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HOW NOT TO CATCH A THIEF: WHY THE ECONOMIC ESPIONAGE ACT FAILS TO PROTECT AMERICAN TRADE SECRETS

Robin L. Kuntz[†]

*“The Cold War is not over, it has merely moved into a new arena: the global marketplace.”*¹

Sixteen years ago, with America still recovering from its Cold War-era fear of Soviet spies, members of Congress realized that the nature of foreign espionage had transformed. Foreign enemies (and allies) had traded in their military spies for ones who spied on the trade secrets of American businesses, and this growing threat of economic loss concerned the U.S. government. In an effort to curb the increasing danger that foreign governmental actors posed to the trade secrets of American companies and the U.S. economy at large, Congress enacted the Economic Espionage Act of 1996 (“EEA”), which criminalizes the theft of trade secrets with the intent to benefit a foreign government.² The EEA has largely failed in its purpose, and today, economic threats from abroad have grown even stronger. Between 2011 and 2012, economic espionage losses to the U.S. economy exceeded \$13 billion.³ Although the U.S. Department of Justice (“DOJ”) and the Federal Bureau of Investigations (“FBI”) have prioritized investigations under 18 U.S.C. § 1831—the EEA provision that criminalizes economic espionage—courts have heard only nine such cases since 1996, and only six convictions have resulted.⁴ This Note argues that the failure to curb economic espionage results from two problems, one external and one internal to the EEA. First, courts have interpreted § 1831 of the EEA too

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1. *Economic Espionage*, THE FEDERAL BUREAU OF INVESTIGATION, <http://www.fbi.gov/about-us/investigate/counterintelligence/economic-espionage> (last visited Sept. 20, 2012).

2. 18 U.S.C. §§ 1831–1839 (2006); see 142 CONG. REC. S12,207–12,216 (daily ed. Oct. 2, 1996).

3. *Economic Espionage: A Foreign Intelligence Threat to American Jobs and Homeland Security: Hearing Before the H. Comm. on Homeland Sec.*, 112th Cong. 1 (2012) (statement of Frank Figliuzzi, Assistant Dir., Counterintelligence Div., Fed. Bureau of Investigation), available at http://www.fbi.gov/news/testimony/economic-espionage-a-foreign-intelligence-threat-to-americans-jobs-and-homeland-security?utm_campaign=email-Daily&utm_medium=email&utm_source=congressional-testimony&utm_content=109928.

4. See *infra* Section II.B.

narrowly. Second, Congress constructed § 1831 too narrowly. If courts broaden their reading of § 1831 of the EEA, and if Congress adopts solutions offered in recent legislation, the EEA may become a more effective tool in curbing the threat of economic espionage.

This Note evaluates the stated policies underlying the EEA, and argues that judicial treatment of cases involving economic espionage under § 1831 of the EEA conflicts with the goals of Congress and frustrates the prosecutorial objectives of the DOJ. This Note posits that Congress can help correct this misalignment by amending the EEA to reflect the policy goals outlined in recent legislation. Part I provides the background and policies behind the enactment of the EEA and lays out the EEA's statutory framework. Part II discusses the responses to the EEA by the DOJ, FBI, and Congress. It also describes the narrow approach that courts have taken in their interpretations of § 1831 of the EEA. Part III explains that judicial narrowing of § 1831 conflicts with the goals of Congress and the DOJ—to convict and punish those who commit economic espionage. Part III then argues that recent legislation amending the EEA indicates Congress's desire to broaden the elements of § 1831. Finally, the Note concludes by advocating an expansion of the recent amendments to the EEA in order to fulfill Congress's goal of reducing international theft of American trade secrets.

I. THE ECONOMIC ESPIONAGE ACT OF 1996: A BACKGROUND

A. THE POLICY RATIONALES BEHIND THE ENACTMENT OF THE EEA

By 1996, developments in computer technology, coupled with the growing value of intangible assets, made it both easier and more lucrative for individuals and companies to steal proprietary information from others.⁵ Congress was especially concerned that foreign countries were engaging in

5. H.R. REP. NO. 104-788, at 4–5 (1996). By the end of the Cold War, rapid development of information and communications technology “made it more difficult to rely on the national border to keep adversaries at bay.” Aaron J. Burnstein, *Trade Secrecy as an Instrument of National Security? Rethinking the Foundations of Economic Espionage*, 41 ARIZ. L. J. 933, 943–44 (2009). These technological developments have also “made it much cheaper to collect economic and technological information on a scale that allows large-scale, rapid industrial development without investing in fully independent research and development,” presenting the possibility that other countries might “leapfrog” the United States in terms of technological development. *Id.* at 944.

“economic espionage”—stealing trade secrets from American companies and detracting from the economic power of the United States.⁶

While domestic trade secret theft was a major concern,⁷ the legislative history behind the EEA reveals that Congress was especially worried about foreign threats to American economic prosperity.⁸ Prior to the passage of the bill, FBI Director Louis Freeh testified to a judiciary subcommittee that the FBI was investigating “allegations of economic espionage conducted against the United States by individuals or organizations from [twenty-three] different countries,”⁹ including many countries that took advantage of their friendly relations with the United States to steal proprietary information from American companies.¹⁰ Additionally, the Senate Intelligence Committee reported that since the end of the Cold War, foreign governments were increasing their use of espionage resources to obtain trade secrets from American companies, causing more than \$100 billion in losses to these businesses.¹¹ Congress viewed these cases of economic espionage as threats

6. See 142 CONG. REC. H10,461 (daily ed. Sept. 17, 1996) (“[L]argely overlooked as a threat to our national security is the attack being waged against our Nation’s economic interests [O]ur economic interests should be seen as an integral part of its national security interests, because America’s standing in the world depends on its economic strength and productivity.”). Nathaniel Minott offers a definition of “economic espionage”: “illegal, clandestine, coercive or deceptive activity engaged in or facilitated by a foreign government designed to gain unauthorized access to economic intelligence, such as proprietary information or technology, for economic advantage.” Nathaniel Minott, *The Economic Espionage Act: Is the Law All Bark and No Bite?*, 20 INFO. & COMM. TECH. L. 201, 205 (2011) (offering the definition of the Canadian Security Intelligence Service). As discussed in Section III.A.2, *infra*, the EEA defines economic espionage as encompassing activities intended to confer benefits beyond just economic advantages on a foreign government. The EEA thus defines “economic espionage” in slightly broader terms than does the definition provided by Minott.

7. In 1996, the American Society for Industrial Security estimated that thefts of trade secrets costs American businesses about \$24 billion per year in losses, much of which was caused by “Americans or U.S. nationals who leave their employment and steal proprietary information which they deliver to their new employers.” See 142 CONG. REC. H10,461 (daily ed. Sept. 17, 1996) (statement of Rep. Buyer).

8. See 142 CONG. REC. H10,461 (daily ed. Sept. 17, 1996) (statement of Rep. Hyde) (“But largely overlooked as a threat to our national security is the attack being waged against our nation’s economic interests.”).

9. *Id.* (statement of Rep. Hyde).

10. *Id.* (statement of Rep. Hyde). Representative Hyde does not identify these countries, but states, “[m]ost disturbing is the fact that a number of these countries maintain friendly relations with the United States, yet take advantage of their access to U.S. information and their ability to steal the innovations of American businesses.” *Id.*

11. 142 CONG. REC. H12,208 (daily ed. Oct. 2, 1996) (statement of Sen. Specter).

to U.S. national security, and sought a way to hold foreign agents accountable for their criminal actions.¹²

Prior to the enactment of the EEA, no federal criminal statute existed that directly addressed domestic trade secret theft, let alone foreign economic espionage.¹³ Instead, prosecutors relied on a combination of various federal statutes—such as the Depression-era Interstate Transportation of Stolen Property Act,¹⁴ the Mail Fraud statute,¹⁵ and the Wire Fraud statute¹⁶—to combat crimes that involved trade secret theft.¹⁷ These statutes, however, were limited in their application and were inadequate in prosecuting instances of economic espionage:¹⁸ the mail fraud statute only applied to economic espionage that involved the use of mail; the wire fraud statute required “an intent to defraud as well as use of wire, radio or television”; and the Transportation of Stolen Property Act did not apply to economic espionage at all.¹⁹

Thus, in proposing the EEA, Congress had two main concerns. First, “[f]oreign powers, through a variety of means, [were] actively involved in stealing critical technologies, data and information from U.S. companies or the U.S. Government for the economic benefit of their own industrial sectors.”²⁰ Second, “[l]aws then on the books . . . were of virtually no use in prosecuting acts of economic espionage.”²¹ Congress decided that the only way to “maintain [the United States] industrial and economic edge and thus safeguard [its] national security” was to enact a federal law that protected the

12. 142 CONG. REC. H10,461; *see also Economic Espionage*, THE FEDERAL BUREAU OF INVESTIGATION, <http://www.fbi.gov/about-us/investigate/counterintelligence/economic-espionage> (last visited Sept. 20, 2012) (“The Cold War is not over, it has merely moved into a new arena: the global marketplace.”).

13. 142 CONG. REC. H10,461 (statement of Rep. Schumer).

14. 18 U.S.C. §§ 2314, 2315 (2006).

15. *Id.* § 1341.

16. *Id.* § 1343.

17. *See* *United States v. Hsu*, 155 F.3d 189, 194 (3d Cir. 1998) (noting that “the absence of any comprehensive federal remedy targeting the theft of trade secrets” forced prosecutors to “shoehorn economic espionage crimes into statutes directed at other offenses”). While one previously existing federal statute, 18 U.S.C. § 1905, prohibited the misappropriation of trade secrets, it only provided for misdemeanor sanctions and thus was rarely used in criminal prosecutions. *See* James H. A. Pooley et al., *Understanding the Economic Espionage Act of 1996*, 5 TEX. INTELL. PROP. L. J. 177, 179 (1997).

18. *See* Gerald J. Mossinghoff et al., *The Economic Espionage Act: A New Federal Regime of Trade Secret Protection*, 79 J. PAT. & TRADEMARK OFF. SOC’Y 191, 194 (1997); *see also* Pooley et al., *supra* note 17, at 179–80.

19. *See* Mossinghoff et al., *supra* note 18, at 194.

20. *Id.* at 193.

21. *Id.*

proprietary economic information of the United States at a national level.²² The EEA—and specifically § 1831—was Congress’s response to these concerns. The statute provided the federal government with a much-needed vehicle for prosecuting trade secret theft.

B. THE EEA: 18 U.S.C. §§ 1831, 1832

In 1996, Congress enacted the EEA, which criminalizes two categories of trade secret theft. Section 1832 prohibits general trade secret theft.²³ Section 1831—the focus of this Note—criminalizes foreign economic espionage by punishing “those who knowingly misappropriate, or attempt to conspire to misappropriate, trade secrets with the intent or knowledge that their offense will benefit a foreign government, foreign instrumentality, or foreign agent.”²⁴ Section 1831 thus only concerns trade secret theft by foreign

22. S. REP. NO. 104-359, at 11–12 (1996).

23. 18 U.S.C. § 1832 (2006):

(a) Whoever, with intent to convert a trade secret, that is related to or included in a product that is produced for or placed in interstate or foreign commerce, to the economic benefit of anyone other than the owner thereof, and intending or knowing that the offense will, injure any owner of that trade secret, knowingly—

(1) steals, or without authorization appropriates, takes, carries away, or conceals, or by fraud, artifice, or deception obtains such information;

(2) without authorization copies, duplicates, sketches, draws, photographs, downloads, uploads, alters, destroys, photocopies, replicates, transmits, delivers, sends, mails, communicates, or conveys such information;

(3) receives, buys, or possesses such information, knowing the same to have been stolen or appropriated, obtained, or converted without authorization;

(4) attempts to commit any offense described in paragraphs (1) through (3); or

(5) conspires with one or more other persons to commit any offense described in paragraphs (1) through (3), and one or more of such persons do any act to effect the object of the conspiracy,

shall, except as provided in subsection (b), be fined under this title or imprisoned not more than 10 years, or both.

(b) Any organization that commits any offense described in subsection (a) shall be fined not more than \$5,000,000.

24. *United States v. Hsu*, 155 F.3d 189, 195 (3d Cir. 1998); *see* 18 U.S.C. § 1831 (2006):

(a) IN GENERAL.—Whoever, intending or knowing that the offense will benefit any foreign government, foreign instrumentality, or foreign agent, knowingly—

(1) steals, or without authorization appropriates, takes, carries away, or conceals, or by fraud, artifice, or deception obtains a trade secret;

governmental actors—which this Note defines as “economic espionage”—while § 1832 concerns trade secret theft by domestic actors. Neither of these provisions preempts other civil or criminal laws prohibiting the misappropriation of trade secrets, meaning that a person indicted under the EEA may still be prosecuted under any other trade secret misappropriation statute for the same set of facts.²⁵

Congress emphasized the importance of the foreign economic espionage problem by imposing harsh penalties on those who violate § 1831 of the EEA.²⁶ In the original EEA statute, an individual who violated § 1831 faced a maximum prison sentence of fifteen years, a maximum fine of \$500,000, or

(2) without authorization copies, duplicates, sketches, draws, photographs, downloads, uploads, alters, destroys, photocopies, replicates, transmits, delivers, sends, mails, communicates, or conveys a trade secret;

(3) receives, buys, or possesses a trade secret, knowing the same to have been stolen or appropriated, obtained, or converted without authorization;

(4) attempts to commit any offense described in any of paragraphs (1) through (3); or

(5) conspires with one or more other persons to commit any offense described in any of paragraphs (1) through (3), and one or more of such persons do any act to effect the object of the conspiracy,

shall, except as provided in subsection (b), be fined not more than \$500,000 or imprisoned not more than 15 years, or both.

(b) ORGANIZATIONS.—Any organization that commits any offense described in subsection (a) shall be fined not more than \$10,000,000.

As discussed *infra* Section III.B, Congress amended the penalty provisions of § 1831 in January 2013. See H.R. Rep. No. 112-610, at 2 (2012).

25. 18 U.S.C. § 1838 (“This chapter shall not be construed to preempt or displace any other remedies, whether civil or criminal, provided by United States Federal, State, commonwealth, possession, or territory law for the misappropriation of a trade secret . . .”). See *United States v. Aleynikov*, 785 F. Supp. 2d 46 (S.D.N.Y. 2011), *rev’d*, 676 F.3d 71 (2d Cir. 2012) (reversing Aleynikov’s conviction for trade secret theft under § 1832 of the EEA). After the Second Circuit reversed Aleynikov’s conviction under federal laws, he was charged under New York Penal Laws. See Robert Damion Jurens, *U.S. v. Aleynikov and the Economic Espionage Act*, 28 BERKELEY TECH. L. J. 833, 838 (2013) (forthcoming) (noting that the EEA “expressly states that it does not preempt any other trade secret laws, which leaves companies open to pursue federal or state actions”).

26. See Mark D. Seltzer & Angela A. Burns, *Criminal Consequences of Trade Secret Misappropriation: Does the Economic Espionage Act Insulate Trade Secrets from Theft and Render Civil Remedies Obsolete?*, B.C. INTELL. PROP. & TECH. F. 1, 14 (1999), http://bciprf.org/wp-content/uploads/2011/07/46-Burns_IPTF11.pdf (“The EEA prescribes stiff maximum criminal sanctions.”).

both.²⁷ The \$500,000 maximum fine for individuals under § 1831 was double the normal maximum fine for felonies.²⁸ Moreover, any organization that violated § 1831 faced a maximum fine of \$10 million.²⁹

II. DEVELOPMENTS IN THE WAKE OF THE EEA

A. THE DOJ AND THE FBI: A SLOW START, BUT RAMPING UP

When Congress passed the EEA in 1996, the House of Representatives estimated that in the six years following its enactment, “the government would most likely investigate and prosecute a total of about [fifty] cases covered by this legislation.”³⁰ While the government has surpassed this fifty-case goal, almost all EEA cases during this six-year period were prosecuted under § 1832 of the EEA, which criminalizes general trade secret theft.³¹ Between 1996 and 2009, well over a hundred trade secret prosecutions were initiated in the United States, but only six of them were under § 1831 of the EEA.³² By 2012, the DOJ had only prosecuted nine cases under § 1831 of

27. 18 U.S.C. § 1831. An individual who violates § 1832, on the other hand, faces a maximum prison sentence of ten years, a fine, or both. As discussed *infra* Section III.B, the § 1831 penalty provisions were amended in January 2013. See H.R. Rep. No. 112-610.

28. See Pooley et al., *supra* note 17, at 201–02. It is also interesting to note that the original bills Congress introduced contained even more severe penalty provisions than does the enacted EEA. On September 17, 1996, Representative Buyer introduced H.R. 3723 (entitled the “Economic Espionage Act of 1996”), which provided for a maximum prison sentence of twenty-five years for those who commit economic espionage with the intent to benefit a foreign government. See 142 CONG. REC. H10,460 (daily ed. Sept. 17, 1996). On September 18, 1996, Senator Stevens proposed an amendment to H.R. 3723, which also imposed a maximum prison sentence of twenty-five years for an individual convicted of economic espionage. See 142 CONG. REC. S10,862-63 (daily ed. Sept. 18, 1996) (Amendment No. 5384).

29. 18 U.S.C. § 1831. Any organization that violates § 1832 faces a maximum fine of \$5 million. *Id.* § 1832. See Pooley et al., *supra* note 17, at 202 (“Evidently, the general approach of the statute is to punish foreign espionage more severely than domestic trade secret theft.”).

30. H.R. REP. NO. 104-788, at 9 (1996).

31. Michael L. Rustad, *The Negligent Enablement of Trade Secret Misappropriation*, 22 SANTA CLARA COMPUTER & HIGH TECH. L.J. 455, 458 (2006) (“An empirical study of all EEA prosecutions from the federal criminal statute’s enactment in 1996 to August 1, 2005 uncovered fewer than fifty economic or espionage prosecutions filed in federal courts; nearly every prosecution was for domestic rather than foreign economic espionage.”).

32. Mark L. Krotoski, *Common Issues and Challenges in Prosecuting Trade Secret and Economic Espionage Act Cases*, 57 U.S. ATTY’S BULL. 2, 7 (2009). These six cases include: (1) Indictment, United States v. Okamoto et al., No. 1:01-CR-00210 (N.D. Ohio filed May 8, 2001); (2) Judgment in a Criminal Case as to Fei Ye, United States v. Ye, No. 5:02-CR-20145 (N.D. Cal. Nov. 25, 2008); (3) Judgment in a Criminal Case as to Xiaodong Sheldon Meng, Judgment in a Criminal Case as to Ming Zhong, United States v. Meng, No. 5:04-CR-20216 (N.D. Cal. June 24, 2008); (4) Order Granting in Part and Denying in Part Defendants’

the EEA.³³ In five of these cases, the defendants pled guilty.³⁴ One of these cases is still pending.³⁵ The remaining three—*United States v. Chung*,³⁶ *United States v. Lee*,³⁷ and *United States v. Jin*³⁸—are the only prosecutions that went to trial, and *Chung* resulted in the only trial conviction to date under § 1831 of the EEA.³⁹

Despite the relatively small number of prosecutions brought under § 1831 of the EEA, it is notable that the DOJ initiated four of these nine prosecutions within the past three years.⁴⁰ Before 2009, charges of foreign

Motion for Judgment of Acquittal as to Lan Lee, Yuefei Ge, *United States v. Lee et al.*, No. 5:06-CR-00424 (N.D. Cal. May 21, 2010); (5) *United States v. Chung (Chung I)*, 633 F. Supp. 2d 1134 (C.D. Cal. 2009), *aff'd*, (*Chung II*) 659 F.3d 815 (9th Cir. 2011); (6) *United States v. Jin*, 833 F. Supp. 2d 977 (N.D. Ill. 2012) (convicting the defendant under § 1832, but acquitting the defendant under § 1831).

33. See William J. Edelman, Note, *The “Benefit” of Spying: Defining the Boundaries of Economic Espionage Under the Economic Espionage Act of 1996*, 63 STAN. L. REV. 447, 453–54 (2011); Roy Strom, *U.S. Tries Cracking Down on Economic Espionage*, CHI. DAILY L. BULL. 1, 1 (2012).

34. See Judgment as to Kexue Huang, *United States v. Huang*, No. 1:10-CR-00102 (S.D. Ind. Jan. 5, 2012) (sentencing defendant to eighty-seven months imprisonment and three years supervised release); Judgment as to Elliot W. Doxer, *United States v. Doxer*, No. 1:11-CR-10268 (D. Mass. Dec. 21, 2011) (sentencing defendant to six months imprisonment and two years supervised release); Judgment as to Hong Meng, *United States v. Meng*, No. 1:10-CR-00056 (D. Del. Oct. 26, 2010) (sentencing defendant to fourteen months imprisonment); Judgment as to Fei Ye, *United States v. Ye*, No. 5:02-CR-20145 (N.D. Cal. Nov. 25, 2008); Plea Agreement as to Tze Chao, *United States v. Liew*, No. 3:11-CR-00573 (N.D. Cal. Mar. 2, 2012). Not all of the defendants in the *Liew* case have pled guilty. The district court quashed service of the indictment on one of the defendants, the Pangang Group Co., Ltd. See *United States v. Pangang Group Co., Ltd.*, 2012 WL 3010958, at *1 (N.D. Cal. July 23, 2012). Notably, this is the first case in which the DOJ directly charged a foreign entity (the Pangang Group is a Chinese company) rather than just an individual who intended to benefit a foreign government. See *infra* note 167 for further discussion.

35. See Indictment, *United States v. Okamoto et al.*, No. 1:01-CR-00210 (N.D. Ohio filed May 8, 2001). Before the FBI could arrest the defendant, he fled to Japan. Japan subsequently denied the United States’ extradition request, finding no probable cause to suspect that he committed economic espionage under § 1831. See Tetsuya Morimoto, *A First Japanese Denial of U.S. Extradition Request: Economic Espionage Case*, 20 No. 7 INT’L ENFORCEMENT L. REP. 288, 288–89 (2004).

36. *Chung I*, 633 F. Supp. 2d 1134 (C.D. Cal. 2009), *aff’d*, 659 F.3d 815 (9th Cir. 2011).

37. *United States v. Lee*, No. CR 06-0424 JW, 2010 WL 8696087, at *1 (N.D. Cal. May 21, 2010).

38. *United States v. Jin*, 833 F. Supp. 2d 977 (N.D. Ill. 2012).

39. See Edelman, *supra* note 33, at 453–54, tbl.1. Notably, all but one of the nine § 1831 cases involve trade secrets allegedly stolen with the intent to benefit the Chinese government. See *id.*

40. These four cases include: *United States v. Huang*, No. 12-1053 (7th Cir. dismissed Mar. 26, 2012); Complaint, *United States v. Doxer*, No. 1:11-CR-10268 (D. Mass. filed Oct. 5, 2010); Complaint, *United States v. Meng*, No. 1:10-CR-00056 (D. Del. filed Oct. 1, 2009);

economic espionage were rare—so rare that one attorney compared § 1831 prosecutions to “unicorn sightings.”⁴¹ By the end of 2010, however, the DOJ was making a marked effort to prioritize economic espionage prosecutions. The 2010 “Annual Report on Intellectual Property Enforcement”—a report by the U.S. Intellectual Property Enforcement Coordinator (“IPEC”)⁴² detailing that year’s enforcement efforts as well as future objectives—announced the DOJ’s increased focus on prosecuting economic espionage crimes.⁴³ The 2010 Report promised that this focus would continue,⁴⁴ as did the 2011 report,⁴⁵ which stated: “Protecting trade secrets is vital to our nation’s economic success, and we will continue vigorously to enforce our trade secret and economic espionage statutes.”⁴⁶

This call for vigorous enforcement of the EEA applies not only to DOJ prosecutions, but also to FBI investigations. As a result, between 2009 and 2010, the FBI commenced forty investigations involving economic espionage under § 1831.⁴⁷ The current FBI Director, Robert Mueller, “has designated counterintelligence as the FBI’s number two priority, second only to counterterrorism,” and the FBI recently formed an “Economic Espionage Unit” that specifically works to combat the economic espionage threat

and Complaint, *United States v. Liew et al.*, No. 3:11-CR-00573 (N.D. Cal. filed July 27, 2011).

41. Quinn Emanuel Urquhart & Sullivan, LLP, *Spotlight on the Economic Espionage Act*, JD SUPRA (Mar. 22, 2012), <http://www.jdsupra.com/legalnews/spotlight-on-the-economic-espionage-act-20115/> (citing Sharon Weinberger, *US Charges Scientist with Economic Espionage*, 466 NATURE 542, 543 (2010)).

42. The Intellectual Property Enforcement Coordinator (“IPEC”), Victoria Espinel, was appointed by President Obama in 2008 to coordinate the enforcement efforts of government agencies working to combat intellectual property crimes, including trade secret theft. See *About the Office of the U.S. Intellectual Property Enforcement Coordinator (IPEC)*, Office of Management and Budget, THE WHITE HOUSE, <http://www.whitehouse.gov/omb/intellectual-property/ipec/> (last visited Mar. 3, 2013).

43. Executive Office of the President of the United States, *2010 U.S. Intellectual Property Enforcement Coordinator Annual Report on Intellectual Property Enforcement*, 4 (2011), http://www.whitehouse.gov/sites/default/files/omb/IPEC/ipec_annual_report_feb_2011.pdf.

44. *Id.*

45. Executive Office of the President of the United States, *2011 U.S. Intellectual Property Enforcement Coordinator Annual Report on Intellectual Property Enforcement*, at 9–10, 30–31 (2012), http://www.whitehouse.gov/sites/default/files/omb/IPEC/ipec_annual_report_mar_2012.pdf.

46. *Id.* at 113.

47. Press Release, Office of Public Affairs, Department of Justice, Department of Justice Joins in Launch of Administration’s Strategic Plan on Intellectual Property Enforcement as Part of Ongoing IP Initiative (June 22, 2010), available at <http://www.justice.gov/opa/pr/2010/June/10-ag-722.html>.

through community outreach and other programs.⁴⁸ While the efforts of the DOJ and FBI represent an attempt to counter the huge amounts of economic loss that economic espionage has caused in recent years, these efforts have yet to reduce losses to the U.S. economy. Frank Figliuzzi, the Assistant Director of the FBI's Counterintelligence Division, testified that between 2011 and 2012, "economic espionage losses to the American economy total[ed] more than \$13 billion."⁴⁹

The increased focus on economic espionage within the DOJ and FBI in recent years likely stems from initiatives within the Executive Department that aim to protect the intellectual property rights of U.S. citizens. For instance, in October 2008, President George W. Bush signed into law the Prioritizing Resources and Organization for Intellectual Property Act ("PRO-IP Act"),⁵⁰ which was enacted to "enhance remedies for violations of intellectual property laws and to allow rights holders to enforce their intellectual property rights more aggressively."⁵¹ The PRO-IP Act created the

48. *Economic Espionage*, THE FEDERAL BUREAU OF INVESTIGATION, <http://www.fbi.gov/about-us/investigate/counterintelligence/economic-espionage> (last visited September 20, 2012). The FBI's Counterintelligence Division works to "identify, disrupt, and defeat the efforts of foreign intelligence services operating inside the United States." *Economic Espionage: A Foreign Intelligence Threat to American Jobs and Homeland Security: Hearing Before the H. Comm. on Homeland Sec.*, 112th Cong. 1 (2012) (statement of Frank Figliuzzi, Assistant Dir., Counterintelligence Div., Fed. Bureau of Investigation), available at http://www.fbi.gov/news/testimony/economic-espionage-a-foreign-intelligence-threat-to-americans-jobs-and-homeland-security?utm_campaign=email-Daily&utm_medium=email&utm_source=congressional-testimony&utm_content=109928. In May 2012, for example, the FBI unveiled billboards in nine major U.S. cities, which contained the words: "13 Billion Lost: Protect America's Trade Secrets" and directed viewers to the FBI website. Evan Perez, *FBI's New Campaign Targets Corporate Espionage*, WALL ST. J. (May 11, 2011 9:21 AM), http://professional.wsj.com/article/SB10001424052702304543904577396520137905092.html?mg=reno64-wsj#articleTabs_video%3D%26articleTabs%3Darticle.

49. *Economic Espionage: A Foreign Intelligence Threat to American Jobs and Homeland Security: Hearing Before the H. Comm. on Homeland Sec.*, 112th Cong. 1 (2012) (testimony of Frank Figliuzzi, Assistant Dir., Counterintelligence Div., Fed. Bureau of Investigation), available at http://www.fbi.gov/news/testimony/economic-espionage-a-foreign-intelligence-threat-to-americans-jobs-and-homeland-security?utm_campaign=email-Daily&utm_medium=email&utm_source=congressional-testimony&utm_content=109928.

50. Prioritizing Resources and Organization for Intellectual Property Act ("PRO-IP Act"), Pub. L. No. 110-403, 122 Stat. 4256 (2008).

51. Tonya D. Butler, *The IP Czar Chronicles: Coming to a White House Near You*, 56 FED. LAW. 14 (2009) (internal quotation marks omitted). The PRO-IP Act was intended to bolster the Federal effort to protect this most valuable and vulnerable property, to give law enforcement the resources and the tools its needs to combat [intellectual property crimes], and to make sure that the many agencies that deal with intellectual property enforcement have the opportunity to talk with each other, to coordinate their efforts, and to achieve the maximum effects for their efforts.

Intellectual Property Enforcement Coordinator (“IPEC”), an official within the President’s Executive Office who serves as the President’s principal advisor on matters “regarding domestic and international intellectual property enforcement programs.”⁵² The IPEC must also, when appropriate, make recommendations to Congress “for improvements in Federal intellectual property laws and enforcement efforts.”⁵³ The PRO-IP Act also provides funding and investigative resources to the DOJ and FBI for the enforcement of laws relating to intellectual property crimes.⁵⁴ These resources, and the IPEC’s enforcement efforts, have likely contributed to the sudden increase in economic espionage enforcement by the DOJ and FBI in the past few years.

B. THE COURTS: THE THREE ECONOMIC ESPIONAGE CASES THAT MADE IT TO TRIAL

Because the DOJ has prosecuted only nine cases under § 1831, the federal courts have had very few opportunities to interpret the provisions of the EEA. *United States v. Chung*,⁵⁵ *United States v. Lee*,⁵⁶ and *United States v. Jin*⁵⁷ are the only prosecutions under § 1831 of the EEA that resulted in published judicial opinions discussing the statute.⁵⁸ While these cases lay out a basic analytical framework for interpreting the elements of a § 1831 claim, the case law regarding § 1831 remains relatively undeveloped.

The only trial conviction under § 1831 occurred in 2009, when Judge Carney of the Central District of California found Dongfan “Greg” Chung—a former Boeing engineer—guilty of stealing secret technological information from Boeing and giving it to the Chinese government.⁵⁹ Federal agents found over 300,000 pages of Boeing technical documents in Chung’s home, including six documents Judge Carney determined were trade secrets: four relating to an antenna that Boeing developed for the Columbia space shuttle, and two describing technology that Boeing developed for the Delta IV

154 CONG. REC. S7281 (daily ed. July 24, 2008) (statement of Sen. Leahy).

52. PRO-IP Act § 301(b)(E).

53. *Id.* § 301(b)(F).

54. *See* Butler, *supra* note 51; PRO-IP Act §§ 401–403.

55. *Chung I*, 633 F. Supp. 2d 1134 (C.D. Cal. 2009), *aff’d*, 659 F.3d 815 (9th Cir. 2011).

56. *United States v. Lee et al.*, No. CR 06-0424 JW, 2010 WL 8696087, at *1 (N.D. Cal. May 21, 2010).

57. *United States v. Jin*, 833 F. Supp. 2d 977 (N.D. Ill. 2012).

58. *See* Edelman, *supra* note 33, at 453–54, tbl.1. Notably, all but one of these cases involved trade secrets allegedly stolen with the intent to benefit the Chinese government. *See id.*

59. *Chung I*, 633 F. Supp. 2d at 1148. The defendant waived his right to a jury trial, and the court conducted a ten-day bench trial. *Id.* at 1137.

Rocket.⁶⁰ The Ninth Circuit affirmed Chung's conviction in 2011, holding that "there was sufficient evidence to support the district court's finding that Defendant possessed the relevant trade secret documents . . . with the intent to benefit China."⁶¹ The Ninth Circuit pointed to "ample evidence" that during the 1980s and in 2001, Chung "intended to benefit China by providing technical information responsive to requests from Chinese officials and by delivering presentations to Chinese officials."⁶² The court explained that, given Chung's pattern of conduct and his recent possession of trade secret documents similar to those he possessed in the 1980s and 2001, there was sufficient evidence of Chung's intent to benefit China.⁶³ Because there was ample evidence that Chung intended to benefit China, neither the district court nor the Ninth Circuit devoted much of their opinions to nuanced interpretations of the EEA provisions. Chung had acted as an agent of the Chinese government, he possessed an obvious intent to benefit China in the past, and he stole trade secrets very similar to those he had previously used in his conversations with Chinese officials.⁶⁴ On its face, § 1831 of the EEA fit the facts of *Chung* almost perfectly—Chung had committed trade secret theft with the intent to benefit a foreign government.

In both *Lee* and *Jin*, on the other hand, weaker evidence of the defendants' relationships with foreign governments required the courts to delve into deeper statutory interpretation of the EEA.⁶⁵ In *Lee*, the defendants Lee and Ge were charged under both § 1831 and § 1832 for stealing trade secrets from their employer and using them to set up their own company to develop a competing product in China.⁶⁶ To fund their company, the defendants intended to apply for a cash grant from a program set up by the Chinese government.⁶⁷ After a jury trial, Chief Judge Ware of the Northern District of California sustained the jury's conviction of the defendants for trade secret theft under § 1832, but granted the defendants'

60. *Chung II*, 659 F.3d at 819, 824.

61. *Id.* at 828.

62. *Id.*

63. *Id.* ("Given Defendant's history of passing technical documents to China . . . a rational trier of fact reasonably could infer from Defendant's more recent possession of similar documents that his intent to benefit China persisted well into the limitations period and extended to his possession of the trade secrets.").

64. *See id.*

65. *See* United States v. Lee et al., No. CR 06-0424 JW, 2010 WL 8696087, at *1 (N.D. Cal. May 21, 2010); United States v. Jin, 833 F. Supp. 2d 977 (N.D. Ill. 2012).

66. *Lee*, 2010 WL 8696087, at *1.

67. *Id.* at *4.

motion for acquittal as to the economic espionage charges under § 1831.⁶⁸ The court concluded that, while the government sufficiently established that the defendants committed trade secret theft, it failed to produce evidence showing that the defendants intended or knew that the theft would benefit a foreign government.⁶⁹

After reviewing the EEA’s legislative history, the court in *Lee* concluded that “the ‘benefit any foreign government’ element must be interpreted to refer to the benefits ordinarily associated with ‘espionage,’” which traditionally is associated with “activity sponsored or solicited by a foreign government.”⁷⁰ The court added that such activity does not include “benefits on the economy of a country that might be realized from operating a company in a foreign country,”⁷¹ even if the defendants used trade secrets in creating their new company and the foreign government provided funding for that company through a cash grant.⁷²

The government funding at issue in *Lee* involved China’s “863 Program,” an initiative adopted in 1986 to “accelerate the acquisition and development of science and technology in the [People’s Republic of China (“PRC”)]”⁷³ in order to gain equal footing with the scientific and technological capabilities of the United States.⁷⁴ Officials in the Chinese government deny that the program supports the theft of trade secrets from American companies.⁷⁵ However, in return for cash grants from the Chinese government, all recipients of 863 funding sign a contract promising to allocate to the government the rights for all intellectual property work done in connection with the funding, including trade secrets.⁷⁶ Therefore, in exchange for these cash grants, all recipients of 863 funding must confer a benefit—in the form of intellectual property rights—on the Chinese government.

68. *Id.* at *3, *8. The jury did not return a verdict against either defendant on three of the charged counts: (1) Conspiracy to Commit Economic Espionage; (2) Economic Espionage or Attempted Economic Espionage as to their employer, NetLogic; and (3) Theft of Trade Secrets as to Net Logic. The defendants then moved for acquittal on these three counts. *Id.* at *1.

69. *Id.* at *2, *7–8.

70. *Id.* at *6.

71. *Id.*

72. *Id.* at *8.

73. *Hearing on H.R. 105-851 Before the H. Select Comm. on U.S. Nat’l Sec. and Military/Commercial Concerns with the People’s Republic of China*, 105th Cong. 10 (1999).

74. See Aaron J. Burstein, *Trade Secrecy as an Instrument of National Security? Rethinking the Foundations of Economic Espionage*, 41 ARIZ. ST. L.J. 933, 976 (2009) (citing U.S.-CHINA ECON. & SEC. REVIEW COMM’N, 2007 REPORT TO CONGRESS 127 (2007)).

75. *Id.* at 977.

76. *Id.* at 976.

Despite the nature of the 863 Program, the *Lee* court held that the defendants lacked the intent to confer a benefit on the Chinese government, and thus acquitted the defendants of the § 1831 charges.⁷⁷ The court differentiated the *Lee* case from *Chung*, in which the defendant had been “an agent of the [PRC] for over thirty years,”⁷⁸ holding that “[e]vidence that Defendants solely intended to benefit themselves in the PRC, or benefit a private corporation in the PRC is insufficient for the charge of Economic Espionage.”⁷⁹

Similarly, in *Jin*—the most recent trial involving § 1831 of the EEA—Judge Castillo of the Northern District of Illinois acquitted the defendant of economic espionage.⁸⁰ The indictment alleged that Jin stole proprietary technical documents from Motorola, her former employer, and was in possession of these documents as she boarded a flight to China.⁸¹ It also alleged that during a previous leave of absence from Motorola, Jin accepted employment at Sun Kaisens, a Chinese company that develops telecommunications technology for the Chinese military.⁸² Although the court found Jin guilty of stealing trade secrets from Motorola under § 1832—the general trade secret provision of the EEA—it concluded “the evidence failed to establish beyond a reasonable doubt that Jin intended or knew that her conduct would benefit [China].”⁸³ The court therefore acquitted Jin of economic espionage under § 1831.⁸⁴

III. DISCUSSION

The facts and holdings of *Lee* and *Jin* demonstrate that the courts narrowly interpreted several elements of § 1831. These narrow interpretations, which led both courts to acquit the defendants of economic espionage charges, directly conflict with Congress’s goal of curbing economic espionage and the DOJ’s efforts to prosecute foreign theft of trade secrets.

77. *Lee*, 2010 WL 8696087, at *8.

78. *Id.* at *6 (citing *Chung I*, 633 F. Supp. 2d 1134, 1148 (C.D. Cal. 2009)).

79. *Id.* at *7.

80. *See* *United States v. Jin*, 833 F. Supp. 2d 977, 1020 (N.D. Ill. 2012). The defendant waived her right to a jury trial and proceeded to a bench trial. *Id.* at 980.

81. *Id.*

82. *Id.*

83. *Id.* at 1020.

84. *Id.*

A. JUDICIAL NARROWING OF § 1831 OF THE EEA CONFLICTS WITH THE GOALS OF CONGRESS AND THE DOJ

In formulating their narrow interpretations of § 1831, the *Lee* and *Jin* courts focused on the requirements of § 1831 that differentiate it from § 1832: that the defendant acted “intending or knowing that the [trade secret theft] will benefit any foreign government, foreign instrumentality, or foreign agent.”⁸⁵ The courts’ analyses in both cases can be divided into three elements. First, the courts explain what constitutes a “foreign government, foreign instrumentality, or foreign agent.” Second, they offer interpretations of what it means to “benefit” one of these entities. Finally, the courts analyze the mens rea element of the statute—that the defendant must *intend or know* that the trade secret theft will benefit a foreign government.

1. *Defining the Beneficiary: A Foreign Government, Foreign Instrumentality, or Foreign Agent*

The *Lee* court stated that “benefitting a ‘foreign government, instrumentalit[y] or agent [is not] synonymous with benefitting a ‘foreign country’ or benefitting a ‘foreign corporation.’”⁸⁶ The court interpreted the EEA’s legislative history as distinguishing § 1831 (foreign economic espionage) from § 1832 (general trade secret theft) on the basis that “the former penalizes conferring a benefit on a foreign *government* and the latter covers offenses conferring a benefit on a foreign *corporation*.”⁸⁷ The *Lee* court concluded that § 1831’s use of the term “foreign government” instead of “foreign country” requires the prosecution to “prove that the offense was to aid the government of a foreign country.”⁸⁸

The court’s conclusion that § 1831 only targets those who confer a benefit on a foreign government, rather than a foreign corporation, does not necessarily follow from the legislative history that the court cited in the *Lee* opinion. The legislative history underlying the EEA explains that “[e]nforcement agencies should administer [§ 1831] with its principle [sic] purpose in mind and therefore should not apply [§] 1831 to foreign corporations when there is no evidence of foreign government sponsored or coordinated intelligence activity.”⁸⁹ Nothing in this statement, however,

85. 18 U.S.C. § 1831(a) (2006).

86. *United States v. Lee et al.*, No. CR-06-0424 JW, 2010 WL 8696087, at *6 (N.D. Cal. May 21, 2010).

87. *See id.* at *6. The court added that “there are numerous statutes and regulations penalizing the sole act of exporting goods or technological information to a foreign country with no requirement of benefit to the government of those countries.” *Id.* at *7.

88. *Id.*

89. 142 CONG. REC. S12,212 (daily ed. Oct. 2, 1996); *see Lee*, 2010 WL 8696087, at *7.

categorically excludes foreign corporations from the ambit of § 1831. The EEA defines “foreign instrumentality” as “any agency, bureau, ministry, component, institution, association, or any legal, commercial, or business organization, *corporation*, firm, or entity that is substantially owned, controlled, sponsored, commanded, managed, or dominated by a foreign government.”⁹⁰ As long as there is evidence that a foreign government “substantially” sponsors a foreign corporation, that corporation falls squarely within the scope of § 1831 of the EEA.⁹¹

In cases involving foreign corporations, a court’s task is therefore to determine whether a certain entity is substantially sponsored or controlled by a foreign government. While the EEA does not define “substantially,” the statute’s legislative history explains that “the prosecution need not prove complete ownership, control, sponsorship, command, management, or domination” over a foreign entity.⁹² In *Jin*, the court did not explicitly comment on whether China “substantially sponsored” Sun Kaisens, the Chinese telecommunications company for which Jin temporarily worked during her leave of absence from Motorola.⁹³ The court did, however, note that Sun Kaisens “develops telecommunications technology and products for the Chinese military.”⁹⁴ The court also explained that one of the documents found in Jin’s possession listed Sun Kaisens as “a member of the General Assembly,” which was the highest decision-making body of a Chinese military project called the Comprehensive Mobile Communications Project.⁹⁵

90. 18 U.S.C. § 1839(1) (emphasis added).

91. *See id.*

92. *See* MICHAEL BATTLE ET AL., U.S. DEP’T OF JUSTICE, PROSECUTING INTELLECTUAL PROPERTY CRIMES § IV.B.4, at 158 (3d ed. 2006), *available at* [http://www.lb5.uscourts.gov/ArchivedURLs/Files/09-20074\(1\).pdf](http://www.lb5.uscourts.gov/ArchivedURLs/Files/09-20074(1).pdf). The legislative history of the EEA provides some explanation of how to define “substantial”:

Substantial in this context, means material or significant, not technical or tenuous. We do not mean for the test of substantial control to be mechanistic or mathematical. The simple fact that the majority of the stock of a company is owned by a foreign government will not suffice under this definition, nor for that matter will the fact that a foreign government owns 10 percent of a company exempt it from scrutiny. Rather the pertinent inquiry is whether the activities of a company are, from a practical and substantive standpoint, foreign government directed.

142 CONG. REC. S12,212.

93. *See* United States v. Jin, 833 F. Supp. 2d 977 (N.D. Ill. 2012).

94. *Id.* at 980.

95. *Id.* at 1004. The Comprehensive Mobile Communications Project was part of the Comprehensive Military Communications System 2nd General Meeting, which was organized by the 61st Institute. *Id.* The 61st Research Institute focuses on the research and development of equipment for the People’s Liberation Army of China. *Id.* at 1002.

Given the strong relationship between the Chinese government and Sun Kaisens, as well as the lack of precedent for judicial interpretation regarding the extent of control or domination necessary for a company to constitute a “foreign instrumentality,” the *Jin* court could have concluded that the Chinese government substantially sponsored Sun Kaisens.

2. *The Benefit*

Closely tied to the interpretation of the “beneficiary” element is the determination of what constitutes a “benefit” to a foreign government under § 1831. The EEA’s legislative history indicates that courts should interpret the word “benefit” in § 1831 broadly:

The defendant did not have to intend to confer an economic benefit to the foreign government, instrumentality, or agent Rather, the government need only prove that the actor intended that his actions in copying or otherwise controlling the trade secret would benefit the foreign government, instrumentality, or agent in *any way*. Therefore, in this circumstance, benefit means not only an economic benefit but also reputational, strategic, or tactical benefit.⁹⁶

The *Lee* court, however, interpreted the benefit element more narrowly than these comments suggest. The court’s conclusion that “there was no evidence that Defendants intended to or were required as a condition of the grant to transfer any technology to the PRC”⁹⁷ does not comport with the realities of the 863 Program in which the defendants intended to participate.⁹⁸ The cash grant that the defendants would have received under the 863 Program was not given unconditionally, but rather as part of a give-and-take that involved a subsequent conferral of benefits on the Chinese government.⁹⁹ If the *Lee* court had viewed the program in this way, it likely

96. H.R. REP. NO. 104-788, at 11 (1996).

97. *See* United States v. Lee et al., No. CR 06-0424 JW, 2010 WL 8696087, at *8 (N.D. Cal. May 21, 2010).

98. *See supra* Section II.B.

99. *See* Edelman, *supra* note 33, at 465 (noting a possible argument that the defendants in *Lee* “must have known that there is no such thing as free money, and if China was willing to fund the venture, the defendants had to understand that the government was getting some benefit in return”). In some respects, this 863 funding relationship looks and functions much like a venture capital relationship, in which the *Lee* court noted that a benefit would be “inherent” because “[v]enture capital means money invested in the ownership element of a new enterprise.” *See Lee*, 2010 WL 8696087, at *8.

would have found that the 863 funding requirements transformed the defendants' use into a "benefit" for the purposes of § 1831.¹⁰⁰

The narrow interpretation by the court conflicts with the policy goals that Congress hoped to accomplish through the EEA. If courts continue down the *Lee* court's path and interpret "benefit" narrowly, prosecutors may believe that they can only obtain an economic espionage conviction by showing benefits that are obviously solicited by a foreign government—as in the *Chung* case—and they may lose the incentive to prosecute cases where the benefit is more indirect.¹⁰¹ This deterrence thus creates a vicious cycle: if prosecutors lack the incentive to pursue on-the-margin economic espionage cases due to the ambiguity of the statute, courts will lose the opportunity to develop case law on § 1831, which will perpetuate the ambiguity of the statute and thus continue to deter prosecutions.¹⁰²

Jin represents an on-the-margin case where the benefit to the foreign government was more indirect. The court acknowledged that the legislative history of the EEA suggests a broad interpretation of the term "benefit," but it concluded that proof of Jin's intention to confer a benefit on the Chinese government was too speculative.¹⁰³ The court focused not on whether Jin thought or knew the stolen trade secret information would confer a benefit on a foreign government, but whether the stolen trade secret information *actually* would have conferred a benefit on the Chinese government.¹⁰⁴ The court reasoned that, because the technology contained in the Motorola trade secrets was less advanced than that available to the Chinese military, and was therefore undesirable, the link between the Chinese military and the trade secrets failed to "give the PRC any tactical, reputational, or other benefit."¹⁰⁵ The court also suggested that, because Jin had documents indicating the Chinese military was seeking more advanced telecommunications technology than that contained in the Motorola trade secrets, Jin likely knew the stolen trade secrets would not benefit the Chinese government.¹⁰⁶

100. See *Lee*, 2010 WL 8696087, at *6. This broader reading of Program 863's purposes and activities also relates to the "beneficiary" element of § 1831, discussed *supra* Section III.A.1.

101. See *Criminal Law—Economic Espionage—Ninth Circuit Upholds First Trial Conviction Under § 1831 of the Economic Espionage Act of 1996*, 125 HARV. L. REV. 2177, 2182 (2012) ("EEA ambiguity disincentivizes prosecution of cases at the margin.").

102. See *id.*

103. *United States v. Jin*, 833 F. Supp. 2d 977, 1019–20 (N.D. Ill. 2012).

104. See *id.* (emphasis added).

105. *Id.*

106. *Id.* at 1019.

This focus on the actual benefit to the Chinese military distorts the proper analysis of § 1831. The court incorrectly focused on what benefit the Chinese government was seeking from the defendant, rather than what benefit the defendant was seeking to confer on the Chinese government. Regardless of whether the Motorola technology was less advanced than that desired by the Chinese military, access to these documents may have provided the Chinese government a glimpse into Motorola's design process or may have provided some other type of information about the company's strategies. More importantly, the court's focus on the actual benefit disregarded the third element of § 1831: whether Jin *intended* these documents to benefit the Chinese government.¹⁰⁷

3. *The Defendant's Mens Rea: Intent or Knowledge*

To convict a defendant under § 1831, the government need not prove that a foreign government actually benefitted from the defendant's offense.¹⁰⁸ Rather, the government must prove that the defendant had the requisite mens rea—he or she must have intended or known of a benefit to a foreign government at the time he or she stole the trade secrets.¹⁰⁹ Because both the *Lee* and *Jin* courts focused more of their analyses on the benefit requirement than on the mens rea element, the case law regarding how courts should interpret the mens rea element in § 1831 remains relatively undeveloped.¹¹⁰

In its brief analysis of Jin's mens rea, the court provided two arguments for why Jin neither intended nor knew of a benefit to a foreign government.

107. See 18 U.S.C. § 1831(a) (2006) (focusing on the language “whoever, *intending or knowing* that the offense will benefit any foreign government . . .” (emphasis added)). In acquitting Jin of economic espionage charges, the court concluded: “There is certainly plenty of speculative proof that the PRC *may have benefitted* from Jin's conduct, but such speculation does not equate to proof beyond a reasonable doubt.” *Jin*, 833 F. Supp. 2d at 1020 (emphasis added). As discussed *infra* Section III.A.3, it was improper for the court to consider whether or not an actual benefit would have accrued to the PRC in determining Jin's guilt under § 1831.

108. See Edelman, *supra* note 33, at 473; see also 18 U.S.C. § 1831(a).

109. Edelman, *supra* note 33, at 473; see also 18 U.S.C. § 1831(a).

110. In *Lee*, the court focused on whether a grant from the 863 Program equated to a benefit to the PRC. *United States v. Lee et al.*, No. CR 06-0424 JW, 2010 WL 8696087, at *7–8 (N.D. Cal. May 21, 2010); see also *supra* Section III.A.2. While the court acknowledged that the defendants intended to benefit themselves and intended to apply for an 863 grant, it did not explicitly analyze § 1831's mens rea requirement. *Lee*, 2010 WL 8696078, at *7–8; see also Edelman, *supra* note 33, at 452–53 (noting the prosecutors' and judge's focus on the benefit element during the *Lee* trial). In *Jin*, the court concluded that Jin did not intend to benefit the Chinese government because “the evidence did not establish that Jin planned to give the trade secrets to Sun Kaisens” and because the government would not have actually benefitted from the Motorola trade secrets. *Jin*, 833 F. Supp. 2d at 1019–20; see also *supra* Section III.A.2.

First, it explained that the government provided no evidence that Sun Kaisens “asked or directed” Jin to steal trade secrets from Motorola.¹¹¹ However, this explanation overstates the government’s burden. The government must prove only that the defendant “intend[ed] or [knew] that the [trade secret theft] offense [would] benefit any foreign government,”¹¹² not that the foreign government solicited the transfer or beneficial use of the trade secrets.¹¹³

Second, even if the Motorola documents would not have *actually* benefitted the Chinese government, Jin may still have believed or intended that the Chinese government would receive a benefit. The *Jin* court stated that “[t]he Chinese military documents found in Jin’s possession clearly establish that Sun Kaisens develops telecommunications technology for the Chinese military, and that Jin had worked on such projects in the past.”¹¹⁴ Given this connection between Jin and the Chinese military, the court could have adopted the *Chung* court’s analysis: “Given Defendant’s history of passing technical [non-trade secret] documents to China . . . a rational trier of fact reasonably could infer from Defendant’s more recent possession of similar documents that his intent to benefit China . . . extended to his possession of the trade secrets.”¹¹⁵

While the evidence of Jin’s connection to the Chinese military was not as strong as the evidence of Chung’s connection to the Chinese government, the *Jin* court should have used a similar inferential chain in analyzing Jin’s conduct.¹¹⁶ Jin had a history of working for Sun Kaisens on telecommunications projects that benefitted the Chinese military.¹¹⁷ Given this past and Jin’s recent possession of Chinese military documents relating to telecommunications,¹¹⁸ it is reasonable to infer that her past intent to

111. *Jin*, 833 F. Supp. 2d at 1019.

112. 18 U.S.C. § 1831(a).

113. *See Lee*, 2010 WL 8696087, at *7 (“[T]he government would have met its burden if it presented evidence showing that Defendants were ‘intending’ to transfer [their employer’s] trade secrets to the PRC or one of its instrumentalities or agents, or use it for the PRC’s benefit even if the transfer or beneficial use was not solicited by the PRC.”).

114. *Jin*, 833 F. Supp. 2d at 1003.

115. *Chung II*, 659 F.3d 815, 828 (9th Cir. 2011).

116. In *Jin*, the Government argued that “Jin knew her conduct would benefit the PRC because Sun Kaisens develops telecommunications technology for the Chinese military, Jin knew that Sun Kaisens developed telecommunication projects for the Chinese military, and the trade secrets pertained to telecommunications technology.” *Jin*, 833 F. Supp. 2d at 1019. The court held that this “inferential chain from the facts to the Government’s conclusion fails to establish the required proof beyond a reasonable doubt.” *Id.*

117. *Id.* at 1003.

118. *See infra* note 124.

benefit the Chinese military—or at least to benefit Sun Kaisens, which is arguably a Chinese instrumentality¹¹⁹—extended to Jin’s possession of the Motorola trade secrets.¹²⁰ By refusing to accept this inferential chain as circumstantial proof of Jin’s intent or knowledge, the court narrowly interpreted § 1831’s mens rea element.

Furthermore, the court stated that “the evidence did not establish that Jin planned to give the trade secrets to Sun Kaisens, let alone the PRC.”¹²¹ That Jin did not intend to give the trade secrets to Sun Kaisens or the PRC, however, does not foreclose the possibility that she intended to “use [the trade secrets] for the PRC’s benefit.”¹²² The *Jin* court acknowledged that Jin “believed at the time she took the documents that they would, at a minimum, help prepare her for her new job with Sun Kaisens and meet the expectations of her new employer,” and thus confer an indirect benefit on Sun Kaisens.¹²³ Jin intended to use the trade secrets to enrich herself and improve her skills, and her enrichment would, in turn, benefit Sun Kaisens. This intention, combined with Jin’s knowledge that Sun Kaisens developed telecommunications technology for the Chinese military, as well as her knowledge of her own role in that process, suggest that Jin knew or intended that a benefit, even if indirect, would result from her trade secret theft.¹²⁴ This conclusion would carry even more weight if the court had given a broad

119. *See supra* Section III.A.1.

120. Jin knew that Sun Kaisens worked closely with the Chinese military, so she therefore knew that work she did in connection with telecommunications projects would likely be passed on to the Chinese military. *See Posters ‘N’ Things, Ltd. v. United States*, 511 U.S. 513, 523–24 (1994) (concluding that, in a criminal statute with a mens rea requirement of knowledge, this requirement is satisfied by evidence of “action undertaken with knowledge of its probable consequences” (quoting *United States v. United States Gypsum Co.*, 438 U.S. 422, 444 (1978))).

121. *Jin*, 833 F. Supp. 2d at 1019.

122. *See United States v. Lee et al.*, No. CR 06-0424 JW, 2010 WL 869087, at *7 (N.D. Cal. May 21, 2010).

123. *Jin*, 833 F. Supp. 2d at 1017. The court discussed this planned use in its determination of Jin’s guilt of general trade secret theft under § 1832. *Id.*

124. The facts stated in the *Jin* opinion reveal a strong relationship among Jin, Sun Kaisens, and the Chinese military. In 2006, a Sun Kaisens manager asked Jin to review Chinese documents and “ascertain how much assistance she could provide on the projects.” *Id.* at 983. Later in 2006, the same manager emailed Jin asking her to familiarize herself with a document that would be discussed with “Institute 61,” which is “under the oversight of the Chinese military and develops equipment for the People’s Liberation Army (PLA).” *Id.* A few weeks later, Jin saved documents relating to Chinese military communications systems to her hard drive. *Id.* In 2007, Jin saved additional Chinese military and Sun Kaisens documents. *Id.* When agents stopped Jin at the airport on her way out of the United States, they found a classified document relating to Chinese military telecommunications systems. *Id.* at 988.

reading to the “beneficiary” element and determined that Sun Kaisens was an instrumentality of the Chinese government.¹²⁵ Jin’s intention to indirectly benefit Sun Kaisens by using the trade secrets for her professional development would thus equate to an intention to benefit a foreign instrumentality. In constricting the statute’s interpretation, the court set precedent that makes it more difficult to convict a defendant of economic espionage.

The courts’ narrowing of the elements of § 1831 does not fully explain the lack of economic espionage convictions. In *Jin*, the court found that the defendant lacked the mens rea required for a conviction under § 1831, and convicted her only on charges of general trade secret theft.¹²⁶ Yet, at sentencing, Judge Castillo enhanced Jin’s prison term because he found the evidence that she intended to benefit the Chinese government in stealing the Motorola trade secrets to be “compelling.”¹²⁷ Judge Castillo’s recognition of this evidence suggests that § 1831 of the EEA does not function as Congress intended in securing economic espionage convictions. Even where a judge finds compelling evidence of guilt, the narrowly defined elements of § 1831 prevent that judge from convicting the defendant under the economic espionage prong of the EEA.

B. CONGRESS’S RECENT LEGISLATION AMENDING THE EEA
INDICATES A DESIRE TO BROADEN THE ELEMENTS OF § 1831

1. *The Penalty Enhancement Act of 2012*

Congress has most recently articulated its policy goals regarding economic espionage by passing EEA-related legislation. On January 14, 2013, President Obama signed into law the Foreign and Economic Espionage Penalty Enhancement Act of 2012 (“Penalty Enhancement Act”)¹²⁸ which amends the EEA by significantly increasing the maximum fines for stealing trade secrets with an intent to benefit a foreign government.¹²⁹ The Penalty Enhancement Act was the product of two

125. *See supra* Section III.A.1.

126. *Jin*, 833 F. Supp. 2d at 1020.

127. Ameet Sachdev, *Four Years for Stealing Secrets in Punishing Ex-Motorola Worker, Judge Warns Economic Espionage Is a Threat to U.S. Companies*, CHICAGO TRIBUNE, Aug. 30, 2012.

128. *Statement by the Press Secretary, Office of the Press Secretary, THE WHITE HOUSE*, <http://www.whitehouse.gov/the-press-office/2013/01/14/statement-press-secretary> (last visited Mar. 3, 2013).

129. *Foreign and Economic Espionage Penalty Enhancement Act of 2012 (“Penalty Enhancement Act”)*, H.R. 6029, 112th Cong. (2012); 158 CONG. REC. H7,559 (daily ed. Jan. 1, 2013). For offenses committed by individuals, this bill increased the maximum fine from \$500,000 to \$5,000,000, and for offenses committed by organizations, the bill increased the fine from

companion bills—H.R. 6029 in the House of Representatives and S. 678 in the Senate—which contained nearly identical language in their original formats.¹³⁰ H.R. 6029 passed in the Senate on December 19, 2012,¹³¹ and in the House on January 1, 2013.¹³²

The Penalty Enhancement Act contains measures that the IPEC, in conjunction with the Departments of Commerce, Homeland Security, Justice and State, and the U.S. Trade Representative, recommended to Congress.¹³³ The bill was intended to be “a starting point for a larger discussion about the implementation of the [EEA], and whether additional updates and improvements are needed in light of the global economy and advances in technology.”¹³⁴ In his introduction of S. 678 to the Senate, Senator Herb Kohl described how the technological landscape has changed in the fifteen years since the enactment of the EEA. Now, companies maintain as much as eighty percent of their assets as intangible trade secrets, and recent technologies make it very easy for outsiders to obtain this information.¹³⁵ Senator Kohl provided several examples of recent economic espionage cases, including *Chung* and *Lee*, and concluded: “We must definitively punish anyone who steals information from American companies.”¹³⁶

By significantly increasing the maximum fines for a conviction under § 1831 of the EEA, the Penalty Enhancement Act reflects the policy goals

“not more than \$10,000,000” to “not more than \$10,000,000 or 3 times the value of the stolen trade secret to the organization, including expenses for research and design and other costs of reproducing the trade secret that the organization has thereby avoided.” H.R. 6029 § 2(a)–(b).

130. *See* H.R. 6029; S. 678, 112th Cong. (2011). S. 678 was introduced on March 30, 2011, by Senator Kohl of Wisconsin, and was co-sponsored by Senator Sheldon Whitehouse of Rhode Island and Senator Chris Coons of Delaware. 157 CONG. REC. S1985 (daily ed. Mar. 30, 2011). H.R. 6029 was introduced on June 27, 2012, by Representative Lamar Smith of Texas. 158 CONG. REC. H4155–56 (daily ed. June 27, 2012). Both bills originally proposed increasing the maximum imprisonment for a § 1831 violation from fifteen to twenty years, and H.R. 6029 also proposed increasing the maximum fine for a § 1831 violation. *See* S. 678; H.R. 6029. The only other notable difference between the House and Senate bills is that the House bill does not contain a directive for the Sentencing Committee to “consider establishing a minimum offense level under the Federal sentencing guidelines and policy statements for offenses relating to the transmission or attempted transmission of a stolen trade secret outside of the United States.” *See* S. 678 § 3(b)(3); H.R. 6029 § 3(b).

131. 158 CONG. REC. S8229–30 (daily ed. Dec. 19, 2012).

132. 158 CONG. REC. H7559 (daily ed. Jan. 1, 2013).

133. 157 CONG. REC. S1985 (daily ed. Mar. 30, 2011) (statement of Sen. Kohl).

134. *Id.* (statement of Sen. Kohl).

135. *Id.* *See also* Strom, *supra* note 33, at 1 (“Given the relative ease of transferring sensitive trade secrets via cellphones, e-mail and thumb drives, . . . a recent surge in trade secret theft cases makes sense.”).

136. CONG. REC. S1985 (statement of Sen. Kohl).

that Senator Kohl enunciated in his initial introduction of the bill. These substantive amendments, however, are not the only reflections of these goals. The Penalty Enhancement Act also directs the U.S. Sentencing Commission to review the U.S. Sentencing Guidelines in light of the amendments to the EEA's penalty provisions.¹³⁷ The Act asks the Sentencing Commission to "consider whether additional enhancements in the Federal sentencing guidelines" are appropriate to account for two types of special offense characteristics:¹³⁸ (1) "the transmission or attempted transmission of a stolen trade secret outside of the United States"¹³⁹ and (2) "the transmission or attempted transmission of a stolen trade secret outside of the United States that is committed or attempted to be committed for the benefit of a foreign government, foreign instrumentality, or foreign agent."¹⁴⁰ These recommended sentencing enhancements are not substantive amendments to the EEA. Rather, if adopted by the Sentencing Commission, the enhancements would increase the offense level—and thus, the possible sentence—of a defendant who has already been convicted of trade secret theft¹⁴¹ under either § 1831 or § 1832 of the EEA.¹⁴²

137. See H.R. 6029, 112th Cong. § 3 (2012).

138. *Id.* § 2(b)(2). "Special offense characteristics" are "those characteristics specific to the defendant's conduct or harm that Congress has determined to be aggravating or mitigating factors of a crime." Carolyn Barth, *Aggravated Assaults with Chairs versus Guns: Impermissible Applied Double Counting Under the Sentencing Guidelines*, 99 MICH. L. REV. 183, 185 n.14 (2000). Sentencing judges use special offense characteristics to add enhancements to a defendant's base offense level when determining the proper sentencing range under the Guidelines. See *infra* note 141.

139. H.R. 6029 § 2(b)(2)(A).

140. *Id.* § 2(b)(2)(B). The bill issues the following general directive to the United States Sentencing Commission:

(a) IN GENERAL.—Pursuant to its authority under section 994(p) of title 28, United States Code, the United States Sentencing Commission shall review and, if appropriate, amend the Federal sentencing guidelines and policy statements applicable to persons convicted of offenses relating to the transmission or attempted transmission of a stolen trade secret outside of the United States or economic espionage, in order to reflect the intent of Congress that penalties for such offenses under the Federal sentencing guidelines and policy statements appropriately, [sic] reflect the seriousness of these offenses, account for the potential and actual harm caused by these offenses, and provide adequate deterrence against such offenses.

Id. § 3(a).

141. While the U.S. Sentencing Guidelines are no longer mandatory, the Sentencing Reform Act, 18 U.S.C. § 3553, requires sentencing courts to consider the sentencing range generated by the Sentencing Guidelines in its assessment of an appropriate sentence. Alan Ellis and James H. Feldman, Jr., *Federal Sentencing Under the Advisory Guidelines: A Primer for the Occasional Federal Practitioner—Part I*, THE CHAMPION 42, 43 (July 2008); see *United States v. Booker*, 543 U.S. 220 (2005) (holding that mandatory Sentencing Guidelines are

The second recommended enhancement would increase the recommended penalty of a defendant who has stolen a trade secret and transmitted—or attempted to transmit—it outside of the United States for the benefit of a foreign government.¹⁴³ Such an enhancement would therefore apply only to a defendant who has been convicted of economic espionage as codified in § 1831 of the EEA.

The first recommended enhancement, on the other hand—for “the transmission or attempted transmission of a stolen trade secret outside of the United States”¹⁴⁴—does not parallel any provision in the EEA. Rather, this enhancement essentially cuts out the beneficiary, benefit, and mens rea requirements contained in § 1831. If adopted by the Sentencing Commission, such a provision would enhance the Guideline sentence of anyone convicted of stealing trade secrets who also attempts to—or does—take the trade secrets out of the country, regardless of whether the defendant intended to

unconstitutional). As an example of how penalty enhancements factor into the calculation of a Guidelines range, consider a defendant who has been convicted of economic espionage under 18 U.S.C. § 1831 (2006). First, the judge must determine the offense guideline applicable to the offense of conviction. U.S.S.G. § 1B1.1(a)(1). For 18 U.S.C. § 1831, the applicable offense guideline is § 2B1.1, which covers offenses involving stolen property, fraud, deceit, and other property offenses. *See* U.S.S.G. § 2B1.1. Second, the judge must determine the “base offense level,” which is “six” for defendants convicted under § 1831. *See* U.S.S.G. §§ 1B1.1(a)(2); 2B1.1(a). Third, the judge must determine if a “specific offense characteristic” (“SOC”) applies. U.S.S.G. § 1B1.1(a)(2). In this calculation, the judge increases the base offense level according to the penalty enhancements provided in the Guidelines. For example, if the loss exceeded \$1 million, the judge must add sixteen levels to the base level. U.S.S.G. § 2B1.1(b)(1). At present, the only enhancement in the Guidelines specifically relating to trade secret theft is § 2B1.1(b)(5), which provides for a two-level enhancement if “the offense involved misappropriation of a trade secret and the defendant knew or intended that the offense would benefit a foreign government, foreign instrumentality, or foreign agent.” U.S.S.G. § 2B1.1(b)(5). A defendant convicted under § 1831, therefore, would receive this two-level enhancement to his offense level. After considering a number of other factors, the judge produces a final offense level and uses this, as well as the defendant’s criminal history category, to calculate the appropriate sentencing range under the Guidelines. *See* U.S.S.G. § 1B1.1(a)(3)–(8).

142. Because the first of the two recommended enhancements does not include a requirement that the defendant has stolen trade secrets with an intent to benefit a foreign government, this enhancement could apply to a defendant who has only committed domestic trade secret theft under § 1832. This differs from the enhancement that currently exists in the Sentencing Guidelines, which would only increase the base offense level of a defendant convicted of economic espionage under § 1831 of the EEA. *See supra* note 141. The Penalty Enhancement Act gives the Sentencing Commission 180 days to complete its consideration of these additional enhancements. H.R. 6029 § 3(d).

143. *See* H.R. 6029 § 2(b)(2)(B).

144. *Id.* § 2(b)(2)(A).

benefit, or knew he was benefitting, a foreign government, foreign instrumentality, or foreign agent.¹⁴⁵

While these directives for sentencing enhancements do not contain proposals to amend the provisions of the EEA itself, they serve as indications of Congress' current policy objectives. Senator Kohl, when he introduced S. 678 to the Senate, framed it as "a first step in our efforts to do more to stem the flow of valuable business information out of our country."¹⁴⁶ He provided several examples of recent economic espionage cases, including *Chung* and *Lee*, and advocated "punish[ing] anyone who steals information from American companies."¹⁴⁷ These sentiments reflect Congress's goals in originally enacting the EEA, but they especially emphasize the importance of keeping trade secrets of American companies within the United States. The directives in the Penalty Enhancement Act reflect a congressional belief that it is not only necessary to punish an individual who steals trade secrets with a specific intent to benefit a foreign government, but also to punish an individual who steals trade secrets and simply takes them to a foreign country.

2. *The Penalty Enhancement Act May Increase Penalties, but Not Convictions, in on-the-Margin Cases*

If the Sentencing Commission adopts these recommendations for additional penalty enhancements, defendants like Lee and Jin—who stole trade secrets and attempted to transmit them outside the United States—could face harsher punishments. Under the narrow interpretation of the § 1831 elements used by courts thus far, these types of defendants will escape economic espionage conviction because of insufficient proof that they intended to benefit a foreign government.¹⁴⁸ However, because these types of defendants would be convicted under § 1832 of the EEA, which punishes general trade secret theft, they would still face harsher punishments under the proposed Sentencing Guidelines enhancements for attempts to take stolen trade secrets out of the United States. This result echoes the approach already taken by Judge Castillo in Jin's sentencing—he enhanced Jin's punishment because of compelling evidence that she intended to benefit

145. Because this enhancement would only apply to those convicted of stealing trade secrets, and because the EEA is the only federal statute that criminalizes trade secret theft, this enhancement would likely only apply to those convicted under § 1831 or § 1832. *See supra* Section I.A,

146. 157 CONG. REC. S1985 (daily ed. Mar. 30, 2011) (statement of Sen. Kohl).

147. *Id.*

148. *See supra* Part III.

a foreign government.¹⁴⁹ The additional enhancements for attempted transmission of trade secrets out of the United States would subject defendants who barely escape economic espionage conviction to harsher punishments.

Nevertheless, harsher punishments will not necessarily align the judicial outcomes of § 1831 cases with the policy goals of Congress and the prosecutorial ambitions of the DOJ. While those convicted of economic espionage or found to have attempted the transmission of trade secrets outside the country may face increased prison sentences under these potential enhancements, the narrow elements of § 1831 will still restrict the ability of courts to find defendants guilty of economic espionage. Furthermore, the narrow interpretation that courts have given to the already narrow elements in the statute will discourage prosecutors from prosecuting on-the-margin cases like *Jin* and *Lee* because of the slim chances of conviction under § 1831.¹⁵⁰ These penalty enhancements, while indicative of Congress's attempt to combat economic espionage, do not strike at the heart of the problem. The language of § 1831—which both constricts and is constricted by the courts—has impeded the efforts of Congress and the DOJ to convict defendants of economic espionage. Thus, to align its goals and judicial outcomes, Congress must reform the language of the EEA itself.

C. A PROPOSAL FOR IMPROVED ENFORCEMENT OF THE EEA

One theme emerges from analysis of the policy goals and proposals outlined in the Penalty Enhancement Act: the dangers of economic espionage originate not only from those who steal trade secrets with a specific intent to benefit a foreign government, but also from those who steal trade secrets and merely transmit—or attempt to transmit—them to a foreign corporation or entity. This, in turn, suggests a specific way to reform the EEA itself to increase convictions under the EEA: Congress should add a provision to the EEA that addresses the same concerns that underlie the Penalty Enhancement Act.

The Penalty Enhancement Act's directives to the Sentencing Commission recommended enhancements in the Sentencing Guidelines for two offenses: (1) economic espionage and (2) “the transmission or attempted

149. See Sachdev, *supra* note 127.

150. See *Criminal Law—Economic Espionage—Ninth Circuit Upholds First Trial Conviction Under § 1831 of the Economic Espionage Act of 1996*, *supra* note 101, at 2182 (“EEA ambiguity disincentivizes prosecution of cases at the margin.”); *supra* Section III.A.2.

transmission of a stolen trade secret outside of the United States.”¹⁵¹ The EEA codifies the first of these offenses in § 1831, but it does not codify the second.¹⁵² As discussed in Section III.B above, *supra*, the Penalty Enhancement Act’s focus on this second offense suggests Congress’s interest in preventing the transmission of a stolen trade secret outside of the United States, even if it was not stolen for the benefit of a foreign government. Congress could emphasize this importance by writing a prohibition on such activity into the EEA itself. Such a provision could appear as a separate section within the EEA, and would use the same preamble as § 1831 and the same language as § 1831 and § 1832 in its description of the general trade secret offense. This additional provision could read as follows:

(a) Whoever, with intent to convert a trade secret, that is related to or included in a product that is produced for or placed in interstate or foreign commerce, to the economic benefit of anyone other than the owner thereof, and intending or knowing that the offense will, injure any owner of that trade secret, knowingly—

[the five types of trade secret theft from § 1831 and § 1832¹⁵³]

and knowingly transmits or attempts to transmit such information outside the United States, shall, except as provided in subsection (b), be fined under this title or imprisoned not more than ___ years, or both.¹⁵⁴

151. S. 678, 112th Cong. § 3(b)(2) (2012); H.R. 6029, 112th Cong. § 3(b)(2) (2012); *see supra* Section III.B.

152. *See* 18 U.S.C. § 1831–1832 (2006); *supra* Section I.B.

153. These five types of trade secret theft are:

(1) steals, or without authorization appropriates, takes, carries away, or conceals, or by fraud, artifice, or deception obtains a trade secret;

(2) without authorization copies, duplicates, sketches, draws, photographs, downloads, uploads, alters, destroys, photocopies, replicates, transmits, delivers, sends, mails, communicates, or conveys a trade secret;

(3) receives, buys, or possesses a trade secret, knowing the same to have been stolen or appropriated, obtained, or converted without authorization;

(4) attempts to commit any offense described in any of paragraphs (1) through (3); or

(5) conspires with one or more other persons to commit any offense described in any of paragraphs (1) through (3), and one or more of such persons do any act to effect the object of the conspiracy

18 U.S.C. § 1831(a)(1)–(5).

154. This proposed provision is identical to 18 U.S.C. § 1832 except for the italicized language. By including the “produced for or placed in interstate or foreign commerce” language from § 1832 in this suggested addition, Congress would establish federal jurisdiction over the provision. *See* Susan W. Brenner & Anthony C. Crescenzi, *State-*

To reflect the severity of this offense, Congress could set the maximum prison sentence at a number of years just below the fifteen-year maximum prison sentence for economic espionage under § 1831.¹⁵⁵ Adding such a provision to the EEA would decrease the impediments to conviction found in § 1831, while at the same time reserving the harshest punishments for those defendants who clearly commit economic espionage under § 1831 as currently codified and interpreted. Adding a provision to the EEA that prohibits the transmission or attempted transmission of a stolen trade secret outside of the United States would remove the three biggest barriers to conviction under § 1831: the beneficiary, benefit, and mens rea elements. Regardless of the defendant's intent or knowledge to benefit a foreign government, he or she would violate this provision if he or she steals an American trade secret and knowingly transmits it to a foreign country.

This addition to the EEA would give prosecutors more breathing room to prosecute foreign thieves of trade secrets without stretching the terms of § 1831. The proposal would encompass situations like those in *Jin* and *Lee*, where the defendants had stolen trade secrets and attempted to transmit them to a foreign country, but did not meet § 1831's narrowly interpreted benefit and mens rea requirements. The harsher punishment provided under § 1831 would be reserved for situations like that in *Chung*,¹⁵⁶ where the facts suggest the defendant's obvious intent to benefit a foreign government.

The addition of this type of economic espionage crime to the EEA would both increase economic espionage convictions—thus aligning the goals of Congress with judicial outcomes—and preserve fairness to defendants. Because this addition would not change the terms of § 1831, defendants would not be subject to the harshest economic espionage punishments unless a court finds that they satisfied the narrow beneficiary,

Sponsored Crime: The Futility of the Economic Espionage Act, 28 HOUS. J. INT'L L. 389, 428 (2006). It would also serve to bridge the gap between domestic trade secret theft in § 1832 and foreign economic espionage in § 1831—by using § 1832's language to criminalize foreign-related trade secret theft, it would help to fix the current disconnect between the two sections. The EEA's express statement that it does not preempt any other trade secret laws would also apply to this provision. See 18 U.S.C. § 1838 (2006); *supra* note 25.

155. The maximum prison sentence for the suggested offense should be at least twelve years, to differentiate it from the maximum sentence of ten years for general trade secret theft under § 1832. See 18 U.S.C. § 1832(a). Congress could set the maximum fine for this offense at the same level as the originally enacted § 1831—\$500,000 for individuals and \$10 million for organizations. See 18 U.S.C. § 1831 (2006).

156. *Chung I*, 633 F. Supp. 2d 1134 (C.D. Cal. 2009), *aff'd*, 659 F.3d 815 (9th Cir. 2011). See *supra* Section II.B.

benefit, and mens rea elements of the existing § 1831. Those who transmit or attempt to transmit a stolen trade secret outside of the United States would receive a lesser punishment—under the suggested EEA addition—and those who only steal a trade secret, without transmitting it, would receive an even lesser punishment—under § 1832. Most importantly, this suggested amendment would still require that a defendant committed trade secret theft—that is, that the defendant had the requisite intent as described in § 1832. To convict a defendant under this suggested addition, prosecutors would still need to prove beyond a reasonable doubt that the defendant knowingly committed trade secret theft (i.e., that he violated § 1832), and that he knowingly transmitted or attempted to transmit those stolen trade secrets outside of the United States.¹⁵⁷ The government, however, would *not* need to prove that the defendant intended or had knowledge of a resulting benefit to a foreign government in the commission of this trade secret theft or in its transmission to another country.

D. BEYOND THE EEA

One potential complication with this proposed amendment—and with the EEA in general—may arise in the context of multinational corporations. While Congress has directed EEA enforcement efforts against foreign governments and foreign entities, it is unclear how the EEA would apply to companies that have a significant presence in multiple foreign nations. The suggested amendment to the EEA may further complicate this problem, as it shifts the focus from those who intend to benefit a foreign government with their stolen trade secrets to those who merely take them to another country. What if the defendant stole a trade secret from an American company, and then transmitted it to a company in China that was forty-nine percent American-owned and fifty-one percent Chinese-owned? What if it is impossible to determine what percentage of a multinational corporation is owned or controlled by a certain country? These are legitimate questions that Congress should consider if it decides to reevaluate its policy regarding economic espionage enforcement.

Even putting these open issues aside, a basic problem with the EEA itself will prevent Congress from accomplishing all of its goals. Congress

157. Reflecting this logic, Nathaniel Minott suggests that the additional mens rea requirement in § 1831 (having the intent or knowledge that the offense benefit a foreign government) is “needlessly onerous, and, in many respects, is unusual compared with other criminal statutes.” Minott, *supra* note 6, at 206. Minott points out that “[o]ften, criminal law does not require the prosecutor to demonstrate the specific, separate dual intents when the law has two branches. Usually, it is sufficient only to demonstrate that the defendant had the requisite intent to set the cause in motion.” *Id.* at 207.

intended that the EEA function as a “strong and meaningful deterrent to criminals considering engaging in economic espionage.”¹⁵⁸ But the policies behind the EEA also suggest that these “criminals” are the foreign governments themselves, which initiate the efforts to steal American trade secrets.¹⁵⁹ The EEA, however, as a domestic law, does not—and cannot—target foreign governments for punishment.¹⁶⁰ Congress, therefore, “enacted a law that was supposed to target a certain class of violator, but left the ‘head’ of the beast unscathed.”¹⁶¹ Consequently, the EEA does not punish or deter the roots of the problem: foreign governments that solicit and benefit from economic espionage.¹⁶²

The individuals whom the EEA does punish—those who actually steal the trade secrets from American companies—are the “lowest actors on the international espionage ladder.”¹⁶³ They are simply the pawns of the foreign government that wants to benefit from American trade secrets. Enhancing the punishment of these actors under the Penalty Enhancement Act thus seems misguided. It is unlikely that an increase in the maximum fine under § 1831 will deter foreign governments from committing economic espionage when those foreign governments feel few repercussions from the penalty. Furthermore, because of these policies, it may seem especially problematic to punish individuals for simply taking trade secrets out of the country without the intent to benefit a foreign government, as proposed in Section III.C, *supra*.

There are several possible solutions to these problems. One solution could involve a combination of changes to the EEA and external agreements with foreign governments. Because the EEA only covers individual offenders, the ultimate solution to the larger inter-governmental economic espionage conflict may require international treaties. The United States could accomplish this either through bilateral treaties¹⁶⁴ or a multi-country

158. 142 CONG. REC. S12,214 (daily ed. Oct. 2, 1996).

159. *See id.* at 12,208 (“For years now, there has been mounting evidence that many foreign nations and their corporations have been seeking to gain competitive advantage by stealing trade secrets”); *see also* 142 CONG. REC. H10,461 (daily ed. Sept. 17, 1996) (“[The EEA] will also send a clear message to foreign governments, including many of our traditional allies, that are currently spying on America’s private companies.”).

160. Minott, *supra* note 6, at 209.

161. *Id.*

162. *See id.*

163. *Id.* at 210.

164. *See id.* at 222 (arguing that treaties could provide an “effective enforcement mechanism” for the economic espionage problem).

convention prohibiting economic espionage,¹⁶⁵ which could both encourage fair competition among nations and provide a mechanism for punishing those that steal or solicit the theft of trade secrets from other nations.¹⁶⁶ Another solution to the holes in the EEA could involve direct prosecution of the foreign instrumentalities of trade secret theft. While this would probably not be feasible if the beneficiary of the trade secret theft traced directly to a foreign government, it may be feasible if the beneficiary is an instrumentality of—i.e., a corporation in—a foreign government.¹⁶⁷

Both of these solutions—combining changes in the EEA with treaties, and prosecuting foreign instrumentalities directly—could help Congress achieve its policy goals. First, by targeting the foreign governments who solicit trade secret theft, these solutions would tackle the real economic espionage problem. Second, both of these solutions would preserve the EEA’s current function of prosecuting and punishing those individuals who actually commit trade secret theft for the benefit of a foreign government. While foreign governments may be the main problem behind economic espionage, the individuals who steal trade secrets from American companies play a significant part in the crime and should be punished for it.

IV. CONCLUSION

The EEA’s failures to prevent foreign economic espionage stem from problems of narrowness in § 1831. Despite Congress’s calls for broad

165. See Mark E.A. Danielson, *Economic Espionage: A Framework for a Workable Solution*, 10 MINN. J.L. SCI. & TECH. 503, 527–30 (2009) (proposing a convention framework for prohibiting economic espionage, and thereby “obliging parties to comply as a matter of international law”).

166. See *id.* at 530.

167. In the most recent case involving economic espionage, *United States v. Pangang Group Co.*, prosecutors attempted to do just that. *United States v. Pangang Group Co., Ltd.*, No. CR 11-00573 JSW, 2012 WL 3010958, at *1 (N.D. Cal. July 23, 2012). In *Pangang*, the Government charged Pangang Group, an allegedly state-owned Chinese company involved in the manufacturing and marketing of steel, titanium, and vanadium products, with economic espionage. See *id.* at *1. After a grand jury indicted the Pangang Group, the district court granted the defendants’ motion to quash service of the summons, holding that the Government failed to comply with the service requirements in the Federal Rules of Civil Procedure when it served the summons on a manager of a United States-based, Pangang-owned company. *Pangang Group*, 2012 WL 3010958, at *1, *14. The *Pangang* opinion will likely make it “more difficult for the U.S. government to serve foreign corporations” in economic espionage cases. Quinn Emanuel Urquhart & Sullivan, LLP, *Court Quashes Summons of Indictment in Economic Espionage Act Prosecution Against Quinn Emanuel Chinese Client*, JD SUPRA (Oct. 5, 2012), <http://www.jdsupra.com/legalnews/court-quashes-summons-of-indictment-in-e-49457/>. However, this case suggests that the DOJ is making—and can make—an effort to target foreign instrumentalities directly.

interpretation of the provision, courts have read the beneficiary, benefit, and mens rea elements of the statute quite narrowly. This narrow judicial interpretation makes it more difficult for prosecutors to secure convictions, and thus deters them from pursuing economic espionage prosecutions. On the other hand, it appears that the narrow elements of § 1831 itself may constrain courts in their desire to convict defendants of economic espionage, as evidenced by Judge Castillo's enhancement of Jin's sentence for compelling evidence that she intended to benefit China.¹⁶⁸ The recently enacted Penalty Enhancement Act—with its suggestion that the EEA punish those who transmit stolen trade secrets to another country regardless of their intent to benefit a foreign government—indicates Congress's desire to broaden the terms and reach of the EEA. If Congress changes the EEA to reflect these desires, if courts interpret these provisions broadly, and if the DOJ continues to directly prosecute foreign instrumentalities or the Executive branch reaches outside the EEA through treaties or conventions, the United States may be able to accomplish its stated goal of curbing economic espionage.

168. See Sachdev, *supra* note 127.

