

Short and longer-term impacts of the Covid-19 pandemic on postal consumer demands, universal service providers and the wider postal sector

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1. Introduction and Background

The global Covid-19 pandemic public health crisis led to dramatic changes in society as consumers and businesses adapted to a new emergency where governments in most affected countries imposed substantial restrictions on normal life. The main changes included: requirements to work at home for office workers, “social distancing” and the wearing of face masks, restrictions on meeting other people and public gatherings, a ban or severe limitations on non-essential travel, and mandated closure of non-essential shops, leisure and hospitality venues.

This crisis resulted in a sharp fall in GDP however, although it was far more severe than previous recessions, this was different as large parts of the economy were frozen not due to lack of demand but due to the response to the pandemic. Unprecedented government and central bank action took place to support jobs and ensure liquidity. As governments’ understanding of the pandemic was imperfect and the type of responses varied to some degree, restrictions were not co-ordinated or uniform though they normally coincided with heightened national infection or hospitalisations.

These changes in society, which lasted in some form for over a year, and which to some degree persist at the time of writing, had a profound impact on the postal sector including the Universal Service Providers (USPs). In the short term, USPs had to adapt their operations to the new restrictions and in some cases were also asked, or volunteered, to provide new services to support government responses to the pandemic. The “stay at home” rule also led to a dramatic acceleration in e-commerce, with unprecedented pressure on all parcel operators to ensure deliveries of goods which would otherwise have been bought in person.

Purpose and Methodology

The paper aims first to assess the short-term impacts of Covid-19 on society and the respective implications on USPs and the wider postal sector primarily in the UK and Europe but also considering different global regional trends.

The paper starts by considering the changes to the demand side, and analyses the societal changes stemming from the pandemic, how consumers, households and businesses were affected, how their behaviour changed, and how this impacted the postal sector both in the changed demand for services and how postal operators were in practice able to respond.

The paper goes on to examine which of these changes are likely to be temporary, which may become permanent, and why, and what trends are new as opposed to development and acceleration of changes which were already to some degree evident (see figure 1). It also explores how some initial responses taken by postal operators in response to changing

consumer demands or operational challenges may precipitate longer term service changes, including new product offerings.

The paper examines four core areas of life that have been most affected by the pandemic and the associated societal and postal impacts. The four areas are: public health and social responsibility; shopping and leisure; business; and communications.

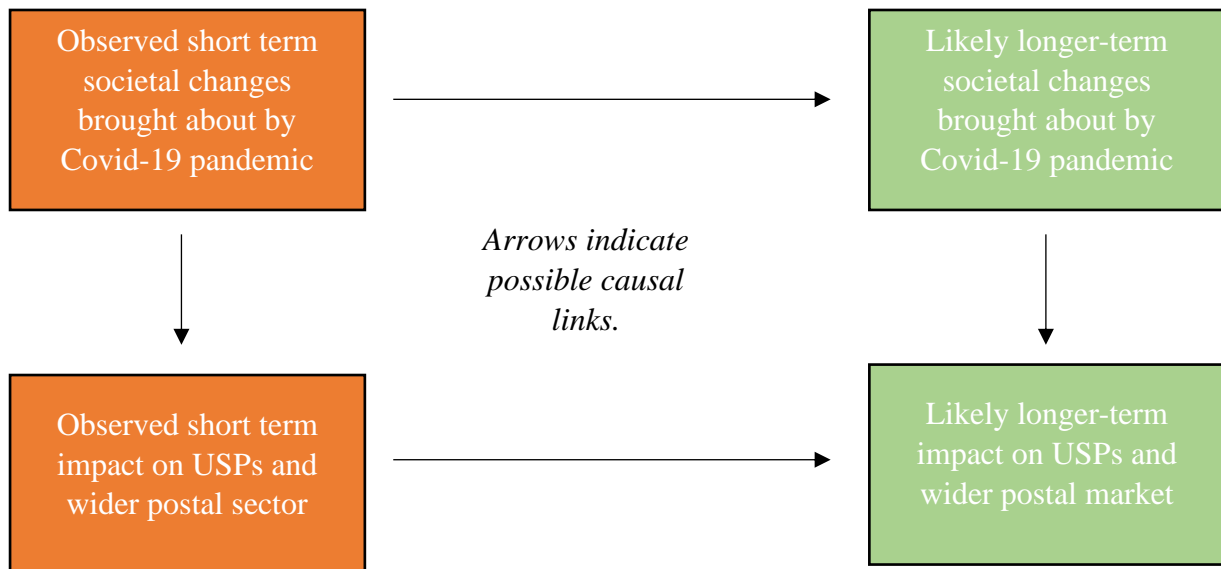


Figure 1

Accordingly, after Section 1, the Introduction, Section 2 examines the Public Health and Social Responsibility aspects of the pandemic and their short and longer term societal and postal impacts. Sections 3 and 4 assess Shopping and Leisure, and Business, respectively, in the same way. Section 5 explores how the pandemic affected communications between citizens, diverging slightly from the previous analytical structure by considering the societal and postal impacts in tandem. Finally, Section 6 summarises the analysis and conclusions of the earlier sections.

2. Public Health and Social Responsibility

Short Term Societal Impacts

The Covid-19 virus reached the UK in late January 2020. As of 23 August 2021, there have been 6.49 million reported cases, resulting in 509,743 hospitalisations and 154,811 related deaths (PHE, 2021). On 23rd March 2020, the British government imposed a stay-at-home order banning all non-essential travel and contact with people and closing schools, businesses, and most workplaces. Individuals deemed to be clinically vulnerable were instructed to 'shield' and those with symptoms or, having had contact with others testing positive to the virus, were required to self-isolate. Social distancing to reduce transmission of the disease was introduced by requiring individuals to remain 2 metres apart. The use of personal protective equipment was encouraged in workplaces where social distancing wasn't possible.

This approach was typical of most European countries who imposed similar restrictions between 1 and 25 March 2020 (Imperial College COVID-19 Response Team, 2020). In the United States, stay-at-home orders came into effect between 15 March and 12 April 2020 on a

state-by-state basis. Australia and New Zealand entered national lockdowns on 23 and 25 March 2020 respectively.

In the UK, the initial lockdown was gradually eased in June and July 2020 with some residual public health restrictions. In the autumn, case rates began to increase again prompting a tiered restriction regime to be introduced in England and Scotland geared to localised infection rates. In November, the UK entered a month long ‘circuit breaker’ lockdown.¹ Further lockdowns in response to new variants and rising case rates followed in January 2021 which were gradually phased out between March and August 2021 as the proportion of the adult population receiving vaccinations began to break the link between infections and hospitalisations. Many other countries experienced subsequent lockdowns of varying durations and stringency in response to their own rising case rates which also tended to tail off as vaccination rates improved.

Short Term Postal Impacts

Demand Side

Many operators experienced a surge in demand for parcel services as national lockdowns and the subsequent closure of businesses and retail forced consumers to rely on online and mail-order shopping. Amongst the EU27, the value of retail sales via e-commerce increased by 30% in April 2020 compared to April 2019, despite a fall in total retail sales of 17.9% (Eurostat, 2020). In the UK, e-commerce sales as a proportion of total retail sales increased especially steeply from 18.8% in May 2020 to 32.9% in May 2021 (ONS, 2021). Royal Mail delivered full year results for 2020-21 “well above initial expectations” fuelled by “strong parcel growth” (Royal Mail, 2021). Increases in demand for parcel services via e-commerce were also widely reported by other National Regulatory Authorities (NRAs) too, albeit with variations in the scope and pace of e-substitution by country.

The European Regulators Group for Postal Services (ERGP) found that as of November 2020, 30 European NRAs had reported increases in parcel volumes by domestic postal operators since the beginning of the pandemic, 2 NRAs reported volume declines and 6 did not report any notable volume changes (ERGP, 2020). UNCTAD’s B2C E-Commerce index measures the preparedness of economies to support online shopping by considering internet accessibility and network security, internet banking availability and reliability of postal services. Postal operators in countries scoring highly by this measure experienced greater e-commerce driven demand for parcel delivery services than those performing less well (UNCTAD, 2021). Meanwhile, the closure of businesses because of lockdowns had a converse effect on letter volumes. Total letter volumes in the UK declined by 25% in 2020-21 compared to the prior year, driven primarily by the negative economic impact of the pandemic and related reduction in business mail (Royal Mail, 2021).

The pandemic influenced the types of products consumers sought to purchase. UNCTAD report that health-related goods (including PPE), devices for home working and home entertainment were initially the most purchased online in the early stages of the pandemic, but as the lockdown restrictions continued, consumers began to purchase a wider range of goods. Postal operators responded to such demands. For example, Royal Mail launched a pharmacy delivery

¹ Wales and Northern Ireland had slightly shorter and longer lockdowns respectively.

service, offering home delivery for prescription drugs and return service for medical samples illustrating a pandemic driven demand for virtual medical services (Royal Mail, 2020).

Finally, governments drove demand for new postal services to support pandemic-related public health measures. In the UK, Royal Mail convened a network of 35,000 ‘priority post boxes’ to fast track the delivery of Covid tests to laboratories and deliver samples from over 100 regional test centres. USPs also delivered letters inviting citizens to book vaccination appointments. In France, e-learning initiatives such as “homework at home” relied on the postal USO for free return of homework assignments by post for those without broadband access or computers. In developing countries, the social role of USPs was also reinforced through enhanced or new services to mitigate the impact of the pandemic such as the delivery of food parcels to relatives in outlying areas (e.g. Ghana). An increase in postal voting in elections, to minimise physical interaction, also boosted demand for postal services both for the delivery/return of ballots and election campaign material. Local elections in the German state of Bavaria in March 2020 were conducted entirely by postal voting whilst deferred local and mayoral and devolved elections in Wales and Scotland experienced much greater take-up of postal voting in the UK (Wagner, 2020).

Supply Side

Postal operators experienced considerable disruption to supply broadly mirroring the public health measures arising from the pandemic. This disruption centred primarily on human resourcing volatility due to high and unpredictable absence rates, and from social distancing requirements which impacted upon ordinary collection, delivery and processing activities.

High infection rates during the first wave (spring 2020) of the pandemic led to higher than usual staff absentee rates compounded by self-isolation rules, posing serious challenges to consistent service delivery. The US Postal Service experienced a reduction in employee levels by 20% in April 2020 (US Postal Service, 2021). In Austria, the military was required to reinforce processing capacity in two distribution centres for two weeks in May 2020 due to clustered outbreaks (ERGP, 2020).

As the pandemic progressed, operators developed contingency plans to stem supply disruption. In Portugal, CTT distribution centres adopted a system of segmenting and periodically rotating workers to minimise virus exposure. In the US the Postal Service partially activated its Continuity of Operations Plan in New York, instructing the redirection of mail if processing units were shut down, in this case due to local staff absences. Social distancing measures significantly hampered delivery efficiency and reduced processing capacity (USPS, 2021).

In many European countries, Post Offices operated by USPs assumed reduced operating hours and strict capacity limits to reduce the scope for virus transmission between customers and staff. Also, services typically requiring consumers to visit branches were fulfilled by other methods such as physical delivery of pensions by Post Italiane in cash to the most vulnerable citizens, with the support of the national army (UPS, 2021). Meanwhile, postal operators across Europe devised contactless delivery systems, typically replacing the need for signatures for tracked items with alternative measures such as photographing the item in the delivered location (ERGP, 2020).

The most acute periods of restriction, coinciding with the greater demand for parcel delivery services, gave rise to quality of service issues. In seven European countries, national regulators

declared force majeure situations during the first wave of infections as USPs were unable to meet the requirements of respective USOs (ERGP, 2020). Elsewhere, quality of service issues drew the attention of media and consumer bodies, for example around the Christmas period in the UK as the surge in demand for parcel services, combined with the second wave of infections, overwhelmed postal operators.

Longer Term Societal Impacts

The rollout of vaccinations weakened the link between infections and hospitalisations prompting some countries to begin removing restrictions. In July 2021, the UK removed almost all legal restrictions including social distancing rules, mandatory indoor mask wearing and future requirements to self-isolate upon coming into contact with others testing positive to the virus, subject to individuals having had both vaccination doses (BBC, 2021) while in other parts of Europe restrictions were relaxed to a lesser degree.

Several factors will determine the pace and extent of a return to more normal conditions globally, over the longer term. Principally, that vaccines have been administered unequally with higher income countries having vaccinated citizens much more quickly than emerging and developing countries. This has precipitated concerns that the development and spread of variants may outpace vaccine uptake (Trapper and McKie, 2021), and whether and how long some restrictions remain. Moreover, given the remaining uncertainties on future pandemic developments, including the need for, and effectiveness of, any further vaccinations, a residual caution on the part of a section of the population in resuming all social activities, especially by those who feel most vulnerable to any future virus resurgence, is likely to persist.

In addition, hygiene and healthcare are likely to become a greater consideration in everyday life and may lead to enhanced biosecurity measures such as sanitisation stations in public spaces and workplaces, whilst formalised working from home arrangements for office workers may become the norm for at least part of the time (Marr, 2020). Mintel (2021), a market intelligence agency, also noted that greater prioritisation of personal wellness emerged during the Covid-19 pandemic which brands have capitalised on by offering products and services to facilitate greater monitoring of personal health.

Finally, we might expect the continuation of virtual delivery of some healthcare services that were established as temporary measures at the height of the pandemic to minimise potential transmission of the virus where virtual consultations are effective. Thomas DelBanco (2020), Professor of Medicine at Harvard Medical School, has predicted that telehealth will become 'part and parcel of medicine', citing the convenience to patients and improvements in technology facilitating such services as key drivers.

Longer Term Postal Impacts

For the most part, a relaxation of restrictions will see the removal of safeguard measures that operators have been required to deploy which impeded efficiency and constrained capacity. The removal of social distancing rules, for example, will allow Royal Mail to return to shared van working arrangements and for those operators still reliant, or partly reliant, on manual sorting processes, to increase capacity by allowing more workers within closer proximity. Relaxing restrictions is therefore likely to have a positive impact for operators and consumers, reducing operating costs and improving productivity. Operators are likely to see spend on PPE and sanitation fall, whilst costly contingency measures, such as hiring additional vans, are dropped. Improved operating efficiency and expanded processing and delivery capacity should

improve quality of service alongside efficiency improvements introduced during the pandemic which reduced customer contact.

Alongside more virtual health consultations, increased use of delivery services for prescriptions and medical testing is likely. The NHS already automatically sends out bowel cancer screening testing kits to all people over a certain age deemed at risk. Such initiatives may multiply, reflecting increased caution in social interactions and visiting public spaces by the vulnerable in spite of eased legal restrictions. Some individuals who registered for a postal vote during the pandemic may also continue to do so, leading to long term increased demand for postal services.

Where changes in services occurred as a temporary response to public health threats, we may see their continuation if acceptable to consumers. For example, contactless parcel drop-off arrangements seem likely to remain given such measures appear to have worked smoothly while also reducing contact time for individual deliveries. Where post offices operated by USPs have temporarily closed or offered reduced opening hours, we might expect this to persist if it has prompted consumers to develop acceptable alternative arrangements, such as accessing services online or via alternative outlets and if respective regulations allow.

Finally, where USPs were able to offer public service solutions during the pandemic, we may see governments explore longer-term opportunities to expand their social role. USPs are also likely to continue to benefit from the step change in e-commerce levels and develop innovative services in line with changing consumer demands as a result of permanent lifestyle changes brought about by the pandemic, such as doorstep parcel collection services and delivery of new types of product not previously carried by postal operators.

3. Shopping and Leisure

Short Term Societal Impacts

In the UK the ONS (2021), estimated that 10 million new users started buying digitally during the pandemic. There was large growth in particular retail categories: for example, Kingfisher, which includes the DIY brands B&Q and Screwfix, recorded online sales growth of 158% year on year. Other sectors which benefitted included online fashion (+72%), health and beauty (+102%), beer and wine (+105%), electrical (+206%) and clothing (+22%). Overall, online retail was up 74% in January 2021 compared to January 2020. Paypal (2021) identified six ways in which it considers that the pandemic is changing consumer shopping habits including: increased support for local retailers and brands, touch free payments, prioritisation of health and hygiene factors and new brands and products e.g linked to new hobbies taken up during lockdowns.

Strikingly, during the pandemic, 46% of UK consumers purchased a product online that they had only ever previously purchased in store. Retired households were a big driver of increased online grocery spend during the pandemic, increasing their spend by 229% between January 2020 and January 2021. Research from Global Web Index showed that suburban and rural consumers drove the bulk of global online shopping growth during the pandemic whereas pre-pandemic this growth was driven by millennials. Overall, between Q1 and Q2 2020, Latin America showed the largest shift to online grocery adoption (+31%) followed by the USA (+23%).

OECD (2020) reported on different impacts of the pandemic by country on the shares of e-commerce in retail. It found a non-uniform impact, with some sector sales increasing, as already seen, and other sector sales decreasing. In the US, for example, there was greatest demand for PPE, home activities, groceries and computer equipment and reductions in travel and sports goods and formal clothing. In China, food products were the biggest winner, growing by 36% between January and April 2020 compared to the equivalent period in the previous year.

Conversely hospitality and tourism, especially international leisure air travel, were badly affected globally during the pandemic. Business travel was similarly affected. Domestic tourism suffered less as continued uncertainty in addition to added costs and restrictions on international travel prompted holidaymakers to book domestic holidays instead. Sports tournaments and other forms of live entertainment for larger audiences were similarly affected, promoting the acceleration of a trend towards letting events or stores come to the home via broadcasting (Elsevier 2020).

Short Term Postal Impacts

USPs and other parcel operators responded to the increased demand for e-commerce by adapting their operations and stepping up innovation. In the UK, Royal Mail reported that for the first time in its history it was attracting more revenues from parcels than letters. However, the increased demand was not uniform and there were wide differences observed between European countries. This reflected a mix of factors, such as maturity of the e-commerce market, the nature and timing of lockdown restrictions and cultural factors. Some countries, especially outside of Europe, did not, for a variety of reasons, benefit from a rise in e-commerce, such as Kenya and New Zealand.

During the pandemic, first time delivery of e-commerce items was far easier to achieve during lockdowns or where many more people continued to work from home. Nevertheless, perhaps with a view to longer-term sustainability in more normal times, the pandemic also provided a stimulus to continued expansion of out of home (OOH) delivery solutions, whether parcel lockers or pick-up and delivery points (PUDOs). These offer the advantages of being open 24/7. Moreover, sustained first time delivery, easy access and an efficient delivery method avoids traffic congestion and reduces carbon emissions.

Longer Term Societal Impacts

32% of consumers expect to continue their buying habits during lockdown notwithstanding temporary dips observed in the immediate aftermath of lifting restrictions. Various studies show that many of the online shopping habits which UK and European consumers adopted over lockdowns are most likely here to stay. For example, a study by DS Smith (2020) finds that while 64% of Europeans say they shopped more online during the pandemic, 89% say they will continue to shop as much online or even more post lockdown. Other studies suggest that even after the pandemic subsides, e-commerce sales will grow much faster than during the pre-pandemic era for products such as food and beverages, drugs and medical supplies, personal care products and pet products. There is evidence that as more customers have discovered the convenience of e-commerce, concerns about product quality and online security have diminished. Target, a US department store chain, reports higher levels of spending and loyalty among its new online customers. J.P. Morgan (2020) examined US consumer spending habits during the pandemic and asked whether they have changed for good due to the pandemic. It

found that there were especially large increases in spend on food, spirits and health and personal care products, which only partially subsided since and foresees many people will continue to spend more time at home in future, due to either caution or economic uncertainty. Another relevant factor will be whether vaccination “passports” are required in social settings, for example as the French Government announced in July 2021, which could further reinforce home shopping and leisure habits acquired during lockdowns.

This appears to be borne out so far, as existing evidence indicates that consumers returned to physical retail when restrictions were lifted while maintaining some of their newly acquired online shopping habits. Royal Mail’s Trading Statement for Q1, 2021-22, published on 21 July 2021, reported strong year on year revenue performance with Royal Mail’s Chairman commenting: “we are starting to see evidence that the domestic parcel market is rebasing to a higher level than pre-pandemic.” Moreover, consumers may be left with less choice of physical retail as the economics and supply chain organisation of bricks and mortar retail are likely to have changed for the longer term. For example, GAP and Debenhams (clothes retailers) closed all UK stores to operate entirely online. Other retailers have developed plans to further integrate online and instore experiences, repurposing stores as ‘show rooms’ for items such as furniture whilst expanding their online purchasing and delivery offerings. Finally, the disruption to the high street by lockdowns may also make physical retail seem a riskier enterprise, given the potential for similar disruption in future whilst retailers that made heavy investments in their online offerings during the pandemic may seek to prioritise these business streams in the future to ensure a return on investment.

Moreover, the history of the SARS epidemic in Asia in 2003, and the associated diversification by the Chinese companies Alibaba and JD.com into emerging e-commerce activities, demonstrates that major events such as epidemics can act as catalysts for major changes and the trial and subsequent success and expansion of new business models.

“Home as a hub”

In addition to the step change in buying online, and the implications for the high street, a new attitude to the importance of the home started during lockdowns but has continued since. KPMG (2020) identified “Home is the new hub” as one of its four consumer trends arising from the pandemic. Changes to work and socialising gave an opportunity for a new lifestyle, including relocation away from large cities to suburbs, towns and villages with a perceived healthier and cheaper way of life. This may reflect the higher numbers observed in the UK looking to move house/location including for extra space. KPMG also saw an associated, increased focus on in-home experiences and investments, such as buying furniture, electronics and gardening activities and eating in, linked to convenience, accessibility and safety. In a separate study, PWC (2021) identified a significant increase in time spent on home entertainment, watching or reading the news and hobbies. Finally, a UK study by Premierline (2021) identified six consumer trends which it considers will stay based on analysis derived from Google Trends data: home improvements, shopping local, gardening, physical and mental health, online shopping and a focus on ethical brands.

Longer Term Postal Impacts

USPs and other carriers are likely to continue to benefit from the step change in e-commerce levels and develop innovative services associated with this development, such as collection on

delivery, expanded parcel collection options, improved delivery flexibility and tracking, wider use of lockers for different types of delivery and potentially downstream access services, either to individual addresses or to lockers for companies looking to benefit from the economies of scale and scope offered by the USP's regular household delivery services.

One key theme that emerges as a result of greater future parcel volumes is the economics of parcel deliveries to the door, and alternatives, and how to make such deliveries more cost effective. This is linked to the environmental impact of the sustained and growing number of such deliveries when multiple carriers can be delivering packages to households or blocks of flats, sometimes on the same day. Wien box is an open locker system developed in Vienna by the Wiener Stadtwerke-Group, a company offering municipal infrastructure services throughout Austria, which explained the rationale for its development at an ERGP ² public workshop in July 2021. Wien Box worked with relevant authorities, including urban utility providers, public housing associations and residential building developers, to establish a new logistical and technical framework for open systems of lockers which integrated different carriers. At present in Austria, a minority of locker deliveries (38%) are made to 'white label' lockers, while Austrian Post and Amazon have closed locker systems. The Group explained that one advantage of such boxes is that they can have different uses, including for collection, and that they can save up to two thirds of CO2 emissions related to last mile delivery.

The ways in which parcel lockers can be most efficiently set up and used, and their relationship with out of home "PUDO" delivery points, at local retailers, for example, are still the subject of study. One such study ³ points to the expansion of locker installations and retailers partnering with delivery companies to become PUDO points, facilitating a higher number of parcels per stop than for residential deliveries. While they are capital intensive to set up, lockers are normally well-located, with good accessibility and parking, enabling 100% first time delivery. In contrast PUDO points are easier, quicker and cheaper to set up, making them a good complementary option or a testing ground for the optimum sites for locker developments. However, locker technology is evolving, and the next generation of lockers should be cheaper and simpler to set up, using batteries instead of electricity and linked to bluetooth rather than wi-fi.

The study, which surveyed 200 retail businesses, reports that 70% of them see the future as carrier agnostic networks. It also highlights some of the other issues which are critical to success such as incentivising early collection from the locker. Finally, it examines unattended - at home - delivery, via smart technology enabling access to larger and potentially more versatile garage lockers with greater capacity and options e.g. delivery and storage of food or white goods while the recipient is out.

Budbee, a Swedish company also present in Finland, Denmark and Belgium ⁴, goes further than providing locker systems and tracking information by operating urban consolidation centres outside major city centres where e-commerce packages are initially delivered and from

² European Regulators Group for Post

³ Last Mile 2020: Before and after COVID-19, Last Mile Expert and Postal Hub Podcast

⁴ who also made a presentation to the same ERGP workshop in July 2021

where Budbee plan the onward deliveries to lockers in an efficient and environmentally friendly way. As the current and anticipated future increase in parcel volumes coincide with heightened environmental concerns and targets, we may expect to see further innovations of this nature in establishing more efficient last mile delivery solutions, such as through the roll out and development of innovative multi-carrier parcel lockers (as demonstrated by Weinbox) and broader network reconfiguration (as demonstrated by Budbee).

Such an arrangement could be made available to both retailers and postal operators who want to outsource the final mile delivery and benefit from the associated economies of scope and scale. Conversely, where Universal Service Providers or other postal operators hold a strong market share in the delivery of e-commerce packages, they could make their networks, to home or to lockers, available to third parties on a commercial basis to increase their drop rates per address and/or locker.

A final postal use of lockers could be for regular, though not necessarily daily, delivery of letters, where recipients were happy to collect their letter mail. Where delivery to the door or mailbox at the recipient's address remains part of the universal service requirement, any such future alternative arrangements would need to be optional and take into account the paying senders' preferences too.

In addition, the Covid-19 pandemic occurred at a time of growing environmental concerns by governments and businesses. These concerns increased for the postal sector as household deliveries multiplied. Accordingly, postal operators are increasingly looking to accelerate plans to reduce their environmental impact, for example, by lowering the CO2 footprint per kilometre, improving network efficiency and reducing the number of kilometres per delivery. Fleet electrification is also already underway with the main remaining challenge the "greening" of long-distance transport. There is potentially a wider benefit of the shift to online and e-commerce, with consumers no longer travelling to purchase goods. In France, 7 out of 10 consumers said they would have taken a motor vehicle to collect their purchase had they not purchased online.⁵ Similarly, if consumers are predominantly buying online in the future, items can be packaged and presented in a more efficient and sustainable way. This would in practice mean smarter route planning and increased use of parcel lockers, reduced air transport for parcels and smarter packaging, especially reduced air in parcels (currently running at 30-50%). It could entail partnerships with subcontractors and e-tailers, so that they encourage their customers to adopt greener delivery solutions. Several major European USPs reported on the progress made to date in areas such as electrifying vehicle fleets, improving packaging, "green mail" products and reduced reliance on air transport. Sustainability is therefore likely to become increasingly integrated into postal operators' business strategies, with investments now in sustainable solutions potentially providing a long-term competitive advantage.

Finally, while earlier delivery targets, and associated offers, for parcels have increased, quality of service targets for letters delivered under the universal service have been modified in several countries in recent years away from next day targets to targets of 2,3 or 4 days. Next day letter targets sometimes require reliance on air transport so changing the USO specification can reduce the reliance on air transport reducing costs and emissions, as evidenced by the changes to the USPS USO service standards in the US earlier this year. In France, La Poste, is reported

⁵ 2021 UPU conference

to want to add on an extra day to the delivery time for its “lettre vert” service to save costs.⁶ Such changes may also carry a positive environmental impact and are likely to continue following the pandemic.⁷

4. Business

Short Term Societal Impacts

The pandemic has had widely different impacts on work by sector which have been heavily dependent on the nature of the sector, the impact of government restrictions and guidance and the state support offered. Office-based workers were largely required to work from home. Workers in parts of the service sector which were temporarily closed, such as non-essential retail and hospitality, were furloughed and paid most of their salaries by the state. Self-employed workers in the service sector were unable to work in the sectors where restrictions were greatest. Manufacturing production and front-line service jobs unaffected by the restrictions continued as before but with the appropriate PPE precautions.

The shift to digital transactions propelled high growth in delivery, transportation, and warehouse jobs, with Amazon hiring 400,000 new workers worldwide during the pandemic. According to the McKinsey Global Institute (2021) the pandemic showed that much more work could be done remotely than had previously been thought possible, including: business sales calls, legal arbitration and trials, doctor visits, classroom learning, property viewings and repairs (via virtual reality). However, the study also highlighted that certain work was still best conducted in person, such as negotiations, critical business decisions, brainstorming, sensitive feedback, inducting new employees and teaching of young children or students with special needs.

A different study, on the future of work post-Covid, also by the McKinsey Global Institute (2021), highlights a substantially higher need for complete reskilling post-Covid driven by reductions in employment in some sectors, such as retail service, sales, hospitality and office support staff with increases in demand for employees in other specialised occupations, like health professionals and transportation workers.

Small businesses suffered mixed fortunes because of Covid-19, however most countries saw a notable rise in new small businesses either starting up, or growing significantly, with the rise in e-commerce. The United States saw double the number of new business applications in Q2 2020 compared to the previous year, France saw a record number of new businesses formed in October 2020, and the UK saw a 30% increase in the number of new businesses registered in Q3 2020 compared to Q3 2019 (US Census Bureau, 2020). Smaller businesses that were not online, or without an e-commerce presence before the pandemic, were often forced to migrate online during the first lockdown (March-May 2020). This sometimes led to new cross-border

⁶ The “lettre vert” or “green letter”, with a green stamp, currently takes two days for delivery avoiding air transport, compared to 1 day for a priority letter. It sits alongside another green “écopli service”, for direct mail, which takes up to four days.

sales, as evidenced by a local cheese shop in Paris, France,⁸ who found new online customers in Belgium and Switzerland, which may have been replicated across other similar businesses.

Finally, a study on consumer demand recovery post-Covid (McKinsey 2021), which examined consumer spending in China, the United States, France, Germany and UK, found a demarcation between employees working from home who maintained their income and others in more precarious occupations. It found the former group was able to increase their household savings while the second group was not. The study found an uneven recovery between income and age cohorts with mid-high-income earners bouncing back more. This has implications for businesses in how they address both these broad consumer groups.

Short Term Postal Impacts

Postal operators took an active role in supporting local businesses through the pandemic, as well as managing the extra demand these SMEs provided. For instance, DHL's initiative in Germany, 'DHL lokal handeln' (DHL shop locally) encouraged shopkeepers and retailers, who did not generate revenues due to the closure of their shops during Covid-19, to increase their engagement in the area of e-commerce and to register as a business customer at DHL Parcel to benefit from the company's expertise and offerings. Of the 315,000 new companies in the UK, nearly 16,000 were e-commerce leading to corresponding demand for B2B and B2C delivery services. eBay saw a surge of new businesses on the site: a 335% increase from June 2019 to June 2020, its biggest on-year rise (Royal Mail, 2020). Germany and Japan also saw similar trends compared to 2019. Some smaller businesses migrated to online marketplaces and aggregator websites, which introduced another component in the selling of goods for businesses, as such intermediaries become effectively 'gatekeepers' to running a successful online business.

Longer Term Societal Impacts

McKinsey (2021) identifies an acceleration in three trends already in existence pre-pandemic with wider economic impacts which may provide a guide to potential future developments: hybrid working from home for most computer-based office employees; growth in economic importance of e-commerce and "delivery economy", and business use of AI and automation.

The changes in consumer demand post-pandemic, including the rate of recovery in demand, is likely to depend on employment factors. Some employees who have been able to work from home and maintain their income, increased savings through the lack of work-related costs, and enforced cutbacks on leisure spending, even before any additional stimulus payments. Such groups may therefore be predisposed to increased consumer spending as restrictions ease. On the other hand those that lost jobs or income or accrued debts may be forced to scale back consumer spending in the short to medium term. Overall, with the vaccine rollout and relaxation of restrictions consumer demand is expected to return to pre-pandemic levels albeit unevenly by group spend.

McKinsey observed six consumption shifts whose continuation (or not) will influence the post-pandemic economy including the acceleration of e-grocery shopping, a decline in live entertainment, the emergence of home nesting and a decrease in leisure air travel. In the coming

⁸ As mentioned at the UPU 2021 conference.

five years early evidence points to a continuation of some of these trends. Most consumer surveys show that some of the shift to e-commerce, both by age and by products purchased, is likely to continue. Similarly, for “home nesting”, individuals and households continue to seek more space commensurate with the increased time spent at home, sometimes for work. Demand for leisure air travel and live entertainment are, by contrast, predicted gradually to return to normal in the medium term while business travel will not recover to the same extent. In China, leisure travel already recovered to pre-pandemic levels. Finally, the switch to remote learning and virtual health appointments can be expected to continue/

Regarding retailing, the businesses that can quickly adapt their services to go directly to the consumer are most likely to succeed. Examples cited include Nike, selling direct rather than via department stores, and the restaurant chain Cote Brasserie offering fresh produce boxes based on its most popular restaurant dishes. Business hotels are also showing adaptability by rebranding for staycations or even “workations”, also offering day rooms or offices.

Longer Term Postal Impacts

Longer term, the shift in people working from home more often may have several consequences for the postal sector. Primarily, the greater mobility of people’s locations may require assumptions to be recast about where parcel volumes and traffic will be, both now and in the future, away from city centres and workplaces to individual residential addresses. The parcels sector is characterised by increasing consumer expectations with next-day delivery standard, some adoption of same day delivery, and increased flexibility as part of the delivery process (e.g. DPD UK’s recent introduction of changeable one-hour timed delivery slots). Delivering parcels in urban and city locations carry greater volume density, and thus more efficiency from both an environmental and financial perspective, so delivering a greater proportion of parcels in the future to individual residential addresses may result in parcel operators raising prices more to compensate.

Alternatively, parcel operators may look to mitigate any price increases by offering cheaper alternatives or a discount if consumers choose to collect their parcels from a point of aggregation, where the parcel operator can retain the current volumetric efficiencies – for instance, parcel boxes or local shops. In addition, operational advances e.g. greater use of autonomous guided vehicles (AGVs) may contribute to further cost reductions.

However, the greater proportion of employees working from home, or virtually, may mean that the high first time success rate that parcel operators had in delivering parcels during the strictest lockdowns, may continue to a large degree as consumers remain at home for a majority, or at least some, of the working week, which will result in greater efficiencies and cost savings for parcel operators.

An additional consequence of the pandemic with implications for small businesses is that supply chains may become more local, so that they are more resilient and have less international dependencies in light of the disruption the pandemic, and associated consequences (e.g. reduced air transport) (ECB, 2020). As such, companies may look to more distributed manufacturing, storage, dual sourcing and re-shoring in the future. If this were to occur, smaller SMEs might become more of a part of a localised supply chain, so benefitting more local, domestic parcel operators, to the detriment of international parcel traffic (DHL, 2020).

5. Communicating

Short Term Societal Impacts and Postal Impacts

Covid-19 and the associated social restrictions changed how we communicated, with the shift being away from physical, in person interactions to virtual and online forms of communication in work, leisure and education purposes. With the significantly reduced need for physical interactions internationally, either for leisure or business needs, the immediate demand for international travel fell. Reduced travel meant airlines reduced their capacity dramatically, with adverse consequences for international mail deliveries. Generally, 50% of air cargo on passenger flights was e-commerce and cross border goods. When passenger flights stopped because of Covid, this capacity was reduced by 70%. To cope with this, freighter sea networks were used and retired planes were brought back into use, 2500 passenger planes were used for cargo only and 300 of these had their seats removed for greater capacity.⁹

As widely reported on, letter volumes significantly fell for most, but not all, USPs, for a variety of different reasons. Marketing and advertising mail were particularly affected, as companies' profitability and revenues suffered due to the pandemic, leading to substantial reductions in their advertising spend, at least in the short term. In the year prior to Covid-19, marketing mail accounted for \$16 billion and over half the total volume delivered. In April 2020, USPS announced that because of Covid-19, it expected to see a \$13 billion drop in revenue for the calendar year 2020 (New York Times, 2020).

Nonetheless, for those businesses who were still able to send mail, due to the significant number of people staying at home, in the UK, direct and business mail saw record increases in the 'effectiveness' of mail (9% and 16% increases compared to the previous year, such as consumers acting on mail that they receive), and interaction rates with mail from sectors increased 14-23% from the previous year (JICMail, 2020). Therefore, whilst bulk mail volumes decreased, for some of those continuing and able to post letters, it became much more effective.

A UPU (2021) report on Covid-19, Posts and Direct Marketing illustrates this point by pointing to the relationship between e-commerce and direct mail despite the decrease in direct mail volumes since the start of the pandemic. It reports: "In some important markets, the demand for local and domestic e-commerce and home delivery services has amplified the way customers have engaged with direct mail and boosted the impact of direct mail by driving B to C transactions."

Longer Term Societal and Postal Impacts

How much of this shift in communications including the decline in letter volumes translates into the long term, and the extent to which it can be attributed to Covid-19, are hard to quantify given that the trends in letter volumes were in long term decline before Covid-19 (UPU, 2020). Nevertheless, history shows that in periods of economic decline, some letter volumes invariably disappear, and postal operators cannot plan on them returning (IBM, 2020). Conversely, public cynicism over data privacy, possibly exacerbated by the increase in online activity during the pandemic, may lead to an indirect benefit for direct and advertising mail as consumers become more aware and wary of their data and what it is being used for.

⁹ June 2021 UPU conference, Impact of COVID-19 on e-commerce logistics.

In respect of direct mail, their volumes often decline sharply in a recession as companies cut all marketing spending in light of reduced demand for their products. An example is the US where after compound declines in annual growth of 11% from 2007-2009, the subsequent decline averaged only 0.5% over the subsequent ten years. Moreover, in an economic upturn, direct mail is often seen as a good medium to rebuild brand loyalty and to re-engage with existing customers and win new customers, reflected in its relatively stable 7% share of the advertising market in the US. Its wider benefits over more transient forms of digital advertising may also be felt more in the coming years as consumers spending more time at home may increase its visibility and other qualities such as: tangibility, relative durability and its ability to capture the receivers' attention.

Another example is the shift to online, or home, learning for schools and universities, with a virtual, online presence seemingly likely to remain (especially for universities). The move to a more virtual learning environment may embed a wider virtual teaching environment, which may carry through to a reduced use and demand for physical books with an increased use of e-books and online journals. Therefore, there may be less demand for physical books, and their associated deliveries.

For international letters as well as some domestic mail and B2B mail, the continued constraint of reduced airline capacity for cargo, which is likely to continue until the mid-2020s when passenger numbers are expected to return to pre-Covid levels, may mean that international mail capacity is both reduced, and/or more expensive, in the medium future (Kada, 2020).

6. Table summarising conclusions

Short Term Societal and Postal Impacts

	Short Term Societal Impacts	Short Term Postal Impacts
Public Health and Social	<ul style="list-style-type: none"> • Severe restrictions on households and businesses • Social distancing and PPE requirements • Mass testing and vaccination programme rollout 	<ul style="list-style-type: none"> • Acceleration in e-commerce parcels including pandemic related purchases • New types of postal services to address pandemic related needs • Contingency operational measures impacting costs and Q of S
Shopping and Leisure	<ul style="list-style-type: none"> • Step change in e-commerce, varying in scope and extent by country • New categories of products purchased online • New groups of people buying online • Travel and hospitality severely restricted 	<ul style="list-style-type: none"> • Postal operations changed to cope with parcels growth • New delivery and tracking options developed • Disruption to international postal deliveries • Advertising mail picked up as economies unlocked to tie in with e-commerce
Business	<ul style="list-style-type: none"> • Widely differing impacts depending on type of work and Government support • Office workers mainly switched to work from home • Reduced demand for transport, hospitality, travel, and retail in urban centres • Increased demand for certain local businesses and services • Benefits and drawbacks of remote working assessed 	<ul style="list-style-type: none"> • Widespread working from home and closure of non-essential retail drove parcels growth • Working from home drove more, cost-effective first-time deliveries • Business mail spend experienced large decreases during lockdowns • Advertising mail similarly declined in line with GDP drop • Posts devised Covid-secure practices which reinforced trust in the mail

	<ul style="list-style-type: none"> • Employers offered mental health support with more holistic view of employees • Growth in small businesses, often home micro-businesses 	<ul style="list-style-type: none"> • Short term boost to mail driven by new small businesses
Communicating	<ul style="list-style-type: none"> • Personal communications transferred mainly online • Stay at home orders boosted sending of gifts and greeting cards 	

Long Term Societal and Postal Impacts

	Long Term Societal Impacts	Long Term Postal Impacts
Public Health and Social	<ul style="list-style-type: none"> • Continued public health restrictions/changes in behaviour which are self-imposed rather than mandated by Government? • Established vaccination passports that impact social interactions of unvaccinated? • Government and individual focus on health and wellbeing • Growth in tele-health services on cost and convenience grounds 	<ul style="list-style-type: none"> • Postal service delivery increasingly contactless • Self-imposed restrictions and/or vaccination passports/requirement for negative testing drives increased use of home as social and leisure hub, driving further e-commerce parcels growth • Public service opportunities for post e.g. assisting elderly, delivering health testing kits and medicines, postal voting, building on their existing networks and trusted brands
Shopping and Leisure	<ul style="list-style-type: none"> • New buying habits reinforced and lockdown buying trends continue • Demand for alternative delivery and collection points to ensure first time deliveries • Growth in environmental concerns with higher base and further growth of e-commerce • More time spent at home and reinforcement as “home as a hub” concept with work, life and 	<ul style="list-style-type: none"> • Postal operations changed to cope with long term parcels growth and reprioritisation of letters e.g. slower delivery speeds and/or delivery on fewer days • Potential options to collect letters from a locker daily or weekly? • Changes in USO specifications to slower but more reliable letter services to eliminate use of air transport

	<p>leisure based around home</p> <ul style="list-style-type: none"> • Particular segments set to grow faster e.g. drugs and medicine, personal care, home leisure items • Leisure travel to bounce back eventually but perhaps not to the same pre-pandemic base however future business travel likely to be at far lower levels impacting airline economics • Growth in e-learning • “Local is best” trend with pandemic behaviours of supporting local stores and services carried forward to some degree 	<ul style="list-style-type: none"> • Home as a hub will nevertheless drive some letter volume growth e.g. micro-business related, personalised direct mail linked to e-commerce etc • Pressure on posts to meet “green targets” leading to more energy-efficient delivery and packaging solutions and possibly to consolidation of last mile activity • Increasing prevalence of "open locker" solutions which maximise last mile efficiencies • Innovative postal services combining home delivery and an expansion and diversification of locker solutions e.g. blurring of postal and grocery deliveries and collection/delivery of other types e.g. laundry • Commercial downstream access arrangements for e-commerce parcels introduced, driven by cost/environmental concerns • Concerns over use of personal data may reinforce mail as more trusted medium than electronic alternatives e.g. apps • International mail likely to become more expensive due to long term airline capacity constraints and higher costs • Growth in local only delivery services and associated information e.g. door to door leaflets
Business	<ul style="list-style-type: none"> • Rules-based hybrid working becomes the norm for office workers 	<ul style="list-style-type: none"> • Changed patterns of mobility and live/work locations will change the economics of

	<p>with varying degrees of flexibility</p> <ul style="list-style-type: none"> • Home or office-based interactions become based on business needs and effectiveness of setting • Employers seek to influence and manage employees' overall work/life experience positively to drive productivity • Change in job mix in the economy away from travel and leisure and towards distribution and last mile 	<p>postal services as currently set up</p> <ul style="list-style-type: none"> • Small business growth to drive increase in letter mail, especially for minority who continue to demand paper records • Postal operators will need a wider range of partnerships to meet business e.g. with logistics companies, delivery technology manufacturers, specialist fulfilment carriers
Communicating	<ul style="list-style-type: none"> • Possible re-emphasis on direct mail as an effective marketing medium in combination with digital • Education to be offered online • International mail capacity reduced and more costly. 	

Bibliography

BBC (2021). [Covid-19: End of England's Covid rules still set for 19 July](#),

Department of Health and Social Care (2020). [Full list of local restriction tiers by area](#).

DHL (2020). [Transition to a new normal: DHL and logistics expert Prof. Richard Wilding publish White Paper on post-corona supply chains](#).

ECB (2020). [The long term effects of the pandemic: insights from a survey of leading companies](#).

Elsevier Health Emergency COVID-19 Initiative (2020): Impact of Covid-19 on consumer behaviour: Will the old habits return or die?

ERGP (2020). [Measures adopted by postal services due to the Covid-19 outbreak](#).

ERGP (2020). Report on the consequences of Covid-19 on the postal sector.

Eurostat (2020). [Value of e-commerce sales dataset](#).

GOV.UK (2019). [Bowel cancer screening: easy guide](#).

GOV.UK (2021). [Coronavirus \(COVID-19\) in the UK](#).

Hancock and Evans in the Financial Times (2020). [Consumers sweet on desserts as pandemic spurs home deliveries](#).

Harvard Business Review (2021), 9 trends that will shape work in 2021 and beyond, Brian Kropp

IBM (2020). [Posts must collaborate in new ways to weather COVID-19](#).

Imperial College COVID-19 Response Team (2020). [Report 13: Estimating the number of infections and the impact of non-pharmaceutical interventions on COVID-19 in 11 European countries](#).

JICMAIL (2020) [Q2 2020 results reveal record levels of consumer interaction with mail during lockdown](#).

Kada in Mailing Systems Technology (2020). [How the Postal Sector Can Succeed in a Post-COVID World](#).

Marr in Forbes (2020). [The 5 Biggest Healthcare Trends In 2021 Everyone Should Be Ready For Today](#)

McKinsey Global Institute (2021) The future of work after COVID-19

McKinsey Global Institute (2021a) The Consumer Demand recovery and lasting effects of COVID-19

Morgan, J P (2020), How COVID-19 Has Transformed Consumer Spending Habits

New York Times (2020). [Coronavirus is threatening one of governments steadiest services: the mail](#).

ONS (2021). [Internet sales as a percentage of total retail sales \(ratio\) \(%\)](#).

Powell in the Harvard Gazette (2020). [What will the new post-pandemic normal look like?](#)

Royal Mail (2020). [Prescription and pharmacy delivery.](#)

Royal Mail (2021). [Results for the full year ended 28 March 2021.](#)

Royal Mail Group (2020). [Lockdown fuels rise in start-ups as entrepreneurial brits drive ecommerce boom.](#)

Smith, D S (2020), Company Newsroom: Why European shopping may never be the same post Covid-19

Trapper, J. and McKie, R in the Guardian. (2021). [Vaccines ‘outpaced by variants’, WHO warns, as Delta now in 98 countries.](#)

UNCTAD (2021). [Covid-19 and E-commerce: A Global Review.](#)

UPS (2021). Webinar series on the regulatory responses to Covid-19.

UPU (2020). [The COVID-19 crisis and the postal sector: impact, scenario and perspectives for the way forward.](#)

UPU (2021), Covid-19, Posts and Direct Marketing – A UPU Direct Marketing Advisory Board (DMAB) Report

UPU conference (2021)

US Census Bureau (2020). Business and industry: Time series/trend charts, 15 December 2020

US Postal Services, Office of Inspector General (2021). [Mail services during the early stages of COVID-19 pandemic.](#)

Wagner (2020). [Responding to COVID-19 with 100 per cent Postal Voting: Local Elections in Bavaria, Germany.](#)

Wroble in Mintel (2021). [Wellness trends to watch in 2021.](#)

YouGov (2021). [COVID-19 Public Monitor | YouGov](#)