

# 15 SEIZING OPPORTUNITIES FOR DIGITAL TRADE

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## ABSTRACT

Digitalisation offers new opportunities for developing countries and firms of all sizes to overcome existing trade cost disadvantages and deliver their products to a wider range of markets. This chapter highlights that the benefits of digitalisation for trade, and of trade for digitalisation, are not automatic. It stresses that ensuring that these are realised and shared more inclusively requires a regulatory environment that allows governments in developing countries to respond to new challenges raised by digitalisation. While international co-operation and technical assistance can support developing countries in addressing digital connectivity and skills gaps to maximise benefits, developing countries in regional and global discussions that will shape the rules underpinning a growing part of their economies.

## Key messages

- Digitalisation provides new opportunities for developing countries to engage in international trade – particularly for micro, small and medium-sized enterprises and women entrepreneurs – helping them overcome existing trade cost disadvantages and deliver their products to global markets.
- Ensuring that the benefits of digitalisation for trade, and of trade for digitalisation, are realised and shared more widely requires a regulatory environment that allows governments in developing countries to respond to new challenges raised by digitalisation.
- It is important that developing countries participate in international discussions on digital trade to help shape the rules that will underpin a growing part of their economies.
- International co-operation and technical assistance, through initiatives such as Aid-for-Trade, can support developing countries in addressing issues related to digital connectivity and skills gaps.

The increase in adoption of digital technologies has led to unprecedented reductions in the costs of engaging in international trade, changing both how and what is traded and contributing to growing competitiveness (López González and Jouanjean, 2017<sup>[1]</sup>). It has also helped open new opportunities for trade, not least in the context of tackling some of the consequences of the COVID-19 pandemic and helping economic recovery (OECD, 2020<sup>[2]</sup>). Yet, while in many ways it has never been easier to engage in international trade, the adoption of new business models by firms has made international trade transactions and policy issues more complex (López González and Ferencz, 2018<sup>[3]</sup>).

Digital trade offers new opportunities for individuals and firms of all sizes in both developed and developing economies. However, governments are facing growing regulatory challenges in ensuring that these opportunities can be realised and shared more inclusively. Getting the policy mix right calls for greater dialogue among different stakeholders to fashion more holistic approaches that allow everyone to reap the benefits of the digital transformation of trade.

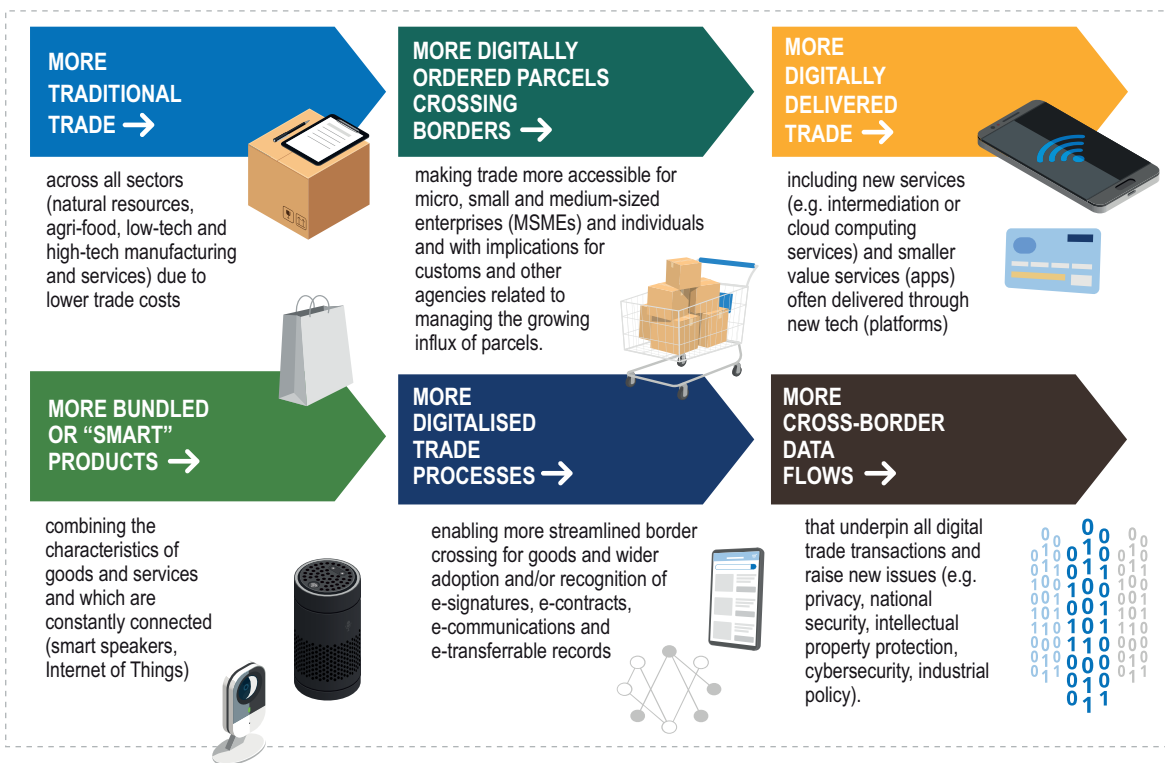
## What is digital trade and why does it matter?

In much the same way that reductions in transport and co-ordination costs enabled

the fragmentation of production along global value chains, declining costs of sharing information are powering a digital trade revolution that is changing what and how we trade. Digital trade involves digitally enabled or digitally ordered cross-border transactions in goods and services which can be either digitally or physically delivered (López González and Jouanjean, 2017<sup>[1]</sup>). Digital trade means (Figure 15.1):

- more traditional trade → across all sectors (natural resources, agri-food, low-tech and high-tech manufacturing and services) due to lower trade costs
- more digitally ordered parcels crossing borders → making trade more accessible for micro, small and medium-sized enterprises (MSMEs) and individuals and with implications for customs and other agencies related to managing the growing influx of parcels
- more digitally delivered trade → including new services (e.g. intermediation or cloud computing services) and smaller value services (apps) often delivered through new tech (platforms)
- more bundled or “smart” products → combining the characteristics of goods and services and which are constantly connected (smart speakers, Internet of Things)
- more digitalised trade processes → enabling more streamlined border crossing for goods and wider adoption and/or recognition of

Figure 15.1. Effects of digitalisation on trade



Source: Authors' illustration.

e-signatures, e-contracts, e-communications and e-transferrable records

- more cross-border data flows → that underpin all digital trade transactions and raise new issues (e.g. privacy, national security, intellectual property protection, cybersecurity, industrial policy).

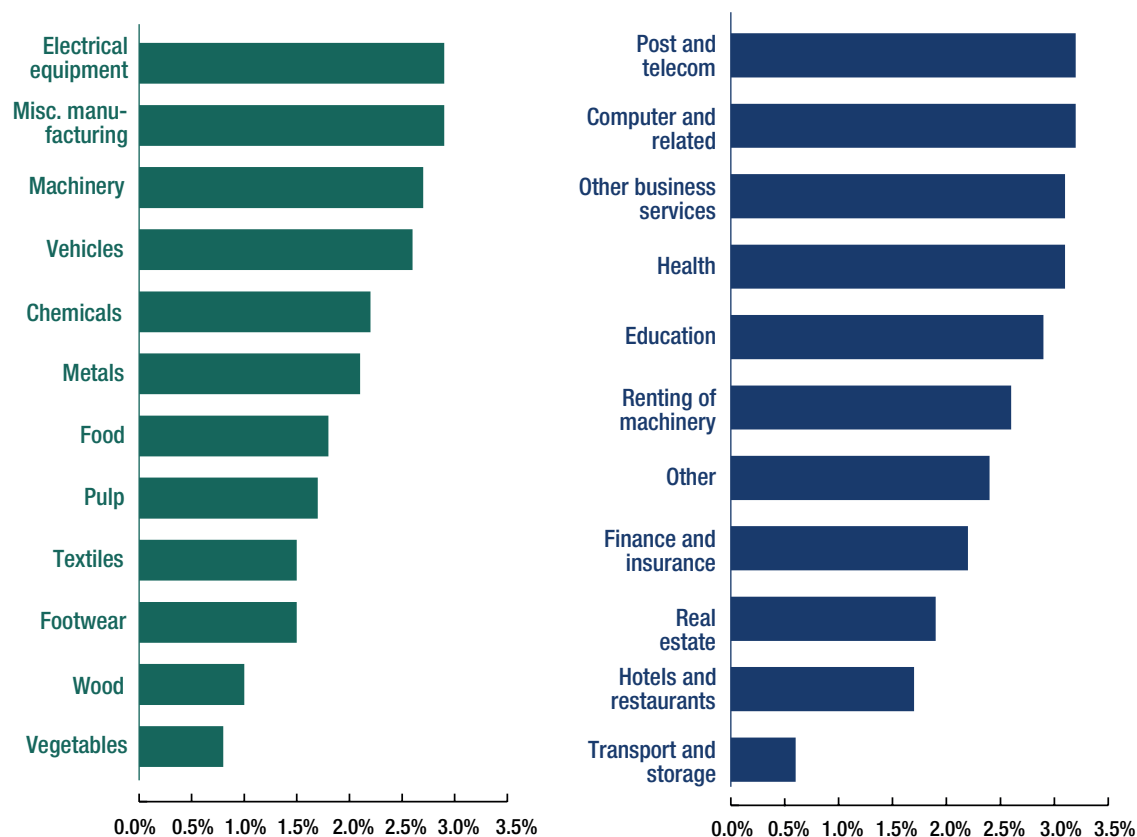
Digital trade matters because it creates a range of benefits. Countries with better digital connectivity, such as a higher degree of Internet penetration, have a greater degree of trade openness and sell more products to more markets. More digitalisation also means more trade: A 10% increase in digital connectivity between countries<sup>1</sup> raises goods trade by nearly 2% and trade in services by over 3% (López González and Ferencz, 2018<sup>[31]</sup>). Importantly, these positive effects emerge across all sectors (Figure 15.2). So, whether for trading carrots, cardigans, copper, household appliances or laptops, digitalisation has the potential to help increase exports. When

goods are traded internationally in small parcels, a 10% increase in bilateral digital connectivity (both countries increasing their connectivity rates) raises parcel exports by up to 4% (López González and Sorescu, 2021<sup>[4]</sup>).

Digitalisation can also help countries draw greater benefits from their regional trade agreements. When combined with a regional trade agreement, a 10% increase in digital connectivity gives rise to an additional 2.3% growth in goods exports (López González and Ferencz, 2018<sup>[31]</sup>).

In addition, digital trade facilitation tools can help reduce the costs of trade at different stages of the supply chain. Sustained implementation of the World Trade Organization (WTO) Trade Facilitation Agreement (TFA), for instance, has enabled the wider digitalisation of trade processes. Even modest efforts to reduce performance gaps in automated border processes could further increase trade by as much as 4%

Figure 15.2. Digitalisation has a positive impact on trade in goods and services



Note: The figure shows the percentage increase in exports as a result of a 10% increase in bilateral digital connectivity and is derived from a gravity model on a sample of 160 countries.

Source: López González, J. and J. Ferencz (2018<sub>[7]</sub>), "Digital trade and market openness", OECD Trade Policy Papers, No. 217, OECD Publishing, Paris, <https://dx.doi.org/10.1787/1bd89c9a-en>.

across all goods sectors<sup>2</sup> (OECD, 2020<sub>[5]</sub>). In addition, greater use of digital tools for streamlining border processes can increase exports of small parcels by more than 6% (López González and Sorescu, 2021<sub>[4]</sub>). Importantly, automation of border processes can help MSMEs in developing countries to engage in international trade and increase the value of their exports and imports by more than 4.5% (López González and Sorescu, 2019<sub>[6]</sub>).

Digital trade is especially important for developing country MSMEs and women entrepreneurs. Access to cheaper, more sophisticated and diverse digital inputs – including productivity-enhancing software, communications technology or e-payment services – can help firms deliver their output to a wider customer base across different

countries and overcome existing trade costs disadvantages. Recent evidence suggests that access to digitally deliverable business services,<sup>3</sup> such as Internet banking or online accounting services, helps drive export competitiveness, especially in less developed countries (Andrenelli and López González, 2019<sub>[8]</sub>). Moreover, recent analysis shows that in developing countries, MSMEs with a digital presence in the form of a webpage are more likely to become exporters than those with no digital presence<sup>4</sup> (Andrenelli and López González, 2019<sub>[8]</sub>). Digital services can also help women-led firms, which are generally smaller than those led by men, overcome some of the barriers to establishing and growing their businesses and to trading on international markets, among them lowering the costs of accessing credit and obtaining

information through professional networks (Korinek, Moisé and Tange, 2021<sup>[9]</sup>).

The wider use of digital platforms and websites to sell goods across borders has also contributed to a significant increase in the number of parcels crossing borders, a trend that was accelerated by the COVID-19 pandemic, including in many developing countries. This has created new opportunities, particularly for individuals and MSMEs, to engage more directly in trade (López González and Sorescu, 2021<sup>[4]</sup>).

### How can developing countries make the most out of these new opportunities?

The benefits of digital trade do not flow automatically. A range of policy levers are needed to promote greater participation and benefits, including through new approaches to market openness. Today, a simple digital trade transaction rests on a series of enabling or supporting factors. Take the act of ordering an e-book. The consumer must be able to access a retailer's website, and this depends on the regulatory environment in which the retailer establishes its webpage as well as the cost of Internet access to the consumer – a cost that, in turn, is affected by the regulatory environment in the telecommunications sector. The consumer's e-book purchase is also affected by the ability to pay electronically, the download capacity (bandwidth) of the network, and the tariff and non-tariff barriers faced by the physical device used to read the e-book (i.e. the e-reader). A barrier to any one of these transactions will influence the need or ability to undertake another transaction (Figure 15.3).

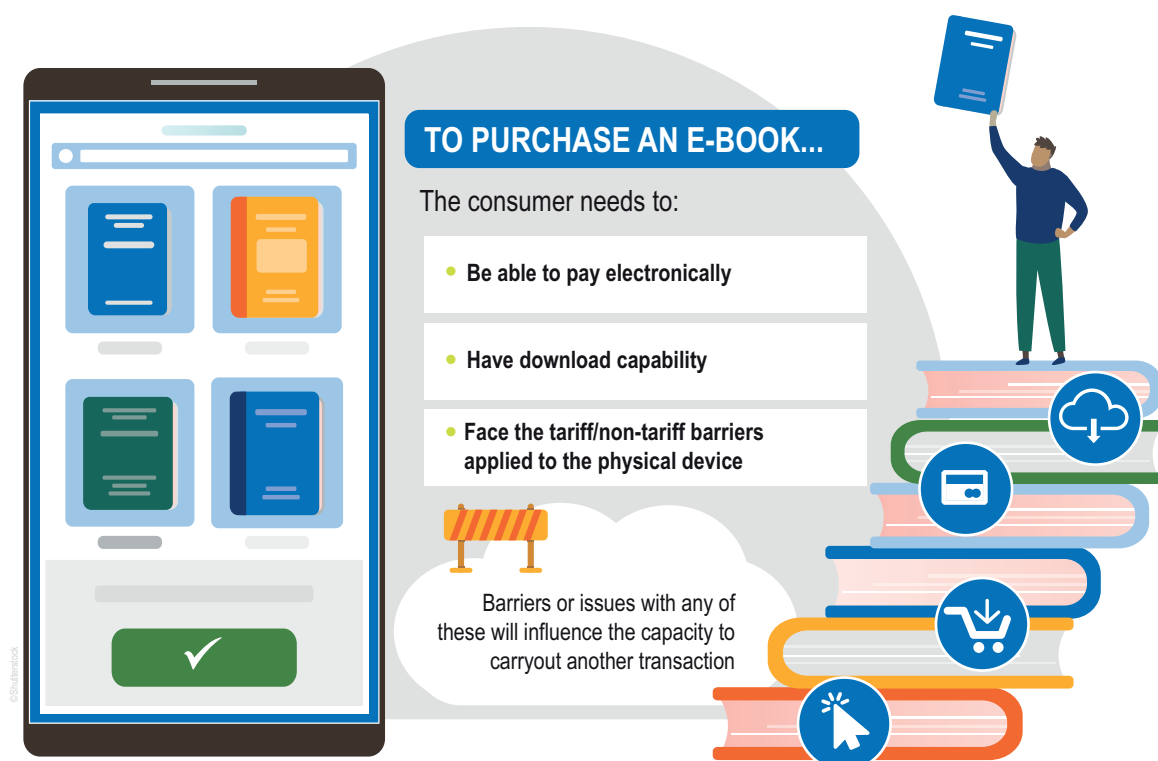
Market openness, then, should be approached more holistically, taking into consideration the full range of measures that affect any particular transaction. While Internet access is a necessary condition for digitally enabled trade in goods to flourish, it is not sufficient on its own. If transportation, logistics or e-payment services in the receiving or delivering country are costly due to services trade restrictions, or if goods

are held up at the border by cumbersome procedures, then the benefits of digital trade may not materialise (López González and Ferencz, 2018<sup>[3]</sup>). Survey evidence highlights that in developing countries, cross-border logistics and e-payments are among the biggest challenges to firms' participation in e-commerce (López González and Sorescu, 2021<sup>[4]</sup>).

According to OECD Trade Facilitation Indicators,<sup>5</sup> all emerging and developing economies have made significant progress in automating and streamlining trade processes at the border since the WTO TFA entered into force in 2017. However, further reforms are needed across areas such as the electronic submission and processing of trade documents, use of digital certificates and signatures, and implementation of electronic single windows. Advances in these areas can also support regional integration efforts through improved co-operation between border agencies and increased involvement of the private sector (OECD, 2020<sup>[10]</sup>). The challenges faced by developing countries in implementing trade facilitation reforms are explicitly recognised in the WTO TFA, which links implementation to provision of assistance. Since the start of the Aid-for-Trade Initiative in 2005, development co-operation providers<sup>6</sup> have disbursed approximately USD 4.7 billion for aid for trade facilitation (OECD, 2021<sup>[11]</sup>).

The benefits of digitalisation for trade, and of trade for digitalisation, also require action across a number of different policy areas, from building digital skills and addressing digital divides to improving access to information and communications technology (ICT) goods and services and the affordability and reliability of Internet connections (López González and Jouanjean, 2017<sup>[11]</sup>). Taking a holistic approach to market openness means understanding how trade policy issues interact with other policy domains such as privacy, innovation, competition, infrastructure, connectivity, taxation and skills. Successful firms in the digital age combine adoption of new

Figure 15.3. Barriers to e-book purchase



Source: Authors' illustration.

technologies with access to global markets. Thus, trade policy should be considered within the context of many other policies that also matter if the shared benefits from digital adoption are to materialise.

Discussions on digital trade are ongoing, including through the WTO Joint Statement Initiative on e-commerce and across a number of trade agreements (Nemoto and López González, 2021<sup>[12]</sup>). As highlighted in the recent OECD *Digital Trade Inventory*, there is already substantial uptake of instruments on issues related to digital trade in many developing economies. This suggests there is a solid base of international instruments that international digital trade discussions can build on. Some regional trade agreements and regional co-operation fora that include developing economies – among them the Association of Southeast Asian Nations, the Southern African Development Community, the Economic Community of West African States and the African Union – also are considering new rules of varying “depth and density” in areas

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of importance to digital trade (Nemoto and López González, 2021<sup>[12]</sup>). It is important that developing countries participate in ongoing digital trade discussions and help shape the rules that will underpin a growing part of their economies, as cross-border regulatory divergences and lack of interoperability can result in additional transaction costs where activities need to be aligned across multiple regulatory frameworks.

Box 15.1 discusses the potential of Africa Continental Free Trade Area (AfCFTA) in support of dynamic digital economy.

At the same time, it will be important that aid for trade efforts continue to support developing countries' participation in international trade. While approximately USD 0.4 billion were devoted to aid for trade in ICT in 2017-19, this represents only 0.4% of the total aid for trade disbursements. It will thus be important to enhance and better target assistance and co-operation to close these gaps and address challenges, including in the context of the COVID-19 pandemic (OECD, 2021<sup>[11]</sup>).

## **BOX 15.1 BUILDING FRAMEWORKS FOR A DYNAMIC DIGITAL ECONOMY: THE AFRICA CONTINENTAL FREE TRADE AREA**

**BY TUNDE FAFUNWA, ADVISOR TO THE ECONOMIC COMMISSION FOR AFRICA & SENIOR PARTNER, KITSKOO**

Enacted in 2019, the Africa Continental Free Trade Area (AfCFTA) is building the single biggest free trade zone in the world. Negotiations regarding its e-commerce and competition protocols present an opportunity to build a dynamic, single digital market across the continent, boosting Africa's digital economy, driving innovation and spurring rapid private sector growth.

With the right policy mix and investments, the Internet economy could add USD 180 billion to Africa's gross domestic product by 2025, depending on the extent to which businesses use digital technologies (Google/IFC, 2020<sup>[13]</sup>). Realising this potential will require global, regional and national leaders to develop coherent regulatory and legal frameworks to facilitate and enable digital trade.

The COVID-19 crisis underscored the importance of e-authentication, e-signatures and digital payments, prompting the deadline for completion of the e-commerce protocol (part of the Phase III AfCFTA negotiations) to be moved up to December 2021. This protocol will influence legal and regulatory frameworks across the continent: legal instruments such as those related to market access (digital products and services, cross-border data flows, custom duties); rules and regulations (covering data protection, data governance, and electronic information and transmission); and trade facilitation (electronic trade, authentication, co-operation and administration) (Ogo, 2020<sup>[14]</sup>).

The e-commerce protocol is another opportunity to bring together essential building blocks for the digital single market. More consistent and less complicated regulations, alongside engagement of stakeholders at all levels, could unlock the benefits of e-commerce especially for micro-, small- and medium-sized enterprises (MSMEs), which account for more than 90% of all firms and 60% of all private-sector employment in Africa (ITC/Amsterdam University of Applied Sciences, 2020<sup>[15]</sup>). Economies of scale in a digital single market would increase customers and revenues, and decrease unit costs for businesses. Economies of scope would enable MSMEs to connect to continental logistics and distribution platforms to reach niche markets – even with small product volumes.

Negotiations on the AfCFTA competition protocol are another critical opportunity to develop a successful digital trade framework that can foster innovation while protecting data. The digital economy is characterised by multi-sided markets, network effects, non-price competition and platform-based business – as discussed by experts at OECD events on Competition Economics of Digital Ecosystems (OECD, 2020<sup>[16]</sup>). Applying a traditional goods and services approach to digital competition won't work.

African actors, among them Smart Africa and AfricaNenda, are working with international organisations to lay the groundwork for a cohesive digital economy, including through digital ID interoperability and work on a continent-wide data policy. But regulatory authorities on trade, competition and digitalisation in African countries must also be prepared to work together across policy areas. Currently, only two regional trade agreements mention e-commerce, and then only broadly. Only 33 of the 54 countries in Africa have formal e-transaction legislation (Banga, Macleod and Mendez-Parra, 2021<sup>[17]</sup>). It is important that African policy makers engage with global processes. International development actors can contribute by supporting open, inclusive standards in the World Trade Organisation, the United Nations Conference on Trade and Development, and other multilateral forums. This commitment would demonstrate to African regulators that cross-border, inclusive and growth-oriented digital trade is within Africa's grasp.

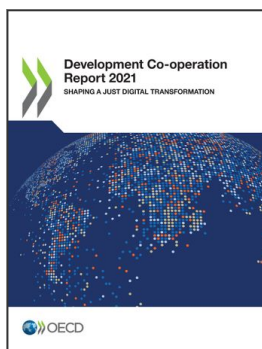


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## NOTES

1. Digital connectivity between two countries, or the potential thereof, is proxied using the minimum of the share of the population that is using the Internet. The measure acts as a mass parameter of potential digital connections, reflecting that both supplying and demanding countries require good connectivity for digitally enabled trade to flourish. Internet penetration indicators are used as a proxy for digital connectivity since such data are available for more countries and more time periods than for other indicators. Internet penetration indicators also have a high correlation with other measures of digital connectivity (e.g. business and household use of broadband, access to computers, and wireless broadband and fixed broadband subscriptions).
2. The potential increase in trade across sectors is based on a reduction of 0.1 points in the bilateral performance gap, based on the OECD Trade Facilitation Indicators for 163 economies.
3. Digitally enabled services are services that can be (although they are not necessarily) delivered remotely over ICT networks.
4. These estimations are derived using the World Bank Enterprise Survey and follow the method established in López González (2019[18]) and López González and Sorescu (2019<sub>[6]</sub>).
5. The 11 OECD Trade Facilitation Indicators, developed in 2013, include measures relating to the full spectrum of administrative procedures at the border: inspection and clearance of goods, transparency of information and administrative simplification, use of information technology for data processing and exchange, and co-operation between customs and other border agencies. For Trade Facilitation Indicators by jurisdiction, see: <https://www.compareyourcountry.org/trade-facilitation>.
6. As reported in the OECD Creditor Reporting System.



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