

The Role of Criminal Law in Promoting Innovation¹

Margaret K. Lewis

Professor, Seton Hall Law School

Criminal law now plays a larger role in U.S.-PRC relations than ever before. Under the banner of the Department of Justice’s “China Initiative,” the U.S. government is using economic espionage, fraud, false statements, and other offenses to respond to a “China threat.” People and entities who have connections to the party-state structure of the PRC have engaged in trade secret theft and other activities that are criminal under U.S. law. However, the current use of criminal law misses the mark in responding to these legitimate concerns. An expansive view of national-security-triggering assets, a broadly conceived threat to those assets, and the U.S. government’s at least partially justified emphasis on the need for keeping information from public view helps give rise to rhetoric of an “existential threat” emanating from the PRC.

Policymakers should jettison the overly broad label of “China” in the “China Initiative” as part of a broader rethink of the role of criminal law in protecting and promoting innovation. Charting a path that uses criminal law in a prudent manner requires enhanced collaboration with the scientific community as well as with experts who understand power structures in the PRC. The U.S. government should also curtail further criminalization of academic misconduct, invest in creating an innovation economy, and develop diversity, equity, and inclusion initiatives. Reflection on the excesses of the present approach and reclaiming space for international collaboration that has already eroded during the China Initiative can strengthen the United States’ position as a place for emulation, emigration, and innovation.

Prosecuting people is not an obvious way to promote scientific and technological innovation. Criminal law can, however, play a helpful role when used prudently. This paper examines how it can be applied and proposes initial steps for the U.S. government to chart a thoughtful path forward. It proceeds from the hopefully uncontroversial premise that promoting innovation is a goal shared by the U.S. government and broader U.S. society. Having groups of

¹ This paper draws on my prior work in the article “Criminalizing China” (111 J. CRIM. L. & CRIMINOLOGY 145 (2020), <https://ssrn.com/abstract=3600580>), the July 21, 2020, ChinaFile conversation, (<https://www.chinafile.com/conversation/there-future-values-based-engagement-china>), and January 26, 2021, SupChina op-ed (<https://supchina.com/2021/01/26/gang-chens-case-should-be-the-end-of-the-doj-s-china-initiative/>).

scientists working together in a laboratory, for example, might be fun for those directly involved, but collaboration also serves a larger goal of spurring the intellectual and economic vitality necessary for the United States to maintain its long-term competitiveness. The U.S. government is justified in scrutinizing how the People's Republic of China (PRC) leadership's own ambitions are in tension with—and sometimes antithetical to—the United States' interests in this regard.

It is expected that the PRC leadership will increasingly seek to move beyond the low-tech manufacturing that was critical to the country's previous economic growth towards a high-technology environment. A concern, however, is that the PRC government and intertwined Chinese Communist Party (CCP, and the collective ruling entity best termed the PRC party-state) are incentivizing and even directing activities that violate U.S. laws to further this aim. These activities range from computer hacking, to theft of intellectual property, to cultivating relationships that—while they might not have violated intellectual property rights—are seen as compromising individuals such that they are primed to act as channels for valuable information from U.S.-based entities to PRC-based ones. The scale of these activities is debated, but that they are occurring is widely accepted. The U.S. government can seek to decrease the prevalence of such activities by deterring people from engaging in illegal activities, warning people and entities that are potential victims of these illegal activities to better protect themselves, and creating legal barriers that impede the ability of such activities to even potentially occur. Yet all of these responses are imperfect and themselves impose costs.

While there is no easy prescription for the U.S. government to follow, this paper contends that the U.S. government can and should do a better job of crafting a response that uses criminal law as one facet of an overarching pro-innovation policy. Simply put, the United States will be in a stronger competitive position vis-à-vis not only the PRC but also other countries if the existing

fruits of scientific and technological labors are protected in tandem with nurturing an environment that bears more fruits in the future. Other papers in this suite on “Research, Education, & Academic Freedom” examine the environment within U.S. universities for cooperation with PRC-based entities as well as questions about how we draw lines between open research and research that is a national security concern. This paper is focused on when the U.S. government should go so far as to seek criminal liability—taking away a person’s money and/or liberty combined with labeling them a “criminal.”

This paper begins by clarifying what we know, and do not know, about activities tied to the PRC party-state that can compromise assets deemed a U.S. national security concern. It then provides a brisk overview of the U.S. government’s use of criminal law to protect against what it has termed a “China threat”² and a “Chinese threat.”³ Finally, it addresses the prescriptive “what should be done” question by setting forth several policy recommendations regarding targeted use of criminal law to promote innovation in the United States.

What is the U.S. government protecting and from whom?

Concerns about criminal activity tied to the PRC party-state stretch back decades but have accelerated in recent years. The U.S. government’s description of the threat lacks precision both in terms of what the U.S. government seeks to protect and from whom.

With respect to the protect *what* question, the Trump administration took a sweeping view of the types of assets classified as a national security concern. The threat was articulated as

² Christopher Wray, “Confronting the China Threat,” Feb. 6, 2020, <https://www.fbi.gov/news/stories/wray-addresses-china-threat-at-doj-conference-020620>.

³ Christopher Wray, “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, <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>.

including the theft of intellectual property (e.g. trademarks, trade secrets, and patents) as well as unauthorized access to personal data and other information. Signs from the Biden administration's early days in office indicate continuity in framing the threat from China, with Press Secretary Jen Psaki stating in late January, "China has been willing to do whatever it takes to gain a technological advantage—stealing intellectual property, engaging in industrial espionage, and forcing technology transfer."⁴

To be sure, the PRC party-state today raises national security concerns far beyond traditional spying. Intellectual property with potential military applications most obviously triggers national security concerns, but the U.S. government's conception of what is of importance to the United States' interests now encompasses large swathes of intellectual property. "Tappy" the robot was designed to test mobile phones, but FBI Director Christopher Wray—who has thus far stayed on in the Biden administration—declared Huawei's alleged theft was "[t]o the detriment of American ingenuity," and the case is being prosecuted "with assistance from the Department of Justice's National Security Division's Counterintelligence and Export Control Section."⁵ Accessing Tappy is, however, a far cry from when the PRC military got its hands on the hardware in the U.S. Navy EP-3 plane that crashed on Hainan Island in 2001⁶ or even trade secrets from non-military aviation and aerospace companies.⁷

⁴ White House Press Briefing, Jan. 25, 2021, <https://www.whitehouse.gov/briefing-room/press-briefings/2021/01/25/press-briefing-by-press-secretary-jen-psaki-january-25-2021/>.

⁵ Press Release, Dep't of Justice, "Chinese Telecommunications Device Manufacturer and its U.S. Affiliate Indicted for Theft of Trade Secrets, Wire Fraud, and Obstruction Of Justice," Jan. 28, 2019, <https://www.justice.gov/opa/pr/chinese-telecommunications-device-manufacturer-and-its-us-affiliate-indicted-theft-trade>.

⁶ See Kim Zetter, "Burn After Reading," THE INTERCEPT, Apr. 10, 2017, <https://theintercept.com/2017/04/10/snowden-documents-reveal-scope-of-secrets-exposed-to-china-in-2001-spy-plane-incident/>.

⁷ See Press Release, Dep't of Justice, "Chinese Intelligence Officer Charged with Economic Espionage Involving Theft of Trade Secrets from Leading U.S. Aviation Companies," Oct. 10 2018, <https://www.justice.gov/opa/pr/chinese-intelligence-officer-charged-economic-espionage-involving-theft-trade-secrets-leading>.

The U.S. government's view of which assets deserve protection including via the use of criminal law is likewise broad with respect to *who* has rights to those assets. Assets are of concern even when they are held by non-governmental entities. Intellectual property disputes between businesses or other private entities are commonly settled in civil court where the person claiming infringement can seek monetary damages, injunctions, and other remedies.⁸ The U.S. government's decision to treat infringements as a matter for criminal sanction adds a significant level of severity and expresses that a broader societal harm occurred. Emphasizing that the alleged infringer seeks to benefit entities outside the United States implicates national security concerns. For instance, economic espionage is a more serious form of trade secret theft because it involves a nexus with a foreign government.

Cases pursued by the U.S. government further demonstrate that assets are a concern when the holders are not unabashedly "American." For example, in November 2019, the United States charged Haitao Xiang with economic espionage and related crimes linked to his work at Monsanto from 2008 to 2017. In the press release, FBI Assistant Director John Brown is quoted as stating, "The revolutionary technology at the core of this case represents both the best of American ingenuity and why the Chinese government is so desperate to steal it for themselves. ... Our country's economic security is our national security, and the FBI will always do everything in our power to protect it."⁹ Yet Monsanto was acquired by Bayer, a Germany company, in 2017.¹⁰ Bayer AG has substantial operations and corporate entities in the United

⁸ See "Huawei Pleads Not Guilty to Racketeering in Beefed-Up U.S. Case," BLOOMBERG, Mar. 4, 2020, *available at* <https://perma.cc/CL2H-QV54> ("Huawei has said the new accusations rest on 'recycled civil disputes from the last 20 years that have been previously settled, litigated, and in some cases, rejected by federal judges and juries.'").

⁹ Press Release, Dep't of Justice, "Chinese National Who Worked at Monsanto Indicted on Economic Espionage Charges," Nov. 21, 2019, <https://www.justice.gov/opa/pr/chinese-national-who-worked-monsanto-indicted-economic-espionage-charges>.

¹⁰ See Greg Roumeliotis & Ludwig Burger, *Bayer to Buy Monsanto, Creating a Massive Seeds and Pesticides Company*, SCI. AM. Sept. 14, 2016, <https://perma.cc/9ZQB-BFZL>; Mara Hvistendahl, "Operation Purple Haze," THE

States,¹¹ but so do many PRC-based companies like AVIC and BGI Group.¹² The American versus “foreign” or, more specifically “Chinese,” rhetorical binaries are complicated in reality.

Harms that do not hit the United States directly can, of course, still be of concern from a national security perspective, such as if a country limits freedom of navigation in waters understood to be part of the high seas. Even if the U.S. government does not have any immediate interest in entering those specific waters, the erosion of the principle of freedom of navigation can over time have negative effects on U.S. interests. Likewise, infringements to a German company’s intellectual property could weaken the global environment for intellectual property protection in addition to the harm to the foreign parent company’s U.S. subsidiaries. Nonetheless, if the U.S. government’s contention is that an infringement of intellectual property has a direct effect on the U.S. economy and that “America” is harmed, then a much tighter line must be drawn between the infringement and the dollar amount lost to GDP or based on another metric.¹³

Turning to the protect *from whom* question, there is no reliable calculation of the harm caused to the U.S. economy that is attributable to the unauthorized access and use by the PRC party-state of these broadly defined assets.¹⁴ The math further blurs when the harm is defined to include assets compromised by PRC-based companies (or other entities), even if not directly linked to the party-state. The complex ties among the party-state, business, and academia make it particularly difficult to draw lines as to when the ultimate culprit is a foreign government or

WIRE, Apr. 19, 2020, (“‘Monsanto appreciated all of the efforts that were taken by the U.S. Government to protect intellectual property,’ a spokeswoman for Bayer wrote me after the merger.”).

¹¹ See Bayer, <https://www.bayer.us/>.

¹² See Rich Gardella & Dan De Luce, *U.S. Units of Companies Got Coronavirus Bailout Money*, NBC NEWS (July 14, 2020), <https://www.nbcnews.com/news/china/u-s-units-chinese-companies-got-coronavirus-bailout-money-n1233692>

¹³ Cf. Dep’t of Justice, *supra* note 8 (“Stealing trade secrets can destroy a business,” said Special Agent in Charge Richard Quinn of the FBI St. Louis Division. “When done at the behest of a foreign government, it threatens our nation’s economic security because it robs our companies of their market share and competitive advantage.”).

¹⁴ See Mark Cohen, “The 600 Billion Dollar China IP Echo Chamber,” CHINA IPR (Blog), May 12, 2019, <https://perma.cc/B26H-63K6>.

agent thereof (e.g. as required for economic espionage) as compared with a non-governmental entity (e.g. for garden-variety trade secret theft). We do know that the PRC party-state under the leadership of Xi Jinping has placed greater emphasis on enhancing innovation, as seen in the Made in China 2025 initiative and Thousand Talents Plan. These efforts stretch far beyond entities within the formal government or CCP structure. The PRC's move away from basic manufacturing and toward more knowledge-based drivers of economic growth is expected; more complex is understanding *how* the PRC is pursuing this transition and if its strategies have been and will be successful.

We do not know the dollar amount of intellectual property theft tied to the PRC party-state and/or entities connected therewith, nor do we know the extent to which illegal activities tied to the PRC are changing in prevalence and/or nature over time. We do know, however, that the Department of Justice (DOJ) has, since launching its "China Initiative" in 2018, directed substantial resources to investigating and prosecuting cases with links to the PRC. We also know that the stated number of cases in the pipeline is increasing, as Director Wray stated in June 2020 that there were "more than 2,000 active investigations that link back to the Chinese government."¹⁵ This compares to his statement in February 2020 that there were "about a thousand investigations involving China's attempted theft of U.S.-based technology in all 56 of our field offices and spanning just about every industry and sector."¹⁶ In January 2021, the FBI

¹⁵ Ursula Perano, "Wray: FBI Has Over 2,000 Investigations that Trace Back to China," AXIOS, June 24, 2020, <https://www.axios.com/fbi-wray-china-counterintelligence-investigations-f809b7df-865a-482b-9af4-b1410c0d3b49.html>.

¹⁶ Christopher Wray, Director, FBI, Opening Remarks at the China Initiative Conference at the Center for Strategic and International Studies (CSIS), Washington D.C., Feb. 6, 2020, (*available at* <https://www.csis.org/analysis/fbi-director-christopher-wrays-opening-remarks-china-initiative-conference>); *see also* William Barr, U.S. Att'y Gen., Keynote Address at the China Initiative Conference at CSIS, Washington D.C., Feb. 6, 2020, (transcript *available at* <https://www.csis.org/events/china-initiative-conference>) (noting in context of China Initiative that "you should expect more indictments and prosecutions in the future"); *see also* "The Latest: FBI Chief Wray Says China Poses a Serious Threat," ASSOC. PRESS, July 23, 2019, *available at* <https://perma.cc/66NK-PTUU> ("Wray told the Senate

stressed that “we have now reached the point where the FBI is opening a new China-related counterintelligence case about every 10 hours. And of the 5,000 active counterintelligence cases the FBI has, nearly half of them are related to China.”¹⁷

These public statements are an imperfect proxy for estimating the quantity of suspicious activity that has been on the government’s radar, let alone the actual amount of criminal activity. When done effectively, intellectual property violations can long remain hidden, especially because victim entities may have reputational and market incentives to keep quiet violations they do discover.¹⁸

Limited information on specific cases frustrates efforts to gather individual data points and, in turn, extrapolate findings to at least estimate broader trends. This is in part because, like most criminal cases, charges brought under the China Initiative that result in convictions tend to be resolved through guilty pleas, at which point there is far less information available than would be exposed at trial. For example, in a filing in the pending case of *United States v. Tao* in which it is alleged that the defendant lied and defrauded the U.S. government regarding his ties to PRC-based entities, the DOJ argued that groups seeking to intervene as *amici curiae* lacked a factual basis for their assertions: “Of course, because the evidence in this case is not yet a matter of

Judiciary Committee on Tuesday the FBI has more than 1,000 investigations involving economic espionage and attempted intellectual property theft. He says nearly all lead back to China.”).

¹⁷ FBI Special Agent in Charge Joseph R. Bonavolonta’s Remarks at Press Conference Announcing Arrest of MIT Professor Gang Chen, Jan. 14, 2021, <https://www.fbi.gov/contact-us/field-offices/boston/news/press-releases/fbi-special-agent-in-charge-joseph-r-bonavolontas-remarks-at-press-conference-announcing-arrest-of-mit-professor-gang-chen>.

¹⁸ See, e.g., Nancy Hungerford, “Chinese Theft of Trade Secrets on the Rise, the US Justice Department Warns,” *CNBC*, Sept. 22, 2019, <https://www.cnbc.com/2019/09/23/chinese-theft-of-trade-secrets-is-on-the-rise-us-doj-warns.html> (U.S. Deputy Assistant Attorney General Adam Hickey noted regarding increasing frequency of economic espionage cases implicating China, “That may be because the victims are more attentive to what’s happening, which is a good thing”).

public record, the only knowledge *amici* have concerning the defendant’s alleged criminal activity in this case is from the Second Superseding Indictment and various news accounts.”¹⁹

This combination of (1) an expansive view of national-security-triggering assets, (2) a broadly conceived threat to those assets, and (3) the U.S. government’s at least partially justified emphasis on the need for keeping information from public view helps give rise to rhetoric of an “existential threat” emanating from the PRC.²⁰ But this anxiety-producing language should not block scrutiny of what the U.S. government is bundling into this threat and why. Nor should the existence of at least some level of threat to U.S.-based assets from entities linked to the PRC party-state generate acquiescence to sweeping too wide a network under the umbrella of that threat. This existential-threat framing has encouraged a climate in which people of PRC nationality and/or Chinese ethnicity face heightened scrutiny.

After extensive study, this author is admittedly not aware of any government documents that state a person was selectively prosecuted *because* he was a PRC national or ethnically Chinese. And requests by Asian Americans Advancing Justice (AAJC) and the ACLU have at least to date not yielded the sought information.²¹ However, the absence of direct evidence of prosecutions motivated by discriminatory grounds does not mean that the U.S. government’s actions have been non-discriminatory. This is first because we do not have a window into the conversations and minds of people involved in cases falling under the China Initiative. Yet statements such as by U.S. Attorney for the District of Massachusetts Andrew Lelling regarding

¹⁹ *United States v. Feng Tao*, Government’s Response to Motion For Leave to Enter Appearance and File *Amicus Brief*, Sept. 9, 2020, D. Kansas.

²⁰ Eric Tucker, “US Officials Warn Chinese Espionage an ‘Existential Threat’,” ASSOC. PRESS, Feb. 6, 2020, <https://www.businessinsider.com/us-officials-warn-chinese-espionage-an-existential-threat-2020-2> (quoting William Evanina, then nominee to be director of the National Counterintelligence and Security Center, as stating regarding Chinese economic espionage that “[t]he long-term existential threat to the security of our nation is real”).

²¹ AAJC, FOIA for Records on Government Efforts to Investigate and Prosecute U.S.-Based Scientists and Researchers Believed to Have Connections to China, Mar. 17, 2020, <https://advancingjustice-aaajc.org/foia-request-chinese-american-scientists>.

MIT professor Gang Chen that “[t]he allegations of the complaint imply that this was not just about greed, but about loyalty to China”²² give rise to concerns about how U.S. law enforcement view naturalized U.S. citizens and other people with ties to China.

That implicit bias can make the investigators and prosecutors themselves unaware of factors in their own decisionmaking adds another layer of complexity.²³ Consequently, while recognizing the lack of an empirical basis, personal accounts by ethnically Chinese researchers like Sherry Chen and Xiaoxing Xi,²⁴ who were investigated by the U.S. government, demonstrate that their experience of stigmatization is real even if defendants fail to prevail on selective prosecution claims or do not bring such claims because the charges are dropped (as was the case for Chen and Xi) or the defendant accepts a plea.²⁵

In sum, we are faced with a mixed of known-knowns, known-unknowns, and even unknown-unknowns.²⁶ There is evidence of illegal activities connected to the PRC party-state, but the U.S. government’s depiction of that phenomenon deserves closer scrutiny for its potential to conflate disparate issues and inflate threats. This does not mean that we should pursue a path of complacency. Rather, the U.S. government should enact policies that address concerns about the PRC party-state’s activities as part of a carefully crafted strategy to promote the United States’ long-term economic competitiveness. The current use of criminal law misses the mark.

²² ; see also Ellen Berry, *A Scientist is Arrested, and Academics Push Back*, N.Y. Times, Jan. 26, 2021, <https://www.nytimes.com/2021/01/26/us/mit-scientist-charges.html>

²³ See generally American Bar Association, *Implicit Bias Videos and Toolkit*, <https://www.americanbar.org/groups/diversity/resources/implicit-bias/>.

²⁴ See APA Justice, <https://www.apajustice.org/> (providing summaries of these and other cases).

²⁵ There is a robust debate in the criminal justice field regarding the reasons why people plead guilty to charges. See, e.g., Jed S. Rakoff, *Why Innocent People Plead Guilty*, N.Y. REV. OF BOOKS, Nov. 20, 2014, <https://www.nybooks.com/articles/2014/11/20/why-innocent-people-plead-guilty/>.

²⁶ Cf. Hart Seely, “The Poetry of D.H. Rumsfeld,” SLATE, Apr. 2, 2003, <https://slate.com/news-and-politics/2003/04/the-poetry-of-donald-rumsfeld.html>.

How does the U.S. government use criminal law to protect assets deemed a national security concern?

While all three branches of government play a role in using criminal law to protect intellectual property and other assets deemed a national security concern, the executive branch is at the forefront because it has tremendous discretion in how laws are enforced. The “China Initiative” is centered within the DOJ, which includes the FBI as its primary investigatory force. The Initiative was, however, conceived as reaching beyond the DOJ’s walls to include coordination with the Department of Treasury, National Institutes of Health, and other government entities. More broadly, the China Initiative was but one facet of the Trump administration’s assertive approach to U.S.-PRC relations. The Biden administration has thus far given no indication that it will end the China Initiative.

As the arm of the executive branch charged with enforcing the law, the DOJ’s most powerful tools in the China Initiative are the ability to investigate and prosecute. These tools are being used with vigor. U.S. government officials working on the China Initiative have vocally defended the Initiative as a critical component of countering a China threat that is both an appropriate use of their law enforcement powers and based on following evidence wherever it may lead without discriminatory intent.²⁷ I have explained in detail elsewhere how the DOJ has presented this work as deterring individual “thieves and hackers” while also having a potential deterrent effect on the decisions of the PRC party-state’s leadership.²⁸ Other traditional drivers of criminal punishment are less prominent in the Initiative, namely incapacitation, rehabilitation, and retribution. What I have argued is problematic is that people who have ties to “China” based

²⁷ William Evanina, Director, Nat’l Counterintelligence and Security Center, Remarks at the China Initiative Conference at CSIS, Washington D.C., Feb. 6, 2020, (“We hear a lot of pushback in the government about this as a racial issue. Totally disagree. This is a fact-based issue of the theft of intellectual property, trade secrets, and ideas by a communist country.”).

²⁸ See generally, “Criminalizing China,” *supra* note 1.

on nationality, ethnicity, or other connections are lumped together as part of a China threat. Markers of “China-ness” become proxies for assessing risk.

Outside the executive branch, Congress plays a critical role in enacting the criminal laws that the DOJ uses.²⁹ As with Congress’s criminalization of economic espionage in the 1990s, Congress could today enact new laws aimed at the activities of concern under the China Initiative, such as additional criminal provisions targeting failure to disclose on federal grant filings ties specifically with foreign actors.³⁰ Thus far, activities sometimes termed “academic espionage” are prosecuted using wire fraud, false reporting on government submissions, and similar statutes. Congress could also enact laws outside of the criminal context that could reduce exposure of U.S.-based intellectual property to PRC linked entities, as seen in proposals to limit visas and reduce PRC-linked investment in the United States.³¹ Thus, while the current focus is on how the executive branch has stepped up use of existing laws, it bears watching Congress’s role in providing prosecutors with additional tools in the form of new criminal laws as well as creating non-criminal laws that work in concert with criminal prosecutions. For instance, the more limited channels there are for PRC nationals to be in the United States legally, the easier it is for PRC nationals to violate immigration laws and face criminal punishments, whether those violations be intentional or unwitting.

²⁹ The extent to which actions that share similarities to congressional law making can be done directly by the President via executive orders is contested, though the Trump administration demonstrated a preference for such direct action in the context of China policy. *See, e.g.,* Bobby Chesney, *Banning TikTok and WeChat: Another Primer*, LAWFARE, Aug. 7, 2020, <https://www.lawfareblog.com/banning-tiktok-and-wechat-another-primer>. The Trump administration also went so far as to decrease a PRC presence in the United States by ordering closure of the Houston consulate. U.S. Gov’t, Briefing With Senior U.S. Government Officials on the Closure of the Chinese Consulate in Houston, Texas, July 24, 2020, <https://www.state.gov/briefing-with-senior-u-s-government-officials-on-the-closure-of-the-chinese-consulate-in-houston-texas/>.

³⁰ *Cf.* 18 U.S.C. § 666, <https://www.law.cornell.edu/uscode/text/18/666> (theft or bribery concerning programs receiving federal funds, but this provision does not create tiers based on whether the alleged theft or bribery connects to a foreign entity).

³¹ *See, e.g.,* Senator Tom Cotton, “Cotton, Blackburn, Kustoff Unveil Bill to Restrict Chinese STEM Graduate Student Visas & Thousand Talents Participants,” May 27, 2020, https://www.cotton.senate.gov/?p=press_release&id=1371.

The judicial branch also is involved in the U.S. government’s approach to using criminal law to counter the “China threat.” If criminal cases go to trial, judges at a minimum are making legal decisions and, depending on whether there is a jury, potentially also serving as the finders of facts. Yet, as is common with criminal cases in general, there are seldom trials: plea bargaining dominates in the China Initiative context. There are at least three high-profile cases currently headed to trial,³² but to date the vast majority of cases under the “China Initiative” umbrella that have resulted in convictions have been resolved through guilty pleas,³³ which means limited judicial oversight. This also means that the government’s evidence has not been tested in open court.

Judges are also responsible for determining the sentence whether the defendant pleads guilty or is found guilty at trial, though judicial discretion is cabined by statutory minimums and maximums as well as by the federal sentencing guidelines. The details of criminal procedure are beyond the scope of this brief policy-focused paper; nevertheless, the takeaway is that the judiciary has thus far played a peripheral role in the China Initiative. Given the substantial discretion vested in prosecutors to determine criminal charges and the dominance of plea bargaining in resolving cases, it is expected that prosecutors will continue to drive the proverbial bus.

³² See Berry, *supra* (reporting that Gang Chen had pleaded not guilty); *United States v. Feng Tao*, Government’s Response to Motion For Leave to Enter Appearance and File *Amicus Brief*, Sept. 9, 2020, D. Kansas; Nate Raymond, “Harvard Professor Pleads Not Guilty in U.S. to Lying about China Ties,” REUTERS, June 17, 2020, <https://www.reuters.com/article/us-usa-china-crime-idUSKBN23N2PK>.

³³ See Dep’t of Justice, Information about the Department of Justice’s China Initiative and a Compilation of China-Related Prosecutions Since 2018 (last updated Sept. 21, 2020), <https://www.justice.gov/opa/information-about-department-justice-s-china-initiative-and-compilation-china-related>.

What role should criminal law play in enhancing innovation?

With the premises that PRC-linked entities (party-state and broader), to at least some extent, compromise intellectual property and information deemed of U.S. national interest (not just of interest to private entities with legal rights to those assets) and the U.S. government is prioritizing countering these activities, the question becomes: what should be done differently from the current approach?

To be clear, the U.S. economy is also hurt if intellectual property that could be used to generate product sales, jobs, and/or even more advanced intellectual property in the United States is infringed by actors who siphon off those assets to any other economy from Australia's to Zimbabwe's. Accordingly, once a determination is made that assets are deserving of protection, including by criminal enforcement, then the U.S. government should protect those assets irrespective of from where potential threats emanate. It is just as illegal for people to steal intellectual property with the intended beneficiary being the Canadian government as the Chinese government. Pro-innovation U.S. policies should thus be framed in a country-neutral manner not simply as a response to binary competition with a what is depicted as a threatening China.

If the U.S. government decides to direct investigatory and prosecutorial resources towards certain perceived threats over others, then it should be pressed to justify those choices. Particularly since the launch of the China Initiative, the U.S. government has articulated a special concern for intellectual property not just leaving the United States but also going to the PRC, which is increasingly seen as an economic and strategic rival. The U.S. government should be pushed to substantiate publicly the scope and scale of the "China threat" that it is expounding as well as how the current approach is tailored to mitigate, even if not able to eliminate, that threat.

Moreover, threat mitigation alone is insufficient for the United States to remain a hub for innovation. The United States can strengthen its competitive position both by protecting current assets from being compromised by entities that will then use those assets to benefit other countries' economies and by creating new assets that will expand the U.S. economy. The United States should defend what it has now, but the long-term vitality of the U.S. economy will also require expanding the assets that are deserving of protection. The following six policy prescriptions for the U.S. government relate to the role of criminal law in achieving these aims.

1. Jettison the overly broad label of “China” in the U.S. government’s China Initiative

In a September 2020 court filing, the DOJ again refuted criticisms that the China Initiative is “targeting Chinese people” and instead asserted that “in reality the U.S. government is responding to a national security threat posed by the government of China.”³⁴ Despite interspersed references to the “Chinese Government” and “Chinese Communist Party,” a closer look at “China” as used in the “China Initiative” indicates that it conflates government, party, national origin, and ethnicity into an amorphous threat.³⁵ “China” itself is anthropomorphized into a villain that steals and cheats.

Lumping together people and entities as sharing connections to “China” fuels xenophobia and undermines the principle of non-discrimination that is a stated foundational principle of the DOJ’s work. Using nationality and/or ethnicity as a proxy for potential criminal activity—either explicitly or implicitly—further tends to “Other” populations as risky bets that need to be controlled rather than viewing people as individuals who can contribute to the collective good. The U.S. government has failed to engage with these critiques in a meaningful way. The Biden

³⁴ *United States v. Feng Tao*, Government’s Response to Motion For Leave to Enter Appearance and File *Amicus Brief*, Sept. 9, 2020, D. Kansas.

³⁵ See generally “Criminalizing China,” *supra* note 1.

administration's strong condemnation of racism and xenophobia³⁶ has yet to include a public review of the influence of bias in the China Initiative.

Reframing the China Initiative in country-neutral terms of protecting intellectual property regardless of the source of the threat is a necessary but insufficient step. The change could be largely cosmetic without the additional steps below. But it would be a clear signal that the U.S. government had reversed its highly unusual decision to label a criminal enforcement initiative in country-specific terms and was at least beginning to do the harder work of reexamining the contents of the Initiative.

2. Collaborate with the scientific community to better articulate what the U.S. government seeks to protect using the criminal law

The people best able to help clarify the line between open scientific research and intellectual property that is a national security concern are often those facing enhanced scrutiny. As Steven Chu, the Nobel-prize winning physicist at Stanford University and former U.S. Secretary of Energy, said in September 2020 regarding the atmosphere for scientists of Chinese descent: "There are certainly people leaving."³⁷

Before the outbreak of COVID-19, the White House Office of Science and Technology Policy and the DOJ began outreach to academics and scientific communities outside universities. These conversations have yet to mature into a robust two-way dialogue where the non-governmental experts educate the government about the nature of their work alongside the government officials educating non-governmental communities about the nature of the perceived threat. The elevation of President Biden's science adviser to a cabinet-level position provides an

³⁶ White House Memorandum, Jan. 26, 2021, <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/26/memorandum-condemning-and-combating-racism-xenophobia-and-intolerance-against-asian-americans-and-pacific-islanders-in-the-united-states/>.

³⁷ Andrew Silver, "US Political Crackdown Spurs Fears of Chinese Brain-Drain," NATURE, Sept. 7, 2020, <https://www.nature.com/articles/d41586-020-02359-5>.

opportunity for an enhanced role of the scientific community in various aspects of policy making,³⁸ including with respect to the DOJ's work.

The DOJ should place higher priority on creating fora that can chart a path that promotes the “values of transparency, openness, and merit-based competition”³⁹ in science and technology and fashions a targeted role for criminal law in protecting the intellectual property created from such a transparent, open, and merit-based environment. This task is no doubt more difficult because of the pandemic, but additional steps can and should be taken.

3. Engage with academic and other non-governmental experts to better understand the structures of power and influence in the PRC

U.S.-PRC relations are tense and will likely remain so for some time to come. Navigating the relationship with finesse requires deep country-specific expertise. This is especially true for the DOJ, which is not a part of the executive branch with deep expertise on the PRC. The Biden administration has already given positive signals that it is moving in this direction. NSC spokesperson Emily Horne told reporters in February, “National security adviser Jake Sullivan is personally focused on China as a priority, building capacity across departments and agencies and running processes that break down old silos between foreign and domestic policy”⁴⁰

In addition to drawing on intra-executive-branch cooperation, the DOJ would be wise to draw on the community of scholars to augment knowledge of PRC politics, economy, history, and society that is needed along with the national-security focus of the China Initiative's leadership. For example, discerning whether a company has mere strands connecting it to the

³⁸ Kery Murakami, *More Influence for Science*, Inside Higher Ed., Jan. 18, 2021, <https://www.insidehighered.com/news/2021/01/18/biden-elevates-head-science-office-cabinet-level>.

³⁹ NSF Releases JASON Report on Research Security, Dec. 11, 2019, https://www.nsf.gov/news/news_summ.jsp?cntn_id=299700.

⁴⁰ Bethany Allen-Ebrahimian, *Biden's Whole of National Security Strategy*, AXIOS, Feb. 2, 2021, <https://www.axios.com/bidens-whole-of-national-security-council-strategy-431454bb-43dc-45ef-9ccc-8a3f229ba598.html>.

party-state as compared with deep entanglement is no easy feat, but Meg Rithmire and Hao Chen’s research provides context to the PRC-government investment in “private” firms.⁴¹ This more textured understanding would help in drawing lines as to when connections with PRC-based entities were serious enough to justify use of criminal punishments.

Looking to the future, the U.S. government should restart the Fulbright programs in China and Hong Kong that were suddenly suspended in summer 2020 following the White House’s Executive Order calling for their end. The U.S. government should also expand pathways to develop the next generation of China specialists by supporting language studies and area studies programs because understanding *less* about a rival is never an effective strategy to enhance your competitiveness.

4. Curtail further criminalization of academic misconduct

The DOJ enforces criminal laws, it does not make those laws. And while there is tremendous discretion in which laws are enforced and how vigorously, Congress’s passing of new criminal laws provides additional tools in the prosecutor’s toolbox. These tools should be added cautiously. Technological advances, for example, may justify new laws: it was only possible to hack computers once computers existed. In the context of the China Initiative, the DOJ has not argued that current criminal laws are insufficient for the task.

The DOJ’s own guidance for prosecutors includes as a reason *not* to commence prosecution that “there exists an adequate non-criminal alternative to prosecution.”⁴² Thus, in addition to cautioning against creating new federal criminal laws and/or ratcheting up existing punishments, Congress and the executive branch should seek ways to strengthen non-criminal

⁴¹ Meg Rithmire, “The State Department Says the Chinese Communist Party Controls Chinese Companies. It’s Not That Simple.” WASH. POST: MONKEY CAGE, Sept. 8, 2020, <https://www.washingtonpost.com/politics/2020/09/08/state-department-says-chinese-communist-party-controls-chinese-companies-its-not-that-simple>.

⁴² See U.S. Dep’t of Justice, Justice Manual, 9-27.220.

measures for supporting compliance with grant reporting requirements and protection of intellectual property. For example, individuals and organizations that violate grant reporting requirements can be barred from future grants,⁴³ and compliance requirements can be streamlined by harnessing new technologies as called for by the Grant Reporting Efficiency and Agreements Transparency (GREAT) Act of 2019.⁴⁴ Criminal law should be a backstop, not the frontline of defense for intellectual property.

5. Invest in creating an innovation economy

The title of this paper is intentionally framed as a positive agenda, “The Role of Criminal Law in *Promoting Innovation*” rather than in “*Punishing Theft*.” Seeking deterrence through punishment is one aspect of promoting innovation, but it should not dominate. Rather, the U.S. government should message that it will protect the intellectual property people have today while supporting an environment that will produce new intellectual property tomorrow. This requires investing in STEM fields and maintaining pathways for the flow of money and human capital that have restrictions based on facts rather than fears. The American Academy of Arts & Sciences issued a report in 2014 warning that the United States was failing to adequately invest in science and technology, especially when viewed against the PRC’s advances.⁴⁵ Proposed legislation like the America LEADS Act (S.4629) focuses on the need for “investing in

⁴³ See National Science Foundation, Key Regulations: Government-Wide Debarment and Suspension, *available at* <https://www.nsf.gov/oig/regulations/>.

⁴⁴ Public Law No. 116-103 (Dec. 30, 2019), *available at* <https://www.congress.gov/bill/116th-congress/house-bill/150/text>.

⁴⁵ *Cf.* American Academy of Arts & Sciences, Restoring the Foundation: The Vital Role of Research in Preserving the American Dream (2014), *available at* https://www.amacad.org/sites/default/files/publication/downloads/AmericanAcad_RestoringtheFoundation.pdf (“Indeed, China is projected to outspend the United States in R&D within the next ten years, both in absolute terms and as a fraction of economic output. If our nation does not act quickly to shore up its scientific enterprise, it will squander the advantage it has long held as an engine of innovation that generates new discoveries and stimulates job growth.”).

American competitiveness”⁴⁶ and, during the campaign, now President Biden stressed the need for innovation funding, including in artificial intelligence, quantum computing, clean energy, and 5G.⁴⁷

With thoughtful framing, pro-innovation initiatives could shift the narrative towards one which welcomes people whatever their nationality or national heritage might be. Moreover, humanizing the contributions to innovation in the United States by people of various races, ethnicities, genders, religions, etc. would be a step towards creating a positive atmosphere of celebrating an inclusive environment rather than the negative narrative of highlighting criminal prosecutions.

6. Enhance diversity, equity, and inclusion initiatives

Kamala Harris said in her acceptance speech of the Democratic vice-presidential nomination, “And let’s be clear—there is no vaccine for racism. We’ve gotta do the work.”⁴⁸ This is true for all types of bias. The Obama administration began to implement implicit bias training in the Department of Justice,⁴⁹ but the Trump administration ended these efforts.⁵⁰ The work needed to address bias is much more complicated than requiring people to sit through anti-bias training, though carefully designed training can be part of a holistic approach.⁵¹ The American Bar Association has analyzed how implicit bias can influence prosecutors’ decisions.

⁴⁶ America LEADS Act, introduced Sept. 17, 2020, <https://www.congress.gov/bill/116th-congress/senate-bill/4629/text?r=53&s=1>

⁴⁷ Sara Castallanos, *AI, Quantum R&D Funding to Remain a Priority Under Biden*, Nov. 9, 2020, <https://www.wsj.com/articles/ai-quantum-r-d-funding-to-remain-a-priority-under-biden-11604944800>.

⁴⁸ *Full Text of Kamala Harris’ Acceptance Speech: ‘We have a chance to change the course of history,’* Scroll.in, Oct. 2, 2020, <https://scroll.in/global/970869/full-text-kamala-harris-acceptance-speech-at-the-democratic-national-convention>.

⁴⁹ See Dep’t of Justice, Department of Justice Announces New Department-Wide Implicit Bias Training for Personnel, June 27, 2016, <https://www.justice.gov/opa/pr/department-justice-announces-new-department-wide-implicit-bias-training-personnel>.

⁵⁰ See Justine Coleman, “Lawmakers of Color Blast Trump Administration for Reportedly Instructing Agencies to End Anti-Bias Training,” THE HILL, Sept. 8, 2020, <https://thehill.com/homenews/house/515535-lawmakers-of-color-blast-trump-administration-for-reportedly-instructing>.

⁵¹ *Does Diversity Training Work? With Calvin Lai, PhD*, Speaking of Psychology (podcast), 2018, <https://podcasts.apple.com/us/podcast/speaking-of-psychology/id705934263?i=1000499192154>.

The DOJ insists that it has been sensitive to this issue, but has not provided any details about specific measures.

Non-governmental actors cannot “do the work” of bias-mitigation for the government: you can lead a person to the Project Implicit website,⁵² but you cannot force them to take an Implicit Association Test. People outside the government can, however, draw attention to how bias is infusing into the government’s depiction of a “China threat.” The Congressional Asian Pacific American Caucus (CAPAC) has pushed the government for information on investigations of Chinese-American scientists,⁵³ AAJC filed an amicus brief in *United States v. Tao* arguing that the prosecution is based on discriminatory grounds,⁵⁴ and the Brennan Center for Justice at NYU School of Law is hosting a series of webinars exploring how the China Initiative is potentially infringing civil liberties.⁵⁵ These and other initiatives raise awareness and, hopefully, will push the U.S. government to respond more completely to concerns about bias because two phenomena can coexist: the threat by association attaching to people of Chinese ethnicity and/or PRC nationality, and the threats from the PRC party-state that go far beyond traditional spying.

Discovery as part of criminal trials is another way to obtain information about the China Initiative that could prompt reflection on how the Initiative has been conceived and implemented. As noted above, at least a couple high-profile cases under the China Initiative are headed towards trial, though they might still be resolved through guilty pleas, or the charges could potentially be dismissed. Yet it is unfair to ask individual defendants to test the government’s case at trial

⁵² See Project Implicit, <https://implicit.harvard.edu/implicit/takeatest.html>.

⁵³ See “Raskin and Chu Launch Investigation into NIH and FBI Probes of Chinese Scientists,” Asian Pacific American Caucus, Feb. 20, 2020, <https://capac-chu.house.gov/press-release/raskin-and-chu-launch-investigation-nih-and-fbi-probes-chinese-scientists>.

⁵⁴ See AAJC, *United States v. Tao* Amicus Brief, Aug. 20, 2020, <https://advancingjustice-aajc.org/publication/united-states-v-tao-amicus-brief>

⁵⁵ See Webinar: “The Human and Scientific Costs of the China Initiative,” Sept. 20, 2020, <https://www.facebook.com/810038321/videos/10159032563868322/>.

because it serves as an information-forcing mechanism. A number of factors can influence an individual's risk calculus regarding whether to plead guilty including, but not limited to, the strength of the government's evidence, a genuine acceptance of responsibility if they indeed violated the law, concern about a higher sentence they would face at trial (i.e., whether it is a plea discount versus a trial penalty), as well as the financial and emotional costs of fighting the case through trial and potentially subsequent appeals.

Conclusion

In his September 2020 piece titled "In Defense of Diplomacy with China," former U.S. government official James Green wrote, "Ramped up criminal prosecutions and civil cases against theft of intellectual property will remain an important deterrent, but guardrails need to be in place to avoid stripping Chinese-Americans of their Constitutional rights or stigmatizing an entire race of people."⁵⁶ In his July 2020 speech titled "The Threat Posed by the Chinese Government and the Chinese Communist Party to the Economic and National Security of the United States," FBI Director Wray warned of "malign foreign influence efforts" that "undermine confidence in our democratic processes and values."⁵⁷

Director Wray did not specify what he meant by "our...values," but these values presumably include upholding constitutional rights as well as a broader value of non-discrimination regardless of specific constitutional requirements. Current guardrails are proving insufficient to constrain criminal investigations and prosecutions from running over these values. More bounded use of criminal law is a critical step to promoting collaboration and competition among the best and brightest minds regardless of the characteristics of the bodies in which those

⁵⁶ James Green, "In Defense of Diplomacy with China," *ChinaFile*, Sept. 10, 2020, <https://www.chinafile.com/reporting-opinion/viewpoint/defense-of-diplomacy-china>.

⁵⁷ Wray, *supra* note 3.

minds reside. Reclaiming space for collaboration that has already eroded during the China Initiative can, in turn, strengthen the United States' position as a place for emulation, emigration, and innovation.