TIKTOK, TICK-TOCK: HOW THE COMMITTEE ON FOREIGN INVESTMENT IN THE UNITED STATES (CFIUS) CAN MITIGATE THE THREATS POSED BY FOREIGN-MADE SOFTWARE APPLICATIONS

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INTRODUCTION

TikTok is a "wildly popular" software application, best known for dance moves and music videos, that exploded into the mainstream following its 2017 entry into the United States marketplace. Today, TikTok boasts 100 million active monthly users in the United States and close to 700 million active monthly users worldwide. Countless users have become "influencers," a term coined to describe users who have gathered a large enough following to monetize their content. While most see the application as fun and harmless, the U.S. government sees TikTok, and other foreign-made applications like it, as a threat to national security.

Citing national security concerns, President Donald Trump issued Executive Order (EO) 13,492 on August 6, 2020, which sought to effectively ban TikTok in the United States by prohibiting anyone subject to U.S.

^{1.} See Mansoor Iqbal, TikTok Revenue and Usage Statistics (2021), BUSINESS OF APPS (July 2, 2021), https://www.businessofapps.com/data/tik-tok-statistics/ (charting the growth of the application's userbase in the United States between 2018 and 2020).

^{2.} Id. See generally Active User Definition, ADJUST, https://www.adjust.com/glossary/act ive-user/ (last visited August 27, 2021) (defining active user as "a person who accesses an app for a given period of time").

^{3.} See Shane Barker, How to Earn Money from TikTok as an Influencer (A Detailed Guide), SHANE BARKER (Oct. 20, 2020), https://shanebarker.com/blog/earn-money-from-tiktok/(explaining that users can earn money by endorsing brands on their account if they have a large number of followers).

^{4.} Compare Marian Haile, 10 Reasons Why Everyone Needs a TikTok Account, SOCIETY19 (Oct. 25, 2020), https://www.society19.com/reasons-why-everyone-needs-a-tiktok-account/ (listing fun and entertainment, cultural exchange, creative outlets, and opportunities for entrepreneurship as reasons to use TikTok), with U.S. Navy Bans TikTok from Mobile Devices Saying it's a Cybersecurity Threat, GUARDIAN (Dec. 21, 2019), https://www.theg uardian.com/technology/2019/dec/21/us-navy-bans-tiktok-from-mobile-devices-saying-its-a-cybersecurity-threat (recounting that the Navy did not describe the national security threats in detail when banning the application from government-issued mobile devices), and REUTERS, Bill to Ban TikTok on U.S. Government Devices Passes Committee (May 12, 2021), https://www.reuters.com/technology/bill-ban-tiktok-us-government-devices-passes-committee-2021-05-12/ (noting that the Senate Homeland Security and Governmental Affairs Committee passed the bill unanimously and suggesting that the threat to national security stemmed from concern that the Chinese government was using the application to covertly collect the data of U.S. users).

jurisdiction from transacting with ByteDance, the application's Chinese parent company.5 On August 14, 2020, President Trump issued another EO (Divestment Order) mandating that ByteDance divest itself of all assets used to support the operation of TikTok in the United States.⁶ This EO followed a recommendation by the Committee on Foreign Investment in the United States (CFIUS or Committee), an interagency body chaired by the Secretary of the Treasury, that is responsible for screening foreign investment into the United States and flagging threats to national security.⁷ TikTok entered the U.S. market via foreign investment in 2017 when ByteDance acquired Musical.ly and migrated all of its U.S.-based users to TikTok.⁸ CFIUS, whose administrative actions fall under the Treasury Department's purview, has the authority to retroactively review certain transactions and issue mitigation or divestment measures, as it did with the Divestment Order of August 14.9 Though the Biden Administration has declined to follow the actions of its predecessor, it still recognizes the need to safeguard the data of U.S. users and address the national security concerns posed by software applications linked to "foreign adversaries." Thus, the TikTok saga is instructive.

The underlying national security threats posed by TikTok are not idiosyncratic to the application.¹¹ Instead, TikTok's story serves as a case study and a reminder that CFIUS needs to promulgate clear and concrete regulations for foreign-made technology that seeks to capture the personal

- 5. Exec. Order No. 13,942, 85 Fed. Reg. 48,637, 48,637–38 (Aug. 6, 2020).
- 6. Exec. Order Regarding the Acquisition of Musical.ly by ByteDance Ltd., 85 Fed. Reg. 51,297 (Aug. 14, 2020). *See generally* Akhilesh Ganti, *Divestment*, INVESTOPEDIA, www.investopedia.com/terms/d/divestment.asp (last updated Mar. 30, 2021) (stating that divestment can describe a situation where a company may be forced to sell assets as the result of regulatory or legal action).
- 7. See Exec. Order Regarding the Acquisition of Musical.ly by ByteDance Ltd., 85 Fed. Reg. 51,297, 51,297–98 (Aug. 14, 2020).
- 8. See Sam Blake & Tami Abdollah, A TikTok Timeline: The Rise and Pause of a Social Video Giant, DOT.LA (Sep. 14, 2020), https://dot.la/a-tiktok-timeline-the-rise-and-pause-of-a-social-video-giant-2647649026.html (describing the history of TikTok); see also infra The Rise of a Cultural Phenomenon (detailing that ByteDance acquired Musical.ly in order to use its existing presence in the U.S. market as an entry point for TikTok).
 - 9. See 31 C.F.R § 800.101(a), 800.213 (2020).
- 10. Stipulation of Dismissal Without Prejudice, *TikTok Inc.*, v. Biden, No. 20-cv-02658 (D.D.C. July 21, 2021); PYMTS, Biden Administration, TikTok Agree to Drop Lawsuit, (July 25, 2021), https://www.pymnts.com/legal/2021/biden-administration-tiktok-agree-drop-lawsuit/; Exec. Order No. 14,034, 86 Fed. Reg. 111, 31,423, 31,424 (June 9, 2021).
- 11. See, e.g., Exec. Order No. 13,943, 85 Fed. Reg. 48,641 (Aug. 6, 2020) (identifying popular messaging application WeChat as posing a similar threat as TikTok).

data of U.S. users and employ artificial intelligence (A.I.) or algorithms to control the flow of content to our domestic user base. Part I of this Comment provides background information about CFIUS and places a special focus on the most recent round of regulations and the sole CFIUS action ever challenged in court. Part II discusses the rise of TikTok, the national security concerns raised in the Divestment Order, the challenges of regulating A.I., and proposes frameworks through which CFIUS can regulate. Part III analyzes the EOs, discusses possible legal grounds for objection, and reviews the now dead deal between two U.S.-based companies, Oracle and Walmart, to purchase stakes in TikTok in an attempt to mitigate CFIUS concerns. Part IV recommends a framework for new CFIUS regulations and discusses how these new rules, along with existing CFIUS law, can better address the threats posed by TikTok and similar applications.

I. CFIUS: ORIGINS, EVOLUTION, AND PRECEDENT

In 1975, President Gerald Ford signed EO 11,858, which established CFIUS. ¹² CFIUS' role is to screen foreign investment into the United States and identify threats to U.S. national interests. ¹³ CFIUS, in its original form, was a multiagency think tank that analyzed foreign investment and provided policy recommendations to the president. ¹⁴ Now focused on investment screening, it is chaired by the Secretary of the Treasury and comprised of high-ranking officials from the Departments of Justice, Homeland Security, Commerce, State, and Defense, among others. ¹⁵ As the sources and methods of national security threats via foreign investment have changed, CFIUS has evolved accordingly to keep pace—a trend that must continue for CFIUS to properly address the new threats posed by TikTok and foreign-made software applications like it. ¹⁶

^{12.} Exec. Order No. 11,858, 40 Fed. Reg. 20,263 (May 7, 1975).

^{13.} *Id.* at 20,263–64 (describing CFIUS' purpose with the Executive Branch as "monitoring the impact of foreign investment in the United States" and authorizing CFIUS to make recommendations to the National Security Council and Economic Policy Board).

^{14.} Id.

^{15.} See Committee Composition, U.S. DEP'T OF THE TREASURY, https://home.treasury.gov/policy-issues/international/the-committee-on-foreign-investment-in-the-united-states-cfius/cfius-overview (last visited August 27, 2021) (providing an overview of CFIUS); see also James K. Jackson, Cong. Rsch. Serv., RL33388, The Committee on Foreign Investment in the United States (CFIUS) 1 (2020), https://fas.org/sgp/crs/natsec/RL33388.pdf (outlining the history of CFIUS).

^{16.} Infra Part II.B.-C..

A. Background

During its early days, CFIUS operated in relative obscurity—meeting a mere ten times between 1975 and 1980.¹⁷ In 1988, Congress passed the Exon–Florio Amendment to § 721 of the Defense Production Act of 1950, which authorized the president to investigate foreign investment in U.S. companies and prohibit transactions where there was a reasonable belief that the foreign interest exercising control might threaten national security.¹⁸ Upon passage of this amendment, President Ronald Reagan signed EO 12,661, delegating this power to CFIUS.¹⁹

In 1991, the Treasury Department issued final regulations to implement Exon–Florio and established an essentially voluntary process through which firms provided notice to CFIUS of transactions for review.²⁰ The regulations also listed potential post-transaction consequences for acquisitions that failed Committee review, such as divestment.²¹ In 1992, Congress passed another amendment to Exon–Florio.²² This amendment *required* CFIUS to review any transaction where an entity controlled by, or acting on behalf of, a foreign government sought to engage in a transaction, which might pose a threat to national security.²³

In 2018, Congress again expanded CFIUS' jurisdiction with the passage of the Foreign Investment Risk Review Modernization Act (FIRRMA).²⁴ The Treasury Department issued two sets of final regulations in January 2020, which implemented the FIRRMA changes and formulated CFIUS as it exists today.²⁵ These regulations brought more transactions under CFIUS' jurisdiction by expanding mandatory notice requirements and giving CFIUS authority over certain non-

- 17. JACKSON, supra note 15, at 6.
- 18. 50 U.S.C. § 2170; JACKSON, *supra* note 15, at 7.
- 19. Exec. Order No. 12,661, 54 Fed. Reg. 779, 779 (Dec. 27, 1988).
- 20. JACKSON, supra note 15, at 8.
- 21. *Id.*; *See Divestment, supra* note 6 and accompanying text (defining divestment as a company selling off some or all of their assets).
 - 22. JACKSON, supra note 15, at 9.
- 23. National Defense Authorization Act for Fiscal Year 1993, Pub. L. No. 102-484, § 837(b), 106 Stat. 2315 (2020) (describing such threat as arising out of foreign ownership or control of a person or entity engaged in interstate commerce).
- 24. See generally Foreign Investment Risk Review Modernization Act (FIRRMA) of 2018, Pub. L. No. 115-232, §§ 1701–28, 132 Stat. 2173 (codified as amended in scattered sections of 50 U.S.C.).
- 25. Michael E. Leiter et al, CFIUS' Final Rules: Broader Reach, Narrow Exceptions and Foretelling Future Change, SKADDEN (Jan. 16, 2020), https://www.skadden.com/insights/publications/2020/01/cfius-final-rules.

controlling investments in U.S.-owned technology, infrastructure, or data (TID) businesses.²⁶

The new regulation covering TID businesses reflects the economic realities of modern-day cross-border transactions, which increasingly involve personal identifiable data.²⁷ The regulation sorts identifiable data into the following categories: financial data, data in a consumer report, medical data, non-public electronic communications, geolocation data, biometrics, data used to obtain a government-issued identification or security status, and genetic sequencing data.²⁸ These types of personal data, some of which are collected by TikTok, are extremely valuable in today's market, and thus concurrently creates incentives for foreign investment and a need to protect U.S. consumers.²⁹

B. Notable CFIUS Actions

Though CFIUS has maintained a low profile throughout most of its existence, the TikTok saga was not its first foray into the headlines. In 2006, CFIUS approved Dubai Ports World's (DPW's) acquisition of the U.K.-based Peninsular & Oriental Steam Navigation Company.³⁰ Since a foreign government owned DPW via a holding company, this acquisition effectively placed six ports on the U.S. Eastern Seaboard and Gulf Coast outside of domestic control.³¹ Following bipartisan backlash and faced with possible congressional nullification of the CFIUS-

^{26.} Regulations Pertaining to Certain Investments in the United States by Foreign Persons, 31 C.F.R. §§ 800.248(a)–(c) (2020) (using "TID" to refer to technology, infrastructure, and data).

^{27.} See, e.g., 31 C.F.R. § 800.211(3)(i) (2020) (giving CFIUS jurisdiction over foreign involvement in a U.S. business which maintains or collects the data of persons in the United States).

^{28.} Id. at § 800.241(a)(1)(ii). See generally Head of CFIUS Provides Intel on Non-Notified Transactions, More, FOREIGN INV. WATCH (Oct. 6, 2020), https://foreigninvestmentwatch.com/head-of-cfius-provides-intel-on-non-notified-transactions-more/ (relaying the warning of the former head of CFIUS that practitioners should not interpret the regulation's list data subject to regulation as exclusive).

^{29.} David Lazarus, *Shadowy Data Brokers Make the Most of Their Invisibility Cloak*, L.A. TIMES (Nov. 9, 2019), https://www.latimes.com/business/story/2019-11-05/column-data-brokers (reporting that the data brokerage industry is worth about 200 billion dollars).

^{30.} Press Release, U.S. Dep't of the Treasury, CFIUS and the Protection of the National Security in the Dubai Ports World Bid for Port Operations (Feb. 24, 2006), https://www.treasury.gov/press-center/press-releases/Pages/js4071.aspx.; Neil King Jr. & Greg Hitt, *Dubai Ports World Sells U.S. Assets*, WALL St. J. (Dec. 12, 2006), https://www.wsj.com/articles/SB116584567567746444.

^{31.} King & Hitt, supra note 30.

approved deal, DPW voluntarily sold their holdings to a New York-based asset management company before any divestment could be ordered.³² The DPW incident highlights how the CFIUS process can be politicized and subjugated to the whims of public sentiment, a reality that some feel now applies to TikTok.³³

CFIUS subsequently reviewed the merger of a foreign-based company, Alcatel, with a domestic telecommunications equipment company.³⁴ The parties voluntarily notified CFIUS of the transaction who ultimately recommended that President George W. Bush approve the deal.³⁵ President Bush approved the merger but conditioned his approval on the parties' acceptance of two confidential national security agreements, including a right to reopen investigation, a first in CFIUS' history.³⁶

After Alcatel, CFIUS action grew steadily, and today, nearly fifty years after its formation, the Committee is busier than ever.³⁷ CFIUS' Annual Report to Congress for calendar year 2019 shows that CFIUS received notices for review of over 1,500 transactions and conducted over 800 investigations, five of which resulted in presidential decisions. ³⁸ Thus, it seems that the Divestment Order to TikTok is not an outgrowth of the Committee's recent increase in activity; but instead, it arguably

^{32.} *Id. See generally* Julio L. Rotemberg, *The Dubai Ports World Debacle and Its Afternath*, HARV. BUS. SCH. 9-707-014 (2007) (discussing the event in detail and explaining how public outcry stopped the deal).

^{33.} See Seung Min Kim & Rachel Lerman, Trump's Vow to Ban TikTok Reflects GOP's anti-China Posture Ahead of Elections, WASH. POST (Aug. 1, 2020), https://www.washingtonpost.com/politics/trumps-vow-to-ban-tiktok-reflects-gops-anti-china-posture-ahead-of-elections/2020/08/01/5bf1f9ea-d40d-11ea-8c55-61e7fa5e82ab_story.html (describing that the EO's yielded a hostile posture toward Beijing and echoed a broader, anti-China sentiment within the Republican Party).

^{34.} Alcatel/Lucent Merger to Proceed Following President Bush's Acceptance of CFIUS's Recommendation for Approval, GIBSON DUNN (Nov. 28, 2006), https://www.gibsondunn.com/alcatellucent-merger-to-proceed-following-president-bushs-acceptance-of-cfiuss-recommend ation-for-approval/.

^{35.} *Id*.

^{36.} *Id.*; Client Memorandum, WILLKIE (Dec. 22, 2006), http://www.willkie.com/-/media/files/publications/2006/12/president-bush-reserves-power-to-withdraw-approv__/files/presidentbushreserves-power-to-withdraw-approv__.pdf.

^{37.} See JACKSON, supra note 15, at 35 (reporting a steady uptick in activity between 2009 and 2017).

^{38.} See generally CFIUS ANNUAL REPORT TO CONGRESS 4 (2019), https://home.treasury.go v/system/files/206/CFIUS-Public-Annual-Report-CY-2019.pdf. See 31 C.F.R. § 800.301–.307 (2020) (describing the of the types of control transactions that are subject to CFIUS review); 31 C.F.R. § 800.211 (2020) (stating that CFIUS has jurisdiction over TID transactions).

creates a new mechanism through which the Committee can continue to expand its influence.³⁹

C. CFIUS in Court: Ralls Corp.

CFIUS action has only been challenged once in court. In March 2012, a Chinese company called the Ralls Corporation (Ralls) purchased four American companies that were in the process of constructing wind farms in Oregon.⁴⁰ In July 2012, after reviewing the deal, CFIUS ordered mitigation measures due to concerns about the risks associated with a Chinese company owning property near restricted areas used by the U.S. Navy.⁴¹ Without giving Ralls notice of the evidence against them, or an opportunity to rebut it, CFIUS recommended divestiture to President Barack Obama, which he ordered in September 2012.⁴²

Ralls promptly challenged the action in court.⁴³ As a matter of first impression, the D.C. Circuit in *Ralls Corp. v. Committee on Foreign Investment*⁴⁴ held that there was no "clear and convincing evidence" that Congress intended to bar judicial review of the executive action.⁴⁵ The court also held that the deprivation of property violated Ralls' due process rights because the government did not provide access to or notice of the unclassified information that informed CFIUS' decision.⁴⁶ On remand, the District Court ruled that the President's mandate should remain in place while Ralls received its due process and prepared to hear arguments about the order's mootness.⁴⁷ Because the parties settled shortly after the District Court's remand ruling, the proceeding never occurred.⁴⁸ *Ralls Corp.* is

^{39.} See infra, Part II.A. (describing that the Divestment Order represents a broadening of CFIUS's jurisdiction).

^{40.} Christopher M. Fitzpatrick, Note, Where Ralls Went Wrong: CFIUS, the Courts, and the Balance of Liberty and Security, 101 CORNELL L. REV. 1087, 1092 (2016); Noel J. Francisco, D.C. Circuit Holds that CFIUS Must Provide Due Process Before Prohibiting a Transaction, JONES DAY (July 2014), https://www.jonesday.com/en/insights/2014/07/dc-circuit-holds-that-cfius-must-provide-due-process-before-prohibiting-a-transaction.

^{41.} Fitzpatrick, supra note 40, at 1092–93.

^{42.} Id. at 1093; Ralls Corp. v. Comm. on Foreign Inv., 758 F.3d 296, 306 (D.C. Cir. 2014).

^{43.} Fitzpatrick, supra note 40 at 1094.

^{44. 758} F.3d 296 (D.C. Cir. 2014).

^{45.} Id. at 311.

^{46.} Id. at 319.

^{47.} Ralls Corp. v. Comm. on Foreign Inv., Nos. 12–1513, 12–2026 (ABJ), 2014 U.S. Dist. LEXIS 177868 *2-3 (D.D.C. 2014).

^{48.} Ralls and U.S. Government Settle Only CFIUS Suit in History, STEPTOE: INTERNATIONAL COMPLIANCE BLOG (Oct. 14, 2015), https://www.steptoeinternationalcomplianceblog.com

important not only because it is the only CFIUS action tried in court, but also because ByteDance invoked it as precedent in its own legal efforts to fight EO 13,942 and the Divestment Order.⁴⁹

II. TIKTOK: SHOULD WE BE CONCERNED ABOUT THE SOCIAL MEDIA GIANT?

While the Trump Administration's threat to ban TikTok may have seemed extreme, there are real national security concerns with TikTok and similar foreign-made applications that operate, or seek to operate, in the United States.⁵⁰ Part II of this Comment will recount the rise of TikTok in the United States and detail the specific national security concerns surrounding the capture and storage of U.S. users' personal data, the threats posed by foreign-made A.I., and the challenges of A.I. regulation.

A. The Rise of a Cultural Phenomenon

ByteDance entered the U.S. market via a nearly \$1 billion acquisition of U.S.-based Musical.ly in 2017.⁵¹ Though this is exactly the type of deal that the new FIRRMA regulations intend to capture, the regulations were not in place at the time of the acquisition, and the deal was never reviewed by CFIUS since the parties were not required to provide notice.⁵² TikTok's U.S. user base grew quickly between 2018 and 2019 as the application continued to gain popularity around the world.⁵³ In June of 2020, TikTok

/2015/10/ralls-and-u-s-government-settle-only-cfius-suit-in-history/.

- 49. Complaint at 21-22, TikTok v. Trump, No. 1:20-CV-02658(CJN), 2020 WL 7233557, at *1 (D.D.C. Dec. 7, 2020) (alleging that CFIUS is similarly attempting to deprive them of their assets without satisfactory due process).
- 50. Iqbal, supra note 1; Brian Fung, TikTok is a National Security Threat, U.S. Politicians Say. Here's What Experts Think, CNN: BUSINESS (July 9, 2020), https://www.cnn.com/2020/07/09/tech/tiktok-security-threat/index.html (noting that experts believe that the United States' power and influence could be plausibly weakened by how TikTok handles content and U.S. user data).
- 51. Taylor Walshe & Shining Tan, *TikTok on the Clock: A Summary of CFIUS's Investigation into ByteDance*, CTR. FOR STRATEGIC & INT'L STUD. (May 13, 2020), https://www.csis.org/blogs/trustee-china-hand/tiktok-clock-summary-cfiuss-investigation-bytedance; Blake & Abdollah, *supra* note 8.
- 52. Walshe & Tan, *supra* note 51; Leiter, *supra* note 25 (explaining that FIRRMA was passed, in part, as a response to growing concern that China could acquire domestic companies in order to collect intelligence on U.S. citizens).
- 53. See Iqbal, supra note 1 (detailing that TikTok's U.S. monthly user base increased to forty million from eleven million during a twenty-one-month period between 2018 and

exploded into U.S. headlines when it contributed to the disappointing attendance at a pre-election campaign rally for President Trump, causing its U.S. user base to swell once again.⁵⁴ Citing a need to curtail the influence of mobile applications developed and owned by companies in China, the Trump Administration banned TikTok by issuing EO 13,942 on August 6, 2020.⁵⁵ The Divestment Order followed on August 14, 2020, mandated the retroactive unwinding, similar to a contractual rescission, of ByteDance's 2017 acquisition of Musical.ly via a divestment of all assets used to support the application in the United States.⁵⁶

B. National Security Concerns

TikTok unquestionably falls under CFIUS' jurisdiction since it automatically collects many different types of user information such as location data, search history, and messaging content.⁵⁷ It also raises the same concerns that led to FIRRMA's passage—that data collected by Chinese-owned applications could be accessed by the Chinese government and used for nefarious purposes such as espionage or biological warfare.⁵⁸

- 2019); see also Blake & Abdollah, supra note 8 (reporting that, globally, TikTok was downloaded more than two billion times in April 2020).
- 54. Sarah Frier, *TikTok Teens Registered for Trump Tulsa Rally With No Plans to Go*, BLOOMBERG: POLITICS (June 21, 2020) https://www.bloomberg.com/news/articles/2020-06-21/tiktok-teens-reserved-trump-tulsa-tickets-with-no-plans-to-go?sref=QjdS4d5U (alleging that many users of the application registered for the event with no intention of attending); Iqbal, *supra* note 1 (showing that TikTok increased its U.S. monthly active user base from ninety-one million in May of 2020 to one hundred million in August of 2020).
- 55. See Exec. Order No. 13,942, 85 Fed. Reg. 48,637 (Aug. 6, 2020) (effecting a ban by prohibiting transactions related to the application); Press Release, U.S. Dep't of Commerce, Off. of Pub. Affs., Commerce Department Prohibits WeChat and TikTok Transactions to Protect the National Security of the United States (Sept. 18, 2020), https://2017-2021.commerce.gov/news/press-releases/2020/09/commerce-department-prohibits-wechat-and-tiktok-transactions-protect.html.
- 56. Exec. Order Regarding the Acquisition of Musical.ly by ByteDance Ltd. 85 Fed. Reg. 51,297 (Aug. 14, 2020); *Rescission*, BLACK'S LAW DICTIONARY (11th ed. 2019) (defining rescission as the unmaking of a contract).
- 57. See Regulations Pertaining to Certain Investments in the United States by Foreign Persons, 31 C.F.R. § 800.241 (2020); Robert McMillan & Liza Lin, TikTok User Data: What Does the App Collect and Why are U.S. Authorities Concerned?, WALL ST. J. (July 7, 2020), https://www.wsj.com/articles/tiktok-user-data-what-does-the-app-collect-and-why-are-u-s-authorities-concerned-11594157084.
- 58. Brian Spegele & Kate O'Keeffe, *China Maneuvers to Snag American Space Technology*, WALL St. J. (Dec. 4, 2018), https://www.wsj.com/articles/china-maneuvers-to-snag-top-

Since FIRRMA, CFIUS has taken actions against other Chinese-owned software applications that collect personal data from their users. In March of 2019, CFIUS ordered divestiture of Chinese interests in the dating app Grindr, which collects information about a user's dating habits, HIV status, and sexual orientation.⁵⁹ That same year, a major U.S. hotel operator purchased the hotel management software firm StayNTouch, Inc. after CFIUS raised concerns about its existing Chinese ownership and access to U.S. user data.⁶⁰

1. What TikTok Knows About Us: Your Data Tells a Story

To collect user data, TikTok accesses its users' microphones, cameras, photos, videos, contacts, and even records a user's unique rhythm they use to strike their keyboard—known as a "keystroke pattern." The application can track a user's location by accessing their IP address and GPS coordinates and can view banking data if a user chooses to share it or buys something

secret-boeing-satellite-technology-1543943490 (describing an acquisition as a veiled attempt to access satellite technology in use by the U.S. military); Eamon Javers, U.S. Blocked Chinese Purchase of San Diego Fertility Clinic Over Medical Data Security Concerns, CNBC: POLITICS (Oct. 16, 2020), https://www.cnbc.com/2020/10/16/trump-administration-blocked-chinese-purcha se-of-us-fertility-clinic.html (quoting the head of the Department of Justice National Security Division as saying that this information could be used in the worst case for "the development of some kind of biological weapon"); Leiter, supra note 25 and accompanying text.

- 59. David Hanke & De'Siree Reeves, CFIUS 2.0: "Sensitive Personal Data" in the National Security Context, ARENT FOX (Sept. 3, 2019), https://www.jdsupra.com/legalnews/cfius-2-0-sensitive-personal-data-in-91141/; STAYNTOUCH PRIVACY POLICY https://www.stayntouch.com/privacy/ (last visited June 27, 2021) (detailing that the application collects personal data such as name, company name, e-mail address, and billing information as supplied by the user).
- 60. Katy Stech Ferek, *Data Privacy Increasingly a Focus of National Security Reviews*, WALL St. J.: Tech (Sept. 14, 2020), https://www.wsj.com/articles/data-privacy-increasingly-a-focus-of-national-security-reviews-11600111141.
- 61. Brit McCandless Farmer, How TikTok Could Be Used for Disinformation and Espionage, CBS News (Nov. 15, 2020), https://www.cbsnews.com/news/tiktok-disinformation-espionage-60-minutes-2020-11-15/. See generally Rachel S. Martin, Note, Watch What You Type: As the FBI Records Your Keystrokes, the Fourth Amendment Develops Carpal Tunnel, 40 AM. CRIM. L. REV. 1271, 1273 (2003) (describing the legal controversy surrounding a device used by the FBI to record every keystroke entered into a target machine in order to record passwords it then used to access seized encrypted files); Abdulaziz Alzubaidi & Jugal Kalita, Authentication of Smartphone Users Using Behavioral Biometrics, 18 IEEE COMM. SURVS. & TUTORIALS 1998, 2004 (2016) (explaining how analyzing the nature of a typing motion can be used to authenticate a user of technology).

using the application.⁶² After only a few days of use, TikTok gets a pretty good idea of what the user looks like, how the user holds their phone, who the user's friends are, and what a user likes or is interested in.⁶³

While U.S.-based tech giants Facebook and Google engage in similar practices, TikTok's collection of user data is more problematic since the data could make its way into the hands of the Chinese government.⁶⁴ Specific concerns about TikTok and data protection stem from a 2016 Cybersecurity Law passed by China's National People's Congress that requires network operators to cooperate with Chinese authorities by allowing access to data and undefined "technical support," while also imposing data localization requirements.⁶⁵ The fundamental fear is that TikTok will have to comply with a request by the Chinese government for access to TikTok's network, or that Chinese regulators might be able to access it unilaterally.⁶⁶ If the data of U.S. TikTok users is accessed by the Chinese government, the consequences could be serious.⁶⁷ For example, if the Chinese government were able to identify the characteristics of a person hired by the CIA using the "user portrait" that individual's data creates, then the Chinese government could more effectively attempt to get one of its own spies hired at the CIA by submitting applications that mimic the model type of person the CIA typically hires.⁶⁸

^{62.} Shelly Banjo et al., *TikTok's Huge Data Harvesting Prompts U.S. Security Concerns*, BLOOMBERG: TECHNOLOGY (July 14, 2020), https://www.bloomberg.com/news/articles/2020-07-14/tiktok-s-massive-data-harvesting-prompts-u-s-security-concerns.

^{63.} *Id*.

^{64.} Id.

^{65.} Jack Wagner, *China's Cybersecurity Law: What You Need to Know*, THE DIPLOMAT (June 1, 2017), https://thediplomat.com/2017/06/chinas-cybersecurity-law-what-you-need-to-know/; 2016 Cybersecurity Law, art. 35 (China).

^{66.} Wagner, *supra* note 65; Yan Lou & Zhijing Yu, *China Issues New Measures on Cybersecurity Review of Network Product and Services*, COVINGTON (Apr. 27, 2020), https://www.insideprivacy.com/international/china-issues-new-measures-on-cybersecurity-review-of-network-products-and-services/ (detailing final regulations which subject companies to compliance of "cybersecurity review" by the Chinese government).

^{67.} Robert D. Williams, *Reflections on TikTok and Data Privacy as National Security*, LAWFARE: CHINA (Nov. 15, 2019), https://www.lawfareblog.com/reflections-tiktok-and-data-privacy-national-security (describing the Chinese government's ambitions to build massive data sets which might yield strategic information).

^{68.} See Farmer, supra note 61; User Portrait and Big Data Analysis, PROGRAMMER SOUGHT, https://www.programmersought.com/article/30965709180/ (last visited Aug. 28, 2021) (describing that data can yield insights to a user's gender, age, religion, business habits, frequency and duration of use of an application, and the content a user frequently browses).

There are other risks beyond just the identification and exploitation of an individual user's data. Big datasets or "data troves," which can yield information in the aggregate via advanced analytics, also raise serious concerns.⁶⁹ These big datasets can generate valuable insights, including some that researchers might not have intended to look for.⁷⁰ Thus, reports that China is intent on building massive datasets are certainly causes for alarm.⁷¹ In 2013, the U.S. government concluded that China was responsible for the hack of the Office of Personnel and Management that resulted in a massive loss of personal data for U.S. citizens.⁷² Data like this could be combined with personal data collected from an application like TikTok, or other legally-acquired data, to build a massive data set from which to pull insights and create policy.⁷³

TikTok has rejected any impropriety by publicly stating that it has never shared U.S. user data with the Chinese government and that it would not do so if asked.⁷⁴ Tiktok has also stated that all U.S. user data is stored in

- 69. See Susan Ariel Aaronson, Data Is Dangerous: Comparing the Risks that the United States, Canada, and Germany See in Data Troves 6–7 (CIGI Papers No. 24) (2020) https://www.cigionline.org/publications/data-dangerous-comparing-risks-united-states-canada-and-germany-see-data-troves; Derek Grossman et al., Chinese Views of Big Data Analytics 2 (Rand Corp.) (2020).
- 70. See Exec. Off. of the President, Big Data: Seizing Opportunities, Preserving Values 5, 7, 50 (2014), https://obamawhitehouse.archives.gov/sites/default/files/docs/big_data_privacy_report_may_1_2014.pdf (reporting that data is very valuable to businesses of all kinds and that data, along with the insights it generates, is exchanged commercially and that data clusters in large datasets can reveal unexpected relationships). The creators of an algorithm designed to pilot a helium balloon were stunned when they realized that the algorithm, unprompted, adjusted to the weather conditions by teaching itself an ancient human navigation technique that allowed the trip to conclude in record time. See Chris Baraniuk, How Google's Balloons Surprised Their Creator BBC: Machine Minds (Feb. 23, 2021), https://www.bbc.com/future/article/20210222-how-googles-hot-air-balloon-surprised-its-creators.
 - 71. Williams, supra note 67.
 - 72. Aaronson, supra note 69, at 7.
- 73. Williams, supra note 67; see also Aynne Kokas, China Already Has Your Data. Trump's TikTok and WeChat Bans Can't Stop That, WASH. POST (Aug. 11, 2020), https://www.washingtonpost.com/outlook/2020/08/11/tiktok-wechat-bans-ineffective/ (characterizing China's "data exfiltration" practices as pervasive and reporting that the Chinese government already has a "treasure trove" of data which it can use to support intelligence-gathering efforts for many decades to come).
- 74. Press Release, TikTok, Statement on TikTok's Content Moderation and Data Security Practices (Oct. 24, 2019), https://newsroom.tiktok.com/en-us/statement-on-tiktoks-content-moderation-and-data-security-practices.

the United States and that TikTok's data centers located entirely outside of China are not subject to Chinese law.⁷⁵ CFIUS expressed its skepticism in a July 30, 2020 letter to ByteDance's U.S. counsel.⁷⁶ It alleged that ByteDance has thousands of China-based employees who have access to the data of up to one hundred million U.S. TikTok user accounts and has not disclosed the number of queries these employees made into U.S. accounts.⁷⁷ These are the type of national security concerns that led to the Divestment Order mandating ByteDance's divestment from TikTok.⁷⁸

2. How TikTok Knows What We Like: The TikTok Algorithm

TikTok's algorithm also raises national security concerns.⁷⁹ The quality of the algorithm and the application's unique recommendation system set TikTok apart from its competitors.⁸⁰ While applications like Facebook traditionally rely only on active user participation and thus base recommendations on content which a user "likes" or "shares," the distinct power of TikTok's recommendation system lies in its ability to capture passive and subtle behavior patterns.⁸¹ Such behavior includes the time a user spends watching a video before scrolling to the next one, the number of times a user allows a video to loop, and any particular category of sounds and effects that a user might be drawn to—nuances which make TikTok's recommendation system extremely powerful and valuable.⁸²

- 75. *Id*.
- 76. Complaint, supra note 49, at 48.
- 77. *Id*.
- 78. See Exec. Order Regarding the Acquisition of Musical.ly by ByteDance Ltd., 85 Fed. Reg. 51,297, 51,297 (Aug. 14, 2020).
 - 79. See infra Part II.C. (describing the general threats posed by algorithms).
- 80. Xueyin Zha, *The Unique Power of TikTok's Algorithm*, INTERPRETER (Jan. 8, 2021), https://www.lowyinstitute.org/the-interpreter/unique-power-tiktok-s-algorithm (characterizing the algorithm as transformative in the manner that human beings consume, navigate, and interact with information).
- 81. Roomy Khan, *TikTok: Why is Everyone in a Tizzy?*, FORBES (Sept. 19, 2020), https://www.forbes.com/sites/roomykhan/2020/09/19/tiktok-why-is-everyone-in-a-tizzy/?sh=451fe40c33d5; WIKIPEDIA, *Facebook Like Button*, https://en.wikipedia.org/wiki/Facebook_like_button (last visited Aug. 28, 2021) (describing the like button as enabling a user to interact with content on the platform and detailing that "liked" content will be reported to the user's network).
- 82. Khan, *supra* note 81 (describing TikTok's algorithm as "incredibly engaging" and noting that the algorithm is designed to choose content on its own to display to the user as opposed to the algorithms of other platforms that present a user with content options from which to choose); *see* Zha, *supra* note 80 and accompanying text; Emma Sandler, *What the Potential Oracle Deal Says About*

Yet, TikTok's recommendation system is still subject to the same flaws as its contemporaries. One way these highly curated content streams form is through user interaction and preferences a user sets. ⁸³ Another way is by what's known as the "filter bubble" effect, which occurs when the content is filtered by the algorithms themselves. ⁸⁴ While it may seem to the user that they are in control of what content appears in their feed, the reality is that what goes in—and more importantly what is left out—is completely out of their control. ⁸⁵ While TikTok concedes that these bubbles exist and recognizes that they can lead to the spread of misinformation, the application claims that they study "filter bubbles" continually to learn how to better break them up. ⁸⁶

C. Challenges of A.I. Regulation

The fundamental challenge with regulating A.I. like TikTok's recommendation system is that they are "black boxes," meaning that whatever happens inside the algorithm is known only to the organization that uses it—and even they do not always understand the technology.⁸⁷ The level of complexity is immense even for competent observers, and the calculations that algorithms make can consist of millions of data points, sometimes leaving even the programmer unable to predict the A.I.'s final

- the Power of TikTok Users, GLOSSY (Sept. 15, 2020), https://www.glossy.co/beauty/what-the-potential-oracle-deal-says-about-the-power-of-tiktoks-users/ (recounting a marketing executive's view that TikTok's value to brands is the algorithm and describing the algorithm's power to learn user preferences and curate content as "unmatched"); Brian X. Chen & Taylor Lorenz, We Tested Instagram Reels, the TikTok Clone. What a Dud, N.Y. TIMES (Aug. 12, 2020), https://www.nytimes.com/2020/08/12/technology/personaltech/tested-facebook-reels-tiktok-clone-dud.html (recounting TikTok competitor Instagram's attempt to duplicate TikTok's experience for its users and providing their opinion about the results).
- 83. Gould, Are You in a Social Media Bubble? Here's How to Tell, NBC NEWS (Oct. 21, 2019), https://www.nbcnews.com/better/lifestyle/problem-social-media-reinforcement-bubbles-what-you-can-do-about-ncna1063896.
 - 84. *Id*.
 - 85. Id. (stating that "there is little we can do to impact existing algorithms").
- 86. Sara Fischer, *Inside TikTok's Killer Algorithm*, AXIOS (Sept. 10, 2020), https://www.axios.com/inside-tiktoks-killer-algorithm-52454fb2-6bab-405d-a407-31954ac1cf16.html. *But see* Maria Mellor, *Why is TikTok Creating Filter Bubbles Based on Your Race?*, WIRED (Feb. 28, 2020), https://www.wired.co.uk/article/tiktok-filter-bubbles (implying that there is not much that users or moderators can do to diversify content since TikTok's algorithms recommend content-based activity of all its users and therefore push users into bubbles).
- 87. Dr. Mark van Rijmenam, Algorithms are Black Boxes, that is Why We Need Explainable A.I., DATAFLOQ (Jan. 31, 2017), https://datafloq.com/read/algorithms-black-boxes-need-explainable-AI/2639.

decision.⁸⁸ Because of this opaqueness, "explainability"—the idea that users should be offered an easily understood chain of reasoning for the decisions made by the algorithm—is a possible approach to regulation.⁸⁹ Satisfying this "why" requirement will help combat the content bias and discrimination produced by "filter-bubbles."⁹⁰

The U.S. government has taken concrete steps toward addressing the issues posed by A.I., though not exactly those posed by TikTok's algorithm. Section 1051 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 established the independent National Security Commission on Artificial Intelligence (NSCAI), whose mission is to review advances in A.I. and related machine learning developments, gauge the competitiveness of the United States in these fields, and report their findings to Congress. ⁹¹ Like CFIUS, NSCAI members are appointed by ranking members of various federal agencies and congressional committees. ⁹² Thus, NSCAI benefits from a broad spectrum of federal expertise. In its March 2021 report, NSCAI details that the U.S. government generally lags behind commercial A.I. technology and that the Chinese government is determined to become the global A.I. leader in the future. However, the report mainly focuses on

^{88.} KILIAN VIETH & JOANNA BRONOWICKA, ETHICS OF ALGORITHMS 4 (Ctr. Internet & Hum. Rts.) (2015), https://cihr.eu/ethics-of-algorithms/ (detailing that the complexity of algorithms produces opacity that even experts struggle with); see also Baraniuk, supra note 70 and accompanying text.

^{89.} van Rijmenam, supra note 87.

^{90.} Id.; Philip M. Napoli, What if More Speech is No Longer the Solution? First Amendment Theory Meets Fake News and the Filter Bubble, 70 FED. COMM. L. J. 55, 77-78 (2018) (positing that the filter bubble effect can filter out factual news, which contradicts previously consumed fake news); Spencer M. Mainka, Algorithm-Based Recruiting Technology in the Workplace, 4 TEX. A&M J. Prop. L. 801, 811 (2019) (explaining how recruiters seeking job candidates by using machine learning algorithms risk unintentional violation of federal employment discrimination laws if characteristics like race and sex are not accounted for in the algorithm). See generally Sandra J. Mayson, Bias In, Bias Out, 128 YALE L. J. 2218 (2019) (arguing that algorithmic software meant to assess the risk of a person's future criminal behavior was biased toward African Americans due to inherent racial biases in the U.S. criminal justice system); Romy Ellenbogen & Kathleen McGrory, Lawsuit: Pasco Intelligence Program Violated Citizen's Rights, TAMPA BAY TIMES (Mar. 11, 2021), https://www.tampabay.com/investigations/20 21/03/11/lawsuit-pasco-intelligence-program-violated-citizens-rights/ (detailing a lawsuit filed against a county police department challenging the constitutionality of a program that uses an algorithm to identify individuals likely to commit a crime and then initiate regular contact with the individual to allegedly prevent the future commission of a crime).

^{91.} John S. McCain National Defense Authorization Act for Fiscal Year 2019, Pub. L. No. 115-232, § 1051(a)–(c), 132 Stat. 1636, 1962–65 (2018).

^{92.} Id. at § 1051(a)(4).

defense applications of A.I. and export controls and thus does not align exactly with the threat posed by TikTok.⁹³

In December 2020, the White House issued final guidance for EO 13,859 and imposed a May 2021 deadline by which federal agencies had to develop plans and implement the guidance.⁹⁴ Since much of the language is broad and mobilizing rather than specifically tailored to the execution of well-defined policy proposals, EO 13,859 was meant as the first step in a longer process.⁹⁵ Though the Biden Administration has not taken any specific action regarding EO 13,859, it did announce its own initiative to spur A.I. innovation.⁹⁶

In terms of regulation, the European Union (EU) can serve as a model for reform. In February of 2020, the European Commission, the executive branch of the EU, laid out factors meant to guide A.I. regulatory framework and further issued specific guidance on issues such as transparency in July 2020.⁹⁷ According to the European Commission, transparency has two main elements: access to reliable information about how the A.I. works, including how it was trained, and access to information

- 93. NAT'L SEC. COMM'N ON A.I., 2021 FINAL REPORT 14, 24, 26, 496, 587 (2021), www.nscai.gov/wp-content/uploads/2021/03/Full-Report-Digital-1.pdf (last visited June 27, 2021) (speaking about export control in the context of preventing the theft of American intellectual property and protecting technology industries that are critical to national security).
- 94. See Exec. Order No. 13,859, 84 C.F.R. 3967, 3967–68 (2019) (proclaiming a commitment by all executive agencies and departments to U.S.-driven breakthroughs in A.I. via federal investment in research and development); The White House, Guidance for Regulation of Artificial Intelligence Applications (Nov. 17, 2020), https://www.whitehouse.gov/wp-content/uploads/2020/01/Draft-OMB-Memo-on-Regulation-of-AI-1-7-19.pdf (listing guiding principles for future A.I. regulatory framework); Katori Copeland & K.C. Halm, White House Finalizes A.I. Regulatory Framework and Directs Agencies to Develop Plans for A.I. Regulation and "Non-Regulation," Davis Wright Tremaine LLP (Dec. 10, 2020), https://www.dwt.com/blogs/artificial-intelligence-law-advisor/2020/12/white-house-omb-ai-guidance-final-rules.
- 95. See generally Exec. Order No. 13,859, 84 C.F.R. 3967, 3967 (2019) (broadly calling for an increase in research and development for A.I. as well as increased educational investments into student and faculty fellowships which are A.I.-focused).
- 96. Press Release, White House, The Biden Administration Launches National Artificial Intelligence Research Resource Task Force (June 10, 2021), https://www.whitehouse.gov/ostp/news-updates/2021/06/10/the-biden-administration-launches-the-national-artificial-intelligence-research-resource-task-force/ (announcing the formation of various committees that will produce a report detailing strategies to promote A.I. development).
- 97. Gabriela Bar, Explainability as a Legal Requirement for Artificial Intelligence, MEDIUM (Nov. 27, 2020), https://medium.com/womeninai/explainability-as-a-legal-requirement-for-artificial-intelligence-systems-66da5a0aa693 (describing the European Commission's White Paper on A.I. and the European Commission's official Checklist for Trustworthy A.I.).

that explains the rationale for decisions made by the algorithm, calibrated for specific audiences. In theory, this "transparency" would allow for legally required disclosures to vary based on the audience, i.e., a more detailed disclosure would be given to a regulator with more technical expertise than an ordinary user of an application like TikTok. Under this scheme, the fundamental questions underlying the need for transparency—what the acceptable level of autonomy in an A.I. system is, and what the minimum level of explanation of its outputs should be—would not change.

III. AUGUST 6, 2020 AND AUGUST 14, 2020 EXECUTIVE ORDERS

Prior to the events that preceded the EOs of August 6 and 14,¹⁰¹ the U.S. government had already recognized that TikTok posed credible threats to national security.¹⁰² After investigation, CFIUS and the Treasury Department reached a similar conclusion.¹⁰³ Though the Biden Administration will likely

98. Id.

99. See id.

100. Id.

101. Frier, *supra* note 54 (describing the event where many TikTok users registered to a pre-election campaign rally for President Trump with no intention of attending).

102. See supra, Part II.ByteDance entered the U.S. market via a nearly \$1 billion acquisition of U.S.-based Musically in 2017. Though this is exactly the type of deal that the new FIRRMA regulations intend to capture, the regulations were not in place at the time of the acquisition, and the deal was never reviewed by CFIUS since the parties were not required to provide notice. TikTok's U.S. user base grew quickly between 2018 and 2019 as the application continued to gain popularity around the world. In June of 2020, TikTok exploded into U.S. headlines when it contributed to the disappointing attendance at a preelection campaign rally for President Trump, causing its U.S. user base to swell once again. Citing a need to curtail the influence of mobile applications developed and owned by companies in China, the Trump Administration banned TikTok by issuing EO 13,942 on August 6, 2020. The Divestment Order followed on August 14, 2020, mandated the retroactive unwinding, similar to a contractual rescission, of ByteDance's 2017 acquisition of Musically via a divestment of all assets used to support the application in the United States. .; Abram Brown, Is This the Real Reason Trump Wants to Ban TikTok?, FORBES (Aug. 1, 2020), https://www.forbes.com/sites/abrambrown/2020/08/01/is-this-the-real-reason-whytrump-wants-to-ban-tiktok/?sh=218fb26d4aed (theorizing that the low attendance was the result of an effort coordinated by TikTok users and detailing that certain U.S. personnel had already been prohibited from using the application due to national security concerns); U.S. Navy, REUTERS, supra note 4 and accompanying text.

103. See Exec. Order Regarding the Acquisition of Musical.ly by ByteDance Ltd., 85 Fed. Reg. 51,297, 51,297 (Aug. 14, 2020); Complaint, supra note 49 at 44–46 (pointing to Chinese national security laws, ByteDance's alleged ties to the Chinese government, and history of content censoring).

not follow neither EOs, the approach taken by the Trump Administration may resurface in the future; thus, the EOs deserve an analysis.

A. Legal Authority

The president's authority to issue EOs derives from Article II, Section Two of the U.S. Constitution, which empowers the president to direct and oversee various functions of the executive branch. LOG 13,942, the Order which sought to ban TikTok, invoked President Trump's emergency power to regulate domestic transactions under the International Emergency Economic Powers Act (IEEPA). LOG 13,942 also relied upon President Trump's authority to empower any head of an agency or department of the executive branch to perform "any function which is vested in the President by law." LOG Specifically, EO 13,942 relied on the aforementioned authority to empower the Secretary of Commerce to identify and prohibit any domestic individual or entity from transacting with TikTok so as to make it inoperable.

The subsequent Divestment Order is based on the president's authority to review foreign investment, on his own or through CFIUS, as delegated to him by the Exon–Florio amendment to Section 721 of the Defense Production Act of 1950.¹⁰⁸ Citing national security concerns, Section 2(b)(i) of the Divestment Order mandates that ByteDance divest itself of all interests and rights in any assets or property, tangible or intangible, "wherever located, used to enable or support ByteDance's operation of the TikTok application in the United States, as determined by the Committee." Additionally, Section 2(b)(ii) of the Order mandates the divestment of rights in any U.S. user data derived from the TikTok application or its predecessor,

^{104.} U.S. CONST. art. 2, § 2.

^{105. 50} U.S.C. § 1701 ("Any authority granted to the President ... may be exercised to deal with any . . . extraordinary threat, which has its source ... outside the United States, to the national security ... of the United States, if the President declares a national emergency with respect to such threat."); see, e.g., Exec. Order No. 13,810, 82 Fed. Reg. 44,705, 44,705 (Sept. 20, 2017) (imposing additional sanctions on the country of North Korea by relying on the IEEA to prohibit transactions, trade, and capital flow to the country from the United States).

^{106. 3} U.S.C. § 301; see, e.g., Exec. Order No. 13,859, 77 Fed. Reg. 5371, 5371 (Jan. 27, 2012) (assigning certain presidential powers concerning the armed forces to the Secretary of Defense).

^{107.} Exec. Order 13,942, 85 Fed. Reg. 48,637, 48,637–38 (Aug. 11, 2020).

^{108.} See generally 50 U.S.C. § 4565 (describing CFIUS' power to exercise the president's authority to review certain mergers and acquisitions).

^{109.} Exec. Order Regarding the Acquisition of Musical.ly by ByteDance Ltd. 85 Fed. Reg. 51, 297, 51,297 (Aug. 14, 2020).

Musical.ly.¹¹⁰ These specific measures are rooted in the president's power to take action regarding transactions that threaten national security.¹¹¹

The scope of the Divestment Order is unprecedented.¹¹² By regulation, CFIUS' jurisdiction is limited to "covered transactions."¹¹³ The position of the Divestment Order suggests that CFIUS feels that it can order divestiture of assets that were not included, or may not have even existed, at the time of the transaction.¹¹⁴ Additionally, the inclusion of "wherever located" suggests that CFIUS believes it can now reach assets not physically present in the United States.¹¹⁵ If we retroactively apply this standard to *Ralls Corp.*, then any pre-existing or subsequently acquired asset or property, tangible or intangible, used to support the construction of the wind farms, would be subject to divestiture regardless of its location.¹¹⁶

Historically, CFIUS has not expressed this extraterritorial jurisdiction since its central mission has been to ensure that critical national defense and national security assets do not come under the control of foreign persons. 117 For example, when the Obama Administration blocked Chinese investors from acquiring the U.S. division of Aixtron, a German semiconductor manufacturer, the EO expressly limited CFIUS jurisdiction to any asset "used in . . . interstate commerce in the United States." 118 Furthermore, nothing in FIRMMA's legislative history indicates that Congress intended to expand CFIUS' jurisdiction in this way. 119 Thus, the outcome of the TikTok

^{110.} *Id*.

^{111. 50} U.S.C. § 4565(d)(1).

^{112.} Supra Part II.A. (describing that the Divestment Order represents a broadening of CFIUS's jurisdiction).

^{113.} See generally supra Part I.A. (noting that FIRRMA expanded the "covered transactions" umbrella to include non-controlling investments in certain technologies and real estate in addition to the existing authority over investment which resulted in foreign control of a U.S. business).

^{114.} See Exec. Order Regarding the Acquisition of Musically by ByteDance Ltd., 85 Fed. Reg. 51,297, 51, 297 (Aug. 14, 2020)

^{115.} Id.

^{116.} See supra Part I.C. (discussing the CFIUS review of the Ralls transaction and the litigation which followed).

^{117.} Paul Marquardt & Chase Kaniecki, *President Trump Orders TikTok Divestment; Sweeping Order Appears to Indicate a Broadening of CFIUS' Jurisdiction*, CLEARY GOTTLIEB: CLEARY M & A AND CORP. GOVERNANCE WATCH (Aug. 21, 2020), https://www.clearymawatch.com/2020/08/president-trump-orders-tiktok-divestment-sweeping-order-appears-to-indicate-a-broadening-of-cfiuss-jurisdiction/.

^{118.} *Id.*; Exec. Order Regarding the Proposed Acquisition of a Controlling Interest in Axitron SE by Grand Chip Investment GmbH, 81 Fed. Reg. 88,607, 88,607 (Dec. 2, 2016).

^{119.} See H.R. REP. NO. 115-784 (2018); H.R. 4311, The Foreign Investment Risk Review

saga will play a role in determining whether or not these mandates represent an anomaly or a significant change in CFIUS' jurisdictional scope. 120

B. Enforceability

The enforceability analysis of the EOs must be split into two prongs: judicial enforcement and administrative enforcement. ByteDance quickly challenged both EOs in court.¹²¹ The District Court for the District of Columbia initially granted a preliminary injunction against President Trump's EO 13,942, which sought to effectively ban the application.¹²² President Biden's Department of Justice has since agreed that the action against ByteDance be dismissed.¹²³

In their Complaint, ByteDance argued that the Divestment Order exceeded the scope of the government's authority and was *ultra vires* since it sought to compel assets that did not arise out of the covered transaction to address purported national security threats.¹²⁴ Additionally, ByteDance argued that the Divestment Order deprived them of the due process requirements described in *Ralls Corp.*.¹²⁵

The court remanded *Ralls Corp*. on the theory that the Ralls Corporation did not receive due process during its CFIUS proceeding. The court articulated that proper due process in a CFIUS proceeding requires that the affected party be informed of the action, be granted access to the unclassified evidence on which the action relied, and be afforded an opportunity to rebut it. ByteDance's counsel argued that ByteDance was

Modernization Act of 2017, Hearing Before the Subcomm. on Monetary Policy and Trade of the H. Comm. on Fin. Servs., 115th Cong. (2018); James K. Jackson, Cong. Rsch. Serv., IF11334, CFIUS: New Investment Regulations (2020), http://www.crsreports.congress.gov/product/pdf/IF/IF11334.

- 120. Marquardt & Kaniecki, supra note 117.
- 121. Press Release, TikTok, Why We're Suing the Administration (Aug. 24, 2020), https://newsroom.tiktok.com/en-us/tiktok-files-lawsuit.
- 122. Tik Tok v. Trump, No. 1:20-CV-02658(CJN), 2020 WL 7233557, at *115 (D.D.C. Dec. 7, 2020)
 - 123. Id.; PYMTS, supra note 10.
 - 124. Complaint, supra note 49, at 19-21.
- 125. Noel J. Francisco, D.C. Circuit Holds that CFIUS Must Provide Due Process Before Prohibiting a Transaction, JONES DAY INSIGHTS (July 2014), https://www.jonesday.com/en/insights/2014/07/dc-circuit-holds-that-cfius-must-provide-due-process-before-prohibiting-a-transaction.
- 126. Ralls Corp. v. Comm. on Foreign Inv., 758 F.3d 296, 307–14, 319 (D.C. Cir. 2014); see supra Part I.C..
 - 127. Id. at 319.

similarly denied this right.¹²⁸ The Treasury Department's July 30, 2020 letter to ByteDance's counsel invited ByteDance to provide CFIUS with "additional relevant information" but did not provide ByteDance with the non-classified evidence against it, which effectively limited ByteDance's ability to rebut the allegations or attempt to comply with them.¹²⁹ The facts were sufficiently analogous to *Ralls Corp*. that a ruling court could have found that a question of material fact existed as to whether ByteDance was given the due process defined under *Ralls Corp*..¹³⁰ This theory will not be tested, however, since President Biden's Department of Justice has agreed to dismiss the matter.¹³¹ A judicial ruling in favor of ByteDance would have been clarifying since it would have more firmly established the precedent set in *Ralls Corp*., better protected against future CFIUS determinations that seem arbitrary, and better informed practitioners preparing client transactions for CFIUS review.

Of course, a future court could reject *Ralls Corp*. as good law. A court could disagree that the due process recognized in *Ralls Corp*. exists or decide that a due process requirement in this context falls under a mootness exception. Additionally, a court could argue that even if the due process requirement first recognized in *Ralls Corp*. exists, the political question doctrine applies. Under this doctrine, a presidential determination involving a CFIUS matter would qualify as nonjusticiable and preclude an aggrieved party from seeking relief. 134

In terms of administrative enforcement, the Biden Administration will not finish what the Trump Administration started, at least in terms of TikTok.¹³⁵ President Trump's Treasury Department initially extended TikTok's original deadline from November 12, 2020, to November 27, 2020, and then again to December 4, 2020.¹³⁶ When the latest deadline

^{128.} Complaint, supra note 49, at 28–29; Ralls Corp., 758 F.3d at 325.

^{129.} Complaint, supra note 49, at 53.

^{130.} Ralls Corp., 758 F.3d at 311-12, 314.

^{131.} See PYMTS, supra note 10.

^{132.} Ralls Corp., 758 F.3d at 321, 325.

^{133.} Fitzpatrick, *supra* note 40, at 1101–02; *see* Schneider v. Kissinger, 412 F.3d 190, 194 (D.C. Cir. 2005) (citing Baker v. Carr, 369 U.S. 186 (1962)) (describing the factors that make a question so politically charged that a federal court cannot hear the claim or offer redress for constitutional violations).

^{134.} Fitzpatrick, supra note 40, at 1102.

^{135.} Brian Fung, President Biden Revokes Trump Executive Orders Targeting TikTok and WeChat and Issues Fresh Orders, CNN (June 9, 2021, 12:52 PM), https://www.cnn.com/2021/06/09/politics/tiktok-wechat-executive-order/index.html.

^{136.} See Miles Kruppa, ByteDance gets Seven More Days to Resolve TikTok U.S. Ownership,

arrived, the Treasury Department declined to extend it further but also indicated that it was not prepared to compel a sale.¹³⁷ In June 2021, the Biden Administration rescinded EO 13,942 that attempted to ban TikTok.¹³⁸ It then issued EO 14,034 which sought prompt recommendations from the Secretary of Commerce about the protection of U.S. persons' sensitive personal data and the regulation of "software applications that are designed, developed, [and] manufactured...by...a foreign adversary."¹³⁹ Additionally, the Divestment Order has not been rescinded nor has any divestment occurred.

C. The (Indefinitely) Shelved Deal: Oracle and Walmart as Buyers

The Divestment Order mandated that divestment occur no later than November 12, 2020, or ninety days after the release of the Order. Three days after the issuance of the Divestment Order, U.S. software company Oracle emerged as a potential buyer. 141 On August 27, 2020, Walmart issued a public statement expressing its interest in joining Oracle as a partner in the acquisition. On September 14, 2020, Oracle confirmed Treasury Secretary Mnuchin's announcement that it was a party to the proposed deal that ByteDance had submitted for CFIUS review in order to comply with the Divestment Order. This deal never came to fruition, however, as the Biden Administration's independent review of the 2017 ByteDance transaction effectively killed it.

FIN. TIMES (Nov. 25, 2020), https://www.ft.com/content/35e11a7a-2bd8-4d1b-9f5c-e0cc3c0851a8 (detailing that TikTok's deadline was extended for the second time).

^{137.} Jay Greene, TikTok Sale Deadline Will Pass, Though Regulators Will Hold Off on Enforcing Divestiture, WASH. POST (Dec. 4, 2020), https://www.washingtonpost.com/technology/2020/12/04/tiktok-sale-deadline/.

^{138.} See Fung, supra note 135.

^{139.} Exec. Order No. 14,034, 86 Fed. Reg. 31,423, 31,423–24 (June 9, 2021).

^{140.} Exec. Order Regarding the Acquisition of Musically by ByteDance Ltd., 85 Fed. Reg. 51, 297 (Aug. 14, 2020).

^{141.} James Fontanella-Khan & Miles Kruppa, *Oracle Enters Race to Buy TikTok's U.S. Operations*, FIN. TIMES (Aug. 17, 2020), https://www.ft.com/content/272cfc69-b268-45ac-88d6-d55821f27e78 (noting that Oracle's co-founder, Larry Ellison, is a friend of President Trump's and among the few who has openly supported him in Silicon Valley).

^{142.} Press Release, Walmart Statement Regarding Discussions with Microsoft About TikTok, (Aug. 27, 2020), https://corporate.walmart.com/newsroom/2020/08/27/walmart-statement-regarding-discussions-with-microsoft-about-tiktok.

^{143.} Oracle Confirms Statement, PR NEWSWIRE (Sept. 14, 2020), https://www.prnewswire.com/news-releases/oracle-confirms-statement-301130173.html.

^{144.} See Danny Vena & Jason Hall, Walmart and Oracle's Bid to Acquire TikTok is Dead.

The proposed deal gave Oracle a 12.5% stake in TikTok and responsibility for overseeing the security of U.S. user data, while Walmart would have received a 7.5% stake of the company. Although ByteDance would have retained ownership of the remaining 80%, U.S entities would have owned a majority share of the new subsidiary TikTok Global since U.S. venture capital firms own over forty percent of ByteDance. Alarmingly, the sale did not include the transfer of TikTok's powerful and valuable algorithm to the U.S. companies.

While Oracle would have had permission to check the application's source code, some felt that this would have failed to mitigate perceived threats to national security.¹⁴⁸ Had this deal been executed and subsequently approved by CFIUS, then its terms might have been instructive.¹⁴⁹ Instead, CFIUS and ByteDance are presently engaged in confidential discussions about ways to

Now What?, MOTLEY FOOL (Feb. 25, 2021, 9:00 AM), https://www.fool.com/investing/2021/02/25/walmart-and-oracles-bid-to-acquire-tiktok-is-dead/.

145. Benjamin Horney, *Oracle Takes Minority Stake in TikTok After CFIUS Scrutiny*, LAW360 (Sept. 19, 2020, 9:12 PM), https://www-law360-com.proxywcl.wrlc.org/articles/1310719.

146. Jordan Novet et al., Trump Agrees to TikTok Deal with Oracle and Walmart, Allowing App's U.S. Operations to Continue, CNBC: Tech (Sept. 19, 2020, 5:30 PM), https://www.cnbc.com/2020/09/19/trump-says-he-has-approved-tiktok-oracle-deal-in-concept.html.

147. Mary Jo Foley, ByteDance Won't Allow TikTok's Algorithm to Be a Part of a Sale; Microsoft Is Rejected as Suitor, ZDNET (Sept. 13, 2020, 19:59), https://www.zdnet.com/article/byted ance-wont-allow-tiktoks-algorithm-to-be-part-of-a-sale-report/; see Zha, supra note 80 and accompanying text; see also Shui Li, Potential Impact of China's Export Control Law in Acquisition of Technology Companies, IP WATCHDOG (Dec. 9, 2020), https://www.ipwatchdog.com/2020/12/09/potential-impact-chinas-export-control-law-acquisition-technology-companies/id=128/060/ (reporting that the recently passed Export Control Law of the People's Republic of China likely prohibits the sale of the algorithm to Oracle since it is subject to export controls under the category of "information processing technologies," among other things). See generally Karen M. Sutter, Cong. Rsch. Serv., IN11524, China Issues New Export Control Law and Related Policies (2020), https://crsreports.congress.gov/product/pdf/IN/IN11524 (stating that China's new export control law makes data algorithms part of the amended catalogue of controlled technologies).

148. See Farmer, supra note 61 (quoting a Facebook spokesperson who opined that anything less than a full takeover of the source code would be insufficient); VIETH & BRONOWICKA, supra note 88, at 4, 6–7 (arguing that sharing the source code with a competent observer will not guarantee an understanding of how an algorithm works and that merely publishing a source code without imposing an explainability requirement would not allow for a full understanding of the program's decisionmaking process).

149. See Regulations Pertaining to Investments in the United States by Foreign Persons, 31 C.F.R. §§ 800.405, 800.506 (2021) (stating that the CFIUS has the power to unilaterally conclude review actions which effectively "clears" a transaction).

mitigate CFIUS' concerns, a sign that practitioners will again be left in the dark when seeking to advise clients about specific ways to comply with CFIUS' approval process no matter the outcome. ¹⁵⁰ If specific details emerge from the confidential process, which is an unlikely event, then they can serve as guidance for practitioners, the basis for new regulation, or both. ¹⁵¹

While non-enforcement is the correct result under the law, TikTok and similar foreign-made applications still pose national security threats that should be addressed, and the Biden Administration agrees.¹⁵² The next portion of this Comment will explore regulatory measures which, if properly enacted by CFIUS, can better screen foreign investment for threats posed by A.I. and data collection and can serve as an alternative to perpetual retroactive enforcement via executive orders.

IV. RECOMMENDATIONS

A. Informal Rulemaking

The national security concerns posed by applications like TikTok are not likely to dissipate; conversely, if current trends continue, foreign investment involving software applications is likely to increase. Agencies can issue lawful regulations via the informal rulemaking process described in Section 553 of the Administrative Procedure Act. According to this process, an agency shall provide notice of proposed rulemaking in the Federal Register and subsequently give interested persons an opportunity to participate in the rulemaking during the comment period. During this period, persons may submit data, views, or arguments for or

^{150.} See Fung, supra note 135; CFIUS, www.crowell.com/Practices/International-Trade/CFIUS, CROWELL & MORING (last visited June 27, 2021) (describing the CFIUS process as "complex and opaque"); David R. Hanke, CFIUS 2.0: Treasury Releases Comprehensive Rewrite of CFIUS Regulations, Flood of Filings Expected in 2020, ARENT FOX (Sept. 24, 2019) https://www.aren tfox.com/perspectives/alerts/cfius-20-treasury-releases-comprehensive-rewrite-cfius-regulations-flood (detailing that comprehension of the CFIUS process depends upon proprietary knowledge that includes "a deep understanding of its member agencies' national security sensitivities," and "a solid grasp of CFIUS' typical thought processes and risk analysis").

^{151.} See 31 C.F.R. § 800.802 (2021) (detailing the confidentiality requirements of CFIUS proceedings).

^{152.} See Exec. Order No. 14,034, 86 Fed. Reg. 31,423 (June 9, 2021).

^{153.} See generally Kara Mazachek, FDI in High-Tech: Innovation and Growth in the United States, INT'L TRADE ADMIN.: TRADEOLOGY (Feb. 5, 2020), https://blog.trade.gov/2020/02/05/fdi-in-high-tech-innovation-and-growth-in-the-united-states/ (noting some of the current trends of growth in the high-tech sector).

^{154. 5} U.S.C. § 553.

^{155.} Id. § 553(b)-(c).

against the proposed rule for agency consideration. ¹⁵⁶ Once the comment period closes, an agency considers the relevant matter presented and incorporates a concise general statement of the rule's basis and purpose into the adopted rule. ¹⁵⁷ The statute generally requires that rules be published thirty days before they become effective and a right to petition for issuances, amendments, or repeal of a rule exists. ¹⁵⁸ By law, the Secretary of the Treasury is required to consult with the Committee prior to any notice-and-comment period and issuance. ¹⁵⁹

1. Sensitive Personal Data

In terms of sensitive personal data, the current regulations should be updated by informal rulemaking to establish clear guidelines regarding the storage of U.S.-user data collected by software applications, implement regular reporting requirements, and impose penalties for failure to comply. Glear guidelines governing the storage of U.S.-user data would help to assuage fears that the data could be compromised by adversaries and used for nefarious purposes. In terms of data storage, the prevailing options are to mandate storage in the U.S. or to allow storage in jurisdictions whose laws are seen as friendly and likewise prohibit it in those seen as adverse. So-called "data-localization" mandates warrant that content and communications involving a country's residents and/or citizens be stored in-country and subject to domestic laws. In the case of TikTok, its proposed sale to Oracle would have made Oracle a trusted technology partner responsible for overseeing U.S-user data, which would be stored domestically; thus, an appetite exists for this approach. Though data-

^{156.} Id. § 553(c).

^{157.} *Id*.

^{158.} Id. § 553(d)-(e).

^{159.} Exec. Order No. 13,456, 73 Fed. Reg. 4677, 4678 (Jan. 25, 2008).

^{160.} See generally Regulations Pertaining to Certain Investments in the United States by Foreign Persons, 31 C.F.R. § 800.241 (2021) (establishing CFIUS' jurisdiction over transactions involving sensitive personal data and listing data which qualifies as sensitive and personal).

^{161.} Supra Part II.B.1.(describing how large dataset compilation increases the vulnerability of individual data).

^{162.} See generally Know the Risk: The Best and Worst Countries for Cybersecurity, BROADBAND SEARCH, [hereinafter Know the Risk], https://www.broadbandsearch.net/blog/best-worst-countries-cybersecurity (last visited Aug. 26, 2021) (listing France, the United Kingdom, Japan, and Singapore as countries where cybersecurity is on par or better than the United States).

^{163.} Jennifer Daskal, Law Enforcement Access to Data Across Borders: The Evolving Security and Rights Issues, 8 J. NAT'L SEC. L. & POL'Y 473, 476 (2016).

^{164.} See also Jane Li & Jane Li, Want to Understand the Oracle-TikTok Deal? Just Look at Apple in China, QUARTZ (Sept. 17, 2020), https://qz.com/1904757/oracle-tiktok-deal-mirrors-

localization mandates potentially circumvent conflict of laws problems, some believe them to be economically inefficient, unnecessarily expensive, and particularly burdensome on smaller companies.¹⁶⁵

Another more flexible approach would allow for U.S.-user data to be stored in designated nations with acceptable cybersecurity laws or managed by trusted service providers with favorable reputations and positive past performance. 166 Alternatively, regulators could designate countries in which storing U.S.-user data would be prohibited—a regulatory approach that has been taken in other contexts. In January 2021, the Department of Commerce (Commerce) published a proposed rule that would prohibit or mitigate certain information and communications technology or services transactions (ICTS Transactions) involving "foreign adversaries." 167 The proposed rule enumerates six countries as foreign adversaries: China, Cuba, Iran, North Korea, Russia, and Venezuela. 168 The Commerce list of countries could be copied exactly or modified as needed. approach, new regulations could impose a yearly reporting requirement to assure regulators that user data storage mandates are complied with and subject the company to periodic regulatory inspection. Failure to comply could result in fines or an immediate order to divest.

TikTok claims that all U.S.-user data is currently stored on U.S. servers with backups in Singapore but also acknowledges that user data may be shared with public and private entities.¹⁶⁹ If this is the case, then TikTok

apple-data-operations-in-china/ (recounting that the "trusted partner" model is already employed by the Chinese government).

^{165.} Daskal, *supra* note 163, at 480 (arguing that data localization mandates increase start-ups' and small businesses' international business costs, thus making it harder for start-ups and small businesses to enter and remain in the market and noting that conflicting laws often make international operations difficult for businesses as well).

^{166.} Know the Risk, supra note 162 and accompanying text.

^{167.} Securing the Information and Communications Technology and Services Supply Chain, 86 Fed. Reg. 4,909 (Jan. 19, 2021) [hereinafter Securing the Information] (to be codified at 15 C.F.R. pt. 7); Aimen Mir et al., New U.S. Rules Target Use of Chinese I.T. and Communications Goods and Services, FRESHFIELDS: A FRESH TAKE (Jan. 21, 2021), https://blog.freshfields.us/post/102gp61/new-us-rules-target-use-of-chinese-it-and-communications-goods-and-services.

^{168.} Securing the Information, supra note 167, at 4,909–10, 4,914, 4,925 (providing the reasoning for creating the list and detailing the lists' criteria, including specific cybersecurity incidents and intelligence reports from various areas of the federal government).

^{169.} Privacy Policy, TIKTOK, https://www.tiktok.com/legal/privacy-policy?lang=en (last updated June 2, 2021) (describing the type of data the application collects such as: device information, which types of data are collected automatically, how the data is used,

would already be in compliance with any future data localization mandates;¹⁷⁰ however, reporting and inspection requirements would allow regulators to ensure that U.S.-user data is being safely stored by TikTok and other similar applications. Any regulation that allows for storage outside of the United States should include similar requirements, and this more flexible approach may avoid harsh and cost-prohibitive outcomes that could chill foreign investment.

2. Artificial Intelligence or Algorithms

Foreign-made applications like TikTok serve as conduits for massive amounts of content to flow into and throughout large portions of the U.S. population. This poses a potentially significant threat to national security and thus warrants a hardline approach.¹⁷¹ Accordingly, new regulations should require applications like TikTok to share their algorithms, or A.I., with U.S. regulators for inspection and regular monitoring. Algorithms are admittedly the most valuable and top-secret aspects of these applications, but the United States offers a large and sophisticated market of potential users in exchange.¹⁷² Loss of access to the U.S. market would likely result in a significant loss of revenue and thus creates an incentive for sharing.¹⁷³

In TikTok's case, ByteDance argued in court that the application would suffer a loss of approximately half of its users if the U.S. ban endured for two months and almost 90% if it lasted for six months.¹⁷⁴ Furthermore, in 2020, TikTok partnered with Shopify to introduce shoppable video ads in an attempt to turn the app into a platform for marketers and retailers; thus, every user lost

and with whom it is shared).

^{170.} Daskal, *supra* note 163.

^{171.} Supra Part II.B.2..

^{172.} Tatiana Walk-Morris, Consumers Spent Over \$100 Billion on Mobile Apps in 2020: Report, RETAIL DIVE (Jan. 5, 2020), https://www.retaildive.com/news/consumers-spent-over-100b-on-mobile-apps-in-2020-report/592833/ (reporting that in 2020, U.S. consumers spent over 130 million dollars on mobile applications, and purchases made via smartphone increased by twenty-five percent).

^{173.} See, e.g., Vikram Roy, Instagram Snaps Up TikTok's Second Biggest Market as India Bans Chinese Apps, RADIO FR. INTERNATIONALE (Dec. 7, 2020), https://www.rfi.fr/en/international/20200712-instagram-snaps-up-tiktok-s-second-biggest-market-as-india-bans-chinese-apps (reporting that TikTok's ban in India could cost the company up to 5.3 billion Euros in losses).

^{174.} Bobby Allyn, *TikTok: Even A Temporary Ban Could Make 90% of Users Quit the App*, NPR (Sept. 23, 2020), https://www.npr.org/2020/09/23/916206862/tiktok-even-a-tempo rary-ban-could-make-90-of-users-quit-the-app.

would plausibly lead to a decrease in revenue.¹⁷⁵ This gives TikTok, and companies like it, real economic incentives to comply with any new rules.

When crafting new A.I. regulations, the Treasury Department can draw inspiration from the NSCAI's recent work. In their Second Quarter Recommendations for the year 2020, NSCAI proposed measures through which CFIUS can better prevent technology transfers that create national security risks. Such proposals rely on the proposition that investment screening, as opposed to export control, presents an opportunity for a proactive regulatory approach to protect domestic technology from adversarial capital while also minimizing risk to domestic security.

The first prong of the NSCAI recommendation is to bring more transactions involving A.I. under CFIUS review via mandatory filing requirements for foreign investments into U.S.-made A.I. to prevent domestic tech from falling into the hands of foreign adversaries once exported. Drawing from this proposal, a new CFIUS regulation could similarly require mandatory filing for transactions which seek to *introduce* foreign-made A.I. into the United States via acquisition of a U.S. firm. In theory, this would not increase CFIUS's caseload too dramatically since many investments that introduce foreign-made A.I. are already covered under the "sensitive personal data" rule or another existing CFIUS regulation, as is the case with TikTok. 179 If any valid concerns about efficiency and overburdening exist, then exemptions could be created for trusted partner nations, or an expedited review process could be created for certain investors with a track record of positive performance. 180

^{175.} Walk-Morris, supra note 172 and accompanying text.

^{176.} NAT'L SEC. COMM. ON A.I., SECOND QUARTER RECOMMENDATIONS 52 (Quarterly Series, No. 2.) (2020), https://www.nscai.gov/whitepaper/second-quarter-recommendations-memo/.

^{177.} *Id.* at 52, 70 (describing export controls as a "blunt instrument" used to protect the transfer of U.S.-made technology and listing Russia and China as strategic competitors who can threaten with adversarial capital).

^{178.} Id. at 72; see also Farhad Jalinous et al., Congress Finalizes CFIUS & Export Control Reform Legislation, WHITE & CASE (July 26, 2018), https://www.whitecase.com/publication s/alert/congress-finalizes-cfius-and-export-control-reform-legislation (describing FIRRMA as an attempt to address a gap between technologies the U.S. government believes are highly sensitive but are not captured by existing export regulations).

^{179.} Regulations Pertaining to Certain Investments in the United States by Foreign Persons, 31 C.F.R. § 800.241 (2020).

^{180.} NAT'L SEC. COMM. ON A.I., supra note 176, at 75.

B. Existing Law Can Fashion a Committee Equipped to Examine Foreign A.I.

Once under CFIUS review, appreciable transparency measures should be put in place, which could allow it to inspect the technology and subject the owner of the technology to regular reporting and inspection after the deal is approved. These requirements could be based on the previously discussed explainability standards, and a regulatory framework could be achieved through existing CFIUS law and new regulation.¹⁸¹

This approach requires bringing the requisite technical expertise into the CFIUS review process. Under current CFIUS law, any Committee member may conduct inquiries into aspects of a transaction which poses a threat to national security.¹⁸² The Secretary of Defense is a member of CFIUS and NSAIC, though an independent commission, is a partner of the Department of Defense and could thus be brought into the process.¹⁸³ Additionally, the president and the Secretary of the Treasury each have the power to appoint "the heads of any other executive department, agency, or office" to the Committee on a case-by-case basis.¹⁸⁴ Either approach could serve as the legal mechanism to introduce the kind of technical expertise CFIUS would need to properly vet the technology, and the already confidential and opaque nature of the CFIUS process should alleviate concerns about trade secret disclosure.¹⁸⁵ These explainability standards and reporting and inspection requirements could be enacted by informal rulemaking, and failure to comply could result in an immediate order to divest.

New A.I. regulations would apply both to future deals and prior ones like the acquisition which introduced TikTok into the United States. Thus, the new regulations would require TikTok to share its algorithm with a more expertized CFIUS that is better equipped to understand the technology to properly inspect it. Regular reporting and inspection requirements for the algorithm would allow U.S. regulators to ensure that content is passing through the application in a safe and non-discriminatory way. 187

^{181.} Supra Part II.C. (defining explainability as the "why" behind an algorithm's decision making and proposing a graduated standard for disclosure).

^{182.} Exec. Order No. 13,456, 73 Fed. Reg. 4677, 4679 (Jan. 25, 2008).

^{183.} NAT'L SEC. COMM. ON A.I.: ABOUT Us, https://www.nscai.gov/about/ (last visited: Feb. 19, 2020).

^{184.} Exec. Order No. 13,456, 73 Fed. Reg. 4677, 4677 (Jan. 25, 2008).

^{185.} Supra Part I. (describing the structure of the Committee).

^{186.} Walshe & Tan, supra note 51.

^{187.} Khan, *supra* note 81 (noting that TikTok's algorithm could be used for propaganda or subliminal messaging).

C. Self-Regulation

TikTok has taken its own steps toward transparency,¹⁸⁸ which indicates they agree in principle that applications like it should be regulated. In July 2020, TikTok publicly stated that it believed that companies should disclose their algorithms, moderation policies, and data flows to regulators.¹⁸⁹ Soon after, TikTok announced that it would build a physical office known as the Transparency and Accountability Center, designed to allow visitors to learn about the company's data storage and content moderation policies.¹⁹⁰ The tour includes an explanation of how the algorithm decides what content appears when users first open the application and how machine learning determines which new content a user might like.¹⁹¹ Additionally, TikTok currently releases biyearly "Transparency Reports" and publicly seeks to be the "most transparent and accountable company in the industry."¹⁹²

While these are certainly laudable developments, allowing companies to entirely self-regulate yields problems which are only magnified by the opaqueness and complexity of the technology. Furthermore, in TikTok's case, there are legitimate questions about the company's fealty to an adversarial government, and their past record is problematic. In

^{188.} Casey Newton, *Three Takeaways from a Visit to TikTok's New Transparency Center*, VERGE: INTERFACE (Sept. 11, 2020), https://www.theverge.com/interface/2020/9/11/21 430822/tiktok-transparency-visit-tour-algorithms-for-you-page.

^{189.} Id.

^{190.} Id.

^{191.} See generally Sara Fischer, Inside TikTok's Killer Algorithm, AXIOS (Sept. 10, 2020), https://www.axios.com/inside-tiktoks-killer-algorithm-52454fb2-6bab-405d-a407-31954ac1 cf16.html (describing in detail TikTok's explanation of how the application's algorithm worked); Sam Shead, TikTok Invites U.K. Lawmakers to Review Algorithm After Being Probed on China Censorship Concerns, CNBC: TECH (Nov. 5, 2020), https://www.cnbc.com/2020/11/05/tiktok-invites-uk-lawmakers-to-review-algorithm-after-china-probe.html (describing TikTok's invitation to British lawmakers to review the algorithm as a signal that the TikTok is willing to subject itself to regulation).

^{192.} See, e.g., TIKTOK, TRANSPARENCY REP. 2020 H1 (Sep. 20, 2020), https://www.tiktok.com/safety/resources/transparency-report-2020-1?lang=en (detailing that the Transparency Report includes information about how many videos were removed, the reasons for removal, and the amount of law enforcement requests for user information).

^{193.} Natasha Lomas, *TikTok Hit with Consumer, Child Safety, and Privacy Complaints in Europe*, TECH CRUNCH (Feb. 16, 2021), https://techcrunch.com/2021/02/16/tiktok-hit-with-consumer-child-safety-and-privacy-complaints-in-europe/ (alleging that TikTok has not been able to adequately protect children and teenagers from potentially harmful content and citing this as a need for more regulation of the application).

^{194.} See Wagner, supra note 65 (noting that a recently passed Chinese cybersecurity law

September 2019, leaked documents revealed that TikTok moderators were instructed to censor videos which mentioned Tiananmen Square and Tibetan independence. In June 2020, India banned TikTok following a violent border clash between India and China which resulted in the death of at least twenty Indian soldiers. The ban cost TikTok access to the country's seven hundred million internet users, a market size second only to China itself. If nothing else, TikTok's current transparency posture and policies could serve as a reference point for regulator-experts tasked with developing oversight requirements.

CONCLUSION

The TikTok saga highlights some serious questions about the national security risks associated with technology that automatically collects and stores the data of its users and uses foreign-made A.I. to decide what content is shown or not shown to its users. The Divestment Order, though overbroad and unlikely to be enforced, shows that CFIUS has a role to play in mitigating these national security risks through investment screening.

The Treasury Department can more clearly define this role through new regulations specifying precisely how the personal data of U.S. users should be stored and managed. Accordingly, Treasury should issue new regulations governing the technical inspection, examination, approval, and reporting requirements of foreign made algorithms seeking access to U.S. users. Existing CFIUS law governing its composition could be used to inject new expertise into the process and aid in executing new oversight measures. This approach would properly balance the need to remain competitive in the technological advancement of A.I. and protect the data of U.S. users while avoid a chilling effect of foreign investment into domestic companies.

might require compliance with requests from Chinese regulators); van Rijmenam, supra note 87.

^{195.} Alex Hern, *Revealed: How TikTok Censors Videos That Do Not Please Beijing*, GUARDIAN (Sept. 25, 2019), https://www.theguardian.com/technology/2019/sep/25/revealed-how-tiktok-censors-videos-that-do-not-please-beijing.

^{196.} Roy, *supra* note 173 (discussing that the ban was result of concerns about TikTok's data practices and enacted amidst a wave of nationalist sentiment).

^{197.} Rishi Iyengar, *This is What it's Like When a Country Actually Bans TikTok*, CNN: BUSINESS (Aug. 13, 2020), https://www.cnn.com/2020/08/13/tech/tiktok-ban-trump-india/index.html.