COVID-19 AND E-COMMERCE

eTrade for all
Connecting the dots

A GLOBAL REVIEW

UNITED NATIONS

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NOTES

Within the UNCTAD Division on Technology and Logistics, the ICT Policy Section carries out policy-oriented analytical work on the development implications of e-commerce and the digital economy. It is responsible for the preparation of the Digital Economy Report as well as thematic studies on ICT for Development. It promotes international dialogue on related issues and contributes to building the capacities of developing countries to harness the evolving digital economy.

The Section also coordinates the eTrade for all initiative (etradeforall.org), which is a collective effort to raise awareness and enhance synergies among development partners to strengthen the ability of developing countries to engage in and benefit from e-commerce and the digital economy. Gathering 32 partners, it acts as a global-helpdesk and as a catalyst of partnership. Its two main spin-offs are: 1) the eTrade Readiness Assessments that provide national basic diagnostics of the current e-commerce situation in a country, identify opportunities and challenges and provides policy recommendations; 2) the eTrade Women Initiative to empower women digital entrepreneurs in developing countries.

eTrade for all partners are also key contributors to the UNCTAD's eCommerce Weeks, the leading global and regional platforms to discuss the digital transformation associated with e-commerce and the digital economy.

Reference to companies and their activities should not be construed as an endorsement by UNCTAD of those companies or their activities.

The following symbols have been used in the tables:

Two dots (..) indicate that data are not available or are not separately reported. Rows in tables have been omitted in those cases where no data are available for any of the elements in the row;

A dash (-) indicates that the item is equal to zero or its value is negligible;

Reference to "dollars" ($) means United States of America dollars, unless otherwise indicated;

Details and percentages in tables do not necessarily add up to the totals because of rounding.

PREFACE

The COVID-19 pandemic has accelerated digital transformations. Digital solutions are increasingly needed to continue some of the economic and social activities remotely. They have been critical for telemedicine, telework and online education, not least to keep alive our social ties in times of physical distancing. We have also witnessed e-commerce growth in developing countries, with long-term implications. However, unless adequately addressed, existing digital divides are likely to result in even greater inequalities.

Against this background, a group of eTrade for all partners joined forces in the midst of the COVID-19 outbreak, with the aim of jointly assessing how the impact of the pandemic was playing out in various regions of the world, what barriers countries and business were facing when trying to leverage digital solutions; what policy responses had been taken; and – not least important – what we could do better to reap synergies and enhance global support to those countries that are the least equipped to manage digital transformation for dealing with the pandemic and beyond.

This study on the impact of COVID-19 on e-commerce and digital trade is a collective effort, and the first research-oriented project undertaken under the eTrade for all umbrella. The work has been led by the United Nations Conference on Trade and Development and the United Nations Regional Commission for Latin America and the Caribbean, drawing also on regional reports prepared by the United Nations Economic Commission of Africa, the United Nations Commission of Europe and the United Nations Economic and Social Commission for Western Asia. Valuable inputs and comments were also received from e-Residency of Estonia, the International Trade Centre, the United Nations Economic and Social Commission for Asia and the Pacific and the Universal Postal Union.

The critical global policy challenge that emerges from this study is that greater efforts are needed to help reduce inequalities in e-trade readiness that currently prevail amongst countries. All stakeholders – governments, businesses, consumers and international development partners – have a responsibility to ensure that e-commerce plays a positive and powerful role in national and international recovery efforts. Resources should be committed to that goal.

The pandemic has also demonstrated the importance of ensuring consistency and avoiding duplication in international efforts. Over the past four years, the eTrade for all has shown the potential for collaboration to add value, especially in LDCs. The initiative will continue to play its part by advocating relevant policy approaches, supporting assessments of national e-commerce environments, and fostering collaborations between national and international stakeholders to maximize the synergies that can contribute to enabling e-commerce for development.

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TABLE OF CONTENTS

1

Introduction

Main Messages

The digital economy and e-commerce play a growing role in efforts to achieve the Sustainable Development Goals (SDGs), bringing both new opportunities and new challenges. Countries that harness the potential of e-commerce will be better placed to benefit from global markets for their goods and services in this digitalizing economy, while those that fail to do so risk falling behind.

The COVID-19 pandemic has dominated global economic development during 2020. Restrictions on movement and other interventions to protect public health have reduced economic activity in most sectors and most countries, affecting production, distribution and consumption, with greater impact in countries that were less well-prepared to deal with crisis.

The pandemic caused a sharp deceleration in economic activity for which economies were largely unprepared. One impact within this, however, has been an uptake in e-commerce resulting from the need for much activity to move online. It seems likely that the accelerated trend towards e-commerce seen during the pandemic will be sustained during recovery.

The eTrade for all initiative, established in 2016, which aims to address knowledge gaps regarding e-commerce and foster synergies among the partners, is more needed than ever in efforts to recover from the pandemic. Since the outbreak of the pandemic, UNCTAD and its 32 eTrade for all partners have played an important role in raising awareness of the opportunities and risks for e-commerce that have emerged during the crisis and have worked together to improve understanding of the challenges faced by e-commerce businesses in developing and least developing countries (LDCs). This has reinforced the growing importance of e-commerce and the need for action, supported by international development partners, to build upon it.

The digital economy and e-commerce play a growing role in efforts to achieve the Sustainable Development Goals (SDGs), bringing both new opportunities and new challenges to bear. As UNCTAD's Information/Digital Economy Reports and other international studies have shown[1], future economic prosperity in all countries will depend substantially on the facilitation and exploitation of these digital developments[2].

The last decade has seen accelerating transition towards a digital economy in which information and communications technologies (ICTs) play a growing part in the production, consumption and exchange of the majority of goods and services[3]. Estimates of the size of the digital economy vary considerably, ranging from 4.5 to 15.5 per cent of world GDP[4], because of differences in definition and challenges of measurement, while the share of digitally delivered services in total exports of services has risen from 45 per cent to 52 per cent between 2005 and 2019[5]. This transition has been unevenly spread, however, more rapid and more extensive in developed countries and high-income developing countries than elsewhere.

E-commerce has great potential for diversifying the scope and geographic reach of trading opportunities for developing countries and expanding the range of both established businesses and new enterprises. It also plays an increasingly important role in the supply and distribution of both goods and services in domestic markets.[6] The growth of e-commerce is inhibited, however, in many developing countries by a range of barriers in infrastructure, finance, resources and governance. Countries that overcome these barriers and establish enabling frameworks for e-commerce will be better placed to leverage its potential benefits and address challenges, both domestically and internationally, while those that fail to do so risk becoming less dynamic at home and less competitive abroad.[7] In the absence of measures to take advantage of e-commerce, there is a risk that digital innovations will increase inequality rather than advancing equity.

THE IMPACT OF THE PANDEMIC

The COVID-19 pandemic has dominated global economic development during 2020. Restrictions on movement and other interventions to protect public health have reduced economic activity in most sectors and most countries, affecting production, distribution and consumption.[8] The global economy is predicted to shrink by at least four per cent over the year, rather than growing by four per cent or more as previously anticipated.[9] Global trade in goods fell by almost 18 per cent in May 2020 (compared with the same month in 2019).[10] Developing countries and LDCs – and their citizens – are particularly vulnerable to recessions in global economic activity.[11]

The pandemic and its associated economic downturns struck at a time of changing economic circumstances and increasing economic challenge.[12] Global GDP had been growing at an average of just over 3.5 per cent each year during the previous decade, but recovery from the crisis of 2008/9 has been sluggish in developed countries, limiting growth in global demand.[13] Uncertainties concerning future trade relationships among major economies have come to the fore. Long-term challenges, including climate change, require large-scale adjustments in production and consumption where achievement will depend on international cooperation and commitment by both governments and business.

Various regions and countries have been affected differently by COVID-19, depending on timing and severity,[14] while the pandemic's future trajectory and impact on economic growth, employment and social welfare are unpredictable. Some countries, notably in the Asia-Pacific region, have seen relatively low infection rates in recent months that have enabled more rapid restoration of pre-pandemic levels of economic activity than others,[15] notably in Europe and the Americas, which were suffering a second wave of COVID-19 infections by late 2020. Small island states in the Caribbean have seen high rates of infection while those in the Pacific had been largely spared at time of writing.[16] These different intensities and timings of infection have had, and will continue to have, a significant bearing on economic outcomes.

The United Nations and many governments have made clear their determination that recovery from the pandemic should reach beyond restoration of the *status quo* before the crisis. Rather, in the words of the Secretary-General, the international community should 'turn the recovery into a real opportunity to do things right for the future'.[17]

THE PANDEMIC AND E-COMMERCE

The pandemic caused a sharp deceleration in economic activity for which economies were largely unprepared. One impact within that overall reduction of activity, however, which has significance both during the pandemic and for subsequent recovery, has been an uptake in e-commerce resulting from the need for much activity to move online.

This report makes a preliminary assessment of the impact of the COVID-19 crisis on e-commerce, drawing on the limited range of data currently available.[18] It includes surveys of e-commerce businesses and consumers conducted by UNCTAD and its partners in the *eTrade for all* initiative, analyses by other multilateral agencies, and research undertaken by United Nations Regional Commissions. In addition to this introduction, it includes three chapters:

CHAPTER 2 summarizes global and regional trends that can be identified to date.

CHAPTER 3 considers principal challenges arising from these and the pandemic; policy responses to them by governments, businesses and international development partners; and means by which governments and other stakeholders can strengthen capacity, resilience and recovery from the pandemic. This chapter includes separate sections addressing eight critical challenges requiring such responses.

CHAPTER 4 charts a way forward and offers recommendations to different stakeholder communities.

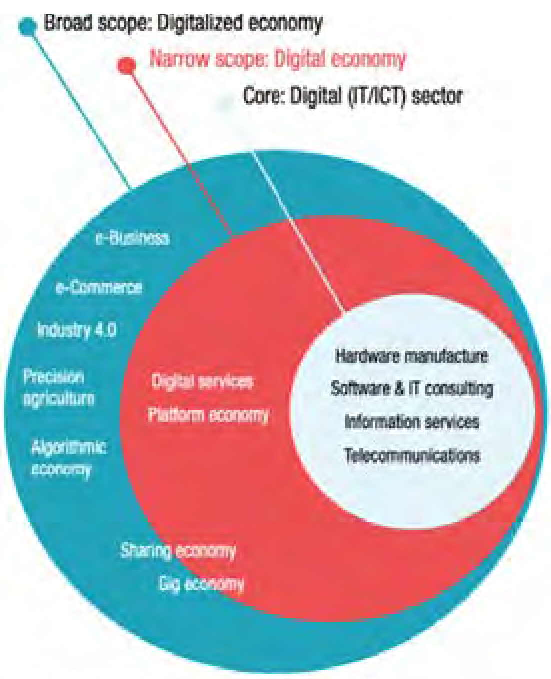
The report summarizes what we know to date, outlines what this indicates for policymakers in diverse stakeholder communities and reflects on approaches to e-commerce that can support global and national economic recovery when the pandemic eventually recedes. Its conclusion, and those of associated regional reports published by the Regional Commissions,[19] are necessarily provisional but intended to stimulate discussion and the deployment of appropriate policy initiatives, particularly in developing countries and LDCs.

E-COMMERCE AND DEVELOPMENT

UNCTAD adopts a broad definition of the digital economy with three main elements, illustrated in Figure 1.1: its underlying technologies and infrastructures, the ICT and digital sectors themselves, and the wider range of sectors in which digital products and services are in growing use (for instance for e-commerce), which can be described as experiencing digitalization.[20] The growing prevalence of digitalization makes it increasingly difficult to distinguish this digital economy from economic activity in general, and therefore difficult to quantify.

Figure 1.1

A representation of the digital economy [21]



Source: Bukht and Heeks, 2017: 13.

Growth in the digital economy has been driven by four main factors:

- the accelerating pace of digital innovation
- increased online participation,
- rapid growth in data gathering and transmission,
- the emergence of platforms that facilitate innovation and/or intermediate in online markets.

The proportion of individuals worldwide engaging with the Internet is estimated to have risen from 29.3 per cent in 2010 to 53.6 per cent in 2019.[22] Global Internet Protocol (IP) traffic, a proxy for data flows, grew from about 100 gigabytes per second in 2002 to some 88,000 gigabytes per second in early 2020. As the pandemic spread during the year, with increased traffic generated by teleworking, videoconferencing, digital entertainment and other applications, this figure is now estimated to exceed 100,000 gigabytes per second.[23]

E-commerce lies at the heart of the digital economy, defined by the Organisation for Economic Cooperation and Development (OECD) as 'the sale or purchase of goods or services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders.'[24] Goods and services are ordered over these networks, while payment and delivery may be online or offline. This represents a complex and growing range of economic activity. It includes, for instance:

- transactions between businesses (B2B), those between businesses and individual consumers (B2C), and those between governments, businesses and citizens (G2B, G2C);
- the direct provision of services that can be traded digitally, as well as the facilitation of ongoing and additional trade in goods;
- international commerce, between continents and across land borders, as well as domestic transactions, both wholesale and retail;
- transactions undertaken through global platforms such as Amazon and Alibaba, through regional intermediaries such as Jumia in Africa, Lazada in Southeast Asia and Mercado Libre in Latin America, through wholesalers' and retailers' own online domains, and through small transactions between MSMEs and individual consumers.

It intersects with other aspects of the digital and analogue economies in complex ways and relies on both physical infrastructure and enabling frameworks of policy, business practice and consumer confidence.[25]

The increasing significance and rapid growth of e-commerce in global economic activity are clear, regardless of definitional variations between different analysts. Its share of global retail trade is estimated by eMarketer to have risen from 10.4 per cent in 2017 to 14.1 per cent in 2019.[26] Southeast Asia's e-commerce sector is estimated to have grown six-fold between 2015 and 2019, reaching US$ 38 billion in value, and is expected to be worth US$ 150 billion by 2025.[27]

E-commerce is increasingly understood by governments and development partners[28] to provide new ways of facilitating the SDGs set out in the 2030 *Agenda for Sustainable Development*.[29] Innovations in technology and the modalities of commerce are creating opportunities for companies of all sizes to engage in domestic and international trade through the adaptation of supply chains, lower trade costs and extended market reach.

By reducing transaction and search costs as well as frictions at commercial interfaces, digital platforms – those of individual sellers and third-party platforms such as Amazon and Alibaba – enable those offering goods or services to connect more easily with (potential) consumers and to expand the volume of commercial interactions.

The COVID-19 pandemic has altered trade patterns substantially, at least in the short term.

It has reduced the volume and shifted the balance of international trade, disrupting traditional supply chains and putting additional pressure on transport, logistics and border controls. It has encouraged the growth of online shopping and services in domestic markets where movement controls and consumer anxiety have discouraged physical transactions. These trends are explored in **CHAPTER 2**.

It seems likely, though this is yet uncertain, that the accelerated trend towards e-commerce seen during the pandemic will be sustained during recovery. Lessons learned from it should therefore be important for future economic growth and for development. These are explored in **CHAPTER 3**.

UNCTAD AND THE ETRADE FOR ALL INITIATIVE

UNCTAD's role is to maximize the trade, investment and development opportunities of developing countries and assist them in their efforts to integrate into the world economy on an equitable basis. Since 2016 it has focused extensively on the opportunities and challenges of the digital economy, by providing global platforms for dialogue, offering specialist advice to governments and other stakeholders, and through its series of *Information/Digital Economy Reports*.

UNCTAD's analysis, drawn from that experience, has shown that countries that harness the potential of e-commerce will be better placed to benefit from global markets for their goods and services in this digitalizing economy, while those that fail to do so risk falling behind.[31]

In 2016, UNCTAD and fourteen global partners established the *eTrade for all* initiative to address knowledge gaps regarding e-commerce and foster synergies between development partners, governments and business stakeholders, with the aim of improving capacity to benefit from it, particularly in developing countries and LDCs. The initiative emphasizes evidence-based policy development, sustainability and rigorous monitoring and evaluation, and has recently developed a special focus on the empowerment of women digital entrepreneurs. With the active involvement of some thirty partner agencies, it has raised awareness of the potential of e-commerce and, through its eTrade for all platform, of opportunities and resources available for policy development and practical governance. The platform builds bridges between countries in need of technical assistance and the partners able to assist them, with the overarching goal of narrowing digital divides and spurring sustainable development. Partners in eTrade for all have also contributed to 27 UNCTAD eTrade Readiness Assessments.

The scope and impact of e-commerce reach across the range of economic activity. The eTrade for all initiative has identified seven policy areas that are crucial to enabling countries, particularly developing countries and LDCs, to engage in and benefit more fully from the growth of online business activity:

- **E-commerce readiness assessments and strategy formulation**
- **ICT infrastructure and services**
- **Trade logistics and trade facilitation**
- **Payment solutions**
- **Legal and regulatory frameworks**
- **E-commerce skills development**
- **Access to financing for e-commerce**

NOTES

1 For example, UNCTAD, 2019b.

2 WEF, 2020b; ITU, 2020c; ECLAC, 2020c; UNIDO, 2020.

3 For example, UN SG, 2019b.

4 UNCTAD, 2020j; World Bank, 2020g.

5 See: UNCTADStat database: https://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx

6 For example, WTO, 2020b.

7 See: WEF, 2020d.

8 IMF, 2020c.

9 Estimates vary. UNCTAD (2020j) suggests 4.3 per cent. World Bank (2020f) (using market exchange rate weightings), 5.2 per cent, while IMF (2020a) previously predicted growth of 4.4 percent.

10 See: CPB Netherlands Bureau for Economic Policy Analysis' World Trade Monitor: https://www.cpb.nl/en/worldtrademonitor

11 For example, UNCDF, 2020a; WTO, 2020g

12 UNCTAD, 2020j; ECLAC, 2020c.

13 See: https://www.statista.com/statistics/273951/growth-of-the-global-gross-domestic-product-gdp/. See also, for example, Chen, Mrkaic and Nabar, 2019; ECLAC, 2020a; UNCTAD, 2020h.

14 IMF, 2020c.

15 See: ESCAP, 2020g, 2020h.

16 Shridath Ramphal Centre, 2020

17 UN, 2020a.

18 See: Committee for the Coordination of Statistical Activities, 2020.

19 UNECA, 2021; UNECE, 2021; ECLAC, 2021; ESCWA, 2021.

20 UNCTAD, 2019b.

21 Ibid.

22 ITU, 2019b.

23 See: discussion in UNCTAD, 2019b.

24 OECD, 2020b.

25 See: Dutta and Lanvin, 2020; World Bank, 2020h.

26 Lipsman, 2019.

27 Nortajuddin, 2020.

28 For example, World Bank, 2020i.

29 UN GA, 2015.

30 See: https://unctad.org/publications.

31 UNCTAD, 2019h.

32 See: https://etradeforall.org/about/partners/ for a list of partners.

33 See: https://unctad.org/official-documents-search?f[0]=product%3A603 for these assessments.

2

GLOBAL AND REGIONAL TRENDS

Main Messages

The COVID-19 pandemic has reinforced the importance of addressing barriers to e-commerce in order to leverage the benefits that can be derived from it and cope with the potential downsides of digital transformation.

While there has been a substantial reduction in overall economic activity during the pandemic, the crisis has seen growth in the market share of trade and retail taken by e-commerce, particularly in domestic markets where movement restrictions and consumer anxieties about social interaction have encouraged use of online shopping. As well as goods, substantial increases have been seen in online conferencing, gaming and entertainment. More people, in short, have been using electronic commerce more often. Businesses with an established online presence have been better equipped to take advantage of this, along with traditional businesses that have been sufficiently agile and had sufficient resources to upgrade their online marketing and sales. Communications networks have largely held up during the pandemic, but there have been considerable difficulties related to trade and transport logistics, especially for international transactions.

The extent to which trends experienced during the crisis will continue during recovery is uncertain and will depend, *inter alia*, on the pace of recovery and the nature and extent of measures taken to facilitate it. Many consumers expect to continue spending more online after the crisis than they did before. Experience of online entertainment services (and the fact that more people have crossed entry barriers) is likely to sustain higher usage levels where they are concerned. Many employers are considering blending office and homeworking. E-commerce platforms are therefore likely to retain many, though perhaps not all, of the gains in market share that they have made during the pandemic *vis-à-vis* offline markets.

The level of participation in digital technology and the Internet is a powerful indicator of an economy's capacity to leverage e-commerce. The ability of businesses to participate in international markets depends increasingly on the quality of digital connectivity available to them, while that of citizens to shop online or use online commercial services depends on the availability of reliable (and preferably broadband) communications networks, the affordability of suitable hardware and data packages, the existence of relevant online platforms and services, the presence of attractive digital payment mechanisms, and individuals' own capabilities and digital literacy. Policies can be put in place to bridge barriers and build trust and confidence in online business.

This chapter considers trends in global and regional economies, and in the digital economy, both before and during the pandemic. The first part considers global trends in the economy, trade and digitalization that establish the context against which experience during the coronavirus crisis should be judged. The second part summarizes current evidence concerning that experience in international and domestic e-commerce, with illustrations drawn from different regions. A final summary considers the experience of different regions and the special circumstances of Least Developed Countries (LDCs) and Small Island Developing States (SIDS).

THE EVIDENCE BASE

Although e-commerce is inherently data-driven,[34] there are significant challenges involved in gathering and analysing relevant data concerning both preparedness (or e-readiness) and experience of e-commerce. Digitalization is largely invisible in statistics on trade and GDP.

Relatively few countries have gathered or currently gather data dealing explicitly with e-commerce with the level of detail that is desirable for policymaking. More countries collect data on B2C e-commerce than B2B, while more data are available for developed than developing countries; there is a significant time lag in reporting.

Where data have been gathered, definitions have also sometimes varied between national statistical systems.[35] As noted in **CHAPTER 1**, the digital economy includes both the ICT/digital sector and sectors that are partly or largely digitalized, the distribution of goods and services, as well as international and domestic transactions. Interconnections between these are complex and standard methods of gathering and analysing data on them have not been generally defined or, when defined, adopted. Ideally, the measurement of value in the digital economy should cover all three levels illustrated in Figure 1.1 – the digital sector, the digital economy and the digitalized economy. In practice, however, as noted in UNCTAD's 2019 *Digital Economy Report*, 'comparable statistical data are available mainly for just the core digital sector, and even in this case there are significant gaps, particularly concerning developing countries. The lack of statistical data and other measurement difficulties increase as the analysis moves from the core to the broad scope of the digital economy'.[36]

Some global figures are available to set the scene. Before COVID-19, eMarketer forecast that global retail would expand by 4.4 per cent, to US$ 26,460 trillion during 2020, with e-commerce growing by 18.4 per cent to US$ 4,105, 15.5 per cent of the total retail value. In light of the pandemic, it has reduced these estimates of retail growth by ten and two per cent respectively, with e-commerce thereby taking a higher share in total retail.[37]

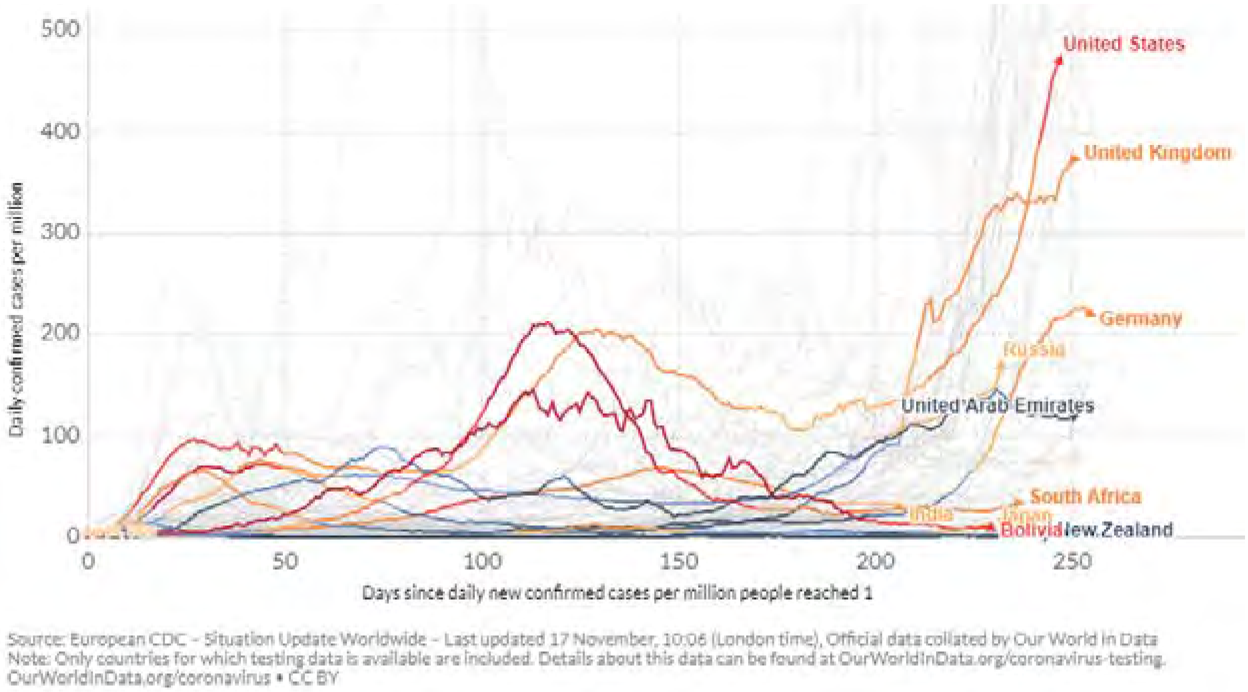
Understanding the trajectory of e-commerce is vital for appropriate policymaking on the part of governments and business planning by commercial enterprises. UNCTAD has developed guidelines, published in the 2020 revision of its *Manual for the Production of Statistics on the Digital Economy*,[38] to improve the quantity and quality of e-commerce data sets. The Manual provides definitions and classifications, as well as model questionnaires that can help national statistical offices to collect statistics in a manner that allows for international comparison.

Problems for policymakers arising from data limitations have been exacerbated by the pandemic. The brief time period since the global spread of coronavirus starting in the first quarter of 2020 means that only partial, limited data are available for the pandemic period, with the most substantive data concentrated in the early months and in a limited range of developed and higher income developing countries. Data concerning LDCs are particularly limited. The timing and trajectory of the pandemic have also varied significantly between regions and countries, making it more difficult to compare experiences. This challenge is exacerbated by the second wave of infections that has occurred in some regions during the latter half of 2020, which has led to a second round of movement restrictions that constrain much economic activity. Comparative infection rates over time are illustrated in Figure 2.2.

Possible future waves, of uncertain severity, can be anticipated, their impact depending partly on progress concerning vaccines and therapeutic medicines.

Figure 2.1

Daily new confirmed cases of COVID-19, selected countries, February to November 2020[42]



As one commentator has put it, there is 'no dearth of back-of-the-envelope analysis' of COVID-19's impact',[43] but speculation is inadequate for effective policymaking and business planning in a crisis that requires frequent refreshing of data to reflect developments in infections and impacts. Poor data and poor data analysis could lead to inappropriate policy responses.

This report is based on data and other evidence available at its time of writing (November 2020). It takes provisional stock of what has happened during the crisis up to that time from this limited evidence base and, so far as possible, identifies broad trends that suggest appropriate directions for policy and practice. Projections towards longer timescales are necessarily tentative, particularly given the uncertain trajectory of the pandemic beyond November 2020. Close and careful monitoring of relevant data will be crucial for effective interventions.

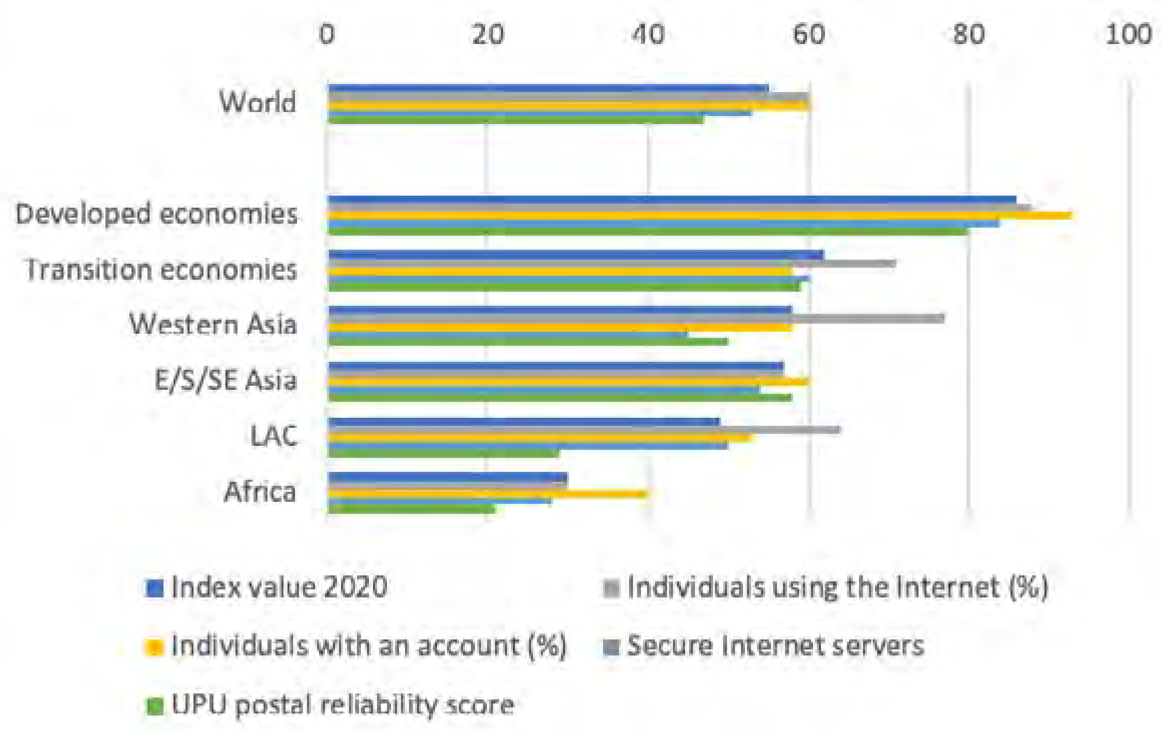
BOX 2.1 THE B2C E-COMMERCE INDEX

UNCTAD publishes an annual B2C e-commerce index[39] that measures the preparedness of economies to support online shopping. This is derived from four indicators: the proportion of individuals using the Internet, the number of secure Internet servers per million people, the proportion of adults with a bank or mobile money account, and the Universal Postal Union (UPU)'s Postal Reliability Index.[40]

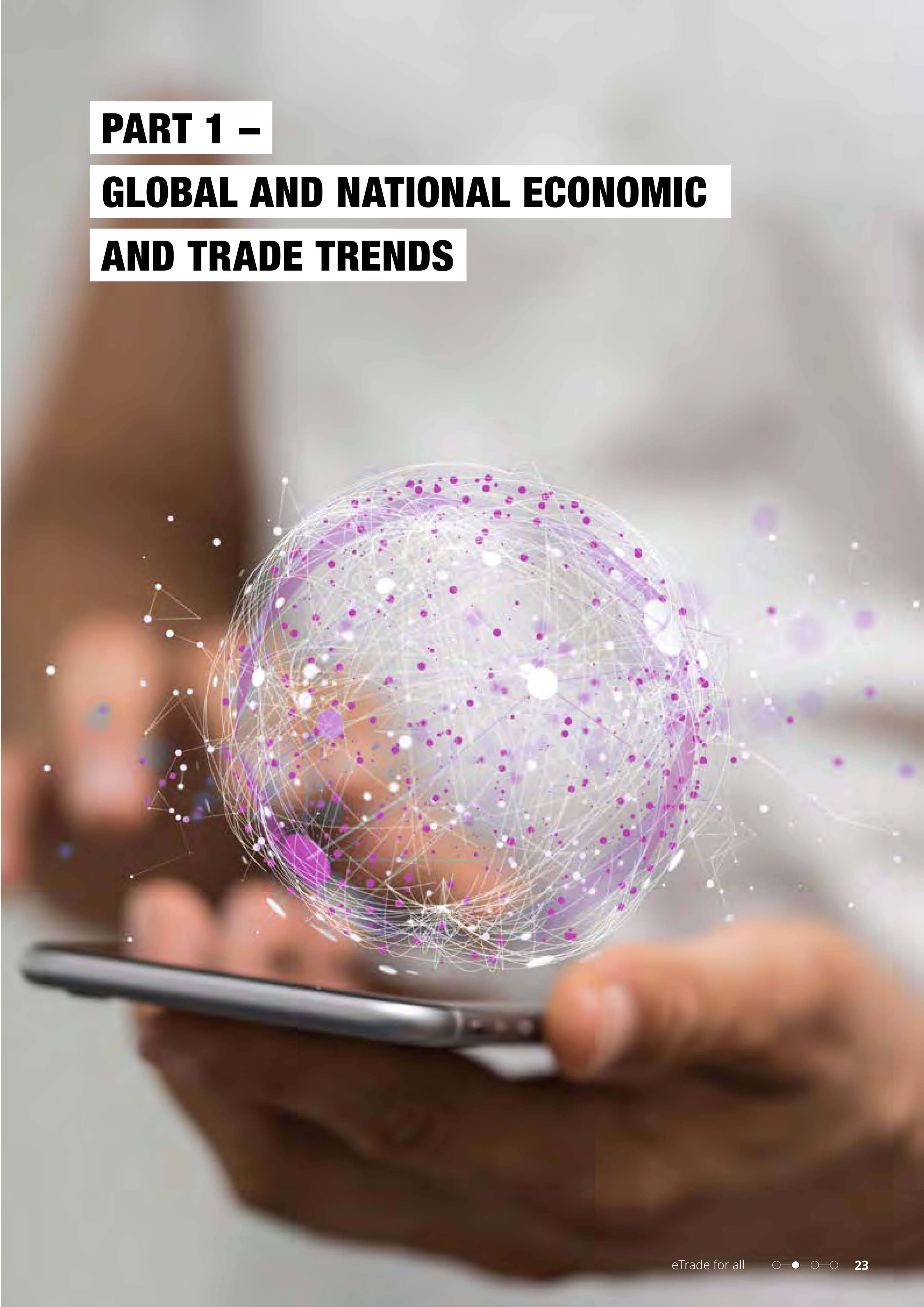
The 2020 index, which included 152 economies, showed substantial discrepancies between countries with high and low levels of readiness and participation in e-commerce that are broadly consistent with geographic and developmental characteristics. These are illustrated in Figure 2.1.[41] Eight of the ten economies with the highest index scores are in Western Europe, the other two are high-income economies in Asia-Pacific (Singapore and China, Hong Kong SAR). All ten of the leading developing economies within the index are in Asia-Pacific, while eighteen of the twenty lowest-scoring countries are LDCs.

Figure 2.2

B2C e-commerce scores by region, 2020



PART 1 –
GLOBAL AND NATIONAL ECONOMIC AND TRADE TRENDS



A Global and national economies

a. Before the pandemic

The global economy was badly hit by the financial crisis of 2007/2008, the most severe shock it had experienced in more than seventy years. The crisis triggered a substantial downturn in international trade and required a write-down of over US$ 2 trillion from financial institutions alone.[44] Lost growth resulting from that crisis and ensuing recessions in many countries has been estimated at over US$ 10 trillion (over one-sixth of global GDP in 2008). The year 2009 was the first in recent times in which global GDP contracted in real terms,[45] an outcome that is now sure to be repeated in 2020.

Global economic recovery was relatively sluggish between 2009 and 2019, with slower than expected growth in developed countries constraining demand for developing country commodities and produce. Many effects of the financial crisis remained active concerns when the COVID-19 pandemic struck in early 2020. As a result, the global economy was less resilient to the pandemic than it might otherwise have been.

Nevertheless, the global economy was growing at the start of the current crisis. Global GDP grew by an average of 2.85 per cent between 2015 and 2019, in the five years leading up to 2020, slowing to 2.3 per cent in the last of these years, its slowest rate of growth since the financial crisis. Rates of growth have varied between and within regions, with stronger outcomes in Asia Pacific[46] than Europe, and for developing countries more than developed countries. UN data show growth of 1.7 per cent for developed countries in 2019, immediately before the pandemic, compared with 3.4 per cent for developing counties and 4.9 per cent for LDCs.[47] African economies, many of which are LDCs, were still expected, at the turn of the year, to grow by around four per cent per *annum* in 2020 and 2021.[48]

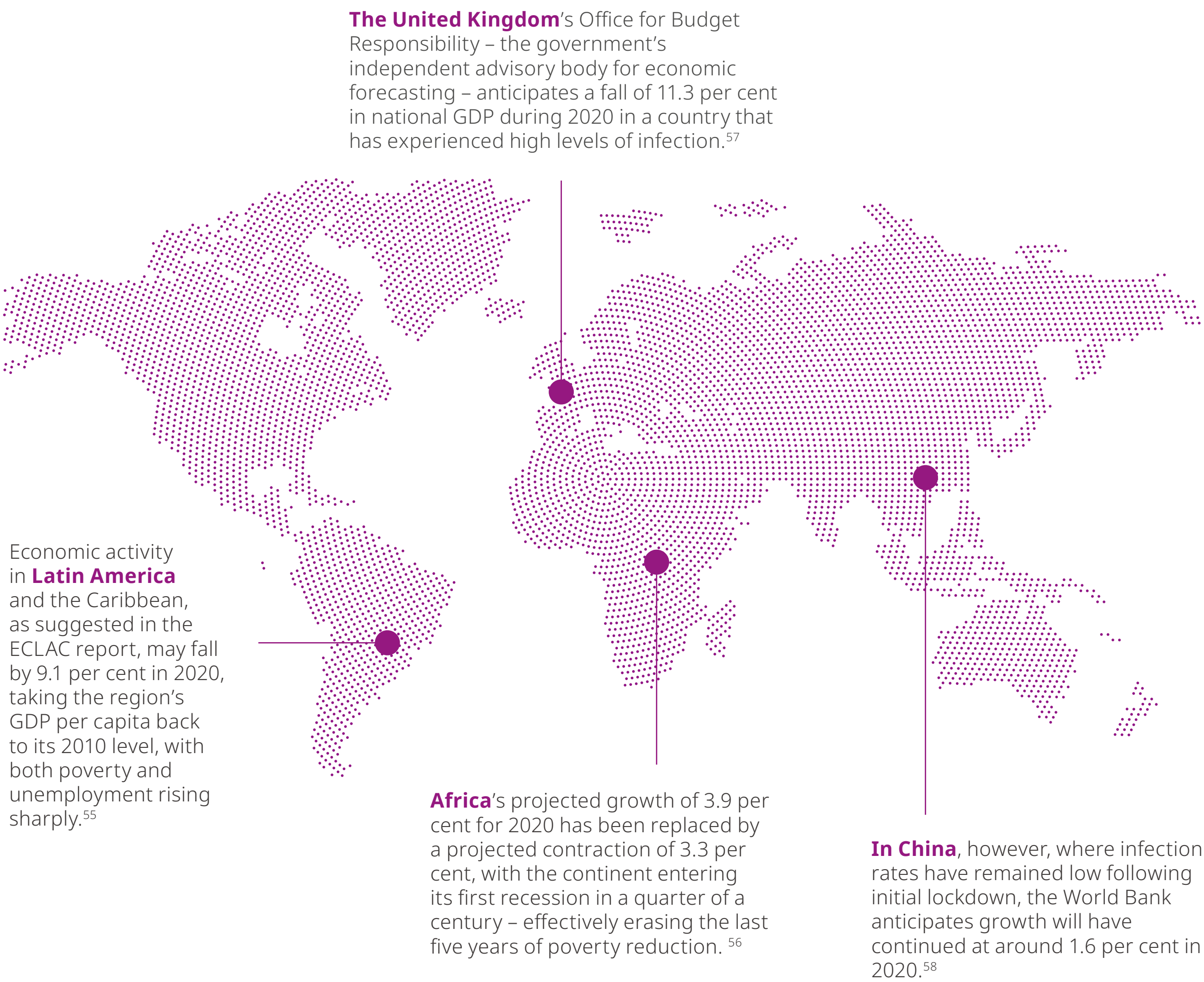
When dealing with e-commerce, it is important to consider economic circumstances not just in terms of national policies and outcomes but also those of businesses and individuals, particularly in relation to incomes, poverty and inequality. Countries with high proportions of citizens living at or below the poverty line are likely to have skewed domestic markets in which demand for many goods and services is concentrated high up the income distribution. Although global poverty rates have fallen by more than half this century, one in ten people in developing countries still lives below the internationally agreed poverty line of US$ 1.90 per day; some two-fifths of these are in Sub-Saharan Africa.[49] Poorer households are less likely to be able to afford non-essential goods and less resilient to the impact of crises such as the pandemic.

High proportions of adults in many developing countries work in the informal economy, often without savings to rely on if normal income sources become unavailable.[50] An increasing number of workers in developed countries also rely on insecure employment with zero-hours contracts or in the so-called 'gig economy'.[51] These groups are highly dependent on day-to-day income generation, which makes them particularly susceptible to lockdowns and movement restrictions, especially when they (and their dependents) have no access to welfare safety nets. Social protection systems that can best support workers when they are between jobs or not working regularly are available to less than half the global population.[52]

b. The impact of the pandemic

The impact of the pandemic on the global economy is expected to be more severe than that of the 2008/9 financial crisis. As noted in **CHAPTER 1**, forecasts that growth in global GDP would rise by more than 4 per cent in 2020 have been replaced by projections that it will fall by a similar proportion or more. UNCTAD, for instance, projects a fall in global GDP of 4.3 per cent during 2020. The World Bank has warned that the recession in advanced economies, where output fell sharply during the early phases of pandemic, is hitting developing countries' export earnings, and projected negative growth for over 150 countries during 2020 as early as June, before the second wave of infections hit many European countries.

The scale of these impacts will vary between regions because of different infection rates.



Some groups of countries are particularly vulnerable to economic downturns caused by the pandemic irrespective of their own infection rates. Small island states in the Pacific, for example, which rely heavily on tourism, have been hard hit economically even though infection rates have been much lower than those elsewhere in the world.[59]

Economic uncertainty and regional variation will continue as infection rates evolve and until vaccines and therapeutic medicines become widely available, reducing the need for movement constraints and restoring economic confidence.

The effects on employment provides a useful illustration of these wider economic impacts, not least because reduced incomes arising from unemployment and underemployment curtail consumer spending. In late June, the International Labour Organization (ILO) reported that countries that comprised 93 per cent of the world's workers had some sort of workplace closure measure in place, requiring people to work from home if possible or rendering them at least temporarily unemployed if they could not (sometimes with financial protections such as furlough schemes). An estimated 14 per cent of working hours, equivalent to 400 million full-time jobs, had been lost worldwide between the last quarter of 2019 and the second quarter of 2020 as a result of the pandemic.[60]

Income inequalities appear to have grown in many countries, because lower-income groups have been disproportionately affected by redundancies and the loss of informal earning opportunities. The World Bank has suggested that nearly 80 per cent of the 1.6 billion workers in the informal economy worldwide have faced lockdowns and slowdowns in industries ranging from wholesale and retail distribution, food and hospitality, tourism and transport to manufacturing. Women have been particularly affected by this, with 540 million women in informal employment around the world, mostly in services.[61]

Global economic recovery is therefore expected to be prolonged and uneven. Countries that have more resilient finances and established systems for business support and social welfare are better placed both to sustain economic activity and to provide income support for those adversely affected during the crisis, and to 'build back better' during the recovery.[62]

Most developed countries have instituted financial support packages for businesses[63] and employees affected by COVID-19, making more jobs sustainable and maintaining purchasing power within the economy as a whole. The United Kingdom government, for example, has subsidized wages and salaries for employees furloughed during the crisis and provided a variety of financial support to affected businesses. Similar measures are reported by ESCWA in the Arab region.[64] Some transition and developing economies have instituted measures of this kind with more limited resources.[65] Kyrgyzstan, Kazakhstan and Tajikistan, for instance, are reported by UNECE to have deferred tax payments, introduced VAT exemptions and prolonged interest and rent payment periods.[66]

Such interventions to support businesses and employees are, however, less feasible in lower income countries with weaker macroeconomic contexts. As the World Bank notes, therefore, 'small businesses in richer countries [have tended to have] a higher level of support from the government than small businesses in poor countries.'[67] This has knock-on effects for the wider economy, including e-commerce.

B Global trade in goods and services

a. Before the pandemic

The SDGs recognize the contribution of equitable multilateral trade as 'an engine for development', calling for a significant increase in developing countries' share of international commerce. They make no specific mention of e-commerce, but there has been growing recognition of its potential, like that of other ICTs, since the adoption of the SDGs in 2015.[69]

Trade in both goods and services is supported by e-commerce (and relevant to this study) because of the increasing role that digital ordering and payment mechanisms play across B2B business arrangements in all countries. Customs and other international trade arrangements are also increasingly digital, with online monitoring of consignments and digital data exchange becoming critical aspects of trade facilitation.

The overall trend in global trade in recent years – from the economic crisis of 2008/2009 up to the start of the pandemic – has been positive. The share of exports (of goods and services) in global GDP has been running at around 28 per cent since 2015. Global trade in goods grew at an average rate of 6.2 per cent per year between 1990 and 2007, and by 2.3 per cent per year between 2012 and 2019.[70] Growth in world trade was slower, however, during 2019 in the run-up to the pandemic, and will be followed by contraction during 2020.[71]

The World Trade Organization (WTO) estimates that service sectors now generate more than two-thirds of economic output, attract over two-thirds of foreign direct investment and are responsible for over 40 per cent of world trade.[72] The relationship between goods and services varies between regions and countries. Generally speaking, developed countries show a higher ratio of services to goods in GDP, with lower ratios in LDCs and countries that are highly dependent on exporting commodities. Service sectors account for the majority of women's employment and a large share of activity in micro, small and medium-sized enterprises (MSMEs).[73]

The extent of intra-regional trade also varies considerably, the result of geographic factors (such as proximity in the case of small island states), geopolitics (such as the risks associated with conflict), the size of domestic and adjacent markets, the competitiveness of locally produced goods and services in relation to those available from global suppliers, and the ease of doing business across borders. Sub-Saharan Africa, for instance, has notably lower levels of formal cross-border trade than other regions. A number of factors contribute to this, including difficulties at border crossings, poor intra-regional transport links and the competitive challenge for small-scale domestic manufacturers and suppliers posed by high-volume producers from other parts of the world that can leverage greater economies of scale.[74] (Informal trade is, nevertheless, significant for many small-scale traders at sub-Saharan border-crossings.)

b. The impact of the pandemic

International trade in goods, much of which now relies substantially on digital ordering and logistics, has been adversely affected by the pandemic as a result of reductions in demand (due to reduced discretionary spending in importing countries), movement controls and restrictions on transit imposed to mitigate and minimize the spread of infection. Lockdowns in China, the United States and the European Union – which are collectively responsible for almost two thirds of global imports and exports – have had particularly serious impacts on international supply chains, reducing volumes of goods imported from countries in other regions.[75] Overall, UNCTAD'S latest estimates suggest that global trade in goods may fall by some 9 per cent in 2020 as against 2019, and global trade in services by 15 per cent.[76]

The first quarter of 2020, as the pandemic spread around the world, saw global trade contract by 3.5 per cent and global manufacturing output by 6 per cent.[77] This was followed by a drop of almost 18 per cent in global trade in goods in May 2020 (compared with the previous May). UPU reported a 21 per cent fall in cross-border postal exchanges between 23 January and 14 May 2020 (compared with the same period in 2019), with lengthened delivery and customs clearance times.[78] Industry-wide cargo tonnage dropped by 9.1 per cent in February 2020 in seasonally adjusted terms,[79] while world merchandise trade is predicted to fall by between 13 and 32 per cent in 2020.[80]

There have been significant variations between regions over time as the pandemic has waxed, waned and waxed again, with impacts in heavily affected countries trickling down to those from which they import.

- Chinese exports fell by about 21 per cent in February 2020 compared with the same month in 2019, affecting both local output and demand for imports from elsewhere, but have recovered since because China's infection level has remained low.[81]
- Factory shutdowns in the European Union have had significant repercussions on exports from Africa and Asia. The International Trade Centre (ITC) predicts that African exporters may lose more than US$ 2.4 billion in global industrial supply chain exports due to factory shutdowns in China, Europe and the United States, more than 70 per cent of which will result from temporary disruption of supply chain links with the EU.[82]

Trade in services has also been affected. The value of exports from a group of 37 countries, which in 2019 accounted for around two-thirds of global exports of services, shrank by 10.4 per cent in the first quarter of 2020 (compared to the same period in 2019).[83] Tourism has been particularly badly hit. Before the pandemic it accounted for 24 per cent of global commercial services exports, including 32 per cent of those from developing countries and 50 per cent of those from LDCs.[84] International tourist arrivals declined by 44 per cent worldwide between January and April 2020, compared with the same period in 2019.[85] The World Tourism Organization expects arrivals to drop by between 58 and 78 per cent in 2020, as compared with 2019, depending on how the pandemic evolves, whether travel restrictions can be lifted and whether they need to be reimposed.[86]

There have been gains in some global markets however, for both goods and services, resulting from the pandemic. Demand for medical supplies, particularly personal protective equipment (PPE) has surged, while that for digital equipment to take advantage of online work and entertainment has also increased.[87] The shift from office to home working and the closure of public entertainment venues have led to substantial increases in demand for videoconferencing and digital entertainment services. Although local platforms are also available, much of this growth represents purchase of services from corporations based in developed rather than developing countries, such as Zoom, Microsoft Teams, Netflix and online games platforms.[88]

BOX 2.2

eTrade for Women

Empowering women entrepreneurs in developing countries

The e-Trade for all partnership has a special focus on women entrepreneurs, in particular through one of its major spin-off programmes, the *eTrade for Women* initiative. Women digital entrepreneurs are significantly under-represented in the ICT sector and the digital economy. Addressing this inequality will not just improve gender equity but also improve the contribution that MSMEs make to SDGs concerned with alleviating poverty and enabling empowerment.

Women's unequal representation in digital economies is a reflection of pre-existing gender inequality and vulnerability in social, political, and economic systems.[89] Women tend to assume a larger share of care and domestic work and take responsibility for decisions that can benefit their families and broader communities.[90] This constrains their business opportunities. As things stand, women own or manage only some 20 per cent of export firms worldwide, and about a third of the world's micro, small and medium-sized enterprises.91 In Sub-Saharan Africa, women make up some 70 per cent of cross-border traders, many of them in the informal economy.[92]

MSMEs owned by women tend to be smaller and thus more vulnerable to fixed costs, volatile international prices and trade-related regulations and obstacles. Evidence suggests, however, that businesses led by women tend to grow faster and to employ more people than those led by men,[83] and that if they are supported to work under the same conditions as those led by their male counterparts, they could facilitate a deeper reduction in hunger and impoverishment.[94]

Times of uncertainty (like the pandemic) tend to exacerbate inequalities such as those experienced by women in e-commerce.[95] They have had to navigate shifting global value chains during the COVID-19 crisis while suffering from unequal access to information, skills, networks and resources.[96] As a result, the United Nations notes, 'Emerging evidence on the impact of COVID-19 suggests that women's economic and productive lives will be affected disproportionately and differently from men'.[97] This is because, 'Across the globe, women earn less, save less, hold less secure jobs, [and] are more likely to be employed in the informal sector. They have less access to social protections and are the majority of single-parent households. Their capacity to absorb economic shocks is therefore less than that of men'.[97]

The 25th anniversary of the *Beijing Platform for Action*, the year 2020, was expected to provide an opportunity to celebrate gender equality. The COVID-19 pandemic has, however, put at risk many of the gains made to promote women's rights and representation since the Platform was agreed. Policies aimed at supporting business development and entrepreneurship have often to consider women's unique 'positions in value chains, their multiple roles in society or their access to assets, skills and networks'.[98] This is a core value of the *eTrade for all* initiative.

B Trends in ICTs in relation to trade and development

a. Before the pandemic

The level of participation in digital technology and the Internet is a powerful indicator of an economy's capacity to leverage e-commerce (and therefore one of the four indicators in UNCTAD's B2C e-commerce index). The ability of businesses to participate in international markets depends increasingly on the quality of digital connectivity available to them, while the ability of citizens to shop online or use online commercial services depends on the availability of reliable (and preferably broadband) communications networks, the affordability of suitable hardware and data packages, the existence of relevant online platforms and services, and individuals' own capabilities and digital literacy.

Digital inequality – between and within regions, countries and communities – has been a longstanding concern in international ICT policy. Two indicators, illustrated in Figures 2.3 and 2.4, illustrate how digital inequalities affect countries' abilities to engage in electronic trade.

- The volume of international bandwidth per Internet user offers a reasonable proxy for the quantity and quality of connectivity available to national businesses in international markets. Although this on average more than doubled across the globe between 2015 and 2019, the average figure in developed countries (189kb/s) is more than twice that in developing countries (91kb/s) and more than nine times that in LDCs (21kb/s).[99]

- The proportion of individuals using the Internet (at least occasionally) worldwide is estimated by the International Telecommunication Union (ITU) to have grown steadily from 13.8 per cent in 2005 to 53.8 per cent in 2019, but these global figures also mask substantial differences. The estimate for developed countries (86.3 per cent) is almost twice that for developing countries and more than four times that for LDCs (47.0 and 19.1 per cent respectively); that for Europe (82.5 per cent) more than three times that for Sub-Saharan Africa (28.2 per cent).[100]

Figure 2.3
International bandwidth per Internet user, kbit/s, ITU estimates, 2019

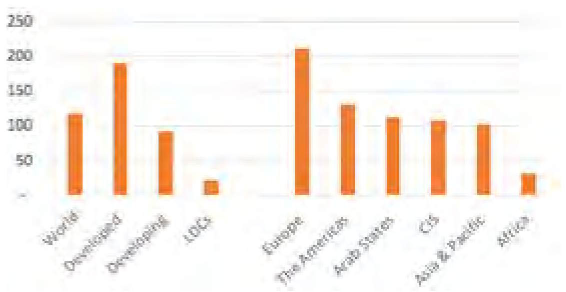
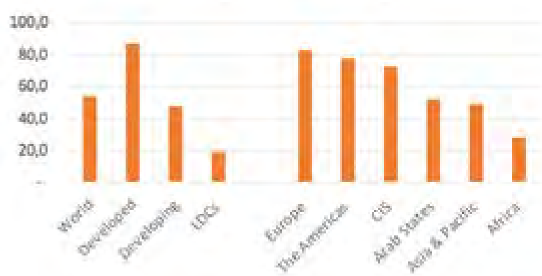


Figure 2.4
Individuals using the Internet per 100 inhabitants, ITU estimates, 2019



Within countries, connectivity and usage of the Internet are often higher among men than women (with particularly substantial differences in LDCs),[101] between urban and rural areas,[102] and between people with higher and lower incomes and educational attainment levels.[103] Recent evidence suggests that these inequalities are not diminishing and may be growing as innovations in technology and services are adopted more quickly by higher income groups.[104]

These inequalities in digital access between countries and amongst individuals are reflected also in the business world.

- Informal businesses in developing countries are much less likely to participate in the digital economy than formal businesses. Very few informal businesses in Sub-Saharan Africa currently make use of the Internet, with survey respondents identifying three main reasons for non-adoption: perceived need, cost, and unavailability of relevant networks or services.[105]
- A study of MSMEs in ASEAN countries in 2019, for instance, found that, while 90 per cent were making use of basic digital tools such as email and standard office software, only 34 per cent were making use of websites, social media or e-commerce platforms and only 10 per cent made use of advanced digital tools or saw digitalization as part of their core business model.[106]

b. During the pandemic

The COVID-19 pandemic has illustrated the value of ICTs in enabling economic activity to continue despite the dramatic curtailment of movement of goods and people that has taken place. Office workers worldwide have been required, encouraged or preferred to work from home, using the Internet, messaging and videoconferencing platforms to do work that was previously performed in offices, while international business travel has been largely displaced by videoconferencing. Digitalization has thereby mitigated the economic damage that has been caused by the pandemic, experience which may lead to lasting changes in work patterns with continued reliance on digital technologies for those who work in offices when the crisis recedes.

Likewise, online entertainment has partially substituted, for those with adequate connectivity, for other leisure-time activities. Fifty-eight per cent of respondents in a consumer survey undertaken by UNCTAD in nine countries in mid-2020 reported that they were browsing and spending a lot of time on entertainment sites during the pandemic.[107] Netflix added 26 million new subscribers in the first two quarters of 2020, compared with just 28 million in the whole of 2019,[108] while streaming services in Latin America have been projected to grow by 36 per cent over the year.[109] Nintendo and Tencent both saw gaming sales increase during the first quarter. Analysis from GamesIndustry.biz shows that sales across fifty major markets rose by 63 per cent during the first quarter while data from Comcast show that new game downloads have increased by 80 per cent.[110] There is evidence also of growth in music downloads, not least in developing country markets.[111]

Some major online platforms have seen substantial improvements in financial performance and stock value as a result of improvements in their business climate during the pandemic. The online retailer (and cloud service provider) Amazon, for instance, registered its most profitable quarter in the third quarter of 2020, with growth of more than 35 per cent in both United States and international sales revenue – including 33 per cent growth in own product sales and almost 55 per cent growth in income from sellers on its marketplace.[112] The African platform Jumia saw an increase of over 50 per cent, from 3.1 million to 4.7 million, in the volume of transactions during the first six months of 2020, compared with the same period in 2019.[113] Netflix revenues are reported to have grown by 25 per cent.[114]

These developments in videoconferencing and home entertainment, and similar growth in distance learning, form parts of the evolving e-commerce ecosystem. They would have been possible ten years ago, when ICTs were less advanced and less pervasive, but they have also demonstrated two important limitations of today's ICT environments.

- Those who are less connected and those whose jobs cannot be done from home have been less able to take advantage of ICTs' potential. More manual than office workers have lost jobs or income, with consequential cuts in purchasing power. Children whose schools have been temporarily closed and who lack digital access or devices at home have been further disadvantaged in their educations. Social and economic inequality is generally thought, therefore, to have risen in result.
- Higher demand for connectivity has put greater pressure on communications networks and services. Data use has increased substantially, with most networks experiencing annual growth of 30 to 45 per cent from previous levels in a few short weeks at the start of the pandemic.[115] In Europe and the Americas, some satellite operators providing broadband connectivity direct to users have experienced traffic growth of up to 70 per cent, especially in remote and rural areas.[116]

Networks have proved more resilient in most countries to this increase in demand than was initially expected, while digital businesses and governments have amended regulations and business models to optimize use of available resources. Increased demand has nevertheless given greater urgency to measures intended to increase bandwidth and extend connectivity to underserved communities. It has also clarified infrastructure needs for longer-term recovery. These developments are discussed in **CHAPTER 3**.

PART 2 –
TRENDS IN E-COMMERCE

Summary

The second part of this chapter is concerned specifically with trends in e-commerce before and during the pandemic. Its analysis draws on research by UNCTAD, contributions by the UN's Regional Commissions, inputs from other eTrade for all partners, and other published literature. There are important limitations to the evidence base which should be noted. Most countries still do not publish official statistics in this area and those that do sometimes do not follow international guidelines. Many more countries publish data concerning B2C transactions than those concerned with B2B e-commerce.[117] Data are also more available for the first half of 2020 than for the later months of the pandemic crisis.

The pandemic and measures to cope with its effects have had two major impacts on the relationship between offline and online commerce, concerned respectively with international and domestic trade. These are derived in large part from movement restrictions to reduce the spread of the infection and public anxiety about personal infection risks:

- Restrictions on transport and additional safety requirements at ports, airports and land borders have disrupted international trade in goods and services, including many goods that are now enabled by digital transactions, and small consignments that are often despatched on passenger aircraft. Disruption to international trade has enhanced awareness and understanding of the value of international e-commerce, including digital trade facilitation, in sustaining economic activity, suggesting the need for accelerated efforts to promote digitalization throughout supply chains.
- There has been extensive substitution of e-shopping and streaming for more traditional retail and entertainment services. The online share of retail sales has increased in all sectors, particularly pharmaceutical and health goods (especially at the start of the pandemic), groceries, and electronic and ICT goods that are used for homeworking and home entertainment. Average expenditure per consumer has fallen, however, as those on lower incomes have turned to online shopping. Many consumers report deferring more expensive purchases until incomes become more predictable.

Changes in shopping, entertainment and workplace behaviour, and associated adaptations in business practice, have accelerated ongoing transitions from physical to online markets that are likely to have lasting impact, particularly if recovery from the pandemic is spasmodic or prolonged.[118] However, these accelerated trends in international and domestic e-commerce are also likely to exacerbate disparities in economic performance between countries with higher and lower levels of e-commerce. This reinforces the need for governments, business stakeholders and international development partners to address barriers to e-readiness and establish environments that enable businesses to leverage gains from greater engagement with e-trade.

a. Before the pandemic

International e-commerce

UNCTAD estimates that the global value of e-commerce sales (including both B2B and B2C) reached almost US$ 26 trillion in 2018, accounting for 30 per cent of GDP and representing growth of eight per cent over 2017. Within this figure the United States was by far the largest market. The value of global B2B e-commerce was estimated at US$ 21 trillion, representing 83 per cent of all e-commerce, including transactions over online market platforms and electronic data interchange. The value of B2C e-commerce was estimated to be US$ 4.4 trillion in 2018, an increase of 16 per cent over 2017. The three countries with the highest values of B2C e-commerce sales were China, the United States and the United Kingdom.[119]

The relationship between international and domestic e-commerce is not clear-cut. Within the limits of available data, UNCTAD estimates that international B2C e-commerce sales amounted to US$ 404 billion in 2018, representing an increase of seven per cent over 2017, and accounting for about 10 per cent of total B2C e-commerce, though this varied between countries. While the majority of online shoppers bought mostly from domestic suppliers, a little over 20 per cent - some 330 million - made cross-border purchases in 2018. Interest in buying from foreign suppliers was expanding. The share of cross-border online shoppers to all online shoppers, it was estimated, had risen from 17 per cent in 2016 to 23 per cent in 2018.[120]

As well as large-scale B2B transactions, a substantial amount of small-scale B2B and B2C trade takes place between continents and across land borders, especially in two contexts.

- Many transactions involving small consignments between merchants and customers in different countries transit by air, often on passenger flights. A decade ago it was estimated that the average online shopper in the European Union spent 939 euros per year on domestic and 693 euros on cross-border e-commerce,[121] much of which would transit in this way.
- A substantial amount of exchange takes place between MSMEs and informal enterprises in the proximity of border crossings, where many small-scale traders rely on such cross-border trade.[122] It was estimated some time ago, for example, that between 30 and 40 per cent of Sub-Saharan Africa's intra-regional trade is informal and that four times as many cross-border traders may be operating outside the formal economy as within it on the continent.[123] As ownership of mobile telephones has grown, an increasing proportion of ordering of goods among such traders now takes place online.

While all of these transactions involve the transfer of goods, they increasingly make use of digital ordering and transaction mechanisms as well as digital trade facilitation.

Domestic e-commerce

Domestic e-commerce has been developing for much of the present century. Although the initial growth of online shopping was slower than anticipated, it has accelerated in the past decade. (Interestingly, in the present context, past experience of health crises played some part in its development. The Chinese firm JD.com, now one of the world's largest online retailers, moved into online sales in 2004 in response to the SARS crisis of 2002/3.[124])

Sustained but variable growth in domestic e-commerce was taking place before the pandemic, though with large variations between countries. These differences were broadly consistent with average income levels, as shown in Figure 2.5, but also affected by other aspects of the digital and legal environment.[125]

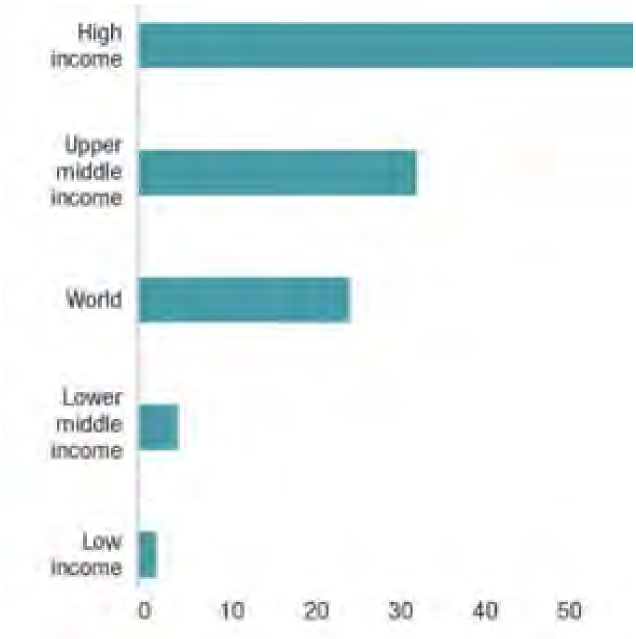
- Data from six European countries with highly connected populations show that more than 80 per cent of Internet users were making some purchases online before the crisis.[126]

- Among developing countries, the highest levels of online shopping could be found in higher-income Asian countries, with much lower levels of participation in lower-income countries that had lower broadband penetration rates and levels of disposable income.
- Similar differences could be found in the Arab region, where the largest e-commerce markets before the pandemic were in wealthier Gulf states (the UAE, Saudi Arabia and Qatar),[127] and in the UNECE region, where the percentage of the population engaged in online shopping ranged from 70 per cent and more in Germany, France and the Russian Federation to 15 per cent in Armenia and less than 10 per cent in some Central Asian countries.[128]
- In more than twenty lower-income countries, where few people were online to start with, less than 10 per cent of Internet users were e-shopping before the crisis struck (implying that e-shopping take-up in the adult population as a whole was very low indeed).[129]

These regional differences can be illustrated by data from WTO and from UNCTAD's B2C e-commerce index, as shown in Figure 2.5. Several reasons can be adduced for them. Alongside the basic level of connectivity which enables people to buy goods and services online, these include the availability of online shopping platforms, the range of businesses that have considered online shopping offerings worthwhile where there are relatively small markets for them in countries such as LDCs, the availability of digital payment mechanisms, the cost of online transactions in relation to purchasing power, and the level of consumer confidence in the security of online transactions. These constraints/challenges are discussed in **CHAPTER 3**.

Figure 2.5

Use of Internet for online purchases by adults, country groups by income category, 2017 [131]



BOX 2.3 THE ROLE OF PLATFORMS

Online platforms are (usually commercial) digital environments that enable different parties to interact online. They are increasingly important in the world economy, using data-driven business models to complement, disrupt and sometimes displace more traditional ways of doing business.

In its 2019 Digital Economy Report, UNCTAD distinguishes between transaction and innovation platforms. The former provides online infrastructure that supports exchanges between a number of different parties, while the latter create environments for code and content producers to develop applications and software. 'Platform-centred businesses', the report notes, 'have a major advantage in the data-driven economy. As both intermediaries and infrastructures, they are positioned to record and extract all data related to online actions and interactions among users of the platform'.[132]

In recent years, the market for domestic digital supply of many products in many countries has become dominated by a small number of global platforms, such as US-based Amazon and the Chinese companies Alibaba and JD.com. However, the relative importance of global and local platforms varies between countries. Amazon is estimated to have some 14 per cent of the global market for e-shopping,[133] for example, including a majority market share in the United States and a 30 per cent share in the United Kingdom. In China, Alibaba's Tmall service, JD.com and Pinduoduo share some 80 per cent of the retail e-commerce market.[134] Lazada (now owned by Alibaba) and Shopee (based in Singapore) are widely used in South East Asia,[135] as is Mercado Libre in Latin America where it operates in fifteen countries. Some two-thirds of online purchases in Saudi Arabia are made from websites based in the Gulf region rather than global platforms such as Amazon and Alibaba, while Arab websites also predominate in Egypt's market for e-commerce.[136]

b. During the pandemic

Significant shifts have occurred in the scope and scale of e-commerce during the pandemic. Different trends are evident in international/cross-border and domestic contexts.[137] Evidence on these is summarized below.

International e-commerce

The majority of international e-commerce consists of transactions for goods that are ordered digitally and subsequently delivered over traditional transit routes though ports, airports and border crossings. A growing proportion of transactions for such goods – both B2B and B2C – takes place online.[138] Disruption to supply chains disrupts e-commerce, while efforts to facilitate trade enable it. The environment for the transit of goods is therefore fundamental to the effective functioning of international e-commerce and to consideration of the pandemic's impact on it.

Intercontinental and intra-regional e-commerce concerned with goods have been adversely affected by restrictions on cross-border transit imposed by governments to constrain virus transmission, and by reductions in transport capacity resulting from movement controls and reduced demand for passenger flights. These factors have affected all trade that requires international transit and delivery, including consignments ordered through B2B and B2C e-commerce platforms.

- In Africa, for example, 38 countries have announced some form of land closures during the pandemic – with concurrent falls of 5, 16 and 23 per cent in exports in February, March, and April compared to the same months in 2019 (while imports declined by 7 per cent in March 2020 and 25 per cent in April 2020 over the previous year). A significant proportion of this trade consists of transactions that have been facilitated through e-commerce.[139]

- ECLAC projects a 23 per cent contraction in the value of regional goods exports in Latin America and the Caribbean during 2020, with falls of more than 10 per cent in both volume and value, along with a similar fall in imports.[140]

Border lockdowns – common in most countries during the pandemic – have restricted shipping and transportation, causing severe disruptions in supply chains for all trade, both traditional and e-commerce. Shortage of staff and enhanced requirements for additional safety precautions have also slowed trade processes in which physical human interaction is required, such as border inspections. Uncertainties and poor information exchange, for instance regarding new protective measures or rules about restrictions, have added to confusion at ports, airports and border crossings, leading to significant delays in transit and in some cases the exhaustion of storage capacity.[141]

ECLAC believes that the most important factor disrupting international trade in its region has been disruption to air and maritime transport. Although the number of freight flights did not fall significantly (and may have increased in the Arab region),[142] the number of passenger flights – which transport much merchandise that is ordered online – halved between January and August. There was also a significant drop in maritime container trade.[143]

There is, however, evidence of change as the pandemic has evolved during the course of the year and as e-commerce businesses have taken the opportunity to compensate for disruption to traditional trading arrangements. The consultancy McKinsey, for example, reports that cross-border e-commerce volumes picked up from the second quarter of 2020, as economies adjusted to pandemic realities and initial logistical challenges were addressed. UPS and PayPal, it reports, both reported substantial growth in the second quarter on cross-border shipment volumes and values. Assessing the extent to which this has continued and its implications for the future require further data from diverse commercial environments.[144]

Domestic e-commerce: online services

Experience with domestic e-commerce has been very different from that affecting international e-commerce. The widespread shift from office to home working and the closure of public entertainment venues during the pandemic have led to substantial increases in the use of teleworking, distance learning, online networking, and entertainment sites. The impact of this has varied between and within countries, as online alternatives have been more available to those with better connectivity, office jobs and higher incomes.

Transition to homeworking by office workers has been facilitated by videoconferencing applications such as Skype, Zoom and Microsoft Teams. Zoom experienced the most spectacular growth among these platforms, with daily meeting participants surging from 10 million in December 2019 to 300 million by April. The United States experienced a 300 per cent increase in use of videoconferencing platforms early in the pandemic, while in Thailand, data traffic from Zoom and Skype increased by 828 and 215 per cent respectively between 1 January and 19 March 2020.[145] In Latin America and the Caribbean, the use of teleworking services increased by 324 per cent between the first and second quarters of 2020, while that of distance education grew by more than 60 per cent.[146]

Similar growth has been seen in educational and entertainment services.

- More than half of those surveyed by UNCTAD in a study of nine countries that it conducted during the pandemic said that they now 'spend a lot of time on entertainment sites'.[147]
- Data from Brazil show that enrolment in education courses, music and video streaming services went up by 68, 59 and 26 per cent respectively between 2018 and the second quarter of 2020.[148]
- Survey data from South Africa show growth across all areas of home media consumption, with the highest growth rates for social media

and messaging services, YouTube videos and news coverage.[149]

- The South African streaming business Showmax has grown its subscriber base by a fifth year on year, while Netflix predicts a 15 per cent increase on the African continent between the first and third quarters of 2020 (from a very low base of streaming adoption at the start of the pandemic).[150]
- The ITU reports a 400 per cent growth in online gaming in the United States, probably influenced by children being out of school,[151] while in Chile, Internet traffic associated with gaming services more than trebled year-on-year in the first four months of the pandemic.[152]

While demand for teleconferencing and entertainment services has grown, platforms that deliver services that have been adversely affected by pandemic movement restrictions have seen activity plunge, bringing business models into question.

- The proportion of Internet users buying airline tickets or booking accommodation through e-commerce platforms in Brazil fell by 65 per cent and 41 per cent in 2020 compared with 2018.[153]
- The online booking agency Travelstart, which operates in Africa, saw a drop in bookings from March to May, though this picked up slightly subsequently, reaching around half of previous volumes for the time of year by August.[154]
- Online accommodation agency Airbnb has experienced a huge downturn in bookings, with a 72 per cent decline in revenue reported early in the pandemic.[155]
- Estimates published by the International Civil Aviation Organization (ICAO) suggest that there will be a fall of just over 50 per cent in the number of airline seats offered by airlines during 2020.[156]

The International Air Transport Association (IATA) fears that the travel industry may not recover from these setbacks until 2024.[157]

Domestic e-commerce: retail

The pandemic has had a substantial impact on retail, including a significant transfer of market share from offline to online businesses. National lockdowns, restrictions on movement, public anxiety about infection and mandatory closures of non-essential retail stores have had a marked impact on patterns of consumer behaviour, encouraging online shopping at the expense of traditional retail across the world. One side impact of this has been an increase in employment in the online shopping and delivery sectors,[158] though this has only partly compensated for loss of jobs in the economy as a whole since the pandemic began.

Overall retail, including both online and offline sales, has been impacted negatively by financial uncertainty among consumers as well as formal lockdowns and business closures. Well over one hundred countries worldwide had instituted full or partial lockdowns by the end of March 2020, affecting billions of people, while many others recommended movement restrictions for some or all of their citizens.[159] Reduced incomes and the risk of redundancy for many people have affected their ability and desire to buy goods and services, both offline and online. This led to a sharp initial drop in purchases in some countries, even online, as merchants and consumers struggled to adjust at the start of the pandemic.

Many people who could do so stopped visiting shops as the pandemic struck, even where these were allowed to remain open. Google's data-monitoring of community mobility, for instance, found that visits to retail and entertainment establishments fell by 70 per cent between February and April 2020 as the pandemic hit Latin America, while those to grocery and pharmacy establishments dropped by 45 per cent - though by September these figures had recovered significantly (to around 30 and 10 per cent below previous levels).[160]

At the same time, as retail stores closed or were considered risky and avoided by many customers, a substantial shift occurred towards contactless e-shopping, with customers buying goods online for subsequent collection or delivery.

Digital entrepreneurs in a number of countries recall an initial period of instability caused by lockdowns and protests but conclude that once stability resumed, their businesses increased their trading volumes. Paystack, a financial payments company with more than 60,000 merchants across Africa, reported for instance that transactions on its platform contracted briefly after lockdowns in the countries where it operates. However, it has since recorded a surge in transactions five times higher than pre-pandemic levels.[161] In Colombia, too, online sales are reported to have fallen as the pandemic hit, then risen sharply again to nearly pre-pandemic levels in the period up to May.[162]

Evidence from across the world illustrates growth in online sales, and in the market share of online retail against offline, since the start of the pandemic, even if that has occurred within a context of stagnant or contracting overall retail. Illustrations of these trends can also be found in Figure 2.6.

Figure 2.6:

Evidence concerning retail sales in the United Kingdom and European Union.[163]

A. Share of e-commerce in total retail sales, United Kingdom and United States (2018-2020)

B. Retail turnover, year-on-year change, EU-27 (July 2019-2020)

- In the United States, the share of e-commerce in total retail sales rose from 11.8 to 16.1 per cent between the first and second quarters; in the United Kingdom from 20.3 to 31.3 per cent.[164]
- In China, the online share of retail sales rose from 19.4 to 24.6 per cent between August 2019 and August 2020.[165]
- In Kazakhstan, the share of e-commerce in retail trade grew from 5.0 per cent in 2019 to 9.4 per cent in 2020.[166]
- A study of 8,600 digital consumers in South East Asia found that, while 47 per cent reduced offline purchases during the six months between January and June, 30 per cent increased their online shopping.[167]
- Downloads of shopping apps jumped 60 per cent in Thailand in the week between the imposition of a partial lockdown and full emergency measures during March.[168]

The online marketplace Mercado Libre showed an increase of 40 per cent in average searches per user across its Latin American operations between late February and late May, resulting in the volume of articles sold and deliveries per day more than doubling between the second quarters of 2019 and 2020. Data from Argentina show a 63 per cent increase in online sales in the first half of 2020, with the share of online sales vis-à-vis physical shops rising from 18 to 49 per cent, and a fifth of orders coming from new customers. Data from Chile suggest that there was an increase in the share of sales done through e-commerce from 5 to 16 per cent between May 2019 and 2020.[169] This experience was not, however, universal in Latin America. In Peru, restrictions to online selling in the early days of the pandemic were so strict that they reportedly curtailed online activity.[170]

A consumer survey by the market research company Statista found substantial increases in use of e-commerce in the ESCWA region, with almost half of respondents in Saudi Arabia and Egypt saying that they have been shopping online more frequently during the pandemic, and more than a third saying so in the United Arab Emirates, Morocco, Lebanon and Jordan. Significant proportions of respondents, however, also reported using online shopping less frequently, suggesting that care is needed in interpreting studies that only ask about increased participation.[171]

Only limited data for the later months of 2020 are so far available, and there are some questions therefore about the extent to which this surge in e-commerce will continue. UNECE reports, for instance, that some countries in its region, including the United States, have experienced a slowdown in online retail as the pandemic has continued, perhaps because consumers are increasingly concerned about the risk of unemployment or reduced incomes in future.[172]

Within this overall picture, significant shifts have also taken place in the supply and demand for different types of goods, both offline and online. In the early days of the pandemic there was, unsurprisingly, a surge in purchases of health-related goods, including personal protective equipment (PPE), and of electronic goods and devices required for homeworking and home entertainment. As the pandemic has continued, a wider range of goods – such as food and beverages, groceries, home improvement and personal care products – have also increased their share of retail sales, while survey evidence suggests that many consumers have delayed purchasing more expensive and luxury items because of increased financial insecurity.[173]

The impact of this shift on businesses has varied.

- Retailers that were previously online-only have naturally made gains, other than in sectors such as travel and tourism.
- Traditional retailers that already had established online offerings were better placed to maintain more of their previous sales revenue than those without them – though, for many, increased online sales will not have compensated for decreased offline sales.
- Many businesses that were previously offline-only have launched new online offers, while others have shifted their product offers to meet changing consumer requirements.[174]
- Those that have remained wholly offline have been worst hit, whether by enforced closure or lower footfall due to customer anxiety and the loss of passing trade.

UNCTAD has conducted two surveys to explore these trends in greater depth – one, in conjunction with Netcomm Suisse, concerned with consumer behaviour and attitudes in nine countries across the world;[175] the other concerned with perceptions by established e-commerce companies and platforms, primarily in LDCs.[176]

The consumer research project surveyed samples of around 250 consumers in each of five countries in the ECE region (Germany, Italy, the Russian Federation, Switzerland and Turkey) and four large developing countries from other regions (Brazil, China, the Republic of Korea and South Africa). No LDCs were included.

- Within these samples the survey found higher rates of growth in the number of people shopping online in economies which started out from lower rates of participation, such as China and Turkey, than in countries which had more established online shopping sectors before the pandemic, such as Switzerland and Germany.

This would be consistent with higher rates of take-up of e-shopping lower down the income scale.

- Growth in the number of online shoppers was evident across the countries surveyed for all eleven product ranges investigated. It was particularly high in products related to pandemic needs (health and pharmaceutical products, consumer electronics and ICT products) and in essential goods such as groceries and personal care products.
- Growth was evident in all age groups, but strongest among those aged between 25 and 44, as well as among women, and those who had attained tertiary education.
- Average expenditure per month through online shopping, however, fell across all product ranges by comparison with the period before the pandemic. This may be because transactions have become more frequent, because more people with lower incomes are now purchasing online, and/or because consumers are deferring more expensive purchases until after the pandemic when they hope their incomes will be more secure and predictable.
- Although there has been growth in the use of digital payments, in most of the countries UNCTAD surveyed, those in its samples have continued to prefer established means of payment. These vary between countries – credit and debit cards being most popular in Brazil, the Republic of Korea and Turkey, PayPal in Germany and Italy, and AliPay and WeChatPay in China. Home delivery was preferred to store collection in all countries.

UNCTAD's research into impacts on e-commerce companies and platforms adds additional perspectives, though it should be borne in mind that the countries concerned, primarily LDCs, have very different underlying market characteristics than those in the consumer survey, and the two are therefore not directly complementary. This e-business survey looked at different potential impacts on different parts of the supply side of e-commerce, including:

- established e-commerce companies;
- established businesses newly entering e-commerce or increasing/upscaling their e-commerce offerings;
- start-ups; and
- third party online marketplaces acting as intermediaries between suppliers and consumers.

Evidence was gathered between March and July 2020 from 184 e-commerce companies and 73 third party marketplaces in 24 countries, around a quarter of these providing a valuable subset of evidence from Bangladesh.[177]

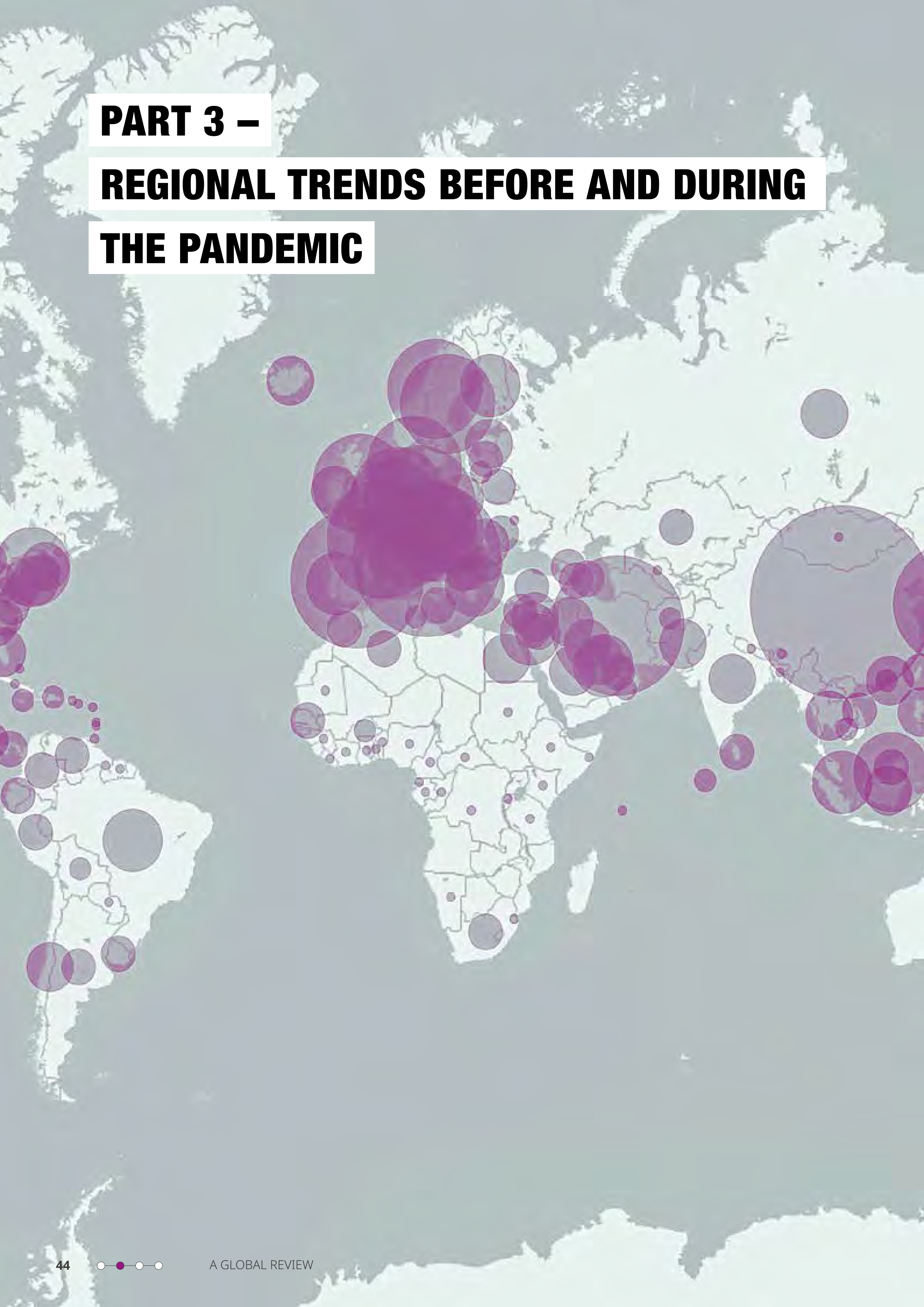
The survey found that – at least in the early stages of the pandemic in these countries – third party marketplaces, with wholly digital business models, had proved more resilient than e-commerce companies with a mix of offline and online sales. Almost 60 per cent of these marketplaces saw increased numbers of users, many of them new to their websites. Other findings from the survey included:

- increases in costs for online businesses because of supply chain difficulties due to lockdown, movement restrictions, business closures and closed borders;
- shifts in consumption patterns, including increased use of online channels for purchasing essential products;[178]
- significant growth in the use of social media for online shopping as well as of e-commerce websites; and
- increased uptake of e-payment mechanisms, although cash payments continued to predominate.

In LDCs, UNCTAD's business survey indicated substantial increase in the use of mobile money for transactions, but also found that cash on delivery remained the preference of many customers and had continued to grow during the crisis (perhaps another indication of e-shopping reaching further down the income scale). Other evidence suggests that this preference for cash on delivery is not restricted to lower-income countries. Evidence from Qatar has shown that, there too, almost half of online shoppers paid this way before the pandemic.[179]

Changes in supply chains affecting smaller suppliers require more investigation. It is clear that many small suppliers – for instance in the agriculture sector[180] – have lost access to traditional markets, while many small retailers have lost access to traditional suppliers. Further research could focus on the impact this has had on their revenue streams and the extent to which they have been able to move from offline to online markets in order to sell produce.

PART 3 –
REGIONAL TRENDS BEFORE AND DURING THE PANDEMIC

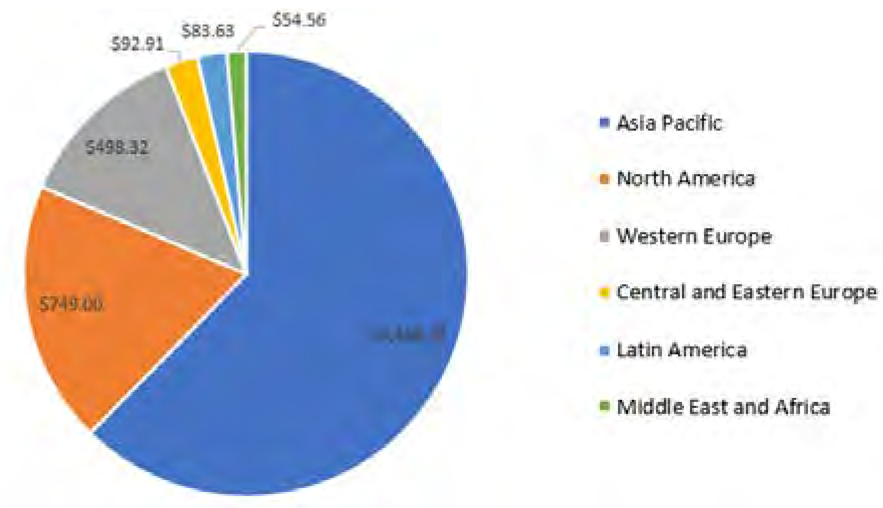


Not every country's pandemic experience has been the same. Some that were affected early, particularly in Asia, were able during the latter half of 2020 to maintain low infection rates, enabling economic activity to return closer to pre-pandemic conditions. Others, including many in Europe, experienced a dip following lockdowns in the spring, but suffered a second wave of infections later in the year that has led to renewed lockdowns and other restrictions. Infection rates have so far been lower than expected in most of Africa, but have been particularly high in the United States, some European countries and much of Latin America and the Caribbean. The future trajectory of infections remains uncertain.

E-commerce is unevenly distributed across the globe, with a majority of transactions taking place in the Asia-Pacific region (which is also the most populous). The eMarketer's 2020 Global E-Commerce Report estimated that 62 per cent of global retail e-commerce transactions by value took place in that region in 2020, with North America and Western Europe responsible for the bulk of the remainder. Latin America, the Middle East and Africa together, it estimated, accounted for just 3 per cent of total e-trade. Its estimates are illustrated in Figure 2.8.

Figure 2.7

Global share of retail e-commerce sales by region, 2020 (billion dollars)[181]



Studies associated with this report have been undertaken by four of the United Nations' Regional Commissions.[182] The overall summary, illustrating developments in one of these regions, Latin America and the Caribbean, is set out some detail below, to illustrate some of the main themes emerging from the discussion in this chapter from a regional perspective.

The studies show that many of these themes are common worldwide, though differences also arise between regions as the result of their different economic characteristics and different experiences of pandemic. They also reveal significant differences within each region that reflect the considerable variation in economic and developmental characteristics among regional countries and their different e-commerce ecosystems, as well as different experiences with the coronavirus.

The majority of **AFRICAN COUNTRIES** are developing countries and LDCs, and the continent has correspondingly low levels of online activity and e-commerce compared to other world regions.[183]

Although it has experienced lower levels of infection from the pandemic than many other regions, it is expected to suffer from declining GDP in 2020, disrupting the developmental progress which had been achieved during the previous decade.

Africa also has low levels of intra-regional trade by international standards. Online shopping has increased substantially during the pandemic among those groups with the income and resources to make effective use of it but has been inhibited by low levels of Internet usage and access to finance, as well as by deficiencies in enabling legislation for e-commerce.

UNECA's report notes the dynamic potential of e-commerce on the continent and urges governments and development partners to foster this by approving appropriate fiscal and regulatory frameworks, promoting financial inclusion, developing the projected African Continental Free Trade Area (AfCFTA)[184] and increasing engagement and partnership between governments and digital entrepreneurs.[185]

The **ARAB REGION** has also seen major differences in experience, in particular between oil-producing states in the Gulf Cooperation Council (GCC) region and middle-income developing countries around the Mediterranean.[186] Higher levels of e-commerce were evident in GCC countries and some larger markets, such as Egypt, before the pandemic, though even in the strongest markets these represented less than five per cent of total retail sales.[187]

As elsewhere, domestic e-commerce has accelerated during the pandemic, but ESCWA reports that there are still many challenges to growth including 'unreliable and costly supply chains, limited awareness and skills ..., insufficient or inconsistent laws and regulations, limited or deficient transport and logistics infrastructure, lack of online or alternative payment facilities, cultural preferences for face-to-face interaction, and reliance on cash.' GCC countries that have established policy and legislative frameworks for e-commerce, and have high levels of GNI *per capita*, are best placed to build on the growth in online shopping that has taken place over the year. ESCWA emphasises the importance of regional integration and cooperation, especially in trade facilitation, in extending benefits to other countries in the region.[188]

In the **ECE REGION**, major differences are evident between the experience of countries in the European Union and continental Europe, the Russian Federation, transition economies in eastern Europe and central Asia, and those in North America.

E-commerce was strongly established in North America and Western Europe before the pandemic, with substantial inroads also in Eastern Europe, the Russian Federation and Turkey, but was much less well-established in transition economies of Central Asia.

The pandemic has struck countries in Europe and North America particularly hard, strengthening the demand for online shopping, as well as videoconferencing, digital entertainment and online gaming. High levels of digital inclusion and experience, strong infrastructures and relatively high *per capita* incomes have facilitated business and individual resilience to the pandemic in higher-income countries, supported by macroeconomic interventions to maintain businesses and individual incomes, though increases in inequality and hardship are also reported.[189]

No separate report has been prepared for the **ASIA/PACIFIC REGION** as part of this project. However, it too has seen substantial differences between sub-regions and countries with different economic and developmental characteristics.

Asia/Pacific is a particularly diverse region, including the world's two largest countries by population (China and India), other countries with very large populations (such as Bangladesh, Indonesia and Pakistan) but also a considerable number of small island states, especially in the Pacific. It includes some of the world's most prosperous countries in terms of GDP *per capita*, but also several LDCs; some of the world's most connected countries and some in which geographical difficulties and low incomes make even basic connectivity a challenge.

The pandemic has also affected countries in the region differently. China and other countries in East Asia experienced its impact first but have had relatively low infection rates during the latter half of 2020, leading to expectations that they will suffer less severe economic downturns as a result. In some small island states, infections have been very low indeed, while in other countries, notably India, the pandemic has been far more severe and disruptive.

Evidence suggests that, as elsewhere, there has been a substantial move towards online shopping, building on existing trends, which is likely to have lasting impacts.[190] Further research in this region will help to build understanding of the diversity of outcomes from the crisis.

The importance of **REGIONAL COOPERATION** has been reinforced by the pandemic. Countries and regions in which there is already extensive trade cooperation, including free trade agreements, collaborative customs arrangements, and harmonization of standards, have been better placed to maintain international commerce.[191] This has been important for trade in goods, an increasing proportion of which are now ordered and transacted online. Harmonization and interoperability have been particularly valuable with respect to transactions, including payments using different modalities in different currencies. The regional reports point to the role that regional economic communities – such as the European Union, the East African Community, Mercosur, ASEAN and the Eurasian Economic Union – can play in maintaining regional economic activity during the pandemic and in the longer term.

BOX 2.4 The impact of COVID-19 on e-commerce in Latin America and the Caribbean[192]

The UN Regional Commission for Latin America and the Caribbean (ECLAC) commissioned a comprehensive study of the impact of e-commerce on its region, which is separately published alongside this report.

The LAC region has seen some of the most severe epidemics of COVID-19 of any region. Brazil has experienced the third highest infection level worldwide, with over five million diagnosed cases by late October and one of the highest death rates (over 700 per million inhabitants). Peru has recorded the second highest death rate worldwide (over 1,000 per million inhabitants) with seven other Latin American countries in the global top twenty for that indicator.[193]

There is significant variation in economic characteristics within the region, which includes both large continental countries and small island states, as well as prosperous middle-income nations, lower income developing countries and one LDC (Haiti).

ECLAC's findings on the experience of e-commerce during the pandemic can be summarized as follows.

As in other regions, there has been sustained growth in Internet connectivity over the past decade and about half of the region's population is currently online. This has facilitated growth in domestic e-commerce. The proportion of Internet users paying bills or shopping online doubled or more than doubled in many LAC countries between 2014 and 2017. However, by the end of that period, the average stood at just 15.5 per cent, about a quarter of the comparable figure for Internet users in OECD countries.

There does not appear to have been a comparable increase in international e-commerce before the pandemic. While domestic parcel shipments grew rapidly in the past decade, there was no comparable growth in cross-border shipments, and the region's share of global B2C trade was well below its share of global merchandise.

The high incidence of COVID-19 in the region has dramatically affected economic output and performance. Economic activity in the region is now expected to fall by 9.1 per cent in 2020, taking its GDP per capita back to 2010 levels, with consequential increases in unemployment and poverty.

ECLAC estimates that the region has been more adversely affected in international trade than any other. Customs, postal and other business data show that volumes of goods imported and exported in May 2020 were more than 25 per cent down on the same month in 2019. Exports of services also fell dramatically, largely because of lost tourist revenues, while data from Uruguay suggest a fall in the proportion of Internet users purchasing from foreign online stores. The unavailability of passenger air transport, which is used for many small consignments, may have contributed to this (though express services, which make their own cargo arrangements, may have been less affected).

By contrast, the high infection rate has propelled dramatic growth in domestic e-commerce, with growth in online purchases, digital payments and deliveries. Rapid reductions in physical shopping occurred quickly in the early stages of the pandemic, with Google's community mobility data recording large falls in visits to retail and entertainment venues and to grocery and pharmacy establishments. Although these metrics recovered as the pandemic continued, they remain well below pre-pandemic levels.

Evidence from countries that already had substantial e-commerce activity shows strong growth in the number of businesses selling online, many businesses establishing new digital sales platforms, and growth in the share of online sales compared with physical stores. Established online stores saw increases in new buyers and new orders between late February and the start of May, with the number of new orders to the online platform Mercado Libre more than doubling in Chile, Colombia and Mexico. Industry participants told ECLAC that online sales grew less dramatically, however, in countries with weaker e-commerce infrastructures.

Growth in online customer numbers was reported widely across the region. Data from Brazil, for instance, suggest that 66 per cent of Internet users bought products and services online during the outbreak compared with 44 per cent in 2018, the increase being especially pronounced in lower income groups and middle age groups. Growth appears to have been significantly lower in Uruguay, which has experienced lower infection rates.

Many of these customers were new to online shopping. Visa reported that 20 per cent of its customers in the LAC region completed e-commerce transactions for the first time in the first quarter of 2020, while PayU saw a 75 per cent increase in the number of its online customers in the first half of the year.

The range of products attracting high levels of online shopping has changed over the course of the pandemic. Pharmaceutical and COVID-related health products were in particularly high demand during the early period of infection, while demand for groceries and other products grew later in response to lockdowns and other movement restrictions.[194] Delivery services have benefited from this, with those focused on food deliveries reported to have more than doubled their volume of trade.

Evidence from Brazil and other countries shows that there has also been substantial growth in enrolment for digital entertainment services, particularly music and video streaming, and for distance learning, as well as participation in online gaming.

The use of digital payment methods has become more widespread since the onset of the pandemic. ECLAC reports that the necessity of moving online has helped to generate greater trust in online transactions, with a high proportion of respondents to one survey in five countries indicating early in the crisis that they would continue to use them even when normal retail activity has resumed.

As noted above, many of the challenges facing the world in terms of global economic development, the COVID-19 pandemic and the development of e-commerce are broadly consistent across regions. Important differences do arise from economic characteristics, digital environments and developmental status.

There are strong similarities, for instance, in the e-commerce environments of developed economies in the OECD, irrespective of geography. These economies have very high levels of Internet adoption and had already experienced extensive participation in e-shopping before the pandemic, with well-established distribution networks. High average income levels, welfare safety nets and economic interventions to sustain livelihoods during lockdowns have sustained purchasing power and thereby supported online shopping. Postal and direct delivery services were also well-established, though capacity shortages in supermarket home delivery services have caused problems with delivery of essentials such as groceries during the pandemic.

Developing countries that are highly dependent on commodities (such as oil) or tourism, which have little scope for diversification at short notice, have faced particular challenges during the pandemic, equally irrespective of geography. Demand for commodities (particularly oil) has fallen worldwide as movement restrictions have reduced road travel and many factories have suspended or reduced production. International tourism and business travel have also been dramatically reduced, with teleconferencing substituting for much international travel.

Three groups of countries are of particular concern to partners in the *eTrade for all* initiative: LDCs, landlocked transition and developing countries, and Small Island Developing States (SIDS).

LDCs are inherently more vulnerable to crisis than other countries. A high proportion of their citizens live in poverty, rely on informal or unstable work for income and have limited access to resources that can help them through sudden downturns. That high proportion also substantially lacks access to the Internet and experience of online shopping. Retail markets for the poor majority are not geared to serve them digitally. Postal services are under-resourced (though informal delivery services may be quite well-developed in consequence).

Although all are characterized by low average incomes per head, LDCs are also diverse, ranging from high-population countries such as Bangladesh and Ethiopia, in which there are dynamic digital sectors, to large landlocked countries in Sub-Saharan Africa such as Chad and Niger, and small island states such as some in the Pacific that are heavily dependent on tourism. These have different economic characteristics and different potential within the digital economy. They have also experienced different levels of infection during the pandemic. The *eTrade for all* partnership has undertaken 25 rapid e-commerce readiness assessments in LDCs during the past four years, which have helped to identify seven critical areas in which deficiencies inhibit the development of e-commerce. The pandemic experience has reinforced the importance of addressing these challenges, which form the framework for analysis in **CHAPTER 3**.

The economies of landlocked countries, including many LDCs and transition economies in Central Asia, are particularly hampered by geography. Some are highly dependent on exports of a few commodities to few markets.[195] At the best of times their trade routes are restricted, reliant on air transport for higher value goods and on road, rail and port corridors through adjacent countries for exporting commodities. These trade routes have been curtailed in the pandemic. Passenger flights, which carry many small consignments, have been drastically reduced (though some passenger airplanes have been redeployed to carry freight). Land borders have been closed in some cases, and subject to stricter regulations in most, causing delays, raising trade costs and inhibiting commerce, including goods that have been digitally ordered.

Small Island Developing States are also hampered by geography.[196] They generally rely heavily on international trade and imported foods and are vulnerable to natural disasters and to climate change.[197] Some, especially in the Pacific, are remote. This has helped protect some of these countries from direct effects of the pandemic on citizens' health – Pacific islands, for example, have generally experienced low infection rates to date, whereas those in the Caribbean have been high – but indirect effects on their economies have been severe. Most rely on imports to meet local demand and have been hard pressed to manage shortages (and rising costs) resulting from reduced air and sea transport. Many are heavily dependent on tourism, with some deriving as much as 70 per cent of GDP from this source, which has been drastically reduced during the pandemic, leaving many people out of work and struggling to pay for essentials. Remittances, another important source of revenue, have also fallen sharply during the pandemic as migrant workers have lost jobs in other countries.[198]

The experience of these countries poses additional challenges to those faced by all countries during the pandemic: challenges that are considered next in **CHAPTER 3**.

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131 Ibid.

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133 See: https://www.statista.com/statistics/955796/global-amazon-e-commerce-market-share/.

134 See: https://www.statista.com/statistics/880212/sales-share-of-the-leading-e-commerce-retailers-in-china/.

135 Information from ESCAP.

136 See: https://import-export.societegenerale.fr/en/country/saudi-arabia/e-commerce?accepter_cookies=oui.

137 For example, WTO, 2020b, 2020d.

138 WTO, 2020c.

139 UNECA, 2020.

140 ECLAC, 2020b.

141 UNECE, 2020a.

142 ESCWA, 2020b.

143 ECLAC, 2020b.

144 McKinsey, 2020b.

145 ITU, 2020c.

146 ECLAC, 2020c.

147 UNCTAD and NetComm Suisse, 2020.

148 CETIC.br, 2020.

149 UNECA, 2021.

150 UNECA, 2021.

151 ITU, 2020c.

152 ECLAC, 2021; Rojas, 2020.

153 CGI, 2020.

154 UNECA, 2021

155 Abril, 2020..

156 Air Transport Bureau, 2020.

157 O’Hare, 2020.

158 Information from ESCAP.

159 BBC, 2020.

160 ECLAC, 2020c.

161 UNECA, 2021.

162 ECLAC, 2021.

163 OECD, 2020b.

164 Ibid.

165 Ibid.

166 Official Information Source of the Prime Minister of the Republic of Kazakhstan, 2020.

167 Bain & Company, 2020.

168 Kang, 2020.

169 See Statista: https://import-export.societegenerale.fr/en/country/saudi-arabia/e-commerce?accepter_cookies=oui.

170 ECLAC, 2021; Bravo Tejeda, 2020.

171 ESCWA, 2021.

172 UNECE, 2021.

173 UNCTAD, 2020b.

174 For example, ODI and African Trade Policy Centre, 2020.

175 UNCTAD and Netcomm Suisse, 2020.

176 UNCTAD, 2020b.

177 Countries with e-businesses represented in the survey were: Africa: Benin, Burkina Faso, Cote d'Ivoire (non-LDC), Mad agascar, Mali, Niger, Rwanda, Senegal, Tanzania, Togo, Tunisia (non-LDC), Uganda, Zambia; Asia: Bangladesh, Bhutan, Cambodia, Lao PDR, Myanmar, Nepal; Pacific: Kiribati, Samoa (non-LDC), Tuvalu, Vanuatu.

178 For example, Cohen, 2020; Dannenberg, Fuchs, Riedler and Wiedemann. 2020.

179 See: https://tdv.motc.gov.qa/e-commerce-in-qatar.

180 WTO, 2020a.

181 UNECE, 2021.

182 UNECA, 2021; UNECE, 2021; ECLAC, 2021, ESCWA, 2021.

183 For example, African Development Bank, 2020a; 2019; CUTS International, 2020.

184 Also see Ismail, 2020; Khan and Ismail, 2020; UNECA and UNCTAD, 2019.

185 UNECA, 2021.

186 ESCWA, 2020a.

187 Bain & Co, 2019.

188 ESCWA, 2021.

189 UNECE, 2021.

190 See: ESCAP, 2020g, 2020h; Kang, 2020; Kathuria, Grover, Perego, Mattoo and Banerjee, 2020; Loh, 2020; Shen, 2020; UN, 2020c; UNDP, 2020; World Bank, 2020b; AsiaHouse, 2020; Bain & Co, 2020; BCG, 2020.

191 For example, Gaitan, 2020; WTO, 2020.

192 ECLAC, 2021.

193 Daily updates regarding the pandemic can be found at: https://www.worldometers.info/coronavirus/?utm_cam paign=homeAdvegas1?.

194 For example, Gao, Shi, Guo and Liu, 2020; GlobalData, 2020.

195 For example, Turkmenistan, see: https://read.oecd-ilibrary.org/view/?ref=129_129634-ujyjsqu30i&title=COVID-19-cri sis-response-in-central-asia.

196 UN FAO, 2020.

197 Jagannath and Narasimhan, 2020; Narasimhan and Cisse, 2020.

198 UNCDF, 2020c; UNDESA, 2020b; World Bank and KNOMAD, 2020.

3

CHALLENGES, RESPONSES AND STRATEGIES FOR RECOVERY

The analysis in CHAPTER 2 has shown that, alongside opportunities for growth in e-commerce, the pandemic has clarified important barriers to that growth. These challenges are not new, in most cases, but manifest long-standing problems that have affected prospects for e-commerce during the past decade and more.

CHAPTER 3 has three main purposes.

1. It summarizes challenges to the development of e-commerce and considers how these have been affected by the COVID-19 pandemic.

2. It identifies some of the immediate and short-term responses that have been made to these challenges, in light of the pandemic, by governments, businesses and development partners up to the time of writing (November 2020).

3. It considers appropriate long-term responses to both these challenges and recovery from the pandemic.

Overview

The *e-Trade for all* initiative is concerned primarily with developing countries and LDCs, and the analysis that follows, therefore, also concerns them in particular. However, their integration into global e-commerce is also affected by developments in other countries that represent important export markets and where global digital platforms are based that are important to their e-commerce development.

The *eTrade for all* initiative is predicated on the understanding that e-commerce will be a driver of economic growth, inclusive trade, and job creation across the developing world, especially in low-income countries, and will be a catalyst for the movement of MSMEs from informal to formal and domestic to international markets. For this to happen, all countries need to prepare for continued growth in the volume and value of e-commerce and develop appropriate policies to deal with associated opportunities and challenges. This is particularly important for those countries that are currently lagging in readiness. Improvements are required in ICT and transport connectivity, legal and regulatory frameworks, and other aspects of e-commerce.

E-commerce challenges

The initiative's research, including rapid e-commerce readiness assessments that have been completed in 27 countries, including 19 LDCs, has identified seven critical challenges to the development of e-commerce that need to be addressed in order to leverage potential gains and reduce the risk of being left behind. These are concerned with:

- **E-commerce readiness assessments and strategy formulation**
- **ICT infrastructure and services**
- **Trade logistics and trade facilitation**
- **Payment solutions**
- **Legal and regulatory frameworks**
- **E-commerce skills development**
- **Access to financing for e-commerce**

This chapter considers these seven themes, together with issues arising from a further, cross-cutting, theme of the *eTrade for all* initiative, the empowerment of women entrepreneurs whose role in enterprise development has been historically undervalued and undersupported.

Each section of the chapter begins with a brief summary of the theme in question and then looks in turn at:

1. the principal pre-COVID challenges as these have been identified by the eTrade for all initiative and its partner organizations;
2. how these – and requirements to address them – have been impacted by the COVID-19 crisis
3. examples of responses to these challenges by governments, businesses and development partners; and
4. appropriate approaches for lasting recovery from the pandemic and enhancement of national e-commerce environments.

While all countries need to address these challenges, differences can be clearly discerned among them as the result of differences in national contexts, including existing e-commerce experience. The COVID-19 pandemic has intersected, in its impact on e-commerce, with each of the challenges identified, again with differences reflecting national contexts including the varying trajectory and intensity of the pandemic. OECD countries, for instance, have generally had stronger and more resilient pre-pandemic e-commerce ecosystems than developing countries; while countries in East Asia experienced earlier infection but have suffered less severely from the pandemic in the latter half of 2020 than European countries that are experiencing a second wave of infections.

Business and government responses

Businesses have responded in different ways to the pandemic, some more successfully than others, according to the sectors in which they operate and the business models they deploy. Some have made substantial gains in both business volume and sales revenue during the pandemic, while others have struggled to survive. Some businesses – particularly communications network operators and digital platforms – have played important roles that have influenced the opportunities available to others seeking to profit from e-commerce or to use it in order to mitigate losses arising from traditional business models.

Most governments have taken steps to address the challenges facing businesses in the pandemic, including the e-commerce challenges identified above, though these have not necessarily been well-coordinated. These measures have included general support for businesses (and workforces) distressed by the pandemic, such as the furlough and wage/salary support schemes deployed in many developed countries. In Switzerland, for example, the government instituted compensation schemes for employees of companies that were required to close their operations, as well as rent reductions and other measures to support those experiencing hardship as a result of the pandemic.[199]

Governments in developing countries have also intervened to protect business and individual incomes. The Argentina government, for example, has announced measures to support workers and poorer social groups through social security and unemployment benefits and payments to those at minimum wage.[200] The government of Cabo Verde has spent over one per cent of GDP, with assistance from the World Bank, on a variety of interventions including income compensation for people in the informal sector and interest-free loans to vulnerable households.[201]

Some governments have sought to stimulate sectors that have been badly hit, such as hospitality. The United Kingdom government, for instance, initiated an 'eat out to help out' scheme to encourage people back to restaurants after its initial lockdown ended (though concerns have since arisen that this may have facilitated a subsequent rise in infection rates).[202]

North African food-tech businesses reported to

UNECA that the growth (of some 20 per cent) that they have seen in transaction volumes during the pandemic has resulted partly from redirection of potential customers towards their websites in response to movement restrictions and associated guidelines.[203]

ECLAC has summarized the overall experience of government intervention in its region thus: 'To varying degrees and with heterogenous capacity to respond, governments … have supported firms and consumers to strengthen business continuity and resilience, ensuring digital and physical connectivity, increasing the availability of digital tools, and fostering the uptake of digital technologies, the adoption of new working and business practices, and the development of digital skills and abilities'.[204]

Experience during the pandemic has, therefore, emphasized the importance of addressing barriers and realizing opportunities in e-commerce that had previously been identified by UNCTAD and its *eTrade for all* partners, rather than fundamentally changing those parameters. Few previously undetected challenges have been identified, but the pandemic has added nuance and urgency in businesses and governments concerning those that need attention and raised greater awareness of why that is so important.

The road towards recovery

The aim of developing strategies for recovery from the pandemic, in e-commerce and more generally, is not simply to return to the status quo that prevailed beforehand but to 'build back better'. As the United Nations Secretary-General has put it, 'We simply cannot return to where we were before COVID-19 struck, with societies unnecessarily vulnerable to crisis'.[205] As well as considering what governments and businesses have done so far, therefore, this chapter also reflects on longer-term initiatives that have begun or could be undertaken in order to leverage more lasting gains.

Strategies for recovery, the evidence suggests, should build on prior experience and understanding of the role of e-commerce in development as a driver of economic growth, inclusive trade and job creation that can enhance both economic prosperity and social welfare. Some regions could benefit particularly strongly from an upturn in e-commerce within international trade. As noted in the previous chapter, for instance, Africa has lower levels of intra-regional trade than other parts of the world and is therefore economically more dependent on global export markets. Diversification through e-commerce associated with more relaxed and more efficient border infrastructure, as well as regulatory changes like de *minimis* tariff exemptions (see **SECTION D**), could encourage local production and cross-border trade, adding to domestic revenue and supporting employment in sectors responsible for producing newly traded goods. It could achieve better results for African development than would follow a return to where things stood before the crisis.

While all regions have experienced similar challenges, some significant differences are evident, reflecting differences in development status and other national characteristics. ECLAC suggests that Latin America and the Caribbean face stronger obstacles to regional integration than most regions, for a variety of geographic regions, including small island status in the Caribbean and inaccessible terrain in central South America.[206] Survey research reported by ESCWA suggests that, in the eyes of a substantial majority of survey respondents, cultural barriers are the most significant obstacle to adoption of e-commerce in the Arab states – though a majority also complained of legal barriers, lack of payment tools and limited engagement with e-commerce by merchants. Many respondents to ESCWA research also felt that the lack of data in the region limited merchants' understanding of potential markets and, thereby, propensity to risk engaging in e-commerce.[207]

Plans for recovery should build on experience both before and during the pandemic. Enterprises, including MSMEs, have increasingly interacted digitally for some years, among themselves as well as with governments and consumers, but this trend has accelerated during the crisis. Requirements for physical distancing, for example, have led to the growth and intensification of digital interaction, from online shopping for goods, through online consultations with professionals such as doctors and lawyers, to online entertainments such as concerts and theatrical performances, and extensive use of teleconferencing and distance learning. The crisis has thereby accelerated the reach of domestic e-commerce towards new types of firms and products, seen greater adoption by new consumer segments (for instance, older people and people further down the income scale), encouraged the launch of new e-commerce platforms, and increased adoption of online payment platforms.

In particular there appears to have been a shift inspired by movement constraints, towards greater online shopping for essentials such as food and groceries as opposed to more occasional purchases and luxuries.[208] Online food sales in China during the first three months of 2020 grew year on year by 32.7 per cent, compared with growth in e-commerce across all categories of 5.9 per cent and a fall in total retail spending of 19 per cent.[209] Over 40 per cent of digital customers in South East Asia are reported to be spending more on fresh and packaged groceries online, and four-fifths of these report that they expect to continue doing so.[210]

It is unclear how far changes in consumer behaviour that have been seen during the pandemic will become permanent when it recedes. Many – not just e-commerce businesses – hope that the gains in market share that have been made by e-commerce within international and domestic trade will be sustained, not least because of the risk that the pandemic will recur or prove precursor to further epidemics in the future.[211] Others, however, warn that while the pandemic might have opened a window of opportunity for new forms of e-commerce, the longevity of sudden changes is uncertain.

In practice, many employers, as well as employees, say that they are considering blended future home and office working rather than returning full-time to offices in city centres. The use of online entertainment services also seems likely to sustain higher usage levels than before the pandemic, which has encouraged many people to overcome the initial (cost and inertia) barriers associated with subscription.

Intentions are evident from a number of consumer surveys.

- More than half of those interviewed in UNCTAD's consumer survey in nine countries said that they expected to continue shopping more often online after the pandemic, while over 40 per cent said that they would spend more time on digital entertainment sites.[212]
- A study by the management consultancy Bain found that over 80 per cent of those shopping online in South East Asia thought they would continue to spend more online after the pandemic.[213]
- A survey by Global Data found that 28 per cent of its informants in India said they now prefer online to physical shopping.[214]
- More than 40 per cent of customers surveyed in four large African countries said that they plan to reduce their supermarket shopping in future, shifting some food purchases online alongside clothing and electronic products.[215]

The trajectory of recovery, which is likely to be gradual and perhaps spasmodic, could well encourage these trends. E-commerce platforms seem likely to retain many, though probably not all, of the gains in market share made during the pandemic vis-à-vis offline sales.

The ability to leverage e-commerce therefore presents a significant opportunity for governments and businesses to build on the experience of crisis in order to accelerate recovery. As past research for the *eTrade for all* initiative has shown however, significant deficiencies and challenges pose barriers to those seeking to take that opportunity. Many businesses and consumers in developing regions have yet to start using the Internet, let alone participate in e-commerce. Enabling e-commerce requires changes in public policy and business practice – to improve digital and trading infrastructure, facilitate digital payments and establish appropriate legal and regulatory frameworks for online transactions and security.[216] Measures to address these will encourage shifts in business practice and consumer behaviour where e-commerce offers economic and social benefits in different markets, but decisions need to be taken to enact them. Once enacted, they will take time to implement, enforce and have an impact.

Government interventions in e-commerce markets have varied during the crisis. Many governments have been preoccupied with measures to address immediate economic impacts, prioritizing short-term palliative measures rather than addressing underlying long-term challenges. In its regional report, ECLAC regrets that 'despite commendable efforts to strengthen economic resilience during the pandemic and emerging best practices implemented in some countries, very few countries appear to have taken the crisis as an opportunity to reassess structural policy priorities effectively and take concerted actions to advance on a consistent, long-term, sustainable e-commerce strategy that can put digital trade at the forefront of economic recovery in a post-pandemic scenario'. It urges governments not to 'let the crisis go to waste' but take it as an opportunity to learn and work together on a regional basis.[217]

At the time that this report was written (November 2020), the pandemic has been ongoing, and indeed appears to be accelerating in much of the world. Its future trajectory remains uncertain. The latest news concerning vaccine development is promising but it is unclear whether or when vaccines, cures and/or therapeutic medicines will enable a return to pre-pandemic social and economic life. It is not possible, therefore, to draw a clear line between responses to the crisis and policies that focus on recovery. Nevertheless, this chapter uses the policy themes explored in each of its sub-sections to consider approaches to e-commerce that can help to lay the ground for longer-term recover. These are illustrated, where appropriate, with instances from initiatives that are already underway.


SHIPPING
TRACKING
DELIVERY
INVENTORY
CONTRACT
ORDER
CARGO
EXPORT
TECHNOLOGY
IMPORT
SERVICE
BUSINESS
LOGISTICS
WAREHOUSE
TRANSPORT

E-COMMERCE READINESS ASSESSMENT AND STRATEGY FORMULATION

Main Messages

The need for eTrade Readiness Assessments and strategy formulation in enabling recovery has been intensified by the pandemic. Countries in which governments are well-informed about e-commerce and have coherent strategies in place have been able to respond to the sector's needs more quickly and effectively. This will be as true after the pandemic as it is during the crisis. A large number of eTrade for all partners already offer assistance in this area. In light of the analysis in CHAPTER 3, governments should focus on:

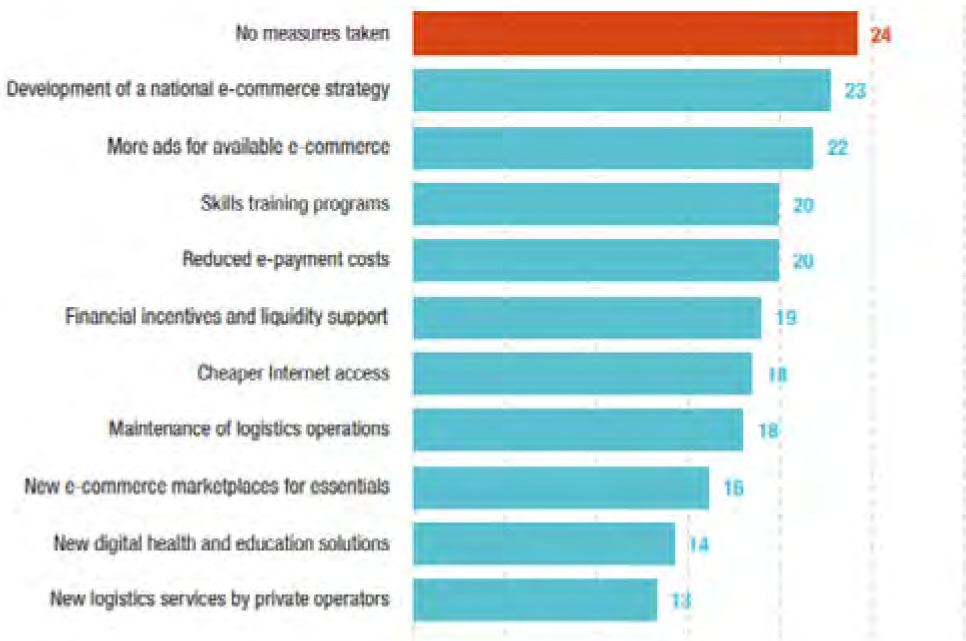
- Systematic data gathering and evaluation of the impact of policies and business practices;
- Identification of critical gaps requiring intervention;
- Establishing/developing strategies for e-commerce that are integrated into broader national development and implemented through coherent governance structures;
- Strengthening interministerial and interdepartmental dialogue for effective coordination;
- Fostering dialogue between government, businesses and business associations (on both demand and supply sides of e-commerce) and consumer representatives; and
- Facilitating public/private collaboration to build awareness and trust in e-commerce among merchants and consumers.

SECTION A
E-COMMERCE READINESS ASSESSMENT AND STRATEGY FORMULATION

SUMMARY

Governments that have a better evidence-based understanding of e-readiness and have put in place coherent cross-government strategies for its development have positioned their countries to take more effective advantage of e-commerce before and during the pandemic. The pandemic has reinforced this. Many developing countries did not have such assessments and strategies in place before the crisis. As Figure 3.1 illustrates, this has been identified in a recent UNCTAD survey of e-commerce businesses in 24 countries, including 19 LDCs, as the most critical area for improvement arising from experience of the current crisis.[218]

Figure 3.1
The most important measures taken during COVID-19 (UNCTAD survey of e-businesses)



Most governments have prioritized short-term palliative interventions in this area during the pandemic, but some have also begun to address longer-term strategic requirements for recovery.

THE CHALLENGE

Experience worldwide has shown that e-commerce develops and thrives best in an enabling environment that is facilitated by a coherent policy framework built on thorough understanding of economic activity and government commitment to support innovation and enterprise.[219] Governments that have taken strategic approaches to e-commerce have seen it make a greater contribution to national growth. Effective strategic approaches, integrating measures designed to address the other challenges explored in this chapter and deployed across government as a whole, encourage new business development and enable economic growth. National strategies for e-commerce should also be consistent with and integrated into broader national development programmes, taking into account regional agreements and frameworks.

The eTrade Readiness Assessments that have been undertaken by UNCTAD in conjunction with its *eTrade for all* partners, have found that many countries lack a unifying vision for e-commerce.[220] While policymakers recognize the benefits of e-commerce, overall understanding of requirements for successful policymaking and business planning is uneven and data on the national business environment as a whole are often inadequate. Policies for e-commerce, where they have been agreed, are frequently diluted within broader programmes for ICTs or the digital economy. Responsibilities for e-commerce are shared across a range of ministries and task groups, which may operate in silos with insufficient collaboration and limited resources. These weaknesses have undermined the capacity of governments and businesses to expand e-commerce in response to the pandemic.

The most effective strategies for e-commerce are built on comprehensive assessments of the national business environment that identify critical gaps requiring intervention. Such assessments need to be built on reliable data that are gathered frequently, enabling analysis of trends, and to have sufficient granularity to permit disaggregation between different sectors and types of business. They facilitate inclusive consultation and dialogue with businesses and other stakeholders, which help to develop robust strategies and implementation plans.[221] Assessments and strategy development along these lines have been unevenly distributed around the world, however. They are more common in developed than developing countries. Only half of the 18 countries surveyed by ECLAC for this project, for instance, had a national e-commerce strategy before the pandemic – most with a coordinating body across government, though the quality and scope of these varies considerably.[222]

The eTrade Readiness Assessments that have been undertaken by UNCTAD and its *eTrade for all* partners have encouraged progress towards the development of national strategies in many of the countries concerned and have illustrated how governments can engage in public-private dialogue, collecting information from MSMEs and consulting businesses as strategy development proceeds. A recent review of these assessments and subsequent policy responses has revealed how they are providing useful tools not just for individual countries but also for regional groupings as these seek to improve their understanding of e-commerce ecosystems - especially where cross-border e-commerce and its role in reinforcing regional integration are concerned.[223]

THE IMPACT OF THE PANDEMIC AND POLICY RESPONSES

The pandemic has reinforced the value of eTrade Readiness Assessments and coherent strategies that enable governments and businesses to respond quickly and appropriately to opportunities and risks. Governments that have prioritized e-commerce development through coherent strategies have been able to respond to the e-commerce sector's needs more quickly and effectively, amending regulations with greater confidence and expedition, and have seemed more capable of managing appropriate responses coherently across government departments.

It is more difficult to introduce major strategic changes in crisis conditions than under normal circumstances. Most governments have, understandably, been preoccupied with short-term responses to the pandemic rather than addressing long-term strategies for change. Where reforms have been introduced, therefore, they have often been short-term palliative measures addressing immediate requirements.

There has been some progress towards longer-term strategic changes in some countries however, particularly if this was already underway before the pandemic struck. Where there was already 'a clear, consistent, and coordinated strategy', ECLAC has noted in Latin America and the Caribbean, the pandemic has facilitated progress, with governments and private sector stakeholders more able to settle on 'common and well-defined goals'. In other cases, it regrets that 'an effective strategy is not apparent and policies seem uncoordinated, the result of urgency and the need to respond to the emergency, which casts doubt on their potential to generate effective long-term changes and reform'.[224]

Three countries in Latin America have told ECLAC that they have begun to develop e-commerce strategies in response to the pandemic, though the scope of these may be limited. Argentina's response, for example, 'amounts to promoting platforms and providing information, training, and technical assistance for SMEs to enhance their online presence'. In Colombia, an ongoing process to develop strategic responses was accelerated, with a draft National Policy of Electronic Commerce, whose goals include institutional improvements, released for comment in August 2020.[225] Costa Rica's government has outlined a coordinated strategy for the e-commerce environment including the postal service, digital government, digital platforms, and digitalization of MSMEs. Development of Cambodia's national e-commerce strategy was also continued during the crisis, and successfully launched in July 2020, while[226] the ECE reports that the governments of Kazakhstan and Uzbekistan have progressed initiatives to facilitate digital technologies and online trading during the year.[227]

TOWARDS RECOVERY

The role of eTrade Readiness Assessments and strategy formulation in enabling recovery has been intensified by the pandemic. Five aspects of this would seem to be especially important and form an appropriate framework for strategic thinking within governments.

- Experience during the pandemic has emphasized the critical importance of **strategic governance** for e-commerce – coordinating public policy interventions for infrastructure, regulation, finance and business development across government, and enabling coherent priorities to be agreed and implemented. Plans for e-commerce should be integrated into broader national development strategies, championed by political and business leaders, and implemented through coherent governance structures. This is valuable even where e-commerce participation is currently at low levels, for example in Myanmar, where strengthening e-commerce has been prioritized within the national COVID-19 Economic Relief Plan.[228]
- Strategies have limited value, however, if they are not rooted in a thorough **understanding** of what is happening on the ground. The pandemic has illustrated the importance of accurate and reliable evidence for formulating

policy and responding to opportunities and risks as they arise. Data sets need to be gathered automatically or regularly and their analysis frequently updated to enable adjustments that respond to rapid changes, such as those that have occurred in e-commerce markets during the crisis. Systematic data gathering, rigorous evaluation of the impact of policies and changing business practices, and rapid intervention to help businesses address barriers and seize opportunities are prerequisites for added value.

Improved understanding of the environment for e-commerce will enable governments to undertake a critical **gap analysis**, identifying missing elements for strategic development that need to be addressed, across the range of themes identified explored within this chapter, in order to remove barriers and leverage opportunities. While the challenges identified are common to many countries, different weaknesses will be more or less important in different ecosystems for e-commerce, requiring different priorities.

- Experience shows that successful strategies build on **dialogue and cooperation** between governments and other stakeholders, particularly private sector businesses that are seeking to implement e-commerce in domestic and international markets. Public-private dialogue for e-commerce needs to balance business and consumer needs, as well as recognize that there are diverse business interests within e-commerce, ranging from international corporations to local start-ups and including businesses that find it easy to embrace e-commerce as well as those that find it much more challenging. Different retail and service sectors, from those concerned with essential goods such as groceries to those in online entertainment, as well as different business models, such as those focused on exports or on domestic markets, need to be included. Public-private dialogues along these lines are now reported to be regularly held in Rwanda, for example, aimed at improving understanding of challenges and opportunities for e-commerce in different sectors such as third-party marketplaces, payments, warehousing and logistics.[229]

- Expansion of e-commerce requires **awareness and trust**. The latter will be built through the experience gained by merchants and consumers, not least during the pandemic, backed by a robust and reliable legal and regulatory framework and payment systems in which consumers can have confidence (see **SECTION C** and **SECTION E** below). Government and business can work together to build awareness of potential benefits for both merchants and consumers. In Tunisia, for example, awareness-raising campaigns on public radio have provided advice on safe online shopping.[230]

ICT INFRASTRUCTURE AND SERVICES

Main Messages

Limitations in infrastructure and in services to support local e-commerce have been thrown into greater relief by the pandemic. More bandwidth and improved quality and resilience will facilitate international e-commerce. More universal and affordable broadband access will encourage more people to shop and sell online. As with strategy development, this will be as true after the pandemic as during the crisis. The eTrade for all partners, including the World Bank Group, regional banks, and ITU can provide valuable assistance in this area. Governments and network operators should focus on:

- Encouraging investment in international and domestic connectivity through enabling regulatory frameworks, with particular attention to inclusion of areas that are currently underserved (such as remote and rural areas);
- Investing in partnership, including public-private partnerships and partnerships with international agencies, to improve network deployment in underserved and potentially less profitable areas, to ensure progress towards universal broadband access;
- Taking steps to reduce digital divides within countries, particularly the gender digital divide, improve affordability of access for local consumers and ensure that affordable access becomes available to all as recommended by the UN Broadband Commission for Sustainable Development;
- Supporting information services, portals and e-commerce platforms that are oriented towards local businesses' and consumers' needs.

SECTION B
ICT INFRASTRUCTURE AND SERVICES

SUMMARY

Businesses and countries that have access to high-speed, competitively priced international connectivity are better placed to digitalize operations and win orders overseas, while those in countries with limited rollout of local broadband networks will have more difficulty in establishing viable digital services or building domestic markets for e-commerce. Most developing countries have more limited ICT infrastructure and services than developed countries, with lower available international bandwidth and substantial proportions of their populations offline or making only limited use of relatively expensive data.[231]

The pandemic has increased demand for international and domestic bandwidth, hardware, and services (particularly for homeworking and streaming).[232]This has stretched network capacity, but in most countries the networks have held up better than expected. Some governments and businesses have intervened, in a variety of ways, to alleviate short-term network congestion, expand connectivity and reduce costs for vulnerable users through price controls or tax changes. Some have also begun to address long-term infrastructure shortfalls by revising licensing requirements or considering adjustments to spectrum allocation.

THE CHALLENGE

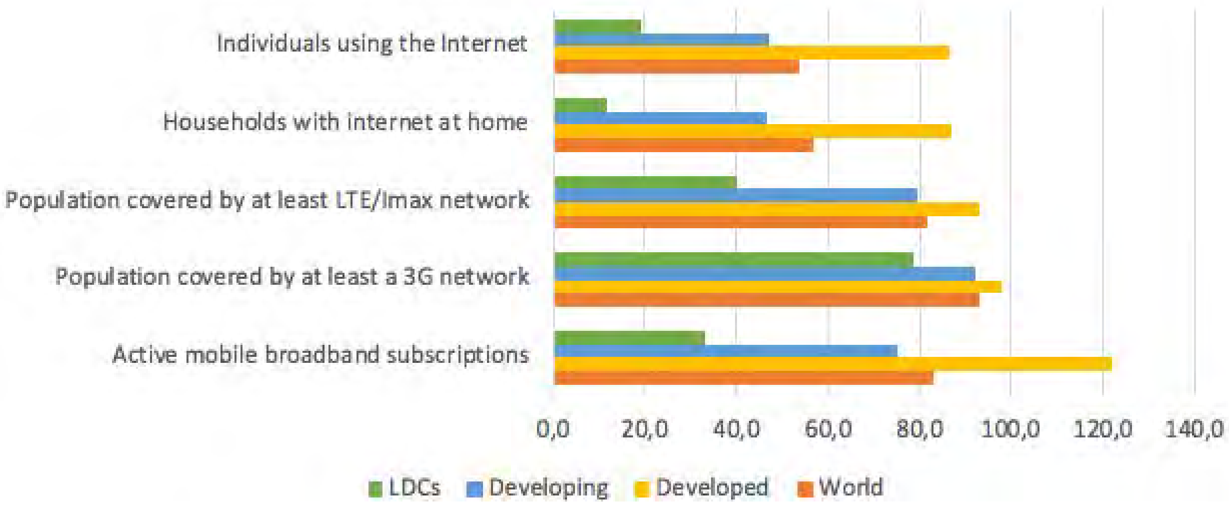
E-commerce relies on infrastructure – not just that for connectivity and data communications, but also transport, electrical power and the delivery of goods and services. These need to be reliable and affordable. This section is concerned specifically with the infrastructure for communications. In developing countries, relatively poor communications networks interact with other constraints, including poor transport and electricity and weak postal and financial networks, to inhibit the reach and profitability of e-commerce.[233]

New international infrastructure, particularly competitive undersea cable infrastructure, has been improving the quality and lowering the cost of connectivity between developing and developed countries.[234] New cable projects continue to be deployed.[234] Alternative, innovative approaches under consideration include proposals for constellations of low earth orbit satellites.[235]

Connectivity is a human issue as well as one of infrastructure. Domestic e-commerce development is constrained by digital divides that leave many people unconnected.[236] Access to fixed and mobile broadband services is almost universal in developed countries, though the extent of usage varies according to factors such as social background, age and income.[237] As Figure 3.2 shows, access levels in developing countries are much more variable, their variation broadly consistent with developmental status and income per head.

Figure 3.2

Connectivity by development status, ITU estimates, 2019[238]



Differences in connectivity and usage between countries result from and reflect differences in connectivity and usage within them.

• In many countries, substantial gaps exist between connectivity in urban and rural communities. According to the GSM Association (GSMA), rural populations in lower and middle income countries are 40 per cent less likely to use mobile Internet than urban populations. Research ICT Africa and LIRNEasia have found urban-rural differentials of 30 to 40 per cent in South Africa, Cambodia and Nepal, rising to almost 80 per cent in some African LDCs.[239]

- The global gender digital divide is estimated to be 17 per cent, a gap that rises to almost 43 per cent in LDCs.[240]
- Access to and usage of the Internet are also strongly correlated with levels of income and educational attainment.[241]

Those who are not connected or poorly connected cannot easily make use of digital services or engage in online shopping as either sellers or buyers. Low rates of digital engagement within societies are therefore critical constraints on the development of domestic e-commerce. Even where people are connected, limited literacy,[242] low-capacity (e.g., 2G) mobile telephones and lack of trust[243] in new modes of commerce inhibit many potential customers from shopping online. The growing prevalence of Internet-capable smartphones,[244]however, is enabling more individuals who can afford the necessary hardware and data packages to shop online; this trend is likely to accelerate.

Affordability is crucial to enabling access. The Broadband Commission for Sustainable Development recommends that governments and mobile network operators (MNOs) aim to achieve entry-level broadband services that cost less than two per cent of GNI (Gross National Income) *per capita*.[245] The majority of lower- and middle-income countries fall short of that target, including three quarters of those in Sub-Saharan Africa. GSMA reports that data rates in developing regions are most affordable in South Asia, where they mostly fall within the Broadband Commission's target, but highest in Sub-Saharan Africa. ITU reports that just ten African countries have achieved the Broadband Commission target.[246] These variations in the cost of data are reflected in very different usage levels.

Infrastructural constraints appear to affect merchants' e-business participation rates even in developed countries. In 2017, for instance, the e-commerce participation rate for MSMEs in a majority of OECD countries was less than half that for large firms.[247] Low levels of digitalization and difficulties in accessing and adopting new technologies make it more difficult and less cost-effective for smaller firms to change work processes or introduce e-shopping channels, which has reduced their flexibility in responding to the present crisis.[248] The growth of smartphone adoption should, however, increase customer numbers and potential returns on investment in e-commerce platforms.

THE IMPACT OF THE PANDEMIC

Internet traffic has grown substantially during the pandemic. In Mexico, Brazil and Chile, for example, traffic grew by 70, 80 and 170 per cent respectively between February and March as the pandemic struck.[249] Growth in demand was partly due to increases in the number of users and the time they spend online but substantially also to higher demand for streaming services (for videoconferencing, education and entertainment) which require greater bandwidth. In Europe, for instance, substantial numbers of people in all countries surveyed by McKinsey indicated that they have increased the range of digital channels that they access during the pandemic.[250]In the United Kingdom, the proportion of adults making video calls doubled, with more than 70 per cent doing so at least once a week and usage of the popular videoconferencing app Zoom rising from under 700,000 adults to more than 13 million.[251]

Increased reliance on digital communications has stretched the capacity of network operators and service providers and been particularly challenging at a time when social distancing and movement restrictions have made it difficult to maintain normal operations. Although networks have held up better than expected in most countries, with fewer outages than might have been anticipated, it has encouraged operators to consider ways of raising capacity and improving resilience and service quality.

Evidence concerning demand for new mobile phone connections is limited, though it seems likely that there has been increased demand for new lines and increased usage of existing lines. (Installation of new lines is more difficult in lockdown because of restrictions on working practice and staff shortages arising from requirements for self-isolation.) Evidence from Latin America shows significant numbers of mobile subscribers beginning to use e-shopping for the first time.[252] The consultancy McKinsey has suggested that new e-shoppers are driving more than half the increase in online grocery shopping in Brazil and South Africa.[253] Comparable growth in demand for streaming services has been described in **CHAPTER 2**.

RESPONSES

Responses to these connectivity challenges have come from both governments and communications businesses. The ITU reports that these can be seen in five main areas:

- increased broadband capacity;
- free services in areas such as education / distance learning;
- the provision of information services related to the pandemic;
- network management; and
- more flexible use of spectrum.[254]

The importance of ICT infrastructure, connectivity and services to e-commerce has been reinforced by increased demand during the pandemic. Large scale infrastructure investments take time to implement, but network operators have sought to increase capacity in response to this growth in demand. The submarine cable operator MainOne, for instance, has sought to raise capacity on its network in West Africa, while the East African cable operator Seacom will add 1.7 terabits per second to its existing capacity of 3.2 TB/s.[255] Projects for new cable infrastructure, already announced in 2018, were advanced in Chile and Argentina.[256] Implementation of investments such as these takes time and may not be completed during the crisis.

Although most networks have proved more resilient to increased demand than was expected, users of many have experienced difficulties arising from limited capacity and networks have needed to manage shortfalls carefully. Other steps with shorter response times, however, have been taken to maintain services and reduce the risk of outages.

- European Union governments and regulators have authorized telecom operators and Internet service providers to take exceptional measures, including reducing online speeds, to prevent network congestion.[257]
- The Lebanese backbone operator OGERO launched an awareness campaign urging users to use their Internet connection responsibly, for example by limiting the number of devices connected simultaneously and reducing the quality of videos on YouTube. It also added extra capacity to handle upsurge in demand.[258]

Some governments and businesses have sought to expand network coverage and capacity in the short term, particularly for broadband.

- Qatar's regulatory authority has worked with operators to double the Internet speeds for residential customers and the volume of data for mobile customers, without additional cost.[259]
- The COVID-19 crisis has given increased impetus to the Niger 2.0 Smart Villages project, supported by the ITU, which has connected several dozen villages with some 200 more in prospect.
- The government of the small island state Tuvalu has installed satellite dishes in all its outer islands to enhance connectivity, with education a special focus.[260]

Some regulators, such as those in Jordan and Sudan,[261] have made additional spectrum temporarily available in order to relieve network congestion. Others have reached agreements with platforms such as Netflix and YouTube to restrict the quality of video-streaming services in order to reduce network congestion.[262] Such measures may be time-limited, partly to alleviate concerns that short-term exceptional interventions may influence long-term regulatory environments and reduce the attractiveness of future infrastructure investment.

Some governments or regulators have also placed additional requirements on operators. A number of governments in Latin America have declared Internet and mobile services to be essential or strategic services – a change of status that obliges them to maintain connectivity and that may last beyond the current crisis.[263] The government of Colombia has relaxed and expedited licensing procedures for new infrastructure.[264] Other governments have tabled regulatory mechanisms to alleviate network congestion and so ensure continuity of services at least for health and education, government and business.

Some businesses and governments have acted to make use of the Internet more affordable for lower-income consumers, in ways that are likely to increase propensity to shop online or encourage them to take advantage of homeworking, home entertainment and education access.

- Special discounts have been offered by mobile and Internet providers in Mexico and other countries.[265] Telecommunications operators in Nepal have offered a variety of cheaper data packages and recharge bonuses.[266]
- The government of Argentina has frozen prices until December 2020 and required government approval for subsequent increases, while Colombia's government has eliminated VAT on mobile plans below a threshold to cut the cost of connectivity for low-income households.[267]
- The government of Kuwait has asked communications operators to provide some free Internet each day for a month during the pandemic, while that in Oman has adopted measures to avoid loss of service to customers and businesses facing cashflow problems as the result of the pandemic.[268]
- Three telecoms operators in Tunisia provided free Internet access for distance education platforms during the lockdown. Mobile operators in Lesotho reduced costs for Internet access to educational websites and content to help students studying online.[269]
- Some governments, such as that in the United Kingdom, have urged operators to work with customers facing payment difficulties.[270]

THE ROAD TO RECOVERY

Limitations in ICT infrastructure and services to support e-commerce have been thrown into greater relief by the pandemic. Poor connectivity undermines the ability of local businesses to access international e-commerce markets, while limited availability of locally focused e-commerce platforms limits opportunities for local merchants to offer consumers access to e-shopping opportunities that are tailored to their needs. Faster connectivity and improved quality and resilience, by contrast, will facilitate e-commerce and encourage more people to shop online.

If national businesses are to be competitive in international e-commerce as countries recover from the pandemic, they will need fast, reliable, high-quality and high-capacity international connectivity, at prices which at least match those available to alternative suppliers. This is particularly important for businesses reliant on cloud access,[271] and those selling into highly competitive markets.

Improved infrastructure needs to be available nationwide in order to include businesses and consumers based in smaller towns or rural areas [272]which are often more poorly connected than urban centres. Domestic consumers will be more inclined to try e-shopping if connectivity is affordable and reliable – and will only be able to access streaming services if adequate broadband is available at reasonable cost in their communities.

The ECLAC report prepared for this project notes that some governments in Latin America have begun to address long-term connectivity challenges for e-commerce by accelerating the deployment of new infrastructure through funding mechanisms and/or relaxation of licensing requirements. In Colombia, for example, the government has issued the first temporary permit to use spectrum to test 5G technology, in association with Huawei. The government of Argentina has progressed a dedicated fund to guarantee mobile and Internet connectivity in poorly served areas, and a number of LDCs in Africa have also begun initiatives to develop 5G networks.[273]

The critical access problems in LDCs at present, however, concern access to 3G and 4G networks rather than future 5G deployment. Addressing these challenges in ways that enhance connectivity and infrastructure requirements for e-commerce in the medium term requires investment by communications businesses within a regulatory environment that encourages them to build capacity and enable e-commerce services to thrive.

Returns on investment, particularly in rural areas, can be commercially unattractive to established network operators that are able to earn higher margins elsewhere. Investment costs for ICT infrastructure are considerable and may require supplementary investment in supportive infrastructure, particularly electricity. However, governments now have considerable experience with financial incentives and regulatory mechanisms to encourage investment, including universality requirements in communications licences, fiscal incentives to enhance the viability of network deployment, innovative approaches to spectrum management, infrastructure sharing, and the deployment of community networks in underserved communities. Interventions along these lines need to address the quality, reliability and resilience of networks as well as quantity of bandwidth. Partnerships between governments, the private sector and international development partners may be required in some cases, especially in LDCs and SIDS.

Improvements to connectivity alone are insufficient to overcome the barriers inhibiting adoption of e-commerce in domestic markets. If engagement with e-commerce is to become widespread rather than reserved for wealthier social groups, access costs (for both hardware and data charges) need to become low enough for them to be cost-effective for lower-income groups.

As described above, some governments have taken steps to address short-term affordability of Internet and e-commerce access during the pandemic. Long-term affordability issues should be addressed by governments and network operators within evolving national strategies for the digital economy, in the context of the Broadband Commission's target to make entry-level broadband services available at less than two per cent of monthly GPD per capita, and associated measures to make Internet services more accessible to all parts of national communities.

PAYMENTS

Main Messages

The pandemic has demonstrated the value of digital and cashless payment mechanisms in enabling transactions to be made at distance, although cash culture is still prevalent in many countries, especially in LDCs. Increasing the acceptance and adoption of cashless payments will hasten short-term recovery from the crisis and lay the ground for stronger e-commerce in future. UNCDF, UPU and development banks are among eTrade for all partners that can make valuable contributions in this context. Governments and other stakeholders should focus on:

- Raising awareness of the benefits of digital transactions among merchants and consumers;
- Establishing enabling financial and digital regulatory frameworks that ensure ease of use and security for digital transactions, including measures concerned with electronic transactions, cybersecurity and consumer protection;
- Encouraging interoperability within a competitive banking environment, to facilitate seamless interbank transfers, reduce friction in transactions and lower costs;
- Simplifying digital transaction mechanisms (and lowering or reducing entry costs) to incentivize adoption by those at lower income levels.

SECTION C
PAYMENTS

SUMMARY

Digital payment systems are important facilitators of both international and domestic e-commerce. Successful employment of them, however, requires appropriate regulatory environments and cooperation between governments and banks, both domestically and internationally. Payment mechanisms that are interoperable between currencies and banking systems are required for international commerce.

A number of digital payment mechanisms are gaining traction for domestic e-commerce transactions. Debit and credit cards are favoured in countries where they are widely available, while PayPal and other payment platforms are preferred in some countries. Use of bank transfers has grown during the pandemic in Brazil. Mobile money is used to varying degrees in lower-income countries. Cash is still preferred, however, by many consumers and cash culture remains predominant in many developing and transition countries.

Adoption of digital payments depends on a number of factors that can be addressed by policy and business interventions, including changes in legal and regulatory frameworks for finance and digital transactions. Where adoption rates are high, attention is required to ensure that digitalization by default does not exclude some population groups. The most important factor inhibiting adoption, however, appears to be trust that transactions will be secure, goods purchased will be delivered, and data will not be misused. Even in Europe, where digital markets are highly developed, McKinsey reports that 18 per cent of consumers surveyed say that they do not use digital channels because of lack of trust.[274] Cybersecurity, in particular, is crucial to enabling trust in, and thereby greater use of, digital payments infrastructure.

THE CHALLENGE

The availability and adoption of digital payments systems that function effectively with e-commerce platforms are important contributory factors in the spread of e-commerce.[275] International e-commerce is highly dependent on the ability of merchants to transfer funds quickly, reliably and at low commission rates across international borders and between currencies. This can be greatly facilitated through trade facilitation mechanisms (such as those described in **SECTION D**) but also requires cooperation between national and commercial banks in trading countries and established legal and regulatory frameworks governing digital transactions (see section E).

Such arrangements are still poorly implemented in many developing countries. ECLAC reports, for instance, that there is often poor cross-border integration between digital payment systems in its region.[276]

The World Bank notes that digital financial services have the potential to lower costs to service providers by maximizing economies of scale, increasing speed, security and transparency of transactions, and allowing diversification of services in ways that can attract consumers lower down the income scale. Domestic B2C transactions can be conducted in cash, through payment on collection or delivery, but are greatly facilitated if digital payment mechanisms are available and used. Cost savings also benefit users of money transfer services. The average cost of sending remittances – a vital source of funds for many individuals and MSMEs in developing countries – is estimated to be 3.3 per cent when these are sent as digital transactions, compared with 6.8 per cent when they are sent as cash.[277]

Three factors are important in enabling realization of these potential benefits: financial inclusion, the availability of digital payment channels, and consumer confidence.

Recent data concerning ownership of bank and other financial accounts suggest that 69 per cent of adults now have accounts,[278] but that figure varies substantially, from 93 per cent in developed countries to around the global average in Asia and just 40 per cent in Africa.[279] Less than half of adults in many developing countries, therefore, have bank or other formal financial accounts, while few have credit cards. However, the growth of mobile money in recent years – the number of which now exceeds one billion worldwide[280] – means that the total number of adults worldwide without any financial account is falling. Women and lower income groups are overrepresented among those without accounts. The World Bank has estimated that there is a persistent seven per cent gender divide in ownership of bank accounts.[281]

Participants in the electronic payments sector in Latin America agree that the biggest challenge they face is lack of financial inclusion. Half of the region's population did not have a bank account or equivalent in 2017, while more than half of employees work informally and are most probably reliant on cash income. Their inclusion is sometimes hampered by complex and time-consuming regulations governing the opening of accounts, for both offline and online banking. In Latin America, for example, ECLAC reports that, even where banks offer digital onboarding, it can take up to four days to open an account.[282] Many businesses are also ill-equipped to handle digital transactions. According to OECD, for instance, only 63 per cent of businesses surveyed in the western Balkans region had access to digital payment infrastructure in May 2020.[283]

Digital wallets – software systems that store payment information, enabling expenditure through authenticated devices such as mobile phones – are used to varying degrees by citizens in many countries and have become very popular in some, such as the Republic of Korea.[284] Boston Consulting Group (BCG) estimates that almost half of urban consumers who have bank accounts in South East Asia make use of digital wallets, where they are also used by some 13 per cent of unbanked urban citizens. The use of wallets supported by non-bank e-money providers is one way in which consumers can overcome difficulties in obtaining formal bank accounts, benefiting both e-shoppers and e-merchants. Shippit's Shopify service in South East Asia, for instance, supports cash on delivery arrangements that allow merchants to access unbanked consumers.[285] BCG expects adoption to rise rapidly among the presently unbanked if/as barriers to adoption are addressed – particularly lack of experience and confidence among consumers and high fees required of merchants.[286] However, merchants report that high costs for accepting payments through them deter them from adoption. In Latin America, fees for MSMEs can be 20 per cent or more of transaction value.[287] This will need to be addressed if they are to play as full a part in e-commerce as might otherwise be possible.

Mobile money has become popular, meanwhile, in a growing number of lower-income developing countries in recent years, following the pioneering introduction of Safaricom's M-PESA service in Kenya in 2007. There are now over 800 million registered mobile money accounts worldwide, responsible for transactions worth US$ 1.3 billion daily. Some 21 per cent of African adults are estimated to have mobile money accounts today, though adoption rates are considerably higher in East Africa than other regions.[288]

UNCTAD assessments have found that, despite mobile money's growing popularity, there is still a strong 'cash culture' in many countries because consumers trust cash more than cashless options, especially for goods that require delivery. This is true even in wealthier countries, for instance in the Arab region, where many customers hold debit and credit cards.[289] Confidence in digital payments mechanisms takes time to develop and varies substantially between countries. Anxiety about possible fraud inhibits online payments, particularly in countries with inadequate data privacy and consumer protection laws. New users who are unfamiliar with potential risks can be particularly vulnerable.

THE IMPACT OF THE PANDEMIC

The growth of online shopping during the pandemic, which is evident throughout the world, has led to increased use of digital payment mechanisms for domestic e-commerce. Digital mechanisms have obvious convenience for online purchases, whether for collection or delivery. As well as facilitating online purchases, contactless debit and credit cards have also been preferred to physical transactions by many merchants and consumers, particularly in OECD countries, because they lower the risk of COVID-19 transmission. Indeed, in Zambia, mobile money has been explicitly promoted as risk mitigation in the face of COVID-19.[290] However, many consumers continue to prefer to pay by cash, which still predominates in many countries, particularly developing countries and LDCs.

UNCTAD's nine-country survey of consumers, which was summarized in **CHAPTER 2**, found significant differences between consumers' preferred methods of digital payment in different countries. Debit and credit cards were most favoured by those surveyed (in its relatively small samples) in five countries – Brazil, the Republic of Korea, the Russian Federation, South Africa and Turkey – while PayPal was preferred by customers in Germany and Italy, and the apps Alipay and WeChatPay in China.[291] Evidence from another consumer survey undertaken during the pandemic, this time in Brazil, suggests that, while debit and credit cards are more popular than other digital payment mechanisms, the biggest growth in that country has been in wire and online bank transfers.[292]

None of the countries in UNCTAD's consumer survey were LDCs. UNCTAD's survey of e-businesses in LDCs found a different picture, with growth reported in the use of both mobile money (more widespread in lower income countries where a higher proportion of the population is unbanked) and cash on delivery. [293] Both of these trends may reflect the increased reach of e-shopping down the income scale, to include more of those who lack formal accounts but are experienced with mobile money and more who have not previously used mobile money but have recently begun to do.

The pandemic's introduction of new customers to digital payments has tested confidence in digital systems. ECLAC sees trust in payments as 'a fundamental challenge' that will take years to mature but notes that 'During the emergency, ... users, including consumers, the government, and businesses, were forced to rely on digital payments, with many first-time users adopting the technology in just a few months. As a result, according to the data analysis company Kantar's COVID-19 Barometer, an average of 70 per cent of users in Argentina, Brazil, Chile, Colombia and Mexico indicated that they would continue to use electronic payments after the emergency is over.[294]

Alongside this, however, there is evidence of increased cybersecurity risks and risks of data abuse as new users adopt technologies vulnerable to fraud in countries that have weak legal and regulatory frameworks for cybersecurity and data protection.[295] New users who are unfamiliar with online risks are potentially more vulnerable than more experienced users. The VPN provider Atlas reports that the number of phishing sites more than trebled between January and the middle of March 2020, as the pandemic took hold within the country.[296] Google has reported a surge in phishing sites worldwide, reaching a total of more than two million by late 2020, already more than 19 per cent higher than in 2019.[297]

RESPONSES

The COVID-19 pandemic has, therefore, elevated the importance of digital payment systems. By mid-April 2020, the World Bank had already listed over fifty policy measures, in 35 countries, to support the functioning of national payment systems and facilitate the use of digital payments during the pandemic. It grouped these into three categories:

- fee reductions and waivers on critical payment services;
- temporary increases in the ceilings forvaritous financial transactions; and
- promotion of digital channels for payments to and from government, such as taxes and welfare benefits.

Central Banks have played a role in some countries. That in the Russian Federation, for example, lowered the acceptance fees paid by merchants when accepting card payments for online purchases, and temporarily simplified its 'know your customer' rules required for verifying accounts opened by individuals or MSMEs for a range of purposes.[298] The Central Bank in Egypt asked commercial banks to reduce fees and increase spending limits on digital wallets and prepaid cards in order to improve the safety of transactions.[299]

In Uganda, the government has worked with mobile operators to offer complementary data packages to facilitate cashless transactions, while in Zambia the government has waived charges for person-to-person electronic money transfers (which are not themselves e-commerce but may be used to transfer money that enables it). At least seven other African countries have waived or reduced their money transfer fees.[300] The Central Bank of Rwanda suspended mobile money fees for three months and waived charges on push and pull services between bank accounts and mobile wallets.[301]

A number of developing countries have also seen interventions by businesses intended to improve affordability.

- Some alternative financial services have taken the opportunity to encourage adoption by new users. Kenya's mobile money service M-PESA, for instance, introduced a fee waiver on all transactions under KSH 1,000 (approximately US$ 9.20) for a three-month period.
- MTN, Vodacom and Orange are all reported to have lowered fees to reduce barriers to entry in some markets, and to have initiated new services to support digital entrepreneurs. In Zambia the company reduced fees to zero for transactions below ZMW 100 (approximately US$ 5.50).[302] In Uganda and Rwanda, both MTN and Afritel cut mobile money fees, while MTN suspended them up to a specified limit in South Africa and Cameroon.[303]
- The Central Bank of West African States has stimulated the use of electronic payments in both public and private sectors in the context of COVID-19, facilitating the introduction of new digital platforms in Togo and Burkina Faso.[304]
- The postal agency in Togo has scrapped fees for some transactions using its ECO CCP platform, which is based on telephone numbers and has light KYC requirements. It also launched an e-Poste mobile app to facilitate free payment of utility bills.[305]
- Accelerated adoption of digital payments has demonstrated to banks and financial institutions the importance of relatively simple, straightforward, and welcoming mechanisms for bringing new users onboard.

This experience does not appear, however, to be universal. ECLAC found that most activity to facilitate digital payments mechanisms in its region, whether concerned with regulation or aimed at stimulating adoption of new mechanisms, followed from measures that were already underway before the crisis – though in its regional report associated with this project it notes that some banks in the region have sought to incentivize electronic payments, for example by making platforms free of charge (at least in the short term) or providing training to (presumably new) users.[306]

ROAD TO RECOVERY

The e-Trade for all initiative has recommended interventions in three main policy and business areas concerning payments.

- The establishment of an enabling regulatory environment to foster confidence in digital transactions – among merchants and consumers – is crucial to encouraging investment in digital payments infrastructure and adoption of digital payment systems. This includes measures (also discussed in section E) related to digital transactions, cybersecurity and consumer protection.

- Competition and cooperation are both important for digital payments to meet consumer needs. Competition fosters innovation in service provision as well as lower costs to consumers. [307]At the same time, however, financial institutions must cooperate to enable seamless interbank transfers and interoperability between different payment platforms in order to reduce friction in e-commerce transactions, increase ease of use and also lower costs. Achieving this balance of competition and collaboration may require adjustment of financial regulations.

- Mobile and cashless payment systems are unfamiliar to many people, particularly in developing countries where, even in the face of the pandemic, cash culture remains strong. Financial institutions should develop interfaces that are easy to use, available in local languages and reduce barriers to onboarding in order to encourage more people to adopt them. New developments in and wider adoption of QR codes could play a significant part in this.[308] Awareness-raising programmes by government and business can also highlight the benefits of digital transactions in domestic markets.

The pandemic has demonstrated the value of digital and cashless payment mechanisms in enabling transactions to be made remotely but, as noted above, cash culture is still prevalent in many countries. Increasing the acceptance and adoption of cashless payments would hasten short-term recovery from the crisis and lay the ground for stronger e-commerce in future. This is important in both B2B and B2C markets.

High-value transactions between businesses can be implemented more quickly, efficiently and reliably through digital bank transfers than traditional media such as cheques. International transactions require complex payment mechanisms, often in multiple currencies, which are capable of enforcement in multiple jurisdictions. These require robust legal, regulatory and technical frameworks (see also **SECTION E**) to address long-term challenges, particularly interoperability.

Some progress is occurring in this context. ECA reports, for instance, that the African Export-Import Bank has launched a Pan-African Payment and Settlement System (PAPSS) for processing, clearing and settling inter-African trade and commerce payments. This has been supported by almost all African countries, though implementation will be challenging.[309]

Cash payments remain the norm for low-value transactions, including shopping, in most countries. A variety of online payment methods is, however, now available for domestic B2C including debit and credit cards, mobile money, and intermediated services such as PayPal. The popularity of these varies between countries but has increased during the pandemic. Many shops, particularly in developed countries, have required or strongly preferred cashless payments since the onset of the crisis, in order to minimize physical transmission of the virus.

More could be done by governments to stimulate adoption of alternative financial mechanisms focused on those who are currently unbanked. Willingness to facilitate innovative financial services, while ensuring their security, is important in this context. ECA notes that, while the government and central bank of Kenya actively promoted mobile money as a tool for digital inclusion when M-PESA was first established more than a decade ago, progress in issuing mobile banking licences elsewhere in Africa has been slower.[310]

One of the most important factors inhibiting adoption of digital payments appears to be lack of confidence among both merchants and consumers that transactions will be secure, goods purchased will be delivered, and data will not be misused, especially for fraud. While the pandemic has broadened experience of digital payments within the community, bringing many new customers on board, it has also created new opportunities for cybercrime and reinforced the importance of robust and responsive cybersecurity.[311] Although the details of cybersecurity programmes are beyond the remit of this report, the need for governments and digital businesses to work together, nationally and internationally, to protect merchants and consumers against fraud and other types of cybercrime is fundamental to an effective national strategy for e-commerce.

TRADE LOGISTICS

Main Messages

Inefficient transport and trade logistics, which reduce the cost and speed advantages that digital transactions offer merchants, have been accentuated during the pandemic, particularly for small consignments from MSMEs. Pandemic conditions have also accentuated weaknesses in infrastructure for delivery of parcels. Some governments have introduced information resources, portals and platforms during the pandemic to assist MSMEs and start-ups to establish e-commerce initiatives. Regional Commissions of the United Nations, ICAO, ITC, UNCTAD, UPU, WCO, WTO and other eTrade for all partners offer programmes to support improvements in trade logistics and trade facilitation. Governments and other stakeholders should focus on:

- Facilitating the digitalization of international trade by adopting the provisions of WTO's Trade Facilitation Agreement, implementing standardized paperless documentation formats, single window processes and other mechanisms to smooth the flow of goods along transport corridors and through border crossings;
- Investing in transport infrastructure, including ports, airports and border crossings, which are critical to enabling cost-effective distribution of inbound and outbound goods that are ordered online from other countries;
- Considering the introduction of de minimis duty exemptions for low-value shipments;
- Investing in improvements to postal networks, including the introduction of comprehensive physical addressing, and enabling innovative/competitive delivery mechanisms;
- Supporting the establishment of information resources, portals and platforms that assist MSMEs in entering e-commerce markets.

SECTION D
TRADE LOGISTICS

SUMMARY

International e-commerce related to goods, like other international merchandise trade, is subject to delays and other problems with transport corridors and border logistics that increase costs and thereby reduce demand. It is also impaired by inadequate interoperability between both physical and digital infrastructures across borders. Domestic e-commerce, meanwhile, is inhibited in many countries by inadequate physical address systems that prevent reliable home delivery for many customers. Lack of information resources, portals and platforms tailored to local business communities has also deterred local merchants and consumers from entering unfamiliar markets for e-commerce.

Staff shortages and enhanced safety precautions have exacerbated these problems during the pandemic, while heightened demand for domestic e-commerce has put increased pressure on postal and express deliveries. Some governments have relaxed border controls in order to mitigate pandemic impacts, especially for small consignments. Some have established new information resources, portals and platforms to assist MSMEs and start-ups to establish e-commerce ventures or have provided resources to help them improve their connectivity and financial capabilities. These provide potential models for further interventions to support recovery.

THE CHALLENGE

Electronic commerce is not purely electronic. While online products can substitute for some physical goods (most notably in entertainment), many e-commerce transactions require movement of goods and/or people, whether within countries or across borders. Challenges arising at the interface between digital and physical infrastructures add, therefore, to those that already exist within traditional trade relationships.[312] At the same time, ICTs provide new ways of facilitating trade by improving the efficiency of data management along trade corridors and through border crossing points. 'Single window' processes and data standardization that enable international interoperability are crucial to achieving the gains that can be derived from this.

The assessment of e-trade environments in LDCs undertaken by UNCTAD and its eTrade for all partners has identified three major themes of trade logistics that adversely affect e-commerce. These are concerned with customs and border arrangements, transport, and postal and delivery services.

Cumbersome and inefficient **customs and border** arrangements present bottlenecks to the growth of international e-commerce through ports, airports and border crossing points. These can occur at multiple interfaces within border systems, including inconsistent documentary requirements and interoperable document interfaces that cause delays, raise costs, and thereby deter e-commerce development. They are particularly problematic for small consignments with relatively low margins that have most potential value for e-commerce MSMEs and start-up businesses.

Such problems can be addressed, and trade costs reduced, by trade facilitation measures. Trade facilitation is defined by the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) as 'the simplification, standardization and harmonization of procedures and associated information flows required to move goods from seller to buyer and to make payment'.[313] It includes processes such as those at customs and border crossings, digital tracking and consignment management, the introduction of paperless trade and 'single windows' for trade documentation.

The extent of such restructuring and facilitation has varied greatly.[314] Some countries, particularly developed countries handling large volumes of international commerce, have implemented extensive trade facilitation arrangements, reducing costs and enhancing their competitiveness along trade routes. Others lag behind, causing problems for local exporters. ESCWA reports, for instance, that a majority of respondents it surveyed for this project blamed complicated customs processes and bureaucracy for hampering cross-border commerce in its region, citing cross-border duties as an additional deterrent. These were particularly problematic for small businesses that rely on small consignments.[315] ECLAC believes that implementation of single windows and paperless trade needs to become more effective in its region, with particular attention to electronic certificates of origin and the exchange of customs declarations and sanitary and phytosanitary certificates. Even where they are established, such systems are not fully functional and, in some cases, do not recognize the role of express couriers.[316]

Poor **transport** infrastructure and insecure transport corridors inhibit transit of freight traffic, both international and domestic, particularly in more remote and rural areas. High transport costs are particularly problematic in geographically difficult contexts such as archipelagos and underpopulated desert and mountain districts. In the Philippines, for example, an archipelago of more than 7,600 islands, complex geography has long posed a challenge to last-mile delivery, resulting in high shipping costs and slow delivery times. Even before lockdown was imposed, deliveries typically took nearly 12 days for areas outside Manila.[317]

The Universal Postal Union (UPU) has identified extensive challenges for **postal services** including lack of ICT infrastructure, under-investment, the slow pace of transition to a more digital culture, deficiencies in customs clearance, and the preference of e-merchants to use their own networks.[318]

Postal services worldwide have been changing the profile of their services in response to digitalization for some time, as email and online messaging services have displaced letter post while growth in e-commerce has increased demand for parcels deliveries. The share of letter post in the total revenue of postal operators fell from 45 per cent in 2008 to 39 per cent in 2018 while that of parcels rose from 16 to 27 per cent.[319] Restructuring, reorganization and new investment are required to facilitate transition on this scale.

Domestic e-commerce deliveries rely on national postal services, many of which are under-resourced and, in addition or where these are available, on express and courier services, which tend to be more costly. Delivery to remote and rural areas can therefore be expensive and unreliable. In addition, physical address systems (such as postcodes, street names and house numbers) are often poor in developing countries, especially outside urban areas and in informal housing districts, making it difficult to deliver packages reliably and inhibiting the ordering of goods for home or business delivery. UPU estimates, for instance, that around 10 per cent of people in Latin America do not receive post at home, with five per cent or more having no postal service whatsoever. 'Despite gradual uptake of technology-based solutions by the postal system and private logistics operators', UNCTAD has therefore noted, 'time and cost of deliveries in remote areas remains unattractive to sustain e-commerce growth'. Even in urban areas, many online customers choose to use click-and-collect alternatives to home delivery as a result.[320]

Another challenge considered by eTrade for all, that especially affects MSMEs and businesses seeking to diversify or expand into new international and domestic markets, is the difficulty they face in obtaining information about market opportunities and in reaching out to new potential customers. Relevant information resources, platforms and portals can make a substantial difference to the viability of both e-commerce start-ups and established businesses seeking to move online. These can be provided or supported by governments, business associations or third-party intermediaries.

THE IMPACT OF THE PANDEMIC

As noted earlier, the pandemic has tended to reduce the value and volume of international e-commerce but has increased its share within domestic retail. Most e-businesses surveyed by UNCTAD for this project reported disruption to supply chains due to lockdowns, movement restrictions, business closures and closed borders, reinforcing pre-existing bottlenecks. ESCWA, for instance, reports that some 65 per cent of airports in its region were fully closed early in the pandemic, along with a significant proportion of road crossings. It anticipated a drop of 22 per cent in road freight transport turnover during 2020 by comparison with the previous year.[321]

Disruption to supply chains means that many businesses have lost access to regular suppliers and had to seek alternatives, sometimes through imports rather than domestic procurement, which has proved costly, time-consuming and has required inexperienced business managers to acquire new e-commerce skills. ECLAC reports that, though the vast majority of companies in its region were connected to the Internet before the pandemic, only a third used it to buy inputs (compared with 70 per cent in OECD countries) and less than 20 per cent had online sales channels.[322]

Poor trade logistics and weak trade facilitation provided a weak starting point for merchants hit by the pandemic and struggling to maintain international sales. COVID-19 protective measures have added to the range of difficulties encountered, even where the pandemic has otherwise increased opportunities.

- ECLAC's report[323] suggests that more complex health and safety requirements for those working in transport and border controls have exacerbated existing bottlenecks despite the reduced volume of cross-border trade.
- In its report for this project, ECA notes that more intensive border management procedures (including ship and container screenings, personal health checks and possible quarantine of goods), accompanied by staffing shortages, have caused additional delays through border crossings, ports and airports.[324]

The Singapore-based delivery service Ninja Van, which provides last-mile delivery to marketplace sellers, has reported that although parcel volume has increased during the lockdown, safety measures have hit productivity and the company has incurred extra costs.[325] At least one international logistics company is reported to have introduced an Emergency Situation Surcharge for logistics management during the crisis, adversely affecting the viability of small consignments.[326]

The preference of online shoppers for home delivery during the pandemic has emphasized the importance of non-digital infrastructure in enabling e-commerce. In some cases – such as local food deliveries – it has been met by retailers organizing their own deliveries or using specialist delivery businesses (which may be local firms or international platforms like Deliveroo and Uber Eats). New express delivery services have emerged in Tunisia, while a number of private logistics companies have entered the market in Cambodia, including food and grocery deliverers such as Food Panda, Nham24 and E-gets.[327]

More generally, changing demand for delivery has shifted the balance of postal services and put increased pressure on post offices, express and courier services. For the first time in its history, revenue from parcels deliveries has exceeded that from letters for the United Kingdom's postal service, Royal Mail, rising to 60 per cent compared with 47 per cent before the crisis.[328]

Increased demand and COVID-induced shortages of personnel have compounded already poor performance in postal reliability, inhibiting merchants from offering online sales and consumers from making online purchases. Global data from UPU shows that the average time for customs and border clearance for inbound parcels around the world increased by 97 per cent from late January to mid-April 2020, with a spread from two to 64 hours.[329] An increasing number of parcels are reported to be stranded in the logistical 'no man's land' between sender and recipient. Firms that can find ways around these problems, such as using express couriers, can gain competitive advantage.

RESPONSES

The challenges of trade logistics are considerable, requiring international cooperation, capital investment, revised business models and restructuring of customs and other border interfaces. The pandemic has reinforced the desirability of better trade facilitation and enabled some acceleration of processes that were already underway.

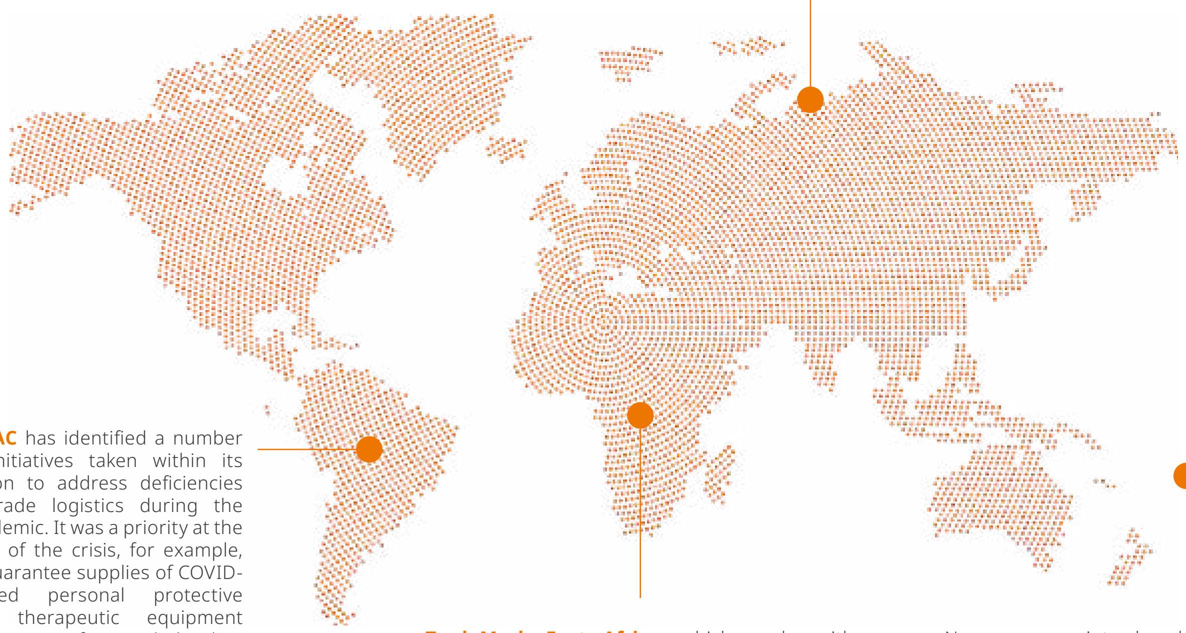
UNCTAD has proposed a range of broad policies and practical measures that governments can take to maintain transport, customs management and associated processes during the pandemic, including the promotion of paperless systems and measures to expedite customs clearance.[330] It has also published guidelines for the adaptation of its ASYCUDA customs management system.[331]

Border closures and movement controls have especially increased the challenges faced by MSMEs and informal border traders, making it difficult for many to pursue their normal economic activities. Measures have been taken in different regions to address these challenges. While many of these have been concerned with mitigating immediate or short-term problems, they also suggest ways in which longer-term challenges identified above might also be addressed.

One such potential change is the introduction of a de minimis threshold to exempt low-value consignments from tariffs in cross-border trade. This can be particularly beneficial for MSMEs, many of which rely on smaller consignments in their export trade, and informal traders at border crossing points. The government of Colombia has introduced a US$ 200 de minimis threshold for tariff-exempted goods, to encourage trade in low-value consignments.[332]

Other measures have been taken by governments and regional associations.

The **Eurasian Economic Union** (EAEU), which includes transition economies in the ECE region, has adopted measures to establish green corridors for food and medicine products, simplifying regulatory processes and allowing greater use of digital documentation.[333]



ECLAC has identified a number of initiatives taken within its region to address deficiencies in trade logistics during the pandemic. It was a priority at the start of the crisis, for example, to guarantee supplies of COVID-related personal protective and therapeutic equipment which were often traded online through e-commerce platforms and marketplaces and delivered by express or courier services. Adjustments to border controls were made that enabled rapid entry clearance for these goods.[336]

TradeMark East Africa, which works with the East African Community to promote trade facilitation in its region, has operated a Safe Trade pilot project to track cargo and monitor the health of truckers using border crossings, using technology to reduce physical contact.[334]

New measures introduced in the small island state of **Kiribati** have included online clearance of documentation for incoming flights and vessels, ensuring delivery of essential goods and repatriating foreign citizens while minimizing physical contact.[335]

Initiatives like these depend on cooperation between border agencies within and between countries, including interoperable processes and technologies, and may require regulatory as well as administrative flexibility.

As noted above, postal services are important distribution channels for e-commerce, and have experienced increased demand while introducing additional safety precautions and sometimes struggling to maintain staffing levels. Countries and regions with relatively strong and well-developed postal networks, such as transition economies in Central Asia, have found it easier to meet pressures placed by rising demand during the pandemic.[337]

- Some post offices have taken steps to mitigate adverse impacts of disruptions in their distribution channels due to transport restrictions and public health requirements.
- Some have offered new services designed to help merchants entering e-commerce to fulfil sales and deliveries. In Senegal, La Poste readjusted its delivery service called 'Jotnaci' by deploying a digital third-party marketplace, revising prices and diversifying partners.[338]

BOX 3.1 Information Services for Online Businesses

Trade facilitation is not solely concerned with processes for transport, data management and international borders. Many businesses are deterred from entering new markets by lack of information about potential demand and uncertainty about procedures they will need to follow, which add to perceived risk. New requirements associated with the COVID-19 crisis have exacerbated the level of perceived risk as well as increasing the desirability, for firms, of reaching new markets with new trading methods. Business associations and governments can help firms to diversify markets and business models by providing information resources, platforms and portals.

The most widespread innovation in trade facilitation reported by ECLAC during the pandemic has been in efforts to promote businesses' e-readiness and online presence in this way. One of the more common measures taken in the region early in the crisis, was the establishment of dedicated websites with resources and information for MSMEs to improve their online presence and adjust business models to the new context. Argentina's SMEs Digital Assistance Network, for example, offers resources and tools to help MSMEs improve their connectivity, payments, invoicing, sales and distribution, as well as provide training materials. Local businesses can also advertise using its platform.[339] Governments in a number of countries in the ESCWA region have also initiated online services to support businesses and citizens navigate the challenges of the pandemic.[340]

Some governments and businesses have established public-private partnerships with existing marketplaces or developed new platforms to help connect MSMEs with suppliers and customers. Initiatives like this can be especially helpful for microenterprises and those in rural areas.

- Costa Rica's government, for instance, has initiated a Buy-SME platform for those businesses without an online presence, and a smartphone app and texting service to facilitate trade among producers of agricultural, meat and fish products.[341]

Development partners and third-party platforms have taken some initiatives along these lines which have particular relevance to longer term recovery.

- The African Development Bank has established Fashionomics, a digital marketplace for MSMEs in the clothing industry which, it says, will pay special attention to connecting women entrepreneurs with national, regional, and global digital marketplaces.[342]

- ITC and partner organizations have launched the Africa Marketplace Explorer to help MSMEs 'find information on how to sell goods online in a regional or neighbouring country, which marketplaces exist, whether they allow foreign firms and what the access requirements are'.[343]

Measures such as these could help to stimulate recovery, particularly in sectors such as tourism that have been badly hit by the pandemic. It would be valuable to assess experience with those introduced during the pandemic in order to maximize their potential value for MSME development in future.

THE ROAD TO RECOVERY

Four priority areas for long-term intervention in trade logistics have been identified by the eTrade for all initiative. These are concerned primarily with the physical delivery of goods, including the growing proportion that are now ordered and paid for online. This illustrates the interdependence of physical and digital infrastructures in the evolving digital economy.

1 The eTrade for all initiative urges governments to facilitate **digitalization of international trade** by adopting the provisions of WTO's Trade Facilitation Agreement (TFA), implementing standardized or harmonized formats for electronic data interchange and paperless documentation, single window processes and other mechanisms to smooth the flow of goods along transport corridors and through ports, airports and border crossings. A number of international models for these are available, including templates from the UN Commission on International Trade Law (UNCITRAL), the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT), and UNCTAD's ASYCUDA customs management system. UN/CEFACT has recently developed an e-commerce framework called ISMIT – Integrated Services for MSMEs in International Trade – to improve smaller businesses' access to international trading opportunities.[344]

ECLAC believes that Central American and Caribbean countries, in particular, would benefit from greater compliance with the TFA, especially with respect to cross-border paperless trade and support to MSMEs. The experiences of Brazil, Chile, and Uruguay during the pandemic, it believes, 'demonstrate that advancing on this agenda can improve the trade facilitation environment and strengthen resilience in times of crisis'. It recommends investment in capacity-building and adoption of new technologies, such as those applying artificial intelligence and blockchain, in order to automate and modernize risk assessment and enable customs 'to overcome the challenge of achieving agile management of growing and more diverse e-commerce flows while maintaining efficient and effective controls and inspections'.[345]

Some countries in Latin America have taken the opportunity of the pandemic to initiate long-term improvements in border trade that may have a lasting impact on digital opportunities. Costa Rica and Panama, for example, have introduced more agile border processes, while Peru and the Dominican Republic have moved towards paperless customs processes. Colombia has begun a comprehensive digitalization of tax and customs processes.

2 Second, the eTrade for all initiative encourages investment in improving **transport infrastructure,** including ports, airports, roads and railways concerned with both domestic and international distribution. B2C suppliers and consumers are inhibited from offering and ordering online where transport and delivery obstacles make transactions inefficient or uncertain. Addressing these physical barriers is an important part of enabling digital trade.

3 Third, the initiative suggests that governments consider changes to **customs** that will encourage cross-border trade in small consignments of the kind traded by MSMEs. One relatively straightforward way to do this is the introduction of de minimis duty exemptions for low-value shipments, as recommended by the TFA. This is particularly beneficial to MSMEs. Colombia has followed this advice during the pandemic, as mentioned earlier, introducing a US$ 200 de minimis threshold below which shipments are exempt from tariffs. Such measures have lasting value as well as immediate value during the present crisis.

4 Fourth, the eTrade for all initiative urges governments to enable **postal services** to innovate, building capacity and identifying opportunities to monetize payment services, delivery mechanisms and support for platforms, including international partnerships. In addition, it urges governments

and postal services to improve last mile delivery mechanisms, by allowing increased capacity in the delivery market (for example through competition and technology-enabled platforms) and by the introduction of comprehensive physical addressing and postcode systems where these are not currently in place. Long-term improvements along these lines would improve the reliability of postal services (which would encourage use of e-commerce), lower costs to merchants and strengthen the resilience of national economies in the face of future potential crises.

ECLAC is concerned that measures taken by governments in response to the pandemic are often locally focused and do not address opportunities of new markets. It recommends that governments pay more attention to the potential of cross-border e-commerce, through interventions specifically targeting MSMEs and sectors that have not traditionally exported digital services.[346]

Regional economic communities (RECs) can play an important part in facilitating and coordinating trade facilitation measures. Regions with strongly established economic communities that already govern broad aspects of trade and the movement of goods and people, such as the European Union, have been better equipped to agree adjustments to trade arrangements that respond to crisis needs. The East African Community's regional free trade agreement and established working relationships have helped along these lines in Africa, particularly when new logistics challenges have arisen due to staff shortages and health precautions at border crossings.[347] The Eurasian Economic Commission has set up an initiative to formulate comprehensive legal regulation for e-commerce including cross-border e-commerce, customs and fiscal arrangements.[348]

There has been some acceleration of discussions about regional agreements during the crisis. Negotiations towards establishing a protocol for e-commerce are ongoing within MERCOSUR, for instance, while the Pacific Alliance has started conversations to establish an additional protocol for cross-border digital trade and e-commerce, including arrangements for mutual recognition of digital and electronic signatures, online consumer protection, and digitally transmitted products, such as software, video games, video and sound.[349]

More coordinating initiatives at regional level would, however, add greater value in all regions. ESCWA considers more regional economic integration in its region critical in this area, emphasising the need to progress on regional free trade agreements that address e-commerce issues including cross-border duties, consumer protection, taxation and regulatory harmonization. A substantial majority of respondents to its survey of e-commerce stakeholders identified lack of coordination between trade institutions in their countries as significantly problematic for their businesses.[350]

LEGAL AND REGULATORY FRAMEWORKS

Main Messages

The effective implementation of e-commerce requires sophisticated and comprehensive legal and regulatory frameworks concerned with ease of doing business and with aspects of digitalization including electronic signatures and transactions, data management, consumer protection and cybersecurity, which are still inadequately implemented in many countries. The pandemic has demonstrated their importance in providing a safe, trusted, efficient and secure environment for both merchants and consumers. The eTrade for all partners, including the Commonwealth Secretariat, Consumers International, CUTS, ITU, the South Centre, UNCITRAL, UNCTAD and the WTO, all offer support in this area. Governments and other stakeholders should focus on:

- Undertaking a regulatory gap analysis in existing law and practice to identify where new measures are required;
- Working together to develop a holistic approach to legislation and regulation across government, in line with national e-commerce strategies;
- Relaxing regulations that inhibit or delay business start-ups and rapid, responsive innovations in business practice (which are particularly relevant to e-commerce ventures);
- Introducing new legislation and regulations expeditiously, but with full due diligence, in critical areas for e-commerce such as electronic transactions, data and consumer protection and cybersecurity, together with appropriate enforcement mechanisms;
- Building awareness and capacity for legal adoption and enforcement by government, parliament and the judiciary, and for compliance by business.
- Supporting the establishment of information resources, portals and platforms that assist MSMEs in entering e-commerce markets.

SECTION E
LEGAL AND REGULATORY FRAMEWORKS

SUMMARY

E-commerce requires the adaptation of existing business policies and practice and the introduction of new legal and regulatory frameworks to govern digital interfaces, in areas including electronic transactions and signatures, data and consumer protection, cybersecurity and the standardization and authentication of fiscal, customs and cross-border trade requirements. The absence or inadequacy of appropriate and supportive legal and regulatory frameworks, which is still common in many countries, inhibits the development of domestic and international transactions and the degree of trust between merchants and consumers that is required for e-commerce to flourish.[351]

The pandemic has demonstrated the significance of these problems, particularly where it has made it more difficult for businesses to develop new business models or migrate online, engage in international e-commerce through global standard interfaces or build trusted relationships with international or domestic customers. Cybersecurity risks have grown during the pandemic, particularly where protections are weak, monitoring poor and enforcement limited. Awareness of these problems has been raised and some governments have implemented temporary measures to facilitate e-commerce business development. Some have been spurred to accelerate legislative processes that were already underway or were delayed in government or parliament, though these have generally concerned aspects of e-commerce rather than addressing the environment for it holistically. Such measures, in any case, require time to become embedded in business practice and customer behaviour.

THE CHALLENGE

E-commerce requires the adaptation of existing business policies and practice, not least in enterprise development, and the introduction of new legal and regulatory frameworks to govern its digital interfaces. Appropriate, effective and enforced legal and regulatory frameworks also inspire trust and confidence among buyers and sellers in the integrity and security of e-commerce transactions.

Critical areas for inclusion in a comprehensive approach to improving legal and regulatory frameworks include:

- business regulation, particularly that concerned with the establishment of new businesses and new business services;
- financial regulation, including the introduction of digital finance and payment mechanisms;
- intellectual property;
- electronic transactions, signatures and contracts;
- the standardization and authentication of fiscal, customs and cross-border trade requirements in trade agreements;

- data privacy, management and personal data protection;
- digital identity;
- consumer protection;
- taxation; and
- cybercrime and cybersecurity.

To facilitate international e-commerce, it is also important that legal and regulatory frameworks are harmonized or interoperable with those of other countries with which there are substantial trade relationships. An important role in this can be played by Regional Economic Communities such as the European Union, the Pacific Islands Forum and the Economic Community of West African States (ECOWAS).

Many countries have not yet established comprehensive legal and regulatory frameworks for e-commerce or enacted legislation governing the areas listed above. ESCWA, for instance, reports that many Arab countries lack legislative frameworks for e-transactions and data protection. This leads to lack of trust in digital transactions and discourages merchants and customers alike.[352] UNCTAD's Cyberlaw Tracker monitors the enactment of relevant legislation. In December 2020 it listed 81 per cent of countries worldwide with e-transaction laws, and 79 per cent with laws concerning cybercrime, but only 66 per cent with privacy laws and 56 per cent with laws governing consumer protection. The figures for LDCs were much lower – 64 per cent, 66 per cent, 43 per cent and 40 per cent respectively.[353]

ESCWA illustrates the value of a comprehensive strategy for e-commerce from the experience of the United Arab Emirates, where e-commerce has shown rapid continuous growth over recent years, and from experience of specific legislation for consumer protection in Saudi Arabia. At the same time, it regrets that many countries in its region lack important legal instruments for electronic transactions and data protection, inhibiting businesses that might otherwise join e-commerce markets. For the Arab region, ESCWA urges particular attention to legal frameworks for electronic signatures, data protection, intellectual property, taxation and cybersecurity. National frameworks in these areas, it argues, should be reinforced through a regional agreement governing cross-border digital trade.[354]

IMPACT AND RESPONSES

The pandemic has illustrated the importance of legal and regulatory frameworks and the remaining gaps within them, including problems associated with limited deployment and weak enforcement.

- The absence of adequate frameworks for electronic transactions makes it more difficult for merchants and clients to arrange orders, contracts and payments in both B2B and B2C, and is particularly problematic for international transactions that require currency conversion and interoperability between different bank regimes.
- Inadequate arrangements for tackling cybercrime and data theft leave merchants and consumers vulnerable to fraud and inhibit them from entering into transactions that they think may put them at risk of fraud.
- The absence of consumer protection laws makes customers vulnerable to abuse by unscrupulous traders, particularly in countries where consignment tracking and delivery networks are poorly developed.

Changes in legal and regulatory frameworks cannot be implemented quickly. Ensuring that they are appropriate requires prior assessment of existing circumstances, gap analysis, consultation and, often, legislative agreement, all of which take time. Once enacted, time is also required for training of enforcement personnel and the judiciary. The pandemic period has not, therefore, seen many substantial changes in legal and regulatory frameworks take place that were not already planned or underway. Some governments, however, have revived or accelerated existing legislative processes and/or initiated progress towards reforms that are required for recovery.

- UNCTAD reports the launch of a new single-window or one-stop-shop process for business registration in Iraq, a country which has ranked low in the World Bank's Ease of Doing Business Index. UNCTAD has pioneered a similar registration process in Benin.[355] Such measures are valuable in simplifying the processes for start-ups in the digital sector that may not conform to the traditional business models envisaged by existing regulations.
- Cambodia's government has expedited work on implementation processes, as a result of the pandemic, following enactment of its e-commerce law in 2019.[356]
- A decree in Tunisia has laid down provisions to address violations of competition and fair pricing rules during lockdown.[357]
- The government of Nepal is, likewise, drafting new e-commerce laws following adoption of its national e-commerce strategy in 2019.[358]

ROAD TO RECOVERY

Commercial relationships work within systems of laws, regulations and standards that enable transactions to take place efficiently and securely. These cover diverse aspects of trade, from health requirements through taxation to consumer welfare. Existing business regulations are generally relevant to and appropriate for e-commerce, but its different modalities require both adjustments to existing rules and additional legal and regulatory frameworks to be put in place if it is to enable innovation and gain the trust of merchants and consumers.

The quality of business regulation is an important factor in encouraging or discouraging business innovation. Processes for registering new businesses or initiating new business offerings are straightforward and permissive in some countries but much more restrictive in others, requiring entrepreneurs to expend considerable time and money, with consequential opportunity costs. E-commerce requires start-ups and established businesses to develop new business models that do not always conform with traditional business regulations. Important areas for assessment and reconsideration in this context include the procedures, time, cost and capital required to open a business and the level of documentation, cost and time required to gain trading authorizations.

Alongside business regulation, e-commerce businesses need to work within a legal framework governing the digital environment. A comprehensive approach to this, developed in line with the national strategy advocated in **SECTION A**, is preferable to piecemeal legislation and regulations because its different elements are more likely to be integrated effectively and reduce the risk of friction and legal dispute. Comprehensive legal frameworks for e-commerce should include arrangements for electronic signatures and transactions, financial transfers, data management, consumer and data protection, cybersecurity, international trade documentation and other cross-border requirements.

As noted above, many developing countries still lack a comprehensive framework of this kind, and this needs to be addressed in order to facilitate e-commerce. The requirement for appropriate legal and regulatory arrangements is becoming more widely understood, not least because of deficiencies revealed by the pandemic. In its report associated with this project, for example, ESCWA has identified 'the need for a legal infrastructure supportive of and conducive to e-commerce activities' as 'one of the main issues that Arab policy makers should address when defining an e-commerce regional strategy'.[359]

Some examples of longer-term developments have taken place during the pandemic. The Government of Myanmar, for instance, has prioritized updating regulatory frameworks, and developing an e-commerce law and business registration system for e-commerce MSMEs. The new law is intended to provide a level playing field to foster development of the e-commerce sector in line with the ASEAN economic community's framework, and to establish an enabling environment for the e-commerce sector and wider digital economy in Myanmar.[360]

The e-Trade for all initiative recommends that governments begin to address this challenge by undertaking a regulatory gap analysis, including a review of existing laws and practices, to identify where new legislation or regulation is required. This should be used to develop a holistic approach across government designed to maximize the value of e-commerce. Multi-stakeholder engagement in the development of regulations – involving digital business, financial institutions and representatives of consumers as well as merchants – will help to build confidence and remove barriers. New legal frameworks take time to embed themselves. Awareness-raising and capacity-building are necessary to expedite their integration in business practice and consumer behaviour, as are effective measures to ensure compliance, including legal enforcement.

These improvements can sometimes be effectively undertaken at regional levels, through the cooperative frameworks of regional economic communities like ASEAN, the East Africa Community (EAC) and Mercosur. Harmonization of cross-border trade arrangements, including processes for customs, transactions and sanitary/phytosanitary requirements, reduces costs and expedite consignments, encouraging international commerce (see **SECTION D**).

SKILLS DEVELOPMENT

Main Messages

The pandemic has shown that many MSMEs, especially in developing countries, have lacked the business and technical skills to leverage e-commerce opportunities. Many consumers, especially those new to ICTs, have lacked the digital literacy skills required to make best use of opportunities to shop online. Addressing skill shortages takes time and can benefit from good practices from around the world. In this context, there is a wide range of expertise among eTrade for all members that can be leveraged. Governments and other stakeholders should focus on:

- Working across government to support retraining and the development of skills required for growing digital societies and economies;
- Enabling partnerships (including enterprise development hubs, incubators, business schools and educational institutions) to provide practical training in e-commerce, tailored to local job markets and business experience;
- Building skills among relevant parts of the government and parliament to raise their ability to formulate, implement and enforce relevant policies, laws and regulations;
- Strengthening the capabilities of domestic IT sectors, which have an important part to play in supporting local digital transformation without overdependence on external platforms and technology providers;
- Ensuring inclusion of women and girls who are under-represented in e-commerce and find it more difficult at present, in many countries, to obtain relevant skills and investment;
- Retraining staff in business support organizations (BSOs) to improve their ability to support e-commerce MSMEs and start-ups;
- Establishing national e-procurement platforms and portals to assist MSMEs and start-ups access international and domestic e-commerce markets;
- Supporting domestic e-commerce platforms that are accessible to all groups within the population, including those with fewer language skills;
- Improving digital literacy and awareness-building among consumers.

SECTION F
SKILLS DEVELOPMENT

SUMMARY

Digital literacy is crucial to the development of the digital economy. Awareness of e-commerce is low among government officials and MSMEs in many countries, particularly in LDCs. New business models require new skills, in both technology and commerce, on the part of established businesses and consumers as well as business start-ups. For businesses especially, these skills are not merely technical: e-commerce requires new ways of marketing and managing relationships with customers who are often unfamiliar with the modalities as well as the potential benefits of e-commerce. Digital enterprise is rarely taught alongside digital technology.

As in other areas, the pandemic has brought these shortfalls to the fore. Initiatives to provide new resources to MSMEs and nascent e-commerce ventures, where implemented during the pandemic by governments, platforms or business associations, provide some tools that address or help to overcome skills deficits in the short term and may encourage more attention to longer-term investment in business training. Like regulatory changes, however, it takes time for capacity-building initiatives to have widespread impact. Many businesses and consumers are learning through experience rather than through formal skills development.

THE CHALLENGE

Digital skills are crucial to the development of the digital economy. New ways of doing things require new skills, in both technology and commerce, on the part of established businesses and business start-ups, as well as digital literacy among consumers. The business skills required are not just technical. E-commerce requires new ways of engaging with international markets and export requirements, of marketing and managing relationships with customers. Small businesses, in particular, find it more difficult to adapt to the need for online presence and services in the absence of such skills.

Countries in which technical and business skills are more widespread and better catered for in business training and support are better equipped to take advantage of e-commerce opportunities in competitive international and domestic markets. Experience here varies between regions and countries within regions. Both technology and business skills relating to e-commerce are well-established in North American, European and East Asian markets. ESCWA, on the other hand, reports that MSMEs in the Arab region face considerable difficulties in entering e-commerce markets as the result of complex rules governing international trade, lack of knowledge of digital marketing and lack of technical skills.

UNCTAD research has shown that awareness of e-commerce is low among government officials and

MSME managers in many countries, particularly LDCs.[361] Information technology courses in colleges and universities rarely dedicate much time to the digital economy. Graduates emerge from them under-equipped with relevant entrepreneurial skills, adding to the challenges faced by local technology start-ups. Business support organizations (BSOs) are also poorly equipped to guide those moving into e-commerce or establishing e-commerce start-ups.

Digital literacy and self-confidence among consumers are important for the growth of domestic e-commerce. Older and less digitally engaged consumers, including newcomers to e-shopping, are often unaware of the potential benefits it has to offer, less experienced in navigating apps and websites, and more concerned about the risks that they fear are associated with online transactions. Their difficulties may be exacerbated by literacy and language limitations on those apps and websites.

IMPACT AND RESPONSES

UNCTAD's survey of e-commerce businesses, mostly in LDCs, provides some evidence concerning skill shortages in established e-commerce companies. Fourteen per cent of those responding to the survey indicated that they had inadequate workforce skills to meet growing demand, but this was not the only problem associated with the workplace and workforce inhibiting agile response. Insufficient funds to scale-up operations, uncertainty about the future to undertake new investments, and availability of the required workforce on short notice were vital challenges, further complicated by COVID-related health precautions. Start-ups and firms without previous experience of e-commerce are likely to experience greater skill deficiencies.

Evidence from consumer surveys suggests not only that the volume of online shopping has grown during the pandemic, but that e-shopping has been adopted by new users who lack previous experience of it, many of whom are also likely to have more limited digital skills.

ECLAC reports that measures to strengthen businesses' e-readiness and online presence have seen more active intervention by governments in its region during the crisis than other challenges discussed in this chapter, though few of these interventions have focused on specific sectors or cross-border trade.[362] Some governments, such as Colombia's, have set up programmes to help entrepreneurs establish e-commerce initiatives. Others have worked with established marketplaces to facilitate access for small businesses, both MSMEs and in some cases informal microenterprises. Costa Rica's government, for example, has established the Buy-SME platform to support businesses without an online presence.[363] The Government of Senegal has expressed interest in mobilizing support to run an information, education and awareness campaign on the benefits of e-commerce across all segments of population.[364]

Initiatives to enhance businesses' e-readiness have also been taken by international and regional agencies in Latin America, including UNDP's Accelerate 2030 MSMEs programme,[365] and joint work to support the digitalization of MSMEs in a number of countries coordinated by the Organization of American States and the online marketing platform KOLAU.[366]

The Inter-American Development Bank has launched a COVID-19 Map of Providers and Solutions,[367] which is analogous to the tools and resources available through eTrade for all.

As with payments systems, simpler interfaces on e-shopping apps and websites would be more accessible to new and inexperienced users and therefore tend towards increasing usage. This is particularly important, for example, where new users lack some of the digital literacy skills of existing online shoppers, or where minority languages are under-represented online. Merchants who address these challenges for new users are more likely to gain their business. They can also offer guidance and advice to help users protect themselves from online abuse and fraud.

THE ROAD TO RECOVERY

Infrastructure, services and regulations are insufficient without skills on both supply and demand sides of e-commerce markets. Skills required by businesses are not just concerned with the effective use of technology, but also with marketing, enterprise and innovation for digital markets. Both start-ups and established firms moving online need personnel with relevant skills that do not form part of traditional university and college curricula.

The e-Trade for all initiative recognizes that developing these skills within local business communities should not be left to MSMEs using their own initiative, but requires coordinated action, consistent with a national e-commerce strategy. The grounds for this are well put in ECLAC's report:[368]

> *Given [the] differences in technology adoption between large firms and MSMEs, a challenge for LAC countries is to design policies that raise awareness about the productivity and profitability gains of applying (even simple and mature) digital technologies in everyday productive processes, as well as training programs that strengthen MSME's digital skills. A key aspect of this challenge is to understand that, for most micro and small businesses, information about suppliers, solution providers, or technological tools may not be enough to enable their digital transformation and can, in fact, increase uncertainty about which technology they should implement, fostering inaction. Rather, MSMEs need to understand how their business models must change in order to better harness digital technologies and improve profitability. This may imply [focusing on] the job training of general entrepreneurial practices and basic digital skills.*

The pandemic has shown that many MSMEs, especially in developing countries, have lacked the business and technical skills to leverage e-commerce opportunities. The eTrade for all initiative has recommended four steps to build the capacity of digital entrepreneurs:

- It has called for partnerships between government, business and educational institutions (including enterprise development hubs, incubators and business schools) to provide practical training in e-commerce, tailored to local job markets and business requirements.
- It has urged governments to prioritize the skills development of women and girls who are under-represented in the ICT sector and e-commerce.
- It has urged retraining for staff in business support organizations (BSOs), so that they are better equipped to assist potential digital entrepreneurs.
- It has encouraged the establishment of national and local platforms and portals to assist MSMEs and digital start-ups to access broader national and international markets, including national e-procurement portals, such as those discussed in **Box 3.3 above.**

Many consumers, especially those new to ICTs, have lacked the digital literacy skills required to make best use of opportunities to shop online. The desire to shop online has grown as a result of movement restrictions and health anxieties during the pandemic but is constrained by potential customers' unfamiliarity with online platforms and anxiety over potential risks posed by online shopping (from fraud to non-delivery).

While digital literacy and confidence will grow with experience, and with more widespread adoption of Internet-enabled smartphones, this can be expedited by governments and businesses raising awareness of the benefits of online shopping, and businesses simplifying platforms and interfaces (particularly for those with fewer language skills). Awareness of consumer rights and consumer protection legislation will also encourage new shoppers online.

FINANCING FOR E-COMMERCE

Main Messages

MSMEs and e-commerce start-ups found it difficult before the pandemic to access capital investment from traditional financial institutions, and often relied on alternative/informal funding. The pandemic has seen reductions in availability of capital, particularly through FDI and remittances, at just the time that new investment has been needed to meet increased demand for e-commerce. Lasting improvements are needed in financing to assist recovery. The development banks, UNCDF and ITC are among eTrade for all partners that can offer assistance in this area.

Governments and BSOs should assist MSMEs and digital start-ups in building their financial capabilities in ways that will improve access to investment.

Banks should revise lending criteria, tailoring these to the needs of the emerging digital economy, innovation and e-commerce.

Entrepreneurs and MSMEs should look beyond traditional lenders towards alternative funding models.

SECTION G
FINANCING FOR E-COMMERCE

SUMMARY

Digital start-ups and MSMEs newly engaging in digital trade require capital investment. So do established businesses seeking to transition to e-commerce. Established lending practices of traditional financial institutions tend to favour larger firms with established business models and assets that can be given as collateral. MSMEs seeking to build e-commerce businesses often find it difficult to obtain required investment and either under-invest or seek alternative, less secure investment sources. This inhibits their effectiveness.

The pandemic has reduced foreign direct investment and remittances, with available finance likely to be focused on traditional sectors rather than innovations that financial institutions consider to be risky. Some governments and international agencies have responded through initiatives to help enterprises identify and access funding and revise business models. In the longer term, more substantial interventions are required to increase investment opportunities for the growing number of e-commerce enterprises.

CHALLENGES

Established businesses (large and small) that are seeking to expand e-commerce or enter into digital markets, and digital start-ups, all require capital investment. The lending practices of established financial institutions tend to be cautious, favouring larger firms with established business models and resources that can be provided as collateral. They are often wary of untested clients and more innovative projects. Venture capital, which can provide alternative investment, is more readily available to businesses in developed than in most developing countries.

Access to financing is one of the important bottlenecks experienced by digital businesses in developing countries and in LDCs in particular. MSMEs seeking to build e-commerce businesses in developing countries often, therefore, find it difficult to obtain the investment that they need and either under-invest or seek less secure and less substantial funding from alternative sources such as family and informal lenders. A third of e-commerce enterprises responding to UNCTAD's survey in developing countries identified limited financing for liquidity shortages as a critical challenge to their business models.[369] Remittances from family members working overseas are likely to be significant for some MSMEs and start-ups.

The problems that MSMEs face in raising capital, particularly for digital investments, are described in many of the eTrade for all rapid eTrade Readiness Assessments that have been conducted by UNCTAD and its partners. In Uganda, for example, access to finance is described as very challenging for entrepreneurs and small businesses, with the cost of acquiring IT equipment and services exacerbated by high interest rates and stringent eligibility requirements of local banks.[370] Similar problems are described in e-readiness reports concerning countries as diverse as Afghanistan, Bangladesh and Mali.[371]

IMPACT AND RESPONSES

These problems for MSMEs have not lessened during the pandemic. Indeed, 'even when demand grew', UNCTAD has found, 'businesses [have] found it very challenging to adapt and expand to meet the additional demand. Insufficient funds to scale-up operations, uncertainty about the future to undertake new investments, availability of the required workforce on short notice were vital challenges, further complicated by health-related precaution measures. The same constraints affected the availability of resources dedicated to communication and visibility, necessary to expose products and services to potential buyers in the market'.[372]

Similar evidence has been found by the UN Capital Development Fund (UNCDF) for MSMEs in developing economies more generally. More than half of respondents to a survey that it conducted among partners and applicants in April 2020 said that reductions in income resulting from the pandemic were likely to put them into financial difficulties within the next six months.[373]

Two-thirds of businesses in UNCTAD's recent survey of e-commerce businesses had sought to obtain additional financing during the early phases of the crisis, divided equally between those seeking finance for business survival and continuity and those looking to finance expansion. Only 14 per cent of these had been successful. Of these, UNCTAD reports, several had pooled funds from multiple sources. More than a third relied on informal financing options from family, friends or saving groups. Another third received support from banks or microfinance institutions and a little under that proportion had obtained private investment.[374]

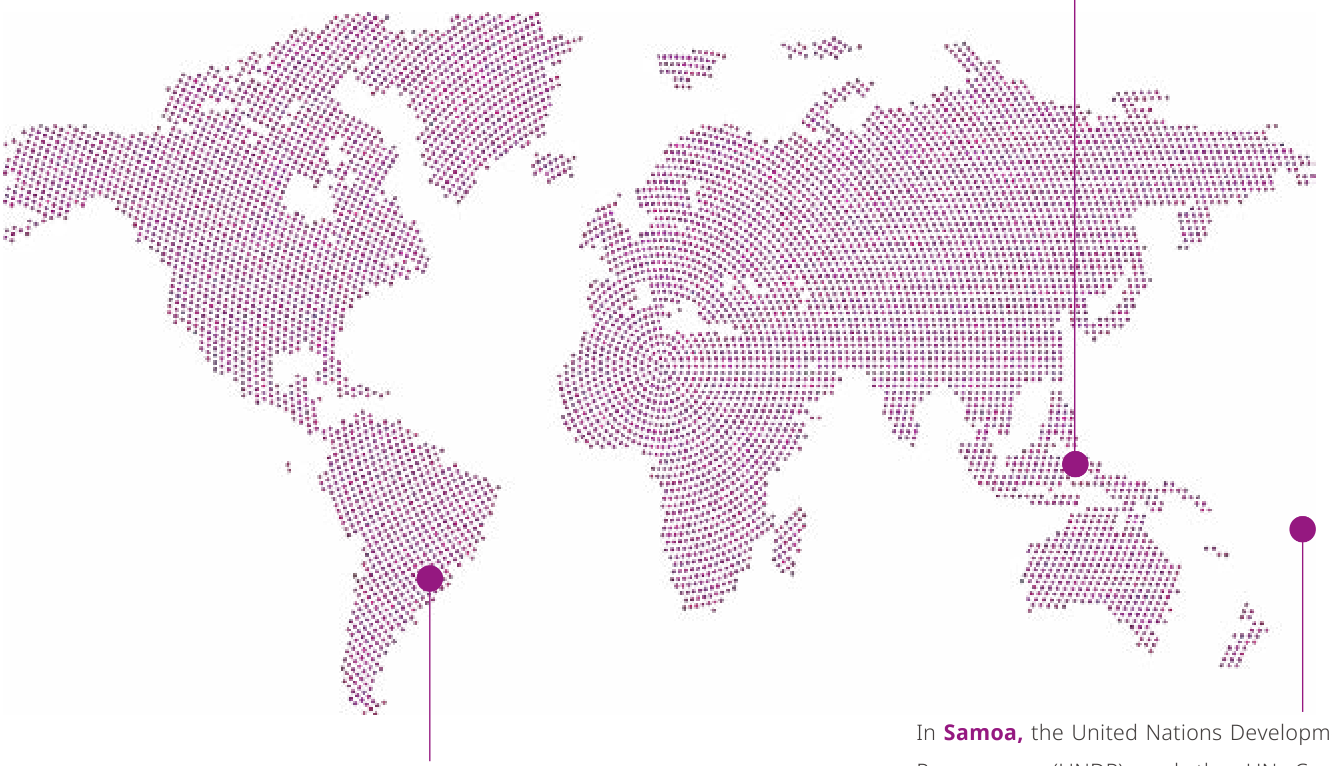
Some of the alternative sources of funding that have been used by MSMEs and start-ups have become less available during the pandemic.

- Lower incomes from established businesses mean that these have less self-generated capital available for new investments. Alternative lenders and family members, for similar reasons, also have fewer funds that they can risk in nascent enterprises.
- Remittances from family members living overseas have been a major source of investment for new firms in many developing countries over recent decades. In 2019 remittances were a greater source of capital for developing countries than foreign direct investment.[375] Reports suggest that these have also substantially reduced in value during the pandemic as senders of remittances have experienced job losses and lower incomes. The World Bank has predicted that the global value of remittances will fall by 19.7 per cent in 2020 over previous years, and by more than 20 per cent in Sub-Saharan Africa and South Asia.[376]

Government interventions to support MSMEs in general have been available in some countries to those operating digitally as well as other sectors. The government of Tunisia, for example, has set up a digital platform that enables business affected by the lockdown to apply for grant support related to tax and other official financial liabilities, as well as establishing funds to cushion impacts on the most affected sectors. Lesotho's government has established a COVID-19 Private Sector Relief Fund to assist businesses that have closed during lockdown with rent and liabilities due to loans.[377]

Some short-term interventions to support small-scale e-commerce innovation by MSMEs have also been reported. For example:

In **Indonesia**, the digital business Gojek has partnered with the Agriculture Ministry to help more local farmers and market sellers, known as "Mitra Tani Markets" in the country, to sell local produce and staple goods online.[378]



The government of **Argentina** has launched a fund to assist financing needs of businesses wanting to invest in new digital products to meet challenges arising from the pandemic.[379]

In **Samoa,** the United Nations Development Programme (UNDP) and the UN Capital Development Fund (UNCDF) have worked with SkyEye Samoa, a local technology business supported by GSMA,[380] to enhance uptake of its e-commerce platform, Maua App, in response to the pandemic. This app allows registered vendors to upload their goods and services onto the Maua platform for potential buyers to purchase through digital payments in real time.[381]

THE ROAD TO RECOVERY

The pandemic has, therefore, seen reductions in availability of capital, including foreign direct investment and remittances, at just the time that new investment has been needed to meet increased demand for e-commerce innovation. While there have been generalized business support schemes in many countries, these have focused on maintaining the viability of existing businesses rather than enabling new commercial ventures such as e-commerce start-ups. Lasting improvements in the availability of funding for investment are needed in order to assist recovery.

In addition to financial support programmes and incentives through governments and international agencies, the eTrade for all initiative's analysis of MSME experience in LDCs suggests three priorities within this area:

- Commercial banks should revise their lending criteria, tailoring standards and products to the needs of the emerging digital economy. This may require them to relax traditional requirements for collateral and credit histories in order to assist non-traditional businesses, including start-ups. It may also require adjustments in national financial regulations.
- Governments and business support organizations should do more to help MSMEs and digital start-ups to build their financial management capabilities in ways that will enable them to access and leverage investment. Particular attention should be paid to business associations and to businesses led by women, encouraging partnerships between these and commercial banks. Interventions of this kind can be effective at relatively small scales and focus on supportive infrastructure as well as (or instead of) direct finance. The government of Indonesia, for example, has launched the MSMEs Go Online programme, which provides capacity-building to expedite digitization and digitalization. The Republic of Korea is providing support to MSMEs to build up their capacity in investor relations and has encouraged brick-and-mortar shops to open to business online through a dedicated support programme.[382] Cambodia's government has established an SME Bank to provide financial incentives and liquidity support to MSMEs in all sectors including digital innovation.[383]
- Entrepreneurs and MSMEs should look beyond traditional lenders towards alternative funding models such as public-private partnerships, incubators and venture capital. One example of a small-scale, specific initiative along these lines is a crowdfunding platform established by the UN's Capital Development Fund and local partners to help women and young entrepreneurs in The Gambia to raise money from friends, family and the national diaspora.[384]

Changes in taxation may also be relevant, for both e-commerce in general and specific products and services. Some countries in Africa, for instance, place high rates of duty on computers and other digital equipment which add to investment costs and inhibit movement towards e-commerce.[385] Reducing these would lower entry costs for both established businesses and start-ups seeking to diversify or initiate e-commerce platforms.

EMPOWERING WOMEN IN E-COMMERCE

Main Messages

The pandemic has amplified the barriers many women face that make it harder for them to benefit from the opportunities of the digital economy and e-commerce than men. Not only are women more exposed to the virus because they are more likely to work in service sectors or as front-line workers, but they are often excluded from policy formulation processes that affect pandemic responses. Women commonly take up more unpaid work than men (including domestic chores and child home schooling during lockdowns) while having fewer resources to draw on, experiencing inequalities in access to the Internet and other resources that enable them to launch businesses. UNCTAD and its partners in eTrade for Women have worked to address some of these challenges, through programmes concerned with online training and support, improved data-gathering and providing access to resources that enable women to participate actively in the digital economy. These include ITC's SheTrades programme and work by UN Women and the EQUALS partnership. Governments and other stakeholders should also support women digital entrepreneurs by:

- Developing family-friendly responses to the crisis that provide broader social protection for parents and women in particular, including flexible work arrangements.
- Involving women more actively in policy and regulatory processes, including short-term responses to the crisis, to recognize and address the unique and unequal impacts of the crisis on women digital entrepreneurs.
- Creating more meaningful, inclusive opportunities for women entrepreneurs to expand their connections and networks, and to voice their needs and concerns – including by engaging with decision-makers and other stakeholders.
- Supporting efforts to develop women entrepreneurs' skills and capacity to join e-commerce platforms and to participate more effectively in supply chains. In the Gambia, for example, ITC's SheTrades provides one-on-one coaching to entrepreneurs in the fashion sector so that they can reach international targets online.[386]
- Encouraging and incentivizing stakeholders – including the private sector as well as government – to adopt products that encourage women digital entrepreneurship, both during the crisis and in the recovery phase, such as dedicated, gender-specific support, gender-specific capital and/or gender-oriented tax levies.
- Working together, in the long term, to address the broader issues and barriers that are faced by women digital entrepreneurs, including gender stereotypes, bias and norms, that prevent them from actively participating in the digital economy.

SECTION H
EMPOWERING WOMEN IN E-COMMERCE

SUMMARY

The e-Trade for all initiative has a special focus on women entrepreneurs, who tend to be significantly under-represented in the ICT sector generally as well as in the digital economy.[387] In 2019, it launched the eTrade for Women initiative[388] with the aim of leveraging the power of women's digital entrepreneurship as a force for more inclusive development.[389]

The e-Trade for Women initiative helps to empower women entrepreneurs in developing countries by leveraging the visibility and networking of leading women advocates, with the support of the governments of the Netherlands and Sweden. It focuses on capacity-building and skills development to provide women entrepreneurs with the tools needed to thrive in a rapidly changing digital economy; to build local, regional and global communities of women digital entrepreneurs within gender-inclusive digital economy ecosystems; and to support women to participate more actively in policy processes that impact women entrepreneurs at global, regional and local levels.

Supporting women digital entrepreneurs is particularly important during and after the pandemic. As the 25th anniversary of the Beijing Platform for Action, the year 2020 was expected to be a ground-breaking celebration for gender equality. The COVID-19 pandemic, however, risks the loss of gains that have been made to promote women's rights and representation in sectors like e-commerce. As the United Nations points out:[390]

> *Emerging evidence on the impact of COVID-19 suggests that women's economic and productive lives will be affected disproportionately and differently from men. Across the globe, women earn less, save less, hold less secure jobs, [and] are more likely to be employed in the informal sector. They have less access to social protections and are the majority of single-parent households. Their capacity to absorb economic shocks is therefore less than that of men.*

Women's unequal representation in digital economies is a reflection of pre-existing gender inequality and of women's vulnerability in social, political, and economic systems.[391] This means that, even before the pandemic, women entrepreneurs had commonly faced gender-specific barriers that rendered them unable to benefit equally and fully from the opportunities offered by e-commerce.[392] Times of uncertainty, such as the pandemic, tend to exacerbate these inequalities. The consultancy firm McKinsey estimates that women's jobs are 1.8 times more vulnerable to the crisis than men's jobs.[393]

Before the pandemic, the global gender pay gap was relatively consistent at 16 per cent, leaving women more vulnerable to the economic downturn caused by the crisis.[394] Sixty per cent of women's employment is in the informal economy (about 740 million women globally, a majority in services),[395] where there are few protections against dismissal and more limited access to social security (where that is available).[396] Women tend to play a more limited role in global business markets, as they own or manage only some 20 per cent of export firms, and about a third of the world's micro, small and medium-sized enterprises.[397] MSMEs owned by women tend to be smaller and thus more vulnerable to fixed costs, volatile international prices and trade-related regulations and obstacles.[398]

While 85 per cent of women-led SMEs have female chief executives, chief operating officers or chief financial officers, a survey by ITC in 2017 found that the proportion of women-led firms doubled when moving from traditional offline trade to cross-border e-commerce.[399] The same survey showed that three out of four firms trading exclusively through e-commerce in Africa are women-owned.[400]

Women also tend to assume a larger share of care and domestic responsibilities and take responsibility for decisions that can benefit their families and broader communities.[401] It has been suggested that if women had the support to be able to produce under the same conditions as men, this could contribute significantly to achieving SDGs concerned with poverty and hunger.[402]

Trade outcomes are just as unequal for women as the broader gendered impacts of COVID-19, discussed in more detail below. Often, policies aimed at supporting business development and entrepreneurship fail to consider women's unique 'positions in value chains, their multiple roles in society or their access to assets, skills and networks'.[403] Women entrepreneurs therefore have to navigate shifting global value chains during COVID-19 while suffering from unequal access to information, skills, networks and resources.

CHALLENGES

Before the pandemic, women faced a number of barriers that made it harder for them to benefit from the opportunities of the digital economy and e-commerce.[404] These barriers have been amplified in pandemic conditions.[405] The limited research that is available[406] suggests, for example, that a majority of small businesses led by women in Sub-Saharan Africa have lost their principal source of income during the pandemic, a much higher rate than that estimated for small businesses headed by men.[407]

Women are also often more exposed to the virus.[408] Not only do significant numbers of women work in services industries, but 70 per cent of frontline healthcare workers are women.[409] Tracking work done by UN Women warns that, in some countries, the rate of COVID-19 infections among female health workers is twice that of their male counterparts.[410] Despite playing a central role in fighting the pandemic, women have often been excluded from policy formulation processes, in which men have mostly made decisions about lockdowns, containment, support and recovery.[411] Women's general, sexual and reproductive health needs may also go unmet – especially as services are diverted to tackle the pandemic.[412] The United Nations Population Fund (UNFPA) points out that during the Zika virus outbreak in 2015/6:[413]

...women did not have autonomy over their sexual and reproductive decisions, which was compounded by their inadequate access to health care and insufficient financial resources to travel to hospitals and health care facilities for check-ups for their children, despite women doing most of the community spread control activities.

Women are said to do three times more unpaid work globally,[414] and spend two to ten times more time on unpaid work, than men, leaving them with less time for business enterprises.[415] In Samoa, for example, it is reported that women-owned or managed MSMEs face more resilience issues than those owned or managed by men as women have to assume greater family and social obligations in times of crisis.[416] With lockdowns and the closure of schools in many places (an estimated 850 million children were home from school at some point during the pandemic),[417] women's workload has increased as childcare and household obligations often fall to women.[418] Without time-use data from before lock-downs, however, it is impossible to know whether and how much more work women might be doing in crisis circumstances like the pandemic.

Besides taking women's time, pandemic conditions have exacerbated women's exposure to domestic violence, which is estimated to have increased by more than 25 per cent in some countries during lockdowns.[419] In Australia, for example, the office of the eSafety Commissioner reported that online abuse and bullying increased in just one month by 50 per cent compared with the period before lockdown.[420]

Finally, women tend to have fewer resources to draw upon than men, including inequalities in access to funding and related resources to enable them to launch and run businesses,[421] access to land,[422] and Internet connectivity and devices.[423] In respect of the latter, which is particularly significant where e-commerce is concerned, the global gender gap in Internet access is currently estimated to be 17 per cent.[424] ITU has warned that this gender gap has been growing in developing countries, particularly during the past five years. While in 2013 the gap in developing countries was 15.8 per cent, by 2019 it had risen to 22.8 per cent. In LDCs, the estimated difference has increased from 29.9 per cent in 2013 to 42.8 per cent in 2019.[425]

Even when connected, women often have inferior hardware and make less use of the Internet than their male peers.[426] UNCTAD has warned that 'women in technology are under-represented and poorly funded.'[427] Women are 30 to 50 per cent less likely than men to use the Internet to increase their income or participate in public life.[428] As a result, significant proportions of women lack access to the opportunity to buy and sell online.[429]

RESPONSES AND RECOVERY

Policy and other interventions concerned with mitigating and recovering from COVID-19 must be responsive to the unique and unequal impacts that the pandemic has on women and women entrepreneurs, ranging from increased care obligations and growing precarity to enabling opportunities for business development that can help society to 'build back better'.[430] While some of the challenges for women that have arisen as a result of the pandemic require immediate action, this should not detract from the need to deal with broader, underlying gender inequalities that particularly affect women and women entrepreneurs.[431]

To understand these inequalities better, more and better gender-disaggregated data should be gathered, including data concerning how the pandemic has affected women digital entrepreneurs. Very few countries have so far invested in data to understand the factors that affect women's ability to participate in (digital) business.

Some examples of short-term interventions that have occurred during the pandemic shed light upon these issues:

ITC | SheTrades

ITC's SheTrades initiative has supported women-led small businesses by offering online training and support packages, including a Covid-19 Crisis Management Toolkit to help women plan in times of uncertainty; a Resilience and Recovery Action Plan Canvas to help women-owned businesses take quicker and efficient decisions during the crisis; and dedicated webinars for different types of women-led businesses.[432]

EQUALS, a global coalition for Gender Equality in the Digital Age,[433] has highlighted the importance of technology for alleviating the immediate impacts of lockdowns. One partner, the Latin American based BBVA Microfinance Foundation (BBVAMF), provides online support to potentially vulnerable microentrepreneurs through a range of financial and non-financial services, which it has made available virtually during the crisis. With its partner CARE, BBVAMF initiated a digital financial education programme to ensure rural female entrepreneurs have access to basic finance, budgeting, savings and products.[434]

UN Women, the Maldives' National Bureau of Statistics and certain telecommunications providers partnered shortly before that country's first lockdown to gather data on the impact of the pandemic on women and men, including that on women's time.[435]

Looking towards recovery from the pandemic requires more than building on these interventions. UNICEF, ILO and UN Women have called for more 'family-friendly' responses to the crisis to provide broader social protection to parents – including employment and income protection, paid leave to care for family members, flexible working arrangements and access to good emergency childcare.[436]

Policymakers can support women digital entrepreneurs by incentivizing private sector lending to women (such as gender bonds); encouraging financing options that serve women's needs; providing assistance for training schemes; collecting gender-disaggregated data on all aspects of women's business participation; developing gender-responsive procurement and crisis response policies; enabling women to participate in policymaking and consultation processes pertaining to Covid-19 and e-trade; and supporting women-led enterprises that have been hard hit by the pandemic.[437]

The private sector can support women in business by considering preferential schemes for women suppliers; providing incentives to suppliers to include more women in supply chains; ensuring that services do reach women in supply chains; giving productive feedback on procurement tenders; providing prompt and advance payments to female suppliers; creating competitive finance schemes based on sustainability criteria; providing bank guarantees and asset-based financing for women-led enterprises; and supporting the digitalization of businesses.[438]

Unlocking women's potential to take full advantage of digital solutions and engage in e-commerce through entrepreneurship can reinforce women's economic empowerment and make them more resilient to economic shocks. Consultations with e-commerce SMEs in Africa and Asia-Pacific[439] and with members of the eTrade for Women communities have shown that businesses that were more advanced in their digital transformation were less vulnerable and better able to adapt to the impact of the COVID-19 pandemic.

While most SMEs relying on more traditional business models have had to cut back their operations, e-commerce platforms that relied on a digital business model reported a boost in their activity. In this light, interventions aimed at supporting women entrepreneurship and boosting women's skills and capacities to lead the digital transformation could have significant impact and should be included in ongoing recovery efforts. Three avenues in particular show promise in this context.

Overcoming existing barriers: Women digital entrepreneurs from the eTrade for Women community have reported that the pandemic has reinforced some of the pre-existing obstacles that they faced in growing businesses prior to the crisis, such as high cost of data, poor Internet connectivity, lack of access to capital, and difficulties in engaging with cross-border trade. Measures aimed at establishing a more enabling environment for women entrepreneurs to create and grow their digital businesses are important when building more inclusive and sustainable digital ecosystems (for instance, access to dedicated gender-specific support, policy measures to foster or provide gender-specific capital, and gender-oriented tax incentives to encourage women digital entrepreneurship).

Increasing women's visibility and access to supportive networks: Women digital entrepreneurs from the eTrade for Women community have reported that they often lack inspirational role models. Interactions with peers can be critical when exploring business opportunities or seeking guidance in difficult times. Women entrepreneurs should be offered more opportunities for recognition as central actors in the digital economy, for example by expanding and growing their connections and networks and providing more inclusive platforms in which they can voice their needs and concerns.

Enabling women to participate more actively in decision-making positions, while reflecting their interests and needs:[440] Women's lack of participation in public spaces, coupled with their low representation in decision-making positions, carry the risk that their needs and interests will not be taken sufficiently into account. Enhancing the participation of women in policy and regulatory processes that have an impact on digital ecosystems, including short-term responses during times of crisis, can help to build more inclusive economies. The government of Myanmar, for instance, has taken steps toward addressing women's needs by conducting extensive consultations with different stakeholders of the digital ecosystem, with the support of the eTrade for all initiative.[441]

Facilitating access to capital for women digital entrepreneurs. The Women Entrepreneurs Finance Initiative is an international initiative that aims to address financial deficiencies concerned with women's access to funding. A collaboration between the European Bank for Reconstruction and Development, the Inter-American Development Bank, the Islamic Development Bank and the World Bank Group, its activities focus on four aspects: providing women entrepreneurs with better access to finance; helping them expand their markets; building their capacities; and fostering more enabling regulatory and policy environments. The EBRD will use its share of the grant to focus on Egypt, Morocco and other countries, while the Islamic Development Bank will focus on Guinea, Niger, Senegal, and Sierra Leone, and the World Bank Group will focus on Burkina Faso, Mali, Mauritania and elsewhere. While the partners have slightly different orientations and priorities, they all focus on addressing the specific challenges for women brought forth by the pandemic.[442]

These aspects relate to other themes covered in this chapter, including the need to support women's equal participation and use of ICTs.

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374 UNCTAD, 2020b.

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392 WTO, 2020h; Bandyopadhyay andGrollier, 2018.

393 McKinsey, 2020a.

394 UN Global Compact, 2020.

395 World Bank, 2020f.

396 UN Women, 2020b.

397 ITC, ICC, UPS and Women 20, 2020.

398 UNCTAD, 2020m.

399 ITC, 2017. The findings are based on a survey conducted by ITC in 2017 among more than 2,200 MSMEs in 111 countries to identify the challenges they face when engaging in e-commerce; including firms from developed and developing coun tries, as well as LDCs.

400 Ibid.

401 Ibid.

402 IADB, 2020a.

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404 Ismail, Stuurman, Sajous and Grollier, 2020; Mbogori, 2020; UNCDF, 2020d; World Bank, 2020l; Bandyopadhyay and Grol lier, 2018; Sicat, Xu, Mehetaj, Ferrantino and Chemutai, n.d.

405 Power, 2020.

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410 UN Women, 2020b.

411 ITC, ICC, UPS and Women 20, 2020.

412 World Bank, 2020f; UNFPA, 2020; UN Women, 2020b.

413 UNFPA, 2020.

414 UN Global Compact, 2020.

415 UN Global Compact, 2020.

416 ESCAP, 2020f.

417 UN Global Compact, 2020.

418 ITC, ICC, UPS and Women 20, 2020.

419 UN Global Compact, 2020; Women's Empowerment Principles, 2020; World Bank, 2020f.

420 UN Global Compact, 2020; Women's Empowerment Principles, 2020; World Bank, 2020f.

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eTrade for all

4

THE WAY FORWARD: LEVERAGING ETRADE FOR ALL

Main Messages

E-commerce offers developing countries new ways of building economic advantage, creating jobs and enterprises, and facilitating progress towards achieving SDGs. Countries whose governments create an enabling environment for e-commerce and whose businesses seize those opportunities will be well-placed to benefit from it. Those that do not, however, risk falling further behind.

A number of critical barriers to successful leveraging of e-commerce, particularly in developing countries and LDCs, have been identified by UNCTAD and its eTrade for all partners. These are concerned with the development of e-commerce strategies, infrastructure, payments, logistics, regulation, skills and finance. Attention also must be paid to inclusiveness, including the role of women digital entrepreneurs whose needs and interests have often been neglected.

Efforts to address these barriers, through a comprehensive approach involving both governments and business, will help to leverage the benefits of e-commerce and mitigate potential problems. Such efforts require commitment on the part of governments, engagement on the part of business, and resources to support infrastructure and skills development, regulatory reform, and the restructuring and reorientation of business models. The eTrade for all initiative illustrates the potential for building synergies between national and international stakeholders to address this need, including development partners and financial institutions.

The COVID-19 pandemic has accelerated the growth of e-commerce, within a context of global economic downturn, increasing its share of international and domestic trade. Measures taken to control infection, including movement controls, and public anxiety about social interaction have increased demand for digital services and online shopping, leading more people to make use of digital channels than was previously the case. There has also been significant growth in the use of digital payment mechanisms. A substantial part of the resulting growth in e-commerce is likely to be permanent. The pandemic has therefore strengthened the case for governments and businesses to build their capacities for managing e-commerce and their presence in e-commerce markets.

Experience during the pandemic has reinforced the analysis and understanding of barriers to e-commerce growth that had been developed by UNCTAD and its partners in the eTrade for all initiative, and has given greater emphasis to the importance of policies and programmes to overcome those barriers. As stated above: countries that develop such policies and programmes will be able to leverage the benefits and 'build back better'; those that do not risk being left behind.

All stakeholders – governments, businesses, consumers and international development partners – have an interest in ensuring that e-commerce plays a positive and powerful part in national and international recovery from the pandemic. Resources should be committed to that goal. UNCTAD and its partners in the eTrade for all initiative will continue to play their part by advocating relevant policy approaches, supporting assessments of national e-commerce environments, and fostering collaborations between national and international stakeholders to maximize the synergies that can contribute to enabling e-commerce for development.

This chapter summarizes the findings and recommendations made in the report. Governments, businesses and development partners are encouraged, in each of the eight areas described, to explore what opportunities and resources are available from eTrade for all partners and to maximize potential value and synergies from the initiative, fostering cost-effective interventions while avoiding duplication. Illustrations of the contributions that partners offer are included.

This report has considered the impact of the COVID-19 pandemic on the progress of e-commerce across different world regions, the part that e-commerce has played in economic activity during the crisis, and its potential role in supporting recovery as the world economy emerges from the pandemic in due course. The report findings confirm that technologies can be drivers of major change, and significantly contribute to sustainable development. Positive outcomes, however, cannot be taken for granted.

Many conclusions are necessarily provisional. The pandemic is still underway at the time of publication, and its duration and trajectory remain highly uncertain.[443] Evidence on impacts to date is limited and will evolve as the crisis continues. Data sets illustrating the impact of the pandemic are much more widely available for the first half of 2020, when the pandemic was in its first phase in most countries, than they are for more recent phases. Examples of business and government responses are also, thereby, skewed towards short-term responses designed to mitigate COVID-19's immediate impact rather than longer-term responses oriented towards recovery.

It is crucial that governments, businesses and development partners use what is currently known to plan ahead, in order to maximize the contribution of e-commerce to expedite and facilitate equitable economic recovery within the framework of sustainable development and to 'build back better'. Two central messages emerge from the report.

- The first is that the pandemic and the restrictions on movement that have been introduced to contain its spread have accelerated many aspects of digital transformation including the development of e-commerce. While there have been substantial reductions in trade overall, the share of trade taken by online commerce has grown, particularly in domestic markets where online shopping has necessarily substituted for many previously offline transactions. This has been accompanied by a further increase in the use of non-cash payments in many countries.
- The second is that countries with greater e-commerce capabilities have been better placed to mitigate some of the challenges of the pandemic, are in a better position to recover from the current crisis and will be more resilient in the face of future crises than those that are less well-prepared.

The critical global policy challenge that emerges from this is that more attention needs to be given – and given urgently – to efforts that can help reduce the inequalities in e-trade readiness that currently prevail among countries. Without such efforts, many developing countries will struggle to improve their prospects following recovery, which could increase the risk of widening inequality rather than greater equality in economic opportunities and outcomes. That in turn would make it more difficult to achieve the SDGs.

Meeting this challenge must be handled against the backdrop of other intense pressures on government and development partners, some of which (such as the SDGs and climate change) are long-established goals for international action while others arise from social dislocation and economic recession brought about by the pandemic.

The pandemic has demonstrated and, in some cases, intensified the challenges to e-commerce development that have previously been identified by the eTrade for all initiative and that were explored in **CHAPTER 3:**

a) E-commerce readiness assessments and strategy formulation

b) ICT infrastructure and services

c) Trade logistics and trade facilitation

d) Payment solutions

e) Legal and regulatory frameworks

f) E-commerce skills development

g) Access to financing for e-commerce

h) Empowering women entrepreneurs in developing countries

It has also created windows of opportunity for those who have been prepared to leverage digital opportunities:

- for businesses to reach into new markets of potential national as well as commercial value;
- for governments to reset inadequate regulatory frameworks in the wider digital and business regulation contexts; and
- for development partners to give renewed attention to the digital dimensions of development.

It is unclear how far changes in economic activity and consumer behaviour resulting from the pandemic will continue after recovery. This is likely to depend partly on the time it takes to return from crisis to normal health conditions.

As in all cases of major disruption, there will be winners and losers: businesses and communities that will gain from them and others whose livelihoods are and will be threatened. Policy interventions need to pay attention to both winners and losers, facilitating investment and enabling environments for e-commerce to develop, but also supporting ways forward for those who have been or may be adversely affected by the economic restructuring that goes with digital transformation.

The pandemic has resulted in significant reductions in government revenues. In light of these, and of the pace of change, it will be crucial to explore approaches that are robustly based on evidence, avoid duplication and leverage the synergies that can be derived from effective partnership. The eTrade for all initiative offers such an opportunity. It has been active for more than four years and has seen its membership more than double, from fourteen to 32 partners, since 2016.

This study conducted jointly by UNCTAD and four UN Regional Commissions, with the active support of several other partners in eTrade for all, is an illustration of how different international and civil society organizations can join forces through such collaborations to develop a better understanding of e-commerce and leverage synergies to address gaps and barriers to inclusive e-commerce development. The result is a rich comparative compendium detailing how different regions have responded to the crisis, including some insights into responses that appear, provisionally, to have worked well and those that appear to have been less successful.

This final chapter of the report focuses on how the eTrade for all partnership can provide leverage to promote more inclusive developmental outcomes during recovery from the pandemic. It briefly reflects on lessons learned that will help governments, businesses and development partners to prepare for the challenges and needs of future crises. It discusses ways in which eTrade for all can help bridge gaps in current policy and practice in order to achieve goals for recovery. It also highlights the need for better statistics on e-commerce that can provide a stronger evidence base for policymakers and business decision makers. The chapter concludes by outlining key goals for governments, businesses and development partners.

MAIN FINDINGS

E-commerce is playing a growing role, as part of the wider digital economy, in sustainable development - bringing both new opportunities and new challenges in relation to the SDGs. Its growth, however, is inhibited in many developing countries by a range of barriers. Countries that overcome these and establish enabling frameworks for e-commerce will be better placed to leverage its potential benefits and address challenges, both domestically and internationally, while those that fail to do so risk becoming less dynamic at home and less competitive abroad. Without adequate policy frameworks there is a risk that digital innovation will increase inequality.

The COVID-19 pandemic has reinforced the importance of addressing barriers to e-commerce in order to leverage the benefits that can be derived from it and cope with the potential downsides of digital transformation. In particular, it has given further impetus to the growth of domestic e-commerce, though the impact on international e-trade (as on international trade in general) has been less positive.

The extent to which trends experienced during the crisis will continue during recovery is uncertain and will depend, inter alia, on the pace of recovery and the nature and extent of measures taken to facilitate it. Many consumers expect to continue spending more online after the crisis than they did before. Experience of online entertainment services (and the fact that more people have crossed entry barriers) is likely to sustain higher usage levels where they are concerned. Many employers are considering blending office and homeworking. E-commerce platforms are therefore likely to retain many, though perhaps not all, of the gains in market share that they have made during the pandemic vis-à-vis offline markets.

Learning from the experience of the pandemic is important in short, medium and longer terms.

In the short term, a number of steps can be taken by businesses and governments to mitigate the impact of a crisis like the pandemic on individual businesses and wider national economies, including ways to sustain and grow e-commerce.

In the medium term, the pandemic has raised awareness of the more substantial, lasting changes to the environment for trade that, if implemented, can leverage the benefits of e-commerce for enterprise and national economic growth.

In the long term, it alerts governments and businesses to the risks of future pandemics or other large-scale threats to business viability and national prosperity and thereby, if sufficient attention is paid and action taken, enable better risk assessment, forward planning and resilience.

Long-term implications, however, reach beyond resilience in future pandemics. As the shift to the digital economy becomes accentuated, greater efforts are required to ensure that businesses in developing countries are equipped to participate effectively. This will require more rapid digitalization of small businesses, greater attention to digital entrepreneurship, improved capacity to make use of data and platforms, stronger regulatory frameworks to promote the creation and capture of value in the digital economy, and a shift in entrepreneurial mindsets from usage and consumption in the digital economy to innovation and production.

As discussed in the 2019 Digital Economy Report,[444] boosting entrepreneurship in digital and digitally enabled sectors will be critical to local value creation. In many developing countries, digital entrepreneurs face a number of barriers to establishing and growing businesses and scaling their activities. Global digital competitors already occupy digital product markets that are most readily scalable and are better resourced to build on that advantage. Servicing local markets digitally in developing countries often requires the establishment of processes and platforms that blend analogue and digital approaches, rather than the asset-light approaches used by digital platforms in more highly connected economies. In many developing countries, the best market opportunities for local digital entrepreneurs may lie in local and/or regional markets for digital goods and services that leverage local/regional needs and demands. This should be an important consideration in the design of national e-commerce strategies and policies.

ECLAC stressed the importance of coordinated action in its report:

> *As has become evident from the challenges that LAC [the Latin America and Caribbean region] needs to address, the development of a thriving digital trade environment in the region depends not only on the quality of digital infrastructure, trade facilitation, and logistics, but also on the incentives, the level of certainty, and trustworthiness provided by the regulatory and legal frameworks, including those for digital security and online consumer protection. The design of these frameworks should be a multi-stakeholder, industry-participated process, where actors from the private sector and civil society can bring in lessons learned from the experience of other countries and regions.*[445]

As this suggests, addressing the barriers and leveraging the benefits identified in **CHAPTER 3** should be a holistic exercise. They intersect and interact with one another. Comprehensive approaches to addressing them will be more successful than treating them in silos. The COVID-19 crisis has accentuated the need for more integrated approaches at national and regional levels and stronger coordination mechanisms at global level.

THE eTRADE FOR ALL INITIATIVE

Inclusive leveraging of digital opportunities will be an essential part of global and national efforts to mitigate the effects of the pandemic and foster post COVID-19 recovery. Launched in July 2016 at UNCTAD's 14th Ministerial conference in Nairobi, eTrade for all brings together beneficiary countries, partners and donors to enhance the development benefits from e-commerce for all within societies. The call to go beyond sector-by-sector silos towards a comprehensive approach is a raison d'être of the initiative. It seeks to serve as a catalyst for smart partnership and has become a valuable and valued resource for the development community in its efforts to help countries trailing in the digital economy to build back better.

At the heart of the initiative is the eTrade for all online platform, an information hub to help developing countries navigate the range of technical and financial services and drive development through e-commerce that are available from eTrade for all partners. Through the platform, developing country stakeholders can connect with potential partners, learn about trends and best practices, access up-to-date e-commerce data, and gain information about forthcoming e-commerce events. The platform was used by more than 71,000 visitors during the period October 2019 to October 2020, 60 per cent who were based in developing countries.

The eTrade for all platform[446] is structured around the same seven policy areas of particular relevance to e-commerce development that have been addressed in this report. In addition to these topics, special attention is given to women in e-commerce development and to the measurement of e-commerce and the digital economy.

The initiative's goal is to bring the donor community, development agencies, international and non-governmental organizations together, to share digital solutions, support e-commerce and facilitate greater coherence in policymaking on digital trade. As illustrated in Figure 4.1, eTrade for all partners complement each other in terms of expertise and activities to support the efforts of developing countries to strengthen e-trade readiness. It is only by bringing these actors together that the development community can respond effectively to the challenge of building back better in the context of e-commerce.

This approach has demonstrated its relevance and value during the first four years of the initiative,[447] which can now build on that experience and leverage its outcomes and achievements to date to play an even bigger part in post-crisis recovery. This objective is consistent with the recommendations of the UN Secretary-General's High-Level Panel on Digital Cooperation[448] and his Road Map for Digital Cooperation,[449] which seek to enhance multi-stakeholder cooperation in the digital age.

FIGURE 4.1 – ETRADE FOR ALL PARTNERS AND AREAS OF FOCUS

PARTNERS	ETRADE FOR ALL POLICY AREAS						
	E-commerce strategy	ICT infra-structure	Payment solutions	Trade logistics and facilitation	Legal frameworks	Skills development	Financing SMEs
ACSIS						✔	
AfDB		✔		✔	✔		
Commonwealth Secretariat	✔				✔	✔	
Consumers International					✔	✔	
CUTS						✔	
DiPLO						✔	
ECA	✔	✔		✔	✔	✔	
ECLAC	✔	✔		✔	✔	✔	
EIF	✔	✔					
ESCAP		✔	✔	✔		✔	
ESCWA		✔		✔	✔	✔	
E-Residency			✔		✔		
IAP					✔	✔	
ICAO				✔	✔		
IDB		✔	✔	✔	✔		✔
ILO					✔	✔	
ISOC		✔				✔	
ITFC		✔	✔		✔		✔
ITC	✔			✔		✔	✔
ITU		✔			✔	✔	
South Centre					✔	✔	
UNCDF			✔			✔	✔
UNCITRAL			✔		✔		
UNCTAD	✔			✔	✔	✔	
UNECE				✔	✔	✔	
UNIDO				✔	✔	✔	
UPU	✔		✔	✔			
WBG	✔	✔	✔	✔	✔	✔	✔
WCO				✔	✔		
WEF						✔	
WIPO					✔		
WTO				✔		✔	

Note : list of eTrade for all partners who could assist in the various policy areas in accordance to their mandate and expertise.

RESPONDING TO POLICY CHALLENGES: MAIN RECOMMENDATIONS

The following paragraphs summarize the findings and recommendations made in the report. Governments, businesses and development partners are encouraged, in each of the eight areas described, to explore what opportunities and resources are available from eTrade for all partners and to maximize potential value and synergies from the initiative, fostering cost-effective interventions while avoiding duplication. Illustrations of the contributions that partners offer are included.

a. The impact of the pandemic

The need for eTrade Readiness Assessments and strategy formulation in enabling recovery has been intensified by the pandemic. Countries in which governments are well-informed about e-commerce and have coherent strategies in place have been able to respond to the sector's needs more quickly and effectively. This will be as true after the pandemic as it is during the crisis. A large number of eTrade for all partners already offer assistance in this area. In light of the analysis in **CHAPTER 3**, governments should focus on:

- systematic data gathering and evaluation of the impact of policies and business practices;
- identification of critical gaps requiring intervention;
- establishing/developing strategies for e-commerce that are integrated into broader national development and implemented through coherent governance structures;
- strengthening interministerial and interdepartmental dialogue for effective coordination;
- fostering dialogue between government, businesses and business associations (on both demand and supply sides of e-commerce) and consumer representatives;
- facilitating public/private collaboration to build awareness and trust in e-commerce among merchants and consumers.

b. ICT infrastructure and services

Limitations in infrastructure and in services to support local e-commerce have been thrown into greater relief by the pandemic. More bandwidth and improved quality and resilience will facilitate international e-commerce. More universal and affordable broadband access will encourage more people to shop and sell online. As with strategy development, this will be as true after the pandemic as during the crisis. The eTrade for all partners, including the World Bank Group, regional banks, and ITU, can provide valuable assistance in this area.

Governments and network operators should focus on:

- encouraging investment in international and domestic connectivity through enabling regulatory frameworks, with particular attention to inclusion of areas that are currently underserved (such as remote and rural areas);
- investing in partnership, including public-private partnerships and partnerships with international

agencies, to improve network deployment in underserved and potentially less profitable areas, to ensure progress towards universal broadband access;

- taking steps to reduce digital divides within countries, particularly the gender digital divide, improve affordability of access for local consumers and ensure that affordable access becomes available to all as recommended by the UN Broadband Commission for Sustainable Development; and
- supporting information services, portals and e-commerce platforms that are oriented towards local businesses' and consumers' needs.

c. Payments

The pandemic has demonstrated the value of digital and cashless payment mechanisms in enabling transactions to be made at distance, although cash culture is still prevalent in many countries, especially in LDCs. Increasing the acceptance and adoption of cashless payments will hasten short-term recovery from the crisis and lay the ground for stronger e-commerce in future. UNCDF, UPU and development banks are among eTrade for all partners that can make valuable contributions in this context. Governments and other stakeholders should focus on:

- raising awareness of the benefits of digital transactions among merchants and consumers;
- establishing enabling financial and digital regulatory frameworks that ensure ease of use and security for digital transactions, including measures concerned with electronic transactions, cybersecurity and consumer protection;
- encouraging interoperability within a competitive banking environment, to facilitate seamless interbank transfers, reduce friction in transactions and lower costs; and
- simplifying digital transaction mechanisms (and lowering or reducing entry costs) to incentivize adoption by those at lower income levels.

d. Trade logistics

Inefficient transport and trade logistics, which reduce the cost and speed advantages that digital transactions offer merchants, have been accentuated during the pandemic, particularly for small consignments from MSMEs. Pandemic conditions have also accentuated weaknesses in infrastructure for delivery of parcels. Some governments have introduced information resources, portals and platforms during the pandemic to assist MSMEs and start-ups to establish e-commerce initiatives. Regional Commissions of the United Nations, ICAO, ITC, UNCTAD, UPU, WCO, WTO and other eTrade for all partners offer programmes to support improvements in trade logistics and trade facilitation. Governments and other stakeholders should focus on:

- facilitating the digitalization of international trade by adopting the provisions of WTO's Trade Facilitation Agreement, implementing standardized paperless documentation formats, single window processes and other mechanisms to smooth the flow of goods along transport corridors and through border crossings;
- investing in transport infrastructure, including ports, airports and border crossings, which are critical to enabling cost-effective distribution of inbound and outbound goods that are ordered online from other countries;
- considering the introduction of de minimis duty exemptions for low-value shipments;
- investing in improvements to postal networks, including the introduction of comprehensive physical addressing, and enabling innovative/competitive delivery mechanisms; and
- supporting the establishment of information resources, portals and platforms that assist MSMEs to enter e-commerce markets.

e. Legal and regulatory frameworks

The effective implementation of e-commerce requires sophisticated and comprehensive legal and regulatory frameworks concerned with ease of doing business and with aspects of digitalization including electronic signatures and transactions, data management, consumer protection and cybersecurity, which are still inadequately implemented in many countries. The pandemic has demonstrated their importance in providing a safe, trusted, efficient and secure environment for both merchants and consumers. The eTrade for all partners, including the Commonwealth Secretariat, Consumers International, CUTS, ITU, the South Centre, UNCITRAL, UNCTAD and the WTO, all offer support in this area. Governments and other stakeholders should focus on:

- undertaking a regulatory gap analysis in existing law and practice to identify where new measures are required;
- working together to develop a holistic approach to legislation and regulation across government, in line with national e-commerce strategies;
- relaxing regulations that inhibit or delay business start-ups and rapid, responsive innovations in business practice (which are particularly relevant to e-commerce ventures);
- introducing new legislation and regulations expeditiously, but with full due diligence, in critical areas for e-commerce such as electronic transactions, data and consumer protection and cybersecurity, together with appropriate enforcement mechanisms; and
- building awareness and capacity for legal adoption and enforcement by government, parliament and the judiciary, and for compliance by business.

f. Skills development

The pandemic has shown that many MSMEs, especially in developing countries, have lacked the business and technical skills to leverage e-commerce opportunities. Many consumers, especially those new to ICTs, have lacked the digital literacy skills required to make best use of opportunities to shop online. Addressing skill shortages takes time and can benefit from good practices from around the world. In this context, there is a wide range of expertise among eTrade for all members that can be leveraged. Governments and other stakeholders should focus on:

- working across government to support retraining and the development of skills required for growing digital societies and economies;
- enabling partnerships (including enterprise

development hubs, incubators, business schools and educational institutions) to provide practical training in e-commerce, tailored to local job markets and business experience;

- building skills among relevant parts of the government and parliament to raise their ability to formulate, implement and enforce relevant policies, laws and regulations;
- strengthening the capabilities of domestic IT sectors, which have an important part to play in supporting local digital transformation without overdependence on external platforms and technology providers;
- ensuring inclusion of women and girls who are under-represented in e-commerce and find it more difficult at present, in many countries, to obtain relevant skills and investment;
- retraining staff in business support organizations (BSOs) to improve their ability to support e-commerce MSMEs and start-ups;
- establishing national e-procurement platforms and portals to assist MSMEs and start-ups access international and domestic e-commerce markets;
- supporting domestic e-commerce platforms that are accessible to all groups within the population, including those with fewer language skills; and
- improving digital literacy and awareness-building among consumers.

g. Financing for e-commerce

MSMEs and e-commerce start-ups found it difficult before the pandemic to access capital investment from traditional financial institutions, and often relied on alternative/informal funding. The pandemic has seen reductions in availability of capital, particularly through FDI and remittances, at just the time that new investment has been needed to meet increased demand for e-commerce. Lasting improvements are needed in financing to assist recovery. The development banks, UNCDF and ITC are among eTrade for all partners that can offer assistance in this area.

- Governments and BSOs should assist MSMEs and digital start-ups to build their financial capabilities in ways that will improve access to investment.
- Banks should revise lending criteria, tailoring these to the needs of the emerging digital economy, innovation and e-commerce.
- Entrepreneurs and MSMEs should look beyond traditional lenders towards alternative funding models.

h. eTrade for Women

The pandemic has amplified the barriers many women face that make it harder for them to benefit from the opportunities of the digital economy and e-commerce than men. Not only are women more exposed to the virus because they are more likely to work in service sectors or as front-line workers, but they are often excluded from policy formulation processes that affect pandemic responses. Women commonly take up more unpaid work than men (including domestic chores and child home schooling during lock-downs) while having fewer resources to draw on, experiencing inequalities in access to the Internet and other resources that enable them to launch businesses. UNCTAD and its partners in eTrade for Women have worked to address some of these challenges, through programmes concerned with online training and support, improved data-gathering and facilitating providing access to resources that enable women to participate actively in the digital economy. These include ITC's SheTrades programme and work by UN Women and the EQUALS partnership. Governments and other stakeholders should also support women digital entrepreneurs by:

- Developing family-friendly responses to the crisis that provide broader social protection for parents and women in particular, including flexible work arrangements.
- Involving women more actively in policy and regulatory processes, including short-term responses to the crisis, to recognize and address the unique and unequal impacts of the crisis on women digital entrepreneurs.
- Creating more meaningful, inclusive opportunities for women entrepreneurs to expand their connections and networks, and to voice their needs and concerns – including by engaging with decision makers and other stakeholders.
- Supporting efforts to develop women entrepreneurs' skills and capacity to join e-commerce platforms and to participate more effectively in supply chains. In the Gambia, for example, ITC's SheTrades provides one-on-one coaching to entrepreneurs in the fashion sector so that they can reach international targets online.[450]
- Encouraging and incentivizing stakeholders – including the private sector as well as government – to adopt products that encourage women digital entrepreneurship, both during the crisis and in the recovery phase, such as dedicated, gender-specific support, gender-specific capital and/or gender-oriented tax levies.
- Working together, in the long term, to address the broader issues and barriers that are faced by women digital entrepreneurs, including gender stereotypes, bias and norms, that prevent them from actively participating in the digital economy.

BOX 3.2 Addressing the need for better statistics

Global efforts at raising the e-trade readiness of developing countries are severely hampered by underlying deficiencies in the evidence base, particularly statistics, that are needed to inform policymaking at national and international levels. There are three particular problems.

First, there has been little systematic gathering of data on the digital economy and e-commerce to common standards. Standard approaches to measuring digital trade are now emerging, including handbooks and manuals published by OECD, WTO, IMF and UNCTAD, while work on the digital economy is continuing within the framework of the G20 group of nations. It will take time, however, before standard methodologies are extensively deployed. The lack of consistent longitudinal datasets concerned with developments to date, which illustrate trends, will continue to be problematic.

Second, data that are collected are disproportionately available for developed country markets as against those of developing countries and particularly LDCs. This tends to skew analysis of e-commerce developments and places policymakers in developing countries and LDCs at a serious disadvantage. Generalizations from developed country data are unwise because the economic and digital environments and experience of e-commerce differ markedly between developed and developing countries, as well as within each of these groups. More systematic and more reliable data, gathered rapidly and frequently, are needed in all countries and regions.

Third, data are poorly disaggregated. It is insufficient to gather data on e-commerce as a whole, because policy responses require understanding of different market segments – international corporations, large local businesses and MSMEs; traditional retailers, digital marketplaces and e-commerce start-ups; businesses focused on international and domestic markets; formal and informal traders; the experience of men and women entrepreneurs; merchants of essential goods and luxuries, etc. It is equally insufficient to gather data on consumers as a homogeneous group, because policy responses and business plans require sophisticated, nuanced understanding of who buys what, where, when and how.

Such data deficiencies are widespread within the digital economy and digital society more generally. Although digital activities depend on data, and tremendous volumes of data are continually gathered through them, those data are often treated as commercially confidential, not least by platforms, and the data sets available for policy analysis by governments and business planning by smaller businesses are limited. Public-private partnership to improve data-gathering, data management and data analysis would be beneficial to both governments and businesses.

A number of resources are available from eTrade for all partners that can be harnessed to improve the availability of relevant data and statistics. These include resources from UNCTAD, WTO and WCO, WTO, ITU and UPU, from the Partnership on Measuring ICT for Development[451] and from UNCTAD's Working Group on Measuring E-Commerce and the Digital Economy.[452] UNCTAD's revised Manual for the Production of Statistics on the Digital Economy,[453] will be published in 2021.

GOALS AND POLICY RECOMMENDATIONS

While this summary of findings and recommendations has relevance to many countries, differences between national contexts are crucial and must be reflected in national strategies. Business plans must be relevant to local economic circumstances and the capabilities of individual firms. Interventions must be consistent with national legal frameworks and feasible with the resources that are available, whether in-country or through development partners.

Some groups of countries have particular requirements. Most of the recommendations made above are particularly relevant to LDCs. Landlocked countries face specific challenges because of their dependence on trade corridors through neighbouring states (including, sometimes, conflict zones). The special circumstances of Small Island Developing States – geographic isolation, small populations, dependence on one or two commodities or services (particularly tourism) for economic welfare, and vulnerability to natural disaster – require reforms that are particularly context-sensitive. Countries in such groups can learn from one another's successes and failures in stimulating e-commerce to date and in the future.

As the shift to the digital economy has accentuated, greater efforts are needed in three critical areas in order to leverage the potential benefits of e-commerce for development:

- Governments and their international development partners need to work together to address concerns regarding national digital readiness in order to enable local businesses to participate effectively in the evolving economic landscape and avoid falling further behind competitors from countries where these opportunities are being more thoroughly addressed.
- Businesses in developing countries need to become better equipped to participate in the digital economy, a transition that requires more rapid digitalization of MSMEs, more attention to digital entrepreneurship (including reskilling), improved capabilities to harness data and platforms; and stronger regulatory frameworks to promote the creation and capture of value in the digital economy.
- International actors – including development partners, United Nations agencies and Regional Commissions, regional economic communities, organizations concerned with digital development and cybersecurity – need to work together with governments and the private sector to leverage opportunities and minimize the risk of countries falling by the wayside.

Together, these goals require a shift in the mindset underpinning policy development and business planning in the digital economy from usage and consumption to innovation and production. ITC has emphasized that this new mindset must be forward-looking if it is to turn the lessons of the COVID-19 crisis into opportunities for future development.[454] As well as maximizing the potential that can be derived from digitalization, it must be resilient, inclusive and sustainable:

- enabling the survival and maintaining the potential of fledgling businesses and supporting the needs of hard-pressed consumers in good times and in bad;
- fully involving women and men, merchants and consumers, rich and poor, the powerful and the disempowered; and
- capable of enabling sustainable development, and achieving the SDGs, in an age of environmental risk and rapid technological development.

International cooperation is crucial to achieving this, at many levels:

- Cooperation in the WTO, UNCTAD, ITC and other organizations concerned with the framework for international trade and trade facilitation.
- Cooperative development, involving governments and business, in the establishment of effective, harmonized and interoperable standards for trade, e-commerce, digital payments and other aspects of the digital economy, building on the models designed by WTO, UN/CEFACT, UPU and other agencies.
- Collaborative attention, again involving governments and businesses, to address threats to cybersecurity that undermine the trust and confidence needed for merchants and consumers to gain maximum value from e-commerce.
- Partnership between governments in Regional Economic Communities (RECs) to foster regional trade agreements, shared arrangements for digital trade facilitation and border management, that will expedite traffic and lower costs.
- Cooperation between governments in neighbouring countries on bilateral arrangements for e-commerce, including the adoption of common trade facilitation measures such as those proposed by the WTO's Trade Facilitation Agreement, UN/CEFACT, UPU and other international agencies.
- Increased attention to the digital economy and the potential for e-commerce, and increased resources for these, from international donor agencies.

NOTES

443 See: Committee for the Coordination of Statistical Activities, 2020.

444 UNCTAD, 2019b.

445 ECLAC, 2021.

446 See: https://etradeforall.org/about/the-etrade-for-all-platform/.

447 UNCTAD, 2019h.

448 UN SG, 2019b.

449 Ibid.

450 Ssemuwemba, 2020.

451 See: https://www.itu.int/en/ITU-D/Statistics/Pages/intlcoop/partnership/default.aspx.

452 See: https://unctad.org/system/files/official-document/tdb_ede2019_WorkingGroupToRs_en.pdf.

453 UNCTAD, 2020p.

454 ITC, 2020a.

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