



GTIPA PERSPECTIVES:

THE IMPORTANCE OF E-COMMERCE, DIGITAL TRADE, AND MAINTAINING THE WTO E-COMMERCE CUSTOMS DUTY MORATORIUM

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Acronyms and Abbreviations

AI	Artificial Intelligence
ALC	Android Learning Community
AU	African Union
AWS	Amazon Web Services
CST	Communication Service Tax
CPTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership
DESI	Digital Economy & Society Index
DSM	Digital Single Market
DST	Digital Services Tax
EC	European Commission
ECIPE	European Center for International Political Economy
ECOWAS	Economic Community of West African States
ECU	Electronic Control Units
EIDES	European Index of Digital Entrepreneurship Systems
EU	European Union
FTA	Free Trade Agreement
GDP	Gross Domestic Product
GDPR	General Data Protection Regulation
GST	Goods and Services Tax
GTIPA	Global Trade and Innovation Policy Alliance
ICT	Information and Communication Technologies
IDB	Inter-American Development Bank
IoT	Internet of Things
IP	Intellectual Property
IT	Information Technology
ITA	Italian Trade Agency
ITIF	Information Technology and Innovation Foundation

MENA	Middle East and North Africa
MSMEs	Micro, Small and Medium Enterprises
NEVADA	Neutral Extended Vehicle for Advanced Data Access
NFC	Near Field Communication
OECD	Organization for Economic Cooperation and Development
PAPSP	Pan-African Payment and Settlement Platform
PC	Personal Computer
PERM	Perceived Readiness Model
QR	Quick Response
R&D	Research and Development
SMEs	Small and Medium Enterprises
SSL	Secure Socket Layer
UK	United Kingdom
UNCTAD	United Nations Conference on Trade and Development
USMCA	United States-Mexico-Canada Agreement
VAT	Value-Added Tax
WTO	World Trade Organization

About the Global Trade and Innovation Policy Alliance

The Global Trade and Innovation Policy Alliance (GTIPA) is a global network comprising over 40 like-minded, independent think tanks that support greater global trade liberalization and integration and deplore trade-distorting “innovation mercantilist” practices, but yet believe that governments can and should play important and proactive roles in spurring greater innovation and productivity in their enterprises and economies. Member organizations advocate and adhere to research and policy consistent with a core Shared Statement of Principles.

The Alliance gives world-class think tanks a space to collaborate on events, research, and reports while enjoying a platform that highlights and cross-pollinates member organizations’ work on trade, globalization, and innovation policy.

Think tanks interested in joining the Alliance should contact Stephen Ezell, vice president for global innovation policy at the Information Technology and Innovation Foundation (ITIF), at sezell@itif.org.



Introduction

By: Yamel Sarquis, Information Technology and Innovation Foundation

The Global Trade and Innovation Policy Alliance (GTIPA) is a global network of over 40 independent, like-minded think tanks from 26 economies throughout the world that believe trade, globalization, and innovation—conducted on market-led, rules-based terms—can maximize the welfare of the world’s citizens. The Alliance exists to collectively amplify each member’s voice and enhance their impact on trade, globalization, and innovation policy issues while bringing new scholarship into the world on these subjects.

This report shows GTIPA members’ perspectives on e-commerce and digital trade in light of negotiations on new rules World Trade Organization (WTO) member nations are deliberating regarding the moratorium on cross-border electronic transmissions customs duties (i.e., duties on digital products). This volume aims to demonstrate how GTIPA member countries—including Argentina, Colombia, Germany, Ghana, Greece, Italy, Jordan, Mexico, Poland, South Africa, and the United States—benefit from and support e-commerce and digital trade, and how keeping tariffs off the Internet drives domestic and transnational growth, fosters global integration, sparks innovation, narrows the digital divide, and creates employment opportunities.

Information and communication technologies (ICT), such as the Internet, have transformed the economic exchange of goods, services, data, and information, which collectively constitute e-commerce and digital trade.¹ The United Nations Conference on Trade and Development (UNCTAD) reported that e-commerce sales hiked to \$25.6 trillion globally in 2018, up 8 percent from 2017.² From e-files, blueprints, data-hosting systems, and software solutions to websites, emails, music, and movies, electronic transmissions and the content and services they constitute are critical to today’s global economy.³

Moreover, the current global health crisis accentuates the importance of maintaining and developing a global digital marketplace. E-commerce and digital trade are lifelines people rely on during COVID-19-induced forced isolations. More broadly, the pandemic has accelerated businesses’ digital transformation in all sectors, from healthcare and retail to manufacturing and financial services. This growing reliance on digital technologies and connectivity makes it clear that the international community should enact new rules to support digital free trade and e-commerce, including by refraining from passing customs duties on electronic transmissions.

The benefits of e-commerce and digital trade are clear, abundant, and undebatable. Not only does the 21st-century economy enable more trade to occur, but it also connects the previously unconnected to the global marketplace.⁴ Electronic transmissions undoubtedly promote Internet penetration and mobile connectivity. In Jordan, the nation’s robust information and communications technology (ICT) infrastructure has permitted several start-ups to flourish, including the famous incubator Oasis500. Consumers have an increased ability to access a comprehensive set of goods and services at reduced prices and higher quality. Businesses (especially small and medium-sized enterprises (SMEs)) can easily enter new markets around the world, often through the use of platforms. This diversifies their sales and thus increases their profitability and likelihood of survival. In effect, e-commerce and digital trade shrink the distance between buyer and seller—by nearly one-third.⁵ Easing online transactions expands efficiency and

speed while lowering operational costs and bureaucratic procedures. Academic research has shown that e-commerce reduces transaction or trade costs by a substantial margin.⁶

Greater use of digital tools and engagement in international e-commerce and digital trade unlocks more resources for investments in intangible assets (i.e., research and development (R&D), staff training, intellectual property (IP), and branding), hence sparking more innovation. With the digital economy at an all-time high, it is natural that intangible assets continue to flourish. According to the McKinsey Global Institute, intangible assets have more than doubled as a share of global revenue, from 5.5 to 13.1 percent since 2000.⁷ In short, an open and tariff-free Internet leads to global economic growth as it makes trade more accessible, dynamic, and innovative.

This is important as industries increasingly seek to develop their competitive and innovative advantage by integrating emerging technologies at every production stage.⁸ The free flow of data to and from applications worldwide is essential for all sectors, including manufacturing, services, and agriculture. For instance, German engineering firms rely on data flows to service critical infrastructure such as power grids, which keeps hospitals up and running. In the United States, the semiconductor industry transfers electronic files containing designs for semiconductors or blueprints to testing and certification centers in India as part of global production networks.⁹ Meanwhile, Microsoft's Africa Development Centers in Nigeria and Kenya participate in free flows of data when creating and sharing innovative solutions for local and global markets.¹⁰

Big and small firms all rely on digital trade and data flows; however, micro, small, and medium-sized enterprises (MSMEs) are even more susceptible to these types of costs and barriers to digital trade. MSMEs lack the size, resources, political capital, or management capabilities to navigate regulations among multiple jurisdictions. Their ability to engage in international trade depends on rules and tools that ensure easy, safe, and low-or-no-cost customer and market identification, communications, transactions, and deliveries to people around the world. This serves particularly true in Mexico, where 97.3 percent of firms are MSMEs and 2.7 percent are SMEs.¹¹ Further, MSMEs tend to rely on larger platforms to sell their goods and services (i.e., MercadoLibre, Amazon). For example, initiatives such as Amazon's "Made in Italy"—which has seen Italian product sales rise by 30 percent, with 45 percent sold as exports—would suffer. With trade obstructions, MSMEs will export and innovate less and therefore be less likely to survive. To sum it up, accessing and operating in foreign markets is vital for the survival of MSMEs and local entrepreneurial ecosystems.

When WTO members enacted the moratorium on customs duties on electronic transmissions in 1998, digital products such as software and e-books were in their infancy, so the suspension was both a rather commendable—and successful—prediction of the digital future of trade and a statement of faith about the need to preemptively protect e-commerce and digital trade from traditional trade barriers.¹² While the term "electronic transmissions" was not clearly defined, it is only fair and reasonable to conclude that it includes both e-commerce and digital trade.¹³

Since 1998, WTO member countries have periodically agreed to renew the moratorium every two years, motivated by recognizing that the growing global digital economy should be kept tariff-free. In December 2019, the WTO General Council voted to maintain the suspension until the biennial WTO Ministerial Conference of 2020. As the COVID-19 outbreak forced the WTO to postpone this meeting, some countries—notably India, Indonesia, and South Africa—continued to push for the

end of the moratorium.¹⁴ This small group of developing countries argue that the digitalization of goods and services has significantly hampered their ability to collect customs revenue, often ignoring the larger net negative effect digital tariffs would have on global trade, innovation and competitiveness, domestic output, and productivity.¹⁵

Extending the moratorium is of paramount importance. According to 2017 data, the global digital economy was worth \$11.5 trillion, equivalent to 15.5 percent of global gross domestic product (GDP), which has grown two and a half times faster than the broader economy over the past 15 years.¹⁶ Keeping the moratorium in place fosters certainty and predictability for both domestic digital economic activity and global production networks and supply chains. It is unclear whether it's even technically feasible to administer a fair, predictable, and efficient system to identify and collect digital duties.¹⁷ Either way, any effort to collect customs on every digital transaction would disrupt the seamless global flow of information and data via software, digital content, and any number of other Internet-based processes, which would inevitably impact broader economic output as well as the levels of global productivity and innovation.¹⁸

Applying customs duties on electronic transactions would have multiple negative repercussions for the global economy. Countries impacted by digital levies would retaliate with tit-for-tat measures, thus undermining digital trade and e-commerce. By preventing the duty-free flow of information and digital goods and services, governments charging such duties would only increase their own industries' costs of accessing a wide array of technologies and data sources critical to growth and innovation, business operations, and the transfer of technology.¹⁹ Services affected would include the Philippines' National Telehealth Center which, alongside American telecommunications service provider Qualcomm, has collected electronic medical records to track patient data, generate reports, and record outbreaks.²⁰ Moreover, introducing such customs duties would only harm countries' domestic exporters and jobs supported in those firms. Under this scenario, tech clusters such as Argentina's Polo IT Buenos Aires, Kenya's Silicon Savannah, and Nigeria's Yabacon Valley would be damaged.

Countries may find it appealing to secure income duties on e-commerce transactions; however, doing so would hurt more than it would help. A European Center for International Political Economy (ECIPE) study concludes that developing and least-developed countries would lose more in GDP than they would gain in tariff revenues with the withdrawal of the WTO Moratorium.²¹ Across even just a handful of developing countries, ECIPE estimates annual GDP losses of \$10.6 billion.²² India's GDP losses would amount to an estimated \$1.9 billion.²³ In the same vein, a report published by the Organization for Economic Co-operation and Development (OECD) also demonstrates the negative economic impact of duties on electronic transmissions "outweigh the potential forgone government revenues."²⁴

Ensuring global digital trade and e-commerce remains tariff-free is just one part of a broader strategy needed for countries to build a growing digital economy. Other aspects include creating a robust digital payments system, cybersecurity protections, IP protection, data privacy, digital literacy and skills, ICT infrastructure, and other elements.

WTO members should renew the moratorium on customs duties on international electronic transmissions, and where possible, make it permanent and binding. The temporary and ambivalent status of the suspension feeds into the uncertainty that affects the broader trade environment. At

this stage, 56 WTO members (both developed and developing) have signed at least one regional trade agreement, including a provision prohibiting customs duties on electronic transmissions.²⁵ For example, both the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CCTTP) and the United States-Mexico-Canada Agreement (USMCA) have reinforced the moratorium by making it clear, permanent, and enforceable.²⁶

This GTIPA report seeks to help policymakers around the world make informed decisions about the growing importance of international e-commerce and digital trade. The paper lays out how each country, and the global economy as a whole, can capitalize on the benefits of a digital free trade agenda, which would support economic development in developed and developing countries alike.

Argentina

By: Martin Krause, Libertad y Progreso

Argentina has all the components needed to become a much larger player in the regional and, indeed, the global digital economy—a skilled workforce, considerable R&D capabilities, and growing clusters of tech firms and private-sector partnerships. The issue relies on whether the Argentinian government builds on these with supportive domestic and international trade policies.

Argentina's knowledge-intensive services sector provides the fastest-growing exports in Argentina, growing from \$151 million in 1996 to \$6.5 billion in 2015. In that year, knowledge-intensive services exports reached 9.1 percent of total Argentinean exports, second only to soybeans. Indicative of the importance of this digital trade, foreign sales represented 25 percent of the sector's revenues by 2012.²⁷

These activities employ 1.3 million Argentines in high-quality, well-paid, and formal jobs. Argentina's software and IT services industry are thriving at a much faster rate than the economy as a whole, with annual growth rates of 20 percent in sales and 24 percent in exports since 2002.²⁸ Argentina's successful services sector is perhaps best demonstrated by Globant, a homegrown global information technology (IT) services company. Founded in 2003, Globant now has 8,300 employees in 14 different companies.²⁹

In addition to knowledge-based services, such as accounting, legal, and engineering, Argentina has an increased capacity in R&D. These exports have grown steadily over the last 20 years, reaching \$505 million in 2015. Clinical research is particularly important in this category, especially in activities with less intensive knowledge, such as clinical trials. In terms of more complex activities, several Argentinean companies also export R&D services abroad, including Tenaris, INVAP, and Satellogic.³⁰ Further, Argentina also holds companies that export R&D incorporated into products in very knowledge-intensive areas, such as biotechnology (i.e., Bioceres and Don Mario).

Argentina holds the conditions needed to become a regional leader in knowledge-based services. In comparison with other developing countries, Argentina's strengths include skilled labor availability. The country's human capital is remarkable when compared with its neighbors. In the Latin American region, Argentina and Chile lead in the 2017 Human Capital Index of the World Economic Forum, ahead of Brazil and Mexico.³¹ According to data from the World Bank, 80 percent of Argentines who finish secondary education enter tertiary education, almost twice the average of Latin America and the Caribbean standards. This human capital allows Argentina to hold four of the largest "unicorn" companies—firms that secured over \$1 billion in capital investments: MercadoLibre, Despegar, Globant, and OLX.

Argentina has approved a "knowledge economy" law to create additional 215,000 jobs and reach \$15 billion in exports by 2030. The legislation reduces labor costs and taxes, promises a steady tax system, and extends the benefits to an array of areas, including audiovisual, biotech, nanotech, and aerospace. The law will impact approximately 11,000 Argentinean companies.

After falling into a financial crisis, Argentina introduced a services exports tax for the first time. Albeit temporary—until the end of 2020—there is doubt over government finances. The crisis also

prompted the government to reintroduce foreign exchange controls due to concerns over digital companies paying contracts in dollars, either for local (i.e., tech professionals who have labor contracts in dollars) or foreign suppliers.

Even though Argentina's services sector has been a critical contributor to the country's economy over the past two decades, its future success is far from assured. The country faces a range of challenges. In addition to the financial and tax issues outlined before, its considerable growth over recent years has the potential to trigger a shortage of trained professionals, with a need to improve the efficiency of the educational system and link to technology companies and the public-sector scientific system.

Digital Trade: Can Argentina Seize the Opportunity to Help Its Firms Grow Internationally?

Argentina needs to articulate a specific digital economy and trade agenda to capitalize on its capabilities. Many of Argentina's services and e-commerce firms are already successful, especially in the Spanish-speaking market, but more needs to be done to ensure other firms can succeed at home and abroad.

To build on its early success, Argentina needs to construct useful ICT infrastructure to support digital trade and e-commerce. To that end, Internet connections in Argentina have been improving steadily. For example, and although somewhat late, 4G coverage was finally made available to 93 percent of the population by the end of 2019, before 5G started getting deployed in 2020, requiring a substantial increase in investments. The spectrum assignment for this new technology will now have to wait for the incoming administration. Similarly, and even though Argentina is the regional leader in fixed broadband penetration rates with 16.6 percent penetration, the country lags behind in Internet connection speed.³² As this improves, so will the ability of local firms to leverage data and digital technologies to engage in digital trade.

Argentina is home to several tech clusters, showing the potential opportunity to support local firms engaged in digital trade. With 5.2 percent of employment in Buenos Aires, Polo IT Buenos Aires has over 80 domestic SMEs, 46 percent of which export to 15 different countries.³³ In the same vein, the Cordoba Technology Cluster is home to more than 500 technology companies rapidly growing their foreign sales.³⁴ Other clusters exist in Rosario and Mendoza.

Argentina also hosts growing connections to international technology firms and platforms that rely on digital trade and e-commerce. Leading global firms such as IBM, NEC, and Siemens have a long-standing presence in Argentina. Other firms, such as Amazon, Motorola, Google, and Intel set up operations recently. In October 2019, Amazon Web Services (AWS) announced plans to build an \$800 million data facility in Bahia Blanca, a decision facilitated by the arrival of EdgeConneX, a supplier of custom-built data solutions to which AWS could be its first and most important client.³⁵ Similarly, Disney's Latin American operations are headquartered in Pilar, Argentina, which translates and exports many of the firm's Spanish-language content.³⁶ However, in a move that will likely affect these content platforms, the government announced that inbound digital services would be subject to local taxes (i.e., value-added tax (VAT)). This includes services such as Netflix, Spotify, and HBO, as well as Skype, Dropbox, Amazon, and Airbnb.³⁷

E-commerce in Argentina is growing rapidly. Between 2014 and 2018, electronic commerce doubled in the value and amount of purchases—around \$12 billion and 120 million goods—and users. This growth was due to an increased number of sellers, products, and services; improved quality and efficiency in logistics and deliveries; customer learning; and spikes in electronic payment systems and credit financing for e-commerce purchases—at least until the 2018 economic crisis. Purchases abroad represented around 10 percent of the total.

Argentina's potential in the regional and global digital economy reflects that the country is home to one of the largest online retailers in the region: MercadoLibre. Founded in 1999, its marketplace listed more than 2 billion goods for sale a decade later. In 2019, it shipped 62.9 million products, which represented an 18.6 percent year-to-year increase. Showing its regional muscle, the number of items shipped to Argentina, Mexico, Chile, and Colombia increased 110.8 percent, 74.9 percent, 29.8 percent, and 44 percent, respectively, year to year.³⁸ MercadoLibre expanded into payment and fintech services with Mercado Pago processing 390 million payments in the same year.

Small exporters timidly started to sell goods abroad through platforms such as Amazon, Alibaba, and Tmall, but they are now being hurt through exchange-rate controls which make their exports more expensive. On the other side, burdensome import procedures prevent Argentineans from purchasing goods abroad, leading to a massive drop in said imports. Citizens need special authorization from the tax authority and personally pick up their deliveries at a post office. Then, Argentineans are allowed to receive as much as 12 shipments of \$50 each annually, delivered to their homes, but the same exchange rate controls make their imports more expensive and a new tax has been added to payments in foreign currency. Argentina was among the initial signatories to the WTO's moratorium on customs duties on electronic transmissions. Previously, it took steps to address these issues. Argentina subscribed to the WTO's Trade Facilitation Agreement, which addresses specific e-commerce issues related to border-clearing procedures for imports and exports. Regarding data flow barriers, Argentina received a national adequacy finding from the European Union (EU). Based on EU rules, Decision 2003/490/EC recognized adequate personal data protection in Argentina; however, these do not precisely enable digital trade:

Argentine Law covers all the basic principles necessary for an adequate level of protection for natural persons, even if exceptions and limitations are also provided to safeguard important public interests. The application of these standards is guaranteed by a special, simplified, and quick judicial remedy for protecting personal data, known as "habeas data," along with the general judicial remedies. The Act provides establishing a data protection controlling body charged with taking all actions necessary for compliance with the objectives and provisions of the Act and endowed with powers of investigation and intervention. Pursuant to the Regulation, the National Directorate for the Protection of Personal Data was established as the controlling body. Argentine Law provides for effective, dissuasive sanctions, of both an administrative and criminal nature. Furthermore, the provisions of Argentine law regarding civil liability (both contractual and extra-contractual) apply in the event of unlawful processing, which is prejudicial to the persons concerned.

Argentina has frequently engaged at the WTO on e-commerce issues. In 2016, Argentina—along with Brazil and Paraguay—submitted a proposal to the WTO’s Work Programme on Electronic Commerce regarding the critical role of e-signatures and authentication, and key terms and principles on how the respective parties recognize e-signatures.³⁹ The three countries based the proposal in a mechanism established in MERCOSUR. In 2017, Argentina joined the Friends of E-commerce for Development group at the WTO, which also includes Chile, China, Colombia, Costa Rica, Kazakhstan, Kenya, Mexico, Moldova, Montenegro, Nigeria, Pakistan, Sri Lanka, Uruguay, Mexico, Indonesia, Korea, Turkey, and Australia. The group has set out a list of foundational issues to discuss as they acknowledge e-commerce as a tool to drive growth, narrow the digital divide, and generate digital solutions for developing countries.⁴⁰ On April 5, 2018, Argentina, Colombia, and Puerto Rico submitted a proposal to the WTO that included a comprehensive view of all relevant WTO disciplines, from market openings in e-commerce-related goods and service sectors to regulatory issues, such as data privacy and protection.⁴¹

Nonetheless, the newly inaugurated government administration poses a challenge to Argentina's digital economy and trade. The current public policies—raising taxes and regulations—are strikingly similar to those in the past. The knowledge economy law previously mentioned was unanimously approved in both chambers of congress, allegedly granting enough trust to spur investment in these areas. Nevertheless, the new government suspended the law, aiming to include further benefits for SMEs. Although changes have not yet been approved, the whole sector is numbed, and investments have stopped. The government also froze Internet rates and extended heavy labor regulations to all kinds of delivery services, further impacting e-commerce and investments. Exchange-rate controls are already impacting imports of e-commerce goods and payments of digital services.

Argentina has many of the key pieces required to become a much larger and more dynamic digital economy, as well as to turn into a hub for regional digital economic and trade activity. A crucial challenge relies on ensuring local firms can easily access and operate in foreign services markets to grow and achieve critical economies of scale. Argentina's emerging e-commerce and digital trade policy outlines its priorities in helping its firms in this regard. However, whether Argentina realizes its full potential will depend in part on improving ICT infrastructure, education, and training, and whether it continues to restrict or tax imports of goods and digital products.

Colombia

By: Andrea Torres and Adriana Ceballos, TicTac

According to the Inter-American Development Bank (IDB), Latin America and the Caribbean reflect low productivity and performance in international trade. However, there is an interesting economic growth opportunity in digital technologies, if addressed correctly. Digital consumption in Latin America has been growing since 2014, when Latin America represented 7.9 percent of global data. Now, that figure stands at 8.1 percent, with 1 in 4 people in the region purchase goods or services online.

To this end, draft proposals seek to guarantee Internet access for companies, allowing them to use digital platforms that facilitate trade at each phase of the process (i.e., digital payments, logistics issues, etc.). Digital, financial, and education services are also crucial inputs.

Another relevant issue is data management. Data collection and analysis allows new services—also provided online—to add value to international trade in goods and increase the penetration of digital services in the market. Global data flows improve global value chains, creating new opportunities for participation.

It is worth considering transformations in international trade by facilitating Internet access and free data flows, which implies market growth and more aggressive online offers. The enablement of digital payments, consumer protection, tariff reduction, and cybersecurity cooperation are other issues to consider in ensuring an ideal flow for e-commerce value chains.

Some advances in the region demonstrate the government's determination to enter this wave of cooperation and economic growth. Thanks to the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), 11 nations, 3 of which are in Latin America—namely Chile, Mexico, and Peru—can discuss the best proposals to advance international trade, including in digital goods and services.

The constant evaluation of the value chain among the companies involved is an incentive that reinforces the quality of the provided service. The e-Commerce Institute rewards the best performance according to a series of criteria established in several categories in each Latin American country.

As a result, Colombia has created the Vice Ministry of Digital Economy, which focuses on the importance and growth of communication processes through technology to achieve its specialization in line with the advances generated by the state in matters of IT and continue with the efforts developed by the Deputy General Ministry.

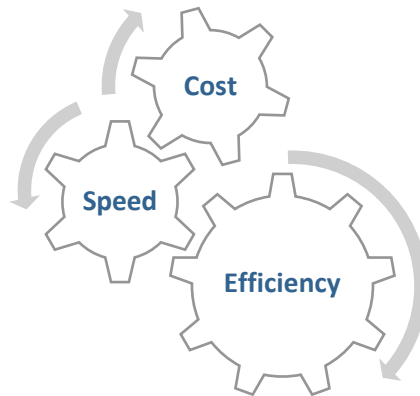
In Colombia, From the Five Phases of the Value Chain, Logistics Has Relevant Challenges

In 2018 income from e-commerce sales (retail) was \$6 billion. The total of digital transactions represented 8.5 percent of national GDP. (See Figure 1.)

- Trade liberalization has reduced tariffs by driving drastic growth in trade in recent decades.
- Logistics tend to be higher than tariffs.

- The frictions associated with trade logistics significantly affect small package trade—essentially SMEs—since they do not have the size, resources, or administrative capacity to make their way through legal and regulatory issues in multiple jurisdictions.
- High trade costs are one of the reasons why there are not more companies that export a greater variety of products to foreign markets in Latin America.

Figure 1: Value Chain: Border Procedures, Capacity Building, Harmonization, Digitalization, and Transparency



The after-sales phase is critical to guarantee a good experience. Feedback and after-sales monitoring allow companies to identify flaws throughout the value chain and user preferences. The following are examples of Colombian companies that successfully compete in the regional and global digital marketplace.

Success Stories in Colombia According to the e-Commerce Institute

1. Despegar (Travel and Tourism)

Despegar is an Argentine initiative in the travel sector. The proposal of a completely online agency in Latin America pays significant attention to online marketing. The website offers various categories to navigate (i.e., hotels, flights, packages, cars, insurance, and transfers) and even the option to create and enter your account to have a more personalized experience. The goal is to guarantee a pleasant user experience through innovation and accessibility.

Diversification of its access platforms such as the mobile application and the customer service channel via WhatsApp reflect the omnichannel’s success among consumers. Mobile application downloads exceeded 41 million as of March 31, 2018—an increase of 35 percent every year—due to mobile phones as the most-chosen communication device for transactions.

2. Almacenes Jumbo (Retail)

Active in Colombia, the Chilean retail company found in e-commerce one of its most-common ways of distribution since 2014. It focuses on the idea that the consumer is the main brand influencer, focusing on the client’s platform usage through a smart checkout system. Other elements, such as

the variety of payment methods and omnichannel offerings (access through website and mobile application), facilitate each purchase. For deliveries, they schedule certain distribution hours with a “Drive Thru” option, wherein customers can place their orders online and can pick them up in no more than 10 minutes.

3. Cine Colombia (Entertainment and Media)

This Colombian company has focused its efforts on facilitating the usability of its customer platform. Through innovation in designing an attractive and interactive platform, it is possible to see details of the available films and functions, and buy tickets from a personal computer or mobile phone. In addition, the company provides the option of having a personal account and a space in which users can give their opinion about the service and identify specific shortcomings and preferences.

4. Mercado Pago (Services and Solutions for E-Commerce)

This company was born in Argentina, and today is one of the most-used payment platforms in Latin America. It stands out for having a wide offer in terms of digital payments, and meeting specific needs and client preferences. Mercado Pago was born as a service anchored to MercadoLibre to facilitate payments when shopping online; however, it now works as an independent platform offering an array of paid services. On the one hand, it provides solutions for consumers, with benefits such as payments through Quick Response (QR) code, credit card, etc. On the other hand, it offers options to facilitate e-commerce for other companies through payment methods on the website and social networks. Such services are useful to support SMEs to expand their market through the region.

5. Paymenez (Servicios Financiero para Banca Online)

Aiming to promote inclusion and financial education in Latin America, Paymenez offers payment solutions for computer games, transportation, and mobile solutions. This platform allows prepaid cards for certain services such as football teams, games, and other brands. It is aimed at niche audiences, characterized by developing custom reward programs designed to appeal to customers’ interests and needs, and facilitates transport services through credit cards and mobile applications.

6. Mario Hernández (Moda y Belleza)

This Colombian company focuses on clothing and accessories manufacturing. It adopted sales services through its web portal, guaranteeing security through the SSL (Secure Socket Layer) protocol. The company has clear shipping and return protocols (no more than 5 and 10 days, respectively) and offers international shipments.

7. Brandlive (E-commerce Agency)

This agency offers solutions and services to different brands and companies such as Adidas, Danone, Unilever, etc. The company looks forward to optimizing each customer experience and improving its traditional and online business channels in Latin America through digital strategy consulting, creativity, and technology and logistics operations. Brandlive stands out for its creative and personalized design, channel integration, planning and monitoring marketing campaigns, and post-purchase tracking experience.

8. Farmalisto (SME E-commerce)

Farmalisto belongs to the pharmaceutical sector in Colombia. It is a pharmacy that offers 24-hour availability and support, thanks to contact facilities through the phone, WhatsApp, and website chat. Shipping prices vary depending on shipping weight and location. The main cities, such as Bogotá, Cali, Medellín, and Barranquilla, have direct contact and may have minor delays.

9. Rappi (Mobile Initiative)

The Colombian project Rappi emerged aiming to overcome three barriers: The use of technology, inefficient logistics, and unbanked people. It offers solutions such as “Rappitenderos,” which assigns people according to the client’s location, and easy payment methods through their mobile app. The variety of services offered help it receive an enthusiastic reception among users, becoming one of the most popular solutions among Latin American countries, and helping to connect supply and demand through one channel, making transactions easier for the customer.

To support such initiatives and strengthen existing ones, it is necessary to:

- Formulate, coordinate, and monitor the implementation of public policies for the use, access, and administration of the technological infrastructure that supports the information of the state, in a manner aligned with the national and sectoral government strategy, as well as security, privacy, and interoperability of the systems.
- Diagnose the degree of digitalization of the different sectors of the economy and, as a result, formulate and articulate policies and programs aimed at encouraging the use of information and communications technologies in the productive processes of such sectors.
- Define, coordinate, and execute necessary policies to promote and ensure that the government uses open data that allows stakeholders to develop innovation and entrepreneurship processes based on technology (i.e., using ICT, promoting the use of state information).
- Formulate policies and programs that promote digital entrepreneurship, and consolidate business models involved in it.

The main challenges for trade policy from Latin American countries’ perspective would be:

1. Cybersecurity policies and procedures to create a solid cybersecurity framework for the organization;
2. Customer experience, and return/refund policies; and
3. Quality website traffic and visitor conversion. Consumer information is a key tool for business growth; however, it must be transparent and clear.

E-Women: Empowerment of Women

This initiative aims to enhance female leadership in the e-commerce industry. It was born to improve and promote women’s position in the labor market, in terms of hierarchy and opportunities in the Latin America.

It offers its participants:

- A comprehensive training plan in digital commerce and management focused on acquiring the skills necessary to lead in the world of online business;
- Participation in meetings “Conversing with Business Leaders on the Internet” and other events specially organized to promote the initiative;
- Exclusive access to the #eWomen Community on LinkedIn. Linking and professional networking with other members of the network;
- Opportunity to receive professional coaching/mentoring in terms of leadership and to have leaders and influencers from the sector (mentors) who will guide in the development of the chosen project, aimed at achieving tangible benefits for your organization;
- Possibility of including their project in the regional R&D bank of eCommerce Institute; and
- Exclusive access to the material published in the Center for Regional Studies of Digital Commerce and the Regional Trends Observatory.

In order to:

- Strengthen female talent in the industry;
- Increase opportunities for women to access decision-making levels that enhance the development of their business, industry, and the e-commerce ecosystem; and
- Provide support and training for women to develop and launch a personal project focused on the digital economy.

Gender equality is essential for economic growth. Women represent one-half of the world’s population but only contribute to 37 percent of global GDP. Improving gender equality positively impacts GDP, resulting in higher employment levels and increases in productivity of as much as 40 percent. Keeping that in mind, trade and investment can be powerful drivers of gender equality.

Argentina and Colombia are the countries with fewer gender differences among Latin American nations. However, there are still challenges related to gender parity in estimated earned income, participation in the legislative process, and wage equality.

Female entrepreneurs, particularly in developing countries, face digital legal and cultural challenges that prevent them from participating in trade, entering the workforce, setting up a business, or even owning land or assets.

Countries need to build policies that support women in the digital enterprise by:

- Conducting research on the relationship between trade, investment, and gender, which are useful to understanding the numbers and having a ripe view of local areas;
- Educating by guaranteeing equal access to education, which should be reinforced with seminars, conferences, and meetings related to punctual trade topics; and
- Infrastructure and Internet access. Having access to the Internet and devices, and knowing how to use them to grow, is a fundamental tool.

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European Union/Germany

By: Emily Benson, Bertelsmann Foundation North America

Overview

Germany and the European Union clearly recognize the importance of building a more productive and integrated digital economy at home, especially via the Digital Single Market (DSM). However, when it comes to setting and pursuing an ambitious digital trade agenda abroad, the EU has yet to demonstrate its commitment to free digital trade. WTO e-commerce negotiations are a critical opportunity for Germany and the EU to engage with a large range of generally like-minded partners. These partners also hope to develop a framework of rules and regulations that support digital free trade, especially the flow of data, while still allowing members to address related public policies, such as privacy. There has never been a better time for the EU to commit to pushing forward a free digital trade agenda.

The EU is clearly a major player in the global digital economy. Home to 513 million inhabitants, the European Union represents a diverse bloc, the world's second-largest democracy, and home to a vibrant mix of transnational corporations and an innovative start-up ecosystem.⁴² Five EU member states rank among the world's top digital countries. In the European Union, 89 percent of households have broadband Internet access.⁴³ In terms of rote competitiveness, several of the top-ten most competitive countries in the world are EU member states. The Netherlands ranks fourth, Germany seventh, and Sweden eighth.⁴⁴

The EU has a solid base of entrepreneurs and start-ups which would stand to benefit from an open, rules-based global digital economy. The European Index of Digital Entrepreneurship Systems (EIDES) 2018 for EU28 countries, which ranks countries according to their success in stand-up, start-up, and scale-up categories, put Denmark first in all three categories. Sweden, Luxembourg, and Finland followed closely behind. Overall, on an EU-wide level, the average of the EU28 among these categories puts the EU somewhere between France and Spain, an impressive feat for a bloc largely regarded as lacking in innovation and digital competitiveness.⁴⁵ Germany tends to be at the top of this mid-level category, which makes for an interesting case study in assessing its digital profile and how it relates to the overall EU digitalization strategy.

Within the EU's digital economy and potential digital trade agenda, Germany is central. Germany's population stands at 80.5 million, the most-populous member state of the European Union.⁴⁶ In 2018, e-commerce sales in Germany reached nearly \$110 billion, representing 10 percent growth from the previous year alone.⁴⁷ In Germany, the top-three online retailers are Amazon, Otto, and Zalando, which together account for nearly \$13 billion in online sales.⁴⁸ For reference, Amazon's market share of online retail in the United States hit nearly 49 percent in 2018, amounting to \$258 billion.⁴⁹ Germany is the fifth-largest ICT economy in the world and the single-largest software market in Europe, with nearly 90,000 IT companies. Each year, Germany produces as many start-ups as the United States.⁵⁰ Given Germany's large software sector, the potential imposition of duties on imports of digital products could ultimately make operations cost-prohibitive for providers of these critical services when trying to sell to foreign clients.

Germany is particularly interesting as its diverse economy, especially its globally competitive industrial sector, increasingly relies on data and digital technologies. Germany is home to a wide

range of companies that directly depend on the digital economy, including Deutsche Telekom and SAP. Zalando and trivago were also founded in Germany. As Internet of Things (IoT)-enabled devices become more integrated into daily life, several German companies will become even more reliant on free digital trade and data flows. For example, both Leica and Miele are German. If an American on vacation in Morocco needs to send pictures to their smartphone via a Leica camera, this transfer relies on Leica's digital infrastructure and its ability to send data transnationally and free of duties. Miele, which produces IoT devices such as Internet-connected refrigerators and dishwashers, similarly depends on the free flow of cross-border data. Especially for IoT devices, duty-free cross-border data flows are particularly important because they allow companies to fix bugs and install updates remotely.

More than facilitating Instagram uploads or the delivery of a new gadget from Amazon.com, the free flow of data is essential to the smooth functioning of critical technologies that German and European firms rely on to be competitive and innovative. Engineering firms service critical infrastructure such as power grids, which keeps hospitals up and running, relying on the ability of data to seamlessly interact with each other. Furthermore, local workforces in many cases are not equipped to handle large-scale data processing that would keep power grids functioning, meaning that it is best to use globally distributed ICT systems, whether in Germany, the United States, or elsewhere, to support these operations, which are often performed remotely.

Europe has a strong attachment to privacy. For example, many German citizens and companies alike are concerned about the sharing and use of data following decades of government surveillance. There is the potential for this cultural and societal aversion to data privacy risks to act as an anchor on Germany's global economic ambitions. If policymakers take an overly restrictive or onerous approach to data privacy and make it difficult and costly to generate, share, use, and transfer data, there will be major ramifications for the country's firms, Germany's digital economy, and these firms' success in the global digital economy. This is particularly important as Germany and German firms lag in some critical areas. Given that connectivity lies at the foundation of the digital economy, it's concerning that Germany has very slow Internet. A 2017 OECD study ranks Germany 29 out of 34 industrialized economies for fast Internet connections, a serious problem as it seeks to lead in areas such as 5G.⁵¹ In Latvia and Sweden, Internet connections via fiber-optic cable account for 62 percent and 58 percent of connectivity, respectively. In Germany, on the other hand, only 2 percent of connectivity comes via fiber-optic cables. Similarly concerning given their critical role in trade and innovation, Germany's Mittelstand companies are reluctant to adapt to the digital economy. Only 16 percent of German firms use cloud services, whereas the OECD average is 25 percent.⁵² In some ways progressive and in other ways regressive, Germany represents a country on the brink of digital success but at risk of restricting digital trade and building barriers to international digitalization. For example, German and EU policymakers need to recognize the international extension of these domestic debates over digital policy in ensuring that global trade rules reflect their interests and provide an open, rules-based framework for their firms and consumers to maximize the opportunities of the global digital economy.

The German Automotive Industry

The automotive sector in Germany in many ways captures a complex story of government, innovation, and how legacy corporations are vying to compete in today's digital world. For one, Germany is far outpacing the United States when it comes to e-mobility. In the United States,

patchwork legislation has hampered innovation in the autonomous vehicle sector. While EU standards may be higher overall and restrictions more prohibitive, the relatively uniform legal environment of the EU, coupled with government openness to autonomous vehicles, has allowed the industry to flourish. The Verband der Automobilindustrie (VDA), Germany’s major automotive association, announced an industry push to invest €40 billion (\$47.1 billion) in e-mobility and €18 billion (\$21.2 billion) in digitization by 2021. The potential returns from this enormous investment in a next-generation technology are unlikely to come to fruition without base-level assurances that data flows will continue to be free throughout both the EU and global digital economy.⁵³ If successful, Germany needs to ensure that its automotive sector has the rules in place, especially around data, to ensure products and services can be sold—and used with ease and low cost—in foreign markets, thus allowing the firms to use cloud-based storage and data analytics platforms. Yet, German car firms will face additional, considerable challenges on the road to success if data localization becomes the norm around the world.

Volkswagen is a great example of a historically analog transnational corporation adapting to the digital age. Foreseeing a dubious future in the traditional automobile sector, Volkswagen has set out to digitize the company, reconstructing its very foundations in order to withstand the rapidly approaching fourth industrialization. Volkswagen sees the future of automobiles as self-driving, moving infotainment centers. This outlook has presented a host of challenges for a company with a strong legacy in traditional car manufacturing. First, Volkswagen needed reliable digital infrastructure to support the enormous amount of data required for a new generation of e-mobility and autonomous vehicles, namely 5G. In addition to 5G, Volkswagen also realized that its manufacturing expertise did not lend itself to specialization in areas such as cloud computing and storage, computer engineering, and cybersecurity. Encountering these obstacles has led Volkswagen to partner with Microsoft for its cloud needs and to harvest top software engineers from Germany’s diverse network of start-ups, even acquiring companies and building incubators in the process. In June 2019, Volkswagen announced it would be spending up to €4 billion (\$4.7 billion) on digitalization, creating 2,000 new digital-related jobs, underscoring its long-term desire to grow further into the digital realm.⁵⁴

Volkswagen is also part of the Neutral Extended Vehicle for Advanced Data Access (NEVADA-Share & Secure Concept), an innovative data-sharing method that increases Germany’s automotive industry competitiveness and produces myriad public benefits.⁵⁵ The contemporary automobile is home to over 100 electronic control units (ECUs), all of which generate data. Under the NEVADA data-sharing system, data from vehicles is shared with the vehicle manufacturer as well as with a remote “neutral” processor, which other manufacturers and third-party entities can access. This data can be used in several ways. First, the data helps vehicles avoid accidents and enhances safety by sharing information such as tire pressure, mileage, battery charge status, and other vital car statistics. Vehicle-generated data can also be used to help the vehicles and their manufacturers become more energy efficient and reduce carbon emissions. Another consumer benefit of NEVADA is that, by broadening the availability of data sharing and access beyond one car manufacturer, consumers have more choice when it comes to customizing their car, including which apps to use.

For Volkswagen, data localization rules would significantly harm the company, its evolving digital strategy, and the broader industry’s ability to maximize the value of data by sharing and using it in an innovative and collaborative way. For example, data localization rules would likely force

Volkswagen to enter into significantly more joint ventures, a burdensome undertaking in terms of both time and money. In countries such as China, state secrets and the data surrounding them are tightly guarded. In 2010, an American geologist was sentenced to eight years in prison for attempting to obtain data related to China's petroleum industry. Just recently, Coca-Cola was investigated for collecting logistics data with hand-held devices.⁵⁶

If a country such as China or India enforces data localization rules, Volkswagen would have to enter a joint venture with local firms, including opening data storage and processing facilities in that country. This would also make it harder for Volkswagen to deploy and develop new data analytics platforms, as localization would potentially prevent them from feeding in the data from local data centers. Not only would this be costly for Volkswagen, but it would also expose the company's trade secrets to foreign entities. With Volkswagen Autonomy (VWAT), the company is already opening autonomous vehicle subsidiaries in the United States and China, but those subsidiaries nevertheless rely on free data transfers back to Volkswagen's headquarters in Germany.⁵⁷ This raises a central point: Commercial factors should be the primary driver for firms deciding where to set up ICT operations. Firms such as Volkswagen may well want local ICT services to better serve key markets, but this should be left to them to decide. Furthermore, while entering a few joint ventures or opening select subsidiaries may be tenable, this would not be a sustainable business model in a bifurcated global digital economy segmented into free versus unfree digital trading countries. This highlights the fact that the impact of costly and complicated rules around data will have an outsized effect on SMEs as they lack the resources and capacity to deal with multiple sets of restrictive rules around data.

One very foundational element regarding the ongoing talks at the WTO about e-commerce rules and extending the e-commerce moratorium is that the talks underscore the uncertainty around digital flows. Uncertainty hinders investment, and innovation and can have negative, lasting impacts on the global digital economy. As the current analog trade war illuminates, companies are not able to invest and expand in an environment with many unknowns. In the absence of regulatory surety, it is likely that companies such as Volkswagen would be less keen to invest in new technology and innovative solutions. Yet researchers have found that autonomous vehicles could reduce traffic fatalities by nearly 90 percent, making ongoing sectoral innovation a pressing necessity.⁵⁸ In many ways, Volkswagen encapsulates some of the most fundamental problems and exciting opportunities within the digital economy ecosystem.

Government Policy

While Germany is in many regards a rhetorical leader for European digitalization, government policy itself has been surprisingly restrictive when it comes to the free flow of data. At the national level, Germany has released action plans on a broad range of digital policies, including its Digitalization and Artificial Intelligence in the Mobility Sector plan, and its recent comprehensive blockchain strategy.⁵⁹ However, Germany, along with France, was one of the few European countries in 2018 to support the introduction of digital taxes.

Unfortunately, Germany has not been a leader in supporting the free flow of data. While a global ranking by the think tank ECIPE lists France as the only developed country in the top-ten countries for most-restricted digital trade, Germany ranks just behind it. In terms of restrictions on data flows, France is the fourth-most restrictive, surpassed only by China, Russia, and Turkey. Germany

ranks seventh in the world in terms of extent of data restrictions.⁶⁰ Indicative of this, in 2015, a German legal amendment stipulated that telecom companies store metadata locally in Germany, earning Germany a spot in ITIF's "Worst Innovation Mercantilist Policies of 2016" report.⁶¹ Thick barriers to digital trade in Germany and France slow down the implementation of Europe's DSM effort. Furthermore, a recent proposal by the German government offers to consolidate government-operated IT systems and service centers. The centralization of data processing and storage, however, perversely makes data more vulnerable to attacks and directly counters the movement among cybersecurity experts that heralds the benefits of a decentralized system.⁶²

Thankfully, regional digital trade and economic policy within the European Union take many steps in the right direction in terms of building an open, integrated, and coherent strategy. In one of the European Commission's top-ten strategies, the European Union launched its DSM for Europe in 2015. The approach consists of six building blocks: 1) E-commerce online platforms; 2) E-government; 3) Data and artificial intelligence (AI); 4) Security; 5) Consumer protection in the digital era; and 6) Electronic communications networks and services.⁶³ The goal is to make the EU more cohesive and functional across areas ranging from digital trade and culture to antitrust policy and consumer protections. In 2017, the European Commission estimated that a cohesive digital market in Europe could contribute €415 billion (\$489.08 billion) annually to the European economy.⁶⁴ An immediate outcome of fostering the DSM has been a reduction in barriers to digital goods and services trade within Europe. In June 2018, the EU motioned to remove member states' data localization requirements, a major step in breaking down intra-European barriers to digital trade.⁶⁵ Together, the push toward a single European digital market, along with many concrete actions against data localization requirements, underscore a broad European desire to promote freer digital flows.

In the EU, international trade negotiations, including the WTO e-commerce talks, are competencies of the European Commission, and so member states such as Germany are not directly involved in such negotiations.⁶⁶ However, given its large population and powerhouse economy, Germany does ultimately have significant influence within the Commission, which has concerned numerous German firms that increasingly rely on more open member states to advocate for freer digital trade policy.

The EU approach to e-commerce negotiations is uniquely European. For one, the EU sees data as inherently and intricately related to the creative industries, civil rights, and other sociopolitical areas, namely privacy. For example, in the EU, 30 percent of available content on Netflix must be EU-created.⁶⁷ This undoubtedly helps support European creatives, whose legacy of genius and creativity extends back centuries. However, contemporary protections on creative goods such as online content constitute discrimination in the world trading system.⁶⁸ Without substantial change, it remains difficult—if not impossible—for the EU to break down additional barriers or, conversely, to prohibit discrimination.

In 2018, the EU put forth a plan that outlines its policy toward data flows in trade and investment agreements. The first article of the plan clearly prohibits data localization requirements within the EU. Following the section prohibiting data localization, Article B of the agreement states that "each Party may adopt and maintain the safeguards it deems appropriate to ensure the protection of personal data and privacy, including through the adoption and application of rules for the cross-border transfer of personal data. Nothing in this agreement shall affect the protection of personal

data and privacy afforded by the Parties' respective safeguards."⁶⁹ While this proposal is a step in the right direction toward freer digital trade, it essentially states that privacy takes legal precedence over free digital trade. If privacy rights supersede free trade in international agreements, then the EU is starting from a different point of departure in e-commerce talks than the Americans, whose view on data aligns more with treating it as a commodity, and where legal responsibilities should move with the data—wherever it is stored. Furthermore, it creates a large loophole for countries to use privacy as an excuse to enact data localization and other restrictions.

In May 2019, the EU put forth its most comprehensive proposals regarding new WTO rules for e-commerce.⁷⁰ Some elements of the European proposals are relatively straightforward and likely will not become obstacles in the negotiations, such as guaranteeing the validity of e-signatures and combating spam.⁷¹ However, the EU's approach to other negotiating objectives such as prohibiting mandatory source code disclosures, a permanent ban on customs duties for electronic submissions, and its approach to data privacy and data localization, are likely to become major issues among developing and developed member states alike.

Agriculture has historically been among the most complex and sensitive areas of European trade negotiations. However, since the EU is not treating data as a commodity due to its interplay, and subordination to, other issues such as human rights and privacy protection, European trade negotiators disagree with the popular aphorism that data is the new oil. Instead, from a trade policy perspective, they regard data as the new agriculture. Yet, treating data and digital trade activity in the same restrictive manner will have much larger and broader trade and economic implications given the growing role of data and digital technologies. While finding some "middle-ground" approach on data with the United States has not, and will not, be easy for EU officials, it is critical if they want firms from Germany and elsewhere in the EU to become more competitive and innovative. The EU-U.S. Privacy Shield is an example of how the two sides can work constructively together on an issue of shared concern, which still allows firms on both sides to use and transfer data freely. It is also an example of how they share common values and approaches, especially in comparison with China and other economies with vastly different views on data privacy and the digital economy. But if EU negotiators revert to a sensitive and restrictive approach that is more akin to agricultural trade policy, the chance of finding some form of consensus with the United States and other trade partners will be slim, thus relinquishing a golden opportunity for new trade rules and a revitalized WTO and multilateral trading system.

Finally, in May 2019, a new European regulation governing the flow of non-personal data went into effect. Key components of this regulation are that it ensures the free movement of non-personal data within the EU as well as the availability of data for regulatory purposes. Non-personal data typically refers to data used in the production and movement of goods, services, and utilities. For example, the blockchain start-up Energy Web Foundation (headquartered in Switzerland, but with a large office of software developers in Berlin), is building digital, open-source infrastructure to make it easier to buy and sell renewable energy. The company's goal is to connect Internet of Things and other smart objects (coffee machines, automobiles, etc.) with a renewably operated electrical grid. Free movement of data is foundationally important to companies such as these. For example, if a chalet in Austria has solar panels but does not consume all the energy those panels produce, using Energy Web's toolkit enables that excess energy to be sold back into the electrical grid. Someone in Sarajevo or Oslo can then charge their electric vehicle or power their apartment

with that excess energy. These renewable exchanges, of course, depend on the free flow of data. Such non-personal data is already extremely important to the global economy and will only increase in importance over time.

Conclusion

It is clear that Germany and many of its firms have ambitious goals regarding the digital economy. From a comprehensive blockchain strategy to supporting its historically analog corporations as they transition toward the digital economy, it is important for German policymakers to consider the critical role of global rules and markets, which will otherwise be hard to access if barriers to digital trade are allowed to proliferate. Barriers to digital trade throughout the European Union have slowed the implementation of the DSM. To its credit, the EU has instituted aggressive policies to strengthen its digital market and enhance free and fair data flows within the Union. However, it now needs to recognize and apply this same approach to the global digital economy. In November 2019, EU President-elect Ursula Von der Leyen said she wants a more “outward-looking Europe. A Europe which collectively defends our common values and interests in the world.”⁷² Encouraging free data flows and working meaningfully toward substantial progress in plurilateral e-commerce talks would signal to the world that Europe is genuinely ready to become the leader it has long promised to be.

Germany

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Digital trade can be divided into three different elements, all of which are highly relevant for the German economy: Electronic commerce is becoming more and more important in international distributed value chains; exchange of data is critical for future industrial processes; and trade of information and communication technologies is essential to purchasing necessary technologies and export respective products.

Three main characteristics of the German economy are responsible for digital trade being highly relevant for future prosperity:

- **Openness**

The German economy is traditionally very intensively interlinked with other economies around the globe. Imports and exports amount to more than 80 percent of GDP, making Germany much more open than most other larger industrialized countries. Major sectors of the economy depend on free markets, and digital trade is becoming an increasingly important part of international trade relations. The substantial share of the manufacturing sector in Germany with its tradable goods is reflected in the importance of international trade in open markets. Not only do large companies in the automotive, machinery, and chemical industries rely on unrestricted trade relations, but especially medium-sized companies do. The “hidden champions” of the German Mittelstand are typically focused on products that require very specialized know-how. These companies, which often lead in small, specialized niches, can only be successful if they offer their goods and services globally. Furthermore, German companies are highly integrated into international value chains that depend on international trade. Open markets are essential for the core of the German economy. As products, services, and value chains are becoming more digital, international trade on digital markets should not be restricted for these companies.

- **Industrie 4.0**

In Germany, the manufacturing sector, with its innovative power, added value, and employment, is an essential element of the economy. It accounts for 23 percent of gross value added in Germany, and 19 percent of fixed capital formation and 17 percent of employment. Manufacturing is dominant in exports, with a share of 81 percent of all exports. The innovative power of the German economy is also primarily determined by the manufacturing industries, which are responsible for 85 percent of private R&D investment. The technological challenge that results from the Internet revolution is to combine modern data-driven technologies and business models with the production of manufactured goods. The free flow of data to and from applications all over the world, as well as data security, is essential for the future success of manufacturing and related services industries. The free flow of non-personal data, especially machine-to-machine communication, is a prerequisite for successfully implementing Industrie 4.0.

- **Technology**

Germany depends on international trade in ICTs. Without components, hardware systems, and software from international suppliers, Germany could not use these fundamental technologies. On the other side, ICTs are also relevant products of German businesses. Open markets for ICT technologies are essential not only for export but also for digitally transforming manufacturing and services industries in Germany and, therefore, for future prosperity.

Although Germany would benefit from free digital trade, several restrictions require standards and security measures for data-based international cooperation:

- **Data Protection**

Germany has a tradition of strict data-protection rules. This is especially true for personal data, which leads to restrictions in transmitting data to countries with lower data-protection standards. The General Data Protection Regulation (GDPR), as a European legal approach, has the potential to become an international standard which would improve the conditions for future open flows of data.

- **Intellectual Property**

From a company perspective, data protection is the back of the medal for the free flow of data. Sharing and using data commercially, coordinating data-driven equipment in different countries, and developing data-based competitive business models require high standards of data protection. Data from a commercial perspective is IP that companies must protect and use according to their business purposes. International digital trade requires the possibility to protect not only personal data, but every kind of data with a specific value. The ability to safeguard and extract one's company data is crucial for globally active companies.

Data localization measures that restrict the cross-border flow of data are “measures that either mandate data to be kept locally or impose conditions to transfer data cross-border.”⁷³ These measures vary in their restrictiveness and include, inter alia:

- Banning the cross-border transfer of data for foreign companies;
- Requiring local processing or storage of data in the country; and
- Making the cross-border transfer of data contingent upon the use of computing facilities or network elements in the country's territory.

These measures, implemented in countries such as China, Russia, and Turkey, force the foreign company to build data centers within that country's jurisdiction, and use local service providers, computing facilities, or network elements in the host country's territory for processing. This ultimately leads to higher costs, inefficiencies, and IP threats—and might, in the worst case, preclude the parent company from extracting data from its global subsidiaries. Due to German companies' global presence and integrated value chains, data localization requirements, therefore, threaten the global implementation of Industrie 4.0.

- **Espionage**

Free trade of information and communications technologies comes to certain limits where data security is systematically questioned. The suspicion of espionage systems hidden in

components can fundamentally limit trade in these goods, especially if there is no way to rule out these risks by analyzing the hardware and software. The discussion about using Huawei's 5G components in European and American communications networks reflects the possible trade-off between open markets and security requirements. When used in critical infrastructure, ICT is a "trust good." Therefore, the lack of trust can be considered a trade obstacle, and can be a reason for data-related trade restrictions.

Germany only has a medium openness in digital trade and adopts, alongside France, more-restrictive digital trade policies than most other developed countries in Europe.⁷⁴ More open, but rules-based, digital trade could be of huge benefit for the German economy. This would call for an international agreement which provides necessary standards, especially regarding data protection and intellectual property rights.

This approach is clearly reflected in the negotiating agenda of the EU Commission, which is responsible for trade negotiations in Europe, and further aims to safeguard its Digital Single Market. The European Union E-commerce proposal at the WTO level defines the positions in the forthcoming negotiations:⁷⁵

- ***Electronic contracts***
The EU suggests that the future e-commerce agreement would prevent members from creating barriers to the use of electronic contracts and guarantee the validity of e-contracts. Several exceptions would be provided, such as contracts governed by family law, broadcasting services, legal representation, etc.
- ***Electronic authentication and electronic signatures***
The EU's proposal provides applicable definitions for electronic authentication and signatures, and suggests that their validity would be guaranteed.
- ***Consumer protection***
The EU's proposal suggests that members would have to protect consumers from fraudulent and deceptive commercial practices to increase consumers' trust in e-commerce. Traders must act in good faith, provide accurate information, and grant access to redress. There shall be cooperation between consumer protection agencies.
- ***Unsolicited commercial electronic messages***
The EU would first define what a commercial electronic message is and then suggest that consumers be protected against them, particularly through the requirement of the recipient's consent before the message is sent. Consumers shall be able to identify on whose behalf the messages were sent. Redress shall be available.
- ***Customs duties on electronic transmissions***
The EU suggests that no customs duties should be imposed on electronic transmissions.
- ***Transfer or access to source code***
The EU's proposal provides that no members could force the transfer or access to the source code of software owned by a person of another member state. Nonetheless, some exceptions would also be provided, notably protecting and enforcing intellectual property rights.

- ***Cross-border data flows***
The EU suggests that cross-border data flows need to be ensured, notably by addressing forced data localization requirements. Data localization measures that interfere with the free flow of data are especially a concern for Europe’s economic powerhouses, fearing that their machine data cannot be transferred back from another country. This would be a disadvantage and make knowledge theft more likely. Therefore, the EU aims to eradicate requirements that prohibit the cross-border transfer of company data, require storage or processing in the territory of other countries, or make the data transfer contingent on the use of local computing solutions.
- ***Protection of personal data and privacy***
The proposal of the EU provides that personal data protection and privacy is a fundamental right. To that end, it is suggested that members could apply rules on the cross-border transfer of personal data.
- ***Open Internet accesses***
The EU would precise members of this agreement to adhere to the principle of open Internet access in their territory.

The European Way Forward

Digital trade offers a timely opportunity for Germany and the EU to cooperate and build trust over the long term between its biggest trading partners: China and the United States. The size of the EU and China alongside the United States and Japan means that they will ultimately lead the debate on the future governance of digital trade, e-commerce, and ICT. While data localization and forced disclosure of source codes remain particularly contentious, China shows a willingness to adapt and to cooperate with the EU on e-commerce regulation, and is now one of the strongest supporters for the EU’s WTO proposal for an e-commerce agenda, along with Brazil.⁷⁶ More restrictions on data localization or forced disclosure of source codes are particularly problematic for China, as they would reduce Beijing’s access to foreign companies’ data in China. Nonetheless, Beijing might tolerate an agreement not to collect data on a territorial basis, if all big players agree.

The United States and China often regard the issue as one of “national security,” whereas for Germany, the EU, and its companies, it is about the free flow of data and reducing non-tariff barriers and IP theft. This pragmatic European approach could mediate between the key players and unite an “alliance of the willing” to close this trade-governance gap.

Ghana

By Ransford Brobbey, Research Intern, IMANI

Defining E-commerce

Electronic commerce (e-commerce), as defined by Zwass (1996), is using telecommunications networks in sharing business information, maintaining business relationships, and conducting business transactions. It cannot be dissociated from the growing digital economy in the 21st century (UNCTAD, 2018).

Forms of E-commerce

E-commerce may come in the form of transactions between businesses (B2B), between costumers (C2C), between businesses and customers (B2C), and between government and businesses (G2B) (Boateng et al., 2011).

The Value of the E-commerce Market

In 2015, the market value of e-commerce, B2B and B2C, reached \$25.3 trillion globally (UNCTAD, 2018). Transactions between businesses and customers recorded sales of \$2.9 trillion in the same year. The Chinese B2C market tops the global list with a value of \$617 billion, followed by the United States, also with a value of \$612 billion. As for the B2B market, the United States leads with a value of \$6 trillion followed by Japan with a value of \$2.4 trillion (UNCTAD, 2018). According to the UNCTAD report, no developing or transitive economy was among the global top-ten e-commerce market in 2015 except for China.

E-commerce in Ghana

The integration of e-commerce in business comes in paths and phases (Molla and Licker, 2005a). According to Molla and Licker's Perceived Readiness Model (PERM), the hierarchical paths and phases in adoption and application of e-commerce are:

1. **Connected e-commerce**, where firms use emails and ICT tools such as fax and telephone to share business information (This, however, is limited to firms and customers who are privy to emails);
2. **Static e-commerce**, where firms incorporate websites to give information on products and services to boost their market reach;
3. **Interactive e-commerce**, where businesses combine both connected and static e-commerce to enhance the exchange of information and queries between other firms and customers;
4. **Transactive e-commerce**, which goes beyond to offer online purchasing and enable tracking orders and management of account information; and
5. **Integrated e-commerce**, where websites bring together competitors, suppliers, and customers and also create a back-office system that removes physical presence and allows for greater or all transactions to be electronic.

Boating et al., stipulated that e-commerce is contingent on existing requisite national-level policy and infrastructure (physical, institutional, functional, and technological). Their evaluation of

Ghana's e-readiness draws on Bajaj and Leonard (2004), Cultural Policy and Technology (CPT) dimensions, and Molla and Licker (2005a). PERM, which also focuses on the internal organization and external related issues of e-commerce assimilation, adopted elements which included government readiness and technological readiness. The former (mostly government initiatives) comprised telecommunication policy reforms and ICT policies, while the latter (private-sector driven) encompassed access to ICT services and their affordability.

Their findings revealed that government readiness to address resource poverty will have an attendant effect on spreading ICTs and related services. Additionally, ICTs diffuse along paths of least cost of adoption. It can be deduced from the findings that the government should focus on implementing policies and plans that advance the transaction of goods and services online by diffusing ICTs and ensuring affordability of usage.

Trajectory of Ghana's Policy and Plans

Ghana's efforts to build an economy based on information technology began about two decades ago. In 2003, the country introduced the National ICT for Accelerated Development (ICT4AD) to have ICT lead the socioeconomic development of the country (Boateng et al., 2011). The 14-Pillar ICT4AD, carved from UNDP ICT4D, birthed the E-Ghana and E-Transform Projects (Fiagbenu, 2017).

E-Ghana had the objective of developing the IT Enabled Services Industry and contributing to improved efficiency and transparency of selected government functions through e-government applications, while the E-Transform Project for Ghana had the objective of improving the efficiency and coverage of government service delivery using information and communication technologies (Fiagbenu, 2017).

The projects saw the establishment of various institutions to drive the change. Notable among them are the National Information Technology Agency (NITA), the National Communications Authority (NCA), the IT Enabled Services (ITES) Secretariat, the Kofi Annan Centre for Excellence, the Ghana Investment Fund for Electronic Communication, the Data Protection Commission, the National Identification Authority, and the Ghana Multimedia Incubator Centre (GMIC) (Fiagbenu, 2017).

The latter, established in 2005 with support from UNDP and Ministry of Communications, is to promote ICT entrepreneurship by providing innovative start-ups with relevant skills and also providing companies with office space, utilities, and Internet access (GMIC Homepage). The Accra Digital Centre and Information Park under ITES also provide similar services.

Insofar legislation enacted to embody and provide frameworks for this development include the National Information Technology Agency Act, 2008 (Act 771), the National Communication Authority Act, 2008 (Act 769), the Electronic Communications Act, 2008 (Act 775), the Electronic Transactions Act, 2008 (Act 772), the Communication Service Act, 2008 (Act 754) and the Data Protection Act, 2012 (Act 845) (Fiagbenu, 2017).

Zwass's definition of e-commerce establishes that a telecommunication network is a necessary precondition for e-business to thrive. The penetration of telecommunication in Ghana's economy is contributing to driving digital usage through its value chain (Fiagbenu, 2017). Substantial private-sector investment led to the deployment of LTE technology in 2013, the laying of five marine cables, and a 65 percent fiber-optic prevalence (Fiagbenu, 2017).

The E-Ghana and E-Transform projects have brought ease to the conduct of some aspect of government business due to digitization and automation.

Customs Duties Platform

The Customs Division of the Ghana Revenue Authority (GRA) collects import duties, import VAT, export duties, petroleum taxes, import excise and other taxes, levies, and fees (GRA Customs Homepage).

In 2001, the Ghana TradeNet was established to provide a fully integrated customs management software connected over a network to various operators that interact with Customs in the processing of imports and exports of consignments. The operators include banks, shipping lines, certification and licensing agencies, and also users of trade information. The main components of the Ghana TradeNet were the Ghana Customs Management Systems (GCMS) and Ghana Community Network (GCNet). The GCMS enable the Division to electronically receive and automatically process manifests and documents, while GCNet is a platform that enables data sharing with the operators (UNDESA Ghana Customs Presentation, 2004).

The system, which allows for 24/7 processing of declarations, collects about 98 percent of all Customs revenue, and some 36 ministries and government agencies use the system for their various operational purposes (Devex GCNet).

GRA Customs Division began using the newly integrated UNIPASS at its ports of entry in April 2020. It replaced the old GCNet and Customs World of Dubai (West Blue). As explained by the acting commissioner general, Mr. Owusu-Amoah, the new system, developed by Customs UNIPASS International Agency of South Korea, had comparative advantages over the old GCNet. These included an exclusive tracking system, a new human resources management system, and an end-to-end encryption—and above all, it fits into the Digitize Ghana agenda.

In sharp contrast, the UNIPASS-ICUMS, which was touted for its capability of increasing import revenue recorded shortfalls according to report on GRA data by the *Business & Financial Times*. Out of the targeted June revenue of GH¢1 billion (\$172 million), GH¢554 million (\$96 million) was raised.

Conclusion

There is limited data on e-commerce activities in Ghana. According to Fiagbenu (2017), there is a lack of data on the extent of Ghana's digitalization, and its impact on GDP is difficult to measure. The policy itself, policy continuity, and research gaps identified need to be filled by government and civil society organizations.

E-commerce has brought players to provide payment solutions, platforms, and innovative logistics. However, the lack of trust, poor delivery, technicality and technical hitches, and cumbersome payment procedure are mitigating factors in the preference of e-transactions (UNCTAD 2018). Going forward, the setbacks, including bugs, need to be addressed to ensure smooth platform operations and user friendliness.

The opportunities for application of integrated e-commerce are considerable. The automation of customs declaration in Ghana's various ports of entry has shortened clearance and transit times (UNCTAD 2018). Nonetheless, the charges on e-transactions are relatively higher. Moreover, cost of usage of Internet is expensive due to Communication Service Tax (CST) charged by Internet service providers, mobile network operators, public/corporate data operators, and the like. Although CST was reduced considerably during the Ghana 2020 Mid-year Review, further reduction will consequentially reduce the data cost associated with e-business transaction.

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Greece

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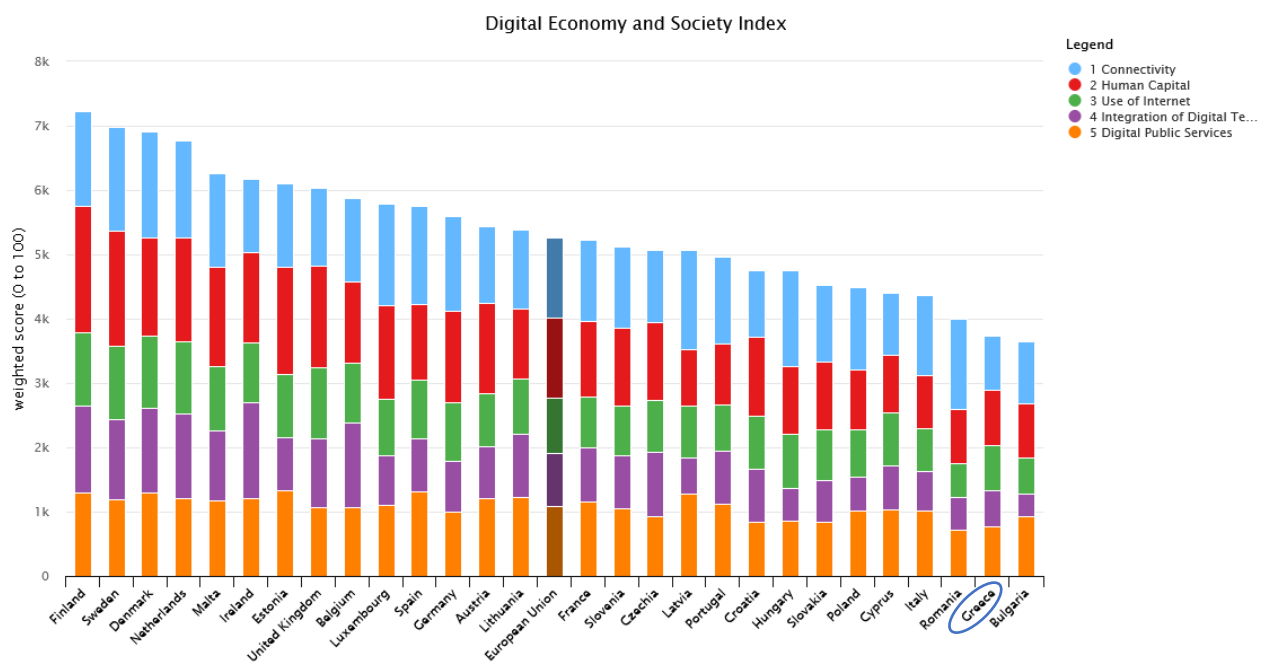
As a result of the global health crisis and its significant impact on economic activity, a swift digital transformation seems to be taking place, to transform traditional economic functions and processes into a digital environment. Tele-education, teleworking, electronic transaction services with the State (e-government), e-commerce, and the financial sector (e-banking) are currently receiving an increasing number of users trying to exploit these possibilities to meet their needs.

To date, both the private and public sectors have adapted rather rapidly and relatively efficiently. However, the effectiveness of these services is based, on the one hand, on the skills of users, existing and potentially new, and on the other, on already-made investments in broadband infrastructure. All of these new broadband-supported services depend directly on the level of investment earned and on the ability of both the information and communications technology sector to improve their services and on businesses in other sectors to integrate these services functionally into their processes. The ultimate link of the chain is the individual users who are called on to use these services on a professional and personal level in order to improve the difficult current daily circumstances.

Greece's Digital Identity

Greece is significantly behind in the digital transformation process as highlighted by the European Commission's annual Digital Economy & Society Index (DESI). It is a complex index that compares key figures per country in five areas: 1) Connectivity; 2) Human capital/digital skills; 3) Use of Internet services by citizens; 4) Integration of digital technology by businesses; and 5) Digital Public Services. (See Figure 2.)

Figure 2: Digital Economy and Society Index (DESI), 2020⁷⁸



European Commission, Digital Scoreboard

According to the 2020 report, Greece ranks 27th among EU member states, above only Bulgaria, indicating the difficulties that exist in the country's digital transformation, with poor performance in almost all the individual categories of the index. Despite an increase in its overall score, Greece shows a limited improvement of its performance in the DESI index. For the first time, the proportion of individuals with at least basic digital skills is more than 50 percent. On connectivity, Greece is making progress at a very high pace in fast broadband (NGA) coverage (15 percent over last year); but still, the country remains below the EU average.

Table 1: Integration of Digital Technology in Greece⁷⁹

	Greece			EU
	DESI 2018	DESI 2019	DESI 2020	DESI 2020
Electronic information sharing	37%	37%	38%	34%
% enterprises	2017	2017	2019	2019
Social media	21%	21%	19%	25%
% enterprises	2017	2017	2019	2019
Big data	11%	13%	13%	12%
% enterprises	2016	2018	2018	2018
Cloud	5%	7%	7%	18%
% enterprises	2017	2018	2018	2018
SMEs selling online	11%	11%	9%	18%
% SMEs	2017	2018	2019	2019
E-commerce turnover	3%	4%	4%	11%
% SME turnover	2017	2018	2019	2019
Selling online cross-border	7%	7%	4%	8%
% SMEs	2017	2017	2019	2019

On the business side, Greece ranks 24th in the EU regarding the Integration of digital technology by business. The number of enterprises in Greece that share electronic information continues to increase and remains above the EU average. However, the percentage of firms using social media decreased slightly in 2019, as did the share of SMEs selling online in 2019 (9 percent, down 2

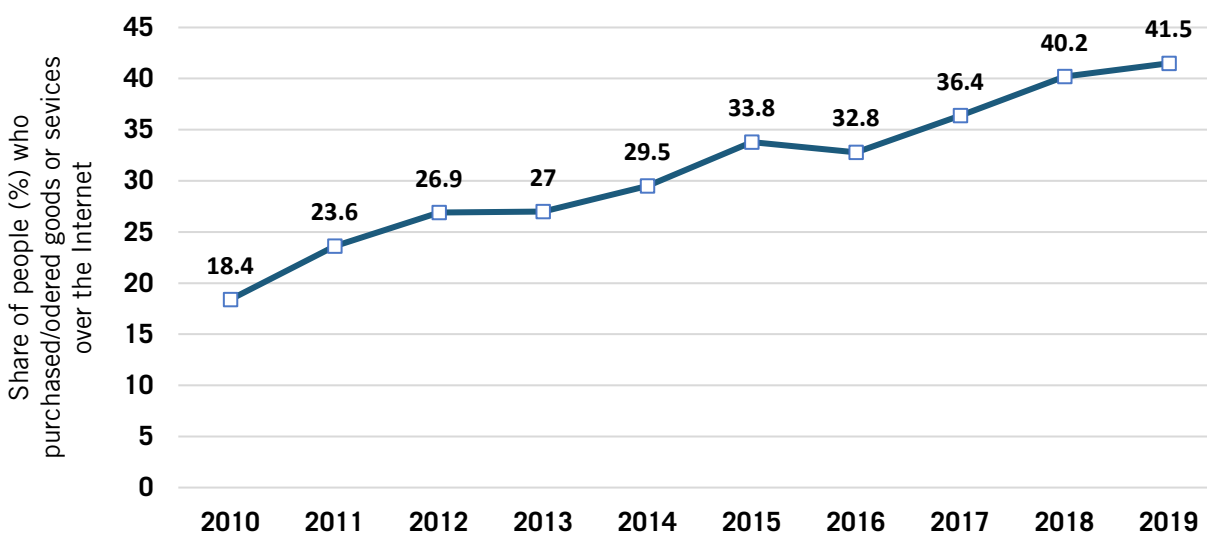
percent since 2018). Their percentage of turnover generated online remained low at 4 percent of total turnover. (See Table 1.)

The restrictive measures to tackle COVID-19’s spread affected e-commerce in Greece substantially. According to the Greek Ecommerce Association (GRECA), e-commerce in Greece increased significantly compared with the previous years after the enforcement of the restrictive measures. Prior to 2020, e-commerce in Greece was growing at a rate of 25 percent on average yearly. In contrast, compared with the same period of last year, the e-commerce was higher in April (171 percent) ; and after the lockdown was over, online shopping did not return to the “normal” trend but remained significantly high (107 percent, comparing May 18–22, 2020 to May 18–22, 2019).

Furthermore, Hellenic Statistical Authority (ELSTAT) performed in 2019 a survey on the use of information and communication technologies by households and individuals. The survey was conducted on a final sample of 5,004 private households and an equal number of individuals, throughout Greece.

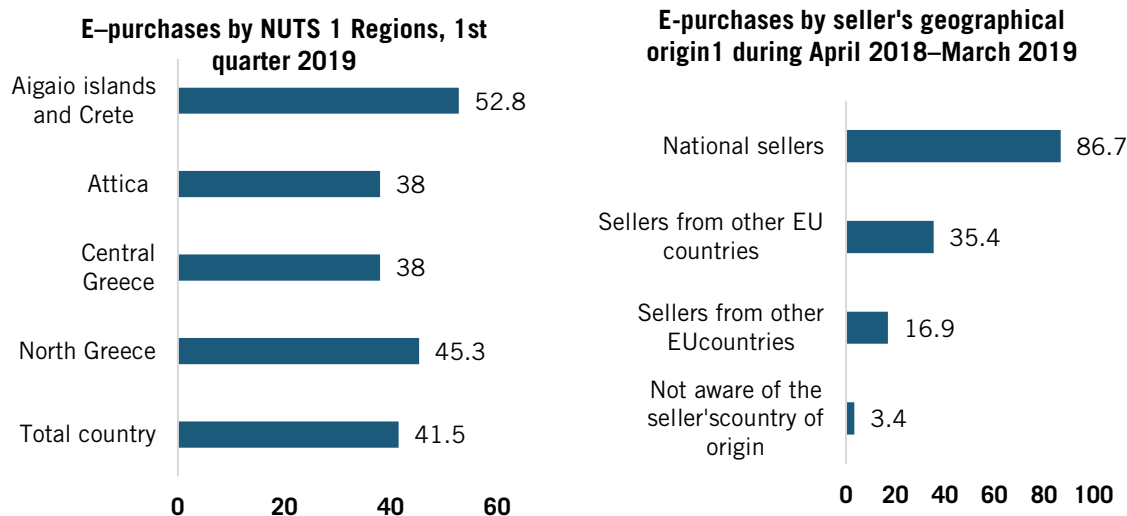
41.5 percent of Greek individuals purchased goods or services over the Internet during the first quarter of 2019. (See Figure 3.) Their proportion increased by 3.2 percent in comparison with the first quarter of 2018, while the expansion during the last decade (2010–2019) approached 125.5 percent.

Figure 3: E-commerce, First Quarter 2010–2019⁸⁰



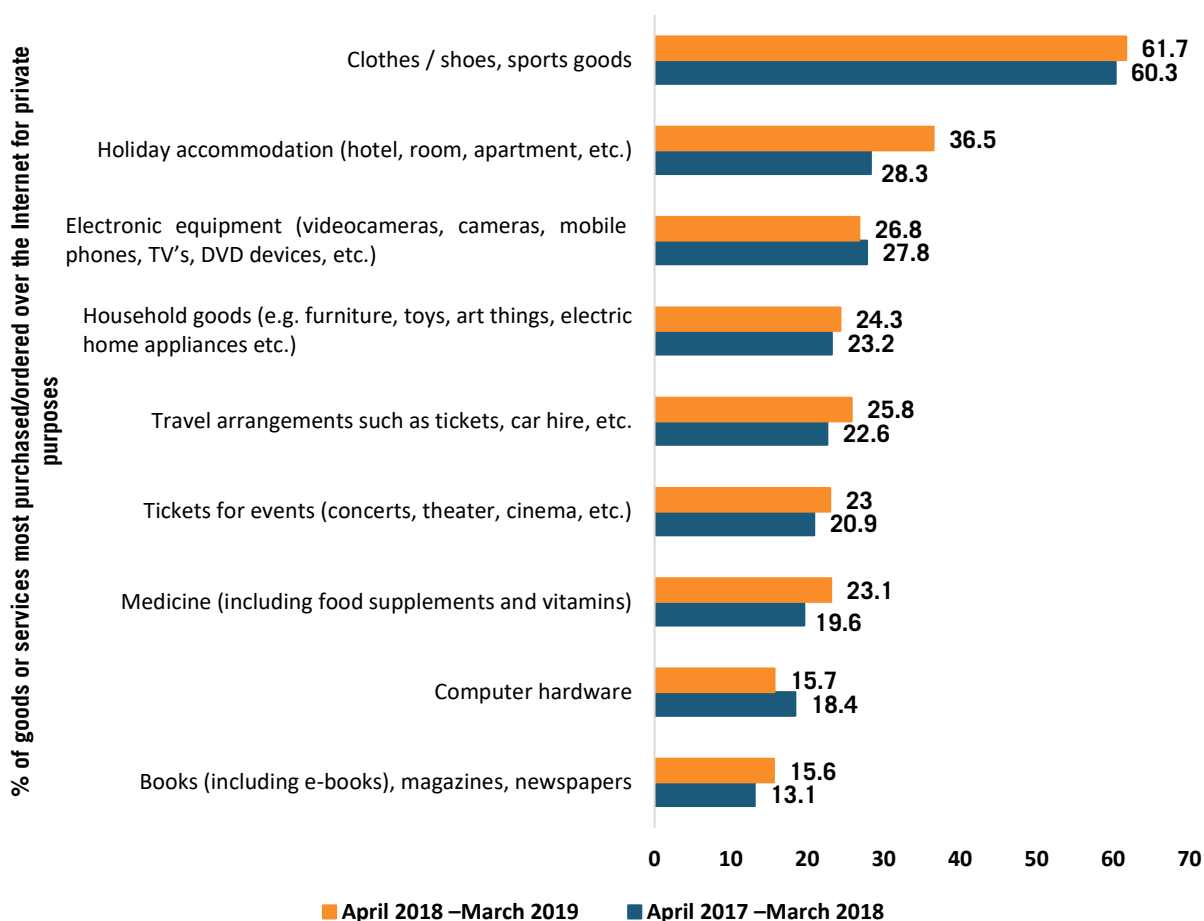
The geographical allocation of the total population in Greece having purchased/ordered goods or services over the Internet during the first quarter of 2019, in the four significant geographical areas of Greece (NUTS1 level), is shown in Figure 4. The lion’s share in e-purchases is documented in the islands of the Aegean Sea and Crete. Regarding the geographical origin of the seller, 86.7 percent of the consumers purchasing or ordering over the Internet chose national sellers. Next, the 35.4 percent of the online shoppers preferred sellers from other EU countries, and 16.9 percent sellers from the rest of the world, while 3.4 percent mentioned not being aware of the seller’s country of origin.

Figure 4: E-purchases by Seller's Geographical Origin and by the Origin of the Consumers (%)⁸¹



The percentage of goods or services most e-purchased using the Internet for private purposes during April 2017–March 2018 and April 2018–March 2019 is presented in the next graph, Figure 5. The most-popular category among users was the fashion items group, such as clothing and shoes, since more than 60 percent of them for both examined periods bought something in this classification. The second-most preferred category was buying holiday accommodations products or services, which increased significantly from 28.3 percent to 36.5 percent (a rise equal to 29.0 percent) for the surveyed periods. A significant increase was documented in the medicine category (19.1 percent) while computer hardware online shopping decreased by 14.7 percent and electronic equipment by 3.6 percent.

Figure 5: Goods and Services Purchased/Ordered Over the Internet during April 2017–March 2018 and April 2018–March 2019⁸²



So, to sum up, Greece lags behind in almost every indicator of the five dimensions of the DESI Index. In Connectivity, Greece features wide availability of fixed broadband but take-up is progressing slowly, as the transition to fast broadband Internet connections is slower than in other EU member states. In Human Capital, Greece's performance is well below the EU average, but it is slightly progressing. Greece needs to address its severe digital skills gaps, and the shortage of ICT specialists remains crucial for supporting the digital transformation of industry. For most of a wide range of online activities, Greeks are more actively using the Internet for online content and video calls than overall in Europe. Greece's overall industry performance in integrating digital technology is below the EU average. Greek companies use social media at the average EU level, but don't use more sophisticated technology such as cloud services or e-invoices. On the positive side, the Greek start-up ecosystem is viewed very favorably worldwide, and investments in digital companies have multiplied over the last few years. Finally, in Digital Public Services, the percentage of Internet users that have exchanged forms with the public administration online is above the EU average.

Under these circumstances, and in order for the country to address the challenges that digital transformation is facing, a closer interaction with the global environment is needed. Additional burdens that may be imposed in e-commerce trade do not protect the local economy, but rather complicate the process of digital transformation. At the same time, and as the economy is struggling to improve its export orientation, the local entrepreneurial ecosystem needs to address more easily foreign demand and be part of global value chains. That is why renewing the e-commerce moratorium is important for countries such as Greece.

WTO E-commerce Moratorium

Since 1998, the members of the World Trade Organization have agreed not to impose customs duties on electronic transmissions. While there is no explicit definition for the term “electronic transmissions,” it is commonly accepted to include anything from software, emails, and text messages to digital music, movies, and video games. The moratorium is examined and extended at the biennial WTO Ministerial Conference.

According to the EU proposal on new WTO rules for electronic commerce as released in May 2019, the EU will pursue negotiation of a commercially meaningful set of rules on e-commerce with as many WTO members as possible.⁸³ A list of initial negotiating proposals for a broad set of rules and commitments, including validity of e-contracts and e-signatures, strengthening consumers' trust in the online environment, tackling barriers that prevent cross-border sales, improving market access commitments in telecommunication and computer related services, etc. is being discussed.

The moratorium has encouraged growth in Internet usage and the flourishing of the digital economy. In the context of the EU, negotiations as previously described, and in combination with the EU single digital market framework, the successful establishment of a well-structured and -designed international digital trade environment is vital for Greece. The country has recently recovered from a deep and unprecedented economic depression. When the key economic figures started to rebound, the COVID-19 health crises began, bringing a massive wave of economic turbulence in various aspects. Therefore, it is imperative not only to transform the current digital landscape, but for Greek firms to focus on international digital trade to ensure their survival through the current crisis.

Especially when considering the business environment of Greece, where 99.9 percent of firms are SMEs, the need to turn the business activities to the digital world becomes more apparent than ever. E-commerce could play a critical role in the sustainable growth of SMEs. It enables the opportunity to increase their sales since they do not narrow their target audience to the local market, but they are able to attract customers from all over the world. A WTO e-commerce moratorium facilitating the principles of international digital trade could assist significantly the efforts of Greek SMEs to expand their online market presence internationally. The low barriers to trade that e-commerce offers to new entrants is a major advantage for small businesses that might have limited resources in terms of human and financial capital. Start-ups and SMEs could strengthen their online presence with decreased investment requirements. Cash flows are also critical for SMEs' survival. E-commerce by nature is more efficient in attracting cash flows in comparison with physical stores since customers can conduct purchases from anywhere at any time. Furthermore, online sales generate instant information, providing SMEs with an efficient way to evaluate the effectiveness of their customer engagement initiatives. Data analysis could assist

firms in developing their general strategy of aiming to boost their performance by helping to understand the spending patterns of customers, effective ways to increase their market share, and different approaches to minimize their operational costs.

Business digitalization could facilitate the engagement of SMEs in digital trade and their entrance into global value chains, and help them establish successful international trade strategies. Digital trade is not a new concept, but under the current circumstances, it is growing rapidly, raising a set of unique challenges. In combination with a well-structured policy framework, it could ensure that the benefits are shared more inclusively, especially for SMEs and start-ups. Digital international trade is creating new trade prospects for firms to not only increase their sales but also to enter into more markets, resulting in a diversified export basket. An increased export base could significantly enhance the country's prospects to overcome the current economic crisis and achieve inclusive and sustainable economic growth.

There is also recent empirical evidence on the role especially of mobile communications in the Greek economy. IOBE (December 2019) published a study, which was prepared on behalf of the Greek Mobile Operators Association (EEKT), entitled “The role of mobile communications and broadband in the new growth model for Greece.” The study aimed to highlight the role of mobile communications and broadband in the new growth model of the Greek economy. At the heart of the study was the quantification of both the overall contribution of the sector to the domestic economy and the potential impact on the economy of a substantial increase in the use of mobile communications in several digital functions, in which the country lags behind based on DESI.⁸⁴

More specifically, the study attempted to measure the impact on GDP of the use of data services from mobile communications. Greece is ranked last in average data consumption with a mobile device in Europe. Based on the latest available data, the average consumption in Greece in 2018 was just over 1GB per subscriber/month, with the European average hovering around 4 GB. The use of e-government services and other electronic transactions across Europe is 1.5 times higher than in Greece.

But the benefits to the economy are not just about increasing data usage. The increase in consumption that comes from the current pattern of Internet use in Greece (entertainment, social media, communication) is expected to have a different effect compared with the consumption of data for transactions related to e-government and the use of applications such as online file storage and remote work, which save time and money and improve productivity.

In this context, the IOBE study conducted a quantitative assessment of the benefits that could arise in the economy from the greater use of data from mobile communications. Specifically, two scenarios were prepared, as shown in Figure 6:

- Scenario (A), where there is an increase in the use of data via mobile communications but service usage characteristics do not change; and
- Scenario (B), where there is an increase in the use, but with a qualitative upgrade of the use of e-government, e-banking, and e-commerce services at the levels of the European average.

Figure 6: Impact on GDP From the Use of Mobile Data⁸⁵

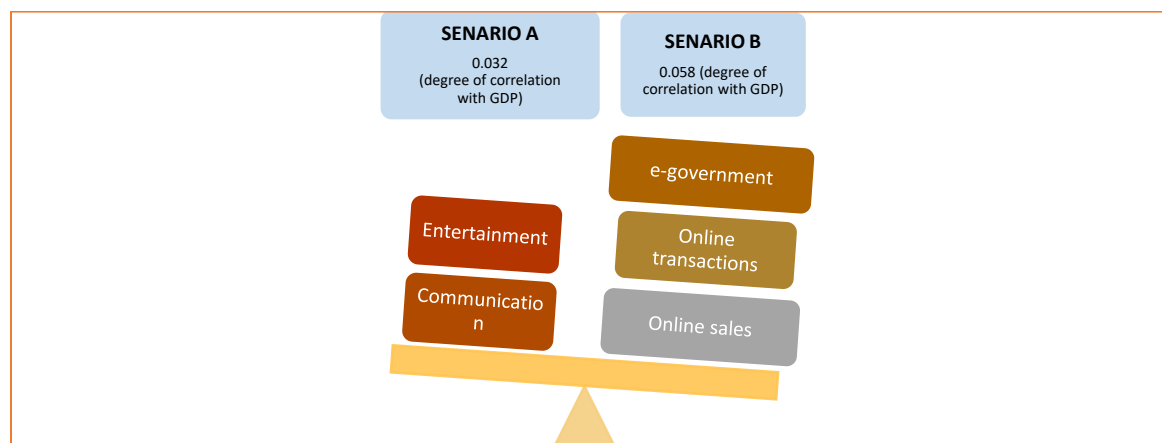
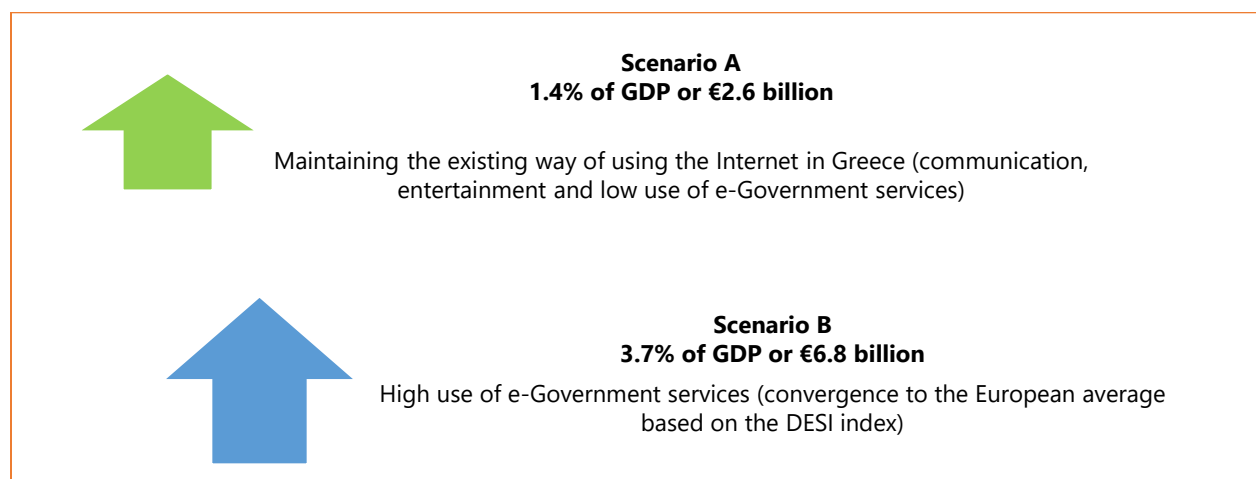


Figure 7: Potential Benefits to the Greek Economy, in GDP Terms, From Doubling the Use of Mobile Data⁸⁶



Using the adopted econometric approaches, it was found that the use of data is positively linked with economic activity to a statistically significant extent in both scenarios. However, this effect is greater when mobile Internet usage is significantly driven by the demand for online services rather than just for infotainment.

According to IOBE estimates, the benefits to the Greek economy, in terms of GDP, can reach up to €2.6 billion (\$3.3 billion) or 1.4 percent of GDP. (See Figure 7.) This result is obtained from Scenario A (i.e., by maintaining the existing way of using the Internet, which is more related to communication and entertainment, while the use of other digital services is low). The benefits more than double in Scenario B (i.e., when the increased demand for data from mobile

communications in Greece is fuelled by the use of digital services, such as e-government, e-banking, and e-commerce, to the extent that Greece converges on the European average based on the DESI index). In this case, GDP could be higher by 3.7 percent or €6.8 billion (\$7.9 billion).

Challenges to E-commerce and Digital Trade in Greece and Policy Recommendations

Greece is significantly lagging behind in various dimensions of digital transformation and e-commerce, as crucial parameters remain at fairly low levels. Greece has to address several fundamental challenges when the critical enablers for a digital and e-commerce transition are examined. On the one hand, Greece should put more efforts to catch up with the current European average, as pointed out, since, in most metrics, the country is behind. Business digitalization in Greece is significantly lower compared to its extent in northern European countries, where it is significantly more developed. High levels of digitization adoption and diffusion are prerequisites to entering e-commerce markets in a dynamic model. Smaller firms predominate the Greek entrepreneurial landscape. SMEs' digitization is more arduous in comparison with larger companies' digital transformation. The limited financial resources, the inability to attract senior professionals, the lack of digital awareness, and the absence of an enabling general entrepreneurial framework could serve as reasons, among other factors, to the low digitisation levels.

Connectivity is vital for ensuring a successful e-commerce expansion. Northern EU States possess a comparative advantage in contrast to the South, where not only the quality of the connection is inferior, but also Greece is quite behind the EU average in the Broadband Price Index. Human skills are also critical for boosting digital trade. Greece demonstrates an insufficiency in digital skills progress. Considerable risk of a potential digital exclusion exists. Enterprises located in Greece might face several barriers in their efforts to enter digital markets. Awareness of the benefits that digital trade could offer to their operations and services is relatively low. The lack of digitised processes also could hinder their efforts significantly to transition to a digital business model.

Simplifying regulations for SMEs to cluster with other firms or with other institutes could pave their way to e-commerce. Creating a facilitating environment that minimizes bureaucratic procedures, motivates participants, focuses on the targets of digital transformation, and has a strong online presence could significantly enhance the current e-commerce landscape. In Greece, the dominant firm type is the SMEs (99.9 percent almost 100 percent of firms). SMEs are not equally capable of attracting personnel with increased digital skills compared with larger firms. In addition, access to advanced infrastructures such as fast broadband Internet connections and medium-high cloud computing services is ambitious for small or young firms. Also, big data utilization in European SMEs is still in its infancy. Databases offering quality data and open data policies could act as an essential motivator for firms planning to open their activities to new digital markets.

Cultural barriers should not be neglected as well. Greece might need to nurture a technologically friendly environment that would encourage firms and particularly new ventures to use online sales channels as well. E-commerce should be included in the strategic planning of a firm. The development of the necessary infrastructure is also key to such endeavours. However, it requires significant initial investments by mobile operators. The regulatory framework should help attract and implement these investments. Issues such as the release of new spectral ranges, appropriate

frequency, and the concession of bands need to be clarified, as should specific issues (e.g., land use permits, antenna installation points, technical characteristics) affecting the licensing of antenna systems.

The public sector's contribution is also essential, both on the infrastructure side (e.g., fiber-optic infrastructure) as well as in mobilizing investments in cooperation with other sources of funding (e.g., programs combining EU funds, national resources, and funding from banking institutions). The implemented public policies affect directly or indirectly the digital trade, but also shape the environment in which businesses operate.

The increasing trend in digital trade could be boosted by a well-structured policy framework which could result from the WTO e-commerce moratorium as it is negotiated between EU and other WTO members. When the current economic situation and the prospects of e-commerce are considered, the establishment of an effective and well-regulated international digital trade framework seems more important than ever.

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Jordan

By: Jordan Strategy Forum

Introduction

Jordan features a nascent, but growing, e-commerce sector and digital economy, built on a relatively strong ICT infrastructure. However, its future increasingly depends upon proactive and thoughtful government support and policymaking—both at home in terms of domestic laws and regulations, and abroad, in working with trade partners and multilateral trade organizations to understand how countries should work together to maximize the potential benefits, while addressing other legitimate concerns, such as over-taxation.

Jordan's economy experienced mediocre rates of economic growth, in the range of 2 to 3 percent per year, since 2009, compared with 6 to 8 percent, in the decade prior.⁸⁷ Jordan's poor economic performance is explained by a series of external (e.g., geopolitical) shocks that have weakened the country's macroeconomic fundamentals, particularly its external balances. In 2008, prior to the country's economic slowdown, exports reached 57 percent of GDP with imports at 86 percent of GDP (implying a trade deficit of 32 percent of GDP). A decade later, Jordan's external balance worsened with exports plummeting to 36 percent of GDP, with imports at 54 percent of GDP (a trade deficit of 18 percent of GDP).⁸⁸ The decline in exports has made prospects of stronger economic growth, necessary to decrease unemployment and improve fiscal balances, difficult to attain.

Stronger export performance represents a key pillar in any country's successful growth story. The persistence of poor security conditions in the region, chiefly the shutting down of the Syrian and Iraqi borders with Jordan—notwithstanding improvements on that front in 2019—have limited Jordanian exports from reaching destination markets via land transport through Syria and Iraq. Regaining momentum in export growth requires not only exploring new export markets, but also capitalizing on Jordan's strong technological infrastructure in advancing e-commerce and digital trade.

The rise of e-commerce and digital trade has affected trade patterns globally. Easier access, worldwide, to the Internet has allowed domestic consumers and producers easier access to global markets and a wider array of goods and services. Given this transition, the WTO—of which Jordan has been a member since 2000—has launched a dialogue with member states to implement regulations governing e-commerce and digital trade.⁸⁹ In light of these discussions, it's important to showcase the benefits that arise from e-commerce, and how a new set of global rules could be shaped to foster the growth of this promising industry.

The scope of this policy note is to outline the e-commerce sector in Jordan, whether Jordan can stand to capitalize on it, and the latest policy developments—locally and globally—that impact this market.

Jordan's Technological Infrastructure

Better infrastructure leads to better services, both of which are important to increase the growth of e-commerce in Jordan.⁹⁰ The development of Jordan's ICT sector has been a key government priority since 2000.⁹¹ Today, Jordan's ICT sector features a “maturing ecosystem with international

tech firms, established firms, venture funds, angel investors, incubators and accelerators.”⁹² The improved local performance led to Jordan faring well historically in global rankings: Jordan placed in the 43rd percentile in ICT sector development per the 2016 World Economic Forum’s “Global Information Technology Report.”⁹³ However, Jordan’s performance stagnated in recent years, as it did not keep pace with developments in other countries.⁹⁴ In 2019, Jordan achieved the 58th percentile in the “ICT Adoption” sub-pillar of the World Economic Forum’s “Global Competitiveness Index.”⁹⁵

The penetration of new technologies in Jordan persistently outperformed regional performance. As shown in Table 2, Jordan was an early adopter of technologies that are crucial to success in the age of the Fourth Industrial Revolution, namely Internet users and mobile cell phones. For the past few years, Jordan witnessed an oversaturation rate of mobile cellular subscriptions (i.e., more than 100 cellular subscriptions per 100 population) and a significant increase in the rate of individuals utilizing the Internet, far above regional and comparator performances.⁹⁶ The increase in the utilization of the Internet in Jordan was facilitated primarily by the proliferation of smartphones, with 9 out of 10 Jordanians owning smartphones while computer ownership remained stagnant at a rate of 35 to 40 percent of the population.⁹⁷ The current spread of technology within the Jordanian society positions it in a strong place to capitalize on the fruits of the Fourth Industrial Revolution, specifically through utilizing e-commerce and digital trade to promote stronger export-led economic growth.

Table 2: Technology Penetration Rates in Jordan and Comparator Regions⁹⁸

Table 2A: Fixed Broadband Subscriptions

Country/Region	'05	'10	'14	'17
Arab World	0.3	2.1	3.3	7.0
MENA	0.9	2.6	5.4	9.3
Middle Income	1.1	4.5	6.9	11.1
Jordan	0.4	4.1	4.0	3.4

Table 2B: Fixed Telephone Subscriptions

Country/Region	'05	'10	'14	'17
Arab World	9.3	9.9	7.4	8.1
MENA	15.2	16.5	15.2	15.4
Middle Income	13.9	12.9	10.6	8.7
Jordan	11.0	6.8	4.3	3.4

Table 2C: Individuals Using the Internet

Country/Region	'05	'10	'14	'17
Arab World	8.5	24.9	36.6	49.3
MENA	9.8	25.0	40.4	56.2
Middle Income	7.5	21.8	35.0	46.1
Jordan	12.9	27.2	46.2	66.8

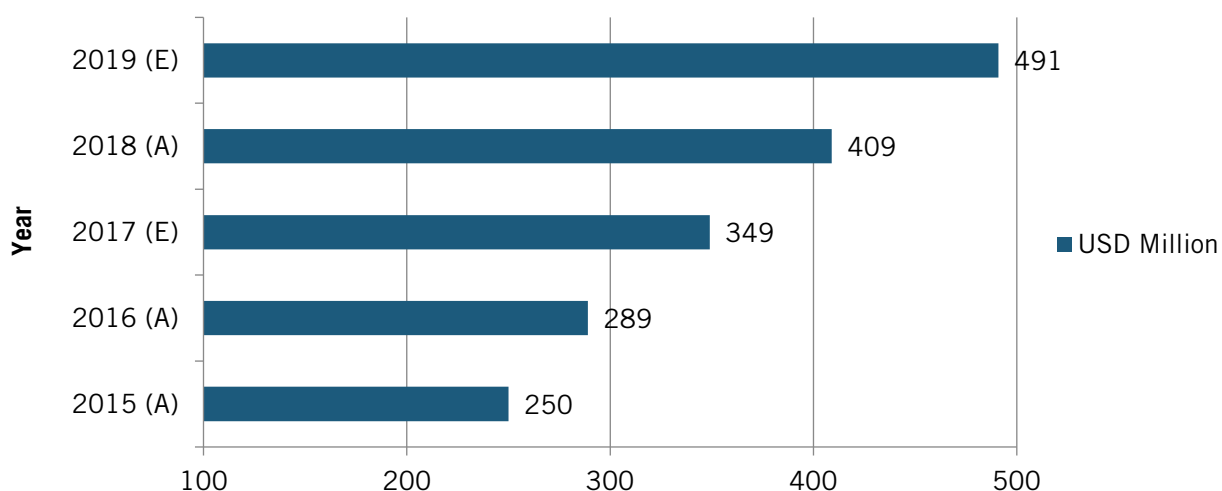
Table 2D: Mobile Cellular Subscriptions

Country/Region	'05	'10	'14	'17
Arab World	26.3	87.9	106.9	101.0
MENA	28.4	91.8	109.3	107.5
Middle Income	25.4	73.9	95.3	103.5
Jordan	54.9	92.2	125.9	100.0

The E-commerce Market in Jordan

E-commerce is a fast-growing, nascent sector in Jordan. While data on the size of the e-commerce market in Jordan is severely limited, publicly available estimates place the e-commerce market at nearly \$500 million in 2019, up 20 percent from 2018. Since 2015, the electronic commerce market has been growing at a compound rate of 18.4 percent per year, implying that the e-commerce market stands to double in size every 45 months at this historical growth rate. (See Figure 8.)





Figure 8: The Size of the E-commerce Market in Jordan: 2015-2019⁹⁹



The strong growth in e-commerce signifies the potential of the e-commerce market in Jordan. E-commerce not only facilitates access to global markets for domestic consumers—thereby offering them products at lower prices and higher quality—but also provides new trade avenues for domestic producers. In response to this market opportunity, numerous start-up incubators were formed in Jordan to capitalize on the enabling policy environment for technology-based start-ups in a country with strong ICT infrastructure.¹⁰⁰ For example, the start-up incubator Oasis500 features several companies specifically capitalizing on the potential of e-commerce in Jordan.¹⁰¹

However, Jordan’s e-commerce sector faces several challenges. The Middle East and North Africa (MENA) region has lagged in e-commerce and digital trade, in part due to less-developed digital infrastructure, government dominance of the telecoms sector, and the lack of a supportive legal and regulatory framework.¹⁰² One major issue is the relatively high cost of Internet access. A 2015 survey conducted by the Jordanian Department of Statistics shows that 13 percent of respondents cited the high cost of Internet service as a reason for not using the Internet.¹⁰³ Another is the lack of content in Arabic. As Ari Kesisoglu, managing director of Google Middle East and North Africa, stated in the report *The Global Evolution of Digital Commerce and MENA eCommerce*, “The percentage of users online in MENA versus the percentage of content in Arabic is a huge gap and we know users in MENA are coming online for local content.”¹⁰⁴ Furthermore, studies of e-commerce adoption in Jordan, especially in SMEs, have shown that security, online payment, awareness of e-commerce, and external ICT support are barriers to e-commerce adoption in Jordan.¹⁰⁵

Examples of Jordanian Start-Ups in E-commerce¹⁰⁶

	<p>Jamalon is an e-commerce bookstore. It targets 22 Arab countries that are excluded from Amazon publishing services, and targets the untapped publish-on-demand online business throughout the region. Jamalon's service allows for millions of Arabic titles to become available to Arab readers, and enables thousands of publishers to market their products and fill this continuously widening gap.</p>
	<p>Elmuda.com is the Middle East's premier online luxury fashion destination for modern women. Designed to suit the fast, glamorous life, Elmuda's collections focuses on limited-edition items featuring the latest trends. With just one click, users gain unrivaled access to the hottest looks of the season from global esteemed labels. It offers customers exactly what they want. This online platform unites fashion lovers with more than 150 brands around the world, where they can buy unique pieces from London to Los Angeles, Berlin to Bucharest, Paris to Milan.</p>
	<p>TOP STEERING is the leading Middle East online cars accessories and parts portal. It offers free shipping and free returns.</p>
	<p>Feesheh is the first online music store in the Middle East region, offering a wide variety of musical instruments and products, all at competitive prices. Music enthusiasts from Jordan, with the vision to encourage the music scene in the Middle East and create a hub for aspiring musicians, established Feesheh.</p>

Local and Global Regulatory Developments

Domestically, Jordan has recently enacted changes that will severely affect cross-border e-commerce, especially the imposition of new customs duties on e-commerce trade, in August 2019.¹⁰⁷ The rationale for the policy change was to correct the imbalance in the tax/customs burden between domestic commerce and trading companies and foreign commerce companies. Domestic commerce companies have been subject to customs fees and taxes while e-commerce portals, based in Jordan, were typically exempt from customs and enjoyed preferential tax treatment as an ICT company. The policy change was as follows:

- Limits on annual e-commerce purchases per natural person reduced from \$3,400 per year (80 percent of GDP per capita) to \$700 per year (17 percent of GDP per capita)

- A new customs duty on e-commerce purchases at the following schedule:
 - Packages <\$70 in value: \$7 fee
 - Between \$70 and \$140 USD: \$14 fee
 - \$140+: subject to standard customs-duty schedules and requirement to submit a customs declaration form with the relevant authorities
- The compliance burden is placed on delivery clearance companies through an online portal designed for this purpose.

The imposition of e-commerce-specific customs fees effectively acts as a tax and barrier to cross-border e-commerce purchases. The policy change previously outlined effectively places a 10 to 20 percent tax rate on e-commerce activities for small purchases. The expected annual revenue from these customs fees is estimated at \$49.1 million.¹⁰⁸ Furthermore, large purchases—defined in the policy change as purchases over \$140—by individual consumers would have to be subject to cumbersome customs regulations, which acts as an incentive against such purchases. Furthermore, decreasing the purchase limit for individual consumers from \$3,400 per person per year to \$700 per person per year effectively limits the growth of the e-commerce market.¹⁰⁹ For example, CashBasha, one of Jordan’s leading cross-border e-commerce sites, shut down operations.¹¹⁰ Unfortunately, imposing customs fees on e-commerce products as a reaction to traditional brick-and-mortar retailers’ complaints about lost sales, instead of doing an in-depth analysis of the overall situation first, might have negative effects for both buyers and traders in Jordan.¹¹¹ This is especially true for Jordan, where its e-commerce sector is still in its infancy.

Jordan is far from alone in considering or enacting changes to customs and tax arrangements to account for e-commerce and digital trade. The change in the domestic policy agenda in Jordan on e-commerce mirrors other developing countries that have undertaken regulating e-commerce and digital trade in the absence of international best practices to show how to balance tax and financial goals while supporting new forms of trade and commerce. It’s one of the issues being discussed at the WTO e-commerce negotiations, where countries are sharing best practices around the use of a value-added tax (VAT) or a goods and services tax (GST) to ensure all players pay the same taxes.

E-commerce and digital trade are not major parts of Jordan’s trade policy agenda, but the country has made some relevant commitments. For example, the 2001 U.S.-Jordan Free Trade Agreement (FTA) was one of the first bilateral trade agreements to include e-commerce provisions—although the provisions were non-binding, non-enforceable, and largely hortatory.¹¹² Article 7 of the agreement highlighted that both countries recognized the important role played by e-commerce, enacting unnecessary barriers to digital products, and that they’d make all relevant e-commerce laws and regulations publicly available.¹¹³ The FTA also referred to the U.S.-Jordan Joint Statement on Electronic Commerce, which outlines a set of shared principles around the countries’ respective approaches to e-commerce, including on issues related to privacy, taxation, security, and other issues.¹¹⁴ In addition, Jordan has made commitments on providing “paperless trade,” which facilitates e-commerce trade, in its trade agreements with Canada and Singapore.¹¹⁵

Importantly, Jordan made the commitment to refrain from enacting customs duties on imports of digital products as part of its FTA with the United States. This is a key issue that is covered by the WTO Electronic Transmission Moratorium. The moratorium, adopted in the WTO’s Second Ministerial Conference in 1998, represents a commitment by member states to withhold imposing

customs duties on electronic transmissions. The suspension has been renewed in every WTO Ministerial Conference since its declaration.¹¹⁶ Electronic transmissions, by definition, cover the transmission of goods and services through the Internet (i.e., music, films, software, video games, e-books, etc.). The moratorium was placed with the explicit intention of continuing dialogue by WTO member states on how, and if, digital trade can be effectively subject to tariffs. This is a difficult regulatory objective—as online purchases of digital products can be difficult to track considering weak state capacity in developing countries—but with a huge tariff revenue potential.¹¹⁷

Unfortunately, Jordan is not participating in ecommerce negotiations at the WTO to talk about this and other key issues and common challenges. These talks came as a response to the exponential rise of e-commerce globally, and since de facto global e-commerce regulation is decentralized at the national level. Jordan would benefit from participating in talks as the goal seeks to “result in a multilateral legal framework that consumers and businesses, especially smaller ones, could rely on to make it easier and safer to buy, sell and do business online.”¹¹⁸

Italy

By: Stefano da Empoli, President, and Michele Masulli, Research Fellow, I-Com

Italy has one of the largest economies in the world, is a G7 and G20 member, and is one of the founding EU countries. Given its prominence, however, data suggests that the country is lagging behind in e-commerce, digital trade, and technology integration.

The Italian E-commerce Gap with Other EU Countries

In 2010, only 4 percent of Italian enterprises had received online orders. Over the last eight years, that figure grew to 10 percent (+1 percent from 2010–2014, +5 percent from 2015–2018). (See Figure 9.) Italy is well below the European average for enterprises receiving online orders: In 2010, the European average was 13 percent; by 2018 this grew to 17 percent. Additionally, Italy's performance, compared with similar European countries over the same period—France (12 percent to 16 percent), Spain (12 percent to 19 percent), the United Kingdom (14 percent to 20 percent), and Germany (22 percent to 20 percent)—also reflects this disparity. (See Figure 10.) Sadly, this does not fully represent the severity of the Italian-European imbalance. When comparing Italy with the e-commerce leaders in Europe—Norway (34 percent to 28 percent), Ireland (21 percent to 31 percent), and Denmark (25 percent to 32 percent)—Italy's dismal result is well-noted.¹¹⁹

Figure 9: Italian E-commerce Sales

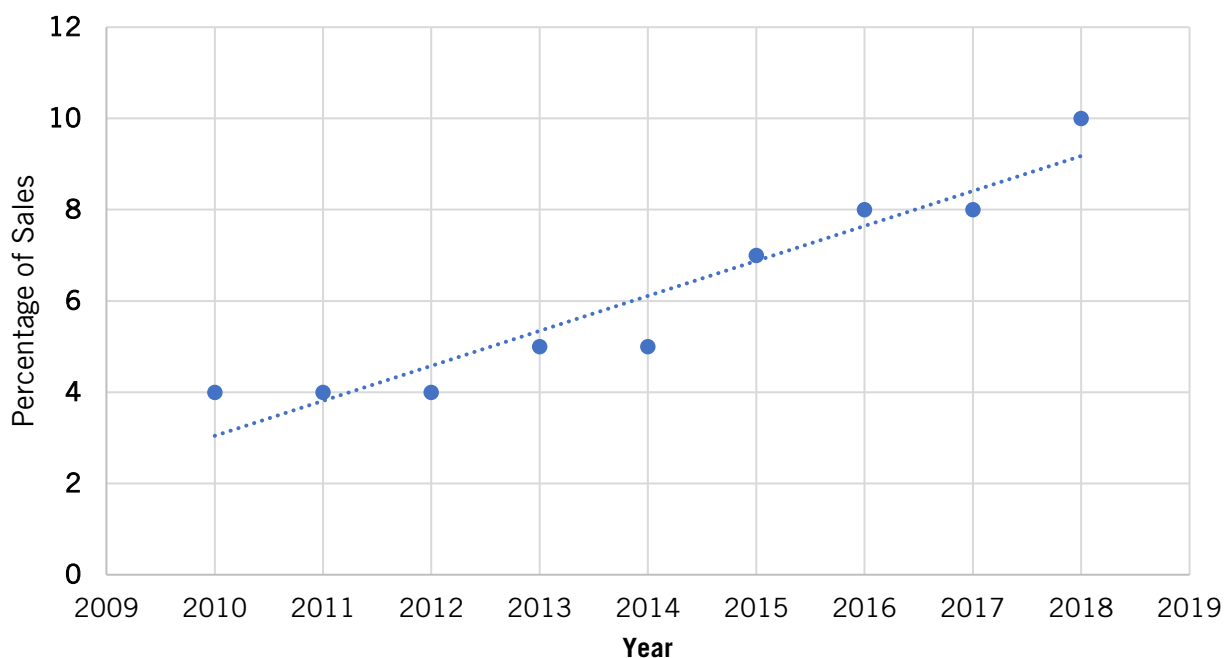
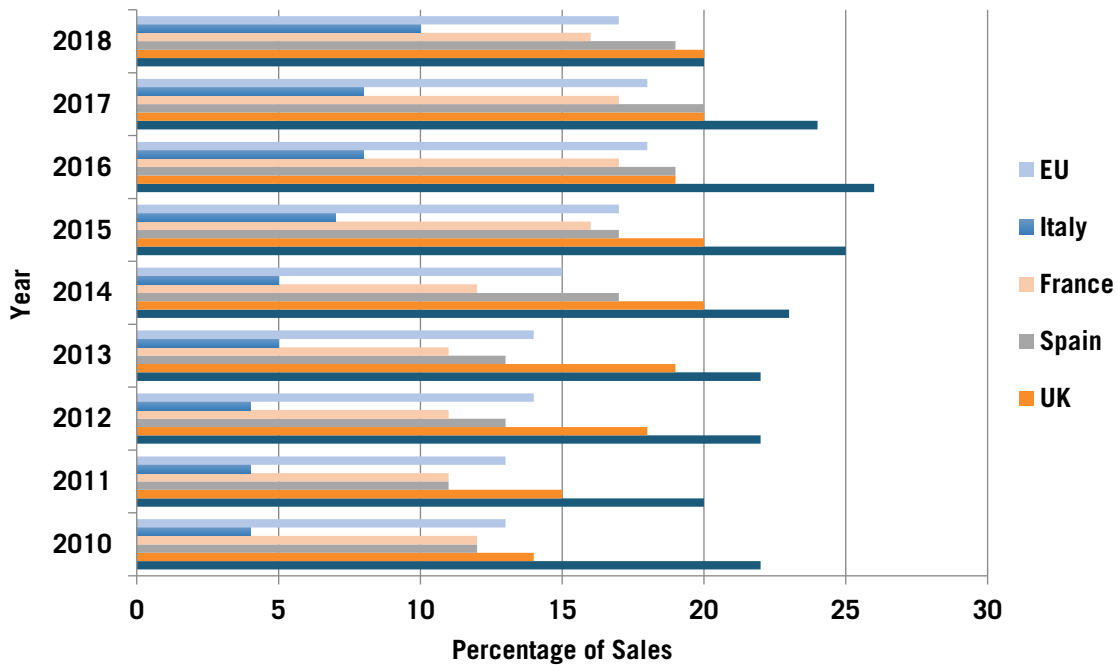


Figure 10: E-commerce Sales, Select European Nations



Italy's low levels of e-commerce and digital trade activity can be attributed to many factors, one of which is the fact that Italy has some of the lowest levels of Internet participation in Europe. Based on 2018 data, 77 percent of Italian individuals use the Internet, while the European average stands at 87 percent. Although Internet participation is rising, the digitization rates among Italian enterprises are quite low, with most SMEs still not embracing the Internet. Specifically, due to high levels of credit-card fraud, low trust in political systems, limited broadband activities, and the restrictive refund policies of Italian merchants, e-commerce remains less developed throughout the peninsula.¹²⁰

Between 2016 and 2018, the Italian export of consumer goods through digital channels increased by 37 percent, from €7.5 billion (\$8.8 billion) to €10.3 billion (\$12.1 billion). However, the percentage of online exports is still limited, comprising just 7 percent of the total exports of consumer goods and 2 percent of the export total. Assuming that Italy increases its export quota through e-commerce to the level of the United Kingdom (one of the most-advanced European countries in enterprise e-commerce use) and that the strengthening of online channels leads to a net increase in exports, we estimate that Italian exports would grow by 1.8 percent, that is, by €8.3 billion (\$9.7 billion) in a year. Even with a more-cautious estimate (a substitution effect equal to one-third), the impact would still be quite significant (+€5.5 billion—or \$6.4 billion—that is, +1.2 percent in export growth).

Legislative Measures: In the Right Direction But Still Not Enough to Change the Course

In 2013, the Italian parliament passed Law No. 145, which included provisions that fostered the digitalization and connectivity of SMEs, allowing them access to non-repayable loans through vouchers not exceeding €10,000 (\$11,779). These loans are for the purchasing of software, hardware, or services that enable the improvement of business efficiency, resulting in further development of e-commerce, broadband, ultra-wide connectivity, and qualified training in the field of ICT.⁶ The law, an unexpected success, calls for modifications and an additional €2 million (\$2.3 million) to support the use of e-commerce tools by SMEs.¹²¹

The Italian Ministry of Economic Development has also created Industria 4.0 (later renamed Impresa 4.0), a strategy aiming to achieve industrial change by promoting investments in innovation, technology, and skills development. The initiative was launched in February 2017 and will last until 2020, yet projections indicate that the plan will systematically alter the country well after the project's deadline. The government has allocated €18 billion (\$21.2 billion) to the target audience of entrepreneurs and companies of all sizes. Impresa 4.0 seeks to promote the implementation of innovative technologies, transforming companies digitally and helping them adapt, eventually increasing their competitiveness. Additionally, it plans to develop skills through digital innovation hubs, supportive education programs, and vocational training in various technology fields.

In addition to legislative strategies, trade deals have been initiated among e-commerce sites promoting the sale of products by Italian SMEs. In March 2019, the Italian government signed about 30 deals with the Chinese government, making Italy the first G7 member to join the Belt and Road Initiative. These trade deals included 10 Italian companies, as well as other ministries and public bodies, initially valued at €2.5 billion (\$2.9 billion) with a potential value of €20 billion (\$23.5 billion). One of the deals, signed by the Italian Trade Agency (ICE is its acronym in Italian) and China's e-commerce group Suning, was aimed specifically at boosting Made-in-Italy exports to China.¹²² Alibaba has also announced that it will allow companies from Italy and Spain to sell products on its platform AliExpress. This comes after Amazon had created a page dedicated to Made-in-Italy products launched in 2019 with a similar goal of promoting Denominazione di Origine Protetta (DOP)—meaning Protected Designation of Origin—and Indicazione Geografica Protetta (IGP)—meaning Protected Geographical Indication products.

An Interesting Case Study: Amazon's Made-in-Italy Program

In May 2019, Amazon started a program, “Made-in-Italy,” which is active for 18 months, focusing on selling Italian goods worldwide, while protecting Italian product authenticity. The Amazon initiative was set up with ICE support. The Italian products covered by the “Made-in-Italy” program are available in five Western markets, including France, Germany, Spain, the United Kingdom, and the United States. However, all listed Italian products are available for purchase wherever the Amazon marketplace operates. The “Made-in-Italy” arrangement has seen Italian companies and products rising by 30 percent since 2017, with 750 companies and more than 94,000 products, 45 percent being sold as exports (another 600 companies are expected to sign up in coming months). Based on how the “Made-in-Italy” online shopping window performs, Amazon estimates that exports will reach €1 billion (\$1.1 billion) by 2021, possibly as soon as 2020.¹²³

To become an Amazon “Made-in-Italy” vendor, products must be completely made in Italy, as well as be compliant with the regulatory requirements regarding the use of the “Made-in-Italy” brand. Participation is completely free, with no additional charges for businesses listing their products on Amazon’s “Made-in-Italy” online shopping window. When customers access the “Made-in-Italy” homepage, they have the option to browse goods based on selected regions (Calabria, Campania, Piedmont, Sardinia, Sicily, or Tuscany) or by product category (kitchen & cellar, home & furniture, clothes & accessories, or beauty). The most popular products being sold on the virtual shopping window are reported to be pasta, balsamic vinegar, olive oil, parmigiano reggiano cheese, and amaro liquor. That is considerable news being that Italy’s best-selling sectors online include transport and storage (66 percent), tourism (57 percent), and manufacturing (25 percent).¹²⁴ Therefore, it implies a diversification and integration of e-commerce in Italy, hopefully sparking more Italian SMEs to sell online, adding to higher exports and an increase in GDP.

Policy Recommendations

Given Italy’s uncertain economic situation over the last few years, e-commerce can lead to more jobs and turnover in a country that needs to speed up its growth. However, this scenario is dependent on the assumption that digital trade and e-commerce will remain tariff-free. If tariffs are to be placed on products bought online, it could seriously hinder the country’s ability to move forward and be an active member in the fourth industrial revolution.

Another important area of concern is taxation. The French government has passed a new Digital Services Tax (DST), highlighting the issue of how digitally delivered services are taxed. The Italian government plans to apply a similar tax from 2020. Unilateral and non-coordinated measures are likely to increase costs for companies selling on marketplaces and reduce incentives for e-commerce and, especially, Italian SMEs’ exports. Italy needs to urgently work with other EU member states and main partners in OECD and G20, starting with the United States, to update and revise international tax codes to respond to the tech-industrial revolution.

At the same time, many limits to cross-border e-commerce within the EU come from the far-from-completed DSM. As a result, both European consumers and companies are denied the full benefits of an integrated market. The EU should address the current barriers separating different national markets and preventing Europe from achieving the economies of scale of other countries and areas (i.e., the United States and China). Non-harmonized rules across the EU represent an important obstacle, especially for SMEs lacking human and financial resources, to comply with the different regulatory regimes.

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Mexico

By: Carolina Agurto, Fundación IDEA

E-commerce represents a growing trend in Mexican markets and all around the world due to its multiple benefits: lower costs and prices for consumers, encouragement of innovation, competition among commercial brands, and friendliness to entrepreneurship.¹²⁵ The structure of the digital market is disruptive to traditional business, and represents new opportunities of income and venture capital in developing economies. In Latin America, the Internet has opened opportunities for the region's economies to become more productive and drive inclusive growth.¹²⁶ Latin American countries can expand trade in services, increase exports and export diversification, and streamline trade and supply chains.

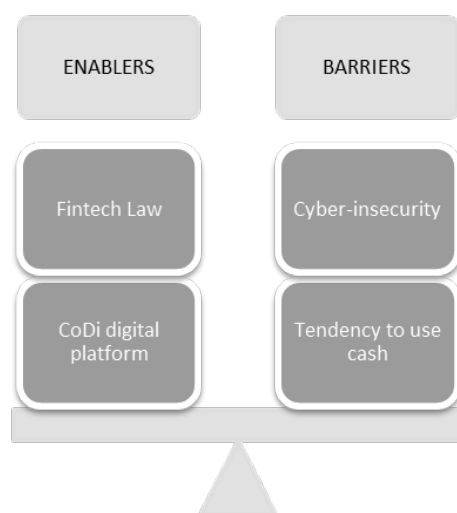
Mexico has seen a fast-growing digital market over the last few years, thus improving ICT adoption for users. The aggregated value of digital trade increased exponentially between 2013 and 2017, from 3 percent to 4.6 percent of GDP.¹²⁷ The Internet Association.mx estimated that e-commerce in Mexico rose by 28 percent in 2016, 20.1 percent in 2017, and 18 percent in 2018.¹²⁸

The proper development of the digital market in Mexico depends on private and public agents' ability to efficiently exploit opportunities for growth, while addressing some key risks and concerns. New discussions about e-commerce focus on market regulation, eyeing consumers' trust and enabling businesses to offer their disruptive services on its platforms.

This fast-evolving sector has not only lured numerous innovative businesses but has also driven the attention of tech-savvy consumers. Nevertheless, some skepticism lies on the sustainability and reliability of these new platforms. The majority of the Mexican population remains unbanked and relies heavily on cash to buy products and services. This certainly represents an important challenge for the e-commerce sector, where certain businesses—such as Oxxo or Amazon—adapt their digital platforms to the economy's reality by including cash payment options. Besides, while many consumers are reluctant to provide their credit cards' personal information, others still question the reliability of the systems.¹²⁹

Mexican authorities have addressed some of these concerns by implementing new regulations and robust online purchasing systems. These positive reforms clearly serve as enablers for e-commerce in Mexico, attracting more businesses on both sides of the market. Two main examples are (1) the Fintech Law, which will regulate online financial services and make financial institutions accountable; and (2) the Digital Payment Platform (CoDi, is its acronym in Spanish), provided by Mexico's Central Bank, facilitating electronic payments while ensuring consumers' information is protected. As Mexican e-commerce expands, local authorities and businesses will have to adapt to a new and demanding sector through innovation. (See Figure 11.)

Figure 11: Main Enablers and Barriers for E-commerce and Digital Markets In Mexico



E-commerce Breakthrough in Mexican Sectors and Businesses

E-commerce has positively impacted various economic sectors in Mexico. There was significant growth in retail, travel, and online services sales in 2018.¹³⁰ The revenue of the e-commerce market was projected to reach \$9.4 billion in 2019, and expected to achieve 7.9 percent growth rate between 2019 and 2023. This growth would result in a market volume of \$12.7 billion by 2023.¹³¹

Box 1: Mexico's E-commerce Consumer Profile

The AMVO's Online Sales 2019 Mexico Study serves as a helpful guide for businesses to get to know the online consumer's profile.

Through the analysis of 1,513 interviews, the study found that consumers are becoming more demanding about the quality of online-acquired products and services.¹³² This suggests a growing trend among Mexican consumers in the usage of digital platforms to make daily transactions. The study also indicates that more than one-third of online shoppers (38 percent) acquire an online product or service every week.

The profitability of the Mexican market has attracted local and international businesses that have become more competitive and accessible to a larger portion of the population. As cellular and Internet subscriptions increase, consumers and businesses benefit more from cheap and easy-to-access digital platforms, such as streaming services. Online shopping has become a more-daily transaction; the Internet Association.mx reported in its last Electronic Trade study (2018) that the top commodities acquired were transport (60 percent share), followed by digital services (49 percent) and travel transactions (37 percent).¹³³

Consolidation of Amazon in Mexico

The positive feedback and profitability of this approach in the Mexican market has caught the eye of Amazon, currently the most important e-commerce business in the United States. Amazon has taken advantage of the growing e-commerce in Mexico and has helped develop its foundations and

boost its growth. It has helped create jobs and attract foreign investment, and the confidence it has set in the country indicates that e-commerce is reliable and sure to grow in the future.

Amazon formally launched in Mexico in 2015 and became the biggest Internet retailer in the market by 2017.¹³⁴ Amazon has seen exponential growth since the retail titan's first incurrence in the Mexican market; to this day there are three warehouses operating outside Mexico City, including the biggest one in Latin America, located in Tepotzotlán. In 2018, there were talks of opening a fourth warehouse in Querétaro, in central Mexico, as part of their expansion plan.¹³⁵ This has been an important development for the big-brand digital market, as Amazon has positioned itself above two other big competitors: MercadoLibre and Walmart.

The growing competition in the Mexican digital market has brought new features and services that consumers can enjoy today. Amazon and its main competitor, MercadoLibre, race through innovation to become the e-commerce business leader in the country's market. While both platforms offer technology, clothing, and other types of goods, MercadoLibre has been limited to the range of services it offers, as it applies only to the Latin American countries where it is present. Amazon has also allowed consumers to buy and sell products in Canada and the United States. This feature increases the number of goods and brands Mexican consumers can purchase. It has also made other products and services available, such as Amazon Basics, Amazon Cash, and Amazon Prime.¹³⁶ Such innovations have given the corporation a competitive edge in Mexico, thus setting the bar of innovation and competitive standards for local businesses.

Mexican Start-Ups: A Story of Success

Mexican entrepreneurship has seen e-commerce as an opportunity to create and invest in new businesses. As digital commerce grows in the country, there has been an increase in the number of new apps and digital platforms from businesses that offer new and specialized services. These products have become more sophisticated and offer a large array of features to satisfy the average online user's needs.

Among the most important start-ups in the Mexican market are Konfío and Kavak.

Konfío is a fintech that offers microcredits to entrepreneurs and small businesses. It was founded in 2013 and has obtained investments from Goldman Sachs and Victory Park Capital. The firm provides accessible financing for those who want to set up a business in Mexico. It is one of the Mexican firms that has attracted the most investment in the country.¹³⁷ It currently stands as one of the largest fintech companies in Latin America in terms of investment received.

The first Mexican unicorn, Kavak, is a digital platform that serves as an online market for used cars.¹³⁸ Users can buy and sell used cars through a safe portal that offers certain benefits and features that other platforms do not. These benefits include three months of mechanical and electrical warranty over the sold product, seven-day return guarantee, and a home delivery service. The firm has diversified the used car market and has become a safe alternative to buy used cars. It raised approximately \$15 million in 2019 and currently has 250 collaborators.¹³⁹ The firm has demonstrated the ambition to grow and expand its market since its release in 2016.

Adaptation Tides for Local Convenience Stores

Most businesses in Mexico offer electronic payments via credit/debit cards or electronic wallet, and local convenience stores have facilitated these transactions. There has been an important openness in the digital market to those who do not have direct access to it via convenience stores. An important case study, due to its value in the Mexican market, is the Mexican chain of convenience stores Oxxo. It is the third-most valued brand in Mexico and has enabled digital trade transactions in its stores.

With 17,999 stores in Mexico, users can pay for a variety of services and online transactions. Taxes, public services, telephone bills, and purchases in over 1,000 online stores can be paid in an Oxxo.¹⁴⁰ In 2019, the chain launched a new app, along with the Mexican technology company Conekta, called Oxxopay, which enables the unbanked population to pay for online goods and services. It simultaneously offers businesses more efficient payment methods.¹⁴¹

The app has been launched as a pilot for future development, which will include a delivery service and the integration of Amazon into the catalog of businesses consumers can buy from.

Mexico's Trade and Economic Policy

Mexico has become very active in reforming international agreements and national policy in favor of the development of e-commerce. From the inclusion of a tax on digital transactions to the approval of a Fintech Law to regulate financial-technological institutions, Mexico has set in motion reforms to establish legal and economic foundations for e-commerce.

Domestic Landscape

National policy regarding e-commerce has been led by a social approach. In particular, policies regarding financial inclusion using technology represent one of the paths recent Mexican federal administrations have taken to foment economic development.

Mexico's Fintech Law

In order to establish market rules for new businesses entering in digital trade and current ones adapting to the new technologies, the Mexican federal government has set forward regulatory policies. The Fintech Law, promulgated in March 2018, is a regulation at the forefront of enabling e-commerce, alongside similar legislation implemented by countries such as Australia, the Netherlands, Hong Kong, and Singapore.¹⁴²

The Fintech Law plans to regulate the organization, operations, and functions of financial tech institutions and authorized start-ups, as well as provide protection to users that solicit their services.¹⁴³ With this law, Mexican authorities aim to boost competition, incentivize national and international investment, avoid malpractice from businesses, guarantee users' safety, and increase their confidence in the Mexican financial system. The Law will also help include more people in the formal economy and reduce the amount of cash in circulation.

Taxation of Mexico's Digital Market

Mexico has also taken a step forward regarding e-commerce regulation through the taxation of digital services in 2020. Mexican fiscal authorities have seen the potential of raising tax revenue by expanding the existing value aggregated tax and income tax on digital services.¹⁴⁴ The

Secretariat of Finance and Public Credit estimated that the revenue for the taxation of digital platforms such as Uber, Airbnb, and Cabify will be around \$4.3 million pesos (\$5.1 million dollars) in 2020.¹⁴⁵ Other countries such as Australia, Sweden, and the United Kingdom have taken similar measures to increase fiscal revenue, and have a major control on the digital services provided.

Box 2: Reform of E-commerce Taxation in Mexico

In accordance with the Action Plan on Base Erosion and Profit Shifting set by OECD, for the integration of international fiscal policies, Mexico has presented *The Initiative of Income Tax Law Coming from Digital Services*. Presented in the Chamber of Deputies on September 6, 2018, the initiative stipulates the main reforms to the current taxation system regarding e-commerce.

These establish the expansion of the taxable base to digital services via income tax (ISR is the acronym in Spanish) and value aggregated tax (IVA is the acronym in Spanish). National and international businesses that offer digital services would have to pay a 3 percent tax from their gross income generated from them. The tax would be applicable to three types of services:

1. Services that provide a digital advertising interface directed to users of said interface. Some services apply to companies such as Google, Facebook Twitter, Instagram, or Spotify, among others.
2. Services that provide a digital “multifaceted” interface. This applies to services that allow users to locate other users and interact with them, which facilitates the delivery of goods and services from businesses. Some examples would be MercadoLibre, Uber, and Airbnb.
3. Services that transmit data recollected from users. The data would be generated from the activities developed by the users on the digital interfaces. This would apply to the services provided by most e-commerce businesses, such as Google, Facebook, Netflix, Spotify, or Amazon.

Exempt services include instant messaging, email, and payments. This means PayPal and Mercado Pago would not have to pay said tax.

Mexican Central Bank’s CoDi

The Mexican Central Bank has also implemented a new digital payment system. CoDi is a digital platform that allows users to make efficient, secure, and real-time online payments.¹⁴⁶ The initiative aims to make online payments more accessible, reduce the usage of cash in the population, and ensure the safety of consumers’ information.¹⁴⁷ The system implemented by the Mexican Central Bank reinforces the security of personal information through QR and Near Field Communication (NFC) coding. The platform is intended to bring confidence to consumers and businesses in the usage of online payments.

Regional Landscape

North America has recently experienced important changes in international trade policy. One of the most relevant ones is the inclusion of a digital commerce chapter in the USMCA.

E-renovations to the USMCA

In Chapter 19 of the USMCA, all three partners agreed to incorporate new disciplines regarding digital commerce to create an environment of innovation in digital content, products, and services of high quality.¹⁴⁸ The agreement establishes a list of rules and obligations all countries must comply with, therefore ensuring a more-developed legal and commercial base for the Mexican digital market. Among the principal dispositions of the chapter are the protection of personal information, strengthening of cybersecurity cooperation, compliance with international standards, and facilitation of information flows between countries to make commercial operations more dynamic and avoid the imposition of trade barriers.

Mexico will benefit from the agreement because it will help the country develop a local digital economy. Small and medium-sized companies could seize important business opportunities that would help them grow in local and international markets. Furthermore, it will set a baseline of rules that guarantee legal certainty and the protection of personal information and stipulate the legal framework for electronic transactions. The agreement will also help Mexico innovate more, and become more competitive and attractive to foreign investment.

Multilateral Landscape

Mexico is actively participating in the new discussions regarding e-commerce and digital trade that are having an impact on modern trade policy. Particularly, the CPTPP and the European Union-Mexico Trade Agreement have been recently under revision to either include or modify chapters regarding digital commerce. The effect in the short term will be the issuance of new domestic rules in order to comply with the treaties.

Box 3: Common Features Among Mexico's Multilateral Treaties

Comprehensive and Progressive Trans-Pacific Partnership Agreement (CPTPP)

Chapter 14 of the TPP is about electronic commerce, and the stipulated rules are helping cement an international digital market. Besides the elimination of tariffs, personal information protection is another relevant feature of this chapter.¹⁴⁹

European Union-Mexico Trade Agreement

The European Union-Mexico Trade Agreement was modernized in 2018. Among the main changes introduced in the Agreement include its chapter on Digital Trade, which recognizes the importance of promoting consumer confidence in digital trade and avoiding trade barriers.¹⁵⁰

Conclusion

The digital market could be an important growth niche if it continues to develop at the current rate and if trade policy is used to boost its potential. It could turn Mexican exports and imports into an important digital trade hub in the region, invigorating connectivity between North America, Latin America, East Asia, and Europe. Therefore, Mexico could benefit from the inclusion of new rules on e-commerce and digital trade, currently under negotiation at the WTO.

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Nigeria

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Nigeria is emerging as a dynamic and growing digital economy that stands to benefit from the new rules for e-commerce and digital trade currently under negotiation at the WTO. E-commerce—defined largely by the buying/selling of physical goods via digital platforms—has changed how people shop and has spurred small package trade across borders. Related is digital trade—the cross-border transfer of products, services, and data over the Internet—which is transforming a much-broader range of global commerce beyond just retail. Using the Internet, businesses and consumers can easily and cheaply access digital goods and services: music, software, cloud storage, data analytics services, and the like.

The data flows and digital products and services that underpin both e-commerce and digital trade flow (nearly) seamlessly across borders—unless governments enact artificial barriers that discriminate against foreign tech firms and their products. Nigeria has a vested interest in enacting new rules that prohibit these barriers to modern trade, while supporting efforts to implement the key legal and technical building blocks for a stronger digital economy.

Obviously, digital free trade is not a shortcut to digital development (in the form of improved ICT infrastructure, skills, and policy settings). In terms of digital adoption, the challenge is particularly acute for SMEs.¹⁵¹ The development challenge facing Nigeria is considerable, so it is no surprise that the country has many areas to improve upon with regard to the digital economy. The UNCTAD's B2C E-commerce Index ranks Nigeria 75th in the world and 2nd in Africa (behind Mauritius).¹⁵² The full benefits of e-commerce and digital trade will only be realized when Internet connectivity becomes ubiquitous and people and firms have the digital skills, with governments providing the right policy frameworks, to help them succeed in the digital economy. However, new digital trade rules are one way in which the Internet and digital technologies can help Nigeria close the digital development gap in improving the productivity and innovation of local firms. Digital trade opens up new economic opportunities (by lowering the costs of trade) and new and better ways of doing things (via innovation in developing, providing, or accessing new digital services).¹⁵³ Digital trade policies that protect data flows also support data innovation—the use of data to create value—which has become increasingly important to economic growth, competitiveness, scientific discovery, and social progress as new technologies and methods have made it easier to collect, store, analyze, share, and use information.¹⁵⁴

For example, new digital trade and e-commerce rules provide the legal certainty and market access that create the economies of scale for firms to grow, which also helps attract associated investment, skills, and know-how. One reinforces the other, creating a virtuous cycle. For example, leading venture capitalists are increasingly funding start-ups in Nigeria and providing advice and connections to help them grow at home and in the region, especially in the fintech and health sectors.¹⁵⁵ Foreign firms and investment also help improve digital skills. In January 2017, Google launched its Android Learning Community (ALC) in Nigeria to use online training and other tools as part of a program to identify, train, and certify over 15,000 developers. In 2018, the initiative evolved into Google and ALC announcing thousands of scholarships to aspiring developers in Nigeria, Kenya, and South Africa.¹⁵⁶ Earlier this year, Microsoft opened its first Africa Development Centers in Kenya and Nigeria, which will serve as engineering hubs to develop innovative products

for local and global markets. Microsoft aims to recruit 100 full-time engineers by the end of the year—expanding to 500 across the two countries by 2023.¹⁵⁷

No doubt, Nigeria's digital economy faces considerable obstacles in transforming itself into a leader in the global digital economy. Improving ICT connectivity and infrastructure for the power grid represents key challenges. Deloitte estimated that expanding Internet access in Africa to match levels in high-income countries could enhance productivity by as much as 25 percent, generating \$2.2 trillion in gross domestic product and more than 140 million new jobs.¹⁵⁸ Mobile penetration in Nigeria was 49 percent in 2018, which lags behind other large emerging economies, such as 53 percent in India and 73 percent in Indonesia.¹⁵⁹ Currently, 44 percent of mobile subscribers in Nigeria are using 3G technology and only 4 percent are using 4G technology, as compared with over 18 percent 4G penetration in South Africa and 16 percent in Angola.¹⁶⁰ However, the situation is improving: In 2017, the continent saw the largest global increase in Internet users—20 percent.¹⁶¹

Nigeria's digital economy and trade potential is already evident despite these challenges.¹⁶² Nigeria is home to 55 active tech hubs, accelerators, and incubators (ranking it second, just behind South Africa, which has 59).¹⁶³ Data analytics firms such as Terragon, Mines, and Paga are using big data and proprietary artificial intelligence systems as part of new services that are allowing them to expand across the region and the globe.¹⁶⁴ Similarly, 54gene is aiming to build and use the first and largest collection of genetics data in Africa.¹⁶⁵ Supported by improving network coverage and more advanced connection speeds, e-commerce and m-commerce (mobile commerce) offerings are helping consumers leapfrog formal retailing in Nigeria and the region. While hard to assess, the e-commerce sector in Nigeria is estimated to be worth over \$10 billion and is growing rapidly.¹⁶⁶ There is plenty of room for growth given that the informal retailing sector is still huge, and rural customers can be better served with e-commerce.¹⁶⁷ McKinsey & Company projected consumer spending on the continent to reach \$2.1 trillion by 2025, with African e-commerce accounting for up to 10 percent of retail sales, and Nigerian consumers being one of the main drivers.¹⁶⁸ Similarly, Nigeria is part of the mobile money revolution, which is growing five times faster in Africa than in any other region.¹⁶⁹ Nigeria has already seen considerable success in establishing start-up ecosystem—as demonstrated by the start-up success of Yabacon Valley—and attracting significant amounts of venture capital, but it still needs to address various issues related to supporting policy frameworks for it to become the start-up center of Africa.¹⁷⁰

The considerable market potential from a young and growing population, rapid urbanization, rising incomes, and widespread technology adoption has led to Nigeria becoming home to some of the biggest e-commerce and digital firms in Africa. Jumia and Konga are two clear examples, as they both continue to raise funds, form new partnerships, enter new sectors, and invest in new operations across the region.¹⁷¹ Indicative of their ability to leapfrog traditional approaches and overcome connectivity issues, according to Jumia's CEO, Juliet Anammah, around 71 percent of the company's Nigerian users access the marketplace portal via their mobile phones.¹⁷² Similarly, Konga relies on WhatsApp to allow merchants to contact potential buyers to arrange returns and manage failed deliveries.¹⁷³ Demonstrating how local firms can succeed while contextual factors improve, Konga and Jumia benefit and expand upon Nigeria's improving postal delivery system. Nigerian Post is one of the best in Africa, having aimed to reach 90 percent home delivery by 2020.¹⁷⁴ In the same vein, Jumia holds over 500 vehicles that deliver to customers in bigger cities. Meanwhile, Konga has a fleet of over 200 vehicles and pick-up points and distribution centers

throughout the country.¹⁷⁵ Founded in Lagos in 2014, Jiji.ng is the highest rated app in Nigerian e-commerce, with more than six million unique active users and 50,000 professional sellers listing more than one million items. Jiji aims to build the largest Africa-based classifieds business, recently acquiring its main competitor to expand its reach into Kenya, Ghana, Uganda, and Tanzania.¹⁷⁶

Nigerian firms are already using e-commerce and digital trade to connect Nigeria to the world. OnycheK —based in New York but founded by a Nigerian entrepreneur—makes it possible for African luxury fashion brands (all made in Africa) to reach a growing global customer base.¹⁷⁷ Others in Africa are also seizing the opportunity, and in doing so, creating openings for Nigerian firms. Called the “Etsy of Africa,” Afrikrea—based in the Ivory Coast—is a marketplace to discover, buy, and sell African-inspired fashion, art, and handicraft items.¹⁷⁸ While Afrikrea’s figures show that 20 percent of its sellers are from Africa, many of its U.S.-registered sellers produce and live in Nigeria.¹⁷⁹ In under two years, Afrikrea has developed a marketplace that receives more than 230,000 visits per month on average—70 percent via mobile—for its 40,000-plus items, where it earned over \$2.25 million in revenue from customers making over 50,000 purchases from over 78 countries.¹⁸⁰ At the regional level, earlier this year, MallforAfrica and DHL Africa eShop partnered to combine their respective abilities to bring buyers and sellers together from Africa and the world while navigating local fulfillment, payments, and delivery challenges.¹⁸¹

Building Scale Through Regional and Global Digital Trade Initiatives

Nigerian policymakers need to recognize that there are multiple entry points into the global digital economy and that digital free trade policies support national efforts to find and build a space for Nigerian firms.¹⁸² Small, outward-focused economies such as Estonia, Singapore, Sweden, and others have demonstrated this in transforming themselves into global technology leaders. Meanwhile, Chile, Colombia, Costa Rica, Kenya, Malaysia, Mexico, and others have similarly taken an outward-looking approach in embracing the positive impact technology has in supporting the digital transformation of their economies. At the heart of this opportunity is the fact that technology allows firms to access international markets with small “asset footprints,” leading to the emergence of so-called micro-multinationals and the born-global firms that quickly attain global reach with minimal cross-border investment.¹⁸³

Nigeria needs to use digital trade policy to build the economies of scale that are critical to success in the digital economy. One reason China and the United States have had considerable success in the digital economy is that their large internal markets allow local firms to achieve economies of scale. Recognizing this, the European Union is now striving to internally harmonize its own laws and regulations, even while inadvertently erecting new barriers. Nigeria is in competition with these countries and regions that are making data-driven innovation and digital development and adoption a centerpiece of their policies. However, the potential for Nigerian firms to build economies of scale is at risk as a growing number of countries are enacting unnecessary, unfair, and overly restrictive behind-the-border regulations that favor local firms and block or discriminate against foreign firms and their digital products. A recent Accenture report captures this trend and assesses the impact of what it calls “digital fragmentation” (defined as the rise in restrictions on the free flow of data, information technology products, services, and talent across country borders). It finds that 74 percent of 402 chief information officers and chief technology officers surveyed expect to

exit a geographic market, delay market-entry plans, or abandon them altogether in the next three years as a result of increased barriers to globalization.¹⁸⁴

This includes rules affecting the ability of data to flow across borders, which is at risk as countries force firms to store data within their country's borders (a policy known as data localization), especially as it relates to personal and financial data.¹⁸⁵ Nigeria itself needs to remove barriers at home in the form of local data storage requirements—which are reportedly unenforced, yet still damaging in the signal they send and the uncertainty they create.¹⁸⁶ At the heart of many of these data localization policies lies the reflexive, yet mistaken, belief among some policymakers that data is more private and secure when stored within a country's borders. In most instances, though, data localization mandates do not increase data security or commercial privacy.¹⁸⁷ It is a simple fact that the activities Nigeria's e-commerce and digital firms are engaged in across borders cannot take place without collecting and sending personal data—such as names, addresses, billing information, etc.—across borders. Instead, Nigeria needs to support efforts to build bridges between different data governance systems so that legal responsibilities associated with data—such as for privacy—remain with the firm, regardless of where the data is transferred and stored. In support of this, different countries' respective data privacy regulators should put in place agreements to cooperate on joint investigations. Rules that support data flows and interoperable legal systems would allow firms in Nigeria to fully realize the benefits of cloud storage in providing services as easily and cheaply as possible across different markets, while allowing regulators to ensure laws are enforced.

Similarly, Nigerian policymakers need to ensure that the country's neighbors in Africa or elsewhere around the world are prohibited from discriminating between physical and digital products, which represents one way countries can keep out more competitive digital products from abroad. Another potential threat is that some countries—such as South Africa—want to overturn a long-held WTO commitment to not enact duties on imports of digital products. Allowing this would create the scenario wherein every Nigerian song or movie or piece of software that is digitally delivered to a customer in another country would face a tariff, thereby putting it at a price disadvantage against local products. All these issues are not properly covered or aren't strong enough under current WTO rules, so Nigeria needs to play its role in putting new rules in place to ensure Nigerian firms have the opportunity to compete in an open, fair, and rules-based digital economy.

Thankfully, Nigerian policymakers have already taken several steps in the right direction. Besides Benin, Nigeria is the only other country from Africa to join 70 other members that seek to work toward new e-commerce and digital trade rules at WTO.¹⁸⁸ This builds on its membership in the WTO group of developing countries—the so called “friends of e-commerce for development”—that share a common understanding of the positive impact of e-commerce and its versatility to create sustainable economic opportunities for all.¹⁸⁹ In joining WTO talks, Nigeria defied its neighbors in the African Group (which includes Egypt, South Africa, and 41 other countries) that oppose negotiations because they want to enact duties on digital products and other protectionist barriers as part of “digital industrial development,” which is akin to the tried-and-failed use of tariffs and infant industry policies of the last century.¹⁹⁰

Nigeria's chief trade negotiator, Chiedu Osakwe, gets to the heart of why Nigeria is right to engage: “The emergence of e-commerce is the product of fast-paced changes in technology that have

presented Africa with the gift of opportunity. Maximizing its potential will depend on how the continent responds. Not engaging would be a mistake.”¹⁹¹ This is consistent with the perspective of WTO Director General Roberto Azevedo, who noted in the context of negotiations that countries have only two options: to participate and to help make the rules, or not participate and take the rules as given.¹⁹² In contrast to this embrace of openness and competition, the Africa Group’s preference for protectionism would lead to isolation and stagnation.

Nigeria is right to break from the Africa Group as nothing that is under consideration stops it from implementing the policies which would actually help the country and like-minded counterparts grow a dynamic, competitive, and innovative digital economy. As ITIF outlined in “The False Appeal of Data Nationalism: Why the Value of Data Comes From How It’s Used, Not Where It’s Stored,” this includes cutting tariffs and taxes on ICT products to make them more affordable (thus spurring adoption), investing in ICT infrastructure and digital skills training education, developing a local entrepreneurial ecosystem, enacting a framework that maximizes the supply of reusable data, and developing institutional capacity for regulating digital issues such as privacy and cybersecurity.¹⁹³

Building on multilateral efforts, Nigeria should also look to build scale in its home region. While Nigeria’s recent role in regional trade initiatives has not always been smooth, Nigeria could look to build upon the region’s recent success in concluding the African Continental Free Trade Area (AfCFTA). UNCTAD estimates that reducing intra-African tariffs under AfCFTA “could bring \$3.6 billion in welfare gains to the continent through a boost in production and cheaper goods.”¹⁹⁴ The closest AfCFTA gets to digital issues is its aim to progressively eliminate barriers to intra-African trade in services.¹⁹⁵ An ambitious digital chapter would go a long way toward building a Digital Single Market for Africa, akin to similar initiatives between Pacific Alliance countries (Chile, Mexico, Peru, and Colombia) in Latin America and the 11 Asia-Pacific countries in the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (but not the closed and heavily regulated European Union). In a similar way, Nigeria should look to build interoperable connections with its neighbors for payment systems, cross-border data flows, data privacy, digital IDs, cybersecurity, electronic signatures, and consumer protection. An African digital trade initiative would obviously not be easy, given how hard it has been to address traditional barriers to trade in AfCFTA, but there may be an opportunity for progress given that these barriers and technologies are relatively new and countries have not yet enacted many of the (worst) barriers that some countries in other regions have done, such as India in South Asia, Indonesia in South East Asia, and China in East Asia.

To Support Digital Trade, Nigeria Should Pursue a Holistic Approach to Digital Development

Efforts to set new global rules on e-commerce and digital trade should be part of a holistic digital development strategy. At the domestic level, Nigeria is similar to many developing countries since it needs assistance with digital literacy and skills, financial services, data governance, digital IDs, and other legal policies and efforts to improve essential infrastructure such as wireless, broadband, and electricity. As it addresses these policy issues, Nigeria should keep an eye on the regional and global level to ensure it enacts interoperable data privacy and protection regimes, and harmonizes technical issues where possible, such as problems around payments and electronic signatures.

Nigeria should tap into the growing range of international initiatives and resources that are available to help the country and its neighbors in their digital development.

Efforts to encourage Nigeria and its neighbors to implement the building blocks for a stronger and more integrated digital economy are already underway, but progress is slow and varied.¹⁹⁶ Adopted in 2014, the African Union Convention on Cyber Security and Personal Data Protection was designed to reinforce member state's legislation as well as regional cyberlaw harmonization initiatives by requiring members to establish legal, policy, and regulatory measures to promote cybersecurity, governance, electronic transaction, and personal data protection, and control cybercrime.¹⁹⁷ However, Nigeria—along with many other states—has yet to sign and ratify the agreement. Only 14 states have signed on, with 5 of them ratifying the agreement.¹⁹⁸ Furthermore, the Convention's regional monitoring mechanism has not yet been formally established.¹⁹⁹ The United Nations Economic Commission for Africa is also working with the African Union (AU) Commission on a digital identity platform for Africa.²⁰⁰ Nigeria should fulfil these AU requirements and take up opportunities under the AU to build regional engagement and cooperation.

At the sub-region level, the Economic Community of West African States (ECOWAS, which includes Nigeria and 14 other countries) has started the process (also with uneven progress) of harmonizing relevant digital laws, such as on electronic transactions, personal data, and cybercrime. As a member of ECOWAS, Nigeria is bound by its Supplementary Act on Personal Data Protection Within ECOWAS (2010), which is the only binding data protection agreement in force in Africa. On January 25, 2019, Nigeria's National Information Technology Development Agency issued the Nigeria Data Protection Regulation 2019, which made it the 10th ECOWAS member to comply with this obligation.²⁰¹ This is welcome progress that fills one of the gaps highlighted in the 2015 joint UNCTAD and ECOWAS review of the region's efforts to harmonize e-commerce legislation. This review also shows that Nigeria and other members had made progress on some issues, but that significant gaps remain and members need to step up regional cooperation and seek out additional capacity-building assistance.²⁰² Related to these efforts to have members enact harmonized e-transaction laws is work by the Afreximbank, which only recently launched the Pan-African Payment and Settlement Platform (PAPSP). PAPSP is the first continent-wide digital payment system focused on facilitating payments for goods and services in intra-African trade in African currencies, with a goal of helping lower transaction costs and facilitating cross-border trade.²⁰³

Nigeria should seek out international assistance programs to complement these domestic and regional initiatives. For example, the World Bank aims to invest \$25 billion in Africa's digital transformation to digitally connect every individual, business, and government in Africa by 2030. In April 2018, the World Bank also launched the Digital Economy for Africa (DE4A) initiative, with a main tool being a Digital Economy Country Assessment (DECA), which will form the basis for the World Bank's work on digital economy issues. There is also UNCTAD's Division on Technology and Logistics, which carries out useful analytical reports and provides training, such as through the E-commerce and Law Reform and TrainForTrade programs.²⁰⁴ The International Trade Centre also provides useful resources and training for policymakers regarding digital policy issues.²⁰⁵ Nigeria should use these initiatives to map out what it needs help with, what resources are available, and which entities are best to provide it.

Conclusion

As Nigerian trade negotiator Mr. Osakwe put it, “The hurdles impeding e-commerce and the digital economy in Africa are largely offline, not online.”²⁰⁶ But without new rules, they could become more common online, especially if the perspectives of Nigeria’s neighbors in the Africa Group prevail with regard to digital trade. While Nigeria still needs to improve foundational elements for a successful digital economy, that should not prevent it from also being involved in efforts at the WTO to implement the digital trade policies that support the growth of its digital businesses. Just as digital technologies allow forward-looking businesses to recast Africa’s challenges as an opportunity to innovate, so too should policymakers look to new digital trade rules at the WTO as the necessary overlay to assist them.

Poland

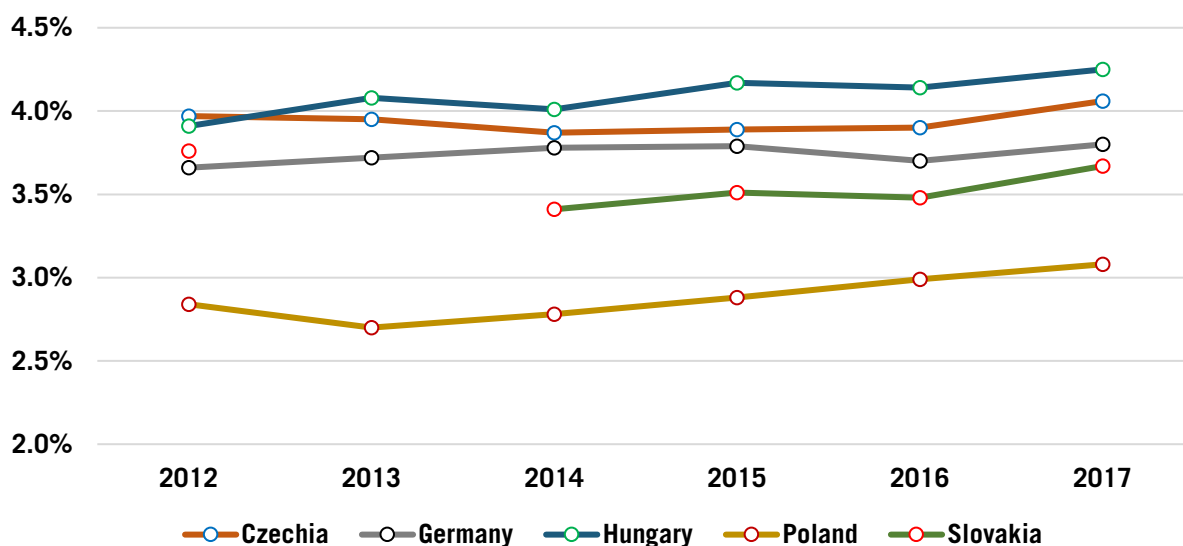
By: Krzysztof Głowacki and Karolina Zubel, Center for Social and Economic Research

Poland has many of the key components in place that together have led to its emergence as a dynamic and growing digital economy. It has already shown enormous potential in not only growing its market share within the European Union but also developing sectors which have proven overwhelmingly successful in the global digital economy, including the video game industry. An ambitious outcome at the WTO would benefit Poland's ability to engage in cross-border digital trade and e-commerce. But likewise, failure to achieve an agreement would likely lead to more barriers that would prevent its firms from benefiting from the economies of scale that come from an open, rules-based global digital economy.

The Polish ICT sector generated €32.9 billion (\$36.5 billion) in production value in 2016, the sixth-largest amount in the European Union.²⁰⁷ In the same year, the sector accounted for 6.1 percent of GDP and 4.6 percent of employment. When narrowed down to services, Polish ICT companies accounted for 3.1 percent of GDP in 2017, which was a moderate share—only larger than in Austria, Greece, and Lithuania and at par with Italy and Portugal.²⁰⁸ Although lower than in most countries in the region—including the other three Visegrad countries of Czechia, Hungary, and Slovakia—said share has been growing consistently from 2014 to 2017. (See Figure 12.)

Owing to the strong network of technical universities and the high numbers of graduates, the sector has traditionally benefited from a low-cost, well-qualified domestic workforce. However, these human capital reserves seem to be running out in line with the general tightening of the labor market, with unemployment at 3.3 percent in Q3 2019, and below 5 percent since 2017.²⁰⁹ The engineering workforce has become scarce, and wage pressures are high. The country still benefits from large amounts of EU funds. Among others, these are used to co-finance the digitization of services and processes in public administration, thus driving domestic demand for IT solutions.

Figure 12: Share of ICT Services in GDP, 2012–2017²¹⁰



Box 4: Poland's Gaming Industry

The story of Poland's gaming industry outlines why policymakers need to be aware of global digital free trade. Critical to the success of Polish gaming firms is that they took advantage of digital technologies and local skills to develop products for global markets rather than simply focusing on the much smaller domestic market. These firms and their workers stand to benefit from a new global framework that protects digital trade and its key ingredients, such as the free flow of data, the protection of intellectual property, and the prohibition of duties on imports of digital products.

Gaming is the fastest-growing entertainment industry worldwide.²¹¹ It has inherently ICT-based foundations, international customer base, and distribution channels that have quickly turned from primarily physical to 91 percent digital.²¹² Poland can boast a large piece of the growing pie as it relates to global gaming. Poland's video-game industry is one of the biggest in Europe. The country is home to several-hundred studios, some of which are small and independent, and others which are gigantic and command global markets.²¹³

One of the giants is CD Projekt, the creator of the *Witcher* series, which has sold over 40 million copies.²¹⁴ The brand name it generated became symbolic of Poland's high-tech sector, leading former Polish Prime Minister Donald Tusk to present a collector's edition copy of *Witcher 2* to U.S. President Barack Obama during worldwide the latter's 2011 visit to Poland.²¹⁵ The company's recent release, *Cyberpunk 2077*, famously promoted by Keanu Reeves, is touted as one of the most-anticipated games in the industry. And CD Projekt is currently the fourth-largest company on the Warsaw Stock Exchange's main index, with a market capitalization of PLN 25.7 billion, or \$6.6 billion.²¹⁶ Apart from developing video games, Polish companies also experiment with digital distribution channels. Again, CD Projekt leads the ranks, and its GOG.com platform has carved out a niche for itself, specializing in older games in a market otherwise dominated by Steam.

Poland's emergence as a gaming industry hub has largely been by way of international expansion enabled by free access with digital products to export markets, with around 100 hundred games exported per year.²¹⁷ Expanding beyond the limits of the domestic market worth \$489 million in 2017 and tapping into foreign markets has made it possible for Polish developers to avail themselves of economies of scale and see considerable returns on investment while bringing to customers around the world products that they quite clearly enjoy.²¹⁸

Poland's gaming sector stands to benefit from an ambitious new WTO agreement on e-commerce, but likewise would be adversely affected if countries were allowed to enact duties on imports of digital video games and enact unnecessary restrictions on data flows that would make video game streaming or transfers impossible or more expensive and complicated. It's therefore important that Poland and the EU push for the types of ambitious rules that would ensure Poland's gaming sector will continue to access global markets in order to develop and grow further.

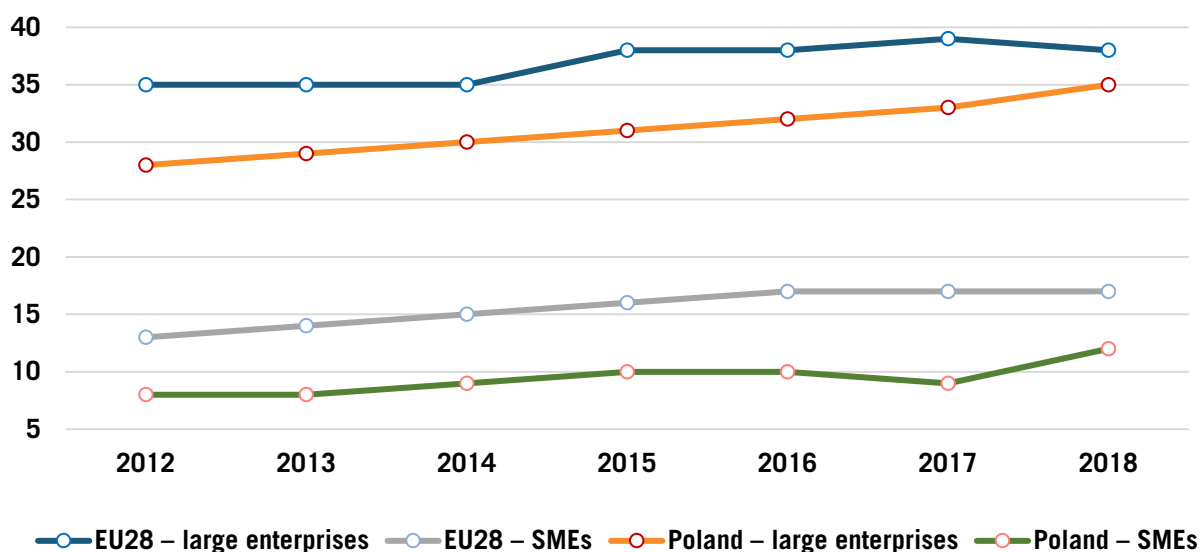
E-commerce

The number of Polish Internet users is estimated at 27.5 million, corresponding to 83.4 percent of the population aged 7 to 74.²¹⁹ The country ranked 9th out of 86 in the E-commerce Foundation's 2019 Internet Inclusivity Ranking.²²⁰ An estimated 62 percent of Internet users purchased goods or services online domestically as of 2019, showing an upward trend from 56 percent in 2018 and 54 percent in 2017. An estimated 26 percent of Internet users also bought

goods or services online using international websites as of 2019.²²¹ Moreover, almost every second a Polish Internet user (45 percent) makes an m-transaction—a transaction via a mobile device—and transactions concluded via social media are gaining in prevalence.²²² Overall, the value of e-commerce sales reached PLN 50 billion (\$12.9 billion) in 2019.²²³ According to e-commerce market specialists, this upward trend is unlikely to change, and the value of the Polish e-commerce market may reach up to PLN 80 billion (\$20.6 billion) in the next few years, which is related to the low share of online sales in general retail trade, at 4.3 percent.²²⁴

On the supply side, 35 percent of large and 12 percent of small and medium Polish enterprises generated at least 1 percent of their turnover from online sales in 2018. (See Figure 13.) Polish enterprises still lag behind average EU enterprises (38 percent and 17 percent, respectively), although by margins that are not large, and recently dwindling. Polish e-commerce vendors are typically MSMEs and employ between 5 and 9 (47 percent) or 10 and 49 sales specialists (32 percent) each.²²⁵ Around 70 percent of e-commerce companies have been active in the Polish market for over 10 years, while only 8 percent of them started operating less than five years ago.²²⁶ An average of 21 e-stores are created in Poland every day, and their total number exceeds 30,000.²²⁷

Figure 13: Share of Enterprises Selling Online (≥1 Percent of Turnover), 2012–2018 (%)²²⁸



E-commerce and digital trade in Poland are supported by efforts to harmonize cross-sectoral digitization policies, especially within the EU’s DSM. Electronic contracts are eligible, and those with secure electronic signatures are equivalent to paper contracts, as laid down by the Civil Code. Products can be sold in digital form under the condition that the transaction signed online is documented in a durable form (i.e., by attaching a receipt to the goods or sending it to the consumer electronically), as laid down in the Act on the Digital Delivery of Services.²²⁹ Moreover, the EU Regulation 910/2014 on electronic identification and trust services for electronic transactions in the internal market (the eIDAS Regulation), in place since September 2018, ensures that e-signatures from other EU countries are also recognized.

Other factors facilitating the development of e-commerce in Poland are related to the country's strong transport and logistics sectors, driven by Poland's intensive international trade. In fact, Poland, which is deeply integrated within the value chains of Western European industries, has been named among Europe's leading traders in the "World Trade Statistical Review 2019," with an average 4 percent annual growth in exports in the period 2008–2018.²³⁰ These credentials have attracted companies such as America's Amazon and German's Zalando, which have located their logistics centers in Poland. Zalando has also invested in its first international fulfillment center dedicated to 15 million Zalando Lounge members from 13 European countries earlier this year.²³¹ Meanwhile, Amazon operates seven logistics hubs, the latest of which, inaugurated in November 2019, is the first regional e-commerce facility created to ensure smooth product flow with partner companies and Amazon's other logistics hubs.²³² According to the company (Amazon, 2019), 7,200 Polish sellers were supplying their local and international customers using Amazon's operations in Poland in early 2019.

Finally, the factor that has been indirectly but considerably supporting digital trade expansion is the recently introduced national Sunday trade ban, which prohibits most Sunday retail business, except on the last Sunday of each month. The policy, despite numerous protests from both customers and business owners, will most likely be extended to all Sundays from 2020.²³³

Box 5: Packhelp Uses E-commerce to Create More E-commerce²³⁴

Packhelp is an online platform that allows companies, mostly SMEs, to design and order their own custom-branded packaging without engaging any printing houses—and using an online creator tool instead. The small volume of orders (from 30 pieces) benefits micro-vendors with an e-commerce presence only, as the traditional packaging industry mostly targets big sellers. Since its launch in 2015, Packhelp has been recognized as among the top Polish start-ups by many observers in the industry, including Siliconrepublic.com (2018), Seedtable (2019), and *Business Insider* (2019). The company has also been awarded multiple prizes—among others, it became the Polish winner in the creative category of the 2018 Startup Europe Awards.

Earlier this year, Packhelp raised €8.8 million (\$10.3 billion) in its third financing round, helping the company to gain recognition outside Poland. Currently, Packhelp exports its custom-branded packaging to over 30 European countries, and plans further expansion to the United States and Asia. According to Nicholas Stocks, general partner at White Star Capital, a VC fund, Packhelp's founders use cutting-edge technologies to make personalized packaging accessible for everyone, rather than just medium and big business. It is the technology, unique sales process, superior customer service, and constant expansion of their range that helps them conquer new markets. Packhelp represents an interesting case of a virtuous circle: It benefits from opportunities offered by e-commerce while at the same time helping other e-commerce micro-vendors and SMEs to grow.

Digital Single Market

As an EU member state, Poland is part of the DSM—a European Commission strategy aiming to minimize barriers in cross-border access to digital goods and services for EU citizens and companies.²³⁵ Under the DSM, e-commerce has been identified as a priority subsector, in which the online and offline spheres connect. The DSM has been in place since 2015, and one of its

most important accomplishments has been the ban on unjustified geo-blocking introduced in Regulation 2018/302. As research has shown, one of the most serious obstacles preventing buyers from online shopping is the practice of geographical blocking, or geo-blocking.²³⁶ Before the regulation's entry into force in 2018, geo-blocking restricted or denied access to websites or applications for consumers from countries other than those predefined by the platform. Frequently, the mechanism automatically redirected the user to a version of the website modified to the country of their location where prices for the same product were different or promotional offers varied, creating unequal access to the market. The regulation stipulates that the seller cannot differentiate the general conditions of access to goods or services available in e-stores due to the customer's nationality, place of residence, or place of business. This means, among other things, that airlines, car rental companies, hotel chains, and ticket distributors for cultural events can no longer use automatic redirections from the e-store home page to the websites of local distributors which impose higher prices than on the home page. It is also no longer possible to differentiate the prices of goods or services based on the computer's IP, GPS, or card number used for the payment.

Two other recent accomplishments of the DSM have been the strengthening of the transparency of cross-border parcel delivery prices (Regulation 2018/644) and facilitation of access to audiovisual services. While the former regulation does not necessarily lower the costs of parcels sent to other EU countries, it requires delivery companies to provide pricing information that will allow national regulatory authorities to exert better regulatory oversight of the providers and their sub-contractors, which is expected to improve price transparency and make it easier to assess certain high cross-border tariffs. The latter Regulation (2017/1128) enables European citizens to use existing online subscriptions in other EU member states.

In 2021, extended rules on online consumer protection will enter into force, enabling quick removal of websites and profiles on which scams have been identified.²³⁷ Due to the planned Directive, EU citizens will also be able to request specific personal information from Internet service providers or banks in order to spot potential frauds and scams.

Beyond the European Union

In multilateral trade negotiations, Poland is represented by relevant EU bodies. EU citizens encounter considerable difficulties when shopping online outside the EU, and their trust in such offers is significantly lower compared with those within the EU.²³⁸ In December 2017, the EU became one of the signatories of the WTO's Joint Statement on Electronic Commerce, which addresses obstacles that SMEs face when trying to develop their international trade capacities.²³⁹

The statement launched a series of negotiations related to e-commerce and digital trade. In January 2019, 76 WTO partners launched talks in Davos on e-commerce specifically.²⁴⁰ As a follow-up, on April 26, 2019, the EU released a proposal on new WTO rules for e-commerce, opting for the provision of data protection and privacy rights.²⁴¹ The European Commission's decision to publish its trade proposals, as well as information and reports about negotiating rounds, has been welcomed by The European Consumer Organization, which urges other WTO countries to follow this best practice and to meaningfully engage with civil society.²⁴²

While negotiations stalled in 2016, Poland—through the EU—was also involved in pursuing new services and digital trade rules as part of the works on Trade in Services Agreement (TiSA), which

involved the EU and another 22 members of the WTO. Nevertheless, demands similar to those expressed in the TiSA negotiations are reflected in the EU's approach to current trade negotiations with other third parties. For example, the draft document entitled "Horizontal provisions for cross-border data flows and for personal data protection (in EU trade and investment agreements)" focuses largely on protection as well as cooperation on regulatory issues with regard to digital trade, all in line with the previously mentioned pan-European plans on tackling the issue of online privacy from 2021 onward.²⁴³

Conclusion

The ICT sector, digital economy, and e-commerce, while still less developed than in the EU on average, are expanding at a fast pace in Poland. Poland is well-placed to grow both its role in small-package-based e-commerce, as well as purely digital trade. The country has become a logistics hub for multinational e-commerce companies, serving customers in Poland as well as in Central and Eastern Europe and Western Europe, in particular Germany and Scandinavia. The country is also developing its own competitive advantages in high-tech digital sectors such as the gaming industry, while start-ups complement the ecosystem with original solutions.

To ensure future growth, access of consumers and business to goods, services, and data that are digital or acquired digitally via e-commerce must be further strengthened. This includes shaping the right environment for digital networks and services to flourish—for example, rolling out fast broadband (5G) to enable quicker and safer transactions—ensuring that countries will not enact duties on imports of digital products, and a friendly regulatory environment that ensures data can move freely across borders (while maintaining data protection and privacy).

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South Africa

By: Chris Hattingh, Project Manager, Free Market Foundation

Introduction and Overview

The COVID-19 global pandemic represents an unprecedented existential threat to traditional methods of trade. While global supply chains can operate to some lesser extent—shipping and some airfreight still have taken place, provided the necessary health precautions were adopted—the immediate, harshest impact has been felt further down the supply chain. Traditional physical retailers and restaurants were closed—either by choice or government-imposed lockdowns—almost overnight.

Small and medium-sized businesses, the vulnerable backbones of many economies, have seen their cashflow cease suddenly and often without warning.²⁴⁴ Observers should not expect many of those to survive, especially not in what one would consider developing economies, such as South Africa.

In a press release from April 8, 2020, the WTO estimated that world merchandise trade was set to drop “between 13%–32% this year.”²⁴⁵ The novel coronavirus has disrupted all trade manners, from the macro- right down to the micro-level. The WTO points to those sectors with “complex value chains, particularly electronics and automotive products” as having been most affected by the government-enforced lockdowns.

Walking down to the little corner shop on one’s street is considered by many a massive health risk. In most countries, governments have erred on the side of severely restricting people’s economic freedom.

In the same WTO press release from April, and in many opinion and research pieces that share the same sentiment, the unprecedented negative effects of the COVID-19 pandemic have been likened to the 2008–2009 global financial crisis. Yet there is something different this time around: E-commerce is much more developed, and indeed entrenched, around the world. E-commerce sales hit \$25.6 trillion globally in 2018, up 8 percent from 2017.²⁴⁶ Many African countries stand out as having massive potential for e-commercial growth, especially as mobile data penetration is increasing across the continent.²⁴⁷ Businesses that already had some digital integration element in their daily operations maintained a modicum of activity. In the same vein, trading businesses with e-platforms retained contact with customers, allowing them to intermittently fulfil needs.

In the midst of the economic devastation caused by the lockdowns, it is vital to appreciate that the disruption to travel and physical trade represents a massive opportunity for e-commerce and digital trade. If there is some measure of recovery and a return to economic freedom, countries would be well-served by allowing and encouraging as much e-commerce as possible.

The COVID-19 outbreak upended many things societies took for granted before 2020. We are now in the world of Zoom and Microsoft Teams meetings, regular “personal” e-contact over instant messaging services, face masks, and being sprayed down with sanitizer in every shop we enter. The latter without mentioning the general sense of uncertainty regarding how business and trade will be conducted in the years to come. E-commerce represents at least some sense of the known, of the comfortable, of the reliable. Those individuals and businesses that adapt most quickly to

the exponential opportunities of e-commerce and ensure they retain the human touch of empathy with their customer relations will lead the way in growth and employment creation in the coming years.

In hopes that the governments and citizens of the world recognize the great potential that e-commerce represents, the focus here will be on South Africa. African countries have, to a greater or lesser extent, embraced the benefits of increased trade. If the correct policies and freedoms are adopted now, countries such as South Africa could lead the way in aiding in unlocking the economic potential of the African people.²⁴⁸

E-commerce and Digital Trade in South Africa

As COVID-19 spread, governments such as South Africa restricted most physical business activity and modes of travel. Measures included banning intra-provincial travel, suspending international flights, and halting taxi services. The lockdown imposed on March 27, 2020, plunged the country's already-decrepit economy further into the mire: "For the whole of 2019, the South African economy grew by only 0.2 percent (in real terms). In 2018, it saw a growth of 0.8 percent."²⁴⁹ The South African Treasury expects the country's GDP to contract by 7.2 percent in 2020. One of the major flaws in most forecasting models is that they cannot account for ripple effects. Humans' choices are unpredictable at the best of times, and modern economies are so intricate and interwoven that even the smallest negative impact can cause widespread damage.

The e-commerce market in South Africa is worth approximately \$3 billion, second only to Nigeria on the African continent.²⁵⁰ In terms of the amount of online spending on the continent, South Africa is way out in front; according to Quartz Africa, "South African shoppers spent an average of \$109 on online purchases on consumer goods—the most among African countries."²⁵¹ And given the massive impact of COVID-19 on all aspects of our lives, more people will use e-commerce platforms in the future. On the continued growth of e-commerce in South Africa, *WEE Tracker* also indicates that the sector grew 20 percent over the last few years. In terms of the number of people using e-commerce, there are currently more than 20 million users in South Africa. Finally, on spending using e-commerce platforms, by the end of 2021, the average per South African spend is expected to be nearly \$190.

In September 2019, professional services company Accenture pointed out that according to a Visa survey, 63 percent of South Africans said they prefer to make purchases at a mall, and Urban Studies found that 76 percent of South Africans visit a mall at least once a week."²⁵² Thus, while more people engage in e-commerce in other parts of the world than we do in South Africa, there is assuredly an opportunity for retailers and other businesses to move toward digital. Most South Africans who would prefer going to the mall now simply engage digitally with retailers. And if they enjoy those interactions with various e-platforms now, those habits will be formed into the future.

According to a Nielsen study of 10 markets in Africa and the Middle East, 29 percent of those surveyed said they are doing more shopping online now than before COVID-19. Further, 65 percent of those surveyed said they are visiting brick-and-mortar stores less.²⁵³ Nielsen representative Gareth Paterson commented that markets could expect a permanent uplift in online shopping numbers even after the pandemic has ended since many behaviors adopted during the COVID-19 period are likely to translate into more permanent long-term habits.²⁵⁴

While the desire is always to see rapid growth, the upward trend looks more gradual in South African e-commerce. If e-commerce businesses invest now and gain consumer trust, they'll see substantial growth over a more extended period in South Africa.

While it was difficult for governments to predict the number of COVID-19-related deaths, it has become clear over time that the policy of effectively locking down the world economy has, and will, for many decades to come have profoundly detrimental economic consequences. This is most assuredly the case here in South Africa.

Through the early levels of the lockdown—South Africa has five, with level 5 being the strictest—the sale of goods such as tobacco and alcohol was prohibited. The same criteria ran for e-commerce. By the third week of May, the government finally allowed e-commerce to resume—and even then, online retailers and other businesses, such as courier companies, had to conform with myriad regulations.

While other countries recognized the importance of allowing e-commerce to operate, South Africa chose the damaging route of prohibiting e-commerce. The Minister of Trade and Industry Ebrahim Patel cited “fairness” as the justification. Because physical shops had been prevented from operating, Patel argued, it would be “unfair” to allow e-commerce to operate.²⁵⁵ This kind of “lose-lose” thinking is endemic throughout the South African government, and strongly informs the spirit in which laws and regulations are formulated.

Takealot.com is South Africa’s largest online retailer—the Amazon of South Africa, if you like. Speaking to *TechCentral* in April this year, Takealot’s CEO Kim Reid said of the e-commerce ban:

It is incomprehensible that this country cannot see the economic value that online can deliver to South Africa in a time of need, the social value that it can deliver at this time. Everywhere in the world it’s open and doing exactly what it should be doing, which is facilitating social distancing.²⁵⁶

When one considers the interconnectedness of e-commerce, one starts to guess just how many lives and livelihoods can be affected when e-commerce is disrupted. There are many market players involved, from workers in factories, farmers, logistics managers, and their families to the people who program and maintain the final product e-platform on laptops and smartphones.²⁵⁷

Given the context of COVID-19, and *especially* in the context of an economy that had a pitiful 1 to 2 percent expected GDP growth rate before the lockdown, the banning of e-commerce makes even less sense. The possibility of trade and value creation was cut off to zero before it stood a chance. Amid this context, it makes sense when Reid said the government has been “short-sighted” by not allowing online shopping.

Add to Reid’s voice and reasoning that of Cas Coovadia, CEO of Business for South Africa. In May 2020, Coovadia told *CNBC Africa*, “Open up e-commerce now. Totally.” Coovadia pointed out that e-commerce companies are connected with all manner of other businesses, including courier services, and that allowing e-commerce to resume would also help other sectors of the economy.²⁵⁸

The potential e-commerce holds to boost economic growth in South Africa is massive. The wrong policy approach from government has delivered a great blow to the sector. But now we must learn the necessary lessons, and especially not repeat these mistakes in the future.

A robust embrace of e-commerce would aid both inter- and intranational trade in the Southern African region. What is meant by a “robust embrace”?

- Government to release broadband spectrum, to allow current players and new players in data provision to enter the mobile data market, increasing competition and lowering prices, enabling more South Africans to access e-commerce platforms.
- Explore a moratorium, until 2022, on tariffs on goods and services sold through e-commerce platforms.
- Provincial governments in South Africa to be encouraged to introduce tax incentives for e-commerce operations, and more digitally focused businesses, to set up physical “bases” or warehouses in cities in those provinces.
- South Africa should continue to support the moratorium on electronics customs duties at the WTO.

Conclusion

Perhaps the problem with clichés is that we become too used to them. But sometimes the phrase, “necessity is the mother of invention” rings true. Innovation often happens when people’s options in life become very narrow, and they must think of uniquely different ways to interact with each other.

Just one example of innovation during COVID-19 in South Africa, enabled through e-commerce, is HolaClub, a “click-and-collect” platform.²⁵⁹ Mongi Tshabala from data insights company Touchsides—which partnered with Heineken SA, Diageo, and Pernod Ricard to establish the platform—explained that the platform allows consumers to pre-order the alcoholic products they want, and even schedule when they want to collect their orders. This also prevents long queues from forming when people want to do their shopping.²⁶⁰

Further, the platform is geared toward aiding tavern owners in South Africa’s poor township areas, allowing them to maintain a level of activity while still adhering to health regulations. Here we see the perfect example of an e-commerce platform, designed with some of the local challenges in mind, implemented to aid that most valuable of human endeavors: trade.

It is quite remarkable that, even in the midst of an unprecedented global pandemic, there was still a sector of the modern economy that could operate if allowed to do so by governments. E-commerce can adapt and limit the physical contact between people like few other forms of trade—something people greatly value when they are concerned about being infected with a potentially deadly illness. In the ever-present interest of “future-proofing” for potential shocks in the future, it makes abundant sense to encourage the growth of e-commerce now, before the next world-shifting event happens. When the formerly simple option of brick-and-mortar stores is taken away from us, digital becomes the way to go.

The South African government adopted the wrong policy approach when it applied a hard, pervasive form of lockdown. When any sector of the economy is “frozen,” for any amount of time, the detrimental consequences compound over time, and the work to simply return to “normal” occupies more time and resources. When the world shut down many forms of physical trade, those countries that still allowed e-commerce and other forms of digital trade set themselves up for great success heading out of the pandemic.²⁶¹ The Department of Trade and Industry erred massively when it banned e-commerce during the initial months of the country’s lockdown, and the negative effects of that decision will be with South African businesses, entrepreneurs, and employees for many years to come.

United States

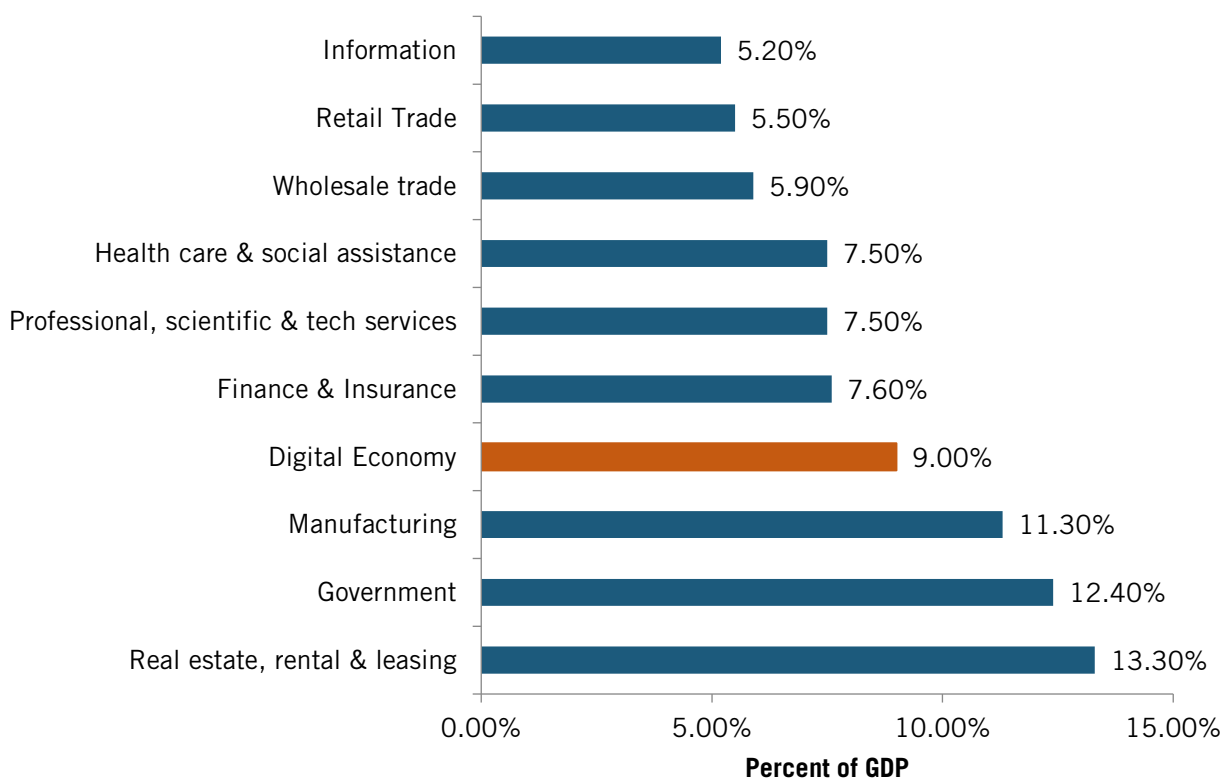
By: Yamel Sarquis and Stephen Ezell, Information Technology and Innovation Foundation

Far and wide, the coronavirus pandemic continues to upend every aspect of human life. When everyday activities such as attending school, commuting to work, or going grocery shopping are restricted, digital-enabled transactions pump blood into the economy and society. With a forced lockdown and no vaccine in near sight, electronic transmissions of data, information, goods, and services indisputably keep the world afloat. And as the crisis continues to unravel, the growing wave of e-transactions will inevitably accelerate the shift to a digitalized global economy.

The Digital Economy Footprint in the United States

The digital economy plays a crucial and expanding role in the United States. In 2018, it represented 9 percent of current-dollar GDP—that is \$1.85 trillion out of \$20.6 trillion.²⁶² The digital economy sector ranked fourth place among U.S. industries. (See Figure 14.)²⁶³

Figure 14: Top 10 U.S. Industries, per Share of Total GDP, 2018²⁶⁴



The gargantuan size of the U.S. digital economy is driven, in part, by the ICT sector. U.S. ICT investment—in hardware, communications equipment, and software—ranks historically high among OECD countries.²⁶⁵ This substantial funding has allowed the United States to be at the forefront of innovation, developing broadband infrastructure, increasing Internet penetration, and adopting emerging technologies—ultimately consolidating a robust digital ecosystem. Although federal R&D investments have scaled back, U.S. private companies are taking the helm.²⁶⁶ For

instance, Internet companies spent over \$64 billion on capital investments in 2019.²⁶⁷ The big five tech bulls—Amazon, Alphabet, Apple, Facebook, and Microsoft—are by far the most prominent investors in corporate America, spending almost \$200 billion a year.²⁶⁸

The ICT industry is an essential contributor to the burgeoning U.S. digital economy and feeds the domestic economy through three main avenues: (1) the production of cutting-edge technologies, (2) the growth of global digital supply chains, and (3) the innovation across other economic sectors.²⁶⁹ Firstly, rapidly-developing technologies, such as cloud computing, robotic automation, artificial intelligence, machine learning, the Internet of Things, and 5G technologies are being placed in the marketplace to benefit companies and citizens.²⁷⁰ For example, the U.S. manufacturing industry has successfully embraced digital transformation, improving efficiency, profit, and dynamism. “Smart Manufacturing” is rapidly transforming from just-in-time build to just-in-time data to determine production needs in real time.²⁷¹ As a result, digital services now account for 25 percent of manufacturing inputs.²⁷²

Secondly, global value chains are being reshaped by cross-border data flows and new technologies.²⁷³ Businesses rely on globally interconnected digital networks to conceive, design, manufacture, and distribute products and services. International electronic value chains, incentivized by a free flow of data and live information sharing, permit transactions to be conducted with ease, accessibility, and speed, and at competitive prices. For example, the U.S. semiconductor industry benefits from this positive trend as it transfers blueprints to semiconductor factories on an ongoing basis. Moreover, newer capabilities such as cloud-based technology offer untapped market access and unexpected benefits to the value chain. For instance, over 2 million third-party micro-enterprise sellers access new markets through Amazon Marketplace.²⁷⁴ In both situations, erecting barriers would disrupt value chains, harming big and small businesses alike.

Thirdly, the United States holds a robust innovation system. According to Fast Company’s ranking, 80 percent of leading innovative companies are based in the United States—with 40 percent stationed in California and Silicon Valley leading the start-up ecosystem pack.²⁷⁵ The country hosts most of the world’s top universities and research centers, has a system of federal agencies instigating innovation (i.e., the Defense Advanced Research Projects Agency), and continues to attract an array of entrepreneurs, innovators, and Science, Technology, Engineering, and Mathematics (STEM) students. Spending on R&D innovation has spurred labor productivity, integrated ICT networks, and stimulated the digital economy. Furthermore, the United States has robust IP protections that give innovators certainty when undertaking risky, costly, and challenging projects.²⁷⁶

As a result, digital transactions usher several benefits for the citizens of the United States. In 2018, the digital economy supported 8.8 million jobs, which accounted for 5.7 percent of total U.S. employment (154.7 million jobs).²⁷⁷ Focusing on the Internet sector, it created nearly 6 million direct jobs and 13 million indirect ones in 2019.²⁷⁸ Additionally, digital transactions turned more affordable. From 2005 to 2018, prices for digital economy goods and services decreased at an average annual rate of 0.5 percent.²⁷⁹ And when addressing labor productivity, the average GDP output per employee in the ICT and related industries was more than twice the average productivity of the total economy from 2006 to 2016.²⁸⁰

It is important to acknowledge and reap the fruits of the digital economy. Digital economy real value added grew at an average annual rate of 6.8 percent per year from 2006 to 2018, compared with 1.7 percent growth in the overall economy.²⁸¹

Scaling up to the Global Scene

Although hard to capture, recent studies value the global digital economy at \$11.5 trillion—or 15.5 percent of global GDP.²⁸² Business-to-business e-commerce makes up more than 86 percent of this total global e-commerce value.²⁸³

Similar to the U.S. case, global ICT services are burgeoning. In 2018, telecommunications, computer, and information services registered as the fastest-growing services sector in terms of global exports, increasing by 15 percent.²⁸⁴

Online access underpins digital trade. On a global scale, Internet usage stands at 53.6 percent, up by 38.6 percent since 2005.²⁸⁵ With an average growth of 10 percent every year, digital trade and e-commerce are up, ready, and flourishing. Moreover, the number of active mobile-broadband subscriptions per 100 inhabitants continues to grow strongly with an 18.4 percent year-on-year growth.²⁸⁶ Naturally, these figures reflect the volume flow of services, goods, people, finances, and data shared across the world.

The benefits are clear and thriving. Cross-border data flows and open digital trade connect companies—particularly MSMEs that struggle to access the international stage—with markets worldwide. SMEs gain access to features, including cloud services that compile and analyze information and use top-tier computing power and other technical tools. Meanwhile, consumers access data, information, services, and goods that would otherwise be deemed unimaginable. On the back end, digital technologies accelerate speed and enhance efficiency in the production and logistic processes while lowering the costs posed by protectionist barriers. A study found that logistic optimization technologies could reduce shipping and customs processing times by 16 to 28 percent, boosting overall trade by 6 to 11 percent by 2030.²⁸⁷

Given that SMEs employ between 60 and 70 percent of the workforce, digitalizing their services means maintaining—and even creating—more jobs.²⁸⁸ Recent reports showcase the Internet as a net creator of employment, with 2.6 jobs created for every job that may be displaced by Internet technologies; companies that use the Internet intensively effectively doubled the average number of jobs.²⁸⁹

Digital transactions are at an all-time high, underscoring the importance of globalization and interconnectedness. In this context, the coronavirus pandemic serves as a crude reminder to exert pressure over the importance of speeding up infrastructure, resources, and accessibility. Supporting grieving businesses and users suffering from the virus, particularly vulnerable populations located in underserved areas, has never been so relevant. Far from erecting barriers on trade and transactions, the international community should build bridges to enhance connectivity, economic stability, and survival.

Tumbling Barriers to Electronic Trade and Development

Since its enactment in 1998, the WTO's Declaration on Global Electronic Commerce has allowed digital economies to flourish around the globe. Developed and developing countries reap the

benefits brought by cross-border data flows and open commercial transactions. To gauge the impact, global e-commerce was worth \$28 trillion in 2018, increasing by 44 percent over the previous five years.²⁹⁰

Although the benefits are indisputable, some WTO member countries are considering withdrawing from the moratorium on customs duties on digital transmissions. Turning to digital protectionism, these small group of countries claim that the suspension keeps them from collecting a substantial volume of customs duties on digital transmissions.

Nevertheless, regulating cross-border data flows would harm companies as businesses would need to significantly increase compliance (i.e., data localization rules) and infrastructure costs (i.e., data-storage systems), regardless of the size or the geographic location of the business.²⁹¹ Since it is a two-way street, local businesses would also absorb the costs of having an integrated value chain, lowering export competitiveness, deterring entrepreneurs from finding digital solutions, innovating, and strengthening competition. Thus, countries will be less attractive in terms of investment and R&D. Furthermore, experts signal that this scenario will likely spark retaliatory measures from third countries. In the end, the costs would clearly outweigh the benefits, and states imposing tariffs would stand to lose.

Another argument sustains that it is technically unclear how governments could determine fair rules for collecting such customs duties on electronic transmissions.²⁹² It would be difficult to track given the existing integrated flows of supply chains. Determining what counts as a “digitizable good” is arbitrary and under debate. Moreover, electronic transmissions disassemble, travel through various jurisdictions, and reassemble before arriving at their destination.²⁹³

To sum it up, although attractive, imposing unilateral measures on digital trade would be fiscally counter-productive.²⁹⁴ Cross-border data flows and digital commerce offer limitless opportunities. They are a cornerstone of economic growth as they enable access to new markets, spark innovation and competition, reduce the costs of doing business, and create employment. Progressively, bilateral and regional trade agreements understand this at their core. To this end, they have enacted features that align with the spirit and substance of the moratorium.²⁹⁵ For example, the USMCA has successfully adapted its clauses to meet the digital trade challenges posed by the 21st century economy. (See Box 6.)

Box 6: The United States -Mexico-Canada Agreement (USMCA)²⁹⁶

Article 19.3: Customs Duties

1. No Party shall impose customs duties, fees, or other charges on or in connection with the importation or exportation of digital products transmitted electronically, between a person of one Party and a person of another Party.
2. For greater certainty, paragraph 1 does not preclude a Party from imposing internal taxes, fees, or other charges on a digital product transmitted electronically, provided that those taxes, fees, or charges are imposed in a manner consistent with this Agreement.

Recommendations

Truth is, digital trade barriers are detrimental for U.S. prosperity—they stifle innovation, threaten American jobs, preclude economic growth, and hurt key industries (i.e., manufacturing, automotive, semiconductors).

Looking ahead, particular attention should be granted to the following as it would unlock the full potential of digital trade in the United States:

- Making the WTO Moratorium a permanent feature of WTO members, granting certainty to businesses around the world.
- Consolidating U.S. role as a leader in non-physical outputs (i.e., service delivery, software, and computing), particularly since cross-border services are growing more than 60 percent faster than trade in goods, producing more economic value than traditional trade.²⁹⁷ This effort includes elevating the digital services capacities among developed and developing countries.
- Increasing domestic efforts in terms of innovation, including federal investment in R&D, and establishing a national innovation agency to guide efforts on digital trade and e-commerce.
- Building secure and safe technologies that incentivize consumer and government trust, including algorithms, privacy protections, and data-storage systems.

U.S. Conclusion

The WTO Moratorium enables custom-free flows of data, constricting a vast ethos of digital trade. The economic implications of COVID-19 serve as a vivid example of the benefits of e-transmissions. Nonetheless, it is also a call to action for governments and multilateral institutions to work toward facilitating a digital economy. Policymakers around the world cannot deny the rising role of digital transmissions in the everyday life of their constituents.

Conclusion

Around the world, countries keep benefiting from e-commerce and digital trade. Keeping a customs-free ethos drives domestic and transnational growth, fosters global integration, sparks innovation, narrows the digital divide, and creates employment opportunities. This is why GTIPA members support keeping the WTO moratorium on customs duties on electronic transmissions.

Moreover, COVID-19 serves as a vivid example of the crucial role of e-commerce and digital trade. Electronic transactions have become a key driver in keeping the global economy afloat. If yesterday's governments, businesses, and citizens had the option of conducting transactions offline, today it is a reality, a key for survival.

Keeping the free flow of digital transactions reinforces overall economic, social, and political stability. Across the spectrum, actors benefit from increased connectivity and expediency while saving on costs, resources, and bureaucratic procedures.

Online transactions help governments in various ways, including by expanding their net of services while improving time and efficiency, making information available to their constituents, reaching vulnerable communities, and modernizing governmental processes. On a wider perspective, electronic transactions also boost ICT infrastructure and the economic growth of countries. Recent studies estimate that digital commerce accounts for 15.5 percent of global GDP.²⁹⁸

Second, citizens gain access to a broader amount of goods and services at a fair price. Given the increased accessibility, firms compete for price and quality, thus benefiting consumers. It should also be noted that digital flows are how it's possible to connect the unconnected, enhancing inclusive growth.

Finally, businesses—particularly MSMEs—can access untapped markets worldwide, increasing their revenue and resiliency. Accessing and operating in foreign markets is vital for the survival of MSMEs and local entrepreneurial ecosystems. Electronic transactions also facilitate knowledge and data sharing, enabling seamless, digitally integrated global supply chains. Moreover, firms are incentivized to innovate, unlocking more investment resources in both tangible and intangible assets.

Digital economic activity drives economic growth and activates a win-win scenario that maximizes the welfare of big and small players alike. Ensuring electronic transaction flows fosters certainty and predictability for all—an Indian mother using an online payment platform to pay for her son's tuition in the UK, a Nigerian startup offering ICT services in Vietnam, or a local Argentinian municipality processing the paperwork of one of its ex-pats.

With all of this at stake, WTO members should renew the moratorium on customs duties on international electronic transmissions, and ideally make it permanent and binding. The temporary and ambivalent status of the suspension feeds into the uncertainty that affects the broader trade environment. Therefore, policymakers should acknowledge the palpable necessity and benefits of suspending duties on e-transactions by promoting policies directed to:

- Increasing connectivity, including ICT infrastructure and the adoption of emerging technologies.

- Investing in intangible assets, including R&D, high-skilled training, and intellectual property rights.
- Providing economic incentives for innovation.
- Elevating the digital services capacities among developed and developing countries.
- Promoting free trade globalization on the international stage.

Far from erecting barriers to trade and transactions, the international community should build bridges to enhance connectivity, economic stability, and survival. An open and tariff-free Internet leads to global economic growth as it makes trade more accessible, dynamic, and innovative.

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100. Jordan is ranked in the 28th percentile globally in the pillar "Political and regulatory environment" in the WEF Global Information Technology Report of 2016.
101. Oasis500 is a pre-seed and seed fund manager and accelerator that catalyzed the development of an entrepreneurial ecosystem in the region, continues to create opportunities for aspiring entrepreneurs and enables them to build their own companies that subsequently contribute to the local economy. See Oasis500.com.
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108. USD 49.1 million represents the estimated revenue from a 10% *effective* tax rate on a market value estimate of USD 491 million for the year 2019 (see figure 1). However, this estimate neglects the expected behavioral change wherein the transaction volume (both quantity and value) could grow at a slower rate due to the placement of the 10% effective tax rate.
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