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ABOUT NEW PERSPECTIVES IN FOREIGN POLICY

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On August 31, 1951, representatives of the United States and the Republic of the Philippines signed the Mutual Defense Treaty (MDT) in Washington. In recognition that “an armed attack in the Pacific Area on either of the Parties would be dangerous to [the] peace and safety” of both countries, the treaty declared that each state would “act to meet the common dangers in accordance with its constitutional processes.”1 However, like most conventional defense treaties and standards, the MDT is not clear about the increasingly common unconventional gray zone threats that skirt the definition of war to avoid prompting a kinetic response. Since its inception, the United States’ commitment to the MDT regarding attacks on Philippine assets in contested waters in the South China Sea has been unclear. Along with the controversial policies of the administration of Philippine President Rodrigo Duterte, the uncertainty of the MDT has strained U.S.-Philippine relations and caused Philippine Defense Secretary Delfin Lorenzana to call for a review of the relevance of the MDT in October 2018 with the main goal of determining whether the government should “maintain it, strengthen it, or scrap it.”2

In March 2019, U.S. Secretary of State Mike Pompeo met with Philippine Foreign Secretary Teodoro Locsin, Jr. and affirmed that “any armed attack on Philippine forces, aircraft, or public vessels in the South China Sea will trigger mutual defense obligations under Article 4 of our Mutual Defense Treaty.”3 Many, including Foreign Secretary Locsin, were encouraged by Pompeo’s reassurance that the United States would help defend Philippine assets against Chinese forces in the contested waters of the South China Sea. However, others like Defense Secretary Lorenzana were unconvinced by this reassurance due to the ambiguity of the criterion of a U.S. response. How does the United States define an attack on the Philippines? Is Secretary Pompeo assuring a U.S. response against obscure gray zone threats?
THE COMPLEXITIES OF GRAY ZONE TACTICS

Gray zone tactics, often used in the realm of asymmetrical or hybrid warfare, are defined as “an effort or series of efforts beyond steady-state deterrence and assurance that attempts to achieve one’s security objectives without resort to direct and sizable use of force.”\(^4\) They can include a mix of conventional warfare, irregular warfare, and cyberwarfare with other influencing methods, such as fake news, diplomacy, lawfare, and foreign electoral intervention. Through gray zone tactics, potential adversaries can inconspicuously coerce their targets to serve their interests while avoiding the possibility of large-scale conflict.

While Foreign Secretary Locsin contended that the vagueness of the MDT would act as a “deterrent” against attacks on the Philippines from China, Defense Secretary Lorenzana argued that this vagueness “will cause confusion and chaos during a crisis.”\(^5\) Foreign Secretary Locsin’s case that an ambiguous MDT acts as a deterrent loses potency when the threats themselves are ambiguous. Potential adversaries in the “gray zone” may bully targets through unconventional means that make it difficult to counter with the retributive actions normally available through the MDT.

The threats become so vague that the authority and capacity to respond are weakened. This is true even for the United States, which possesses the most powerful conventional military force in the world. The U.S. military’s incredible advancements, destructive capabilities, and size may act as a potent conventional deterrent against direct attacks. However, gray zone tactics, among other factors, complicate the conventional superiority of the U.S. military and have become a way for other states to level the playing field. Moreover, unconventional tactics have become an obstacle for typical methods of influence that the United States uses and the general institutional norms and standards it upholds. The United States thus can no longer rely on its conventional military strength to perform coercive diplomacy or retributive actions to defend the Philippines against unconventional threats from China, which has been working within the realm of the permissible through gray zone tactics.

A NEW REALITY IN THE MARITIME SPHERE

Gray zone tactics are closely associated with Russian tactics in its intervention in Ukraine and Syria by land.\(^6\) However, analysts now recognize that China similarly appears to use gray zone tactics as a means of countering U.S. influence and conventional military force in the South China Sea and navigating the maritime field by implementing a range of actions. China has wide ranging territorial claims in the South China Sea—over which the People’s Republic of China has claimed sovereignty since it took power in 1949—that overlap with those of several regional neighbors. “Rising” China has been particularly active in asserting its claims in the South China Sea since 2010, with the bulk of China’s efforts occurring in the period from late 2013 to late 2016 during its so-called Great Wall of Sand campaign, a series of large-scale land reclamation projects in the Spratly Islands that included the creation and fortification of artificial islands.\(^7\)
During this time, China has adopted tactics that allow it to operate in the “gray zone.” These include the “swarming” of Philippine-held Thitu Island (called Pagas Island by the Philippines) as seen in Chinese paramilitary vessels, intimidating acts against Philippine fishermen, and the restriction of supply lines for Philippine troops. An integral tactic to supplement other actions has been island-building and the development of military infrastructure in areas over which they have established control. Other dimensions involve cyberwarfare, disinformation campaigns, and “debt-traps” stemming from opaque infrastructural investments.

A combination of these tactics was seen during the naval standoff between China and the Philippines in April 2012. A Philippine Navy surveillance plane spotted eight Chinese fishing vessels in the disputed Scarborough Shoal. The largest Philippine naval ship, BRP Gregorio del Pilar, was then deployed for interception, surveillance, and confirmation of the presence of said vessels. The Philippine team intercepted the Chinese fishing vessels, shut off their satellite navigation systems and radio communication equipment, and discovered corals, giant clams, and live sharks that were illegally collected by the Chinese fishermen. The Philippine team attempted to arrest the Chinese fishermen but were blocked by two Chinese marine surveillance ships. In the following months, the first major cyber campaign occurred against the Philippine government; a Chinese cyber unit breached Philippine government and military networks, stealing military documents and other highly sensitive intelligence. At the same time, the website of the University of the Philippines, the Philippines’ leading state school, was hijacked. Hackers defaced the school’s website with a map of the South China Sea showing China’s “nine-dash line”—the demarcation of China’s claim over disputed territories. Philippine hackers struck back by hacking Chinese government-owned websites but the Chinese had already accomplished their mission to disrupt Philippine digital space.

As of 2019, China has reclaimed more than 3,000 acres of land on the Spratlys and Paracels and developed military infrastructure that allows for naval and air deployment. Such actions create uneasiness among claimant states, given their inability to respond through the use of conventional forces and a lack of will to enter into an all-out war with China. For the past two years, the Philippines has been building up infrastructure on Thitu Island to firmly ground its defenses in the area. However, the Chinese government recently responded in April 2019 by implementing a “cabbage strategy”—deploying a “swarming” flotilla of fishing vessels and People’s Liberation Army-Navy (PLAN) and China Coast Guard (CCG) ships around Thitu Island. This strategy involves three rings: the inner ring, surrounding the island itself, is comprised of Chinese fishing vessels, whereas fishing administration and marine surveillance ships run through the middle ring. The outermost ring is surveyed by marine warships from PLAN or CCG, thus forming a cabbage-like formation. There are approximately 200 Chinese vessels that have been spotted around the island since April 2019.
NECESSARY REEVALUATIONS AND ALTERATIONS

Considering China’s use of gray zone tactics, Defense Secretary Lorenzana’s concerns regarding the potency of the MDT are warranted. He stated that “the fact that the security environment now is so vastly different and much more complex than the bipolar security construct of the era when the MDT was written necessitates a review of the treaty.”

His statement encapsulates the reality of today’s changing security environment in the South China Sea: China has been shifting from conventional tactics to non-conventional ones and the Philippines is struggling to cope with this threat.

The Philippine government’s appeal to the law against China’s activities in the South China Sea has so far been in vain. Even after the Philippines successfully challenged China’s maritime claims at the Permanent Court of Arbitration in July 2016, China’s encroachments into the South China Sea have continued unabatedly after it rejected the arbitral tribunal’s decision. The Philippine Department of Foreign Affairs repudiated China’s recent “swarming” of Thitu Island in April 2019 by pointing to the illegality of these actions, saying that they were a “clear violation of Philippine sovereignty, sovereign rights and jurisdiction, as defined under international law including the 1982 United Nations Convention on the Law of the Sea (UNCLOS).” However, international laws have had limited policing capability against China’s unconventional hostility in the South China Sea. President Duterte’s unwillingness to fully push the arbitral tribunal’s decision has also frustrated many citizens of the Philippines. Disgruntled by the failings of the international community to protect the Philippines, Palawan fishermen and farmers recently filed a complaint to the Philippine Supreme Court, demanding that the Duterte administration enforce the Fisheries Code to defend against Chinese ships that damage coral reefs and endanger species. But without the means to enforce these laws, the Philippines is helpless against Chinese gray zone threats.

The Philippines has planned to buy new military equipment to counter China in conventional warfare, even though these military aspirations face budget constraints. President Duterte, who typically has taken a softer approach toward relations with China, joined the Department of Foreign Affairs in its repudiation of the swarming of Thitu Island. He told China to “lay off” the island and threatened the use of force, going as far as to say “I will tell the soldiers ‘prepare for suicide mission’.” But with the Philippines’ difficulties in acquiring adequate conventional means to defend itself, its government must consider boosting the country’s capacity for gray zone tactics if it wants to effectively counter the new reality of China’s gray zone tactics. This could include furthering the Philippines’ capacity for cyberwarfare through technological developments and training, along with improving the Philippine military’s asymmetrical capabilities against China and developing new military strategies. Although the Philippines has received new military equipment from Russia at a low cost, adopting gray zone tactics may be a much cheaper option that could lessen the Philippine govern-
ment’s budget constraints. The United States can still act as a deterrent against conventional threats and help police the Philippines’ territorial waters, whereas the Philippines can benefit from shifting its focus to hybrid warfare capabilities to efficiently utilize its available assets and assert its sovereignty.

In terms of its alliance with the United States, it is not only imperative for the Philippines to follow up on Secretary of State Pompeo’s clarification but to also advocate for revisions to the MDT that accommodate the new reality posed by gray zone threats. The United States and the Philippines should issue a joint statement on an elucidative and effective MDT that addresses gray zone threats and upholds the tribunal decision of the Permanent Court of Arbitration. Such an MDT should be multi-leveled, similar to the United States’ defense readiness condition (DEFCON) levels, with well-defined rules of engagement, rationale for escalation of force, and appropriate consequences of corresponding Chinese actions. In doing so, the MDT would be revised to address China’s various actions in the South China Sea and to limit the range of Chinese activities that may be considered permissible. The revised format for the U.S.-Philippines MDT would be unprecedented, as most defense treaties are written to leave room for some flexibility. Taking such decisive action may improve U.S.-Philippine relations and contribute to a more effective strategy in countering Chinese belligerence in the region.

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Right-wing terrorism is on the rise in the United States and across Europe. In the United States, right-wing extremists were responsible for nearly 50 killings in 2018, a 26 percent increase over the previous year.\(^1\)\(^2\) According to the Anti-Defamation League’s latest report, 2018 was the fourth-deadliest year for domestic extremist-related killings since 1970 and of those attacks, right-wing extremists were responsible for almost 78 percent.\(^3\) In Europe, the story is just as grim, with attacks by right-wing groups increasing 43 percent between 2016 and 2017.\(^4\) According to the 2018 European Union Terrorism Situation and Trend Report, right-wing extremism is continuing to expand.\(^5\)

Within this trend, attacks committed by ethno-nationalists and separatist groups have increased and continue to outnumber attacks inspired by other ideologies.\(^6\) A CSIS report published in November 2018 identified several factors driving the phenomenon, including the increased use of social media and the Internet to connect and disseminate information, overseas travel to meet with likeminded individuals, and the elections of President Barak Obama and President Donald Trump.\(^7\) Whether individuals are easily exposed to extremist ideas over social media or concerned about immigration by refugees, it’s clear that the United States must improve and hone its strategy to combat this type of terrorism.\(^8\)

According to the National Strategy for Counterterrorism (NSCT) report published in October 2018, the White House acknowledged the increase in domestic terrorism across the country, including instances with right-wing motivations as well as animal rights extremism, environmental extremism, sovereign citizen extremism, and militia extremism.\(^9\) This is a noteworthy change, considering that domestic terrorism has not been included in previous NSCT reports.\(^10\) Although the current administration has been criticized for failing to acknowledge cases of domestic terror, its inclusion in the NSCT represents an important step forward.

Although there is no single definition for what constitutes right-wing terrorism, it can broadly be defined as:

\begin{itemize}
  \item violence in support of the belief that personal and/or national way of life is under attack and is either already lost or that the threat is imminent.
  \item Characterized by anti-globalism, racial, or ethnic supremacy or nationalism, suspicion of centralized federal authority, reverence for individual liberty, and/or belief in conspiracy theories that involve grave threat to national sovereignty and/or personal liberty.\(^11\)
\end{itemize}
Violence committed by right-wing extremists continues to account for most domestic terrorism in the United States, as opposed to left-wing violence, which only accounted for 3.2 percent of all domestic terrorism between 2009 and 2018. This article provides a comparative analysis of two well-known programs to counter violent extremism (CVE) that specifically target right-wing extremists and that have been found to be effective in the United States and in Europe. The article additionally will argue that the U.S. government should support and empower NGO-driven initiatives that address right-wing extremism to advance a holistic and effective policy to counter violent extremism.

EXIT-DEUTSCHLAND VS. LIFE AFTER HATE

There are several NGOs in the United States and in Europe that are working to combat right-wing extremist groups. Two particularly effective programs are the German-based EXIT-Deutschland initiative and U.S.-based Life After Hate initiative.

EXIT-Deutschland has proven successful in de-radicalizing and preventing right-wing extremism in Germany. The EXIT approach was first established in Norway in 1997 and, after its success there, was implemented elsewhere in Europe. The program was founded in 2000 by criminologist Bernd Wagner and Ingo Hasselbach, a former neo-Nazi movement leader. It provides personalized assistance such as therapy, career counseling, and social support systems to individuals seeking to leave right-wing extremist movements. In turn, participants in the program advise law enforcement agencies on right-wing recruitment tactics, provide seminars to schools around Germany, and work with communities to prevent radicalization. EXIT has a hands-off approach to recruitment. Interested individuals must initiate contact on their own accord to demonstrate that they are ready and willing to leave extremist movements with which they are affiliated.

In addition to public donations, the organization receives funding for several projects from Germany’s Federal Ministry for Family, Senior Citizens, Women, and Youth. The German government commissioned an assessment of EXIT’s work and found that only about 3 percent of the roughly 500 individuals who had participated in the program later re-engaged in extremist activities. The assessment also found that EXIT was more successful than the state-funded deradicalization program of the German Internal Intelligence Service. EXIT-Deutschland’s success has led to the creation of several other chapters around the world, including one in the United States. In 2014, EXIT-USA became affiliated with Life After Hate.

U.S. GOVERNMENT SHOULD SUPPORT AND EMPOWER NGO-DRIVEN INITIATIVES THAT ADDRESS RIGHT-WING EXTREMISM TO ADVANCE A HOLISTIC AND EFFECTIVE POLICY TO COUNTER VIOLENT EXTREMISM.
Life After Hate was founded by former right-wing extremist members in 2011. Through education, outreach, and research, Life After Hate’s goal is to interrupt violence committed under the auspices of religious or ideological beliefs. There are several affiliated programs including the Strong Cities Network, Formers Anonymous, the Against Violent Extremism Network, and EXIT-USA. EXIT-USA provides services similar to those administered by EXIT-Deutschland, including public service campaigns, training, education, and community programs to help individuals get back on their feet.

It is important to note that Life After Hate was awarded a $400,000 grant from the Department of Homeland Security (DHS) under a program called Countering Violent Extremism. However, the grant was reassigned in 2017. Life After Hate was excluded from the list of new award recipients. Shortly after the award was rescinded, supporters donated more than $500,000 to sustain the program’s work. According to the Life After Hate website, since the 2017 “Unite the Right” rally in Charlottesville, Virginia, more than 150 men and women have reached out to the organization for help and support.

EXIT-Deutschland and Life After Hate have more similarities than differences. Both programs are run by NGOs and use similar recruitment models. Both provide counseling services, education opportunities, community outreach, and other kinds of social support. What is interesting is their ability to thrive in very different political and historical contexts. For example, Germany has some remarkably strict restrictions on speech and expression when it comes to right-wing extremism. There also is a legal concept called “Volksverhetzung,” which states that anyone who denigrates or promotes violence towards an individual or group based on ethnicity or religion could be sentenced up to five years in jail.

It is understandable why Germany has such strict laws but this type of legislation doesn’t exist in the United States. Another interesting difference is that the United States has a very different political culture than Germany. There are numerous political parties that support far-right ideologies, like the Alternative for Germany (AfD) and the National Democratic Party, that play an active role in Germany’s political system. An NPR article from September 2018 found that the AfD was the second most-popular party in a recent poll. There is no political party in the United States that supports extremism of any kind. Moreover, a Pew Research Center poll found that both Republicans and Democrats detest terrorism. For both EXIT-Deutschland and Life After Hate to thrive in such different environments shows that the programs can be successful despite different environmental factors.
A final difference between the two programs is that EXIT-Deutschland receives funding from the German government.\textsuperscript{36} As mentioned above, Life After Hate received a grant from DHS but it was later rescinded.

**RECOMMENDATION**

The research findings are mixed on whether CVE programs accomplish what they were intended to do.\textsuperscript{37} In the United States, many have argued that CVE is an area in which government generally falls short relative to other countries.\textsuperscript{38} The above comparison shows that in this instance, the United States is not that far from what Germany is doing with its CVE programs. However, there is an important caveat. NGOs typically are more in tune with local needs and grievances of the communities in which they operate. Therefore, law enforcement and government agencies could be at a disadvantage in addressing right-wing extremism without the collaboration of local NGOs. For example, the program run by the German Internal Intelligence Service was found to be far less successful than EXIT-Deutschland because individuals feared punishment or other negative consequences that were absent in the context of a non-government led program.\textsuperscript{39} Policymakers should dedicate resources to organizations like Life After Hate that have shown measurable progress at the ground level. The government can support these efforts by awarding them federal grants, which could have a positive impact on their work and the individuals whom they help.

*Victoria DeSimone is a former program manager with the CSIS Open Dialogue Initiative.*
ENDNOTES


6. Ibid.


8. Ibid.


10. Ibid.


12. See, for example the definition of left-wing extremism in START, Ideological Motivations of Terrorism in the United States, 1970–2016, 6.


18. “Exit Germany – Nazis against Nazis.”


36. See note 18.


39. “EXIT-Germany – We Provide Ways out of Extremism.”
The current crisis can be traced back to the free and fair election of Ortega, head of the leftist Sandinista party (FSLN), in 2006. Under Ortega, Nicaragua initially experienced a period of economic growth and security (in a notoriously violent region). Yet this stability was coupled with growing authoritarianism. Ortega removed term limits, appointed FSLN loyalists to the Supreme Court and the Supreme Electoral Council (CSE), and removed opposition politicians from the National Assembly. By the 2016 elections, Ortega had severely undermined democracy. The FSLN-dominated Supreme Court prohibited his main opponent from running, authorizing a one-party election. He installed his wife, Rosario Murillo, as his vice president and presumptive heir, evoking memories of the dictatorial Somoza family, which controlled Nicaraguan politics with U.S. backing for much of the twentieth century. Under Ortega, democracy and political competition in Nicaragua have been all but eliminated.

Furthermore, with the collapse of Venezuela’s economy in 2015 (Venezuelan oil money has long bankrolled the FSLN), the economy, and correspondingly Ortega’s popularity, began to suffer. Years of worsening political and economic conditions culminated in April 2018 when Ortega decreed social security reforms, which would have reduced pensions by 5 percent and raised taxes to overcome increasing deficits. Thousands of Nicaraguans took to the streets to protest not just this proposal, but also the systemic erosion of democracy under the Ortega regime.

To quell the protests, the Nicaraguan government resorted to repression and violence, often using parapolice forces to attack protestors and imprison dissidents. These tactics largely succeeded in maintaining Ortega’s grip on power. By August, the protests had died down and the main opposition groups, the Civic Alliance for Justice and Democracy and the National Blue and White Unity, had fractured.
THE STATUS QUO
Today, although Nicaragua may not be in open rebellion, the conditions that inspired last year’s protests have worsened. Ortega’s violent crackdown left more than 325 Nicaraguans dead and thousands more injured or imprisoned, increasing disillusionment with his rule. He is politically isolated within the international community; the Organization of American States (OAS) and the United Nations released reports accusing the Ortega regime of human rights violations. Fundamental individual freedoms, such as the freedom of assembly and due process have been eliminated. Economically, Ortega can no longer provide meaningful growth—experts predict up to an 11 percent contraction in the economy this year and the social security crisis remains unsolved.

An economic shock or another political mistake could rekindle the protests of last year. Should that occur, Nicaragua risks experiencing a humanitarian, economic, and migratory crisis similar to the ongoing issues in Venezuela, further destabilizing an already precarious region close to the United States’ southern border.

Nicaragua, however, has not yet collapsed. As a result, the United States and the international community have a window to avoid another Venezuela in the Western Hemisphere. Proactive, multilateral diplomacy and support for dialogue, with the aim of electoral and institutional reform in the Supreme Court and CSE, could help rebuild Nicaragua’s democracy and prevent the further devolution of political and economic stability. External actors can provide both the carrots and sticks necessary to facilitate difficult negotiations between the Ortega regime and opposition groups.

CARROTS AND STICKS
So far, much of the rhetoric from the Trump administration has promoted a sanctions-based approach to weaken Ortega’s position. In his November 2018 remarks outlining a strategy in Latin America, Bolton declared that the “Nicaraguan regime, like Venezuela and Cuba, will feel the full weight of America’s robust sanctions regime.” Although targeted sanctions, if used with a clear purpose and in collaboration with regional partners, can be an effective threat, relying solely on wide-ranging sanctions will likely prove counterproductive.

Much of the FSLN’s popularity originated from their anti-imperialist, anti-American position. Overusing sanctions could revive memories of U.S. intervention during the twentieth century and give credence to the party’s anti-American rhetoric, thus re-legitimizing Ortega. Furthermore, trade-based sanctions could isolate the private sector—a crucial anti-Ortega faction that will need to play
a significant role in any negotiated settlement because of its their economic clout.\textsuperscript{15} Last, sanctions can produce a wide range of unintended economic and humanitarian costs. Instead of forcing Ortega into accepting a deal, far-reaching sanctions could potentially boost Ortega’s position within Nicaragua and reduce the incentives for him to adopt more liberalizing reforms.

Other coercive diplomatic tactics, such as support for sudden regime change similar to what the Trump administration has pursued in Venezuela, carry even more risks than a sanctions-based approach. The opposition lacks both the constitutional basis and the unified leadership to present a legitimate alternative candidate because of Ortega’s political maneuvering. Ortega controls all elements of Nicaragua’s political leadership, so sudden regime change would most likely create a power vacuum, further destabilizing the country and the region.

Given the risks of sanctions or regime change as policy options, the United States and the international community should focus on building strong institutions that facilitate a peaceful transition to a representative democracy rather than pursuing a policy centered on defeating Ortega.

However, building a lasting democratic infrastructure will require negotiation and multilateral diplomatic pressure to bring Ortega and the opposition groups to the bargaining table.

\textbf{THE UNITED STATES AND THE INTERNATIONAL COMMUNITY SHOULD FOCUS ON BUILDING STRONG INSTITUTIONS THAT FACILITATE A PEACEFUL TRANSITION TO A REPRESENTATIVE DEMOCRACY RATHER THAN PURSUING A POLICY CENTERED ON DEFEATING ORTEGA.}

Although Ortega clearly is desperate to hold on to power, there is a path forward through negotiations. In 2017, Ortega signed a Memorandum of Understanding with the OAS outlining the need for electoral and political reform, and more recently, on April 16, 2019, he agreed to release hundreds of imprisoned protestors, ostensibly as a goodwill gesture.\textsuperscript{16,17} After all, Ortega desires legitimate power, which can only be gained through the acceptance of domestic actors and the international community.\textsuperscript{18} Dialogue is a way for Ortega to regain the legitimacy he had when he was democratically elected.

Previous efforts at negotiation, however, have broken down. In July 2018, Ortega and opposition groups were unable to find a suitable mediator from within Nicaragua and could not agree upon a realistic, meaningful agenda.\textsuperscript{19} This impasse is unlikely to change in the absence of external pressures; therefore, the international community should step in and use both carrots and sticks to encourage Ortega to discuss electoral reform.

A potential incentive that negotiators could offer Ortega would be to hold elections in 2021 as scheduled, instead of moving them up as the OAS and other
institutions have urged.Keeping the elections in 2021 is advantageous for two reasons. It satisfies Ortega's desire to stay in power through legitimate means while giving the Nicaraguan opposition more time to develop a cohesive agenda, identify promising leaders, and prepare an effective political campaign. Building party infrastructure does not happen overnight. Ortega, on the other hand, already has an extensive political infrastructure, and a shortened electoral timeline would only give him an advantage over the opposition.

Simultaneously, the international community could threaten the Ortega administration with suspension from the OAS, which would further isolate and delegitimize his rule, as well as targeted, multilateral sanctions against family members and high-ranking officials should he refuse to negotiate.

**NEGOTIATIONS**

Once parties agree to mediation, negotiations could focus around three potential electoral reforms that would satisfy both Ortega's desire for greater legitimacy and the opposition's calls for greater political freedom and liberalization: independent election monitoring, greater access for political parties, and updated electoral rules.

Nicaragua needs unbiased election monitoring from both internal and external actors. Ortega's control of the CSE, which oversees Nicaragua's elections, gives him undue influence over the electoral process. An independent, non-partisan CSE is a crucial step toward free and fair elections. To ensure that it is operating adequately, Nicaragua should be encouraged to accept external election monitoring by independent groups from the United States, OAS, or by NGOs, all of which also should provide technical support to boost the capabilities of the CSE.

Another potential outcome of negotiations is greater political access for opposition parties. Ortega's allies in the CSE and the Supreme Court prohibited opposition candidates from running in previous elections and removed representatives from the National Assembly, thus guaranteeing Ortega's grip on power. Greater political freedom will have two beneficial outcomes for Nicaragua. Fostering party competition will strengthen democracy, regardless of the result. Second, it will offer citizens a route to express displeasure through peaceful means (i.e., voting) rather than through violence. Outside groups should monitor party competition to ensure that all political groups are given a fair chance.

Last, negotiators should consider changing election laws. Previously, Nicaraguan electoral rules mandated a run-off election if no candidate exceeded 50 percent of the popular vote. In 1999, Ortega and Arnoldo Alemán of Nicaragua's Liberal Party changed this threshold to 35 percent if no other candidate was within 5 percent, thus making it easier to avoid a run-off election. In Nicaragua's multiparty system, lowering the barrier for election made it easier to win election without popular support. Ortega, for example, won the 2006 election with just 38 percent of the vote. Restoring the 50 percent barrier would endow the
electoral winner with a truer mandate to govern and allow the disparate anti-Ortega interests to coalesce around an opposition candidate in a run-off election. Should this reform not take place, it is easy to imagine Ortega or Murillo winning an election over a highly divided opposition despite their unpopularity. Strengthening electoral institutions could satisfy the demands of Nicaraguans, as well as those of the international community. These reforms may leave Ortega in power in the short-term, but they would restore the democratic process and create the framework for a peaceful transition of power.

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ENDNOTES


15. Tiziano Breda, telephone interview with author, April 12, 2019.


19. Ibid.


Across both sides of the Atlantic, governments are raising the alarm over economic competition from China. Both the European Union and the United States have criticized Chinese trade-distorting practices, including forced technology transfer, state-owned enterprise-driven foreign direct investment, and industrial subsidies.\(^1\)\(^2\) However, despite agreement among politicians in Brussels and Washington over the challenge China poses, efforts to coordinate a response have been undermined by unilateral action of the Trump administration. In a retreat to protectionism under “America First,” the United States has been waging a trade war with China, imposing and threatening tariffs on its European allies, and pressuring the European Union to adopt a more confrontational approach vis-à-vis China.\(^3\)

Although President Donald Trump’s approach has been successful in pushing the EU to adopt a tougher stance—the European Commission recently labeled China an “economic competitor” and “systemic rival” in its 2019 *EU-China–A Strategic Outlook* communication—his unilateral confrontation with China and simultaneous tariff threats against his allies are encouraging the European Union to adopt more state-interventionist policies as well.\(^4\) Powerful voices inside the European Union already are advocating for an EU industrial policy that foresees greater state involvement to protect European interests and firms via government subsidies and other forms of preferential treatment. This approach could ultimately hurt U.S. businesses by increasing the global competitiveness of European firms and potentially restricting access to the European market to all foreign firms.

**RESPONDING TO THE UNITED STATES AND CHINA**

So far, the most prominent call for a more defensive and state-interventionist EU industrial policy has come from the German government. In Germany’s *National Industrial Strategy 2030*, economic minister Peter Altmaier has advanced a vision for a German and European industrial policy that advocates: maintaining intra-EU closed value-added chains in the industrial sector; temporary state-ownership of strategically important companies; promoting “national and European champions” through subsidies and looser EU competition rules; and using government intervention to boost competitiveness of EU-based firms in
technology sectors, including the digital economy, autonomous vehicle technology, and Artificial Intelligence (AI). Such measures would provide an artificial competitive edge to European firms at the expense of foreign competitors.

Although these elements of Germany’s draft industrial strategy clearly are intended to address European concerns regarding economic competition from China, they also are a response to U.S. protectionist policies under the Trump administration. The release of the strategy comes amid heightened transatlantic trade tensions given Trump’s looming threat to impose auto tariffs on the European Union and Europe’s waning confidence in U.S reliability as a global partner.

The suggestion to maintain “closed value added chains ... in an economic area”—meaning the European Union—is likely motivated by rising production costs and supply chain disruptions driven by the U.S.-China trade war and overall global uncertainty over trade policy. Closed value-added chains, established by consolidating research and development, production of parts, assembly, and distribution, are likely a bid by the European Union to build resiliency amid an unpredictable global economic environment.

The German draft policy mentions the United States alongside China as an economic competitor and points to China’s industrial policy, “Made in China 2025,” and U.S. policies under “America First,” to justify the need for a European industrial policy that puts Europe first. Ironically, by recommending increased state intervention in the economy, the European Union is essentially taking a page out of the Chinese economic playbook.

A BLUEPRINT FOR AN EU INDUSTRIAL POLICY?

Not all elements of Germany’s draft national industrial strategy will find their way into an EU-wide industrial policy—or even Germany’s final industrial policy. Altmaier’s proposal has earned widespread criticism, including from his ministry’s own economic advisory council. However, the strategy is intended to influence the debate in Brussels and send a clear message to the United States by insisting that “German industrial policy must always also be European industrial policy.”

Recent developments suggest that the German proposal is getting traction, though EU-internal disagreements over the exact nature of an industrial policy are bound to ensue. Shortly after Altmaier presented the strategy, the German Ministry for Economic Affairs and Energy, together with its French counterpart, issued A Franco-German Manifesto for a European industrial policy fit for the 21st Century. The manifesto echoes Germany’s calls to weaken EU competition law to facilitate the
creation of European champions and to allow temporary state involvement in specific sectors. Spain’s prime minister and the EU Commissioner for Competition Margrethe Vestager have voiced support for an EU industrial policy, although they resisted the idea of loosening competition rules. With the EU27’s two largest economies steering the policy debate, it is only a matter of time until the bloc implements some form of industrial policy.

**BAD FOR U.S. BUSINESS**

If implemented, whether just in Germany or at the European level, a more defensive and pro-European industrial policy will inevitably affect, both directly and indirectly, U.S. businesses operating in or exporting to the European Union. For instance, maintaining intra-EU value-added chains in the automotive industry, which frequently is highlighted as a strategically important sector in the German draft policy, also would limit market access for U.S. suppliers of car parts. The European Union is the third-largest export destination for U.S. automotive parts, accounting for $10.9 billion in 2018, or 12 percent of total U.S. exports of automotive parts.

Likewise, although the use of state intervention to prevent foreign takeovers of companies relevant to national security is primarily meant to curb Chinese investment in Europe, the practice could be expanded to block acquisition bids originating from other countries, including the United States. For U.S.-based companies, this is particularly concerning considering that the German draft policy identifies U.S. venture capital firms buying out European start-ups as a challenge to the European economy and suggests that the government provide “encouragement and support” where “takeover attempts concern technology and innovation leadership” rather than national security concerns. Given that the French government once vowed to block the takeover of Danone by PepsiCo after labeling the yogurt maker a “jewel” of French industry, the prospect of the European Union preventing U.S. acquisitions of European AI companies, for example, would not be too far-fetched.

Amending EU competition law and proliferating the use of government subsidies to promote European champions would affect U.S. companies indirectly by employing non-market measures to unfairly increase the global competitiveness of European firms at the expense of both Chinese and U.S. competitors. At the very least, it will further exacerbate problems currently straining the transatlantic trade relationship.

Subsidizing EU companies will lower prices for European products, both domestically and abroad. This will in turn only widen the European Union’s trade surplus with the United States, which has drawn the ire of the Trump administration. EU subsidies to Airbus, a company often highlighted as the poster child of successful industrial policy, have been at the center of a long-standing and recently escalating WTO dispute with the United States, which has threatened to impose $11 billion in additional tariffs on European goods in retaliation for
the bloc’s subsidies to the airplane manufacturer. More EU subsidies in the industrial sector are thus sure to incite additional transatlantic trade disputes.

Furthermore, EU competition law could be changed not only to facilitate the mergers of domestic firms to create European champions but also to prevent foreign firms from expanding their EU market shares. The European Commission has been investigating U.S. tech companies and slapping fines on them for violating anti-trust regulation, and several EU member states have implemented a controversial digital services tax that applies almost exclusively to U.S. tech giants. If these developments are in any way indicative of how a more pro-European industrial policy would affect U.S. industrial companies, it would be a cause for concern.

Although the discussion of an EU-wide industrial policy is still nascent, the German proposal for a national and European industrial policy illustrates how the EU could implement more state-interventionist measures in response to economic competition from the United States and China. The White House certainly welcomes more defensive EU policies vis-à-vis China; however, such policies would inevitably harm U.S. businesses as well, either indirectly through increased competition from European companies or directly by limiting access to European markets for foreign firms.

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ENDNOTES


4. High Representative of the Union for Foreign Affairs and Security Policy, “EU-China – A strategic outlook.”


9. Ibid.


Data is the oil of the twenty-first century and the technology companies that control this resource have become uniquely influential non-state actors. By tapping into an unlimited reservoir of user information, social media and digital communications companies have developed algorithms and targeted advertisements that influence the information and products its users consume. U.S.-based tech companies like Google, Facebook, Amazon, and Apple, among others, have become some of the most transformative and profitable companies in the world.

But the speed with which these companies have come to dominate our economic, social, and political lives has obscured their excesses. Thoughtful regulatory measures on these companies can give individuals more control over their digital lives and promote greater technological competition. Moreover, a well-regulated U.S. tech sector that safeguards the universality of a free and open Internet will sharply contrast the increasing number of restrictive Internet adaptations developing abroad.

DIGITAL MANIPULATION AND TECH COMPETITION

Social media platforms have not done enough to deter foreign and domestic actors from undermining trust in democracy and enflaming pre-existing divisions. In 2016, Russia weaponized social media to help elect Donald Trump and push the United Kingdom to exit the European Union. Using harvested personal information, political data-mining businesses like Cambridge Analytica have facilitated micro-targeted digital political campaigns. Bowing to mounting public pressure, some social media companies have taken steps to self-regulate. Facebook has introduced Off-Facebook Activity, a tool that allows user to view the personal data harvested from their browsing histories and barring Facebook from using it for targeted advertising. Additionally, Facebook, Twitter, and YouTube recently removed hundreds of Chinese accounts spreading disinformation about the ongoing protests in Hong Kong. While these are positive reforms, these platforms should begin to play a more proactive role in combatting disinformation and data abuse rather than reacting to on-going crises.

The dominance of a handful of U.S. tech companies is also beginning to stifle competition. The largest technology companies protect themselves by buying promising startups and folding them into their business or emulating their popular features. This lack of competition makes it difficult for consumers to hold tech companies accountable for major privacy failures.
THE U.S. REGULATORY LEADERSHIP VACUUM
Since their creation, the U.S. government has largely taken a laissez-faire approach toward regulating its technology giants.\(^\text{10}\) The Honest Ads Act and Bot Disclosure Accountability Act in the U.S. Senate would require technology firms to disclose advertising methods and limit the use of automation behind ad messaging on social media, but the latter was not enacted in the previous session of Congress and the former lacks sufficient support.\(^\text{11,12}\) Whereas the federal government’s anti-trust oversight remains lax, state legislatures have taken it upon themselves to protect their constituents’ digital information. Most significantly to date, California’s Consumer Privacy Act gives its residents more autonomy and insight into the use of their personal information online.\(^\text{13}\)

In the absence of U.S. leadership, the European Union has stepped up as the world’s leading big tech watchdog.\(^\text{14}\) Last year, the European Union adopted the General Data Protection Regulation (GDPR), which provides its citizens with tough privacy protections and enforces significant fines against technology companies that fail to meet regulations. EU member states have taken further steps to protect their citizens’ data. Germany recently blocked Facebook from pooling cross-platform data without user consent.\(^\text{15}\) In the United Kingdom, the Report of the Digital Competition Expert Panel called for closer examinations of tech mergers and encouraged large companies to share their data with smaller firms.\(^\text{16}\)

As Europe and the United States develop disparate approaches toward tech regulation, China has taken bold steps to define global digital norms. Modeled after Europe’s GDPR, Beijing’s privacy standard, the Personal Information Security Specification (“the Standard”), gives Chinese citizens a degree of control over their personal data while protecting the interests of its booming technology sector.\(^\text{17}\) Contradictorily, the Standard also establishes the principle of “data sovereignty” that specifies that all information of citizens must be stored in-country and can be accessed on-demand by the Chinese government.\(^\text{18}\) The digital dimensions of China’s Belt and Road Initiative, including fiber optic cables, 5G networks, and satellites, makes the prospect of Chinese data misuse abroad foreseeable.\(^\text{19}\)

Furthermore, China’s “Great Firewall” has become the global gold-standard of censorship and surveillance for other authoritarian countries. Beijing uses data gleaned from its tech giants to refine its vast domestic surveillance state, most glaringly on display in its Xinjiang province.\(^\text{20}\) The Chinese government uses a combination of facial recognition technology, cataloged biometric data, and artificial intelligence to surveil its Uyghur Muslim population.\(^\text{21}\) It is estimated that China has incarcerated 3 million Uyghurs in “political education” camps.\(^\text{22}\) Around the world, an increasing number of countries are embracing China’s vision for a tightly controlled Internet over the permissive American model. Already, 18 countries have purchased Chinese-made intelligence monitoring systems, and 36 have received training in censorship.\(^\text{23}\) Left unchecked, this
Orwellian technology will give authoritarian countries greater control over their citizens’ behavior and degrade the openness of the Internet.

**LEADING BY EXAMPLE ON TECH REGULATION**

The United States stands at a crucial intersection, with the current path leading toward more data manipulation, a permanent technological oligarchy, and a balkanized World Wide Web. The United States must change course and start leading this serious conversation.

Using Europe’s GDPR and California’s Consumer Privacy Act as a foundation, the United States should develop its own regulatory framework to manage its tech giants. In doing so, it can provide greater transparency to digital consumers and establish penalties against companies that enable the maligned use of users’ personal information. Citizens who access these platforms have a right to see which data-mining firms have made use of their online behavior and to identify the ultimate beneficiary of their information. Technology companies that monetize their users’ information should be required to submit their ads to a public archive that would enable private and public organizations to identify misinformation and influence campaigns in real-time. Large technology companies also should be encouraged to share a portion of their data with cities, promising tech startups, civic groups, journalism outlets, and research institutions. Under the control of a third-party trust, this data would be used in ways that involve and benefit citizens.

The United States also must revamp its anti-trust toolkit. Competition authorities should encourage greater watchfulness over corporate takeovers that could permanently damage innovation and consumer choice as well as over mergers involving massive quantities of user data. The government should push for measures that catalyze greater technological competition as well. A variable-compliance cost structure would avoid insulating the largest corporations from challenging platforms and promote a contest of ideas between startups and legacy tech companies. Additionally, compulsory contributions to state revenue would push tech companies to offer their services without advertisements. Congress could add a digital ad surcharge to the corporate income tax of the largest technology companies and state legislatures could adopt a sales tax on the revenue a company earns from the social media ads its residents view. This tax would incentivize the largest tech companies to offer ad-free subscriptions, find new revenue opportunities, and minimize the potential of malign influence on their platforms.

Finally, to reaffirm its place as a global technology leader, the United States must engage in global discussions to find common ground on digital norms and regulations. The United States should begin by adopting the privacy protection laws outlined in Europe’s GDPR and the private sector protections codified in China’s privacy specification. The United States also could become a party to the GDPR, enabling it to improve the agreement and promote stronger transatlantic
TO REAFFIRM ITS PLACE AS A GLOBAL TECHNOLOGY LEADER, THE UNITED STATES MUST ENGAGE IN GLOBAL DISCUSSIONS TO FIND COMMON GROUND ON DIGITAL NORMS AND REGULATIONS.

unity. To safeguard democratic governments from disinformation campaigns and unify the United States and its partners on future digital issues, new multilateral institutions and Internet standards are needed to enforce a new code of technological governance. Encouragingly, G7 leaders endorsed a “Strategy for an Open, Free and Secure Digital Transformation” at the recent summit in France. To avoid further splintering the Internet, the U.S. government must lead these difficult discussions with allies and adversaries alike. Creating more shared databases for researchers with China and Europe would be a promising start. The United States must become an active participant in regulating its tech companies, not only for the sake of its citizens, but to preserve an open Internet and the international liberal order it leads.

CONCLUSION
Humans have regulated the ownership of private property for thousands of years, but we have limited experience regulating the ownership of personal data. To restore digital autonomy to its citizens and prove itself as a capable global leader in digital governance, the United States must do more to curb the harmful side effects associated with its tech giants. In doing so, it will make its Internet policies more attractive than the emerging authoritarian approaches towards the digital commons. If the United States fails to address this challenge head-on, it will inevitably lead to more data manipulation, ungovernable tech giants, and an increasingly fractured World Wide Web.

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15. Olaf Storbeck, "Germany Blocks Facebook from Pooling User Data without Consent, Financial Times, February 7, 2019, https://www.ft.com/content/3a0351b6-2ab9-11e9-88a4-c32129756dd8."


The Soviet Union launched the first artificial satellite, Sputnik 1, on October 4, 1957. The launch of U.S. satellite Explorer 1 just a few months later on January 31, 1958 and the subsequent creation of the National Aeronautics and Space Administration (NASA) that same year marked the dawn of the space age. In the years that followed, space was a burgeoning field in which global superpowers alone enjoyed almost exclusive access. The United States and the Soviet Union were the only entities that could afford the burdens associated with the so-called space race. For the next several decades, the rich and powerful held a strong monopoly over access to the outer space domain, and a majority of the satellites they launched into space were military satellites. From the launch of Sputnik 1 until 1990, the global hegemons were responsible for an overwhelming majority of the satellites launched into space—the United States and the Soviet Union together accounted for a combined 93 percent of satellites launched, 70 percent of which were military satellites—and space seemed impenetrable to the rest of the world.

This no longer remains the case. Today, thanks to increased accessibility through energy-efficient computing and affordable launch systems, private companies, non-profit organizations, and other public entities are rapidly developing and launching imagery satellites. This movement is often referred to as “the democratization of space.” It describes a change in the status quo that “has made outer space accessible to not only the global superpowers and large multinationals, but to developing countries, start-ups, universities, and even high schools.” Leading European aerospace company Airbus recently took steps to close this gap even further with the launch of UP42, its new startup. UP42 is an initiative that “promises to make satellite (and drone) image data accessible to individuals and small shops” by providing readily available resources to the user, including not only the imagery itself but also algorithms that can prepare analytic data. The company’s platform challenges the idea that access to satellite imagery and geospatial data is restricted to federal agencies and their work.

Furthermore, other leading satellite companies are working to increase accessibility and commercialization by not only lowering costs but also increasing...
revisit rates: the frequency with which a satellite can capture a specific location on Earth. Planet Labs, a private American imaging company that retains the largest constellation of satellites in the world, has tasked its SkySat fleet of thirteen satellites with producing high-resolution images more often than any other imagery vendor by making sub-daily revisits.7 Maxar Technologies, the largest American satellite image vendor (previously known as DigitalGlobe), is not to be outdone and is aiming to launch its own WorldView Legion fleet by 2021, which will allow it to “image parts of the planet every 20 minutes, flashing by for photos dozens of times a day.”8

Although satellite imagery analysis is just one facet of today’s constantly evolving digital age, it takes on a meaningful role in the face of globalization. Space-based photography—notably different from aerial surveying or aerial/airborne photography, which require special overflight permissions—maintains the potential to not only influence foreign policy but also to pave the way for increased government engagement and civilian oversight from the public sphere. The democratization of space and commercialization of satellite images are quickly becoming creative tools to affect foreign policy in ways that, just a few decades ago, were next to impossible.

In the last several months, satellite images of North Korea made major headlines in media worldwide that arguably had a critical impact in the U.S. policy sphere. The inaugural report from a CSIS series identifying North Korea’s missile operating facilities was flagged as “fake news” by North Korean state media.9 Images from a story confirming renewed activity at the Sohae launch facility circulated major U.S. media outlets and were referenced in an official testimony by a State Department official less than a week following the breakdown of U.S.-DPRK talks in Hanoi.10,11 Most recently, Planet Labs captured North Korea’s first missile test in 18 months and released an impressive image that not only showed the smoke trail left behind by the projectile but also provided clues for experts to deduce the type of missile that had been launched.12 These stories underscore how increased access to space allowed for close monitoring of a mysterious regime and brought forth new evidence to add to the pre-existing narrative of denuclearization struggles on the Korean peninsula. Partnerships with private satellite companies are crucial to these efforts and provide think tanks with the tools to look into countries like North Korea without having to pay astronomical costs for purchasing imagery or have research efforts thwarted by impractical delays in imagery acquisition, as was the case in the recent past.13 Such capabilities allow research-driven entities to educate the public by providing readily accessible information and place pressure on the government to produce robust policies against such issues.

In a similar vein, satellite imagery also can enhance and complement preexisting research to provide heightened clarity when it comes to national security issues. A notable example is a story published by the Wall Street Journal in 2018, in which the authors combined imagery acquired by Maxar Technologies and
THE DEMOCRATIZATION OF SPACE AND COMMERCIALIZATION OF SATELLITE IMAGES ARE QUICKLY BECOMING CREATIVE TOOLS TO AFFECT FOREIGN POLICY IN WAYS THAT, JUST A FEW DECADES AGO, WERE NEXT TO IMPOSSIBLE.

Planet Labs with expert analyses to report on China’s installation of “jamming” technologies in Mischief Reef in the Spratly Islands to block U.S. satellite communications and bolster Chinese primacy in the South China Sea. This supported previous claims published in 2015 by Jane’s Defense Weekly that also raised concerns about China’s efforts to expand its military presence in the Spratlys by way of Fiery Cross Reef and Subi Reef. The report, which utilized imagery from Airbus, not only provided evidence that China was building concrete runways for military aircraft in Fiery Cross Reef but also captured additional dredging activity at Subi Reef alluding to the fact that China was creating islands for a second military airstrip. These instances illustrate how the commercialization of satellite imagery allows the media to supplement its stories with satellite imagery and provide irrefutable evidence that goes beyond fact-checking.

Satellite imagery analysis can take on a multitude of forms and the case studies examined in this article are simply a sample to demonstrate the diverse techniques in which emerging technology and the democratization of space can influence foreign policy. Increased access to satellite images provides a practical means to acquire new insight about unknown or contentious issues and to support conclusions drawn by open-source research. The various methods with which this technology is applied, and their outcomes can shape the policy debate among the public, hold the government accountable to make informed foreign policy decisions, and increase the scope of open-source information available to researchers. Furthermore, it is a valuable resource that can modernize research techniques, encourage creativity, reduce costs, and much more. Finally, it is a mechanism that can aid both domestic and international causes and catalyze the formulation of U.S. foreign policy.

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5. William Welser IV, “The Democratization of Space.”


China’s state-owned enterprises (SOEs) have existed since the founding of the People’s Republic of China (PRC). Similar to the country’s economy, which remained largely isolated until forty years ago, how these enterprises were owned and operated garnered little attention. However, as China’s economy has become more integrated with the global economy, the global impact of SOEs as well as interest in these enterprises have grown. As other major economic powers have taken issue with state influence in China’s domestic market in recent years, the eyes of the world have turned to SOEs. It is vital that observers outside of China understand what these enterprises are and how they are changing to better understand both China’s domestic economy and its economic impact around the world.

Chinese SOEs appear to be evolving in two contradictory directions; in some respects, they are moving away from government control and towards greater private governance and decisionmaking. Simultaneously, state-owned enterprises—along with nearly all organizations in China, both private and public—are having to give increased formal leadership to the Chinese Communist Party (CCP).¹ For those interested in the conditions of China’s domestic market, from policymakers to investors to academic observers, acquiring a baseline understanding of how these enterprises are changing is essential to fully consider the implications that this somewhat contradictory evolution will likely have on China’s future.

This article seeks to provide readers with a baseline understanding of Chinese SOEs, the implications of mixed-ownership reform, and the larger context of these trends in corporate governance.

THE REFRESHING FLAVOR OF SOE CLASSIC

The classic impression of SOEs is one of large, powerful Chinese companies with unlimited backing from the state. Such support allows these entities to compete on the global stage with an arsenal of resources not enjoyed by counterparts in other countries.

However, the truth is that SOEs are hardly unique to China. SOEs play a role in every major economy, including the United States. They are not necessarily at the heart of each country’s national industrial plans, as evidenced by examples in South Korea and Japan.
Broadly, an SOE is a company owned and managed by the government. Examples in the United States include the U.S. Postal Service and Freddie Mac. Although an SOE may exist in a sector that serves a public good or in a sector considered essential to the national interest, the existence of an SOE does not necessarily preclude private or foreign competition within that sector. Unlike services provided by the government, SOEs still are at least notionally profit driven, though in practice their profit sensitivity depends on the outlook or policies of the government that owns it.

SOEs should not be confused with so-called “national champions,” or companies earmarked by the state for success. South Korea’s chaebols are an excellent example of private national champions. To facilitate development and create internationally competitive companies, South Korea’s government both protected selected domestic industries from international competition and ensured resources went to a handful of chosen companies. Eventually, these companies became international giants in their given industries. Though these “national champions” had very close ties to government, they were privately owned and managed, meaning they were not SOEs. Though an SOE also could be a national champion, the qualities that make a company an SOE or a national champion are a separate set of characteristics.

China’s SOEs are unique in several ways. First, they have a disproportional footprint in China’s economy. One hundred fifty thousand SOEs account for one in five urban jobs in China and approximately 25 percent of the nation’s economic output. This footprint extends to Chinese outbound FDI, which makes up nearly 60 percent of outward investments and has ranged from $40 to $100 billion in real USD annually between 2007 and 2017, according to China’s Ministry of Commerce. Second, the relationship between the state, banks, and SOEs allows SOEs inordinate access to credit from Chinese banks, unlike their counterparts in many other countries. Because of strong incentives to continue collecting tax revenue from SOEs as well as maintain high levels of employment, local and provincial governments push banks to issue credit to state-owned enterprises regardless of their competitiveness. As a result, SOEs account for nearly 60 percent of China’s corporate debt, and conservative estimates place the number of unprofitable but still operable entities (so-called zombie companies) in the thousands. The result has led to massive overcapacity in industries such as steel—and barring an economic crisis, gives national-level economic planners the ability to allow overcapacity in any industry they choose. The combination of these two factors has led the United States and other countries to label China a “non-market economy” where the state excessively distorts markets.

STATE-OWNED MAKEOVER

Foreign companies and governments have expressed frustration with the non-competitive aspects of China’s SOEs, and they are in good company. Chinese leadership, including President Xi Jinping and Premier Li Keqiang have often
spoken about the need to reduce the ratio of zombie companies and increase the competitiveness of SOEs.\textsuperscript{8,9} A number of reforms have been enacted to address this, but one of the more counterintuitive approaches is the so-called mixed-ownership reform (MOR).

Mixed-ownership reform involves private ownership of SOEs to increase price consciousness and efficiency. This allows greater say and corporate oversight from the private sector and provides the impetus to cut the fat from SOEs and increase their competitiveness. The idea was first endorsed by President Jiang Zemin in his 1997 speech to the Fifteenth Party Congress but was formally started in 2013.\textsuperscript{10} After starting with a few select national-level enterprises, the policy has expanded gradually in waves as more companies have fallen under its jurisdiction.\textsuperscript{11} By 2018, two-thirds of all central state firms (at all levels of government) and more than half their subsidiaries fell under mixed ownership reforms involving equity purchases by the private sector exceeding 338.6 billion RMB (50.5 billion USD).\textsuperscript{12,13} As recently as March 2019, it was announced that private sector entities could hold a majority stake in SOEs in certain key industries.\textsuperscript{14}

From a legal point of view, this is not a drastic change. Reforms in the 1980s and 1990s also changed SOE management and control, leading to the creation of a specific office—the state-owned Assets Supervision and Administration Commission (SASAC)—in 2003 to act as majority shareholder of SOEs and exercise shareholders’ rights on the state’s behalf.\textsuperscript{15} In their seminal paper on the topic, professors Li-Wen Lin and Curtis Milhaupt argue that Chinese national SOEs are governed as though all fall within a diversified metagroup under control of SASAC, which they assert is the largest controlling shareholder in the world.\textsuperscript{16} SASAC was highly useful in clarifying the relationship between SOE chains of command and other branches of government, but has been ineffective in addressing problems such as overcapacity and zombie companies.

However, there is optimism that where SASAC failed, private shareholders can succeed. The distinguishing characteristic of the MOR approach is the increased voice private shareholders are expected to have within state-owned enterprises. As SASAC spokesperson Peng Huagang told reporters in 2018, “mixed ownership enterprises will promote improvements in [SOE] corporate governance structure, improve their market-oriented operation mechanisms, and help transform state-owned enterprises.”\textsuperscript{17}

If carried out as asserted, MOR could reduce market imbalances and cut overcapacity by forcing SOE management to make decisions based on price incentives rather than national objectives. As the scope of MOR expands to include more enterprises, it could be an important intermediate step towards removing the distorting effects of state subsidies and make China a true market economy.
PARTY TIME
As promising as the concept of MOR may seem, observers should remain cautious about actual follow-through. Despite the prospect of greater corporatization of China’s state sector, in practice many private companies have concerns over how much input they will have over MOR enterprise decisionmaking. Critics complain that in practice, little has changed in SOE management despite the presence of private ownership. Without the accompanying changes in corporate governance promised in MOR, these reforms are little more than an attempt to receive private sector payments without offering anything in return—an empty box with nice wrapping paper.

Even the prospect of removing state influence from the economy has been publicly refuted by Chinese officials. When speaking to reporters in March, SASAC official Xiao Yaqing explicitly stated that mixed ownership is not privatization. In the same press conference, he tried to assuage concerns that mixed ownership was being used for state acquisition of private companies—essentially working in the opposite direction of the articulated intention. These concerns are not unfounded. In October 2018, amid a sinking stock market and stressed equity, China’s national and local governments bought stakes in private companies to prevent mass defaults. Although state funding served as a buffer against market volatility, analysts are concerned that state investors will be reluctant to give up control and that the private sector could be nationalized.

Moreover, other powerful shifts are simultaneously taking place in Chinese enterprises that could carry SOEs in a different direction. Although MOR and other market-oriented reforms are attempting to move SOEs farther from government control, other initiatives are increasing the role of the Chinese Communist Party. Though there is significant overlap between the Chinese government and the CCP, legally the two entities should be understood as separate. Party cells within SOEs or other organizations were largely passive until a few years ago, but have since become an increasingly powerful force. Since 2013, soon after the start of Xi Jinping’s administration, a concentrated effort was made to increase the roles of SOE party committees in making major decisions for their enterprises. In 2015, the trend was given greater teeth when party leadership ordered that the CCP become the “political core” of state-enterprise corporate governance. Subsequent legal requirements over the following years have similarly clarified that party organizations should serve a “leadership function” within SOEs and that the CCP must legally possess the ability to influence personnel appointments and discuss major proposals before SOE boards make their final decision. Although these changes are not part of MOR, MOR’s implementation timeline matches closely with the party’s rise in SOE corporate governance.
The increased role of the party is not limited to state affiliated entities. Since 2015, private Chinese companies, including foreign-owned joint ventures, have had to accommodate demands to give party organizations legal standing within their governance structure and allow CCP input on major decisions such as the promotion or firing of personnel. Experts assess that this increased role of the party is unlikely to lead to a more centrally-planned economy, but it does reflect the Party’s priority to prevent the private sector from becoming too independent and possibly pose a threat to the party-state.

Taken together, these elements cast significant doubt on how successful MOR will be in achieving its stated objectives—namely, creating more efficient, market-oriented incentives for SOEs through initial public offering (IPO) buy-in from private entities. With decision-making authority in the hands of people who either represent or must accommodate the will of the party, it is unlikely private partners will have much leverage in situations that do not align with party objectives. As Chinese regulators cut down on shadow banking, we may see the parallel counter emergence of “shadow corporate governance” through party leadership within SOEs including MOR companies. Moreover, the increased importance of political loyalty and study of “Xi Jinping Thought,” the president’s political philosophy, in Chinese society at large—especially in government affiliated entities—further foreshadow party-oriented decisionmaking regardless of how MOR is implemented.

OUTSIDE LOOKING IN

Within SOEs and China’s economy, it is very possible that MOR will lead to little more than a change in window dressing. As China’s economy is put under greater stress, cadres will have to balance the need to reform SOEs with the goal of maintaining employment and consumer confidence. In doing so, they will need to choose whether to allow or ignore the voices of MOR private investors. The task will be daunting, and it would not be surprising if leadership chooses inefficient stability over painful changes (without factoring in further distortionary effects from increased party loyalty in the corporate governance structure).

International negotiations are another means by which MOR could take a prominent role. The United States, Japan, and the EU have separately and jointly issued statements condemning the outsized role of Chinese SOEs in the economy. All three powerful economies are pushing for less direct state control and greater free market forces in China’s domestic economy.

MOR provides a counterargument for the Chinese government to rebut foreign criticism. In fact, Chinese officials and business leaders have already started to use this defense. In an op-ed in the Financial Times, Liu Jun, executive vice-president of China Investment Corp., told readers, "Much is made by critics of China of the role played by state-owned enterprises (SOEs). In fact, most such enterprises in China today are stockholding companies with shareholders from both the public and private sectors. Identifying where government ownership of indi-
individual companies begins and ends can be extremely difficult.” As outside scrutiny of state-owned enterprises continues, we are likely to hear more statements to this effect from Chinese policymakers and business advocates. Though the eventual effect on China’s economy is uncertain, MOR provides a speed bump for foreign policymakers, negotiators, and investors trying to build policies around and in response to China’s SOE practices.

**MOR THINGS TO WORRY ABOUT**

Chinese lawmakers have identified state-owned enterprise reform as a priority for domestic economic policy, and the world’s largest economic powers have recognized China’s SOEs as an area of concern for global markets. It is therefore of interest for external actors to understand what reforms are in action and for internal actors to understand the effectiveness and implications of reforms in progress.

Mixed-ownership reform could in theory be an intermediate step towards reducing the role of the state in major industries and increasing market-driven efficiency in China’s economy. In practice, however, it has provided SOEs with an additional source of funding while having little discernable effect on enterprise management. This limited effect, combined with the growing role of the Communist Party in state- and private-owned enterprise management, indicate that although the formal role of government may recede in China’s economy, the informal but more powerful role of the party will take a stronger lead.

These distinctions are highly relevant for observers and policy makers interested in legally constraining Chinese SOE market distortions. Whether it is through multilateral institutions or bilateral negotiations, the governments of major economies including the United States will need to apprise themselves of the shifting landscape, the content of China’s economic reforms, and the implications these reforms have in practice. MOR has been a source of money for SOEs, but MOR is not solving the problems it set out to fix.

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ENDNOTES


5. Ibid. 31, 37.

6. Ibid. 43–44.


16. Ibid., 745.

17. Wang, Sun, and Ban, “State-owned Enterprises Mixed Reform, Groups Welcomed Breakthrough.”

18. Qu and Han, “More State Enterprises Set for Mixed-Ownership Reforms.”


23. Ibid.

24. Bloomberg notes that currently only a small percentage of China’s private sector has been acquired by state entities. Never the less, concerns remain of the practice expanding.


28. Ibid., 24.


30. Readers should note the reason the timelines for MOR and increased formal control of the CCP in SOE governance overlap is due to two scheduled events in 2013 – the Third Plenum of the Eighteenth Central Committee and the start of Xi Jinping’s administration in late 2012. The former laid out intended economic reforms, while the later brought about major changes in government. Although it would be a gross simplification to say that MOR and CCP governance in SOEs have no shared roots, one did not cause the other and their concurrence is likely not intentional.


32. Ibid.


36. Liu Jun, “China is committed to playing by the rules on global trade,” *Financial Times*, October 25, 2018, https://www.ft.com/content/2bbdcd0-d7aa-11e8-aa22-36538487e3d0.
As the world becomes more technologically advanced, some governments are harnessing developments such as facial recognition software, GPS tracking, and other innovative software applications in city-wide surveillance systems to evaluate traffic, collect data, and in some cases, monitor citizens. Although this new technology can increase public safety by better tracking and identifying criminal activity, it also can erode civil liberties by targeting vulnerable populations and systematically implementing mass surveillance and control. Actions by the Chinese government in China’s Xinjiang region are an example of the dark side of surveillance.

Located in northwest China, the Xinjiang Uighur Autonomous Region (XUAR) is home to several ethnic minority groups, the largest of which is the Muslim Uyghurs. The region has been subject to tension in recent years because the Chinese government blames Islamist militants and separatists for conflicts in Xinjiang, whereas rights groups claim that the government represses religious freedom and enforces unfair ethnic policies. In March 2017, China passed a law banning a wide range of activities deemed “manifestations” of extremism, as part of the government’s campaign against what it considers the rising threat of terrorism and separatism in Xinjiang. Mass surveillance and security made possible by advanced technology has helped enable this campaign. In 2017, security and surveillance spending in XUAR almost doubled, and Xinjiang’s security costs have increased 10-fold in the past decade, outpacing the rest of the country. New York Times correspondents recently visited Kashgar, a city in XUAR, where they documented surveillance cameras and security checkpoints at every corner, including inside mosques, and noted the confiscation of cell phones by Chinese authorities to ensure that people have downloaded compulsory software that monitors calls and text messages.

This level of surveillance has empowered the Chinese government to undertake much darker repression tactics in XUAR. In March 2019, an independent researcher estimated that up to 1.5 million Uyghurs and other Muslims have been held in so-called reeducation centers in Xinjiang, calling the detentions an “attempt to eradicate independent and free expressions of the distinct ethnic and religious identities in Xinjiang.” The Chinese government first denied the existence of the centers before officials started referring to them as “vocational
education and training programs” in October 2018 and then officially named them “vocational training centers” in March 2019. Shohrat Zakir, chairman of the Xinjiang government, dismissed reports that the centers were concentration camps or reeducation camps, instead claiming that they were like boarding schools where students live and eat for free.

This account differs from those of UN officials, human rights organizations, and independent journalists, who report that Chinese authorities have extralegally sent people to detention facilities, where they are subjected to forced political indoctrination, renunciation of their faith, mistreatment, and in some cases, torture. In a video that Chinese state television posted showing a class of Uyghurs in the Xinjiang facilities, journalists and human rights activists pointed out surveillance cameras and microphones, demonstrating the technology used to monitor people in cities also permeates the reeducation centers.

The reports of activities in Xinjiang also have prompted attention from U.S. lawmakers. On March 4, 2019, members of Congress wrote a letter to Secretary of State Mike Pompeo urging the Trump administration to take strong measures in response to the Chinese government’s human rights abuses, stating that “of particular concern are reports of U.S. companies that may be contributing to Beijing’s persecution of Uyghurs through their support or commercial ties to Hikvision and Dahua—two Chinese tech giants that have profited from the surge of security spending in Xinjiang.”

Since 2016, Hikvision and Dahua have won $1.2 billion in surveillance project contracts with Xinjiang, and two of Hikvision’s projects were advanced camera systems for detention camps and mosques. These contracts reveal how intertwined Chinese tech companies are with China’s surveillance state, as these companies are providing the technology that makes it possible for the government to repress its people. This February, greater attention was brought to these partnerships when a data leak revealed that SenseNets, a Chinese facial-recognition technology company, collected approximately 6.7 million GPS coordinates linked to names, ID card numbers, and birth dates, and tagged with descriptions such as “mosque,” “hotel,” “internet cafe,” and other locations where surveillance cameras were likely to be placed.

Still, despite warnings, U.S. companies continue to hold investments in Hikvision, as many investors seem to be ignoring Xinjiang’s detention camps due to the profitability of the surveillance industry in China. Although customers of Hikvision may feel that they are purchasing products from a private business, a controlling share of the company is owned by the Chinese government, which should raise serious human rights and national security concerns. These concerns are further heightened as ties between U.S. companies and the Chinese surveillance state go beyond financial investment in Hikvision. Firms in the United States are lending expertise, reputational credibility, and technology to Chinese surveillance companies, and the exact details of these collaborations are not often transparent.
FIRMS IN THE UNITED STATES ARE LENDING EXPERTISE, REPUTATIONAL CREDIBILITY, AND TECHNOLOGY TO CHINESE SURVEILLANCE COMPANIES, AND THE EXACT DETAILS OF THESE COLLABORATIONS ARE NOT OFTEN TRANSPARENT.

On March 13, 2019, Secretary Pompeo spoke upon the release of the State Department’s 2018 country reports on human rights, mentioning that Uyghurs are “interned in reeducation camps designed to erase their religious and ethnic identities.” Although the Trump administration calling out China for its human rights abuses is a necessary start, there is still the failure to mention the problem of U.S. companies potentially contributing to these human rights abuses.

This April, members of Congress sent a letter to Secretary Pompeo, Secretary of Commerce Wilbur Ross, and Secretary of Treasury Steven Mnuchin arguing that words were not enough and urged the Commerce Department to expand its “Entity List” to include entities that have provided technology, training, or equipment to Xinjiang officials in mass detentions and surveillance to ensure that U.S. companies are not assisting in the policing systems used in the Xinjiang region. The Entity List comprises certain foreign persons who are subject to license requirements for the export of specified items because they have engaged in activities contrary to U.S. national security and/or foreign policy interests. Lawmakers also argue that the United States should establish strengthened disclosure requirements to alert American investors about Chinese enterprises that are complicit in human rights abuses.

Although the Trump administration calling out China for its human rights abuses is a necessary start, there is still the failure to mention the problem of U.S. companies potentially contributing to these human rights abuses.

Despite some members of Congress and the State Department bringing the issue to light, the Trump administration is still paying too little attention to the danger of ties between U.S. firms and the Chinese surveillance state. If the United States continues to ignore the contributions of U.S. funds and expertise to China’s surveillance apparatus, then it bears some responsibility for the abuses occurring in XUAR. This administration needs to step up and prioritize Xinjiang in U.S.-China relations and foreign policy.

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ENDNOTES


2. Ibid.


19. Congress of the United States, Letter to Secretary of State Mike Pompeo, Secretary of Treasury Steven Mnuchin, and Secretary of Commerce Wilbur Ross.
The internet is often praised as a tool for freedom of speech, democracy, and truth. However, the internet increasingly has become polluted by misinformation—the inadvertent spread of misleading and false information—and disinformation—the deliberate and coordinated spread of misleading and false information. Individuals online knowingly and unknowingly spread dangerous rumors and propaganda at an alarming rate, which can mislead or manipulate the worldview of those who encounter it. False information online can influence people’s opinions and behaviors with profound consequences—like the impersonation of political groups during elections, or the outbreaks of measles in unvaccinated children.\(^1\)\(^2\)

As the internet becomes ubiquitous, policymakers should develop smart strategies to prepare society for the realities of misinformation. The first step is to identify and counter groups deliberately spreading disinformation, but what does society do with the false information left behind? More concerning, how does a democracy built on the principle of free speech counter misinformation inadvertently spread by its own citizens, without engaging in censorship?

The tension between free speech and the negative effects of misinformation raise questions about who is responsible for addressing it. No community has taken leadership of the mission of countering misinformation, as social media platforms, governments, and civil society all try to hand off responsibilities. Social media giants like Twitter and Facebook are uniquely positioned to address misinformation because they control data on their platforms, but they continue to underreport misinformation while trying to implement in-house solutions. Researchers and civil society organizations are doing an admirable job revealing the extent of misinformation, but their analyses are often incomplete because they lack unfettered access to data controlled by social media companies. Government should be more involved but concerns about excessive surveillance and First Amendment violations make misinformation a legal and political third rail. Society is working in uncharted waters—controlling the spread of information online has never been a reasonable goal in a democracy, and this is a new problem.

Online misinformation may be new, but the way information spreads across online networks is remarkably similar to the way disease diffuses across people-to-people networks. In the early 1960s, epidemiologists proposed the idea
that mathematical models of how disease spreads also could be applied to the spread of a rumor through society, and since then scholars have shown how epidemiological models can be closely applied to the spread of information across social media networks online. It makes sense: both disease and information spread via a contact event between two people, one carrying the agent and one naïve. Both can be traced back to a source—a “patient zero.” Like viruses, information spread transcends borders. If the disease or idea is particularly virulent, the rate of spread can be explosive.

The many parallels between misinformation and disease offer policymakers an opportunity to look to the field of global health for lessons in how to battle the spread of infectious agents. The global health policy community has iterated through many approaches to epidemic preparedness and response; one high-profile example is the deadly Ebola virus, which has made headlines in the past year as an outbreak tears through the Democratic Republic of the Congo (DRC). The international response has come under scrutiny as officials apply lessons learned during the largest-ever Ebola outbreak, which famously took place in West Africa in 2014, to this new context.

One of the most central lessons the global health community learned in West Africa was the importance of building resilient health systems that are well-resourced and prepared to stop outbreaks before they begin. In 2014, Ebola was able to spread through the region with such ferocity precisely because local health systems were weak and unprepared. Today’s outbreak is also happening in a country with a developing health system—but unlike in 2014, the countries bordering the DRC have invested in building strong health systems, so the few cases of Ebola that have crossed over into other countries in the region have been quickly contained.

This principle of building a resilient system to prevent outbreaks provides a useful model for combating misinformation. Rather than engaging in censorship to counter actors or ideas individually, policymakers and industry should focus on building a resilient information system that is ready to mitigate the effectiveness of misinformation without restricting the free marketplace of ideas. This resilient information system should be modeled on the attributes of a resilient health system: reinforced by an engaged and informed public, designed to protect vulnerable and at-risk groups, and well-resourced with all the tools needed to prevent, detect, and respond to emerging threats. Social media platforms, civil society, and government all must work together to build a resilient information system that can mitigate the spread of harmful misinformation without restricting the free exchange of ideas.
PUBLIC EDUCATION

Building a resilient system means engaging all members of a community in a comprehensive effort to fight the spread of a pathogen. Ebola outbreak responders have learned that educating the general public on how to prevent illness is just as important to the response effort as healing the sick. When people know how to recognize the signs of infection, what to do if they encounter a sick person, and how to protect themselves against transmission, the community health system is empowered to halt an outbreak in its tracks.

Similarly, campaigns to build media literacy can teach the public how to protect themselves against misinformation. There is a limit to how effectively technological interventions can protect the public, so educating people on critical assessment of everything they see online, ensuring that people know as much as possible about existing misinformation before they hit social media feeds, and designing peer networks that provide people with relevant sources of social reinforcement all are measures to build resiliency online.

A key attribute of a strong health system is its ability to protect these vulnerable groups. For instance, when an unusual number of children were being infected with Ebola in the DRC, the Ministry of Health held a soccer tournament called “Ebola not in my house” to engage local youth in a conversation about how to protect themselves from the disease.4

Similarly, resilient information systems must be designed to protect the most vulnerable. Media illiteracy is particularly high in certain demographic groups, making them susceptible to misleading and false information online. For example, older generations are more likely be fooled by online misinformation—one study found that those over 65 were three to four times more likely to share junk news online than the 18–29 age group.5 Policymakers should strategically partner with existing advocacy groups and coalitions, such as the AARP, to roll out media literacy programs for at-risk groups.

TARGETED INTERVENTION

Educating the general public is key to reducing the spread of disease, but epidemiologists analyze case and transmission data to identify geographic hotspots of infection within a community for particularly effective outreach. For example, in October 2018, epidemiologists in the DRC were able to analyze chains of Ebola transmission to identify local healers as hotspots for infection. Mistrust of the World Health Organization-run Ebola treatment centers meant that sick people tended to visit traditional healers, who spread Ebola by not washing their hands.

Billboards such as this were effective in West Africa at advertising the symptoms of Ebola and instructing people to bring the sick directly to an Ebola Treatment Center. Photo source: ZOOM DOSSO/AFP/GETTY IMAGES via Boston Globe.
between patients. International aid workers reached out to these local healers to educate them on sanitary practices and recognizing the symptoms of Ebola—recruiting them as officers of the response effort. Just as epidemiologists used transmission data to identify hotspots of disease, misinformation workers can use social network analysis—the process of mapping the flow of information across the structure of communities—to identify hotspots of misinformation online. Tracing misinformation back to a hub can help identify isolated online communities that are exposed to, and in some cases responsible for, misinformation. These communities range from isolated networks of users on Twitter, subcommunities on Reddit, or entire fringe websites like Gab or 4chan.

These online communities are often insulated and distrustful of authority. In the ongoing DRC Ebola outbreak, responders have reported that widespread community mistrust and suspicion is severely undermining outbreak response efforts. Trust in authority has been shattered by years of brutal conflict in the DRC, so many local people believe that Ebola is a Western hoax to oppress the Congolese. This mistrust caused many people to refuse treatment or vaccination, contributing to the spread of disease.

Similarly, insular online communities are particularly vulnerable to misinformation because they are resistant to and dismissive of counterfactual information from sources of authority. In a closed network, only a small amount of information is spread and consistently reinforced by peers. Social media algorithms, which tend to feed users content they like and agree with, can exacerbate these feedback loops and reinforce entrenched ideas. Misinformation workers need to preemptively pierce echo chambers by providing new information and new sources that challenge the community consensus. Research shows that people respond better when they are exposed to multiple sources of information outside of their echo chamber—which increases the likelihood they will accurately assess the credibility of information—rather than being directly told that they are wrong.

Instead of censoring information through fact-checking and debunking, online intervention should focus on providing users with multiple sources of information and letting them come to their own conclusions. For example, Moonshot, a startup focused on countering violent extremism online, focuses on “off ramping” vulnerable individuals by connecting at-risk users with new sources of information and resources that they might not have otherwise been
exposed to online. Social media companies also could contribute by adjusting their algorithms to ensure that people are exposed to content slightly outside of their ideological comfort zone or suggesting that people follow other users who are outside of their usual networks. These ideological nudges could significantly lessen the effect of echo chambers.

However, online networks that are “hotspots” of misinformation are usually too large for officers to individually offramp each user. Instead, officers can use social network analysis to precisely identify two groups of users who are particularly likely to spread misinformation in the future: online leaders and their engaged followers, meaning users who are engaging positively with—but not yet spreading—misinformation.

Leaders are influential accounts that play a central role in shaping the flow of information across online communities. This is particularly pronounced on Twitter: for example, the Twitter user @jackposobiec played a central role in spreading the #Pizzagate conspiracy, a theory alleging that prominent Democratic leaders were running a pedophile ring in the basement of a Washington, D.C. pizza restaurant.

Reaching out to these “superspreaders”—usually moderators or influential accounts—in the same way public health officers reached out to traditional healers in the DRC is an effective way to influence the spread of conspiracies online. Online moderators enforce community rules, remove inappropriate content, and police behavior, so they are well positioned to promote a healthy flow of information through the online system. Often, online leaders don’t realize the extent or implications of their reach; by showing them the impact of their influence, they may be more likely to self-moderate.

The second group misinformation workers should target are engaged followers who are interacting—through “likes,” follows, or comments—with misinformation, and therefore are at the greatest risk of becoming spreaders. For example, researchers identified a group of at-risk accounts in an AIDS-denialist community on the popular Russian social media platform VK.com who followed influential denialist accounts and were thus more likely to internalize the misinformation. As the researchers argued, identifying these followers will “significantly reduce the target audience for possible intervention campaigns.”
COUNTERING EMERGING THREATS WITH PRO-ACTIVE INVESTMENT IN R&D

When it comes to countering emerging threats like Ebola, a resilient health system requires a host of tools, including vaccines, medicines, and diagnostics, to fight the disease. One of the biggest lessons from the Ebola outbreak of 2014 was that the global health community had not invested enough into preparing these tools in advance because there had been no market incentive for pharmaceutical companies to invest in a disease of poverty like Ebola.

In much the same way that the flu vaccine is developed in advance of flu season to get ahead of the virus, today there are extensive efforts across the global health community to ensure that vital tools to fight emerging pathogens are invested in and developed before an outbreak. For example, the U.S. government recently began developing a vaccine for Marburg virus, a deadlier cousin of Ebola which could cause a devastating future outbreak. Vaccine development takes years, so even though there have been only 16 cases of the disease worldwide in the past decade, the United States is investing now, rather than after a Marburg outbreak has begun.

In the same way, misinformation will rapidly evolve beyond our current ability to counter it, and a resilient online information system will need to continually develop new tools to address evolutions of misinformation and disinformation. New technologies will allow harmful misinformation to diffuse rapidly, even as government or social media platforms roll out changes to combat it. Machine-learning algorithms will be able to create video forgeries—known as “deep fakes”—that “will be able to fool the untrained ear and eye.” Artificial intelligence (AI)-enabled botnets will be able to target and converse with vulnerable people online without revealing that they are not human. People deserve to know if the images they are seeing or people they are talking to have been falsified.

A RESILIENT ONLINE INFORMATION SYSTEM WILL NEED TO CONTINUALLY DEVELOP NEW TOOLS TO ADDRESS EVOLUTIONS OF MISINFORMATION AND DISINFORMATION.

Fortunately, emerging technology also offers new ways to combat misinformation and disinformation. Researchers are leveraging AI to identify automated accounts and inauthentic content at scale. The same natural language processing models used to automate the mass production of misinformation can be repurposed to detect it in the wild.

AI-enabled chatbots also can be added to online conversations to detect false misinformation shared in online conversations and intervene by debunking it or providing corrections.

However, it’s unclear how effective it is for chatbots to debunk in real time. In Taiwan, a chatbot named Meiyu has received pushback for making some con-
versations more awkward when it contradicts family elders. Bots that are too confrontational may be less frequently adopted by users. Rather than debunking, chatbots could chime in with other sources of information when they detect misinformation. Such tools could take inspiration from the browser extension Balancer, a tool that measures the ideological tilt of a user’s news consumption and offers suggestions that may challenge their views.

Yet, just as pharmaceutical companies have insufficient incentives to develop vaccines before an outbreak, social media companies have insufficient market incentives to develop tools to address future misinformation challenges. Users are unlikely to hold social media platforms accountable, or unwilling pay for solutions themselves, because they are often unaware when they are affected by misinformation.

Despite its importance in building online resilience, no organization with the central mandate of developing tools to combat harmful misinformation yet exists. If social media companies have no incentive to develop tools, who will? Multilateral organizations like the Coalition for Epidemic Preparedness Innovation (CEPI) have been instrumental in working to push vaccines through the expensive and lengthy development pipeline before an outbreak of disease. The creation of a similar organization for misinformation could fill a gap by providing thought leadership on the cutting edge of innovation for countering misinformation. One candidate is the Defense Advanced Research Projects Agency (DARPA), which has already committed $68 million in the last two years to developing scalable ways to detect deep fakes.

Policymakers should recognize the consequences of not addressing emerging technologies that enable the spread of misinformation and disinformation and must pro-actively invest in technical solutions to counter new threats. Tools to counter misinformation need to be easy to use, scalable, and distributed to at-risk online communities. Pro-active investment in R&D will prepare society’s information ecosystem to prevent, detect, and respond to misinformation.

**RECOMMENDATIONS FOR A RESILIENT INFORMATION SYSTEM**

*Coordinate media literacy and awareness programs* to educate society about the risks of misinformation, subliminal advertising, and polarization. Curriculum should remain politically neutral but encourage best practices like source-vetting and comparing sources. Social media companies also could adjust algorithms to de-weight automated activity and expose users to content outside of their ideological sphere. Specific programs should be delivered to the most vulnerable demographics by trusted advocacy groups such as the AARP.

*Establish an international coalition* that can bring together stakeholders from across democracies, modeled after the multilateral Global Health Security Agenda (GHSA) forum that works to build countries’ capacity to prevent, detect, and respond to infectious disease threats. GHSA members split into task forces,
called “action packages,” which ensure countries are adhering to internationally agreed-upon capabilities to respond to outbreaks. The misinformation coalition could form these task forces as a forcing function to bring together governments, social media companies, and civil society to align efforts and facilitate information and data sharing. A large-scale multilateral effort also could serve as a platform for society to establish goalposts for levels of intervention consistent with democratic norms.

**Institute an NGO to intervene in at-risk communities online.** Functioning like an online Red Cross or Doctors Without Borders, this NGO would be best positioned to provide intervention at the individual level while remaining politically neutral. Social media platforms could provide data and network analysis without intervening at the individual level themselves. Government could provide funding but stay distant to avoid undue surveillance or censorship. Intervention should include both personal outreach to online leaders and increasing all individuals’ exposure to new information so that followers can come to their own conclusions.

**Invest in R&D to address evolving threats.** Government should publicly fund public research into countering evolving misinformation and disinformation threats. Government also should provide financial incentives for social media platforms to develop counter-disinformation tools that can be built into platforms or distributed to individual users at scale.

Ultimately, tackling the challenges of disinformation will require a multidisciplinary approach. Drawing parallels between countering disinformation and public health will not provide a foolproof resolution; it’s not a perfect analogy, because whereas everyone agrees that Ebola is bad, ideas and opinions are not so easily condemned. However, it helps expand our imagination and provides a new framework to analyze disinformation challenges. Democracies must commit to a whole-of-society approach that protects the resiliency of their information systems as the democratic alternative to restricting free speech.

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ENDNOTES


9. Ibid.


14. See CEPI website for more information: https://cepi.net/.

The world’s emerging economies are growing at a rapid rate and economic development is lifting millions out of poverty. However, more than one billion people still lack access to electricity, mostly in rural, hard to reach regions. Most of these communities use diesel generators, the only reliable source to keep the lights on at night. But diesel is expensive, dirty, and very inefficient. Recent technological developments have allowed for an alternative solution of solar powered microgrids, small independent electricity networks, to become more affordable for implementation in these markets. Although these projects are gaining attention, there still is room for increased efficiency and feasibility. Exciting new tools such as blockchain provide an opportunity to help energy projects get the sufficient support and attention to aggregate the implementation of sustainable electrification.

Blockchain is a transparent, distributed ledger that can record transactions between two parties efficiently and in a verifiable and permanent way. With this technology, opportunities for development abound; financing models could become more flexible, renewable energy projects could become more attractive to a wider group of investors, and smaller scale market models could become more viable. The energy industry needs to adopt innovative ideas and bring in a new generation of entrepreneurs to meet the challenges of sustainable economic development head on. Blockchain can provide the opportunities for all this and more.

Blockchain allows for microgrids to perform more efficiently. Microgrids are self-contained grid systems that can produce electricity while connected to either the central system or independent from it. The microgrids enjoy great flexibility and their ability to run independently from the central grid makes them a desirable facet for last-mile communities where central grid expansion may not make economic sense. Both attributes can help developing areas address the widespread issue of inability to access a reliable and resilient source of energy. However, the smaller scale of these projects brings their own issues. For one, they rarely work as a for-profit model, relying instead on government subsidies or multilateral funding. The projects, and to an extent the community, are thus tied to the will of a third actor. Furthermore, to take full advantage of the flexi-
THE ENERGY INDUSTRY NEEDS TO ADOPT INNOVATIVE IDEAS AND BRING IN A NEW GENERATION OF ENTREPRENEURS TO MEET THE CHALLENGES OF SUSTAINABLE ECONOMIC DEVELOPMENT HEAD ON.

...bility aspect of the microgrid, there need to be trained personnel on site to manually adjust the capacity of the grid, which increases costs and opportunities for meter tampering. There are many examples of how a lack of continued oversight after a project is completed severely limits the reliability and longevity of the project. A blockchain platform, in conjunction with microgrid systems connected over the Internet and sharing data (Internet of Things, or IOT), can make use of automated transactions tracked by blockchain, called smart contracts, and turn a microgrid into a smart system, without in-person oversight. Smart contracts can modify the grids production level in conjunction with the central grid to increase resilience. IOT allows live tracking of consumption and production levels, which offers direct control to users. Blockchain thus could allow microgrid adoption in emerging markets to be aggregated, through increased near-instant control, tracking, and transparency, of both project production levels and revenue streams.

Finally, the entire funding structure of such microgrid projects could be fundamentally altered to permit a more diverse pool of investors to increase project durability. Traditionally, funding such projects often requires large amounts of capital upfront and offers a slow rate of return. When investing in emerging markets, transaction costs and intermediary services occupy a large portion of the project costs, leading to lower rates of return and prohibitive costs. Blockchain tracks these transactions and verifies ownership nearly instantly and securely. Additionally, the technology promotes financing ventures that are crowdfunded and widely distributed, easing the burden of high up-front costs. Projects deemed to be higher risk, such as solar farms, could be funded from foreign investors into emerging markets, and ownership could be traced to such minute levels that distributed ownership of individual solar panels would become possible. There are examples of companies implementing this technology, like the Israel-based Solar DAO, which uses blockchain platforms to crowdfund solar farm construction in Kazakhstan. From its distribution of cost and reduced intermediaries bringing down prices, to the secure nature of the technology preventing misallocation of funds, blockchain provides a cost-efficient and hassle-free solution for the development context.

There are two caveats about the adoption of blockchain. First, political will for transparency is necessary. For blockchain to succeed, governments must be willing to transfer some direct control to an automated process and fully embrace transparency, as the transaction ledger will be accessible to all. Many governments have pledged to fight corruption, modernize, and ensure inclusive...
economic growth. The use of blockchain as discussed here could be linked to such political commitments. For example, the Chilean government has moved to adopt blockchain to track energy use and bolster cybersecurity infrastructure. Second, developing nations often lack the necessary digital infrastructure for the technology to work in conjunction with IOT. However, the lack of existing infrastructure actually makes technological leaps more feasible since communities would have to make fewer transitions to catch up. Something similar happened with mobile phones and data penetration in developing countries, which both rose to exceptionally high levels bypassing landlines completely. Furthermore, firms also have shown that they are willing to invest in such projects, and multiple startup companies are utilizing the technology for microgrid and clean energy integration in developing communities. Some companies, such as Danish startup M-PAYG, have used blockchain platforms to create phone payment systems to fund solar panel installations in near-grid-edge communities in Kenya. Others, such as the Canadian renewable energy cooperative Solarshare, use blockchain platforms to allow peer-to-peer transactions of electricity produced by solar panels in communities in Bangladesh.

Now is the perfect time for actors in the energy sector to seriously consider adopting blockchain technology in their project planning. The industry is ripe for disruption. Emerging markets are experiencing a boom in economic growth, driving demand for energy at a faster pace than a centralized grid can keep up with. Sufficient political will does exist to allow piloting and testing blockchain at a scale difficult to reproduce in developed markets. Blockchain has the capacity to provide answers to the problems of electrification for all. It could encourage diversified financing. It could allow a larger portion of the private sector to engage in the industry, making it more attractive to a more varied group of investors, such as startups and tech companies. And it could make energy projects more transparent, democratizing energy and allowing local communities greater control over their own electricity. International organizations and governments should seriously consider blockchain platforms as a potential solution to aggregate renewable energy projects in developing nations while also creating an attractive landscape for foreign, direct investment.

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ENDNOTES


On March 4, 2019, U.S. Trade Representative Robert Lighthizer announced the revocation of Turkey’s and India’s beneficiary developing nation designations in the Generalized System of Preferences (GSP) program.\(^1\) Established in 1976 based on a UN recommendation, the U.S. GSP program provides preferential market access, such as duty-free imports on certain products, to developing economies to encourage economic growth. Although Lighthizer listed specific GSP criteria that India had failed to fulfill, the explanation for Turkey’s termination simply read, “It is sufficiently economically developed and should no longer benefit from preferential market access to the United States market.”\(^2\) The timing of this graduation should raise eyebrows as the current economic reality in Turkey paints a different picture than Lighthizer’s statement; GDP per capita, exports, and imports have decreased significantly since 2013 and, as of March 2019, Turkey is officially in an economic recession.\(^3\),\(^4\),\(^5\),\(^6\) This highlights a departure from the original spirit of GSP to assist developing countries. To build the letter of the law up to its original spirit, the GSP program will require more quantitative and definitive standards.

Countries qualify for GSP based on standards laid out in 19 USC 2462 (b) & (c).\(^7\) The criteria are divided into mandatory and discretionary standards—all of which are notably subjective. Mandatory criteria require that the recipient not be a communist country, is not actively trying to withhold vital supplies from or cause serious disruption to the world economy, does not support international terrorism, and is working towards full compliance with international worker rights. Discretionary criteria are based on the judgment of the U.S. president and include an expression of interest in achieving GSP status, economic factors that “the President deems appropriate,” an acceptable level of intellectual property protection, and restraint from unreasonable export practices.\(^8\)

The European Union and Canada, both of which established equivalent programs under the same UN directive, illuminate different approaches to determining standards for beneficiary countries. In the EU, there are three categories of beneficiary countries: GSP for developing nations, GSP+ for vulnerable developing nations, and Everything But Arms (EBA) for least-developed countries.\(^9\) Each of these categories has specific, quantitative guidelines for graduation based on UN and World Bank classifications, import shares, and economic diversification.\(^10\) In 2012, the EU started graduating countries identified as upper-middle income, eliminating
THE TIMING OF THIS GRADUATION SHOULD RAISE EYEBROWS AS THE CURRENT ECONOMIC REALITY IN TURKEY PAINTS A DIFFERENT PICTURE THAN LIGHTHIZER’S STATEMENT.

The sudden revocation of India’s and Turkey’s GSP status is just one byproduct of the wider debate currently taking place within the U.S. administration about which countries should benefit from developing nation status in trade-related agreements. Thus far, the discussion has largely centered on the World Trade Organization (WTO) rather than the GSP. Currently, the WTO allows countries to self-declare developing nation status, a point that has caused significant friction in U.S. trade relations with countries such as China, South Africa, and India because of the perceived unfairness of special and differential treatment for competitive and substantial, yet developing, global economies. To mitigate the issue, the United States has proposed a clear set of criteria to qualify for developing nation status that would curb the ability of many nations to self-declare. The proposed standards prohibit claiming developing nation status if a WTO country:

• is a member of or has initiated accession into the Organization for Economic Cooperation and Development (OECD);
• is a member of the Group of 20 (G20);
• is classified by the World Bank as a high-income country; or
• accounts for .5 percent of global merchandise trade.14

These criteria would effectively preclude 33 current beneficiaries of special and differential treatment from identifying as a developing country at the WTO.15 They also provide the clearest definition for a “developing country” put forward by the United States in a trade context and share similarities with the qualifications espoused by the EU and Canada for their GSP-equivalent programs. In practice, the standard becomes slightly more problematic. If it were applied to the current list of GSP beneficiary countries, six countries would cease to receive GSP treatment in addition to recently removed India and Turkey: Brazil, the British Virgin Islands, Indonesia, South Africa, Thailand, and Uruguay.
Figure 1: Current GSP beneficiary countries that would be removed under proposed WTO standards\textsuperscript{16,17}

<table>
<thead>
<tr>
<th>Country</th>
<th>OECD member</th>
<th>G20 member</th>
<th>High-income</th>
<th>More than 0.5 percent of global trade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X (1.1%)</td>
</tr>
<tr>
<td>The British Virgin Islands</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>X</td>
<td></td>
<td>X (0.9%)</td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td></td>
<td>X (1.2%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uruguay</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X (1.0%)</td>
</tr>
<tr>
<td>India</td>
<td>X</td>
<td></td>
<td></td>
<td>X (2.3%)</td>
</tr>
</tbody>
</table>

The logic behind the inclusion of South Africa and Indonesia on this chart illustrates the probable shortcomings of the criteria and pitfalls of such criteria in the GSP program.

Membership in the OECD or G20 does not exclusively signal a specific level of development. In fact, much of G20 country selection considered not development levels but regional balance and avoidance of another Northern Hemisphere-only international organization.\textsuperscript{18} Similarly, the OECD was created as an extension of the Organization for European Economic Cooperation (OEEC), a post-war reconstruction program to bolster the European economy.\textsuperscript{19} Although most members of the OECD and G20 are advanced economies, development status and membership are not mutually exclusive; relying on membership to signal development level is thus a flawed standard. Neither South Africa nor Indonesia should be excluded from GSP benefits because of membership in the G20, just as Turkey’s level of development should not be based on its OECD membership.

Although Indonesia passes the marker of making up more than 0.5 percent of global trade, its primary exports include coal briquettes, palm oil, petroleum gas, rubber, and crude petroleum.\textsuperscript{20} As these exports are not sustainable, this indicator reveals not a developed economy but a developing one that would benefit from trade to diversify its economy. Indonesia’s significant share of global trade also is tempered by its large population. Although it makes up 0.88 percent of global trade, its GDP per capita is only $3,847; 9.8 percent of its population lives under the line of poverty; and an additional 20.78 percent of the population are vulnerable to falling below the poverty line.\textsuperscript{21} Its closest counterparts in share of global trade, Thailand and Brazil, clock in above 1 percent with exports primarily in intermediate or final products, including office machine parts, integrated circuits, delivery trucks, and cars, which benefit more laborers and are more sustainable practices.\textsuperscript{22,23} The problem illuminated by Indonesia would be addressed if the U.S. proposed benchmark was increased from 0.5 percent to 1 percent of global trade, mirroring Canada’s standard. All but one country with a more than 1 percent share in global trade have GDP per capita greater than $5,000. The only exception is India, which does not qualify for GSP because of a failure to assure...
the United States that it provides equitable market access. Increasing the minimum share of global trade would help to exclude large, yet developing, economies whose share of trade is less indicative of development level.²⁴

A clearer, more quantitative definition of developing is the best way forward for both the United States and its beneficiary countries; though Turkey would not pass the proposed WTO standard of developing, known quantitative standards would have assisted them in planning for imminent revocation. Going forward, any definition must be framed in a way that understands the nuance of development. Drawing from its counterparts, the U.S. definition should pivot from exclusion based on OECD or G20 membership, raise the minimum share of global trade to 1 percent as Canada does, and take into consideration ways to identify and support vulnerable economies as the EU does. Enacting these new standards for GSP also would serve as a case study for the implications of such reform at the WTO. By implementing these standards, the United States would send strong signals to the WTO that it intends to reform the way the world defines development.

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2. Ibid.


8. Ibid.


17. Brazil has initiated the process of acceding into the OECD. The United States has promised to support the accession in exchange for Brazil pledging to forego special and differential treatment in future WTO talks. This hints at Brazil’s alignment with the U.S. standards—where a country cannot be a member of the OECD and seek special and differential treatment—despite not having been adopted yet.


24. Office of the United States Trade Representative, “United States Will Terminate GSP Designation of India and Turkey.”
Following the devastation caused by Tropical Cyclone Idai in March of this year, the international community rushed to respond to the needs of populations in Mozambique, Malawi, and Zimbabwe. Diseases such as cholera were beginning to spread, and crops in many regions were destroyed. Millions of men, women, and children needed assistance. The World Food Program (WFP) had a unique approach to help the people affected by Idai: unlike other aid agencies that gave food, water, and other types of aid, the WFP gave individuals cash.¹

Cash Transfer Programming (CTP), the provision of cash or vouchers to vulnerable people rather than traditional “in-kind” or commodity aid, such as bags of food, jugs of water, or medical supplies, increasingly is used in humanitarian activities and offers specific opportunities for women. CTP allows recipients to determine their own needs, giving individuals ownership over their own humanitarian response, while also helping to support local economies and businesses. Many studies have demonstrated the possibilities CTP offers for improving gender outcomes of humanitarian responses by empowering local women in crisis contexts.² Surveys show that women often cite cash as their most needed resource in times of crisis.³,⁴ As such, the United States should prioritize gender-inclusive cash assistance, appropriate more resources to CTP, and invest in research on best practices for gender-inclusive CTP.

At the 2016 World Humanitarian Summit in Istanbul, 30 of the largest international donors and aid providers endorsed a series of changes to the humanitarian system—titled the Grand Bargain—to improve the efficiency and effectiveness of humanitarian aid.⁵ Increasing the “use and coordination of cash-based programing” was one of the primary objectives of this summit.⁶ As a result, significant progress has been made on increasing the use of CTP in humanitarian response. The 2018 Grand Bargain annual independent report showed promising advancement for CTP, with 89 percent of Grand Bargain signatories reporting an increased routine use of cash.⁷ Aid organizations are continuing to incorporate CTP into their response efforts, and most experts agree the use of cash is only likely to increase within the humanitarian system. Yet, despite this progress, cash remains under-utilized. A 2018 report by the Cash Learning Partnership and Accenture showed that although more humanitarian aid is being disbursed through CTP, this growth is extremely uneven across organizations.⁸ In 2016, more than two-thirds of aid disbursed as CTP came from just two organizations:
the WFP and the United Nations High Commissioner for Refugees. In addition, even though the use of CTP has increased, the report showed that CTP still accounted for only 10 percent of total global humanitarian assistance in 2016.

**GENDER BENEFITS OF CTP**

Numerous studies have shown the benefits CTP can bring to humanitarian efforts. CTP allows recipients to individually prioritize their needs, giving autonomy and dignity to aid recipients while simultaneously supporting local markets. Instead of an outside organization determining the most pressing needs of a recipient, cash allows individuals to make those decisions for themselves. This empowerment is particularly powerful for women, as women are allowed to take control of their own finances and be the protagonist of their own response efforts. Although more research is needed on the explicit relationship between gender and CTP, development sector evidence “suggests that well-designed [cash-based interventions] targeting women can improve a woman’s bargaining power, increase her decision-making capacity and reduce intimate partner violence.” Indeed, CTP offers opportunities to strengthen women entrepreneurs, typically serving as the drivers of informal economic activities. Evidence also indicates that CTP can improve adolescent girls’ school attendance and give women more power when it comes to decisions regarding marriage, sexual activity, and fertility in particular.

Most importantly, studies have shown that women specifically ask for and need cash in conflict regions. A recent survey of displaced Rohingya in Bangladesh found that of the 51 percent of female respondents have sold aid items in exchange for cash, compared to 36 percent of male respondents. This number rose to 71 percent if the female respondent was the sole head of the household. A similar study in Afghanistan showed recipient preference for cash assistance over in-kind aid, especially among women. 78 percent of the female respondents in that survey stated the best way aid agencies can support them was through cash. In Iraq, 70 percent of both men and women affected by crisis prefer cash over in-kind aid.

**LIMITATIONS OF CTP**

Simply providing cash does not, of course, automatically lead to empowerment. As the head of the United Nations Office for the Coordination of Humanitarian Affairs Mark Lowcock stated, “Cash isn’t a panacea.” Intersectional identities and cultural contexts are important when planning humanitarian response. Gender dynamics, age, disability status, and other factors all affect the effectiveness and outcome of CTP. As such, CTP is not and should not be implemented in a vacuum; rather, intersectional gender-inclusive programming must be developed alongside CTP. There are times when traditional types of assistance may be required to ensure cash does not exacerbate stereotypical gender roles or endanger female recipients. Mechanisms for delivering cash-based assistance must
account for gender to ensure equitable access. Cash assistance delivered through mobile phones, for instance, may not be the best option if women have limited or inequitable access to mobile devices. CTP must be transparent—studies have shown the beneficiaries do not always understand the selection process, which, as practitioners know, is important in a dignified response. Gender-specific needs and impacts must be considered when designing, implementing, and assessing CTP, and women should be included in every stage of the process.

U.S. LEADERSHIP
The United States is a leader in foreign aid and remains the single largest donor of humanitarian assistance, making its influence over the humanitarian system especially potent. Historically, the U.S. Agency for International Development (USAID) has been reluctant to invest in cash programing. This is due to concerns over accountability and the ability to measure sector-specific outcomes, as well as due to the logistical and bureaucratic difficulty that comes with changing years of traditional response efforts. Despite an array of evidence supporting the cost-effectiveness of CTP, the United States continues to give a “disproportionality small amount of its aid in the form of cash.” Yet, the United States has concurrently been a frontrunner of gender inclusivity and equity in conflict environments—a subject many advocates criticized as overlooked by the Grand Bargain. The United States was the first country to codify its National Action Plan on Women, Peace and Security when the Women, Peace, and Security Act was signed into law on October 6, 2017. The Women, Peace and Security Act promotes women’s participation in peace processes and requires a U.S. strategy for including women in security efforts. In addition, USAID has made gender an integral part of its work, investing more than $65 million over the last four years to support women’s leadership across development, humanitarian, and peace-building sectors.

RECOMMENDATIONS
The United States is uniquely situated to both better understand the gender benefits of cash assistance while also improving gender outcomes in humanitarian response. Since women are asking for cash, and there is evidence that CTP can improve gender outcomes, it seems obvious that the United States should prioritize gender-inclusive CTP in humanitarian response. Women’s voices should be accounted for, and CTP offers means of empowerment among women. At the same time, it is important for the United States to engage in research on the best methods of implementing CTP to ensure a gender-inclusive humanitarian response. Developing a framework for when CTP is appropriate and how it
will work to empower women, and not exasperate gender inequities, is required for effective CTP with beneficial gender outcomes. USAID has already made evaluating the cost-effectiveness of CTP a priority and is an international leader in cash benchmarking research. USAID should continue to build on this research and include the gender impacts of CTP in their evaluations.

WOMEN’S VOICES SHOULD BE ACCOUNTED FOR, AND CTP OFFERS MEANS OF EMPOWERMENT AMONG WOMEN.

CTP represents an opportunity to increase the efficiency of humanitarian assistance while re-asserting the United States’ leadership on gender equity. For the United States to continue to be a leader in gender equity and to increase the impact of its investment in humanitarian aid, the United States must study and invest more extensively in CTP. Congress should encourage USAID and the State Department to support actors engaging in CTP and prioritize CTP responses. Local women have spoken. The United States should elevate their voices and adopt a cash-first approach.

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ENDNOTES


6. Ibid.


10. Ibid., 3.

11. Simon, “Setting the State: What We Know (And Don’t Know) About the Effects of Cash-Based Interventions on Gender Outcomes in Humanitarian Settings.”


14. Simon, “Setting the State: What We Know (And Don’t Know) About the Effects of Cash-Based Interventions on Gender Outcomes in Humanitarian Settings.”


17. Ibid.

18. “Perceptions of Cash-Based Aid in Afghanistan.”


23. In 2018, the total funding received for UN-coordinated appeals was around $15.2 billion. Just over one-third of this funding came from the United States. This information can be found on the U.N. Financial Tracking Service website: https://fts.unocha.org/appeals/overview/2018.


At any given time, there are likely to be seven different apple varieties and four different kinds of tomatoes in your local grocery store. However, some 2,500 varieties of apples are grown in the United States—and three times that worldwide. This may surprise you, but it is the norm: about 75 percent of the world’s current food supply is derived from just 12 plant and five animal species despite the fact that more than 6,000 plant cultivars and 7,745 livestock breeds have been cultivated for food. Despite the lack of it in our diets, biodiversity—which the UN Food and Agriculture Organization (FAO) defines as the genetic variability at the species and ecosystem levels that contributes to agriculture and food production—is critical for our ecosystems and sustainable development.

With the global population projected to reach 9.8 billion people in 2030, the global food supply and the resources that feed it are under considerable pressure with limited time and space to adapt. The question is how the United States can mainstream biodiversity efforts into its global food security and agricultural development initiatives in the face of climate change.

LOW LEVELS OF BIODIVERSITY MULTIPLY THE EFFECTS OF CLIMATE CHANGE

While much of the mainstream conversation around biodiversity for food and agriculture is narrowly focused on the dangers of declining pollinator populations, there exists a myriad of man-made risks to the longevity of the global food supply. Changes in land and water use and management, pollution, overexploitation and overharvesting of resources, climate change, and population growth and urbanization all significantly stunt the ability of the current food supply to sustainably scale up production to meet the needs of tomorrow, let alone future generations. A continued decline in biodiversity for food and agriculture will only make the shocks and stresses from extreme weather events more tragic and fragile communities more vulnerable. The damaging reality of a severe lack of biodiversity for food and agriculture is no new foe. The famous Irish Potato Famine of 1845 was the result of an overreliance on a single crop, the potato. When disease hit the country, wiping out large swaths of the main staple crop, the result was severe food insecurity and migration.

Although the Irish Potato Famine may seem like the remnants of a bad dream, contemporary examples of the damaging effects of biodiversity loss are ever
prevalent.\textsuperscript{3} Resource-stressed communities affected by climate change-induced droughts suffer from economic instability and can contribute to significant threats to national security. As evidenced by the violent pastoralist-herder conflicts in northern Nigeria or the mass migration of climate refugees from the northern triangle, a lack of biodiversity underpinned by fragile agriculture systems can have dangerous consequences for national security while weakening the global food system.\textsuperscript{4,5} This point is emphasized by the new FAO report, \textit{The State of the World’s Biodiversity for Food and Agriculture}: production systems and climate change are significant threats to biodiversity and thus agricultural livelihoods. Biodiversity for food and agriculture can safeguard production systems and livelihoods from climatic events, and as a result is critical in sowing solid ground for global food and nutrition security and enhancing the resilience of rural and urban livelihoods.

\textbf{INTEGRATING WHAT IS KNOWN INTO WHAT NEEDS TO BE DONE}

Current initiatives are at risk of entirely missing the mark on the 2016 UN Paris Agreements on global greenhouse gas emissions and the Sustainable Development Goals (SDG), an international commitment to peace and prosperity for people and the planet, are not on track for their 2030 deadline. Despite such agreements, biodiversity is disappearing at a rate “tens to hundreds times higher than the average over the last 10 million years” due to human activity.\textsuperscript{6} Initial commitments are not enough; sustained leadership is undoubtedly required. The United States government is already a leader in this space. The restructuring of the U.S. Agency for International Development (USAID), as well as the emphasis on the Journey to Self-Reliance, provides a framework for biodiversity for food and agriculture to be integrated into the already existing priorities of climate change adaptation and agriculture innovation programming. Furthermore, the U.S. Global Food Security Act of 2016, and its reauthorization in 2018, provides the legislative framework and accountability measure to push for substantive prioritization. The goals outlined in the U.S. Global Food Security Strategy emphasize a holistic approach to investing in a more sustainable and equitable future. Biodiversity for food and agriculture is the bridge between existing U.S. policy, strategy, and programming in agriculture development, and provides concrete benchmarks for measuring achievements and outcomes, which are vital to the existence of the sustainability of such programming. There is no better time to plant biodiversity for food and agriculture into the current U.S. Global Food Security Strategy than right now while global attention is focused on where institutions are falling short of their commitments and what areas are ripe for change.

The challenge lies in mainstreaming this practice and integrating it into all policies, strategies, and practices adopted by public and private sectors related to, or affecting, biodiversity for food and agriculture. The U.S. has a history of leaning into new challenges while being supported by lessons learned. As one of the top leaders committed to developing resilient economies and communities abroad,
the United States should implement biodiversity for food and agriculture as a crosscutting global food and nutrition strategy. The global population and food supply is hungry for a framework that accounts for the complexities of the food system at large and takes into account land, fisheries, natural ecosystems, labor, infrastructure, technology, policies, markets, and food culture when tackling the current food production issue. The distinct parts of a more complete strategy exist; the challenge lies in integrating the principles of biodiversity for food and agriculture into the U.S. Global Food Security Strategy in a way that bolsters the existing framework and complements the comprehensive nature of U.S. agency initiatives. Urgent action is required to mitigate the effects of man and climate change on the biodiversity and global food supply to achieve the ambitious goal of global food security. For a successful integration of biodiversity for food and agriculture into the U.S. Global Food Security Strategy, the following must be addressed:

The political trivialization of climate change must stop, and responsibility needs to be taken (and acted on) for substantive change. With the arrival of the Trump administration, terms like “climate change” disappeared from government websites. USAID followed suit as implementing partners noticed subtle shifts in language as “climate change” was replaced by “resilience to environmental impacts.” Resiliency to shocks and stresses from the environment are an important piece in developing and sustaining communities. The data and the science are clear: climate change is at the root of these challenges. Although today these language bans no longer exist, the threat of scientific censorship still lingers. USAID was able to create the Office of Global Climate Change within the Bureau for Economic Growth, Education, and Environment, but simply restoring the name of an office during the restructuring period is not enough and is not a reliable promise. Climate change will only exacerbate vulnerabilities in fragile contexts; the less biodiverse an environment is, the less resilient a community can be. The impacts of climate change on the biodiversity food security nexus must be more widely acknowledged, accepted, and integrated on a federal level, and a commitment to interdisciplinary, science-backed policies is absolutely required as the U.S. government continues to pursue food security as a national security solution.

The United States must continue to harness the power of partnerships and expertise to cultivate an enabling environment geared towards substantive change. Although the U.S. government may be a leader in the food security and resilience space, there still exists a poverty of data and information sharing between global actors. The United States does not have to tackle this global challenge alone. For example,
FAO’s report helps fill a large data gap in linking food security to the conservation of our world’s natural resources and the UN General Assembly recently declared 2020-2030 the Decade on Ecosystem Restoration—nodding to the inherent linkage between biodiversity for food and agriculture and food security. India collects remote-sensing data on land use and infrastructure; China collects data to monitor tipping points in agriculture relating to water use, biodiversity, and ecosystem services. However, lack of harmonized data, especially publicly reported data, poses a significant challenge as partners attempt to quantify and assess the ultimate impact of biodiversity loss on food and nutrition security. International organizations, governments, and implementing partners will be each other’s biggest allies in compiling data libraries to create and implement programs that will preserve and regenerate biodiversity for food and agriculture.

USAID’s Bureau for Food Security has the opportunity to build off this strong foundation and work alongside a well-established host of implementing partners and thought leaders to educate and organize global community on the need to quickly diversify subsistence agriculture and adapt to new, biodiversity-friendly farming conditions. Rather than let the opportunity grow stale, USAID can pioneer national models for biodiversity for food and nutrition and can lead by example on U.S. soil as well as in Feed the Future partner countries.

Elevate tracking and reporting mechanisms for lessons learned and best practices. Under threat of aid being withdrawn from countries that are suffering from climate-change induced challenges, it is imperative that existing U.S. programs working on increasing food security and bolstering biodiversity are tracking and reporting progress. If managed sustainably, agriculture can contribute to vital ecosystem functions and biodiversity, but tracking progress and metrics is the only way to confirm and prove this result. In Washington D.C., where reporting means funding, these numbers matter. Biodiversity for food and agriculture is highly dependent on factors such as water availability and soil quality, though these variables, among others, must be meticulously assessed through context-specific research and surveys. Although there are programs and organizations such as the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) and Bioversity International that are involved in substantial qualitative and quantitative research, this data is underutilized if it cannot be effectively communicated to policymakers and connected to well-funded programming. USAID has experience in context specific implementation and grant administration through cross-sector initiatives, such as Feed the Future, and this experience should be top of mind when approaching new challenges and paths less traveled. This unique position of power gives USAID the perspective to apply these lessons learned to an integrated Global Biodiversity and Food Security Strategy.

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ENDNOTES


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