NOVEMBER 2019

A Policy Roadmap for U.S.-UK Digital Trade

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A Joint Report of the CSIS EUROPE PROGRAM & SCHOLL CHAIR IN INTERNATIONAL BUSINESS

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Acknowledgments

The authors would like to thank Google, and in particular its offices in London and Washington, for the generosity of their support and insights as this research project came to fruition. In particular, we would like to especially thank David Weller, Katie O'Donovan. Nicholas Bramble, Michele Lynch, and Astri Van Dyke. We are grateful to Google's Digital Garage in Manchester, United Kingdom, for hosting our regional workshop to hear from UK small- and medium-sized enterprises and greatly appreciate these firms and other participants' insights and hospitality. CSIS colleagues were also indispensable in contributing to this report, they include: Bill Reinsch and Scott Miller, aka The Trade Guys, as well as former Europe program coordinators Holly Geffs and Max Shafron, and current Europe program coordinator, Dejana Saric. And no finished CSIS product is possible without the help of our External Relations and publications team, to include Rebecka Shirazi and Jeeah Lee.

When thinking through complex transatlantic trade and data issues, it is essential to engage many experts and private sector practitioners, as well as current and former government officials on both sides of the Atlantic, for their considered views. To the dozens of colleagues who attended three separate workshops and convening opportunities in London, hosted by our colleagues at the Institute of Directors, and in Washington, we thank you for your valuable time and perspectives on this important topic.

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Preface

President John F. Kennedy once said, "The Chinese use two brush strokes to write the word 'crisis.' One brush stroke stands for danger; the other for opportunity. In a crisis, be aware of the danger—but recognize the opportunity." This is the spirit in which we have developed the following roadmap for the future digital trade agenda of the United States and the United Kingdom.

The international community was not prepared for the outcome of the June 2016 UK referendum, which initiated the process by which the United Kingdom intends to depart the European Union. After the initial shock subsided, it was a timely moment to turn our attention to understanding new opportunities for deepening the ties of transatlantic digital trade. In fact, senior UK officials have demonstrated an eagerness to rapidly—and perhaps unrealistically—conclude a U.S.-UK free trade agreement with a focus on digital services. particularly financial services (fintech), artificial intelligence, and professional services.

At the time of this writing, there are growing dangers, as a new British prime minister contemplates—and actively prepares—to take the United Kingdom out of the European Union without an agreement. The authors of the present policy brief did not contemplate the extraordinary challenges a no-deal environment could mean for the free flow of data between the United Kingdom and the European Union, nor did we foresee the complications for the European Union to provide adequacy findings for the United Kingdom's data protection measures. We made assumptions that the United Kingdom would generally maintain its adherence to existing European standards, such as the General Data Protection Regulation (GDPR), and potentially align itself with the European Union in the future on matters of data and services (a view which the Boris Johnson government may or may not support). On the other hand, we expected the United Kingdom to opt for approaching the digital economy with a focus on encouraging technological innovation rather than following the "regulate first" instincts of the European Union. In other words, we envisioned a post-Brexit digital United Kingdom as hewing closer to the United States in its strongly focused approach on technological innovation but also as more European in its adherence to EU regulatory alignment as the European Union implements its Digital Single Market (DSM). Thus, we came to

^{1.} John F. Kennedy, "Remarks at the Convocation of the United Negro College Fund," (speech at United Negro College Fund Fundraiser, Indianapolis, Indiana, April 12, 1959), https://www.jfklibrary.org/archives/other-resources/john-f-kennedy-speeches/indianapolis-in-19590412.

view the United Kingdom as an important bridge between the United States and the European Union on the issue of digital trade, taking a "best of" approach in order to seize economic opportunities.

The United Kingdom is not the only source of potential instability, however. The United States has become increasingly unpredictable in its global trade relationships and very forceful in using its considerable economic leverage to gain bilateral trade concessions. Much of current U.S. trade policy appears to be focused on manufactured goods, commodities such as steel, and agricultural products; there seems to be little focus on driving a digital trade agenda (with the exception of concerns about Chinese involvement in 5G and telecommunications infrastructure). And while the current U.S. administration has been very enthusiastic about deepening bilateral trade ties with the United Kingdom after Brexit, there are clearly barriers and concessions that will feature powerfully in these discussions, including the issues of 5G and any planned taxes on digital services. This suggests that there will be growing pressures on the United Kingdom to choose between the position of the United States and that of the European Union.

We cannot know what lies ahead for the United Kingdom in relation to Brexit, nor do we know what will happen before or after January 31, 2020 (the date on which the United Kingdom will leave the European Union, unless extended). But in the absence of knowing what dangers all of this may entail, our approach will continue to be to recognize the considerable opportunity that exists in this context, regardless of Brexit outcome.

The United States and the United Kingdom are the world's leading exporters of digitallydelivered services, and much of their trade is with each other. The United States exports more services (such as business, professional, technical, insurance, financial, and telecommunications services) than any other place in the world, and over one half of U.S. services exports are estimated to be digitally delivered. The United Kingdom is the world's second-largest services exporter and the biggest U.S. trading partner for digitallyenabled services. The United States and the United Kingdom are leading drivers of crossborder e-commerce—particularly for small- and medium-sized enterprises (SME)—as well as leading innovators in such areas as fintech, govtech, and medtech. Both countries have increasingly been using foundational technologies, from blockchain to artificial intelligence, to perfect new applications and transform old processes. The potential for a vibrant and vast digital trade relationship is very exciting.

But as we examined the opportunity of enhancing U.S.-UK digital trade, we were surprised by the growing list of non-Brexit related challenges. What is the impact of the United Kingdom's ultimate decision on a digital services tax? How will the United Kingdom decide to address internet intermediary liability and online copyright protections in a post-EU environment? How can the United Kingdom and the United States ensure that their technology-driven firms can easily enter and scale in each other's markets? There is a growing list of issues that must be addressed transatlantically, as well as bilaterally.

In the end, we believe the U.S.-UK bilateral trade relationship is best poised to respond to these issues and, perhaps most importantly, best poised to offer a roadmap for delivering on transatlantic opportunities and to help enhance global digital trade standards. In addition to the policy roadmap presented in this paper, we therefore offer a series of

commentaries that look at new innovation opportunities and global digital trade trends in order to highlight opportunities and potential dangers. These can be found in the annex of this policy brief. Although improving global prospects for digital trade does not mitigate the potential loss of wider trade from Brexit, it can be a promising harbinger of future economic opportunity.

Finally, the Institute of Directors in London and the Center for Strategic and International Studies (the Europe Program and Scholl Chair in International Business) in Washington, D.C. would like to thank Google for their generous support of this research project, through the cooperation and collaboration of both their London and Washington offices.

Introduction

Current conversations about trade are dominated by tariffs, agricultural and manufactured goods, and trade wars. But where is the forward-looking discussion on the fastest-growing segment of international trade: the exchange of digital goods, 3-D printable designs, and digital services? The digitization of trade is propelling businesses, empowering entrepreneurs, and boosting productivity growth levels on both sides of the Atlantic. Today, digitally-delivered services are produced by U.S. and European architects, lawyers, bankers, and consultants. The transfer of data among people, businesses, and machines located in different countries is growing exponentially, as is the trade of products on e-commerce platforms by small businesses and individual shoppers on each side of the Atlantic. What is urgently needed is smart, future-oriented policies to fuel digital trade, and these can best be driven by the world's two leading digital economies: the United States and the United Kingdom. What would a positive and far-reaching policy roadmap to facilitate and expand digital trade between the United States and the United Kingdom look like?

There are encouraging signs that a bilateral agenda may be taking form. In early June 2019, President Trump highlighted his desire to secure an ambitious future U.S.-UK free trade agreement once the United Kingdom leaves the European Union. Helpfully, the U.S. Trade Representative's office has suggested that such a deal would free digital trade between the United States and the United Kingdom, potentially building upon the U.S.-Canada-Mexico Agreement (USMCA), unveiled in September 2018, and the U.S.-Japan Digital Trade Agreement signed in October 2019, both of which include strong and modern rules to fuel digital trade among the countries involved.

Looking at bilateral U.S.-UK digital trade inevitably brings us to the transatlantic dimension. This has only grown more important over time, as the European Union develops new regulations for technology companies and data flows, creates new copyright rules, and imposes steep fines on U.S. technology companies. Valuable instruments to bridge transatlantic differences on data protection and sharing, such as Privacy Shield, have withstood skirmishes about transatlantic digital trade policy thus far, but challenges remain and may even be deepening. Some countries—including the United Kingdom and France—have announced national digital sales and services taxes that would hit both American and British companies (large and start-up alike) in a way that would likely be discriminatory. U.S. firms already worry about current lawsuits and implementation issues related to the implementation of the European Union's General Data Protection

Regulation (GDPR), and they are growing increasingly concerned about how digital regulation may continue to diverge in costly, extraterritorial ways on both sides of the Atlantic. Finally, it is important to note that U.S.-UK bilateral and transatlantic ambitions are also feeling the influence of evolving concerns about China's approach to new technologies and telecommunication business structures.

With all these opportunities and challenges in mind, the present paper offers a policy roadmap for a future digital trade agenda, tailored to two like-minded technology heavyweights who are massive users of e-commerce, data, and digital services. What could this roadmap look like and what should it target? In other words, we are outlining what could be the chapter on digital trade in a future U.S.-UK free trade agreement.

This is a result of a two-year effort between CSIS in the United States and the Institute of Directors in the United Kingdom. The aim was to examine the opportunities of a future U.S.-UK digital trade agenda and explore current and future obstacles. This was accomplished through a series of workshops held in Washington, Manchester, and London, as well as a series of blogs and commentaries (which are included in the annex of this policy paper). We conclude that the United States and United Kingdom should be ambitious in furthering their bilateral digital trade agenda. To this end, they should use bilateral dialogues and any future free trade agreement to significantly expand digital trade volumes between the United States and United Kingdom; establish new cooperation to accelerate the development of new technologies and the formation of new technology companies; and fuel the use of crucial technologies, such as artificial intelligence and blockchain, which have the potential to transform countless industries.

1 | The Opportunity

Why focus on digital trade? Simply put, it is a massive opportunity for economic growth, as much in the transatlantic arena as globally. Getting the digital trade component of the U.S.-UK economic relationship right is critical for the future of bilateral trade and investment.

1.1 | The United States and United Kingdom are the world's leading exporters of digitally-delivered services, and much of their trade is with each other.

The United States exports more services than any other country in the world. These include business, professional, technical, insurance, financial, and telecommunications services, and over half of them are estimated to be digitally delivered. The United Kingdom, which is the world's second-largest services exporter, is also the biggest U.S. trading partner of digitally enabled services: the United Kingdom takes in 23 percent of U.S. digitally-deliverable services exports, and 29 percent of U.S. imports of digitallydeliverable services come from the European Union. In 2016, the United States had a \$160.2 billion trade surplus in digitally deliverable services; \$77 billion of that was surplus with the European Union, and \$11.4 billion of that was surplus with the United Kingdom.²

1.2 | The United States and United Kingdom are enormous e-commerce markets, and when consumers in the United States and the United Kingdom buy online internationally, they buy from each other.

U.S. and UK consumers and businesses increasingly buy their TVs, t-shirts, groceries, IT services, computers, concert tickets, car parts, and just about anything else online. The average UK shopper is especially active online: in 2018, the United Kingdom was the largest B2C e-commerce market in Europe, with a turnover of €178 billion (approximately \$197.2 billion).3 E-commerce represents almost a fifth of all retail in both countries, a rate

^{2. &}quot;Table 3.3. U.S. Trade in ICT and Potentially ICT-Enabled Services, by Country or Affiliation," Bureau of Economic Analysis, October 18, 2019, https://apps.bea.gov/iTable/iTable.cfm?reqid=62&step=6&isuri=1&tablelist=359&product=4.

^{3. &}quot;The European Ecommerce Report 2018: relevant findings outlined," EuroCommerce and Ecommerce Europe, February 2, 2018, https://www.eurocommerce.eu/media/159952/2018.07.02%20-%20Ecommerce%20report_annex.pdf.

topped only by China. U.S. and UK retailers, such as Wal-Mart and Marks and Spencer, are also among the very largest online sellers and exporters. The United States and the United Kingdom are also each other's most important cross-border e-commerce markets: 70 percent of UK e-commerce shoppers use U.S. e-commerce sites, while 49 percent of U.S. shoppers buy from UK sites. ⁴ The United States is of course also home to many global e-commerce and payment platforms—such as eBay, PayPal, and Amazon—that enable millions of buyers and sellers around the world to transact with each other online.

1.3 | The United States and the United Kingdom exchange not only goods but billions of bits, including data and content.

In the nineteenth century, it was the United States and United Kingdom that together pioneered the transatlantic telegraph that enabled valuable market data and breaking news to travel from New York to London in record time. The era's proof of concept, a 509-letter message sent in 1858 from British Queen Victoria to U.S. president James Buchanan, took 17 hours and 40 minutes to cross the Atlantic.⁵ Today, transatlantic flows of data remain the fastest and largest in the world; they are extremely relevant for both sides, accounting for over one-half of Europe's data flows and about half of U.S. flows. A considerable amount of this is between the United States and United Kingdom. Fluid data connectivity is especially important for SMEs in both countries, since it allows them to understand how they can enhance customer satisfaction, gain operational efficiencies, and increase response times to new market developments. Another key domain which reflects the importance of U.S.-UK data flows is content and media. For example, over 80 percent of views of content produced by UK creators comes for abroad, often from the United States. UK media programs are in demand on U.S. platforms like never before, with British broadcasters joining together to build and ensure new marketplaces for their content. The advent and export of digitalized news platforms like the Guardian and MailOnline to new U.S. audiences is another notable development. And the successful integration of Premier League soccer into U.S. networks has increased the flow of digitallytransferred merchandise and advertising across the Atlantic while also bringing the issue of TV rights into sharp focus.

1.4 | The United States and the United Kingdom are the world's leading digital innovators, with a shared interest in enabling their tech companies to scale and grow beyond their borders.

U.S. companies have been pioneers in developing social media, e-commerce, autonomous vehicles, and online search, among fields, while UK companies have a remarkable trajectory in fintech innovations. These sectors are key for driving digital trade. Furthermore, companies on both sides are the global vanguard in applying such

^{4. &}quot;Modern Spice Routes: The Cultural Impact and Economic Opportunity of Cross-Border Shopping," PayPal, 2014, https://www.paypalobjects.com/webstatic/mktg/2014design/paypalcorporate/PayPal_ModernSpiceRoutes_ Report Final.pdf.

^{5.} Kati Suominen, Revolutionizing World Trade: How Disruptive Technologies Open Opportunity for All (Stanford, CA: Stanford University Press, 2019).

^{6.} Organisation for Economic Co-operation and Development, Measuring Science, Technology and Innovation (Paris: OECD, 2016), https://www.oecd.org/sti/STI-Stats-Brochure.pdf.

foundational technologies as artificial intelligence, machine learning, and blockchain. This has succeeded in generating astounding efficiencies in such sectors as manufacturing, health care, logistics, and financial services; it has also accelerated the pace of discoveries from cures for cancer to the best ways to grow climate-resistant crops to the most efficient methods to clean up the oceans.

Understanding the opportunities present in deepening U.S.-UK dialogue on digital trade, the United States and the United Kingdom have created the U.S.-UK Trade and Investment Working Group, which is led by the UK Department for International Trade (DIT) and the Office of the U.S. Trade Representative (USTR). This dialogue is focused on preserving strong trade ties as the United Kingdom leaves the European Union, with the goals of finding new means of collaboration and of laying the groundwork for a future bilateral trade deal. Launched in July 2017, the group has focused its meetings on various themes, such as intellectual property, small business trade, financial services, and science and technology, as well as on digital trade.

This work must pave the way for greater U.S.-UK collaboration on digital trade issues at the international level. Indeed, as critical proponents of an open and free global digital economy, the United States and the United Kingdom must help lead the development of global digital trade and digital economy rules and standards. We also believe that a future bilateral U.S.-UK free trade agreement, and in particular its digital trade chapter, can powerfully advance the broader transatlantic and global free digital trade agenda. Nonetheless, challenges loom.

2 | Post-Brexit Considerations

Despite the magnitude of digital trade flows between the United Kingdom and the United States, the imminent departure of the United Kingdom from the European Union poses some complex questions and serious challenges.

2.1 | Hurdles to Transatlantic Data Transfer

As they pursue ongoing digitization and globalization, U.S. and UK businesses are increasingly dependent on their ability to transfer data across borders. Because U.S. and UK companies have vast numbers of European customers, they are subject to the European Union's new data privacy and transfer rules. Companies and consumers are also concerned about how the GDPR may continue to evolve and be enforced.

The United Kingdom has stated that it will abide by the GDPR after it departs the European Union. This was necessary in order to secure a decision from the European Commission that UK laws are compliant or "adequate" (under the European Union's socalled adequacy decision) to continue to conduct trade with the European Union. This is an important issue: about half of the United Kingdom's digitally-intensive firms' exports of goods and a third of their exports of services are estimated to be with EU countries, and 75 percent of UK cross-border data flows are with the European Union. However, dialogues with British online sellers have revealed confusion about the GDPR's scope, uncertainties about its implementation, and concerns that the regulation is costly and undermines the ability of small- and medium-sized businesses to service their customers effectively.

The United States—which is also contemplating adjustments to its legal framework toward data protection—has signaled frustration with the GDPR, both on matters of security and on the costly secondary implications which are forcing U.S. firms to accept the GDPR. Certainly, the U.S. position on enhancing the protection of individuals' data is evolving, as illustrated by new data privacy laws crafted in California and New York. But the GDPR is a rigid and expensive way to regulate data privacy, as well as extraterritorial in scope, which can be confusing for consumers and burdensome for businesses. It is also as yet not clear how data between the United Kingdom and the European Union will flow post-Brexit. Consequently, the United States and the United Kingdom are beginning to grapple with

^{7.} Giles Derrington, "The UK Digital sectors after Brexit," Tech UK, January 24, 2017, https://www.techuk.org/ insights/news/item/10086-the-uk-digital-sectors-after-brexit.

the need for a potential bilateral data deal. Without one, companies might not be able to share even basic business information, and respective regulators and law enforcement officials could fail to share critical data and information—for example on terrorist chatter or state-sponsored fake news.8

Could the United States and United Kingdom craft a "third way" approach for the longerterm future, designing a more flexible and business-friendly global data regime? This may be a difficult idea for the United Kingdom to pursue for now, given its retention of the GDPR and the preponderance of its economic ties and data flows with the European Union. The GDPR is fast becoming standard for British companies, even increasing in popularity as some look to embrace it for reputational standard reasons. But there are viable alternatives that can serve as a reference point, especially the Asia-Pacific Border Commission's Cross-Border Privacy Rules (APEC CBPR), which are used by some of the world's leading economies, including Japan, Singapore, and Korea, as well as NAFTA partners Canada, Mexico, and the United States. The CBPR system is more flexible and user-friendly than the GDPR while still aiming to protect individuals' data. The CBPR data protection model, along with various others, offers an opportunity to empirically evaluate which rules actually work best for consumers and companies, as well as to consider future strategies among trade partners.

2.2 | Erosion of Safe Harbors for Internet Intermediaries

The U.S. Digital Millennium Copyright Act (DMCA) and Section 230 of the American Communications Decency Act of 1996 give internet intermediaries—such as e-commerce platforms, search engines, and social media businesses—immunity, a safe harbor from liability for the content their users generate. These laws are widely seen as the keys behind the success of the U.S. digital economy. In April 2018, President Trump signed legislation that was feared to limit Section 230's protections for sites that fail to stop sex trafficking; however, the U.S. Congress has been clear that DMCA and Section 230 protections remain paramount. The United States has also stressed the importance of these laws in international forums, such as the World Trade Organization (WTO). Moreover, the European Union has its own safe harbor in its 2000 Electronic Commerce Directive, which exempts internet intermediaries from liability when they are a "mere conduit" for the content or if they are caching or hosting it.

However, safe harbor protections are now in doubt in Europe. In landmark legislation in September 2018, the European Parliament passed a copyright law that makes website operators liable for copyright infringements of content their users upload. The law demands that operators use "upload filters" to prevent users from uploading copyrighted content and requires them to compensate copyright holders (such as journalists or musicians) for the use of their content (even for very small portions).9 In a positive development, small and micro firms that operate websites have been exempted, as the law would saddle them with onerous implementation costs. Adequate protection for online content creators is, of course, essential. Yet studies suggest that forcing technology

^{8.} Mark Scott, "Brexit's data bogeyman," Politico, August 28, 2018, https://www.politico.eu/article/brexit-data-protection-privacy-deal-social-media.

^{9.} Ivana Kottasová, "Europe just approved new copyright rules that could change the internet," CNN, September 12, 2018, https://money.cnn.com/2018/09/12/technology/eu-copyright-law/index.html.

companies to police the internet can deter exactly what the United States, United Kingdom, and European Union are actively seeking do: fuel the establishment of new technology start-ups and entice investors. After all, few start-up founders and investors would want their company to stay micro or small, and fewer still may be interested in investing in start-ups that, upon growing, would become liable for user content.¹⁰

These laws are not the only measures eroding safe harbor laws. In June 2018, the European Union revised its Audiovisual Media Services Directive (AVMS) to cover video-sharing platforms and user-generated videos shared on platforms, placing such platforms under a limited liability regime where they must remove illegal content (such as hate speech and public provocation to commit terrorism) when they have knowledge of it. 11 Some EU members, such as Germany and Austria, have imposed tougher regulations based on national laws, requiring social media platforms to remove content, such as hate speech, that might be unlawful. While large firms have algorithms and staff to block content— Facebook alone removes 15,000 pieces of content in Germany each month—smaller firms will struggle with this requirement.12

Liability rules are also shifting in the United Kingdom. The recent UK "Online Harms White Paper" proposes to regulate "companies that allow users to share or discover user-generated content or interact with each other online."13 While some parts of this proposal correctly focus on stopping practices that present systemic risks to users, other parts of the proposal could have a negative impact on free expression, responsible innovation, and economic growth. For example, the proposal applies the same enforcement standards to illegal content and "legal but harmful" content, which risks impeding lawful speech and political discourse. The proposal could also break with both U.S. law and the EU e-Commerce Directive by imposing obligations on internet intermediaries which would amount to general monitoring requirements and by potentially holding intermediaries liable even in cases where they have no knowledge of harmful content. Ultimately, this type of regulation can undermine UK, U.S., and other countries' platforms, interests, and abilities to provide service to UK small businesses that seek to grow through trade enabled by global platforms. UK small businesses and consumers are taking advantage of platforms' user review sites, customer support and feedback mechanisms, and digital marketing capabilities, including to build customer awareness and client bases in new markets.

2.3 | Differences Over Digital Sales and Corporate Taxes

Governments and tax experts are grappling with questions about the taxation of large multinational digital companies, particularly regarding where users or buyers of digital goods and services reside or where the intellectual property holders and developers

^{10.} Matthew Le Merle et al., The Impact of U.S. Internet Copyright Regulations on Early-Stage Investment: A Quantitative Study (San Francisco: Fifth Era, 2016), https://static1.squarespace.com/static/5481bc79e4b01c4bf-3ceed80/t/5487f0d2e4b08e455df8388d/1418195154376/Fifth+Era+report+lr.pdf.

^{11.} See, for example, "Video Sharing Platforms - who's making the rules and how do they apply?" European Audiovisual Observatory, July 12, 2018, https://www.obs.coe.int/en/web/observatoire/home/-/asset_publisher/9iK-CxBYgiO6S/content/video-sharing-platforms-who-s-making-the-rules-and-how-do-they-apply-.

^{12.} Philip Oltermann, "Tough New German Law Puts Tech Firms and Free Speech in Spotlight," The Guardian. January 5, 2018, https://www.theguardian.com/world/2018/jan/05/tough-new-german-law-puts-tech-firms-andfree-speech-in-spotlight.

^{13. &}quot;Online Harms White Paper," U.K. Department for Digital, Culture, Media, and Sport, June 26, 2019, https:// www.gov.uk/government/consultations/online-harms-white-paper/online-harms-white-paper.

reside. Many national tax authorities, seeking new revenue streams, believe that digital consumption has not been appropriately taxed. The European Union is no exception: EU member states are discussing an interim 3 percent digital services tax (DST) on internet services, targeting online advertising, digital subscription fees, and the sale of users' activity data. This is possibly preempting a decision by the Organization for Economic Co-operation and Development (OECD), which is developing a global taxation framework model. There are also disagreements about taxation levels, which some member states believe is too low and which has led to concerns about the rise of a patchwork of national tax regimes. EU member states also disagree on the coverage of data sales and the size of companies that would be included.¹⁴ Recent proposals would extend the law only to about 200 firms, many of them based in the United States, with global annual revenue of at least €750 million (\$876 million) and annual EU revenue of more than €50 million (approximately \$55.4 million).

The European Union has also suggested taxing digital companies' corporate profits and assessing the tax on the basis of a company's gross revenues rather than on its net profit. This practice could force a company into bankruptcy if it had large revenues but limited or negative profits—a description typical of a fast-growing tech company in the first few years in its life cycle. DST proposals face opposition from EU states such as Ireland, the Netherlands, Malta, and Sweden, which host the headquarters of U.S. and European digital giants. France has proceeded with a 3 percent digital "GAFA" (Google, Apple, Facebook and Amazon) tax. Germany is reportedly amenable to a similar idea, since it is concerned about its broader trade relationship with the United States. On the other side of the issue, there has been talk that the United States could formally raise concerns at the WTO about the European Union's use of DST to discriminate against U.S. multinational companies.

It is important to note that digital companies in the European Union have lower taxes than long-established companies, but it is also the case that many multinationals, in tech and beyond, already have low effective tax rates. Since U.S. companies would be the primary target of new digital taxes, it is likely that these taxes would unfairly discriminate against U.S. companies, as already suggested by the French tax. These taxes would also undermine the European public policy objective of encouraging the use of digital services and data, especially among the poorer segments of the population that are most price-sensitive.¹⁵

All these issues coalesce around growing U.S. concerns regarding the United Kingdom's digital tax approach post-Brexit. The Theresa May government committed to a 2 percent unilateral DST starting in April 2020. 16 It is unclear if the Boris Johnson government will support this commitment; should it do so, unilateral taxes imposed by the United Kingdom would affect such firms as Facebook, Twitter, Google, Amazon, Netflix, Uber, and Airbnb, as well as their many British users, and could reduce the attractiveness of

^{14.} Joe Kirwin, "EU Finance Ministers Continue Debate on Digital Tax Scope," Bloomberg News, September 2018, https://www.bna.com/eu-finance-ministers-n73014482246/.

^{15.} See Suominen, Revolutionizing World Trade; and Raul Katz, "The Impact of Taxation on the Digital Economy," (presented to the ITU Regional Economic and Financial Forum of Telecommunications/ICT for Africa, Abidjan, Côte d'Ivoire, January 19, 2016), https://www.itu.int/en/ITU-D/Conferences/GSR/Documents/GSR2015/Discussion_papers_and_Presentations/GSR15_session4_Katz.pdf.

^{16.} Josh White, "UK Budget: Digital Services Tax Set for 2020," International Tax Review, October 29, 2018, http:// www.internationaltaxreview.com/Article/3841244/Latest-News/UK-budget-Digital-services-tax-set-for-2020. html.

the United Kingdom as a hub in which tech start-ups can flourish and scale up. The DST would tax digital firms based on their user base (e.g., user principle) rather than by their physical presence.¹⁷ Although this is viewed as an interim solution until a global framework at the OECD is reached, the UK decision would hit U.S. digital companies the hardest. Commenting on the idea, the U.S. Council for International Business (USCIB) stated that "retreating from BEPS [base erosion and profit shifting] standards and adopting more onerous rules unilaterally will increase the likelihood of double taxation as different standards proliferate."18

2.4 | VAT Hurdles to Small Businesses' E-commerce Sales

E-commerce opens new opportunities for SMEs to sell products across borders. However, the rise of e-commerce has also entited many national governments, as well as U.S. state governments, to tax these online sales. But all too often such a tax brings less money into government coffers than it costs to collect. Partly as a result, many countries implement a de minimis level for customs, under which goods can enter duty- and tax-free. However, de minimis levels are still very low around the world. In 2016, the United States made an important contribution to both its own businesses and to consumers that buy and import online, as well as to small foreign online retailers who want to export into the United States, by raising its de minimis level to \$800. Goods valued less than \$800 are therefore exempt from customs duties (thus offering a tax break to U.S. firms that buy foreign goods) and are exempt from complicated trade rules, such as rules of origin. High de *minimis* is pure free trade for small business.

The United Kingdom will need to address its customs de minimis amount post-Brexit ideally to set it higher if there is no continued alignment with EU customs rules. The European Union's customs de minimis is only €150 (approximately \$166.19); its value added tax (VAT) *de minimis* used to be only €22 (approximately \$24.37). Under recent reforms, however, the VAT de minimis has been revoked for online merchants selling €10,000 (approximately \$11,079.40) or more annually into the European Union. That said, a recent study by an expert group of European economists found that it would be best for the European Union to increase the VAT de minimis, since the current total cost of tax collection incurred by European customs administrations and the private sector vastly exceeds the revenues collected. 19 The study recommended keeping the customs de minimis level at €150 but increasing VAT de minimis to €80 (approximately \$88.64) in order to break even. The interest held by the European Union (and many other countries) in taxing low-value items imported from overseas is yet another challenge for small U.S. and UK online sellers to manage and navigate.

^{17.} Specifically, "UK has proposed a targeted royalty withholding tax applicable to IP royalties paid by a non-UK resident entity to a related party in a low tax jurisdiction, where profits out of which the royalty is paid are associated with the exploitation of the relevant IP in the UK (through sales to UK customers)." In Ben Jones et al., "Taxing the Digital Economy," Tax Journal 1389 (March 2, 2018), https://www.eversheds-sutherland.com/documents/services/taxation/tax-digital-economy-020318.pdf.

^{19.} Juha Hintsa et al., The import VAT and duty de-minimis in the European Union – Where should they be and what will be the impact? (Cross-border Research Association, HEC University of Lausanne, and University of Bamberg, October 2014), http://www.euroexpress.org/uploads/ELibrary/CDS-Report-Jan2015-publishing-final-2.pdf.

2.5 | UK Firms Struggle to Enter the U.S. Market

The United States is an open market, but it can also be a challenging market for European and UK companies. UK companies struggle with U.S. withholding taxes on payments for intellectual property (IP) rights; removing these for UK-based firms would significantly facilitate bilateral trade for IP-heavy companies. For example, UK software developers trying to access U.S. customers and consumers would need to worry less about new demands to use specific encryption solutions.

Approaches to U.S. company law vary across state borders, changing the definition of what it means to be "doing business" in the United States—particularly when it comes to product liability and insurance. This can be a headache for UK-based companies. And with the increase in UK sports and media broadcasting and streaming to U.S. consumers, the dialogue over British TV rights with the United States is likely to provide a challenge in any trade agreement as content generators seek to ensure comparable protection for their content and distribution as what they enjoy in domestic UK markets.

The European Union is creating new rules for privacy, copyright, intermediary liability, and taxes—all the areas that are critical for U.S. technology companies aiming to do business in Europe and globally, not to mention for the future of Europe's own technology companies and digital economy. What will the United Kingdom's perspective be on these issues after its departure from the European Union? Today, the United States and the United Kingdom are actively working with countless countries which are reforming or adopting different types of laws on copyright, consumer protection, data privacy, digital tax, liability, and e-payments. Numerous governments and companies are considering and creating new standards in such fields as artificial intelligence, blockchain, autonomous vehicles and drones, and internet of things (IoT). In many cases, there is no coherent set of international norms against which these regulations and standards can be drawn. The International Organization of Standardization (ISO) is working on some areas such as blockchain, and it is hoped that governments recognize private-sector efforts and evolving private sector-led standards. The changing legal landscape of cross-border digital trade will continue to be something for UK firms to pay attention to as it develops if they wish to integrate with the U.S. market.

There is a real risk of fragmentation of the global digital economy (e.g., the "splinternet"²⁰), caused by divergent national regulations and standards in such areas as data privacy, copyright laws, and digital taxes. Siloed national rulemaking particularly limits small businesses' abilities to take advantage of the internet to scale and grow across markets, just as divergent product standards or rules of origin limit small manufacturers' abilities to diversify their exports.²¹ We can observe the outcome of such fragmentation in EU nations' differing consumer protection regimes, which have limited the interest of online sellers to sell across the different EU markets—a situation that is estimated to cost the EU's economies some €12 billion (approximately \$13.3 billion) annually in foregone crossborder trade.²² This fragmentation was a key impetus for the creation of the European

^{20. &}quot;What is the 'Splinternet?" Economist, November 22, 2016, https://www.economist.com/the-economist-explains/2016/11/22/what-is-the-splinternet.

^{21.} Suominen, Revolutionizing World Trade.

^{22. &}quot;Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A Digital Single Market Strategy for European Commission, May 6, 2015, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52015DC0192.

Digital Single Market (DSM), but it would be far easier if countries adopted interoperable common rules at the outset. There is also particular regulatory fragmentation related to digital access from Russia and China-China's Firewall and forced technology transfer being the most blatant cases—as well as challenges from the GDPR, as already noted.

3 | Digital Policy Roadmap for the Future

In order to navigate a complicated global digital landscape and craft a chapter of a U.S.-UK trade agreement that increases U.S.-UK digital business and helps pave the way to a thriving transatlantic and global digital economy, the following specific policy ideas should be considered:

- Launch a bilateral Dialogue on Digital Trade to develop a new gold standard digital trade chapter with strong privacy safeguards. The group formed for this purpose would be able to readily borrow from—and build upon—the Comprehensive and Progressive Trans-Pacific Partnership (CPTPP), which the United Kingdom at some point may join, and USMCA's digital trade chapters. The U.S.-UK digital trade chapter should include provisions to:
 - Ensure unfettered transatlantic data flows:
 - Prevent data localization:
 - Prohibit web blocking:
 - Uphold basic immunities from liability for user-generated content for internet intermediaries;
 - Uphold duty-free treatment of digital products;
 - Bar restrictions on encryption technologies, such as those arising from countryspecific standards;
 - Provide for mutual recognition of professional qualifications in IT fields;
 - Ensure non-discrimination for government contracts, for example, in the growing govtech sector;
 - Commit to a higher *de minimis* level;
 - Ensure that any digital sales taxes are non-discriminatory;
 - Commit to using, and collaborating on the use of, blockchain in U.S. and UK customs to facilitate trade in parcels and packages;
 - Remove visa requirements for U.S. and UK technology firm employees to perform on temporary assignments in each other's markets;

- Provide open government data in machine-readable format to accelerate data analytics with open-source data;
- Seek risk-based cybersecurity approaches commensurate with the threats in question; and
- Commit to evidence-based, transatlantic public-private dialogue in such areas as consumer protection online, cybersecurity standards and solutions, antitrust policy, and voluntary technology standards.²³
- Create a GDPR Transatlantic Data Bridge. From the Safe Harbor to Privacy Shield agreements, the United States and European Union have always built effective bridges to allow and encourage transatlantic data flows, which ultimately grows transatlantic jobs and economic prosperity. Both sides also have a deep appreciation for the power of digital technologies to create new value in large and small businesses, not to mention enhance economic competitiveness. Given its extensive economic relationship with the European Union, the United Kingdom will likely remain in the GDPR framework despite Brexit. Nonetheless, the United States and the United Kingdom should view this as an opportunity to bridge transatlantic differences in privacy, data protection, and security—perhaps crafting a mechanism in parallel to the GDPR to regulate U.S.-UK and other data transfers along the lines of the APEC CBPR.

The United Kingdom could also build data bridges with other countries. For instance, the United Kingdom should join the APEC-EU Working Group as an observer in order to build greater interoperability between APEC's CBPR system and the EU system of binding corporate rules (BCR). This would also be aided by the European Union granting the UK proposal to allow the UK Information Commissioner's Office (ICO) to continue having a seat on its European Data Protection Board. The United Kingdom itself should establish a trade working group with APEC additional to its current single-country working groups established by the Department of Industry and Trade (DIT) with the United States, Japan, and China.

• Work toward common technology standards. There is vibrant activity across the United States and the United Kingdom, as well as across many U.S. states and the European Union, to develop new corporate standards in technology. Areas of focus include autonomous vehicles, drone delivery, 3-D printing, medtech, and fintech, as well as the crucial cross-cutting technologies leveraged by companies in these sectors, such as artificial intelligence, IoT, machine learning, and blockchain. The setting of these kinds of standards frequently occurs in an ad hoc fashion, often without international coordination, which risks the development of a complex mix of incompatible national standards, such that a company seeking to scale across markets would have to apply a different national standard in each new market, a costly endeavor that might deter companies from trying. The United States and the United Kingdom can take the lead by developing common digital standards for emerging technologies, which could then be positioned as global de facto standards. There is no need to start from

^{23.} For a proposal of a full agreement text (albeit less ambitious on digital provisions): Daniel Ikenson, Simon Lester, and Daniel Hannan, eds., The Ideal U.S.-U.K. Free Trade Agreement: A Free Trader's Perspective (Washington, DC: CATO Institute and Initiative for Free Trade, September 2018), https://object.cato.org/sites/cato.org/files/ pubs/wtpapers/ideal-us-uk-free-trade-agreement-update.pdf.

scratch: governments can follow the lead of private-sector consortia, for example, in transportation or trade finance, that are drafting voluntary industry standards in such areas as IoT or blockchain. In addition, just as has been the case for national product standards under the WTO Agreement on Technical Barriers to Trade (TBT), there could be mutual recognition of national digital and technology standards as long as those standards are non-discriminatory vis-à-vis trading partners. It is important for UK and U.S. businesses to lead the definition of what such standards are, despite current uncertainties over the nature of the United Kingdom's trade relationship with the European Union. Moreover, it is important to remember that even countries within the European Union continue to introduce their own regulatory standards governing goods and services in addition to those generated by Brussels.

- Construct a U.S.-UK tech sandbox to iterate good regulations and standards. Bringing technology solutions to market can be very costly due to myriad national and subnational safety rules and other regulations. Significantly, the United Kingdom has utilized the sandbox approach to lower the amount of time and money it takes to bring fintech to market, allowing companies to bring a new financial product or service to market without needing the entire gamut of financial regulatory approvals it might have to otherwise meet. Regulators can then watch the market develop and regulate undesirable behaviors out. Australia, Singapore, and Thailand have recently copied the sandbox concept in order to energize their fintech ecosystems. In August 2018, the United States and United Kingdom, along with nine other governments, formed a pioneering global fintech sandbox.²⁴ A bilateral U.S.-UK tech sandbox would enable U.S. and UK start-ups and established firms to quickly launch new solutions in either or both the United States and United Kingdom. This would be followed by a process where regulators in both countries monitor how the market responds and then develop best-fit regulations in an iterative fashion. Several technology-driven countries in the Asia-Pacific, such as Japan, Korea, Australia, and Singapore, might also want to join. Companies could experiment more and scale faster, regulators would learn more from each other, and the end users of these solutions would end up with more choices.
- Focus the U.S.-UK Trade and Investment Working Group's SME Dialogue on fueling and measuring SME digital trade and e-commerce. If there is one thing that just about all policymakers worldwide can agree on, it is promoting small business growth and trade. Why not champion the next tech start-up from Manchester or the next eBay seller from Kansas? The future of SME trade is digital. The United States and United Kingdom should therefore use their SME Dialogue to establish clear and measurable yearly goals for the growth of U.S.-UK SME digital trade and for investment in U.S. and UK tech start-ups. This could be gauged through frequent surveys, publicprivate dialogues, and granular data collection, turning a keen eye on the regulatory, logistical, and other challenges that U.S. and UK SMEs face in doing digital trade across the Atlantic and globally. As a result, all stakeholders would have an informed view on how to best reduce the costs and complexities for SMEs to engage in digital trade, grow, and create jobs.

^{24.} Caroline Binham, "Regulators club together to form global 'fintech sandbox'," Financial Times, August 7, 2018, https://www.ft.com/content/ae6a1186-9a2f-11e8-9702-5946bae86e6d.

- Establish a U.S.-UK Council on Digital Trade. The United Kingdom and the United States can establish a permanent joint Council on Digital Trade that reviews the proposed digital free trade agreement's implementation, takes stock of the state of bilateral digital trade, tackles emerging problems and challenges, and helps the two sides discuss common approaches to trading with the European Union, China, and other nations. This council can serve as a political umbrella as much as it can oversee the ongoing technical work among the two sides' FTA implementors, regulators, and standards-setters.
- Measure the impact on U.S. and UK companies—and on the investments and growth of start-ups—of laws about privacy, internet intermediary liability, consumer protection, and similar issues. What you neglect to measure, you cannot change. It is critical that the United States and United Kingdom take regular stock of digital trade between them and globally, assessing how U.S. and UK companies across sectors, geographies, and sizes are faring and how they are impacted by new rules and regulations from Brussels, Beijing, Washington, or London. By measuring the impact of regulations on today's growing army of traders and small businesses and the digital trade they generate (on both side of the Atlantic), the United States and the United Kingdom will ensure that their digital dialogue is data-driven and empirically sound, rather than anecdotal or ideological.

Enhancing U.S.-UK digital trade will cover a large share of global digital trade overall. But the point of doing so is not only to fuel digital trade bilaterally; it is to use bilateral cooperation and developments to shape the global digital trade agenda. With this in mind, here are four additional steps that the United States and the United Kingdom can take:

- Work closely with Northern Europe's Digital 9+ (D9) frontrunners. Under the auspices of the Swedish government, a group of nine Northern European countries (Sweden, Denmark, Finland, Estonia, Belgium, the Netherlands, Luxembourg, Ireland, and the United Kingdom) formed in September 2016 to help advance the development and agenda of the EU Digital Single Market and act as a forum to share best practices on global competitiveness. These so-called "digital frontrunners" convened in mid-2017 in Dublin to assess progress in a number of key areas at the ministerial level. The United States and the United Kingdom should work closely with the D9 when crafting a U.S.-UK deal, with an eye on ultimately addressing contentious transatlantic digital issues. They can also collaborate with the D9 to assess the impact of digital regulations on European, UK, and U.S. businesses and consumers, and they should work together to develop evidence-based proposals to lower compliance costs, especially on small firms. The United States and the United Kingdom can also work to develop common technology standards with the D9. Finally, they should seek to engage Germany, as well as the so-called "digital challenger" countries in Central Europe that are championing a positive digital agenda.
- Bring in the United Kingdom as an observer to the USMCA. The U.S.-Mexico-Canada Agreement will have a combined market of nearly 400 million people and an economic output well above \$20 trillion. The USMCA is a significant coalition for free digital trade and one that also helpfully cements the APEC's CBPR as a reference for data privacy issues. As a next step, why not expand this coalition by bringing the

post-Brexit United Kingdom as an observer into USMCA? To the authors' present knowledge, there is nothing in the agreement that would preclude such a status and creating it might entice other pro-digital trade powers to join, thereby expanding the U.S.-UK-D9 digital trade policy coalition and boosting the odds of enabling thriving global digital trade. U.S. FTA partners Colombia, Chile, and Peru could be interested, for example, since they are already working with Mexico in the Pacific Alliance, pursuing common digital trade policies and programs, and negotiating digital trade chapters with various partners such as Australia and Canada.²⁵ They could be the first ones to join such a broader USMCA-UK digital trade bloc. Further synergies can be explored with Japan, a partner to Mexico and Canada's in the CPTPP and to the United States in the U.S.-Japan Digital Trade Agreement.

- Work to get the WTO e-commerce plurilateral talks done. A critical mass of countries has joined the initiative to negotiate a plurilateral e-commerce agreement at the WTO. The exploratory work to transition toward negotiations on market access and rules is unfolding, and a formal launch was announced at the World Economic Forum in Davos in January 2019. Australia, Japan, and Singapore are leading this effort, and many others, such as Costa Rica, Chile, and Argentina, are offering constructive and enthusiastic input. Their leadership is also positive for engaging other emerging markets and developing countries in the process. While the United Kingdom is still participating as part of the European Union, and while the United States has no negotiation mandate, both of these countries should now align on the negotiating agenda; they should pool their efforts in the WTO, working with likeminded countries and engaging the D9 to shape EU positions.
- The digital trade agenda begins at home. The United States and the United Kingdom also have domestic homework to do in order to bolster the digitization of their companies and economies. While the United Kingdom and the United States are, globally-speaking, digital frontrunners with superstar technology companies, it is also the case that many of their companies (such as SMEs) and business segments (such as manufacturing, education, health care, and construction) have yet to adopt a full range of digital capabilities that would deliver new productivity gains. For example, a recent report indicates that only 11 percent of U.S. manufacturers and 1 percent of UK manufacturers can be considered "digital champions," or firms that are aggressively innovative beyond automation and networking.²⁶ While over 85 percent of U.S. manufacturers have adopted cloud computing and 65 percent use connected sensors in plants, 3-D printing and advanced data analytics tools are used only by about a third.²⁷ In a 2016 study, U.S. mid-size company executives gave themselves a C+ grade on adopting new technologies.²⁸ And as much as there is talk about the rise

^{25.} For further discussion, see Suominen, Revolutionizing World Trade.

^{26.} Sophie Chapman, "UK manufacturing not utilizing digitization enough, compared to global competitors," Manufacturing Global, April 11, 2018, https://www.manufacturingglobal.com/technology/uk-manufacturing-not-utilising-digitisation-enough-compared-global-competitors.

^{27. &}quot;New Research Study Highlights Progress of Digitalization of U.S. Manufacturers," BusinessWire, June 5, 2017. https://www.businesswire.com/news/home/20170605005029/en/Research-Study-Highlights-Progress-Digitalization-U.S.-Manufacturers.

^{28.} National Center for the Middle Market, How Digital Are You?: Middle Market Digitization Trends and How Your Firm Measures Up (Columbus, Ohio: Ohio State University, 2015), https://www.middlemarketcenter.org/Media/ Documents/digitization-trends-in-the-middle-market_NCMM_Digital_Utilization_Report_FINAL_web.pdf.

of e-commerce, astoundingly only 23 percent of UK companies and 20 percent of EU companies report having conducted online sales to consumers or other businesses.²⁹

There are many companies in the United States and the United Kingdom that have failed to modernize, putting a damper on economic productivity and missing opportunities to form new and innovative businesses.³⁰ Companies in both countries lack a deep pool of skilled workers able to leverage emerging technologies. The current pace of digitization limits productivity gains from being realized and undermines firms' competitiveness and digital trade prospects.

The U.S. and UK governments can fuel their countries' productivity by incentivizing digital transformations in such sectors as manufacturing, health care, and construction; encouraging the formation of new innovative businesses; and amplifying education, training, and reeducation opportunities, to help employees best leverage emerging technologies. Tax policy is another lever: in the United States, manufacturers report that the 2018 tax cuts have enabled them to make significant investments in new technologies and workforce development, such as STEM education initiatives.³¹ Governments do not have to be alone in equipping workers with new skills; private companies such as Codecademy and General Assembly already help people quickly learn new skills, such as computer programming, while they work, allowing them to apply it immediately in their jobs and then learn more when technologies change again.³² Governments should also incentivize companies to provide on-the-job training for recent college graduates to better apply their skills to the particular needs of the business, as well as encourage them to use artificial intelligence to match the right workers and freelancers to the right jobs.

^{29. &}quot;Online businesses & e-sales," Eurostat, 2017, https://ec.europa.eu/eurostat/cache/infographs/ict/bloc-2b.html. 30. Dan Andrews, Chiara Criscuolo, and Peter N. Gal, "Frontier Firms, Technology Diffusion and Public Policy: Micro Evidence from OECD Countries," OECD, 2015, https://www.oecd.org/eco/growth/Frontier-Firms-Technology-Diffusion-and-Public-Policy-Micro-Evidence-from-OECD-Countries.pdf; José De Gregorio, "Productivity in Emerging Market Economies: Slowdown or Stagnation?" Peterson Institute for International Economics. November 2017, https://piie.com/publications/working-papers/productivity-emerging-market-economies-slowdown-or-stagnation.

^{31. &}quot;Tax," National Association of Manufacturers, last modified September 2019, http://www.nam.org/taxstories/.

^{32.} Suominen, Revolutionizing World Trade.

Conclusion

There is a unique opportunity at hand for the United States and the United Kingdom to play a vital role in both shaping the global digital trade agenda and accelerating their respective economic growth. Despite the ongoing uncertainties surrounding Brexit, the United Kingdom can use this moment to serve as a positive bridge between the United States and the European Union, working to ensure strong transatlantic data flows, nurture digital businesses, incentivize firms and citizens to use digital technologies, and develop global digital standards. Together, the United States, United Kingdom, and European Union—along with digitally savvy governments in Asia and Latin America—can form a formidable positive force for crafting a vibrant global digital economy and free digital trade.

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Annex

This annex compiles the blog posts that were published throughout the duration of the project, highlighting specific aspects of digital trade and U.S.-UK dynamics. They have been lightly edited for style.

Where the Money Is: The Transatlantic Digital Market

KATI SUOMINEN, OCTOBER 12, 2017

Europe and the United States stand at the cusp of an economic revolution—the rise of automation, data exchanges, and new technologies that connect the physical and virtual worlds to generate unprecedented efficiencies and to scale economies for companies of all sizes.

These technological changes are also critically shaping transatlantic—and therefore global—trade and supply chains. In particular, a rapidly growing share of trade flows between the United States and Europe is digital: the exchange of digitized products and digitally-delivered services; data among people, businesses, and machines; and physical products that have been bought and sold digitally on e-commerce platforms. An especially important share of the total transatlantic online trade happens between the United States and the United Kingdom.

So, what level of digital flows are we talking about?

- E-commerce—digital purchases of physical products—is booming in the transatlantic market, growing two to three times faster than overall trade. The United States, the United Kingdom, and Germany are among the very largest e-commerce markets, not to mention each other's most important cross-border e-commerce markets: 48 percent and 70 percent of German and UK e-commerce shoppers, respectively, use U.S. e-commerce sites, while 49 percent of U.S. consumers buy from UK sites. U.S. online shoppers make most of their online purchases from the United Kingdom and China.³³
- In digitally-enabled services (business, professional, and technical services; royalties and license fees; insurance services; financial services; and telecommunications that are largely enabled by information technologies), the European Union and the United States are top markets for one another: the European Union is the destination for 45

^{33. &}quot;Modern Spice Routes," PayPal.

percent of digitally deliverable U.S. service exports, as well as the source of 46 percent of U.S. imports of digitally deliverable services, accounting for twice as much as Asia. The United States is the largest external market for the European Union's ICT-enabled services, making up 32 percent of the European Union's extra-regional ICT-enabled service exports.

- Within the European market, the United Kingdom is the United States' biggest trading partner of digitally-enabled services, accounting for 23 percent of U.S. exports and 29 percent of U.S. imports of digitally-deliverable services from the European Union.³⁴
- Digital trade is important for the U.S. economy: in 2009, digitally-enabled services accounted for 53 percent of total U.S. services exports and 49 percent of total U.S. services imports. In 2015, the United States had a \$161.5 billion trade surplus in digitally-deliverable services.³⁵ \$70 billion of that is surplus with the European Union, and \$8 billion of that surplus is with the United Kingdom.
- U.S. digital goods, services, and data are frequently used as inputs in European-made final products and exports and vice versa. Some 53 percent of digitally-deliverable U.S. services exports going to the European Union were used in the production of EU exports, while 62 percent of digitally-deliverable EU services exports are incorporated into U.S. exports. The rise of this transatlantic digital supply chain means that the United States and Europe play a central role in each other's global competitiveness in the digital era.
- Of course, not all services travel across the Atlantic: both U.S. and EU companies have affiliates in each other's markets that also sell digitally-deliverable services. In 2014, U.S. affiliates in Europe supplied \$428 billion in digitally-deliverable services (or 2.3 times as much as U.S. digital services exports to the European Union), whereas European affiliates in the United States supplied \$270 billion in digitallydeliverable services (1.5 times as much as EU exports of digitally-enabled services to the United States).
- Transatlantic flows of data are also the largest in the world, accounting for over half of Europe's data flows and about a half of U.S. flows.³⁶ Over 60 percent of YouTube views in the United States were of content uploaded overseas, a figure that rises to over 80 percent for UK views, which are additionally often accessed through U.S. sites like Google, Facebook, or Yahoo!. Often overlooked, SMEs are especially dependent on fluid flows of digital goods, services, and data.³⁷

The United States and Europe are also massively important markets to each other in the digital economy. U.S. and European consumer welfare, and the global competitiveness of U.S. and European businesses and exports, depends on fluid access to quality inputs of digital services, products, and data sourced from the opposite side of the Atlantic.

^{34. &}quot;International Data," Bureau of Economic Analysis, https://apps.bea.gov/iTable/iTable.cfm?ReqID=62&step=1#reqid=62&step=6&isuri=1&6210=4&6200=359. 35. Ibid.

^{36.} Shawn Donnan, "Global Trade: Structural Shifts," Financial Times, March 2, 2016, https://www.ft.com/content/0e0e6960-da17-11e5-98fd-06d75973fe09.

^{37.} OECD, Measuring the Digital Economy: A New Perspective (Paris: OECD Publishing, 2014), https://dx.doi. org/10.1787/9789264221796-en.

Nowhere is the case for free flows of goods, services, and data clearer than between the United States and the United Kingdom, which are each other's main trading partners of goods and services sold online. It is time to focus on enhancing both bilateral and transatlantic digital trade—which is why CSIS and the United Kingdom's Institute of Directors have joined together to map out a future U.S.-UK digital trade agenda.

Fueling the E-commerce Boom in U.S.-UK Trade

KATI SUOMINEN, NOVEMBER 2, 2017

E-commerce is booming in the transatlantic market, growing some three times faster than overall trade. The United States and the United Kingdom are among the very largest e-commerce markets (along with China), while also being each other's most important cross-border e-commerce markets: 70 percent of UK e-commerce shoppers use U.S. e-commerce sites, while 49 percent of U.S. consumers buy from UK sites.³⁸ Behind these numbers are thousands of success stories: micro-entrepreneurs and small businesses across the United States and the United Kingdom that have been discovered online by buyers across the Atlantic. With smart policies, the numbers of these transatlantic online exporters can grow into millions.

In the United States alone, total online transactions grew from \$3 trillion in 2006 to over \$6 trillion in 2013, equivalent to a third of the U.S. economy. The digital share of all retail was 12 percent in 2016 in the United States and 14 percent in the United Kingdom. 39,40 By 2020, the value of UK e-commerce is estimated to be £68 billion (approximately \$88 billion), up from £10 billion (approximately \$13 billion) in 2013.41 The B2B (business-tobusiness, where businesses sell to each other) e-commerce markets are estimated to be 10 times greater than business-to-customer (B2C) sales.

The e-commerce boom is not just making life easier for shoppers accustomed to driving to Walmart or wandering around Harrods. It is also transforming the players and possibilities in U.S. and UK foreign trade. Most strikingly, it is opening opportunities for small businesses to export, grow into multinational sellers, and craft their global supply chains. The difference between online and offline businesses' odds to export are staggering:

 As many as 97 percent of U.S. micro and small businesses that sell on eBay also export—and export on average to 17 markets. By contrast, fewer than five percent U.S. brick-and-mortar businesses export, and those that export sell on average to one market, typically either Mexico or Canada.42

^{38. &}quot;Modern Spice Routes," PayPal.

^{39.} Amy Gesenhues, "Report: E-commerce accounted for 11.7% of total retail sales in 2016, up 15.6% over 2015," Marketing Land, February 20, 2017, https://marketingland.com/report-e-commerce-accounted-11-7-total-retailsales-2016-15-6-2015-207088.

^{40.} Ben Clague, "Ecommerce's Share of UK Retail Sales Inches Higher," EMarketer, January 31, 2017, https:// www.emarketer.com/Article/Ecommerces-Share-of-UK-Retail-Sales-Inches-Higher/1015136.

^{41. &}quot;Exporting in the Digital Age: Helping UK Companies Succeed Globally," U.K. Trade and Investment Department, July 18, 2014, https://www.gov.uk/government/publications/exporting-in-the-digital-age/exporting-in-the-digital-age-helping-uk-companies-to-succeed-globally--2.

^{42.} eBay Main Street, "Global Report USA," 2015, https://www.ebaymainstreet.com/sites/default/files/ebay_global-report_usa.pdf.

 Of UK companies selling on eBay, 95 percent also export, as opposed to 12–20 percent of offline sellers (depending on the estimate). 43 Online sellers export on average to 20 markets, first and foremost to the United States.

Online sellers export more because the internet obliterates the geographic distance that for centuries has curtailed visibility, trust, and trade between small buyers and sellers located far apart—impeded by obstacles such as the width of the Atlantic Ocean. Rather than browsing products in the mall, shoppers today can use e-commerce platforms to access the worldwide smorgasbord of products and sellers. They can moreover use those platforms' star ratings systems and customer reviews to gain an instant feel for the sellers' trustworthiness and quality, aspects that tend to take much more research and iteration between the buyer and seller in the offline economy.

The e-commerce boom will be bolstered by something the United States and the United Kingdom are leaders in: artificial intelligence. Already, robots are hard at work creating evermore perfect matches between shoppers and products, divining what shoppers need even before they do and helping platforms lock in new clients and win back defectors, typically at higher rates and on a vaster scale than brick-and-mortar stores.

But the e-commerce revolution will not translate into broad-based exports and thriving small businesses in the United States and the United Kingdom without good public policy. The very good news is that at present the United Kingdom is (along with Australia and Italy) the location where U.S. digitally-intensive firms least often feel that they face barriers to trade.44 In contrast, U.S. businesses frequently lament that the digital regulations of the European Union (although the United Kingdom and Italy are current members) and China are hampering trade.

Despite the positive news, challenges still hold back U.S. and UK companies from using e-commerce to grow their exports:

• *Customs procedures.* Few issues are as bewildering for small business exporters and importers as customs procedures. In a 2010 U.S. International Trade Commission (ITC) survey of 2,349 U.S. SMEs and 500 large firms, almost 50 percent of SMEs and 30 percent of large companies said customs procedures pose "a major burden." 45 A U.S. ITC survey of 3,466 companies in digitally-intensive industries echoed this result, with 48 percent of SMEs viewing customs requirements as an obstacle to their trade.46 In 2016, the United States gave the world's exporters and all U.S. importers a gift: it raised the U.S. de minimis level—the maximum value of an import that is exempt from customs duties, taxes, and complicated rules of origin-from \$200 to \$800. The United Kingdom, upon leaving the European Union, should be encouraged to do the same: after all, the EU's customs *de minimis* value is very low at €150 (approximately \$166.19). And should a future U.S.-UK agreement include a bilateral, preferential de minimis amount of \$1,000, it would be pure free trade for U.S. and UK

^{43.} Ibid.

^{44.} U.S. International Trade Commission, Digital Trade in the U.S. and Global Economies, Part 2, August 2014. https://www.usitc.gov/publications/332/pub4485.pdf.

^{45.} U.S. International Trade Commission, Small and Medium Sized Enterprises: Characteristics and Performance (Washington, DC: November 2010), https://www.usitc.gov/publications/332/pub4189.pdf.

^{46.} U.S. International Trade Commission, Digital Trade in the U.S. and Global Economies.

- small business exporters, as well as any companies, from Nike to Burberry, that sell low-value items.
- Taxation without representation. The United Kingdom should consider a different outcome to that of the European Union, which recently forced foreign businesses selling more than €10,000 (approximately \$11,079.40) annually to the European Union to pay a value-added tax (VAT), even disregarding the European Union's prior €22 (approximately \$24.37) de minimis level on sales taxes. The United Kingdom's threshold for requiring a business to register for VAT has been much higher, at £83,000 (approximately \$107,408.64), which is better for consumers. It would in fact be better for the European Union to increase its VAT de minimis, as the tax collection costs on low-value items tend to exceed the revenue collected.⁴⁷ In the United States. state governments should temper their growing interest in taxing remote retailers. The United States and the United Kingdom can lead a global effort against duties and taxes that strangle the e-commerce initiative of small business before it can even begin.
- Carmaggedons. As e-commerce and urbanization expand, more and more trade both originates and arrives in congested cities. Soul-crushing traffic jams also jam trade in many countries, probably even more than customs do. 48 Researchers at Texas A&M's Transportation Institute tallied the cost of time and fuel in U.S. cities at 6.9 billion hours and 3.1 billion gallons of fuel in 2014, for a total cost of \$160 billion four times the levels of 1982. 49 By 2020, delays will grow to 8.3 billion hours. In the United Kingdom, 12 of every 100 deliveries are delivered twice (as no-one was at home to sign the first time around), adding congestion to the roads and costs to the shippers to the tune of £850 million per year. 50 U.S. and UK urban planners and trade policymakers need to join forces to develop new technologies that reduce urban transport, from data-driven logistics to 3-D printing.
- Digital and export skills. To make the most of e-commerce, small businesses need to master two things: how to do digital business, such as running geo-targeted ads and analyzing customer data; and how to export, such as dealing with foreign product standards and trade finance providers. In the United Kingdom, exporters are held back by challenges to managing foreign exchange rates, and both exporters and companies trying to export struggle with finding customers and overseas marketing. 51 Meanwhile, some U.S. small businesses erroneously believe their products are not exportable, while traditional manufacturers worry about their digital know-how.⁵² Some efforts to bridge these difficulties include the U.S. Commerce Department's new eCommerce Innovation Lab, designed to help online sellers export goods and services, and UK Trade and Investment's E-Exporting Program, which promotes brands and

^{47.} Juha Hintsa et al., The import VAT and duty de-minimis in the European Union.

^{48.} Kati Suominen, "Next Big Roadblock to Trade-Congested Cities," GE Reports, February 18, 2016, https:// www.ge.com/reports/kati-suominen-next-big-roadblock-to-trade-congested-cities/.

^{49.} David Schrank et al., "2015 Urban Mobility Scorecard," Texas A&M Transportation Institute, August 2015, https://static.tti.tamu.edu/tti.tamu.edu/documents/mobility-scorecard-2015.pdf.

^{50.} Regional Plan Association, Why Goods Movement Matters: Strategies for Moving Goods in Metropolitan Areas (Gothenburg, Sweden: June 2016), http://library.rpa.org/pdf/Why-Goods-Movement-Matters-ENG.pdf.

^{51.} Charlotte Chung, Destination Export: The Small Business Export Landscape (Blackpool, UK: FSB, July 2016). https://www.fsb.org.uk/docs/default-source/Publications/reports/fsb-destination-export-report-2016.pdf?sfvrsn=0&sfvrsn=0.

^{52.} National Small Business Association, Small Business Exporting Survey (Washington, DC: 2016), https://www. nsba.biz/wp-content/uploads/2016/04/Export-Survey-2016-Final.pdf.

retailers (such as British online superstars Marks and Spencer and Karen Millen), as well as ongoing support and advice through an e-passport program. 53,54

E-commerce is the twenty-first century's equivalent of steam engines, railroads, and container ships: it powers more trade at lower cost. It is revolutionizing and increasing opportunities for small businesses to grow. The United States and the United Kingdom are global leaders in e-commerce, but policymakers need to catch up and shape customs, tax, export promotion policies, and transport systems to fuel it.

No Choice? The GDPR's Impact on the United States, the United Kingdom, and the European Union

KATI SUOMINEN, JANUARY 31, 2018

Four letters will have a profound impact on the future of global digital trade: the GDPR, or the General Data Protection Regulation. The European Union's new data privacy regime regulating companies' access to, and transfer of, the data of individuals in the European Union enters into effect on May 25, 2018. The GDPR protects such data as basic identity information (name, address, ID numbers), web data (location, IP address, cookie data, RFID tags), health and genetic data, biometric data, racial or ethnic data, political opinions, and sexual orientation. EU citizens have the right to know upon request what personal data a company is using and how it is being used. Importantly, the GDPR applies to businesses based outside the European Union if they collect or process personal data of EU residents. U.S. and UK companies are already working to meet GDPR requirements—some are even ahead of their EU counterparts but the framework is costly, and there could be ways to attenuate costs. Another complicating factor is Brexit. As the United Kingdom and the European Union intensify their Brexit negotiations, British companies are seeking to divine the future trade regulatory frameworks that will govern their activities with the European Union. One area where UK companies, just like their U.S. counterparts, appear to have no room for negotiation is data privacy.

Why is data so important? Data is the lifeblood of just about any industry—a critical input in companies' operations and production processes. Data enables companies to generate new insights on their processes, competitors, and customers; streamline their business operations and supply chains; and develop new products. Consider Unilever, which compiles data from 190 countries in real time to its UK data center. This information helps the company mitigate supply chain risks, improve business performance, and lower the price of products.⁵⁵ The mining giant Rio Tinto taps data from its trucks, drills, process surveillance cameras, control systems, and maintenance system logs at its mines around the planet. Analyzing these data in Brisbane, Australia, the company is able to cut costs and readily improve the safety and environmental performance of its mines.⁵⁶ Mexico's cement company, Cemex, gained its global leadership position by using data on cement delivery times and best routes to navigate through busy urban areas.

^{53. &}quot;Ecommerce Export Resource Center," eCommerce Innovation Lab, 2018, https://www.export.gov/eCommerce.

^{54. &}quot;Exporting in the Digital Age: Helping UK Companies Succeed Globally." U.K. Trade and Investment Department.

^{55.} Daniel Castro and Alan McQuinn, Cross Border Data Flows Enable Growth in All Industries (Washington, DC: Information Technology and Innovation Foundation, February 2015), http://www2.itif.org/2015-cross-borderdata-flows.pdf.

^{56.} Ibid.

The savings that companies can glean from better data and analytics helps them invest in new activities and allows them to pass cost savings to consumers. The McKinsey Global Institute predicts that companies that make the most of business analytics could increase their operating margins by up to 60 percent.⁵⁷

The European Union has been the vanguard of tough data privacy rules. EU citizens have the right to know upon request what personal data a company is using and how it is being used. The GDPR applies to EU-based "data controllers" (organizations that collect data from EU residents), and "processors," (organizations such as cloud service providers that process data on behalf of data controllers).

There are many limitations on how businesses can deal with data. For example, companies:

- Can store and process personal data only when the individual consents and for "no longer than is necessary for the purposes for which the personal data are processed";
- Must erase personal data upon request:
- Must report data breaches to supervisory authorities and individuals affected by a breach within 72 hours of when the breach was detected:
- Need to conduct data protection impact assessments to identify risks to EU citizens; and
- Have a data protection officer (DPO) if processing large amounts of data.

For an online shopper in the European Union, the extensive coverage and global reach of the GDPR may sound reassuring. UK or U.S. companies that touch the data of EU individuals have no choice but to comply with the GDPR.

All companies with 250 employees or more need to adhere; companies with fewer than 250 employees whose data processing is not occasional, or includes certain types of sensitive personal data, also need to comply. Larger firms can swallow the GDPR's high costs; smaller firms face very high costs, which are passed along to European consumers, companies, and economies alike. Some of the costs imposed by the GDPR include the following:

- Very high implementation costs. According to a PricewaterhouseCoopers survey, twothirds of U.S. businesses are spending between \$1 and \$10 million just to ensure they can implement the GDPR by the time it enters into effect; one-tenth of U.S. businesses are spending over \$10 million.⁵⁸ UK companies have yet to face these costs: only 29 percent have started preparing to comply with the GDPR.⁵⁹ Some 25 percent of UK businesses have cancelled all preparations for the GDPR on the mistaken belief that it will not apply after Brexit.
- *Impending penalties*. Companies are swallowing the implementation costs in part because the penalties for companies that fail to enforce the GDPR run as high as €20 million (approximately \$22.16 million) or 4 percent of a company's global

^{57.} James Manyika et al., Big Data: The Next Frontier for Innovation, Competition, and Productivity (New York: McKinsey Global Institute, May 2011), https://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/ big-data-the-next-frontier-for-innovation.

^{58.} Clint Boulton, "US Companies Spending Millions to Satisfy Europe's GDPR," CIO, January 26, 2017, https:// www.cio.com/article/3161920/article.html.

^{59.} Joe Whitwell, "How SMEs Can Prepare for the General Data Protection Regulation," Telegraph, June 28, 2017, https://www.telegraph.co.uk/business/open-economy/smes-to-avoid-general-data-protection-regulation-fines/.

revenues. However, there are some high impending losses: GDPR fines are expected to cost European banks \$5.2 billion in the first three years in hard cash.⁶⁰ The 100 companies listed on the London Stock Exchange could face fines of up to £5 billion (approximately \$6.47 billion) for GDPR breaches. 61 Had the regime been in place for the past five years, the top listed UK companies could have been fined £25 billion (approximately 32.25 billion).

- Business losses from decreased access to data. Given that limits on data access curb efficiencies, the GDPR is estimated to result in an immediate loss of \$66 billion in sales for EU companies. 62 The more profound implications, such as the curtailment of credit information on consumers and ability for web analytics firms to function, is expected to result in losses of \$173 billion and 2.8 million European jobs. 63
- Negative impacts on GDP, trade, investment, and welfare. Brussels think tank ECIPE's simulations discovered that the European Union's data privacy and localization laws, depending on their final outcome, will lower EU GDP by 0.4-1.1 percent, exports by 0.4 percent, domestic investments by 3.9-5.1 percent, and welfare by \$334-\$806 per worker.⁶⁴

U.S. companies have for a long time struggled with the European Union's digital regulations. In a 2014 U.S. International Trade Commission study, small and large U.S. businesses ranked the European Union among the top three hardest markets to do business with online, including in terms of market access, data protections, and data localization.

As the GDPR kicks in, the bigger question is what happens next at the global level. After all, the GDPR is inconsistent with the General Agreement of Trade in Services (GATS) and is philosophically at odds both with U.S. regulations and the U.S.-promoted APEC Cross Border Privacy Rules (CBPR) system, which focuses on self-enforcement.

Countless emerging markets and developing countries are being encouraged to fashion their data privacy and transfer regimes along the lines of the GDPR. This is a flashing red light that could cause a major digital trade disruption with the United States, and which is completely unnecessary. The CBPR already provides a model for a neat, replicable "regulation in a box" and serves as an equivalent to EU processes.

If the GDPR seriously dents U.S. and UK companies' access to data and revenues in Europe, these companies will seek new opportunities with each other or look to emerging markets with flexible data transfer rules. Will markets or governments decide?

^{60. &}quot;GDPR Already Influencing Cyber Insurance Buying," JLT Group, July 4, 2017, https://www.jlt.com/en-uk/ insurance-risk/cyber-insurance/insights/gdpr-already-influencing-cyber-insurance-buying.

^{61. &}quot;FTSE 100 Companies Could Face Up to £5 Billion a Year in Fines When GDPR Tsunami Hits Our Shores," Oliver Wyman, May 22, 2017, https://www.oliverwyman.com/media-center/2017/may/ftse-100-companies-couldface-up-to-p5-billion-a-year-in-fines-w.html.

^{62. &}quot;Economic Impact Assessment of the Proposed European Data Protection Regulation," Deloitte, December 16, 2013. https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/about-deloitte/deloitte-uk-european-data-protection-tmt.pdf.

^{63.} Ibid.

^{64.} Erik van der Marel, Hosuk Lee-Makiyama, and Matthias Bauer, "The Costs of Data Localisation: A Friendly Fire on Economic Recovery," ECIPE, Occasional Paper 3 (May 2014), http://ecipe.org/publications/dataloc/.

Blockchain to Accelerate Transatlantic Trade

KATI SUOMINEN, FEBRUARY 23, 2018

Among the many effects of Brexit being contemplated is the staggering rise in the workload of UK customs, run by Her Majesty's Revenue and Customs (HMRC). With the United Kingdom poised to leave the European Union and its transitional phase and future relationship with the European Union unknown at this point, the country will need to manage a 363 percent increase in customs declarations, from 55 million to 255 million, caused by the rise of items for which tax and duties will need to be collected on trade between the United Kingdom and the European Union. 65 The HMRC is running against the clock to put in place a new high tech Customs Declaration Service (CDS). While it is not a silver bullet, given the tight timescales the United Kingdom and the European Union are working with, blockchain may help facilitate smoother customs processes in the medium to longer term. It is certainly an important area for consideration in the analysis of how technological innovation can reduce frictions and costs in the transatlantic trade relationship.

At a time when world trade is growing again and e-commerce has created a tsunami of small parcels crisscrossing international borders—trade in items less than \$100 in value grew about 10 times faster than overall world trade in 2011-2015-border agencies need to quickly sort out illicit shipments and fraudulent duty-avoidance while enabling lowrisk shipments to promptly pass through.66 Securing borders and facilitating trade cannot be done efficiently by hand or with the human eye seeking to detect suspicious patterns; rather, the pattern recognition work is perfect for computers.

Savvier customs agencies, such as those of the United Kingdom, the United States, and Singapore, have long used sophisticated risk management techniques in their work, such as predictive analytics and machine learning, and with life-saving effects. In 2010, U.S. authorities identified a bomb inside a printer cartridge shipped from Yemen to Chicago. The discovery was made on the basis of trade data that showed that Yemen was an unusual provider of office supplies to the location destined in Chicago. 67 Singapore Customs is now analyzing the potential for artificial intelligence to read and learn X-ray images of containers in order to detect anomalies and alert customs officials to open suspicious items manually. 68 In the United Kingdom, predictive analytics are expected to locate £7 billion (approximately \$9 billion) in additional tax revenue that has been lost to fraud or errors. 69 But still there is slack. For example, data-sharing among the 28 UK border agencies has been inefficient, as their databases have not been fully connected.

^{65.} Rob Merrick, "No Guarantee New Customs IT System Will Be Ready for No-Deal Brexit, Says UK Customs Chief," Independent, October 25, 2017, https://www.independent.co.uk/news/uk/politics/customs-it-system-nodeal-brexit-david-davis-ready-declaration-service-cds-leave-eu-a8019756.html.

^{66.} Kati Suominen, "The Silver Bullet for Fueling Small Business in the Ecommerce Era: A Plurilateral on De Minimis," Globalization 4.0, April 21, 2017, https://katisuominen.files.wordpress.com/2017/04/de-minimis-plurilateral-suominen-april-2017.pdf.

^{67.} Lorraine Keyes, How Data Can Simplify and Facilitate Trade Within the EU (Rotterdam: Europese Fiscale Studies, 2015). https://www.europesefiscalestudies.nl/upload/Keyes%20-%20verhandeling%20FINAL.pdf.

^{68.} Medha Basu and Nurfilzah Rohaidi, "Singapore's Plans for AI in Border Security," GovInsider, May 16, 2017, https://govinsider.asia/smart-gov/singapores-customs-sung-pik-wan-innovation/.

^{69. &}quot;HMRC-Recovering £7 Billion in Additional Tax Revenues," SAS Institute, 2014, https://www.sas.com/content/dam/SAS/en_gb/doc/CustomerStories/hmrc.pdf.

Blockchain can take customs risk management to another level. Invented by one or a group of still-anonymous individuals who published its foundational open-source code in 2014, blockchain is quietly revolutionizing trade finance, supply chain management, and management of property rights, among many other things. It is a decentralized, disintermediated system that retains data on all transactions on a ledger that is visible to all stakeholders and updated in real time. Each transaction on blockchain has an IP address attached to it which enables anyone to view every transaction any given IP holder has ever made and with whom. All users remain private, and transactions are secure and carried out among private parties—but they are also visible from the bird's-eye view to all market participants. That each user builds an immutable history on the ledger mitigates the need for third-party due diligence.

The properties of blockchain are terrific for border clearance, particularly for ensuring high-quality, real-time data on shippers and on the authenticity and origin of goods that is instantly sharable with all border agencies. In 2017, the HMRC announced a proof of concept using blockchain in customs. 70 The system is designed to reduce administrative costs and delays in trade transactions, coordinate agencies' inspections, and automatically detect anomalies and enable compliant shipments to clear customs fast. Thus, it is ideal for accelerating the United Kingdom's adjustment to the post-Brexit deluge of parcels and customs declarations.

Whether or not blockchain makes it to the HMRC by Brexit, the efforts of the United Kingdom open new opportunities to leverage blockchain in transatlantic trade. In November 2017, U.S. Customs and Border Protection (CBP) announced that it had ideated 14 use cases for blockchain, such as using blockchain to keep track of licenses, permits, certificate of origin reporting, and free trade agreement product qualifications.71 The fact that both UK and U.S. sides are moving to cutting-edge technology can fuel transatlantic flows and data sharing among UK and U.S. customs—and ultimately with a number of other countries planning on using blockchain in their customs departments. In January 2018, for example, 15 countries in East Africa announced that they were launching a "Digital FTA" that would be a web of blockchain ledgers, enabling easy generation of certificates of origin.

What is more, there can be significant synergies between the customs services that adopt blockchain and the many trade intermediaries, such as shippers and banks, that have already been aggressively piloting blockchain in the past couple of years to combat fraud and reduce paper and manual processes in global shipping and trade finance. The Korea Customs Service is already aiming to leverage these synergies with a consortium of shippers.⁷² The governments of Hong Kong and Singapore are launching a blockchain experiment in trade finance with 20 banks in early 2019. Ultimately, all parties involved in a trade transaction shippers, banks, and customs and border agencies—can be on the same blockchain, with full

^{70.} Lis Evenstad, "HMRC Builds Blockchain Proof of Concept for UK Border," Computer Weekly, September 15, 2017, https://www.computerweekly.com/news/450426393/HMRC-builds-blockchain-proof-of-concept-for-UK-

^{71.} Rebecca Campbell, "US Customs and Border Discovers 14 Blockchain Use Cases," CCN, November 13, 2017, https://www.ccn.com/us-customs-and-border-protection-is-looking-into-the-applicability-of-the-blockchain/. 72. Shin Ji-hye, "Blockchain to be Used for Logistics in Korea," Korea Herald, May 31, 2017, http://www.koreaherald.com/view.php?ud=20170531000773.

visibility into any one shipment end-to-end. This is a major opportunity for transatlantic and world trade, which comes none too soon for the United Kingdom.

Building a U.S.-UK Fintech Sandbox

KATI SUOMINEN, MARCH 7, 2018

The United States and the United Kingdom have been at the forefront of the fintech industry, spawning hundreds of companies that help consumers and companies borrow, raise capital, lend, get insured, and pay online. But between these empowering tools and their potential users is a sprawl of regulations that make it costly for fintechs to scale, especially in the United States, and complicate UK fintechs' prospects to serve markets on both sides of the Atlantic. Could the fintech market be more integrated between the United States and the United Kingdom, such that the hop across the pond could be just that easy?

Now numbering over 6,000 around the planet, fintech start-ups have disrupted the world of financial service "dinosaurs" such as banks, insurance companies, and credit card businesses. In the process, they have done a great deal of good, for example, by opening access to fastdisbursing loans to small businesses in rural regions and segments abandoned by banks, helping women entrepreneurs raise capital more easily for their businesses than they would from VCs, and enabling friends to pay one another for dinner with a tap of their phones. 73,74,75 For venture capital investment in U.S. fintech, 2015 was a record year, with \$6 billion in the United States and \$676 million in the United Kingdom. Online loans from fintechs are still a couple of percentage points away from small business loans made by banks in the United States, but they are growing some 20 times faster.

That said, bringing fintech innovations to market is costly, due to the myriad of regulations surrounding financial services. Of course, some rules are in the books for a good reason such as to prevent fraudulent crowdfunding campaigns or predatory lending practices. To lower the amount of time and money fintechs need to get to market, the United Kingdom has helpfully utilized the sandbox approach whereby companies can bring to market a new financial product or service without encountering the full force of regulatory hurdles, and regulators can watch the market develop and regulate undesirable behaviors out.

Various countries, such as Australia, Singapore, and Thailand, have copied the sandbox in order to energize their fintech ecosystems. With nearly a dozen federal agencies, as well as a range of state agencies, regulating fintech, the United States has put forward its own sandbox proposal in a bill calling for a Financial Services Innovation Office to support the development of financial innovations.77

^{73.} Hunter Ruthven, "PayPal Looks to Plug Gap Left by Bank Branch Closures," Business Advice, June 18, 2017, https://businessadvice.co.uk/finance/debt/paypal-looks-to-plug-gap-left-by-bank-branch-closures/.

^{74.} Amy Cortese, "Women Entrepreneurs Are Making Strides With 'Equity' Crowdfunding," Locavesting, May 7, 2015, https://www.locavesting.com/crowdfunding/women-entrepreneurs-are-making-strides-with-equi-

^{75.} Brett Molina, "No More IOUs: These Apps Let You Pay Your Friends," USA Today, August 14, 2017, https:// www.usatoday.com/story/tech/news/2017/08/14/venmo-paypal-zelle-square-cash-these-apps-let-you-pay-yourfriends/536094001/.

^{76.} KPMG, The Pulse of FinTech Q4 2016 (Zug, Switzerland: 2017), https://assets.kpmg/content/dam/kpmg/xx/ pdf/2017/02/pulse-of-fintech-q4-2016.pdf.

^{77.} Rachel Witkowski, "U.S. House Bill Aims to Set Up 'Sandbox' for FinTech Innovation," Wall Street Journal, September 22, 2016, https://www.wsj.com/articles/u-s-house-bill-aims-to-set-up-sandbox-for-fintech-innova-

Still, a critical problem remains: each country (and in the United States, each state) has its own financial services regulations that do not interoperate well. This forces fintechs wishing to scale across borders to adopt rules and apply for licenses specific to each new market. For example, a British (or an American) online lender seeking to service all U.S. states will have to meet each state's regulations. Or, a U.S. equity crowdfunding site that wants its clients be able to solicit UK investors would need to do costly paperwork to ensure the securities sale was in line with the United Kingdom's securities laws, not just with the rules of the U.S. Securities and Exchange Commission.

These frictions make the very point of fintech scalability (or that of any "-tech") much harder to attain than is the case for, say, social media or e-commerce companies. The regulatory mismatches are reflected in the cost and time—on average, \$2 million and two years—that it takes for a U.S. fintech to scale and get into the black. Granted, venture capital for fintechs is more amply available in the United States than in the United Kingdom, but it is tougher to build a fintech in the United States without it. Similarly, expanding to the U.S. market is an option only for those UK companies that have deep enough pockets to meet the various regulations. This limits access to innovative financial services for U.S. and UK consumers and companies.

The obvious way to help fintechs take off faster with less is to make transatlantic financial regulations interoperate.

The United Kingdom has made good headway on this idea with Canada. In February 2017, the United Kingdom's Financial Conduct Authority (FCA) and the Ontario Securities Commission of Canada signed an agreement to refer innovative businesses seeking to enter each other's markets to one another and to help them navigate regulations and lower their time to market.78 This deal is hailed as a template for the first cross-border regulatory collaboration in the fintech market. This is probably as intended: just one month earlier, the FCA's new chief executive, Andrew Bailey, gave a speech stressing the need for global regulatory standards as the basis to govern market access for financial services firms. For its part, the Ontario Securities Commission of Canada had earlier concluded a similar deal with the Australian Securities and Investments Commission.⁷⁹ The United Kingdom and Australia have also created a fintech bridge to enable their respective fintechs to play in each other's markets.80 The United Kingdom has also created similar bridges with South Korea and Singapore, among others.

Meanwhile, the United States has made progress on creating uniform state laws to be adopted across all states to regulate Bitcoin and virtual currency businesses. Additionally, both states and the federal Office of the Comptroller of the Currency (a bank regulator) are working on their respective fronts (and egged on by each other) to develop more

tion-1474538800.

^{78. &}quot;FCA and OSC Sign Co-operation Agreement to Support Innovative Businesses," Financial Conduct Authority, February 22, 2017, https://www.fca.org.uk/news/press-releases/fca-and-osc-sign-co-operation-agreement-support-innovative-businesses.

^{79.} Heidi Gordon, "Ontario and Australian Securities Regulators Become FinTech Friends," McCarthy Tetrault, November 3, 2016. https://www.mccarthv.ca/en/insights/blogs/canadian-securities-regulatory-monitor/ontario-and-australian-securities-regulators-become-fintech-friends.

^{80.} Dominic Powell, "Government Announces FinTech 'Bridge' to UK to Foster Collaboration and Investment," SmartCompany, November 2, 2017, https://www.smartcompany.com.au/startupsmart/news/government-announces-fintech-bridge-to-uk-to-foster-collaboration-and-investment/.

uniform rules for online lenders across states.⁸¹ In addition, in January 2017 the U.S. Trade Representative and the Department of Treasury collaborated with the European Union to create the first insurance "covered agreement" to resolve the disparate treatment of U.S. insurers operating across EU member states, as well as to eliminate collateral requirements for EU insurers in the United States.82

These efforts provide a great basis for a U.S.-UK deal to create a common market for fintechs looking to service users on both side of the Atlantic. Paul Thanos has proposed that the United States and the United Kingdom pilot an "InsurTech Greenhouse," a lusher, binational version of the sandbox that would enable U.S. and UK insurtech companies to do beta tests that regulators could then assess and learn from in order to determine which companies are ready for licensing.83 With the ongoing drives in the United States and the United Kingdom to bridge regulatory islands, the timing is right to scale the idea into a U.S.-UK fintech sandbox. And they should invite the Canadians and Australians to play in it. too.

A Data Localization Free-for-All?

WILLIAM ALAN REINSCH, MARCH 9, 2018

Data localization, the mandate that the data of a country's citizens be stored within the borders of that country, is a thorny issue dividing policymakers across the globe. In the global policy arena, there are two divergent paths when it comes to data localization policy. One path, which is championed by China, among others, is a path of forced localization, in which countries restrict data flows and force companies to comply with their laws in order to do business there. The other path, followed primarily by the United States, as well as by the European Union (partially), allows for the free flow of cross-border data.

The degree of data localization measures worldwide has increased dramatically, most drastically since 2010. According to a United States International Trade Commission (USITC) report, data localization measures and specific laws pertaining to the flow of data have forced companies to leave specific markets and could impede the development of information technology. For example, Brazil debated relevant laws as recently as 2014, and its Marco Civil imposes Brazilian law on all data crossing Brazil's borders. In 2014, India enacted restrictions on data flows, requiring all communication data from Indian citizens to remain in India.⁸⁴ Other countries take a slightly different approach. Australia does not have broad, sweeping legislation on data protection, but it does have specific laws pertaining to instances of data flows (e.g., it requires telecommunications carriers to capture and retain certain information).85 South Korea similarly lacks broad data localization measures but

^{81.} Patrick Rucker, "US Regulation of FinTech Companies Should Not Prompt a Turf War-OCC's Curry," Reuters, May 4, 2017, https://www.reuters.com/article/us-usa-banks-occ/u-s-regulation-of-fintech-companies-shouldnot-prompt-a-turf-war-occs-curry-idUSKBN1802QK.

^{82.} Paul Thanos, "An Insurtech Greenhouse: Future U.S.-UK Regulatory and FinTech Collaboration," Wilson Center, May 31, 2017, https://www.wilsoncenter.org/article/insurtech-greenhouse-future-us-uk-regulatory-and-fintech-collaboration.

^{84.} David Coffin, Global Digital Trade 1: Market Opportunities and Key Foreign Trade Restrictions (Washington, DC: United States International Trade Commission, August 2017), https://www.usitc.gov/publications/332/ pub4716 0.pdf.

^{85.} Melissa Fai and Alex Borowski, "Data Protection 2017: Australia," International Comparative Legal Guides, 2017, https://iclg.com/practice-areas/data-protection/data-protection-2017/australia.

has specific data laws that are applied in specific cases, such as when Google attempted to export mapping data even though South Korea bars any company from using mapping data not stored in South Korea, for national security reasons.86

New restrictive data localization laws have forced businesses to make decisions about data storage, with China a global leader in this realm. China requires that "important data" concerning Chinese citizens be stored and processed locally. This data localization law allows China to restrict market access for cloud computing if the required data localization requirements are not met. The Chinese law also stipulates data localization requirements for the financial services industry and for telecommunications. China's methods have been effective, as companies looking to do business there are increasingly complying with Chinese demands.87

Russia's strict data localization policies also impact business decisions, and thus far there has not been a uniform response to Russian requirements. For example, Twitter has considered whether to store user data in Russia to comply with the new laws. It was reported that Twitter has agreed to transfer data on Russian citizens to a facility within Russian borders. While Russia passed the law in 2014, it has been lax in enforcing it, as evidenced by Twitter's hesitation to comply. That being said, Google and Apple have complied with the law, while Facebook and Twitter have not. However, Russian regulators expelled LinkedIn from operating in Russia for failure to comply with the statute because LinkedIn chose not to locate a data center in Russia.88

For its part, the United States supports eliminating as many barriers to data flows as possible, since it views data localization laws as another barrier to trade. As such, data localization measures are becoming increasingly intertwined with trade agreements. For instance, the United States is seeking new data localization laws within a renegotiated and modernized NAFTA. The United States is also particularly concerned with data flows and the financial services sector.89

The European Union, like the United States, is also interested in drafting data flow provisions for future trade deals that would eliminate cross-border data flow restrictions. The EU provision is aimed at preventing trade protectionists from shielding data flows that are crucial to developing international businesses. Although data protection is a fundamental right in the European Union and thus cannot be negotiated in a trade agreement, Brussels is searching for ways to help facilitate cross-border data flows without compromising the right to privacy of EU citizens. 90,91

^{86. &}quot;South Korea rejects Google's request to use mapping data," Associated Press, November 18, 2016, http://indianexpress.com/article/technology/tech-news-technology/south-korea-rejects-google-request-to-use-mappingdata-4381760/.

^{87.} Josh Horwitz, "A key question is at the heart of China's new cybersecurity law: Where should data live?" Quartz, June 7, 2017, https://qz.com/999613/a-key-question-at-the-heart-of-chinas-cybersecurity-law-whereshould-data-live/.

^{88.} Natasha Lomas, "Twitter is reviewing whether to store some user data in Russia," TechCrunch, April 19, 2017, https://techcrunch.com/2017/04/19/twitter-is-reviewing-whether-to-store-some-user-data-in-russia. 89. Erica Alini, "NAFTA, Trump and the cloud: What the negotiations mean for your personal data," Global News, August 10, 2017, https://globalnews.ca/news/3660107/nafta-trump-the-cloud-data-privacy-canada. 90. "Charter of Fundamental Rights of the European Union," Official Journal of the European Union, 2012/C 326/02, October 26, 2012, http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A12012P/TXT. 91. Julia Fioretti, "EU moves to remove barriers to data flows in trade deals," Reuters, February 9, 2018, https:// www.reuters.com/article/us-eu-data-trade/eu-moves-to-remove-barriers-to-data-flows-in-trade-deals-idUSKBN-

Part of the EU's bridging strategy is its hybrid approach toward data localization, as outlined in the General Data Privacy Regulation (GDPR), set to go into effect in May 2018. Compared to its predecessor (the European Data Protection Directive), the GDPR increases the European Union's oversight of data. The European Union applies its jurisdiction to any personal data processing, in the European Union or abroad, that originates in the European Union. The GDPR also establishes penalty rates for noncompliance, as well as rules on user consent, data erasure, breach notification, right to access, and data portability. But importantly, the GDPR allows for the flow of data to third party countries exclusively if the receiving country's laws are in compliance with GDPR rules.92 And this is where friction between the U.S. and EU approaches lies.

While the GDPR guidelines pertain to EU member states, many EU members have their own nation-specific data laws, which heightens complexity, confusion, and cost. For example, the Danish Bookkeeping Act requires firms to store financial data of Danish citizens in either Denmark or another Nordic country for five years. Greece enacted a data localization law in 2001, stipulating that data generated on physical media located in Greece must be stored on Greek territory.93 Germany established its own data localization laws, with slight deviations from the GDPR: if data is meant for further processing, it does not have to come under the same regulations designated by the GDPR if those regulations would disproportionately affect the further processing of the data. Germany also requires any company with at least 10 employees to have a data protection officer, although the GDPR only stipulates the need for one in exceptional circumstances.94

After Brexit, there is an opportunity for the United Kingdom to forge its own unique path when it comes to the issue. While uncertainties remain about the exact direction of British localization policy, signs are already starting to emerge. The United Kingdom will implement the GDPR, but it wishes to maintain a position of openness, hoping to prevent the internet from becoming balkanized. According to its Brexit position paper, the British government believes:

In an ever more connected world, we cannot expect data flows to remain confined within national borders. Moves towards data localization, or the Balkanization of the internet, risk stifling the competition, innovation and trade which produce better services for consumers, and can weaken data security.95

Additionally, the proposed "Data Protection Bill [HL] 2017-19" before the House of Lords would apply the GDPR and the Police and Criminal Justice Data Protection Directive (PCJ) in the United Kingdom and ensure that the government has adequate data measures in a post-Brexit landscape. The PCJ protects the European Union's fundamental rights on data in the event of police investigations.96 While this is one plan, the House of Lords' Select

¹FT2DC.

^{92. &}quot;GDPR Key Changes," EUGDPR.org, https://www.eugdpr.org/key-changes.html.

^{93.} Coffin, Global Digital Trade 1.

^{94.} Oliver Süme, "Data Protection: Does the German Implementation Act (BDSG-E) undermine the GDPR?" FieldFisher, April 24, 2017, http://privacylawblog.fieldfisher.com/2017/data-protection-does-the-german-implementation-act-bdsg-e-undermine-the-gdpr.

^{95. &}quot;The Exchange and Protection of Personal Data: A Future Partnership Paper," Government of the United Kingdom, August 2017, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/639853/ The_exchange_and_protection_of_personal_data.pdf.

^{96. &}quot;Directive (EU) 2016/680 of the European Parliament and of the Council," Official Journal of the European

Committee on the European Union said that they are "struck by the lack of detail on how the Government plans to deliver this outcome."97 Like much surrounding Brexit, the British data localization policy remains to be seen. However, there at least appears to be a path forward.

The Global Battle for Digital Trade

JONATHAN HILLMAN, APRIL 13, 2018

Global powers are competing to shape the new economy and the future of digital trade. In recent years, three groups have emerged: liberalizers (as represented by the United States), regulators (the European Union), and mercantilists (China). Each group champions different degrees and types of government intervention, especially for cross-border data flows. The differences among these approaches, and various attempts to bridge them, could define digital trade rules in the coming years.

Liberalizers' primary goal is ensuring the freedom and openness of the internet, and they aim to prevent and remove digital trade barriers. They highlight the importance of digital flows to economic growth and worry that foreign governments are increasingly jeopardizing those benefits. For a snapshot of the world through liberalizer eyes, see the U.S. Trade Representative's list of barriers to digital trade. 98 Liberalizers emphasize the value of freely flowing data across borders, the costs of data localization, and the need to avoid unnecessary security measures, among other priorities.

As the leading liberalizer, the United States has been effective in introducing digital trade concerns into regional trade agreements (RTAs). A November 2017 study by Mark Wu, a Harvard Law professor, identified 69 RTAs with an e-commerce chapter or an article dedicated to e-commerce.⁹⁹ More than 30 members of the World Trade Organization (WTO) first agreed to one of these RTAs with the United States, Singapore, or Australia. Not every one of those 30 members can be considered a liberalizer, of course, but their adoption of e-commerce in trade agreements reflects liberalizers' reach.

The liberalizers' preferences are also clearly reflected in two major RTA negotiations, one completed and the other underway. The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), which was signed in March 2018, does not include the United States but reflects many U.S. preferences in its e-commerce chapter. Reports also suggest that negotiations to revise the North American Trade Agreement (NAFTA) will likely incorporate many of the digital trade provisions that the original Trans-Pacific Partnership included.

Union, April 27, 2016, http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016L0680&from=EN. 97. John Woodhouse and Arabelle Lang, "Brexit and Data Protection," www.parliament.uk, Commons Briefing Papers 7838, House of Commons Library, October 2017, http://researchbriefings.parliament.uk/ResearchBriefing/ Summary/CBP-7838#fullreport.

^{98. &}quot;2018 Fact Sheet: Key Barriers to Digital Trade," Office of the United States Trade Representative, March 30, 2018, https://ustr.gov/about-us/policy-offices/press-office/fact-sheets/2018/march/2018-fact-sheet-key-barriers-

^{99.} Mark Wu, Digital Trade-Related Provisions in Regional Trade Agreements: Existing Models and Lessons for the Multilateral Trade System (Geneva: International Centre for Trade and Sustainable Development, 2017), http:// e15initiative.org/wp-content/uploads/2015/09/RTA-Exchange-Digital-Trade-Mark-Wu-Final-2.pdf.

Regulators share many of the liberalizers' goals in principle but call for greater government intervention to protect individual privacy. They recall 2013, when Edward Snowden leaked information about U.S. intelligence collection, and point to recent revelations that Cambridge Analytica harvested Facebook user data. Like liberalizers, regulators generally oppose introducing customs duties on digital products. While claiming to oppose data localization, some of their proposed safeguards provide an opening for countries to do just that. 100

The European Union leads the regulator camp. To be sure, there is a range of opinions among the 28 countries within the European Union. For example, Denmark and Finland generally support fewer restrictions on digital trade, whereas Germany and France have been more vocal proponents of additional safeguards. These positions have coalesced around the General Data Protection Regulation, a new data privacy regime that will take effect in May and could greatly constrain the European Union's ability to agree to more ambitious rules with its trading partners. 101 The European Union's development of an ePrivacy regulation may further constrain data flows.

But the regulators' views are not confined to the European Union, and there is some evidence they are gaining traction globally. Sean Heather of the U.S. Chamber of Commerce notes that Brazil and other countries in Latin America have adopted the European Union's practice of certifying that its partners have "adequate protection" of data. 102 The European Union's preferences are also reflected in its RTAs with Japan and Canada, which place fewer restrictions on government intervention in digital trade than does the CPTPP. Bridging that gap would have major repercussions for shaping digital trade norms globally, but no one expects a breakthrough soon. Both Canada and Japan would have preferred stronger rules, but the European Union's position on data flows left little room for negotiation.

The mercantilist camp prioritizes industrial policy and security objectives. Mercantilists place restrictions on data flows, mandate data localization, and require technology transfers and source code disclosures, among other protectionist measures. These regulations are often justified on industrial or national security grounds, and they have the effect of undermining foreign competition. Many in this camp do less to protect intellectual property, which is often stolen through digital means.

China is the most active of the mercantilists, which also include Indonesia, Russia, and several other emerging economies. China's influence stems from the sheer size of its digital market, which is the largest in the world. China has been effective in convincing foreign firms to adopt its requirements as a condition for accessing its market.

It is unlikely these camps will bridge their digital divides anytime soon. Most negotiations underway are expected to yield lowest-common-denominator outcomes for digital trade.

^{100.} Mehreen Khan and Jim Brundsen, "EU to demand tougher data-protection rules with future trade deals," Financial Times, February 9, 2018, https://www.ft.com/content/e489abba-0dc5-11e8-8eb7-42f857ea9f09. 101. Kati Suominen. "No Choice? GDPR's Impact on the U.S., UK, and the EU." CSIS, January 31, 2018. https:// www.csis.org/blogs/future-digital-trade-policy-and-role-us-and-uk/no-choice-gdprs-impact-us-uk-and-eu. 102. Sean Heather, "On the Dynamic Gains from Free Digital Trade for the U.S. Economy," Statement of the U.S. Chamber of Commerce to the U.S. Congress Joint Economic Committee, September 12, 2017, https://www. uschamber.com/sites/default/files/09.12.17_-_testimony_by_sean_heather_on_digital_trade_to_jec.pdf.

For example, reports suggest that ambitious e-commerce outcomes are unlikely for the Regional Comprehensive Economic Partnership Agreement (RCEP), which includes 16 countries at present.

Uniting the WTO's 164 members will only be more difficult. Roughly half of the WTO's members have not entered an RTA with explicit e-commerce components. On the one hand, that leaves room for the liberalizers to attract additional supporters. But the absence of those commitments also represents a temporary victory for the regulators and mercantilists.

As these groups compete, technology will continue to change, creating new issues to address and potentially even calling into question areas of greater consensus. Competition is likely to intensify before digital trade norms are cemented globally.

An Opportunity to Bridge the Pond's Digital Gap

WILLIAM ALAN REINSCH AND JONATHAN ROBISON, MAY 4, 2018

The U.S. Department of Commerce outlines a variety of activities as falling under the umbrella of "digital trade." A primary form of this is digital business services between countries, from Salesforce's business management software to movie streaming on Netflix to online shopping at Amazon. A wider range of digital trade activities includes any digital transfer of information—whether email, social media messages, or pictures—over international borders. According to a McKinsey & Company report, cross-border data flows grew by 45 times between 2005 and 2014, reaching \$2.8 trillion in in 2014. 103 This growth rate is markedly larger than growth in international trade or financial flows.

Despite this meteoric growth, the Congressional Research Service (CRS) identified several barriers to trade, including tariffs on digital services. 104 Additionally, the CRS recognized "localization requirements, cross border data flow limitations, intellectual property rights (IPR) infringement, unique standards or burdensome testing, filtering or blocking, and cybercrime exposure or state-directed theft of trade secrets"105 as barriers to digital trade. Issues such as data localization and the different "poles" of digital trade policy have been explored in other blog posts in this series. 106,107 The United States, as the leader of the "liberalizers" in digital trade policy, seeks a free and open internet with as few of the above-mentioned barriers to digital trade as possible. In the past, the United States has worked these priorities into several regional trade agreements and fought for digital openness provisions while negotiating the Trans-Pacific Partnership. Despite the United States later pulling out of the TPP, its digital trade provisions remained in the Comprehensive and Progressive Agreement for Trans-Pacific Partnership, which was signed in March 2018 without the United States.

^{103.} James Manyika et al., Digital globalization: The new era of global flows (New York: McKinsey Global Institute, March 2016), https://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/digital-globalization-the-new-era-of-global-flows.

^{104.} Rachel F. Fefer, Wayne M. Morrison, and Shayerah Ilias Akhtar, "Digital Trade and U.S. Trade Policy," Congressional Research Service, May 21, 2019, https://fas.org/sgp/crs/misc/R44565.pdf.

^{105.} Fefer et al., "Digital Trade," p. i.

^{106.} William Alan Reinsch, "A Data Localization Free-for-All?" CSIS, March 9, 2018, https://www.csis.org/blogs/ future-digital-trade-policy-and-role-us-and-uk/data-localization-free-all.

^{107.} Jonathan E. Hillman, "The Global Battle for Digital Trade," CSIS, April 13, 2018, https://www.csis.org/blogs/ future-digital-trade-policy-and-role-us-and-uk/global-battle-digital-trade.

If past is prologue, it is certain that any future U.S.-UK bilateral trade agreement will include digital trade provisions. The question remains: when will this happen? President Obama famously said that the United Kingdom would be at the "back of the queue" of countries the United States prioritizes for negotiating a trade agreement. 108 The Trump administration, however, has brought the United Kingdom to the front of the queue, refocusing the conversation in London and Washington on negotiating and signing a bilateral U.S.-UK FTA as expediently as possible. During her visit to Washington less than one week after President Trump took office, Prime Minister Theresa May made digital trade a top priority for the United Kingdom and discussed with President Trump how to "establish a trade negotiation agreement, take forward immediate, high-level talks, [and] lay the groundwork for a UK-U.S. trade agreement." ¹⁰⁹ More recently, in January 2018, President Trump promised "We are going to make a deal with U.K. that'll be great" once the U.K. formally leaves the European Union. 110 Despite public statements of support for such an agreement, and conversations between the two governments on the subject, neither a concrete timetable for negotiations nor specific policy details have emerged.

A sticking point in any negotiation will be the European Union data privacy and localization law, the General Data Protection Regulation (GDPR). The United Kingdom must continue to follow the GDPR until it formally leaves the European Union. In his piece, Jonathan Hillman terms the European Union as the leader of the "regulators" faction when it comes to digital free trade. 111 While supporting an open internet, the European Union also places stricter controls than the United States on individual data privacy and some restrictions on data localization, that is, where data about EU citizens can be stored and who can access it.

Therein lies a significant challenge to digital synchronization between the United States and United Kingdom after Brexit. The European Union remains the largest single export market for British exports, with 44 percent of goods and services going to other EU nations in 2016-2017. 112 While the United States is the second largest destination for British goods and services, at 19 percent, harmonizing with the European Union remains an understandably stronger pull for British policymakers than doing so with the United States. The UK government recognizes the need for synchronization between post-Brexit UK policies and the EU GDPR law. In a speech in early March 2018, Prime Minister May laid out her vision for Britain's digital trade policy future with the European Union. She argued that "the free flow of data is . . . critical for both sides in any modern trading relationship" while touting the United Kingdom's "exceptionally high standards of data protection."113 For May, the goal is to seal "an agreement with the EU that provides the

^{108.} Anushka Asthana and Rowena Mason, "Barack Obama: Brexit would put UK 'back of the queue' for trade talks," The Guardian, April 22, 2016, https://www.theguardian.com/politics/2016/apr/22/barack-obama-brexit-ukback-of-queue-for-trade-talks.

^{109. &}quot;President Trump and Prime Minister May's Opening Remarks," The White House, January 27, 2017, https:// www.whitehouse.gov/briefings-statements/president-trump-prime-minister-mays-opening-remarks/. 110. Rob Crilly, "Donald Trump promises 'great' UK trade deal after Brexit," Telegraph, January 29, 2018, https:// www.telegraph.co.uk/news/2018/01/29/donald-trump-promises-great-uk-trade-deal-brexit/.

^{111.} Hillman, "Global Battle,"

^{112. &}quot;The UK's trade with the USA," Full Fact, November 4, 2016, https://fullfact.org/economy/uk-trade-usa/. 113. Derek du Preez, "Brexit - UK will leave EU Digital Single Market, but wants strong data relationship," diginomica, March 2, 2018, https://diginomica.com/brexit-uk-will-leave-eu-digital-single-market-wants-strong-datarelationship.

stability and confidence for EU and UK business and individuals to achieve our aims in maintaining and developing the UK's strong trading and economic links with the EU."114 While talk of a U.S.-UK bilateral FTA has thus far amounted to platitudes, May's government has a concrete goal for a post-Brexit digital relationship with the European Union: maintaining the free flow of data between the European Union and the United Kingdom, with strong data security, so that digital trade can continue without hindrance to business. Central to this goal is for the British to achieve "data adequacy." 115

"Data adequacy" is a designation a third-party country receives from the European Union. It certifies that the recipient nation meets EU GDPR data standards, and it allows EUstored data to freely flow there. Currently, only 12 nations meet those standards, with the United States currently deemed adequate only for commercial purposes. To facilitate transatlantic data transfers, the EU-U.S. Privacy Shield Agreement was signed in 2016. While ensuring that data regarding EU citizens is protected and can continue to flow to U.S. companies, the agreement is not a permanent, comprehensive fix to the problem. It is subject to an annual review on both sides of the Atlantic and continues to face significant legal challenges in Europe, particularly since EU citizens claim it fails to fully protect personal data as required by Article 8 of the EU Charter of Fundamental Rights. At any moment it could be invalidated. With the United Kingdom focused on achieving full data adequacy post-Brexit, the onus may be on the United States to update its laws if it wishes to further a digital trade agenda with the United Kingdom.

Despite these challenges, the policies of post-Brexit Britain have yet to be written. In this window, there is great opportunity to work together toward further harmonization of digital trade standards. With digital trade growing at breakneck speed, the importance of including mutually approved standards in the future grows as well. Any bilateral U.S.-UK FTA will powerfully advance a global digital free trade agenda. With a combined market of nearly 400 million people and economic output well above \$20 trillion, mutually acceptable standards will create a significant coalition in the emerging global marketplace on digital free trade. With a renegotiated NAFTA likely containing a digital trade component, the United Kingdom could be joining a \$20 trillion North American market, with nearly 500 million people of unified standards. The United Kingdom could also serve as an intermediary in harmonizing the remaining differences between the United States, Canada, Mexico, and the European Union on digital trade. At its furthest reach, such a bloc, representing nearly a billion people and almost one half of global economic output, would have extensive power to shape this issue for generations to come. Most importantly, it could also serve as a bulwark against countries that exert more draconian control on the internet and digital trade, including China and Russia.

^{114.} Ibid.

^{115.} Ibid.

Must Third Countries Choose Between EU and U.S. Digital Trade **Protection Preferences?**

WILLIAM ALAN REINSCH, JULY 11, 2018

The entry into force on May 25 of this year of the European Union's General Data Protection Regulation (GDPR) has brought privacy and digital security issues to the front burner. In the wake of numerous data scandals and breaches (Facebook, Equifax, Uber, Under Armour, Chili's, and too many others to list), the European Union has implemented the most comprehensive and stringent privacy standards on Earth. While many welcome this development, and seek to emulate it (e.g., California's recent data privacy laws), others view the implementation of the GDPR as a form of regulatory protectionism that contains a degree of extraterritoriality due to the requirement that any firm, European or not, that processes the personal data of EU citizens is bound by the GDPR. It is this legally expansive element and the requirement that the GDPR must be "embedded in any new EU trade deals" that must be more thoroughly reviewed in an international context. 116

The Trump administration's response to the GDPR arrived very late—days after May 25—and was voiced through two prisms: national security (through Department of Homeland Security Secretary Nielsen, who warned the GDPR would have "unintended consequences," such as delaying the government's ability to notice cyber threats) and trade (Secretary of Commerce Wilbur Ross wrote an op-ed in the Financial Times where he warned that the GDPR would "create unnecessary barriers to trade"). 117,118

The U.S. government has strong concerns about the GDPR but has not yet promulgated an alternative approach. Does the United States have a counter proposal to the GDPR? Will the United States accept the European Union's right to set the guidelines for all firms and all future FTAs unilaterally? Or will Washington negotiate with Brussels to create a "mutual adequacy" mechanism to cover data protection between the European Union and the United States (similar to Privacy Shield) or tweak the GDPR in a more liberal direction instead? Alternatively, should the United States chart its own path on data privacy and encourage third countries to choose between guidelines, for example, APEC's Privacy Framework enshrined in its Cross-Border Privacy Rights (CBPR)?

The Trump administration is unlikely to accept the European Union's right to set global rules for data protection. Previous blog posts in this series have described the United States as the leader of the "liberalizers" in digital trade policy. Liberalizers might see the GDPR as an onerous EU regulation and a stealthy, high tech form of protectionism. In this view, the GDPR exceeds previous EU regulations in its reach, if not its intent. European guidelines do not usually penalize foreign firms operating in their home countries, but personal data crosses borders more freely, and the GDPR authorizes fines of four percent

^{116.} Nikhil Kalyanpur and Abraham Newman, "Today, a new E.U. law transforms privacy rights for everyone. Without Edward Snowden, it might never have happened," Washington Post, May 25, 2018, https://www.washingtonpost.com/news/monkey-cage/wp/2018/05/25/today-a-new-eu-law-transforms-privacy-rights-for-everyonewithout-edward-snowden-it-might-never-have-happened/?noredirect=on.

^{117.} Dustin Volz and Joseph Menn, "U.S. official warns of 'unintended consequences' of European data privacy law," Reuters, April 17, 2018, https://www.reuters.com/article/us-usa-cyber-nielsen/u-s-official-warns-of-unintended-consequences-of-european-data-privacy-law-idUSKBN1HO36J.

^{118.} Wilbur Ross, "EU data privacy laws are likely to create barriers to trade," Financial Times, May 30, 2018, https://www.ft.com/content/9d261f44-6255-11e8-bdd1-cc0534df682c.

of a firm's global revenue if that firm is mishandling data gleaned from EU citizens. Fearful of such an expansive regulatory reach, many U.S. websites went dark in Europe when the GDPR entered into force. The number of lawsuits that have already been filed since implementation will continue to fuel the view in Washington that the GDPR is designed to penalize dominant U.S. technology firms in Europe, which are a source of U.S. tax revenue, as well as economic innovation and competitiveness.

A more likely scenario would be for U.S. regulators to push back at the edges of EU regulations and initiate a negotiation. This is what Secretary Ross began to do with his recent editorial by raising concerns about pharmaceutical companies who might not submit drug trial data to the Centers for Disease Control (CDC) if patients are EU citizens or about nefarious website owners whose identities might be hidden from law enforcement. Ironically, Ross's article was published on May 31—the date the United States applied tariffs on steel and aluminum imports from the European Union. As such, Ross's liberal appeals about free-flowing data and the need to fight high tech protectionism ring hollow.

Furthermore, Washington appears split on the GDPR. Businesses have complained, but some in Congress have expressed enthusiasm for the new regulations. Democratic senators introduced a resolution that called for U.S. citizens to receive the same privacy protections that EU citizens are guaranteed by the GDPR. 119 But so far, Republicans have not proposed an alternative, viewing "regulations" as a four-letter word.

If the United States attempted to chart an alternative to the GDPR alongside the European Union, what form would that take? The United States pushed for an entire electronic commerce chapter in the Trans-Pacific Partnership (TPP) that disavowed data localization requirements and required each signatory to create its own data protection legal framework. ¹²⁰ But Europe would find this inadequate, and the European Commission maintains that "EU data protection rules cannot be the subject of negotiations in a free trade agreement."121 On the other hand, recent European FTAs with Canada and Japan have used "mutual adequacy decisions" to cover data protection: separate announcements that each country's data protection laws satisfy the other's regulations. Canada has held adequacy status with the European Union since 2001, and under new GDPR regulations this status will be reviewed at least every four years. Japan has yet to bridge the gap, but the European Union and Japan hope to soon approve each other's privacy regime as a follow-up to their FTA (but not as a direct part of it, because they cannot achieve consensus among the 28 EU members to do so). The European Union has played hardball on this point. They have not negotiated away GDPR provisions in their most recent FTAs and reiterated that, "Data protection is a fundamental right . . . privacy is not a commodity to be traded."122 Even U.S. firms that comply with the GDPR regulations are only permitted

^{119.} U.S. Congress, Senate, Encouraging companies to apply privacy protections included in the General Data Protection Regulation of the European Union to citizens of the United States, S Res 523, 15th Cong., 2nd sess., introduced in Senate May 24, 2018, https://www.congress.gov/bill/115th-congress/senate-resolution/523/text.

^{120. &}quot;Trans-Pacific Partnership: Chapter 14: Electronic Commerce," Office of the United States Trade Representative, https://ustr.gov/sites/default/files/TPP-Final-Text-Electronic-Commerce.pdf.

^{121. &}quot;Communication from the Commission to the European Parliament and the Council: Exchanging and Protecting Personal Data in a Globalised World," European Commission, January 10, 2017, https://eur-lex.europa.eu/ legal-content/EN/TXT/PDF/?uri=CELEX:52017DC0007&from=EN.

^{122. &}quot;Key elements of the EU-Japan Economic Partnership Agreement," European Commission, April 18, 2018, https://europa.eu/rapid/press-release_MEMO-18-3326_en.htm.

to transfer personal data if they also comply with the EU-U.S. Privacy Shield Framework. But a case challenging Privacy Shield was recently kicked to the European Court of Justice, and there is a chance it will be overturned in the middle of 2019. 123 In that event, the pressure for the United States to reach a new formal data protection agreement with Europe would be immense.

Rather than accept the GDPR, seek an adequacy mechanism, or find a transatlantic regulatory "third way" with the European Union, what if the United States created its own data protection standards?

This runs into a couple more pitfalls. First, as mentioned earlier, the United States does not appear to have an alternative proposal in mind, although it could look to the CBPR as a possible way forward. Clearly, the GDPR will benefit from a first-mover advantage that makes third countries more likely to accept the EU model. The United Kingdom, for instance, has implemented the GDPR, passing a new UK Data Protection Act that mirrors the GDPR's requirements even though the government has stated that it will not become part of the European Union's future e-privacy regulations. 124 After Brexit, Parliament can of course change the law, but it is unlikely that the United Kingdom will scrap existing data privacy laws for a U.S. model because it does not wish to lose the existing economic benefits of harmonization despite a preference for a U.S.-style lighter regulatory touch. Moreover, Theresa May's government is especially determined to maintain digital trade with the European Union after Brexit. The Queen even used her June 2017 speech to Parliament to emphasize Britain's need "to maintain [its] ability to share data with other EU member states" after Brexit. 125 This is an understandable policy approach. Even if the British seek a U.S.-UK FTA, their main trading focus will remain Europe. British trade with the rest of the European Union dwarfs U.S.-UK trade. According to the British Office for National Statistics, the United Kingdom exported £99.6 billion (approximately \$129 billion) to the United States in 2016 and imported a further £66.3 billion (approximately \$85.8 billion).¹²⁶ For British trade with the European Union, the comparable figures are £235.8 billion (approximately \$305.1 billion) and £318 billion (approximately \$411.5 billion). There is no way the United Kingdom will want (or be able) to replace EU trade with U.S. trade.

This is not a challenge for the United States alone. Other third countries find themselves in similar positions vis-à-vis the GDPR. Brazil has adopted the practice of ensuring that trading partners have solid data protections before allowing digital trade, and its Mercosur partners Argentina and Uruguay are some of the few countries that have data adequacy status with the European Union. It is perhaps telling that the next big trade deal the European Union is negotiating is with Mercosur: the European Union is positioning itself in the absence of a compelling competing model as the effective rule-maker for

^{123.} Natasha Lomas, "Facebook denied a stay to Schrems II privacy referral," TechCrunch, May 2, 2018, https:// techcrunch.com/2018/05/02/facebook-denied-a-stay-to-schrems-ii-privacy-referral/.

^{124. &}quot;Data Protection Act 2018," National Archives, http://www.legislation.gov.uk/ukpga/2018/12/contents/

^{125. &}quot;GDPR and Brexit: UK Government unveils Data Protection plans." Bryan Cave Leighton Paisner, June 22. 2017, https://www.bclplaw.com/en-US/thought-leadership/gdpr-and-brexit-uk-government-unveils-data-protection-plans.html.

^{126. &}quot;Who does the UK trade with?" Office of National Statistics, January 3, 2018, https://www.ons.gov.uk/businessindustryandtrade/internationaltrade/articles/whodoestheuktradewith/2017-02-21.

global digital trade and data protection concerns. The European Commission admitted as much in a 2017 statement that said, "The EU should seize this opportunity to promote its data protection values and facilitate data flows by encouraging convergence of legal systems."127 It has since identified East and Southeast Asia, India, and the remaining Mercosur countries as specific targets for mutual adequacy talks. That could entrench EU data protection regulations among many of the world's major economies and deepen the GDPR's first-mover advantage before—or if—an alternative U.S. model is put forward.

New Zealand provides another example. The European Union recognized New Zealand's privacy regime as adequate in 2012, but as stated earlier, that status must be reviewed every four years. And because the GDPR passed after 2012, New Zealand fears that the European Union will apply stricter standards in its periodic reviews than it did when it first granted adequacy. The Office of New Zealand's Privacy Commissioner admits the country may need to update its 1993 Privacy Act and that the GDPR will require "even more of a third country in the future."128 This is particularly portentous because the European Union itself says New Zealand has played "a pioneering role in developing data protection laws." 129

Will third countries have to choose between EU and U.S. models for data protection? It appears unlikely that the European Union and United States will bridge the gap between their two worldviews or that a U.S. model will be as compelling for many third countries, leaving much of the world leaning toward the GDPR. In the absence of an alternative U.S. model, it seems like the GDPR will rule the data protection roost.

Govtech: Digitally Improving Government Services to Facilitate International Trade

ALLIE RENISON, SEPTEMBER 3, 2019

The transatlantic trade agenda is primarily aimed at facilitating exchange between market actors and consumers, but there is a key area where government actors should be harnessed to encourage cooperation—not only for its own end, but to benefit end users as well. These are known as "govtech" initiatives, and they are aimed at streamlining, digitizing, and improving government services, increasing business efficiencies, and enhancing citizen engagement in a number of areas. Countries such as Estonia are world leaders in govtech, having transformed the way the government provides public services through technological innovation, making it easier for its citizens to do everything from paying taxes and setting up a business to accessing social security and finance. 130 It is also transforming the governance of large public sectors and improving the efficiency, accountability, and value-for-money wherever taxpayer money is concerned.

Govtech innovations have also been critical in bringing together trade customs and regulatory standards, using platforms which facilitate the centralization of cross-border information and requirements into one place, such as Single Window systems. In

^{127. &}quot;Exchanging and Protecting Personal Data in a Globalised World," European Commission.

^{128.} Blair Stewart, "Providing an adequate level of data protection; an ongoing process," Office of the Privacy Commissioner, January 27, 2017, https://www.privacy.org.nz/blog/providing-an-adequate-level-of-data-protection/.

^{129. &}quot;Exchanging and Protecting Personal Data in a Globalised World," European Commission.

^{130.} Nathan Heller, "Estonia, The Digital Republic," The New Yorker, December 11, 2017, https://www.newyorker. com/magazine/2017/12/18/estonia-the-digital-republic.

Singapore, a new Networked Trade Platform links together a host of different certification services needed for import and export and connects users to a number of third-party schemes aimed at facilitating trade. 131 Discussions are already underway between the Singaporean government and its Dutch and Chinese counterparts to bring together equivalent systems to enable trade to flow more easily and to give businesses an easier way to understand trade processes in their respective countries. 132

Meanwhile, the Association of Southeast Asian Nations (ASEAN) already has its own regional Single Window system (ASW), which allows traders and governments to benefit from the electronic exchange of shipment information between one another.¹³³ The system expedites cargo clearance times, minimizes border delays, and cuts costs for businesses, large and small, while improving competitiveness through document and information sharing. A number of ASEAN members are already using the ASW system to exchange electronic origin certificates, meaning importers do not have to wait for hard copies before their goods can be cleared.

Singapore is also harnessing govtech to explore changing the way in which it approaches public procurement by taking a grassroots approach to engaging the private sector. Spearheaded by its own Government Technology Agency, Singapore is looking at four models: providing an open call competition to crowdsource ideas (including leading hackathons); testing ideas alongside its procurement process to shorten deployment times; working with industry partners to co-develop projects after they meet specified performance benchmarks; and, finally, taking a "dynamic" approach to contracting bulk tenders so that new partners or suppliers can be added to a particular government contract.

Procurement can be one of the thorniest issues to negotiate open access to between countries, but it can also be one of the most transformative. The United States is a fairly closed market to international bidders due to its "Buy America" provisions at the federal, state, and even municipal level. Successive governments have tried to negotiate waivers from such federal requirements in conjunction with trade agreements, but substantive issues are typically blocked at the sub-federal level. There is an incentive for state and municipal governments to engage bilaterally with foreign trade counterparts, as too heavy of a top-down approach simply owned by the federal government, particularly during a potentially contentious trade negotiation, may not succeed in respecting trust and openness. State-level economic development agencies and councils in the United States could work together with their trade counterparts to identify and target the reduction of these procurement barriers bilaterally. Trade missions—often led by governor's offices and sister-city organizations—are an ideal place to build these relationships, supported by regional and local business and trade associations.

^{131. &}quot;Introducing the Networked Trade Platform," Government Technology Agency of Singapore, https://www. tech.gov.sg/products-and-services/networked-trade-platform/.

^{132. &}quot;Singapore's New Digital Trade Platform Can Help Build Cross-Border Linkages," Business Times, September 26, 2018, https://www.businesstimes.com.sg/government-economy/singapores-new-digital-trade-platform-canhelp-build-cross-border-linkages.

^{133. &}quot;About ASEAN Single Window," ASEAN Single Window Portal, http://asw.asean.org/about-asw.

Govtech is an area particularly ripe for the U.S.-UK bilateral trade relationship. Ideally, U.S. and UK suppliers would be treated in a manner similar to which UK and EU trade partners are currently, that is, by being afforded the exact same level of access to each other's public procurement within the EU Single Market. Of course, this is facilitated by thousands of harmonized competition rules governing procurement and tenders and backed up by the requirement to post all tender notices as part of the European Union's Official Journal. Although this would not exactly be replicated at a bilateral level between the United States and the United Kingdom, there are lessons to be learned. For example, an electronic register or database could be created where both governments could post all (federal and central) notices of tenders, allowing businesses on both sides of the Atlantic to access it—taking inspiration from the UK government's "Exporting is Great" online database of live export opportunities. Additionally, both governments could work toward creating a list of trusted transatlantic pre-approved suppliers for automatic consideration in federal or central e-procurement processes, which would allow for real-time communication between public authorities and suppliers in each other's markets. An open data approach to facilitating bilateral procurement access would help streamline certain tender processes and cut down on cost and delays.

The United States and the United Kingdom are on different levels in their receptivity to Single Window-type systems. It remains a longstanding aim and ambition for the UK government, potentially expedited by the increased trade facilitation requirements placed upon it by Brexit (if the United Kingdom is not in a customs union with the European Union thereafter). The United States has taken greater steps toward consolidating a Single Window platform, with the Obama administration setting into motion the Automated Commercial Environment/International Trade Data System (ACE/ITDS)—the primary interagency system and single access point through which industry can submit all documentation relating to import and export. 134 This Single Window system, while still in the process of being implemented, is more advanced than the United Kingdom's move to collate documentation requirements into a single portal. However, as the British government is now taking steps to streamline its own border processes as it prepares for Brexit, a small business or trade facilitation chapter in a future U.S.-UK free trade agreement could draw together a blueprint for bilateral cooperation between agencies. The United States and the United Kingdom could begin examining areas related to customs as a pilot initiative between Her Majesty's Revenue and Customs (HMRC) and the U.S. Customs and Border Patrol (CBP), prioritizing a cooperative platform that would allow trusted traders to submit customs-related information. This would facilitate much wider pre-clearance processes in origin country ports and airports, as well as reducing wait times at destination borders.

While these areas traditionally attract less attention than other areas of trade policy, they are perhaps the most important issues to facilitate international trade, providing a veritable, practical way of reducing costs and complexity. These initiatives could be featured in an eventual U.S.-UK free trade agreement. As the U.S.-UK Trade Working Group continues to meet, it should encourage the engagement of the agencies and parts

^{134. &}quot;Automated Commercial Environment/International Trade Data System (ACE/ITDS)," U.S. Food & Drug Administration, August 19, 2019, https://www.fda.gov/industry/import-systems/automated-commercial-environmentinternational-trade-data-system-aceitds.

of government responsible for these policy areas to assemble an ambitious workstream, the brainstorming and implementation of which may not need to wait for a wider trade agreement to be negotiated.

Are Global Digital Trade Standards Emerging?

ALLIE RENISON, SEPTEMBER 3, 2019

Since the 1994 Global Agreement on Tariffs and Trade (GATT) and the 1995 Global Agreement on Trade in Services (GATS), the World Trade Organization (WTO) has failed to produce any significant multilateral trade agreement. This has spurred a series of regional, bilateral, and occasionally plurilateral deals which now constitute the baseline for global trade. The overarching trend applies to digital trade as it does to classical areas covering goods and (some) services, albeit with more progress on the former only in recent years. As with other areas in the trade of services, progress on global digital trade has been slow due to jealously-guarded sovereignty among countries over how governments regulate policy areas like data flows, e-privacy, cybersecurity, and investment in the IT sector. Trade in digital goods has seen more relative success thanks to the Information Technology Agreement (ITA) penned two decades ago, but as new digital products emerge, concerns abound over how they could become subject to unwittingly protectionist regulation desperately seeking to keep pace with rapid technological change. Everything as of late has been subject to the recent winds of a growing trade war.

As innovation has made data the new lifeblood of enterprise and trade, regulatory approaches to data have begun to segment sharply across the world. Faced with a lack of comprehensive understanding about how the use of data will affect society, three kinds of approaches have been taken by governments, legislators, and regulators: a precautionary approach (the European Union, for example), a state-controlled approach (China being a case in point), or a more hands-off approach (as seen in the United States). Regulatory segmentation presents both a challenge and an opportunity for global digital trade. As cyber offensive and defensive capabilities have grown, governments have attempted to shape the future of digital trade, but in practice their steps focus on protection against the misuse of data. This means that all too often in preferential trade agreements it becomes simply easier to insert general language about agreeing to liberalize digital trade, but this in practice effectively excludes the sensitive issue of data flows from trade negotiations altogether.

Even within the European Union, where the provision for harmonization of minimum standards (and increasingly harmonization of regulation) in the Single Market affords member states a unique opportunity to achieve progress in these areas, the decisions of national governments frequently prevent progress. The EU's Digital Single Market (DSM) agenda allows EU countries to think seriously about how to encourage businesses and consumers to make better use of a more integrated digital market by potentially establishing a collective set of standards that could lead the world in that liberalization. 135 But the sharply divergent approaches among EU member states with regards to data rights and privacy has created more barriers to liberalization, not less.

^{135. &}quot;Digital Single Market," European Commission, https://ec.europa.eu/commission/priorities/digital-single-market en.

According to the European Center for International Political Economy's Digital Trade Restrictiveness Index, EU heavyweights France and Germany are the only European countries featured in the top 15 most restrictive countries in the world. 136 Although both countries have stated their desire to better compete digitally with the United States and China by way of creating "EU champions," forging regulatory frameworks that can lock out and protect against competition does not encourage the creation of such champions. While there has been more progress toward "completing" the DSM through regulation and external targeting, thus far the DSM has avoided digital liberalization in counterproductive ways, as outlined by Hosuk Lee-Makiyama and Philippe LeGrain. 137

The European Union's General Data Protection Regulation (GDPR) is increasingly becoming the new global norm, with few regulatory approaches counteracting it in the developed Western world. APEC countries are making steady progress toward implementing its Cross-Border Privacy Rules (CBPR), a voluntary system with room to reflect diverse national privacy approaches and to provide an opportunity for deeper regulatory cooperation as more countries join the CBPR. But this initiative remains secondary to a more top-down comprehensive regulatory approach from Europe that is spreading globally through the European Union's global free trade agreements. Countries like South Africa and Japan have modelled or remodeled their privacy laws along large swathes of European rules, while some developing countries are encouraged to do the same in return for improved market access to the European Union—although many are doing so voluntarily as well. 138,139 The "best practice" approach, intersecting with a desire to maximize reputational advantage, is increasingly seeing the United States' regulatory firepower fall short.

But this so-called regulatory "Brussels effect" appears to be trending in the United States, with an echoing "California effect," as California state law seeks standards similar to the GDPR. Large U.S. firms such as Facebook have also called for the United States to adopt stricter internet regulation along the GDPR's lines with respect to privacy standards. Microsoft CEO Satya Nadella has also supported the GDPR. Today, the United Kingdom remains committed to retaining the GDPR after Brexit, and while it and Ireland have long adopted a lighter-touch approach to the development of such, London appears committed to enforce legal compliance: the fines issued by the Information Commissioner's Office (ICO) against British Airways and Marriott for data breaches are some of the largest the companies have experienced to date. 140,141

^{136.} Martina Francesca Ferracane, Hosuk Lee-Makiyama, and Erik van der Marel, Digital Trade Restrictiveness Index (Brussels: European Centre For International Political Economy, April 2018), https://ecipe.org/wp-content/ uploads/2018/05/DTRI_FINAL.pdf.

^{137.} Hosuk Lee-Makiyama and Philippe Legrain, Open Up: How to Fix the Flaws in the EU's Digital Single Market (United Kingdom: Open Political Economy Network, January 2017), http://www.opennetwork.net/open-fixflaws-eus-digital-single-market/.

^{138. &}quot;SA Companies Doing Business with EU Customers Need to Consider Making Changes to Their Data Privacy," PricewaterhouseCoopers South Africa, 2018, https://www.pwc.co.za/en/press-room/sa-companies-eu-customers-changes-to-data-privacy.html.

^{139.} Michihiro Nishi, "Data Protection in Japan to Align With GDPR," Skadden, Arps, Slate, Meagher and Flom LLP, September 24, 2018, https://www.skadden.com/insights/publications/2018/09/quarterly-insights/data-protection-in-japan-to-align-with-gdpr.

^{140.} Charles Riley, "British Airways Faces \$230 Million Fine. It Would Be a Record Under Europe's Tough Data Privacy Law," CNN Business, July 8, 2019, https://www.cnn.com/2019/07/08/tech/british-airways-gdpr-fine/

^{141.} Kate O'Flaherty, "Marriott Faces \$123 Million Fine For 2018 Mega-Breach," Forbes, July 9, 2019, https:// www.forbes.com/sites/kateoflahertyuk/2019/07/09/marriott-faces-gdpr-fine-of-123-million/#227897345253.

Because it is unlikely that the WTO will become the forum where international rules governing the full flow of data to include privacy standards will emerge, can multilateralism—and more specifically plurilateralism—usher in progress on smaller, but no less important, areas affecting digital trade? There was great hope that the plurilateral follow-up to the GATS would be an opportunity for a "coalition of the willing" to take some of these ideas forward, particularly around liberalizing and facilitating e-commerce and going much further on GATS' sectoral annexes. But uncertainty around the U.S. position in recent years, divisions within the European Union on its approach, and country specific sensitivity to exposure of individual Trade in Services Agreements (TiSA) offers by Wikileaks, has seen that progress stall since 2016.142

Fortunately, the drive of a new coalition of the willing has spurred movement within the WTO to prioritize, update, and drive new digital trade initiatives. The 2015 update to the global Information Technology Agreement expanded not only the number of countries involved but also the scope of digital products covered by its commitment to tariff-free trade. Eliminating duties remains a priority for monitoring and compliance, including monitoring a recent proliferation of regional and preferential trade agreements. And as new products of information (and communications) technology continue to develop and emerge, the ITA model will be prioritized and replicated.

The lack of progress on TiSAs has also contributed to the rise of a "coalition of the willing" mechanism to initiate a new e-commerce initiative. Spearheaded at the 11th WTO Ministerial Conference by a handful of small countries led by Costa Rica and joined by a number of key players (including disparate players like the United States, the European Union, Russia, and China), over 70 countries in total are working to advance WTO talks on trade-related aspects of e-commerce. Formally launched at the beginning of January 2019, this plurilateral effort aims to foster greater public-private cooperation in developing key baselines for non-discrimination and regulatory frameworks for e-commerce. This initiative focuses on developing countries, which have traditionally prioritized agricultural trade and the challenges of subsidies over digital trade. By placing e-commerce outside the WTO, progress in a plurilateral framework can be made.

One of the key areas of focus for the e-commerce initiative has been around the status of a moratorium in the WTO on levying customs duties for electronic transmissions, which expires at the end of 2019. Opponents to the moratorium include those countries that have also taken issue with the plurilateral initiative, namely India and South Africa, and contend that the moratorium is harming their domestic industrial digitization efforts particularly among SMEs. 143 Some view this as simply a pretext for increasing tariff revenues generally, as well as a realization that by separating e-commerce from the WTO, these countries lose leverage on areas like agricultural subsidies. This may have been the motivation for India's resistance to agreeing to the WTO's Trade Facilitation Agreement. However, South Africa's opposition could be waning in light of its recent recognition at the G20 Osaka Summit that there may be little sense in blocking international agreement on

^{142. &}quot;Trade in Services Agreement," Wikileaks, 2015-2016, https://wikileaks.org/tisa/.

^{143.} D. Ravi Kanth, "Need for Re-Think on E-Commerce Deals, Say India and South Africa," LiveMint, November 29, 2018, https://www.livemint.com/Politics/xk2ickqzx64MoZ2WoiIUdK/Need-for-rethink-on-ecommerce-dealssay-India-and-South-A.html.

an e-commerce framework. This could possibly be spurred on by increasing recognition across Africa that Africa could accrue significant gains to businesses and consumers as the new African Continental Free Trade Area agreement comes into force.

As the e-commerce talks (and many workshops in Geneva supporting them) develop, consumer concerns will likely grow. It is vital that the e-commerce initiative serve as a driver for greater societal inclusion and a mechanism to tackle the digital divide to ensure progress and wider acceptance. The United States, the European Union, and Japan have all proposed similar baseline rules to help eliminate cross-border restrictions on data flows and to fight against forced data localization (that is to say, prohibitions on the location of computing facilities, including financial ones). These proposed rules include the "removal of conditions for transferring or accessing source code, cloud computing and interactive web services, and the imposition of customs duties on electronic transmissions," notably a permanent rather than temporary ban on the latter.¹⁴⁴

China, which decided at the last minute to join the e-commerce initiative, has recently issued its own counterproposals, which may encourage more developing countries to join the initiative but ultimately water down the eventual agreement. Chinese counterproposals include loopholes such as inserting special flexible conditions for developing countries, as well as insisting that more exploratory discussions be held to reflect the differences among WTO members on data storage and treatment of digital products before moving to conclusive negotiations.

While the mantra of "if you can't beat 'em, join 'em" may be underpinning China's motivations (not least with an eye to the significant investment ambitions that China is taking forward in Africa), it is still progress, particularly in comparison to the continued refusal from India and Indonesia (among others) to participate in the plurilateral discussions, as evidenced by both countries' refusal to sign up to the Osaka track at the recent G20, which was aimed at promoting a framework for cross-border data flow liberalization with enhanced protections.¹⁴⁵

Unfortunately, both countries are drafting their own national e-commerce policies with the explicit aim of ensuring they have the flexibility to use data for development.

It is unclear whether this coalition of the willing will be able to make sufficient headway in these e-commerce plurilateral talks in the near term or whether an increase in participating countries (which is generally a positive development) will lead to "paralysis by analysis." One way to reduce resistance is for those countries with similar aims and proposals on the e-commerce initiative to cement their approach through bilateral and preferential agreements, as seen in the recent United States-Mexico-Canada Free Trade Agreement (should it be passed by Congress), which is arguably an improvement upon the "new gold standard" for data flows and digital trade in the CPTPP. While the United States has withdrawn from the CPTPP, successful bilateral negotiations with Japan may put these provisions onto a firm footing. And while UK-EU FTA negotiations will consider far more

^{144.} D. Ravi Kanth, "'Digital Trade' War Underway in E-Com Pluri-Talks at WTO," SUNS, April 30, 2019, https:// www.twn.my/title2/wto.info/2019/ti190501.htm.

^{145. &}quot;G20 Summit: India Does Not Sign Osaka Declaration on Cross-Border Data Flow," Scroll.in, June 29, 2019, https://scroll.in/latest/928811/g20-summit-india-does-not-sign-osaka-declaration-on-cross-border-data-flow.

integrated (and contentious) approaches to data flows after Brexit, these baselines can be expected to feature in the discussion, underscoring once again that bilateral and regional agreements may be the key to driving progress on global digital trade.

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