusters<sup>46</sup> to the effect that "researchers have posited that high-tech clusters in California may have been aided by increased labor mobility due to the unenforceability of non-compete clauses."<sup>47</sup> The data sample used by Prof. Gilson extended from 1994-2001, and is approximately coterminous with China's accession to the WTO in late 2001 and its rapid development since as an economic and security competitor.<sup>48</sup> China's entry into the WTO was also the start of China's accelerated commitment to becoming a peer technology competitor with the United States, which China has since achieved by nearly every measure.<sup>49</sup> Due to its bias of exclusively focusing on US innovation clusters, it is my belief that this study has limited utility in addressing the role of non-competes in explaining China's technological emergence.

One approach towards evaluating Gilson's theories on prospective global innovation would be to update his study on innovation clusters with more recent data on global innovation clusters. The World Intellectual Property Organization (WIPO) collects such data in its Global Innovation Index (GII), where it also ranks innovation clusters.<sup>50</sup> The GII also has the advantage of following the methodology used by Prof. He of relying principally on overall patent data in weighting the innovation outputs of a cluster, without his overlay of his efforts to uniformly value patents based on stock fluctuations. The rankings have been made based on Patent Cooperation Treaty (PCT) filings, a widely accepted measure for judging patent quality. Using USPTO data would likely skew findings in favor of US innovation. <sup>51</sup> In addition, the GII includes a ranking on share of total scientific publications, which is another widely accepted measurement for scientific and innovative output.<sup>52</sup> Additional adjustments could be made to these calculations based on patent families, field of use of the patent, forward or backward citations, etc., but those would entail a far greater commitment of time and resources. Unlike Prof. He's study, the GII study also facilitates comparisons can be made across multiple economies and across time.

To analyze how technological clusters may have benefited from the absence of non-compete clauses, I used GII's listing of the 100 leading innovation clusters. I then consulted with

<sup>&</sup>lt;sup>46</sup> Bruce Fallick, Charles A. Fleischman, and James B. Rebitzer, *Job-Hopping in Silicon Valley: Some Evidence Concerning the Microfoundations of a High-Technology Cluster*, 88 Rev. ECON. & STATISTICS 472, 477 (2006); NPRM at fn. 89.

<sup>&</sup>lt;sup>47</sup> NPRM at fn. 340.

<sup>&</sup>lt;sup>48</sup> Id. at p. 476.

<sup>&</sup>lt;sup>49</sup> See Ian Clay and Robert Atkinson, *Wake up, America: China is Overtaking the United States in Innovation Capacity*, Information Technology & Innovation Foundation (Jan. 23, 2023)

https://itif.org/publications/2023/01/23/wake-up-america-china-is-overtaking-the-united-states-in-innovationcapacity/.

<sup>&</sup>lt;sup>50</sup> WIPO, Global Innovation Index 2022, <u>https://www.wipo.int/global\_innovation\_index/en/2022/</u>.

<sup>&</sup>lt;sup>51</sup> Long Zhao, On the grant rate of Patent Cooperation Treaty Applications: Theory and Evidence, 117 ECONOMIC MODELLING (Dec. 2022) <u>https://www.sciencedirect.com/science/article/abs/pii/S0264999322002887</u>.

<sup>&</sup>lt;sup>52</sup> See e.g., European Commission, Directorate-General for Research and Innovation, *Publications as a measure of innovation performance: selection and assessment of publication*, Publications Office of the European Union (2021) <u>https://data.europa.eu/doi/10.2777/43576</u>.

numerous legal resources to determine which tech clusters were in economies that ban non-compete agreements.<sup>53</sup>

In its 2022 GII rankings, the top five technology clusters, in rank order, were (1) Tokyo/Yokohama, (2) Beijing, (3) the Chinese Pearl River Delta region, (4) Seoul, Korea and (5) San Jose/San Francisco. San Jose/San Francisco was the only one of the top five clusters located in a jurisdiction (California) that absolutely bans non-competes.<sup>54</sup> The other jurisdictions that are known to ban non-competes entirely and made the top 100 were in India, Russia, and Israel.<sup>55</sup> Both Beijing and the Pearl River Delta (including Shenzhen) permit non-compete agreements to be enforced. Moreover, as Dan Wang has observed, Shenzhen, in the Pearl River Delta, is particularly well-known for its labor mobility and accumulated process technology, which benefits from robust labor mobility. The assumption made by Dr Gilson that noncompetes promote such process-oriented innovation are belied by the Chinese successes as ranked in the GII. Two Chinese jurisdictions that permit non-competes are now more innovative than any United States technology cluster.

Collectively, the jurisdictions in the GII rankings that ban non-compete agreements fell by 2 rankings between 2019 and 2022, which included a decline of Los Angeles, a jurisdiction that bans non-competes, by one ranking. By contrast, China's tech clusters, which permit non-compete agreements, increased by 132 rankings over the same period. Overall, United States tech clusters decreased by 34 rankings. The other two jurisdictions in the United States that decline to enforce non-compete agreements, Oklahoma, and North Dakota, were not ranked at all. In terms of raw numbers of technology clusters, China's 21 clusters are also now equivalent in number with the 21 such clusters in the United States. The data demonstrates that the United States is failing to maintain the lead of its technology clusters vis a vis China and many other countries in the world since the time that Dr. Gilson published his study.

Prof. He suggests that abolishing non-compete agreements is an important factor in stimulating patent output. To the contrary of that study, this simple analysis of the relative ranking of innovation hubs based on their prohibition of non-compete agreements suggests that over time permitting non-compete agreements to be enforced can stimulate certain types of innovation and that the absolute invalidity of non-compete agreements may correlate with absolute and relative declines in the innovative capacity of countries that host global innovation clusters. Whatever the causative factors or technologies involved, the data on innovation clusters confirms that countries that permit non-compete agreements of some kind are among the most innovative in the world, host the most rapidly rising innovation clusters, and may be

<sup>&</sup>lt;sup>53</sup> See sources listed at fn. 4.

<sup>&</sup>lt;sup>54</sup> WIPO, Cluster ranking The GII reveals the world's top 100 science and technology (S&T) clusters and identifies the most S&T-intensive top global clusters (2022)

https://www.wipo.int/export/sites/www/pressroom/en/documents/2022gii clusters chapter.pdf.

<sup>&</sup>lt;sup>55</sup> Teheran, Iran is also listed as a technology cluster. However, I have thus far been unable to determine Iranian law regarding non-compete agreements.

highly dependent on process technology. This data is also consistent with Prof. Gilson's analysis that "legal infrastructure [involving intellectual property and employee mobility] prominently influences the dynamics of high technology industrial districts" and that this legal infrastructure should be tailored to the industries that are located there.

This analysis also supports my recommendations that non-compete clauses should continue to be available internationally to support protection of confidential information, considering the circumstances that exist in a range of foreign countries with differing legal systems and different competing technologies. The FTC should also consider the possibility that adverse changes in international non-compete enforceability may accelerate the declines in American innovative capacity relative to other countries, which are already happening over a short timeframe.

## (C) Impact on CHIPS Act Implementation

Today the competitive threat posed by "technology spillover" from employees working overseas is considerably more severe than in 1957, when a group of eight employees left Shockley Semiconductor Laboratory to establish Fairchild Semiconductor. None of those socalled "Traitorous Eight" went to work in foreign countries that had emerged as peer competitors to core US technologies. Here again, an up-to-date and international comparative study may shed light on the impact on US international competitiveness of rules against enforceability of non-competes.

A counter example to the Traitorous Eight is the more recent story of Dr. Gerald Yin, the current CEO of AMEC, a Chinese semiconductor equipment manufacturer. Dr. Yin left Applied Materials reportedly with a team of over 30 engineers to establish a semiconductor equipment manufacturing company in Shanghai in 2007.<sup>56</sup> Applied Materials also subsequently was a party to a trade secret law suit involving Dr. Yin in 2009 in Shanghai, which was withdrawn in 2010.<sup>57</sup> According to the *Wall Street Journal* and other media, his company now risks being placed on the US Entity List by the Bureau of Industry and Security (BIS) by reason of its presenting a threat to US competitiveness in semiconductor technology, under regulations promulgated by BIS in October 2022.<sup>58</sup>

<sup>&</sup>lt;sup>56</sup> Andrew Leonard, *Betrayal: A Silicon Valley Way of Life*, Salon (Jan. 3, 2008) <u>https://www.salon.com/2008/01/03/chips\_and\_treachery/</u>.

<sup>&</sup>lt;sup>57</sup> Mark Cohen, Semiconductor Patent Litigation Part 2 – Nationalism, Transparency and Rule of Law, China IPR (July 4, 2018) <u>https://chinaipr.com/2018/07/04/semiconductor-patent-litigation-part-2-nationalism-transparencyand-rule-of-law/;</u> *Applied Materials v. AMEC* 630 F. Supp.2d 1084 (N.D. Cal. 2009); AMEC Shanghai v. Applied Materials, Inc. (USA) 中微半导体设备(上海)有限公司 v. 美国应用材料有限公司 Lv Yizhong Minxu (Zhi) Chuzi No. 239. (2009) [沪一中民五(知)初字第 234 号].

<sup>&</sup>lt;sup>50</sup>Peter Landers, Entrepreneur Caught in the Middle of U.S.-China Chip War, Wall St.J. (Nov. 9, 2022), https://www.wsj.com/articles/entrepreneur-caught-in-the-middle-of-u-s-china-chip-war-11667989801.

The potential scope of this problem of high-tech employee migration to China has been identified by Georgetown University's Center for Security and Emerging Technology as potentially affecting as many as 1,100 Chinese engineers involved in semiconductor manufacturing equipment technology alone.<sup>59</sup> The FTC's proposed rule, as it applies to China's high-tech enterprises, is in direct conflict with BIS's October 2022 export control rulemaking, which limits employee mobility from the United States to China regarding technologies of concern to US national and economic security, including in the "development" and "production" of certain integrated circuits.<sup>60</sup>

Dr. Yin's story is one of several that document the close relationship among invalidity of noncompetes, trade secret theft and threats to US national security due to employee migration to China. California's ban on non-competes did not create spillover opportunities in the United States for Gerald Yin's employees. It created more high-paying job opportunities for employees in China. A useful additional study that the FTC may wish to conduct might be on the effect of banning non-compete agreements on enhancing China's technological competitiveness in hightechnology areas.

California law holds that when an employee moves to California, his non-compete agreement from another jurisdiction is deemed invalid because of the superior interest of California in not enforcing non-compete agreements. A well-known example of this judicial invalidation of noncompete obligations arose in the case Kaifu Lee when he departed Microsoft in Seattle in 2005 to work for Google in China. A California court ruled that California had a superior interest in invaliding the non-compete agreement with respect to Mr. Lee's employment in China by Google, a California company.<sup>61</sup> The court relied on a line of California cases which underscored that superior interest. For example, in Application Group, Inc. v. Hunter Group, Inc., 61 Cal. App.4th 881, 72 Cal.Rptr.2d 73 (1998), a California appellate court held that California law applied to an employment contract entered by Pike, a computer consultant. AGI, a California corporation, hired Pike away from Hunter. However, Pike remained in Maryland and telecommuted to her job. The California Court nonetheless ignored her contract's choice-of-law provision and invalidated the covenant not to compete. This same rule has been applied internationally to employees of California companies that are principally located overseas. Power Integrations, Inc. v. De Lara, Case No. 20-cv-410-MMA (MSB) (S.D. Cal. Mar. 26, 2020).

<sup>59</sup> Center for Security and Emerging Technology, China's Progress in Semiconductor Manufacturing Equipment, (March 2021) https://docplayer.net/205054920-China-s-progress-in-semiconductor-manufacturing-equipment.html.

<sup>&</sup>lt;sup>60</sup> Interim Rule, Bureau of Industry and Security, Implementation of Additional Export Controls: Certain Advanced Computing and Semiconductor Manufacturing Items; Supercomputer and Semiconductor End Use; Entity List Modification 87 Fed. Reg. 62186, 62193 (Oct 13, 2022) ("this rule revises § 744.6 (Restrictions on specific activities of "U.S. persons") to inform "U.S. persons" that "support" for the "development" or "production," of integrated circuits that meet certain specified criteria in the PRC implicates the general prohibitions set forth in § 744.6(b) of the EAR and is therefore subject to a BIS license requirement").

<sup>&</sup>lt;sup>61</sup> Google, Inc. v. Microsoft Corp., 415 F. Supp. 2d 1018 (N.D. Cal. 2005).

These choice of law have relevance to employees from overseas that work in CHIPS Act subsidized semiconductor manufacturing facilities or are employed by these companies while working overseas. If the California precedents are applied, any foreign investor in the United States risks invalidation of its non-compete agreement when its employee comes to work for a United States company. These precedents, if applied to the NPRM, would turn the United States, with its large labor and technology markets, into the non-compete "divorce capital" of the world, where employees come to shed their non-compete obligations by working for US-based employers and thereafter take on other assignments that may pose risks to themselves, their former employers and the economic security of the United States. Reliance on post-facto export controls to provide an administrative "non-compete" approach to labor mobility in semiconductors and other sectors will not address the need to deter trade secret misappropriation before the leakage has occurred. Ex ante remedies, such as non-compete agreements and preliminary injunctions for their violation, are critical tools in preventing these losses from occurring in the first place.

One solution to the problems identified in these comments is for the FTC to clarify that the NPRM only applies within the United States. The FTC should also consider establishing different rules for international labor mobility in order to prevent application of California-style choice of law rules. However, the adoptiong of a rigid rule would risk an inconsistency between FTC rules and foreign law, leading to potential invalidity of FTC rules by foreign courts. If a rigid FTC rule were adopted, it would also deprive employers of the flexibility to adjust their non-compete agreements based on evolving legal, business, technology, and labor environments in jurisdictions where they compete or operate.

I believe the better approach for the FTC to a revised rule would be to refer (renvoi) issues involving application of foreign non-compete rules to the local law existing in a foreign country where a former employee of a US company seeks to be employed. If this situation were to apply, US employers would be free to insist that employees sign non-compete agreements that conform to other jurisdictions, such as Germany or China, where compensation may be required for the period when the non-compete is in effect. In my own experience, US multinationals are already quite familiar with foreign non-compete agreements for their technically skilled staff and have the know-how to draft agreements that generally comply with the multiple jurisdictions where they operate. If California companies had been able to draft non-compete clauses with similar provisions, they would likely have limited their exposure to overseas trade secret misappropriation during the past several years, which would have benefited the economic and national security interests of the whole country.

A differential treatment between foreign and domestic non-compete agreements as I propose for technically skilled employees is also supported by WTO agreements and jurisprudence. Many foreign countries, including the United States,<sup>62</sup> China,<sup>63</sup> and Switzerland,<sup>64</sup> provide for

<sup>&</sup>lt;sup>62</sup> Economic Espionage Act, 18 U.S. Code § 1831 et seq.

<sup>&</sup>lt;sup>63</sup> Chinese Criminal Code, Art. 219.

<sup>&</sup>lt;sup>64</sup> Swiss Penal Code, Art. 273.

more deterrent penalties when trade secret misappropriation is undertaken on behalf of a foreign actor The TRIPS Agreement also provides for exemptions for its obligations to protect national security or in the event of an international emergency.<sup>65</sup> The WTO and its predecessor agreement, the GATT, also recognize that there may be instances where differential treatment between the application of domestic law and use of foreign law may be "necessary to secure compliance" with GATT/WTO requirements.<sup>66</sup> The use of foreign law in my proposed changes in the NPRM is necessary to ensure that United States trade secrets are adequately protected domestically and overseas, pursuant to TRIPS obligations that: "[m]embers shall protect undisclosed information [trade secrets]"; and they may adopt "criminal procedures and penalties to be applied in other cases of infringement of intellectual property rights [such as trade secrets]"; and that member economies shall "permit effective action against any act of infringement of intellectual property rights." <sup>67</sup> The WTO requirement that "members" shall protect undisclosed information also imposes an affirmative obligation to protect against trade secret misappropriation, rather than principally relying on civil remedies that are required to protect all other IP rights.<sup>68</sup> My proposal implements this affirmative obligation. Finally, I know of no WTO case where the domestic application of a WTO member country's law, which would otherwise have applied to cases brought in that country to resolve a cross-border IP dispute, was itself a violation of TRIPS obligations, as such matters are usually committed to the discretion of courts according to conflicts of law principles.

Several jurisdictions in the United States are currently slated to build state-of-the-art semiconductor manufacturing facilities subsidies, including Arizona, Ohio, New York and Texas. All of these states permit non-compete agreements for highly skilled technical employees. The TSMC fab in Arizona and the Samsung fab in Texas are also invested in by companies that honor non-competes in their home jurisdictions. Among the investing companies, TSMC,<sup>69</sup> Samsung<sup>70</sup> and Micron<sup>71</sup> have also already encountered significant losses due to trade secret misappropriation by their employees or partners on behalf of Chinese companies. Micron's proprietary technology has already been stolen by employees of a Taiwanese partner for Fujian Jinhua, a Chinese fab, which has since been determined by BIS to "pose a significant risk of becoming involved in activities contrary to the national security or foreign policy interests of

<sup>&</sup>lt;sup>65</sup> TRIPS Agreement, Art. 73.

<sup>&</sup>lt;sup>66</sup> See General Agreement on Tariffs and Trade, United States – Section 337 Of the Tariff Act of 1930, *Report by the Panel adopted on 7 November 1989* (L/6439 - 36S/345).

<sup>&</sup>lt;sup>67</sup> TRIPS Agreement, Arts. 40, 41, 61.

<sup>&</sup>lt;sup>68</sup> TRIPS Agreement, Art. 42.

<sup>&</sup>lt;sup>69</sup> Ramish Zafar, *TSMC Wins Legal Battle Against Employee Who Violated Contract and Moved to China*, WCCF Tech (July 8, 2022) <u>https://wccftech.com/tsmc-wins-legal-battle-against-employee-who-violated-contract-moved-to-china/</u>.

<sup>&</sup>lt;sup>70</sup> Matthew Humphries, 7 Former Samsung Employees Jailed for Stealing Chips Secrets for China, PC Mag (Feb. 21, 2023) <u>https://www.pcmag.com/news/7-former-samsung-employees-jailed-for-stealing-chip-secrets-for-china</u>.

<sup>&</sup>lt;sup>71</sup> South China Morning Post, *Taiwan's UMC to aid US Pursuit of Chinese Chip Maker Fujian Jinhua over Alleged Theft of Micron Trade Secrets*, <u>https://www.scmp.com/tech/gear/article/3107531/taiwans-umc-aid-us-pursuit-chinese-chip-maker-fujian-jinhua-over-alleged</u>.

the United States."<sup>72</sup> Along with Gerald Yin/AMEC, this is the second instance in recent years in which employee mobility to China in the semiconductor sector has been recognized by our export control agencies as a threat to US national economic security.

If the NPRM were enacted in its current form, it is likely that US and foreign employees of the new fabs would also no longer be bound by the non-compete agreements, thereby leaving their employers with difficult-to-enforce trade secret cases in China, much as was faced by Applied Materials in its case against Dr. Yin. For foreign investors such as TSMC or Samsung, this weakening of IP protection may result in a need to restructure employment agreements and/or even more careful scrutiny of how proprietary technology is transferred, controlled or managed by their US affiliates. These changes may also limit the pool of employees that the employer deems suitable to travel to the United States based on risks of mobility to a competitor in China.

The NPRM, by facilitating employee migration to China through invalidation of non-compete agreements, benefits China's economic and national security plans to develop a leading, internally competitive semiconductor industry. Litigation data in the United States already demonstrates that, among those countries where a defendant's nationality has been identified, China and Taiwan account for the majority of identified foreign defendants. According to Taiwanese Prof. Tzu-I Lee, from January 1, 2001, to December 31, 2021, 8.3% of all of the defendants in United States semiconductor trade secret cases were identified as Chinese individuals/entities, 3.2% were identified as Taiwanese individuals/entities, and 2.9% were identified as Taiwanese defendants allegedly misappropriating trade secrets to China or for Chinese entities. An additional 5.3% involved defendants related to other main players in the industry, such as Japan, South Korea, India and Israel. The balance of the defendants (80.2%) may have been from the United States or were simply not identified as being of any national origin.<sup>73</sup> Collectively, Chinese and Taiwanese defendants accounted for over 50% of the cases where the foreign nationality of a defendant had been identified.

The impact of these changes would extend beyond the CHIPS Act to other technology areas. Foreign companies have invested over \$2.0 trillion in high tech, which is about 46% of their total FDI in the United States. These foreign-owned affiliates were responsible for over 2.1 million US jobs in 2017. Most foreign countries honor non-compete agreements; many foreign countries likely already have non-compete agreements in place for their skilled workers who have access to their key technical secrets. The foreign investors from jurisdictions which honor non-compete agreements would be placed at a high risk of trade secret loss to other countries

<sup>&</sup>lt;sup>72</sup> Bureau of Industry and Security, Final Rule, 83 FR 54519 (effective Oct. 30, 2018) <u>https://www.federalregister.gov/documents/2018/10/30/2018-23693/addition-of-an-entity-to-the-entity-list.</u>

<sup>&</sup>lt;sup>73</sup>Tzu-I Lee, *Bordering Secrecy: An Empirical Study on Cross-Border Trade Secret Thefts in the Semiconductor Sector* (2022) (unpublished manuscript, available from the author).

by investing in high tech sectors in the United States.<sup>74</sup> The invalidation of non-compete agreements would also affect ongoing employment and secondment agreements and may also send a negative signal to the employees' home countries to similarly weaken their non-competition obligations in advanced technologies. These steps could all serve to further enhance China's competitive role in semiconductors and other high-tech sectors.

## (D) Conclusion

I do not believe that a one-size fits all approach of invalidating non-compete agreements for both unskilled low-wage workers and highly skilled high-tech executives in a range of critical and non-critical technologies is appropriate or in the national interest. The NPRM has set up a red herring issue by focusing on the millions of low-wage workers who should not be encumbered by non-compete agreements. I do not disagree with that proposition, although I believe that has little relevance to the issues discussed in these comments.

The international consequences of the proposed FTC rule should be the subject of an additional opportunity for public comment and additional study. At a minimum, the FTC, in consultation with other US government agencies concerned with technology and intellectual property (USPTO, NIST, OSTP, USTR, USDOL, USDOJ, etc.), as well as our science agencies with ownership and managements interests in technology development (NSF, DOE, NIH, NOAA, DoD, etc.) should exercise great caution in finalizing the NPRM.

If the FTC nonetheless seeks to publish a final rule limited to the United States domestic environment, I have proposed amendments that conform to my viewpoints as an appendix to these comments.

Thank you for the opportunity to comment on the NPRM.

Mark A. Cohen

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The opinions expressed here are my own.

<sup>&</sup>lt;sup>74</sup> Kara Mazachek, FDI in High-Tech: Innovation and Growth in the United States, (Feb. 5, 2020) <u>https://blog.trade.gov/2020/02/05/fdi-in-high-tech-innovation-and-growth-in-the-united-</u> <u>states/#:~:text=FDI%20supports%20the%20high%2Dtech,FDI%20in%20the%20United%20States</u>.

## APPENDIX

## 910.1.(b)1 Definitions

Non-compete clause means a contractual term between an employer and a worker that prevents the worker from seeking or accepting employment with a person, or operating a business, after the conclusion of the worker's employment with the employer in the United States. Application of United States law is not mandated by these rules to non-compete agreements involving overseas employers, including overseas subsidiaries of US companies.

§ 910.2 Unfair methods of competition.

(a) Unfair methods of competition. It is an unfair method of competition for an employer to enter into or attempt to enter into a non-compete clause with a worker; maintain with a worker a non-compete clause; or represent to a worker that the worker is subject to a non-compete clause where the employer has no good faith basis to believe that the worker is subject to an enforceable non-compete clause.

(b) It is not a per se unfair method of competition for an employer to enter into or attempt to enter into a non-compete agreement with a worker or represent to a worker that the worker is subject to a non-compete clause restricting the worker's ability to work outside of the United States consistent with the rules. In general, international non-compete clauses should be evaluated according to the need of the United States to maintain its economic security in international labor markets and protect proprietary technologies of the United States from disclosure to foreign markets. Employers should consider the impact upon the worker and the needs of her employer, the degree of labor competition in the market and other factors in entering into an international non-compete agreement. Generally speaking, employees who are in senior management positions and have had access to confidential technical or business information may be subject to a non-compete agreement for a limited period of time and under reasonable conditions, including the availability of compensation such as providing a reasonable portion of the employee's salary for the duration of the non-compete.