The COVID-19 crisis and the postal sector

Impact, scenarios and perspectives for the way forward

May 2020
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About this report

The report presents an overview of the COVID-19 crisis in the postal sector from an economic perspective. It does so by complementing official postal statistics and a series of real-time indicators constructed from electronic data interchange (EDI) messages between postal operators and consolidated by the Universal Postal Union. The analysis reveals that the crisis has put pressure on international postal supply chains to an unprecedented degree. In particular, cross-border exchanges decreased by 21% between 23 January 2020 and 14 May 2020, compared to the same period the previous year. Delivery and customs clearance times have lengthened and some international postal bilateral liaisons have no longer been open for private dispatches. Given the criticality of postal services for the basic functioning of most economies, the report presents three near-future scenarios for the sector, in order to provide policymakers and postal operators with insights and suggestions on the way forward.

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## Glossary

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<th>Abbreviation</th>
<th>Definition</th>
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<tr>
<td>2IPD</td>
<td>Integrated Index for Postal Development</td>
</tr>
<tr>
<td>B2C</td>
<td>Business to consumer</td>
</tr>
<tr>
<td>CAGR</td>
<td>Compound annual growth rate</td>
</tr>
<tr>
<td>CIS</td>
<td>Commonwealth of Independent States</td>
</tr>
<tr>
<td>DO</td>
<td>Designated operator</td>
</tr>
<tr>
<td>ECB</td>
<td>European Central Bank</td>
</tr>
<tr>
<td>EmIS</td>
<td>Emergency Information System</td>
</tr>
<tr>
<td>EMS</td>
<td>Express Mail Service</td>
</tr>
<tr>
<td>EMSEVT</td>
<td>EMS events</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross domestic product</td>
</tr>
<tr>
<td>IB</td>
<td>International Bureau</td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Organization</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>ITU</td>
<td>International Telecommunication Union</td>
</tr>
<tr>
<td>LDCs</td>
<td>Least developed countries</td>
</tr>
<tr>
<td>NBER</td>
<td>National Bureau of Economic Research</td>
</tr>
<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
</tr>
<tr>
<td>PPP</td>
<td>Purchasing power parity</td>
</tr>
<tr>
<td>PREDES</td>
<td>Pre-advice of dispatch</td>
</tr>
<tr>
<td>SDR</td>
<td>Special Drawing Rights</td>
</tr>
<tr>
<td>SDGs</td>
<td>Sustainable Development Goals</td>
</tr>
<tr>
<td>USD</td>
<td>United States dollar</td>
</tr>
<tr>
<td>VIX</td>
<td>Stock market volatility index</td>
</tr>
<tr>
<td>WB</td>
<td>World Bank</td>
</tr>
<tr>
<td>WDI</td>
<td>World Development Indicators</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
</tr>
<tr>
<td>YoY</td>
<td>Year-on-year</td>
</tr>
</tbody>
</table>
1. Introduction

The spread of the novel coronavirus, and of COVID-19, the disease caused by it, has been unprecedented. From the first reported cases in December 2019 to the beginning of spring 2020 in the northern hemisphere, it became a global pandemic. By 12 May 2020, the virus had already infected over 4 million people and resulted in more than 280,000 deaths worldwide, as governments in every continent imposed lockdowns and restrictions of movement. This public health calamity has triggered a social and economic crisis, with global domestic product (GDP) set to contract by 3% in 2020.¹ The postal sector is no exception in this regard. Although its relevance as a public service may have been strengthened by this turn of events, the whole sector will have to engage in considerable efforts in order to recover both during and after the COVID-19 crisis. To that end, it is essential to understand the economic forces at work and their repercussions on the activities of postal operators.

The present report aims to provide a consolidated analysis of the impact of the COVID-19 crisis on the postal sector. The study relies on a series of statistical and real-time indicators to provide an economic diagnosis of the sector in the short to medium term. Additionally, the examination of three near-future scenarios offers insights and potential lines of action for policymakers and postal operators. The analysis shows that all postal products are currently affected, with international shipments particularly impacted. The stakes are high, as designated operators (DOs) alone employ 5.23 million people, grossing 267 billion SDR a year in operating revenues.²

As domestic postal markets appear to move in different directions, international flows have been disrupted by the closure of airports, even if goods are still free to transit to most destinations. Emergency messages issued by postal operators have thus mounted up considerably, with an increasing number of postal items “stranded” in the “logistical no man’s land” between sender and receiver. As of May 2020, for every 2.1 weekly items exported, only one has been notified as received. Cross-border exchanges have thus dropped, down by 21% between 23 January 2020 and 14 May 2020, compared to the same period the previous year. Delivery and customs clearance times have lengthened and some international postal bilateral liaisons are not open for private dispatches.

In the area of financial services, which represent, on average, 16% of postal operators’ revenues, disruptions to overall economic activities and the subsequent impact on migrants are likely to severely alter the evolution of remittances. The most affected flows will be those from wealthier to developing countries, some of which rely strongly on this financing source to sustain their economic activity.

These new developments have come at a time at which the postal sector was already facing unprecedented change, owing to decades-long macro-trends such as digitalization, liberalization, and changing citizen needs. As governments, regulators, operators and other wider postal sector players attempt to grapple with the effects of the crisis, not all countries are equally prepared to face the challenge. Indeed, disparities in postal development that have been accumulating over the years, both between and within regions, will make it difficult for the least resilient national postal services to overcome the obstacles ahead.³ Yet, as the crisis once again highlights the criticality of postal services for the basic functioning of national economies, supporting the sector should become a central element of any policy developed by governments in order to combat the major socio-economic upheaval caused by COVID-19.

In order to disentangle the possible developments ahead, three main scenarios have been identified in this report, based on the projected movement of key postal aggregates. In the first scenario (the most pessimistic), postal operators would be unable to recover from the crisis, missing opportunities in the parcels segment and accelerating their long-term decline in letter post. The second scenario would be marked by an eventual recovery, with some opportunities seized, but insufficient structural change to
reverse long-term trends. And in the third – most optimistic – scenario, recovery would be more rapid, with opportunities seized, together with positive structural change.

Since the mix of products and services and the level of postal development can vary considerably from one country to another, these scenarios are obviously a simplification of reality. Yet, they may constitute a useful exercise if they enable policymakers and postal operators to frame what is at stake in their respective countries and therefore in their national economies.

Policymakers would thus gain from supporting the postal sector through economic relief measures and a closer follow-up on the overall status of the network. Postal operators would also benefit from adopting best practices already implemented by some of their peers in other countries, not only to overcome the logistical and economic constraints caused by the crisis in the short-term, but also as a means to bridge the postal development gap that has been widening over the years.

This document is organized into four sections: section 2 presents the current economic context and the short-term impact of the crisis on the sector; section 3 describes the reference scenarios for the near future; and section 4 concludes.
2. Context and current impact of COVID-19 on the postal sector

_A public health and economic crisis hits the world_

COVID-19 has taken hold of the world, growing in only a few months from a little-known disease to a
global pandemic, claiming over 280,000 lives and overloading national health systems worldwide (see Table
1). Beyond the public health calamity, COVID-19 has also triggered a social and economic crisis of a scale
not seen in recent history. To date, most countries around the globe have decided to implement health
and economic measures to fight the pandemic.

Table 1 – COVID-19, evolution as of 12 May 2020

<table>
<thead>
<tr>
<th>Number of confirmed cases</th>
<th>Number of confirmed deaths</th>
<th>Number of countries or territories with cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,088,848</td>
<td>283,153</td>
<td>215</td>
</tr>
</tbody>
</table>


On the health front, governments have resorted to measures aimed at reducing infections and avoiding a
saturation of national health systems. This has included compulsory social distancing, travel restrictions
and border closures (either partial or full), suspension of commercial flights, as well as the closure of
schools, restaurants and non-essential businesses, and even economy-wide shutdowns.

On the economic front, exceptional, far-reaching measures have been taken such as stimulus packages,
zero-interest-rate credit lines, tax breaks and subsidies, all of which are aimed at cushioning the negative
impact of the reduction in economic activity. Central banks have also engaged in massive exercises of
quantitative easing, flooding financial markets with liquidity.

Figure 1 – Evolution of stock market volatility

Source: Chicago Board Options Exchange, S&P 500 Market Volatility Index.
As the pandemic progressed, stock markets reacted, became more volatile and, initially, plunged, before starting to recover in the month of April 2020. As shown in Figure 1, the S&P Market Volatility Index (VIX), a barometer of economic uncertainty, has increased to levels comparable to the 2008 financial crisis. In addition to the uncertainty generated by COVID-19, a drop in global demand for transport together with reduced industrial activities resulted in a record drop of commodity prices as shown by several indices (Figure 2).

As mentioned in a recent report by the United Nations, “economic activities in transportation, retail trade, leisure, hospitality and recreation have been battered”, with supply chain disruptions halting the manufacturing industry and commodity prices falling steeply. The authors warn that tightened liquidity conditions, with outflows of capital from developing countries and pressure on foreign exchange markets, are weakening local currencies. As some countries experience dollar shortages, further constraints arise for governments aiming to deploy fiscal stimulus packages, precisely when such supporting measures are most needed.

In this new context, most economic forecasts have had to be reviewed. The International Monetary Fund (IMF) recently revised its estimates on global output, predicting that it will contract by 3%. In the same vein, according to the latest forecasts by the World Trade Organization (WTO), global merchandise trade will be impacted even harder, plummeting between 13% and 32% in 2020. Although the health measures were necessary to fight the spread of the disease, they have also had a number of spillovers. Beyond decelerating international trade and affecting global logistics, the policies have had an overwhelming effect on labour supply. According to preliminary estimates from the International Labour Organization (ILO), unemployment is expected to rise, with 5 to 25 million jobs and 860 billion to 3.4 trillion USD in labour income that could be lost. In addition, 1.6 billion informal workers, roughly half of the global workforce, are particularly exposed and could see a 60 percent decline in their earnings. Furthermore, massive job losses among migrant workers, whether in the formal or informal economy, will have knock-on effects on countries heavily dependent on remittances.
As for the economic measures, although they were desperately needed to boost activity\textsuperscript{11} and help prevent a credit crunch, they have also planted the seeds of a future sovereign debt crisis, owing to the already weak position of government finances worldwide since the 2008 financial crisis.\textsuperscript{12}

Moreover, since the beginning of the COVID-19 outbreak, one of the UN’s key expressed worries has been that developing countries, least developed countries (LDCs), landlocked least developed countries (LLDCs) and small island developing states (SIDS) could be disproportionately affected by the crisis.\textsuperscript{13} There has also been considerable concern that any progress made in the implementation of the Sustainable Development Goals (SDGs) might be reversed.

**Disrupted postal supply chains**

In the specific case of the postal sector, a first immediate and striking consequence of COVID-19 has been widespread disruption to international supply chains, resulting from constraints imposed on international transport, in particular aviation.

As shown by the data collected by the International Civil Aviation Organization (ICAO) (Figure 3), global air-passenger traffic declined sharply in February and March 2020 (-13% and -54% respectively). This is mainly due to the low demand for air travel, coupled with the rising travel restrictions and the financial necessity for airlines to ground their fleets.\textsuperscript{14} According to ICAO, the decline has already been stronger than during both the post-9/11 terror attacks (2001–2002) and the SARS outbreak (2002–2004).

![Figure 3 – Drop in global passenger traffic](image)

As the COVID-19 crisis gathered pace and disruptions to air transport mounted, many postal operators took significant steps to mitigate the most adverse impacts of the disruptions in the global supply chain, and therefore in their activities. Some of these measures were simply a necessary and obligatory follow-up to the public health and economic measures decreed by governments, thus inevitably causing further disruptions to operations. However, other measures were also geared towards reducing the direct effects of the disturbances to the service, while maintaining compliance with rules established by national authorities.
A first feel for the extent of the disruptions can be given by analyzing the Emergency Information System (EmIS) messages collected by the UPU. These messages are part of an institutionalized process through which the organization’s member countries can inform their peers about issues concerning their postal network.

The most important operational issue communicated through this channel, excluding product-related announcements, has been the impact on international transport capacity. Summary statistics concerning the EmIS messages are provided in Table 2. The evolution of announcements is given in Figure 4, which follows EmIS messages by 124 different countries and shows three marked acceleration waves of disruptions starting at the end of January 2020, spiking in mid-February 2020, and eventually unravelling in mid-March 2020.

Table 2 – Incidents in the network

<table>
<thead>
<tr>
<th>Area impacted</th>
<th>Number of announcements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letter post</td>
<td>269</td>
</tr>
<tr>
<td>Parcel post</td>
<td>267</td>
</tr>
<tr>
<td>EMS</td>
<td>259</td>
</tr>
<tr>
<td>Forwarding from outbound IMPC</td>
<td>178</td>
</tr>
<tr>
<td>International transport capacity</td>
<td>170</td>
</tr>
<tr>
<td>Delivery</td>
<td>158</td>
</tr>
<tr>
<td>Collection/posting</td>
<td>153</td>
</tr>
<tr>
<td>Suspension</td>
<td>138</td>
</tr>
<tr>
<td>Acceptance at inbound IMPC</td>
<td>123</td>
</tr>
<tr>
<td>Disruption</td>
<td>104</td>
</tr>
<tr>
<td>Collection of signature</td>
<td>101</td>
</tr>
<tr>
<td>Force majeure case invoked</td>
<td>92</td>
</tr>
<tr>
<td>Work force capacity</td>
<td>69</td>
</tr>
<tr>
<td>Cancellation of transit</td>
<td>64</td>
</tr>
<tr>
<td>Customer care service</td>
<td>33</td>
</tr>
</tbody>
</table>

Source: UPU EmIS messages (17 April 2020).
In particular, the disruptions in transport and availability of labour are putting a significant stress on the logistics of the international postal network. Even in countries that are not witnessing a shortage of labour supply, the cost of processing mail has increased because of additional security steps implemented in the transport of mail, from disinfection at the office of exchange to the observance of a safe distance between workers.

By exploiting the information captured through electronic data interchange (EDI) messages embedded in barcoded mail items and consolidated by the UPU, one can develop specific indicators that summarize the stress that the COVID-19 crisis is exerting on the network. Such indicators can be particularly useful as a way to inform postal operators about the evolution of the situation, and to raise awareness among policymakers on the challenges that the sector is currently facing.

One such indicator is the *stranded mail ratio*, which represents the ratio between items ready to be exported and items received by the importing country. In normal times, the ratio is slightly above one, as in a given week almost every exported item is received by the importing country. As shown in Figure 5, since February 2020, the ratio has climbed and as of May 2020, for every 2.1 weekly items exported, only one has been notified as received.
From the stranded mail ratio, it is possible to compute the spread between the current situation and a “business as usual” baseline. The stranded mail spread captures this differential by comparing the 2020 stranded mail ratio to its baseline value in 2019. Figure 6 shows a progressive increase in the spread after the Chinese New Year. In the week of 27 April 2020, the spread touched its historical maximum (136%), with a subsequent downward trend that reached 71% during the week of 4 May 2020. This means that, owing to the COVID-19 crisis, it is now 71% more difficult for exports to reach the final country of destination than in normal times.
Another visible impact of the crisis for cross-border postal exchanges is the increase in delays for clearing items through customs, owing to additional inspections, both on outbound and inbound items. According to the UPU’s Integrated Quality Reporting System (IQRS), the average time for customs clearance has increased considerably, as reported in Table 3. Such a spike generates additional waiting costs for businesses and consumers importing and exporting postal items. The lengthened delivery times increase the relative cost of waiting for international purchases with respect to domestic ones. The phenomenon is particularly worrisome in that it may contribute to a decrease in the demand for imported goods.

Table 3 – Disruption in customs clearance procedures

<table>
<thead>
<tr>
<th>Supply chain element</th>
<th>Customs clearance time spread</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parcels outbound</td>
<td>From 1 to 71 hours</td>
</tr>
<tr>
<td>EMS outbound</td>
<td>From 1 to 29 hours</td>
</tr>
<tr>
<td>Parcels inbound</td>
<td>From 2 to 64 hours</td>
</tr>
<tr>
<td>EMS inbound</td>
<td>From 2 to 34 hours</td>
</tr>
</tbody>
</table>

Source: Integrated Quality Reporting System (IQRS).
Notes: Based on average values of the time-stamps for events EMD and EME (EMSEVT).

Impact on international flows

The international light logistics growth rate calculated by the UPU shows that cross-border exchanges worldwide have dropped by 21% since the outbreak of the crisis for all mail classes (letters, parcels and express). As shown in Figure 7, year-on-year growth rates have permanently entered the negative arena since the first months of 2020, in a way that cannot be explained by seasonal variations (such as the usual drop and spike regularly observed around the Chinese New Year).

Two major factors are currently driving changes in international volumes: on the one hand, the supply of mail is being hindered, as there are challenges in channelling items to several destinations because of
lockdown policies; on the other, the demand for international mail may be changing because of the negative global income shock and a potential substitution between international and domestic goods.

In this context, the drop in cross-border volumes is undoubtedly explained by the technical disruptions in the delivery network, in particular the growing mismatch between inbound and outbound flows, expressed through the stranded mail indicators mentioned above. Indeed, with an increasing number of postal items trapped in the “logistical no-man’s land” between sender and receiver, international transactions cannot be completed, thus preventing reported volumes from growing.

The disruptions are also affecting the settlement system for cross-border letter-post exchanges between national DOs. Because of the cancellation of flights, the dummy-test mail items that are used to monitor performance in order to define settlement positions are neither sent nor received, thus having a negative impact on the functioning of the system.

**Impact on domestic flows**

While the impact of the public health crisis on the international postal market has been mostly negative, the figure for domestic markets is blurred. A data collection exercise carried out by the European Commission in April 2020 contained a request to 31 countries to report how their postal volumes had changed following the COVID-19 outbreak. Among the 22 countries that were able to provide a reply, 11 said that their postal volumes either decreased or remained constant, and 11 declared a marked increase in their postal volumes. While this sample may not necessarily be representative of global trends, it provides a clearly mixed signal on suggestions that domestic postal volumes would have been positively impacted by the crisis.

The same mixed signal is perceptible in the evolution of online retail orders, a variable that has historically been correlated with the demand for parcels. As seen in Figure 9, panel A, some countries have seen a strong increase in domestic online orders, while others have seen the same variable drop dramatically (Figure 9, panel B). Although the figure shows the trend for only 10 countries, it would appear that e-commerce sales have increased in higher income countries, while stabilizing or even dropping elsewhere.
There are two possible explanations for this. First, the advent of the health crisis might have hit economies with significant informal sectors the hardest, where disposable income is lower and the welfare state does not reach every individual. Second, in some countries, the level of Internet penetration might be relatively low, and households might not consider the online channel as a substitute for retail goods sought in brick-and-mortar shops.

**Figure 9 – Difference in trends for online retail orders**

**Impact on other postal activities**

In the area of remittances and postal payment services, the impact of the COVID-19 crisis is also expected to be considerable. With fewer post offices open and the projected decrease in postal payments, the amount and volume of transactions will most likely drop in 2020, as the number of new postal accounts also falls. The UPU’s postal payment services have already recorded a 4.3% drop at the end of March 2020, compared with the same period in 2019. In countries with a high reliance on migrant remittances, this evolution will most likely be particularly dire.

Moreover, until the beginning of the COVID-19 outbreak, governments had been increasingly using national postal operators to deliver social benefit payments, including unconditional cash transfers, pension payments, and other welfare benefit payments. Yet, physical distancing rules have hindered the physical delivery of cash from postal employees to beneficiaries. This will likely limit the ability of governments to deliver bulk cash to unbanked populations rapidly, although postal operators could still...
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be considered as a trusted channel for delivering social benefit payments in a situation where only essential businesses remain open.

The crisis will also impact other postal activities such as philately, with delays in the production, delivery and reimbursement of international reply coupons. And delays are anticipated in the receipt of stamp parcel shipments and in the production and sales of stamps, although further data will need to be collected in order to measure the extent of the impact in these areas.
3. Scenarios – What may happen to the sector from now on

In the light of the short-term effects of COVID-19 described above, the question that remains revolves around what will be the longer-term impact of the crisis on the postal sector. There is still much uncertainty around the global economic panorama in the coming months, as many economic and health policies are still being enacted, with no fully reliable yardstick to evaluate their degree of effectiveness. This means that caution needs to be exerted when making any predictions.

Yet, considering the extreme speed and acuteness with which the disease affects economies and societies, decisions made in the short term can have major consequences in the long term. This is why some projections at this stage may be useful in informing postal operators and policymakers, so that they can tailor their actions accordingly.

Moreover, not everything is unknown at this point: some indications are available, especially if one focuses on analyzing the situation of the sector before the crisis as well as those key factors that have historically affected the demand for and supply of postal services. On this basis, it is possible to draw some key scenarios for the future of the sector, ranging from the most pessimistic to the most optimistic outcomes.

Postal services and long-term trends before the crisis

COVID-19 struck precisely when the postal sector was already facing significant challenges. In recent years, as digital substitution gathered pace, most types of communications, bills and paperwork had been displaced to the digital environment. At the same time, new opportunities had been generated for postal operators, thanks to the unprecedented growth of e-commerce.

Consequently, many postal operators had been trying to adapt their business models, shifting their focus from letters to parcels, logistics and financial services (see Figure 10). The share of letter post in the total revenues of postal operators thus dropped from 45% in 2008 to 39% in 2018, to the benefit of parcels and logistics, which jumped from 16.3% to 27.2% over the same period.

Figure 10 – Evolution of revenue composition, postal operators

Source: UPU official statistics.
Notes: Simple average by year at the global level.
This transition of business models was clearly reflected in the evolution of traffic (see Figure 11). The number of domestic letter-post items for DOs worldwide was estimated at 296 billion in 2018, representing a compound annual growth rate of -2.8% over the 2008–2018 period. These flows were projected to further decrease in 2019 to 286 billion items.

By contrast, domestic parcel post continued its upward trend, reaching 14.9 billion items in 2018. This was the result of the strong development of the segment in the 2008–2018 period, with a compound annual growth rate of 7.5%. Although final figures are not yet available, the positive trend is forecast to be confirmed for the full year of 2019 (15.6 billion items).

While international transactions continued to constitute a relatively small proportion of total traffic before the crisis (3.6 billion for letters and 0.18 billion for parcels in 2018), they had been growing very rapidly. For instance, international parcel post alone grew at a compound annual growth rate of 13% in 2018, revealing how much of an opportunity cross-border business represented for postal operators.

Yet, in spite of the transition in business models, postal operators had not necessarily observed a relative growth of their revenues compared to other sectors. As the time series of the UPU’s official statistics show, from 2007 to 2017, while the real economy expanded on average by 3.3% per year, real operating revenues grew at just 1.2% per year. In 2018, DOs employed 5.23 million workers, grossing 265 billion SDR in nominal operating revenues.
Notwithstanding the economic importance of the sector, in 2019 many citizens around the globe did not have access to postal services. As shown in Table 4, there were still many disparities between regions: a situation that was also reflected in the area of postal development. In particular, the UPU’s Postal Development Report 2019, which contains the global ranking of the Integrated Index for Postal Development (2IPD), revealed that gaps both between and within regions had been widening over the years.

Table 4 – Access to postal services

<table>
<thead>
<tr>
<th>Region</th>
<th>% of the population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>having mail delivered at home</td>
</tr>
<tr>
<td>Africa</td>
<td>15.8%</td>
</tr>
<tr>
<td>Arab region</td>
<td>83.1%</td>
</tr>
<tr>
<td>Asia and Pacific</td>
<td>96.7%</td>
</tr>
<tr>
<td>Europe and CIS</td>
<td>98.5%</td>
</tr>
<tr>
<td>Industrialized countries</td>
<td>99.3%</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>90.3%</td>
</tr>
<tr>
<td>World</td>
<td>90.6%</td>
</tr>
</tbody>
</table>

Notes: Regional groups specified in the UPU’s 2019 Postal Economic Outlook.

On average, by 2019, postal reliability had increased everywhere with the exception of Africa and Eastern Europe and the Commonwealth of Independent States (CIS). Regarding the reach (connectivity) of postal operators, a relative drop was visible in all regions, and in particular in Africa, Eastern Europe and the CIS as well as in Latin America and the Caribbean. When it comes to postal relevance, the overall performance remained particularly low, averaging 11 out 100 points globally, with the most substantial increases restricted to Europe and the CIS and advanced economies. Finally, in terms of resilience, challenges seemed to persist in most regions.

These gaps might pose hurdles to e-commerce, which, as already mentioned above, is the most promising avenue of future growth for postal operators. In fact, a regression analysis presented in the UPU’s Postal Development Report 2019 found that decreasing postal development gaps might help boost parcel volumes. For any pair of countries, the report finds that each 1% reduction in the differential of postal development (2IPD) scores is associated with a 0.1% increase in bilateral parcel tonnage.

**Factors that may influence the evolution of the sector going forward**

The long-term consequences of the COVID-19 upheaval for the sector can be broken down according to the relative effect of the crisis on the four main segments of postal products and services referred to above, i.e. letter post (communications and direct mail), parcels and logistics (delivery of e-commerce goods and supply chain solutions), financial services (e.g. remittances), and other products (e.g. citizen services). Of course, as different countries have different mixes across these segments and are subject to different macroeconomic and social contexts, the effects of the crisis may vary geographically.

The overall demand for postal services depends on the needs and preferences of consumers/households, businesses and the public sector. Postal operators need to take this into account and adjust their supply accordingly.

In this sense, among the most important factors that may affect postal services in the future, one may mention the following:

- The occurrence of any economy-wide supply-side shocks, i.e. any factor preventing production activities from being completed, such as shortages in the supply of labour;
– The resilience of business-to-business exchanges, and in particular the stability of global supply chains and of transport-related sectors, such as aviation;

– The duration of public health measures, including restrictions on travel and the supply of non-essential public functions, which is in turn dependent \textit{inter alia} on the degree of development of a country’s health infrastructure (e.g. availability of beds in intensive care and ventilators);

– The extent of economic risk mitigation measures undertaken by public authorities;

– The level of disposable income of the country’s consumers/households;

– The possibility for consumers/households to adopt digital alternatives, either to postal services or to offline retail purchases;

– The level of postal development of countries, in particular the postal operators’ reliability, reach, relevance and resilience.

As shown in the previous section, some of the first visible and immediate impacts of COVID-19 on the world economy have been supply-side shocks, such as labour shortages or the physical inability to carry on production activities owing to social distancing measures. This is why a global recession in 2020 is inevitable, as countless hours of production have been permanently lost. The more a country experiences such shocks, the greater the likelihood that its economy, and therefore its operators, will be impacted.

Throughout the crisis, this type of supply-side shock has gone hand in hand with a worldwide disruption of global value chains, affecting businesses that rely on the exchange of intermediate goods to carry on their production activities. The greater and longer the disruption, the higher the negative impact for the entire supply chain.

Businesses tend to use postal services as an intermediate product necessary for their production. Since these firms have been reducing their supply of products because of the COVID-19 outbreak, a subsequent reduction in the demand for postal services is expected to follow. In the case of international mail, the evolution of the crisis in the aviation sector will play a key role, together with the full operability of cross-border postal liaisons. Any operator with a large share of total income stemming from international mail is at risk of seeing a substantial decrease in operational revenues.

In this context of widespread logistical disruptions, the duration of public health measures also becomes a critical factor in the outcome of the crisis: should it extend beyond a certain point, businesses may run out of cash and unemployment may rise with a number of ramifications throughout the economy.

Of course, not all countries have the same basis for mitigating the effects of such a shock. Some may have high-performing health systems, which could allow them to cease the lockdown policy earlier, thus curbing the intensity of the two previous factors.

Economic risk mitigation measures by public authorities are also key in this regard inasmuch as they allow businesses and households to sustain their revenues and income and avoid a cash crunch until overall economic activity can recover. As already briefly mentioned in the previous section, countries with high public debt-to-GDP ratios will have less room to manoeuvre in this area.

By contributing to a general slowdown of economic activities, all these factors have the potential to depress households’ disposable income, leading consumers to shift expenditure towards first-necessity goods. This is one of the most important channels through which postal services could be thoroughly affected by the crisis.
Indeed, the change in demand for each type of postal service can be understood, at least in the short-run, by changes in income and relative price of postal services vis-à-vis their substitutes. Some studies have shown how postal products and services are “normal” goods in the economic sense of the term, i.e. their consumption tends to rise with income but their relative importance decreases as a share of disposable income. Recent research papers by the United States National Bureau of Economic Research (NBER) and the Organization for Economic Cooperation and Development (OECD) also seem to indicate that pandemics such as COVID-19 may have the potential to depress and/or alter household spending, as consumers shift expenditure across major categories and eventually scale down their purchases, as the overall macroeconomic situation worsens.

Therefore, should disposable income decrease in the event of a major recession, consumers could change their expenditure on postal services, either because of the urge to focus spending on first-necessity goods or because of an acceleration in the adoption of digital alternatives. As a greater number of economic activities move online, in a world where working from home becomes a reality for many people, there is indeed a possibility that digital alternatives will be adopted more rapidly.

In the case of letters, where such alternatives are more readily available, substitution may accelerate further, accentuating a historical decline initiated in the 1990s.

In the case of parcels and logistics, the picture appears to be more nuanced. Parcels and logistics are used by businesses as an intermediate product, to both ship and receive goods (final or intermediate) from and to other businesses and consumers. Households also use these services to ship gifts or privately sold goods, and receive retail online purchases. Therefore, the demand for parcels is tied to both productive economic activities and to the demand for physical deliveries, which is boosted by e-commerce.

At least in the short term, some of the offline consumption is expected to be substituted by online purchases. The question is whether this effect will prevail over the negative income shock and will last once restrictions of movement are relaxed. So far, the record is mixed: as shown in Figure 9, online orders have increased in some countries and decreased in others.

Moreover, there are currently no indications that the evolution of the demand for financial services and other postal products will perform differently from the overall demand for services in the real economy, as shown by the recent decrease in international postal payments (-4.3% with respect to 2019) captured by the UPU. This is why, when considering scenarios for the future of the sector, it may be assumed that the demand for financial services and other postal products will move in a pro-cyclical fashion.

The last major factor that may affect the fate of the sector is at least partly within the control of postal operators: postal development. The more reliable, connected, relevant and resilient DOs are more likely to weather the storm. If they can minimize disruptions in delivery time, operators will have a higher probability of retaining existing (or gaining new) customers. If they are seamlessly connected with business partners, they will be able to resume operations more quickly and bank on opportunities offered by cross-border e-commerce, especially once economic activity resumes. If they have a wide distribution network, a substantial physical presence and an existing high market share, they should be able to take advantage of any positive evolution of parcels volumes. Last but not least, if they are diversified and well versed in a range of products and services considered as essential by public authorities, they will have the means to come out of the crisis with their relevance confirmed.

Scenarios for the sector
On the basis of the factors presented above, the following simplified scenarios can be defined for the future of the postal sector, from the least to the most optimistic:

– **Scenario 1 (Pessimistic)** – No recovery, opportunities not seized and acceleration of long-term decline;
– **Scenario 2 (Expected)** – Eventual recovery, some opportunities seized but insufficient structural change;
– **Scenario 3 (Optimistic)** – Swift recovery, opportunities seized and positive structural change.

Besides the evolution of the factors presented above, it is important to take into account the fact that public health policies of containment generally evolve in phases, during which only certain activities are allowed. There are three underlying assumptions behind these scenarios. First, that health measures follow a pattern of initial hard lockdown, then relaxation measures, followed by a new normality that gradually sets in. Second, to simplify the analysis, it is assumed that only one major outbreak can happen per country. Third, revenues of postal operators are assumed to be mostly centred on letter post, parcels and logistics, and the final outcome depends on the movement of these segments.

**Scenario 1 – Pessimistic outcome**

The first scenario is characterized by a worsening macroeconomic situation. There are strong labour supply shortages, and firms are incapable of producing or delivering goods at pre-crisis levels. Global value chains are disrupted, with a domino effect on activities of nearly all sectors, leading to a drop in the exchange of intermediate goods. The lack of resilience in the underlying infrastructure, especially of the country’s health system, forces an extension of public health measures, with very long lockdown policies in place, significantly impacting all economic activities. Yet, the economic relief provided by the authorities proves to be insufficient to support businesses and households, further depressing supply and demand.

As a result, disposable income drops sharply, enticing consumers to shift their expenditure towards first-necessity goods and away from postal services, all the more so because online sales (and parcel traffic) fail to grow sufficiently to compensate for the increased digital substitution of letters. Moreover, the timid levels of postal development further exacerbate the situation, as operators are unable to adjust supply and services to the evolving needs of businesses and consumers.

The evolution of the two key postal aggregates in this scenario is depicted in Figure 12. In the pre-crisis period, one can observe the long-term trend of parcel-post growth and letter-post decline. As the crisis starts, lockdown measures are imposed, which drives down the demand for both parcels and letters. After the relaxation of public health restrictions, an initial recovery appears but the new long-term trend is of lower growth for parcels and of steeper decline for letters.
In this pessimistic scenario, postal operators would be radically affected, with a significant reduction in their operating revenues and growth perspectives, which in turn triggers less investments and a sluggish recovery. The likelihood of such a scenario materializing will be determined by the degree of income loss faced by households, the level of Internet penetration, and the ability of postal services to reach all sections of the population in a context of supply-side constraints.

Other types of changes in consumer habits can also play a certain role in future, in particular the purchase of goods and services produced “closer to home”: the COVID-19 crisis has triggered a growing realization by consumers that the products they usually consume may be sourced in very distant countries. Similarly, the awareness of the reliance on distant suppliers could also move businesses to source their intermediate products “closer to home”, thus potentially affecting domestic and international deliveries by postal operators.

**Scenario 2 – Expected outcome**

The second scenario, which is more likely than the previous one, depicts what has been witnessed by some developed countries currently hit by the COVID-19 outbreak. As the macroeconomic situation worsens, businesses face labour supply shortages, leading to a temporary incapacity to produce or deliver goods. This in turn leads to sporadic disruptions of global value chains, altering the activities of several businesses and causing a short-term drop in the exchange of some intermediate goods.

As public health measures are progressively eased and/or populations adapt to the new circumstances, economic activities can resume more rapidly. Public authorities provide some degree of economic support to businesses and households, although not sufficiently to enable the latter to maintain pre-crisis levels of supply and demand. This in turn decreases disposable income, affecting consumer behaviour.

As shown in Figure 13, in this scenario, the crisis displaces purchases to the online channel, in spite of a drop in households’ expenditure. As the lockdown starts to be imposed, the demand for parcels increases at a faster rate than the long-term trend. Eventually, as public health restrictions are relaxed, purchases through the offline channel pick up and the momentary acceleration in parcels reverts to the long-term trend. Conversely, in the letter-post segment, the initial drop in volumes eventually reverts to the long-run trajectory as restrictions of movement are eased.
In this scenario, the rise in parcels and logistics acts as an automatic stabilizer of postal revenues. While it may not compensate completely for the potential loss in the letter-post segment, it provides a steady stream of liquidity that helps postal operators attempt to eventually overcome the crisis.

Figure 13 – Evolution of key postal aggregates, expected scenario

Scenario 3 – Optimistic outcome

In this third scenario, the macroeconomic situation is less stringent. Labour supply shortages are limited in scope, size and duration, creating only temporary incapacities to produce or deliver goods. In this context, there is no major disruption in global value chains, meaning only some businesses and a handful of intermediate goods are impacted. Owing to a resilient infrastructure, public health measures can be eased out relatively quickly, reducing the overall impact of the COVID-19 outbreak on economic activities. Strong public support to businesses and households enables further stabilization of supply and demand.

As a result, there is only a very slight decrease in disposable income, enticing consumers to reduce their expenditure in offline retail purchases, thus increasing online sales beyond historical trends. Thanks to the country’s high level of postal development before the crisis, postal operators are able to increase supply rapidly in order to respond to surging demand in parcels, leading to an increased usage of the postal channel.

In this scenario, the most optimistic one, the rise of activities in parcels and logistics will last much longer, thanks to a lasting change in the habits of consumers, and a permanent substitution of offline purchases with online ones. The long-term trend for parcel growth thus accelerates, providing postal operators with additional sources of revenues, which in turn allows them to invest in their structural transformation.
Figure 14 – Evolution of key postal aggregates, optimistic scenario
4. Conclusion

As this report has shown, the COVID-19 outbreak has not spared the postal sector, and the perceived recouping of relevance by postal operators as essential public services in many countries has not necessarily translated into increased traffic and revenues. As supply chains have been strongly disrupted worldwide, the weakest links of the postal network have been exposed even more acutely. Addressing them has thus become even more critical.

This matters not only to postal operators, but also to policymakers, since the postal sector remains one of the largest and most seamlessly connected networks in the world. Its “light logistics” nature makes it particularly well suited to fulfil the needs of economies whose pace of digitization will most likely accelerate as a result of the COVID-19 crisis.

As policymakers start preparing their economies for the new world that will emerge from this crisis, giving a central place to the postal sector should be high on their socio-economic agenda. In fact, supply and access to postal services, in conjunction with information and communication technologies, can help policymakers achieve their goals. The two factors can alleviate the economic impact of public health policies by providing alternative channels of consumption, work and communication.

The three scenarios for the future of the sector that were presented in this report focus on indicating potential evolutions of key postal aggregates. While they may represent a simplified version of reality, they can help to gauge the performance of the sector relative to the rest of the economy, and suggest ideas for preventing the most adverse outcomes. In both the baseline and optimistic scenarios, the sector is expected to outperform the real economy.

In order to prevent the most pessimistic scenario and mitigate any negative consequences should it materialize, policymakers could implement economic relief measures that maintain, as far as possible, the purchasing power of households at pre-crisis levels. In this endeavour, special care should be given to populations in remote areas and their access to affordable postal services.

Moreover, policymakers, in close collaboration with postal operators, could monitor the overall status of the domestic and international postal network. Nowadays, thanks to the implementation of international standards and the collection of EDI messages, it is possible to closely follow the performance of key postal aggregates through a number of key indicators, such as the ones presented in the previous sections of this report.

While most of these indicators concern the international network, countries could easily adapt the same concepts to their domestic networks. For instance, a snapshot of the current international volumes can be given by the light logistics growth rate. Supply-side disruptions can be monitored through the stranded mail ratio and the international mail disruption indicator. In addition, challenges in deliveries-customs clearance times can be extrapolated from the customs clearance spread.

Postal operators could also contribute to preventing the pessimistic outcome by stepping up efforts to improve their level of postal development, in particular by investing in improved reliability of delivery and diversifying into postal payments and citizen services.

More concretely, postal operators around the world could attempt to align as closely as possible to best practices already implemented by their peers elsewhere and based on information shared by the UPU, in areas such as employee safety, operational difficulties (acceptance and transport), delivery procedures, collection/pick-up procedures, customer awareness and inquiries.
Indeed, the UPU has traditionally acted as a knowledge centre for best practices implemented in the postal sector, many of which find their way into capacity-building initiatives and projects, such as those undertaken within the context of operational readiness for e-commerce (ORE) programmes. During the current crisis, this role is all the more important, which is why policymakers and postal operators would gain from relying on it to sustain the sector in the post-COVID-19 world.
Endnotes

1 IMF (April, 2020), World Economic Outlook.


4 As of 12 May 2020.

5 Notable examples of these measures include a stimulus package of 2 trillion USD enacted by the United States Government at the end of March 2020, as well as announcements of quantitative easing by the Federal Reserve and the European Central Bank (ECB) reaching 700 billion USD and 870 billion EUR respectively.

6 The International Monetary Fund (IMF) tracks the economic policy responses of 193 countries and territories; the information is available at www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19.


11 For instance, Italy’s GDP is predicted to contract by 3% in the first quarter of 2020 and by 5% in the second quarter of 2020.

12 Italy’s example is a case in point: although it is one of the most severely hit countries in the COVID-19 crisis, it does not have much room for fiscal stimulus: its debt-to-GDP ratio was already close to 140% of GDP at the end of 2019.


14 ICAO estimates that, during March 2020 alone, airlines have lost 31 billion USD in passenger and cargo revenues.


16 Some countries have sent more than one message during the period.

17 The indicator can be extracted using the EMS event messages (EMSEVT), in particular events EMC (“arrival at departure office of exchange”) and EMD (“reception at the destination office of exchange”).

18 The international light logistics growth rate tracks the year-on-year growth rate of weekly exported registered items at the global level, using the information collected by the UPU through the pre-advice of dispatch (PREDES) EDI messages that DOs sent to each other.

19 As part of the functioning of the international traffic between national DOs, a number of settlement systems for cross-border mail exchanges are in place, usually known in postal jargon as “remuneration systems”. These are directly linked to the UPU-adopted Universal Postal Convention, and constrains member countries to apply certain pricing measures and compensation mechanisms for incoming international mail.

20 The list of countries surveyed by the European Regulators Group for Postal Services includes: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Liechtenstein, Malta, Montenegro, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Spain, Slovenia, Switzerland, Sweden, Turkey, and the United Kingdom.

21 As explained in the above-mentioned ILO brief issued in May 2020, 1.6 billion out of 2 billion informal economy workers are significantly impacted by the COVID-19 pandemic, leading to a 60% decline in their earnings. As also mentioned in the report, these individuals do not have the option of ceasing to work or working remotely from home.


23 The international reply coupon (IRC) allows someone sending a letter to another country to pay for the postage for the reply in advance. When the sender writes a letter to a foreign addressee that requires a response, they can purchase an IRC and enclose it with their letter. The IRC will entitle the addressee to one or more return postage stamps representing the minimum postage for an unregistered priority item or airmail letter to a foreign country. Stamps obtained in exchange for IRCs can be used to reply to the sender. IRCs are available from local post offices and certain operators. If a national postal operator does not sell IRCs, customers can buy them from the post office of a neighbouring country. IRCs can be used for a variety of purposes, including requests for information or documents from abroad, school and university enrolment or foreign invitations requiring a reply.

24 UPU official postal statistics (2019). It should be noted that many international letters comprise “small packages” which are goods weighing below 2kg. Therefore, the figure for international parcels tends to underestimate cross-border e-commerce.

25 UPU calculations based on International Monetary Fund and World Bank figures as well as UPU official postal statistics.


27 The ZIPD is a comparative indicator of postal development around the world. It is a composite index that summarizes information about the performance of postal operators in over 170 countries, across four key dimensions: reliability, reach/connectivity, relevance and resilience.
The exact regional categories used for aggregation are available in the UPU Postal Economic Outlook (2019). Available at www.upu.int/uploads/tx_sbdownloader/postalEconomicOutlook2019En.pdf.


Such practices cover a wide range of areas including employee safety, operational difficulties (acceptance and transport), delivery procedures, collection/pick-up procedures, customer awareness and inquiries. More detailed information on the UPU’s action in response to network disruptions caused by COVID-19, including a compendium of best practices and guidance notes for postal operators, is available on the UPU website at www.upu.int/en/activities/upu-action-on-network-disruptions-caused-by-covid-19/resources.html.