> How the COVID-19 Pandemic Accelerated the Transformation of the U.S. Postal Service into a State-Owned Package-Delivery Enterprise—and Why Policymakers Must Respond

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Years before the widespread use of email and the World Wide Web, Congress directed in the Postal Reorganization Act of 1970 that the U.S. Postal Service "shall have as its basic function the obligation to provide postal services to bind the Nation together through the personal, educational, literary, and business *correspondence* of the people." Congress further directed that, to discharge that paramount statutory duty, the Postal Service "shall provide prompt, reliable, and efficient services to patrons in all areas and shall render postal services to all communities."

Half a century after that congressional declaration of the "basic function" of the Postal Service, the COVID-19 pandemic gripped the American economy and dramatically stimulated demand for and reliance on *e-commerce package deliveries* from businesses to homes. Substantial evidence indicates that in 2020 the business of the Postal Service fundamentally and permanently changed. And as a result of that change, the congressionally declared "obligation" of the Postal Service to provide "as its basic function" the provision of services that would "bind the Nation together through the . . . correspondence of the people" is now threatened by two separate factors.

The first is the collapse of demand for mailed correspondence because of technological innovation and changing consumer tastes: the "correspondence

¹ Pub. L. No. 91-375, 84 Stat. 719, 719 (1970) (codified as amended at 39 U.S.C. § 101(a)) (emphasis added).

 2 Id

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of the people" continues its steady migration from letters to electronic means, a trend which of course began long before the COVID-19 pandemic. The second factor is the demand (by both businesses and households) for the Postal Service's expanding (but inessential) role as a public enterprise providing e-commerce package delivery.

The economic performance of the Postal Service in 2020 confirms that its true principal business and managerial focuses have become the delivery of packages, notwithstanding the obligation that Congress created in 1970 for the Postal Service to regard as its "basic function" the delivery of the "correspondence of the people." We must therefore ask, How do those institutional priorities advance the statutory mandate that Congress gave the Postal Service in 1970? Are immediate changes in policy necessary to ensure that the Postal Service will discharge its statutory mandate in a sustainable manner, year after year?

EXECUTIVE SUMMARY

In the aftermath of the COVID-19 pandemic, policymakers must confront existential questions concerning the Postal Service. Not all the answers to those questions are yet known. Not all the pertinent questions are even known. The key contribution of this article to posing and answering those essential questions can be summarized in the following 13 points:

- 1. In 2020, the Postal Service no longer faithfully adheres to the statutory mandate—that its "basic function" be the delivery of the "correspondence of the people." From 2010 to 2020, first-class mail volume steadily decreased and package volume steadily increased. Following the onset of the COVID-19 pandemic in the United States in 2020, the Postal Service's transformation into a public enterprise primarily providing e-commerce package delivery abruptly accelerated. During the three-month period from April 2020 through June 2020, for the first time in its history the Postal Service earned approximately as much revenue from competitive products (a category composed of packages, among other items) as it earned from market-dominant products (a category composed of first-class mail, marketing mail, and periodicals, among other items).
- 2. In 2020, after the onset of COVID-19, the level of demand for e-commerce package delivery that formerly was considered "peak load" became the new—and perhaps permanent—"base load." The new base load resembles the Christmas peak load consistently observed in the last two months of every calendar year.

- During the sustained peak load after the onset of COVID-19—that is, the new base load level of demand for package delivery-substantial evidence indicates that package delivery might remain incrementally unprofitable to the Postal Service. In particular, during the Christmas peak, one would expect to observe incremental revenues derived from and incremental costs attributable to-the incrementally increased volume of package deliveries. One would hope to observe incremental revenues that exceed incremental costs. Yet, substantial evidence indicates that the observed incremental increase in package revenues during the Christmas peak is insufficient to cover the incremental increase in Postal Service costs during the Christmas peak, despite a decrease in market-dominant mail volume over that same period. Similarly, during the COVID-19 peak period for packages, despite a decreasing volume of market-dominant mail (which one would expect to reduce postal costs), incremental economic costs appear to have exceeded incremental package revenues.
- The Postal Service's outmoded accounting principles date to the 1970s and obscure precisely how incrementally profitable or unprofitable package delivery really is as an economic matter. Although Congress enacted the Postal Accountability and Enhancement Act (PAEA) of 2006, the Postal Regulatory Commission's (PRC's) implementation of the PAEA has failed to correct the Postal Service's inadequate accounting. Section 3633(a) of the PAEA requires the Postal Service to price its competitive products so that they recover not only (1) the costs "attributable" to those products (which, subject to certain nuances, are what economists would call the incremental costs that are proximately caused by the supply of those products), but also (2) an "appropriate share," set by regulation, of the Postal Service's common costs, which postal cognoscenti call "institutional costs." The minimum "appropriate share" of institutional costs that the PRC required the Postal Service to cover through revenue from package delivery—5.5 percent in 2007 and 8.8 percent in 2018—has been disturbingly low. In 2020, it is laughable to suggest that only 8.8 percent of the Postal Service's institutional costs are properly assignable by its overhead-allocation methodology to package deliveries. The D.C. Circuit said that the reasoning animating the PRC's 2018 implementation of the PAEA's appropriate share requirement was incomprehensible. The Postal Service's probable underreporting of the amount of costs attributable to package delivery in turn artificially inflates the supposed incremental "profitability" of package delivery. That package deliveries satisfy the appropriate share requirement as it is currently interpreted by the Postal Service is almost meaningless from an economic perspective. If the Postal Service cannot reliably confirm to Congress that its package-delivery enterprise is in fact incrementally profitable, Congress faces the difficult task of overhauling a failed enterprise with incomplete and unreliable information.

- Service has been satisfying the statutory criteria that Congress established in the PAEA—that is, even if the Postal Service has been allocating an appropriate share of its institutional costs to package delivery, to be recovered through the rates for such delivery services—the Postal Service has still failed to prove that its package-delivery business is profitable in the generally accepted economic sense. That is, the Postal Service has not reliably shown with substantial evidence that the incremental revenues derived from package delivery cover the incremental costs that the Postal Service has attributed to its delivery of packages.
- 6. Policymakers should seriously confront the prospect that the Postal Service does not even seek to turn an economic profit from its package-delivery enterprise. The Postal Service has not produced persuasive evidence that it even seeks to determine what its economic profit—or loss—is on its package-delivery business.
- 7. To summarize, the Postal Service has not produced substantial evidence that its package-delivery enterprise is profitable as an economic matter. To the contrary, substantial evidence indicates that as an economic matter the Postal Service's package-delivery enterprise is incrementally *un*profitable.
- 8. Yet, the Postal Service plans to invest billions of dollars in infrastructure to deliver e-commerce packages. Who will pay for that investment? If the Postal Service is not maximizing its profit from package delivery, and if it is instead asking the Treasury to cover its losses or lend it more money, then the Postal Service is asking taxpayers to subsidize e-commerce delivery when it sacrifices profits in the short run.
- 9. Even if the answer to the question of who will pay is "the Postal Service," taxpayers are still footing the bill through long-run investment in infrastructure for the delivery of e-commerce packages. Are taxpayers the proper source of funds with which to expand the e-commerce package-delivery infrastructure of the Postal Service, particularly if that package-delivery enterprise is incrementally unprofitable? No. More likely, the optimal level of investment by the Postal Service is negative, or some modest amount sufficient to support a leaner delivery network for falling market-dominant mail volumes, particularly if the Postal Service already has sufficient capacity to deliver the traditional categories of mail that support the "correspondence of the people"—which, to repeat, is what Congress has called the Postal Service's "basic function."
- 10. In other words, policymakers should seriously consider whether the Postal Service should disinvest from its existing package-delivery enterprise. Increasing package volume will require more truck rolls per

piece of market-dominant mail and will make delivery of the mail more expensive than it would otherwise be. Letters, magazines, and packages differ in shape, size, and weight. The Postal Service should be designing its network to serve its basic function—the delivery of a decreasing volume of letters and other market-dominant mail. The Postal Service should not be expanding its package-delivery network capacity. With few exceptions (such as election mail), the Postal Service arguably should not even be expanding its network capacity for delivering correspondence mail, considering that the demand for such mail is steadily shrinking rather than expanding, as we shall see.

- 11. Finally, if package delivery is instead incrementally profitable to the Postal Service as an economic matter, then surely policymakers cannot credibly justify gratuitously giving the Postal Service billions of taxpayer dollars. Some members of Congress in 2020 had proposed appropriating \$75 billion in unrestricted funds to the Postal Service—which, for context, is approximately the enterprise value of FedEx. Put differently, for that amount of money, the Postal Service could simply buy an existing, profitable package-delivery company. Either the Postal Service's transition to a package-delivery firm is profitable, in which case the Postal Service should not turn to Congress for a gratuity, or it is unprofitable, in which case the Postal Service should not continue to invest in package-delivery infrastructure.
- 12. The COVID-19 pandemic has cast a spotlight on the challenges facing the Postal Service and on the value to the United States of a functional Postal Service. Although the Postal Service can financially survive in the near term, policymakers are at a crossroads. Substantial evidence indicates that, as package deliveries approach levels seen only during the Christmas peak, those deliveries might not be incrementally profitable. Similarly, peak package-delivery levels might increase the costs and decrease the quality of market-dominant products. Should Congress authorize the Postal Service to continue down this path? Simply put, what is the end game for the Postal Service's investment in e-commerce infrastructure? Decreasing mail delivery quality? Increasing prices? A thriving package-delivery firm for which the mail is just along for the ride?
- 13. Members of Congress must decide what kind of business the Postal Service should operate before they appropriate billions of dollars for a business model that is unsustainable in the long run. Would it be negligent for the management of a private company to invest in a business in which it had no expectation of making a profit? Why should the management of the Postal Service be allowed to act according to a lesser standard of care? The corporate assets that the Postal Service and Congress would be wasting would belong to taxpayers. The alternative,

and the solution, is to design a Postal Service optimized to serve its essential statutory mandate.

The remainder of this article is organized as follows. In Part I, I explain why substantial evidence indicates that the Postal Service's package-delivery services are incrementally unprofitable, such that the Postal Service's optimal level of investment in a package-delivery infrastructure is likely to be low or even negative. In Part II, I examine the patterns of volume, cost, and revenue observed during the COVID-19 pandemic, and in particular the declining demand for market-dominant products and the increasing level and share of revenue of the Postal Service that are properly assignable to its provision of competitive products. In Part III, I analyze the impact of the COVID-19 pandemic on the appropriate share of institutional costs that by statute the competitive products of the Postal Service must bear. In Part IV, I question in greater detail the optimal incremental investment that the Postal Service should make in the aftermath of the COVID-19 pandemic of 2020.

I. The Postal Service's Optimal Level of Investment in Its Transformed, But Evidently Still Unprofitable, Business Model

Congress gave the Postal Service (as the successor to the Post Office) several statutory monopolies over mail delivery in the United States. Those monopolies, collectively called the private express statutes, are codified in the U.S. Criminal Code.³ In addition to being exclusively authorized by the Postal Accountability and Enhancement Act (PAEA) of 2006 to sell "market-dominant products" (which, subject to certain nuances, are the products over which the Postal Service enjoys a statutory monopoly),⁴ the Postal Service is permitted to *compete against private firms* in the provision of what the PAEA calls "competitive products," which include most notably packages and overnight mail.⁵

³ 18 U.S.C. §§ 1693–97. For a legal and economic analysis of these provisions, see J. Gregory Sidak & Daniel F. Spulber, Protecting Competition from the Postal Monopoly II–38 (AEI Press 1996); J. Gregory Sidak, *Abolishing the Letter-Box Monopoly*, I Criterion J. on Innovation 401, 404–23 (2016); see also J. Gregory Sidak, *Maximizing the U.S. Postal Service's Profits from Competitive Products*, II J. Competition L. & Econ. 617, 638–45 (2015).

⁴ Pub. L. No. 109-435, 120 Stat. 3198, 3201 (2006).

⁵ 39 U.S.C. § 3642(a). As initially defined by statute, market-dominant products consisted of First-Class mail letters and sealed parcels, First-Class mail cards, periodicals, standard mail, single-piece parcel post, media mail, bound printed matter, library mail, special services, and single-piece international mail. *Id.* § 3621(a). As initially defined by statute, competitive products consisted of priority mail, expedited mail, bulk parcel post, bulk international mail, and mailgrams. *Id.* § 3631(a). Unless otherwise noted, I use "competitive products" as a term of art corresponding to this statutory classification, rather than as an economic assessment of the presence or absence of competition in a given market. The statutory definitions of market-dominant products and competitive products are subject to modification: "Upon request of the Postal Service or users of the mails, or upon its own initiative, the Postal Regulatory

During the three-month period from April 2020 through June 2020, for the first time in its history the Postal Service earned approximately as much revenue from competitive products as it earned from market-dominant products. That staggering fact indicates that the Postal Service had, by the middle of 2020, transformed itself into primarily a state-owned package-delivery enterprise that competes with private carriers. That outcome is troubling because the Postal Service has not proven that its package-delivery enterprise is incrementally profitable. To the contrary, substantial evidence indicates that package-delivery services are incrementally *un*profitable to the Postal Service.

It is the Postal Service's duty and burden to produce substantial evidence to the President, to Congress, and to the public that we can realistically expect its package-delivery services to be incrementally profitable. Would it be negligent for the management of a private company to invest in a business in which it had no expectation of making a profit? Congress should not permit the management of the Postal Service to act according to a lesser standard of care. How otherwise can Congress and the public be confident that the Postal Service is not wasting taxpayer dollars?

At a minimum, policymakers must scrutinize the Postal Service's capital expenditures so as to recalibrate its optimal level of investment. More fundamentally, policymakers must seriously consider whether to save the Postal Service by enacting new legislation compelling the Postal Service to divest its inessential, and evidently incrementally unprofitable, package-delivery business.

A. Is the Provision of Package-Delivery Services Incrementally Profitable to the Postal Service?

With unparalleled clarity in the history of the Postal Service the outbreak of the COVID-19 pandemic has highlighted the evident failure of the Postal Service's incremental revenues from package delivery to cover its incremental costs of that product. Previously, we observed a routinely recurring Christmas spike in demand for e-commerce package delivery in late November and December of every year, which followed the spike in demand for market-dominant products (including advertising mail). The Christmas spike in demand for e-commerce package delivery corresponded to large increases in both monthly revenues and monthly costs for the Postal Service. Yet, it does not appear that packages delivered by the Postal Service actually

generate incremental revenues that equal or exceed their incremental costs during peak periods.

B. Does the Postal Service's Accounting of Its Costs Reliably Indicate Whether Its Competitive Products Are, as an Economic Matter, Incrementally Profitable?

The Postal Service's methods of accounting for its costs do not reliably indicate whether its competitive products are in fact incrementally profitable as a matter of economics. The Postal Regulatory Commission (PRC) regulates the Postal Service, pursuant to the powers delegated to it by the PAEA and prior legislation, though with a lighter touch than that of the commission's earlier incarnation as the Postal Rate Commission. Section 3633(a) of the PAEA requires the Postal Service to price its competitive products so that they recover not only the "attributable" costs of those products (which, subject to certain nuances, are what economists would call the incremental costs that are proximately caused by the supply of those products), but also an "appropriate share," set by regulation, of the Postal Service's common costs, which postal cognoscenti call "institutional costs."

Because of current postal regulation, the package-delivery business of the Postal Service is forcing its market-dominant mail services to cover a large share (or proportion) of growing institutional costs. Consequently, the Postal Service might understate, perhaps by a substantial amount, the true incremental cost of package delivery. Although the increased revenue during the Christmas spike arguably suffices to satisfy the existing pricing tests that the PRC requires of the Postal Service's competitive products, the Postal Service has not demonstrated to the President or to Congress (or to the public) that the incremental revenues derived from its package-delivery services include not less than an appropriate share of institutional costs as section 3633(a) of the PAEA requires.

In particular, section 3651(a) of the PAEA specifies that "[t]he Postal Regulatory Commission shall submit an annual report to the President and the Congress concerning the operations of the Commission under this title, including the extent to which regulations are achieving the objectives under sections 3622 and 3633, respectively." Section 3651(b)(2) further provides that "[t]he Commission shall detail the basis for its estimates and the statutory requirements giving rise to the costs identified in each report under this section."8 Does the PRC take these statutory reporting requirements seriously?

⁶ *Id.* § 3633(a).

 ⁷ Id. § 3651(a).
 8 Id. § 3651(b)(2).

C. The Paradigm Shift, Following the Onset of the COVID-19 Pandemic, in the Base Load Level of Demand for E-Commerce Package Delivery

When the spikes in the demand for e-commerce package delivery by the Postal Service extend beyond the Christmas season—that is, when heightened demand is not episodic but instead is continuous—the same pattern of incremental losses on e-commerce package deliveries could financially ruin the Postal Service. A level of demand for e-commerce package delivery that formerly was considered peak load has become the new base load. By analogy, suppose that the peak load of electricity generation necessary to accommodate the summer demand for air conditioning suddenly was required throughout all four seasons of the year. That development would require a reexamination of whether the principles of cost causation and rate design that support the pricing of services were accurately matching incremental revenues to incremental costs.9 When the spike in demand for e-commerce package delivery that the Postal Service typically had experienced only during the final two months of the calendar year persists year-round in a post-COVID-19 world, would the revenues derived from those packages cover their accurately measured incremental costs? No.

1. The Substantial Decline in the Volume of Market-Dominant Products

The COVID-19 pandemic has in fact produced a sustained base-load demand for e-commerce package deliveries never before observed outside the familiar Christmas peak. Meanwhile, demand for the Postal Service's market-dominant products has fallen, and that new level of demand might correspond to a permanently diminished base-load demand for those products. In August 2020, the Office of Inspector General of the U.S. Postal Service reported that, following the COVID-19 pandemic, "[t]he Postal Service anticipates a substantial drop in mail volume and the long-term impact is forecasted to be significant." No one plausibly expects such a decline in demand to reverse itself.

In the period from April 2020 through June 2020, 65 percent of the total weight of products delivered by the Postal Service was composed of

¹⁰ Office of Inspector General, United States Postal Service, Audit Report: Delivery Vehicle Acquisition Strategy 1 (Aug. 12, 2020) [hereinafter Postal Service Delivery Vehicle Acquisition Strategy Audit Report].

⁹ For the classic discussion of peak-load pricing, published the same year that Congress reorganized the Post Office into the Postal Service, see 1 Alfred E. Kahn, The Economics of Regulation: Principles and Institutions 87–109 (MIT Press 1988) (1970). In a related vein, Kahn's 1970 treatise on public utility regulation also exposed the problems with "fully distributed" or "full allocated" costs of the utility's overhead costs: "Quite simply, the basic defect of fully distributed costs as a basis for rate making is that they do not necessarily measure marginal cost responsibility in a causal sense." *Id.* at 151.

competitive products.¹⁷ In each of May 2020 and June 2020, the combined revenue from domestic and international competitive products exceeded the combined revenue from domestic and international market-dominant products.¹² As identified and measured in the most intellectually defensible manner for a multiproduct firm offering diverse products—that is, by revenue—the Postal Service's primary business today is e-commerce package delivery.

2. Cross Subsidizing the Spike in Institutional Costs Arising from the Increase in Demand for E-Commerce Package Delivery Through Revenue from Market-Dominant Products

Yet, the Postal Service covers the spike in institutional costs arising from the increase in demand for e-commerce package delivery since the outbreak of the COVID-19 pandemic through a cross subsidy flowing from its market-dominant products, plainly in violation of what section 3633(a) of the PAEA requires. Costs that are caused by peak-load demand are not overhead costs, and it is specious to toss them into the pot of institutional costs while ignoring obvious and substantial evidence of cost causation, which instead would properly direct the Postal Service to treat such costs as fully attributable to e-commerce package delivery. It follows with greater force that, if the old pattern of seasonal peaking of demand for e-commerce package delivery persists for the Postal Service throughout a longer period of the year, a new base-load level of demand has been revealed, and it should be properly recognized to have highly consequential cost-causation implications for the setting of the Postal Service's rates for its competitive delivery of packages.

3. The True Incremental Cost of E-Commerce Package Delivery

E-commerce package delivery is an essential component of the infrastructure for e-commerce, and the Postal Service currently is imputing to its own package-delivery product an unrealistic and artificially low cost for

¹¹ Preliminary Revenue, Pieces, and Weight by Classes of Mail and Special Services for Quarter 3 Fiscal Year 2020 (Apr. 1, 2020—June 30, 2020) Compared with the Corresponding Period of Fiscal Year 2019, at 3, 5, https://about.usps.com/what/financials/revenue-pieces-weight-reports/fy2020-q3.pdf [hereinafter Quarter 3 Fiscal Year 2020 Revenue, Pieces, and Weight Report]. The Postal Service reported that the weight of total competitive mail during the third quarter of fiscal year 2020 was 4,123,139,000 pounds. *Id.* at 3. The Postal Service reported that the total weight of all market-dominant and competitive mail during the third quarter of fiscal year 2020 was 6,317,801,000 pounds. *Id.* at 5. Thus, 4,123,139,000 pounds ÷ 6,317,801,000 pounds = 65 percent.

¹² See USPS Financial Information (Unaudited) 2 (May 2020) [hereinafter Postal Service Unaudited Financial Information (May 2020)], https://www.prc.gov/docs/113/113760/2020.6.24%20May%20 2020%20Monthly%20Financial%20Report%20to%20the%20PRC.pdf; USPS Financial Information (Unaudited) 2 (June 2020) [hereinafter Postal Service Unaudited Financial Information (June 2020)], https://www.prc.gov/docs/114/114153/2020.8.7%20June%202020%20Monthly%20Financial%20 Report%20to%20the%20PRC.pdf.

the provision of that component. As trucks laden with packages crisscross residential neighborhoods, and as delivery workers (called "city carriers" in postal argot) spend increasing numbers of hours in post offices preparing for deliveries, the Postal Service still describes the cost of any package as though it were merely a box riding with minimal imposition alongside the letters, bills, and advertising mail in the back of a mail truck, which is erroneously assumed for cost-causation and rate-setting purposes to have plenty of cubic feet of unused space.

D. Optimal Incremental Investment by the Postal Service, as Authorized by Congress

How should the permanently increased base-load level of demand for packages and the permanently decreased base-load level of demand for market-dominant products guide sound investment decisions of the Postal Service's upper management—and, by extension, Congress?

1. Do Economies of Scope Exist Between Letter Delivery and E-Commerce Package Delivery?

A firm's technology is said to exhibit economies of scope if a single firm can produce two products at a lower cost than if each product were produced by a different firm.¹³ The cost of producing one of the products alone is called its *stand-alone cost*.¹⁴ Economies of scope are said to exist if the sum of the stand-alone costs of the two products exceeds the cost of jointly producing the two products in a single firm. The sorting machines, delivery trucks, mail-carrier pouches, and other equipment designed for the optimal delivery of letters will not necessarily resemble the equipment designed for the optimal delivery of small packages. The economies of scope between the delivery of letters and the delivery of packages might be weak, nonexistent, or even negative (which is to say that there are diseconomies of scope between the two activities, such that it is inefficient to produce the two products within a single firm).

We shall see that the Postal Service's next-generation trucks and customer letterboxes are clearly designed to accommodate more packages. The Postal Service has not hidden this fact. A truck that is optimized to deliver packages will look different from a truck that is optimized to deliver letter mail.

¹³ See, e.g., J. Gregory Sidak & Daniel F. Spulber, Deregulatory Takings and the Regulatory Contract: The Competitive Transformation of Network Industries in the United States 55–60 (Cambridge Univ. Press 1997); Daniel F. Spulber, Regulation and Markets 114–17 (MIT Press 1989). The seminal exposition of economies of scope is John C. Panzar & Robert D. Willig, Economies of Scale in Multi-Output Production, 91 Q.J. Econ. 481 (1977).

¹⁴ See, e.g., William J. Baumol & J. Gregory Sidak, Toward Competition in Local Telephony 58–59 (MIT Press & AEI Press 1994).

As the Postal Service contemplates ordering new custom-made delivery trucks, as it reconfigures its sortation facilities, and as it makes other specialized capital expenditures, it must consider the tradeoffs between designing the components of its network for the handling of larger, heavier, bulkier packages as opposed to smaller, lighter, flatter letters. Will current cost-attribution methodologies assign to the new network elements the true proportion of costs that package deliveries proximately cause? In making its investment decisions, does the Postal Service use existing cost-attribution measures? Cost attribution is not simply a rate-regulation issue. The Postal Service cannot optimally allocate capital for network investment unless it can accurately measure its costs, including the effect on its costs of any economies or diseconomies of scale or scope.

2. The Postal Service's Long-Anticipated Capital Expenditure on Delivery Trucks, or "Long-Life Vehicles"

The Postal Service's most capital-intensive project in 2020, the proposed replacement of its fleet of more than 200,000 delivery and collection vehicles, dates to its 2015 fiscal year and is estimated in 2020 to cost approximately \$5 billion or \$6 billion.¹⁵ The familiar box-shaped mail trucks, known as Postal Service long-life vehicles (LLVs), have a maximum capacity of 1,000 pounds or 108 cubic feet of cargo.¹⁶ The Postal Service's request for proposals in 2015 for its next-generation delivery vehicle included a minimum capacity of 1,500 pounds and 155 cubic feet of cargo.¹⁷ Five years later, in August 2020, three finalists had emerged in the design competition.¹⁸

Figure 1 shows both the current LLV in 2020 and the finalists for the next-generation delivery vehicle.

¹⁵ See, e.g., Postal Service Delivery Vehicle Acquisition Strategy Audit Report, supra note 10, at 1; see also Delivery of a New Vehicle, U.S. Postal Service Office of Inspector General (Sept. 7, 2020), https://www.uspsoig.gov/blog/delivery-new-delivery-vehicle ("[T]he Postal Service began planning in Fiscal Year (FY) 2015 for acquisition of a new, Next Generation Delivery Vehicle (NGDV) to start replacing the current fleet beginning in FY 2018 through FY 2019. But due to frequent changes to the NGDV acquisition timeline, the planned deployment date is now scheduled for January 2022."); What Should Be the Top Priority for Capital Investment?, U.S. Postal Service Office of Inspector General (Jan. 19, 2015), https://www.uspsoig.gov/blog/what-should-be-top-priority-capital-investment.

¹⁶ U.S. GOV'T ACCOUNTABILITY OFFICE, REPORT TO CONGRESSIONAL REQUESTERS, UNITED STATES POSTAL SERVICE: STRATEGY NEEDED TO ADDRESS AGING DELIVERY FLEET 9 (May 2011), https://www.gao.gov/assets/320/318032.pdf.

¹⁷ See Press Release, U.S. Postal Service, USPS Position on Next Generation Delivery Vehicles (Jan. 15, 2016), https://about.usps.com/news/statements/011516.htm; see also Gary Gastelu, U.S. Postal Service Searching for the Mail Truck of the Future, Fox News, Feb. 27, 2015.

¹⁸ See Gary Gastelu, U.S. Postal Service to Award \$6.3B Contract for New Mail Truck This Year. See the Finalists., Fox Bus., Aug. 13, 2020.

Figure 1. Side-by-Side Images of the Old-Generation LLV Model and the Three Finalists for the Next-Generation LLV Model

The Old-Generation LLV Model







The Three Finalists for the Next-Generation LLV Model



Source: Gastelu, U.S. Postal Service to Award \$6.3B Contract for New Mail Truck This Year. See the Finalists., supra note 18.

Merely upon visual inspection of the design of these three truck prototypes it would strain credulity for anyone to claim that the next-generation LLVs are designed to deliver a declining volume of market-dominant mail in the most efficient manner.

3. The Postal Service's Record on Innovation

I have previously remarked upon the Postal Service's similar redesign of the customer letterbox in 2015 to handle the increased volume of packages being delivered to rural locations. Figure 2 compares the traditional rural letterbox, unchanged from 1915 until the Postmaster General unveiled the "next-generation" letterbox in 2015.

¹⁹ Sidak, Abolishing the Letter-Box Monopoly, supra note 3, at 433 & fig.1.

Figure 2. A Century of Postal Innovation Revisited

Rural Letter Box, 1915

"Next Generation Mailbox," 2015





Sources: Rural Mailboxes, Smithsonian National Postal Museum, https://web.archive.org/web/20191210182830/http://postalmuseum.si.edu/exhibits/current/customers-and-communities/reaching-rural-america/rural-mailboxes.html; Press Release, U.S. Postal Service, Shape of Things to Come (Jan. 20, 2015), https://liteblue.usps.gov/news/link/2015/01jan/news21s1.htm.

The Postal Service's vision of the future focuses on bigger mail trucks to accommodate bigger (and more) packages. The Postal Service would spend billions of dollars building infrastructure to support e-commerce *package* delivery, when market-dominant mail volume is declining.

4. Who Should Fund the Expansion and Maintenance of Infrastructure for the Delivery of E-Commerce Packages?

Considering that the Postal Service has a demonstrated record of losing billions of dollars annually,²⁰ the burden of paying for that investment in e-commerce package-delivery capacity will fall on the Treasury—which is to say, on American taxpayers. All lawyerly disclaimers to the contrary notwithstanding, no one really believes that the federal government would refuse to back with its full faith and credit the debts of the Postal Service if it became insolvent.²¹

So, the rational expectation is that Congress will bail out the Postal Service by making taxpayers absorb its operating losses and the costs of transforming this government enterprise into a company whose principal business focus is the delivery of packages. But a taxpayer-funded bailout would not correct the failure of the Postal Service to identify and attribute the costs of

²⁰ See, e.g., Catie Edmondson, Nicholas Fandos, Alan Rappeport, Luke Broadwater & Emily Cochrane, Key Highlights of Louis DeJoy's Testimony to a House Panel, N.Y. Times, Aug. 24, 2020 ("Am I the only one in this room who understand[s] that we have a \$10 billion a year loss?") (quoting Postmaster General Louis DeJoy).

²¹ See U.S. Const. art. IV, § 1.

its package-delivery business in an appropriate manner that respects established principles of cost causation, as section 3633(a) of the PAEA requires.

E. How Transparent and Informative Are the Postal Service's Cost-Accounting Practices?

The COVID-19 pandemic has had the incidental effect of pulling back the curtain on the Postal Service's obscure system of cost accounting. The pandemic has exposed the underlying frailty and unsustainability of the Postal Service's business model. The Postal Service has undergone a transition from being a government entity statutorily directed "to bind the Nation together through" the delivery of "the personal, educational, literary, and business *correspondence* of the people" to being as a *de facto* matter a government-owned e-commerce package-delivery company. That metamorphosis will saddle U.S. taxpayers with the Postal Service's operating losses and its capital expenditures to reinvent itself as an e-commerce company.

1. Rate Design and First-Class Mail Prices

The optimal amount of money that the Postal Service should invest in maintaining or expanding its network is a separate question from what cost-recovery principles will animate the chosen rate design. How can the Postal Service fix its financial predicament? The solution clearly is not another hike in first-class mail prices, for that action would further decrease demand for market-dominant products, worsen the inability of those products to contribute to the coverage of institutional costs, and exacerbate the burden of package-delivery costs borne by each first-class letter.

Until policymakers require that the Postal Service accurately measure, assign, and recover the costs of its metamorphosis into an e-commerce company, the Postal Service will keep slouching toward insolvency.²³ Fixes on the margin will not deliver long-run viability.

²² 39 U.S.C. § 101(a) (emphasis added).

²³ The Postal Service reportedly claims to have earned a \$1.6 billion profit in fiscal year 2019 from its Amazon contract. See Tony Romm, Jacob Bogage & Lena H. Sun, Newly Revealed USPS Documents Show an Agency Struggling to Manage Trump, Amazon and the Pandemic, Wash. Post, Sept. 18, 2020 ("[D]ocuments unearthed by American Oversight suggest Amazon is a lucrative client for the Postal Service. Amazon drove about \$3.9 billion in revenue and \$1.6 billion in profit for the USPS in fiscal 2019, according to multiple emails and financial statements obtained via open records laws. The Postal Service delivered 1.54 billion packages on Amazon's behalf last year, about 30 percent of the company's total volume in 2019, and deliveries and revenue increased this year, the documents also indicate."). But whether the Amazon contract is deemed to be profitable for the Postal Service is endogenously determined by the accounting rules by which the Postal Service imputes costs to its provision of services under that contract.

2. The Postal Service's Runaway Losses and Its Universal Service Obligation

The Postal Service has reported "controllable losses" that exceeded \$6 billion from October 2018 through June 2020.²⁴ The Postal Service defines a "controllable loss" as "a non-GAAP [generally accepted accounting principles] measure, [calculated] by excluding items *over which [the Postal Service] ha[s] no control*, such as PSRHBF [Postal Service Retiree Health Benefits Fund] actuarial revaluation and amortization expenses, workers' compensation expenses caused by actuarial revaluation and discount rate changes, and retirement expenses caused by actuarial revaluation."²⁵ "Controllable loss" is a construct of the Postal Service that is typically if not always less than the net loss that the Postal Service reports over a given period of time. The difference between the Postal Service's net loss and its "controllable loss" is the dollar amount of loss that is ostensibly beyond the Postal Service's control.

Until costs—including the cost of the Postal Service's current universal service obligation (USO), established by Congress 50 years ago—are known with a reasonable degree of certainty, the big question of whether the Postal Service can survive and discharge its statutory duties cannot be answered. For the Postal Service to ensure its solvency and its ability to discharge its statutory obligations, one must ask: What are the features of a reasonable USO for the Postal Service? How much will that reasonable USO cost? What are the causal determinants of the cost of that USO? And can the Postal Service afford to pay for those costs with the net revenues from its operations?

F. Congressional Reform of the Postal Service After the COVID-19 Pandemic

In a high-package-delivery state of the world, traditional costing methodologies might erroneously suggest that the USO is cheaper for the Postal Service

²⁴ See U.S. Postal Service, Quarterly Report for the Quarterly Period Ended June 30, 2020 (SEC Form 10-Q), at 34 (filed Aug. 7, 2020) [hereinafter U.S. Postal Service 10-Q (June 30, 2020)] (reporting a "controllable loss" of \$2.723 billion from October 2019 through June 2020); U.S. Postal Service, Annual Report for the Fiscal Year Ended September 30, 2019 (SEC Form 10-K), at 18 (filed Nov. 14, 2019) [hereinafter U.S. Postal Service 2019 10-K (Nov. 14, 2019)] (reporting a "controllable loss" of \$3.418 billion from October 2018 through September 2019).

²⁵ E.g., U.S. Postal Service 10-Q (June 30, 2020), *supra* note 24, at 33 (emphasis added). To calculate "controllable loss," the Postal Service adds or subtracts from its "net loss" six quantities: (1) "PSRHBF unfunded liability amortization expense," (2) "Change in workers' compensation liability resulting from fluctuations in discount rates," (3) "Other change in workers' compensation liability," (4) "CSRS [Civil Service Retirement System] unfunded liability amortization expense," (5) "FERS [Federal Employee Retirement System] unfunded liability amortization expense," and (6) "Change in normal cost of retiree health benefits due to revised actuarial assumptions." *Id.* at 34; see also Charles T. Horngren, Srikant M. Datar & Madhav V. Rajan, Cost Accounting: A Managerial Emphasis 217 (Pearson 15th ed. 2015) ("Controllability is the degree of influence a specific manager has over costs, revenues, or related items for which he or she is responsible. A controllable cost is any cost primarily subject to the influence of a given *responsibility center manager* for a given *period.*... A current manager may benefit from a predecessor's accomplishments or may inherit a predecessor's problems and inefficiencies.") (emphasis in original) (boldface suppressed).

to discharge than the USO would be in a (counterfactual) low-package-delivery state of the world. The traditional costing methodologies might erroneously presume that the trucks and the letter carriers would already be stopping at a large share of the letter delivery points required by the USO. The Postal Service often complains that it is required to do too much under inflexible laws. Instead, it needs to deliver what society needs the most: services for which competitive forces will not elicit the supply.

If Congress must subsidize the Postal Service today to enable it to continue on its current path, must Congress also commit to continue providing that subsidy indefinitely into the future? The same political pressure to maintain the status quo today will exist tomorrow. For example, if Congress subsidizes the delivery of prescription medicines today, finding the political will to end that subsidy and increase the cost of receiving that medicine tomorrow will be difficult.

The Postal Service should not solicit taxpayer funding to build and operate an e-commerce infrastructure. Congress, or an agency to which it delegates its authority, should revisit the half-century-old USO and update it, refine it, and make it financially sustainable. To define the proper scope of such reform, policymakers need accurate measures of costs and a genuine understanding of the business and managerial objectives of the modern Postal Service. A regulatory framework designed in 1970 cannot answer questions about the business model that has evolved for the Postal Service over the subsequent half-century.

II. THE COVID-19 PANDEMIC AND E-COMMERCE PACKAGE DELIVERY

On March 19, 2020, Governor Gavin Newsom of California issued the first statewide stay-at-home order in response to the COVID-19 pandemic.²⁶ The *New York Times* reported that, by March 30, 2020, "at least 316 million people in at least 42 states, three counties, 10 cities, the District of Columbia and Puerto Rico [we]re being urged to stay home," which "account[ed] for a stunning 95 percent" of the American population.²⁷ As we shall see, during this period of upheaval in the first half of calendar 2020, the Postal Service for the first time in its existence recorded that a majority of its revenue came not from its provision of market-dominant products, but instead from its

²⁶ Sarah Mervosh, Denise Lu & Vanessa Swales, *See Which States and Cities Have Told Residents to Stay at Home*, N.Y. Times, Apr. 20, 2020 ("The directives to keep people at home, which began in California in mid-March, quickly swept the nation."); *see also* State of California, Exec. Order N-33-20 (Mar. 19, 2020), https://www.gov.ca.gov/wp-content/uploads/2020/03/3.19.20-attested-EO-N-33-20-COVID-19-HEALTH-ORDER.pdf; Jennifer Calfas, Margherita Stancati & Chuin-Wei Yap, *California Orders Lockdown for State's 40 Million Residents*, Wall St. J., Mar. 19, 2020.

²⁷ Mervosh, Lu & Swales, See Which States and Cities Have Told Residents to Stay at Home, supra note 26.

provision of competitive products, including e-commerce package deliveries. Yet, the incremental costs attributable to the increased deliveries of packages appeared substantially to exceed the incremental revenues attributable to those deliveries.

A. Declining Demand for Market-Dominant Products

As residents across the country stayed home, demand increased markedly for packages and fell precipitously for first-class mail, periodicals, and marketing mail. The Postal Service announced on August 7, 2020:

As a result of the pandemic, and to a lesser extent, secular mail declines, the Postal Service's sales from mail services, its largest sales category, continued to significantly decline during the third quarter [of fiscal year 2020]. Meanwhile, the Postal Service's sales from Shipping and Packages experienced substantial growth as a result of the surge in e-commerce driven by the COVID-19 pandemic However, the package volume increases drove substantial increases in workhour and operating expenses.²⁸

UPS and FedEx also experienced significant increases in demand.²⁹ Some analysts reportedly expected that the demand for package delivery during the 2020 Christmas peak could outstrip the capacity of the network by "as much as seven million packages a day between Thanksgiving and Christmas."³⁰ Figure 3 reports the monthly changes in demand for different Postal Service products relative to the same period one year earlier.

Press Release, U.S. Postal Service, U.S. Postal Service Reports Third Quarter Fiscal 2020 Results (Aug. 7, 2020), https://about.usps.com/newsroom/national-releases/2020/0807-usps-reports-third-quarter-fiscal-2020-results.htm.

²⁹ See, e.g., Kelly Yamanouchi, UPS Grapples with Christmas-Like Shipping Surge Amid Coronavirus, Atlanta J.-Const., June 8, 2020.

³⁰ Paul Ziobro, Holiday Crunch Starts Early with More Packages Than Means to Deliver Them, Wall St. J., Oct. 19, 2020.

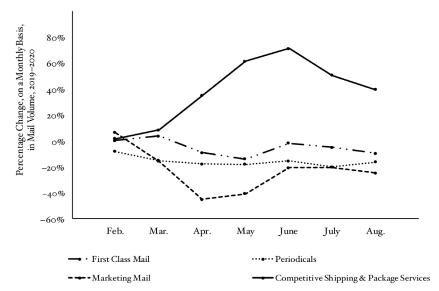


Figure 3. Percentage Change, on a Monthly Basis, in U.S. Postal Service Mail Volume, 2019–2020

Sources: USPS Financial Information (Unaudited) 2 (Feb. 2020), https://www.prc.gov/docs/112/112710/2020.3.23%20February%202020%20Monthly%20Financial%20Report%20 to%20the%20PRC.pdf; USPS Financial Information (Unaudited) 2 (Mar. 2020), https://www.prc.gov/docs/113/113103/2020.5.8%20March%20202020%20Monthly%20Financial%20 Report%20to%20the%20PRC.pdf; Postal Service Unaudited Financial Information (Apr. 2020), supra sources to Table 1, at 2; Postal Service Unaudited Financial Information (May 2020), supra note 12, at 2; Postal Service Unaudited Financial Information (June 2020), supra note 12, at 2; USPS Financial Information (Unaudited) 2 (July 2020) [hereinafter Postal Service Unaudited Financial Information (July 2020)], https://www.prc.gov/docs/114/114338/2020.8.24%20July%20 2020%20Monthly%20Financial%20Report%20to%20the%20PRC.pdf; USPS Financial Information (Unaudited) 2 (Aug. 2020) [hereinafter Postal Service Unaudited Financial Information (Aug. 2020)], https://www.prc.gov/docs/114/114639/2020.9.24%20August%20 2020%20Monthly%20Financial%20Report%20to%20the%20PRC.pdf.

In May and June of 2020, the Postal Service's package deliveries increased between 60 and 80 percent relative to one year earlier. All other categories of Postal Service products experienced substantial year-over-year declines over this period.

The decline in demand for letter mail and other market-dominant products during the first half of 2020 continued a long trend. From 2010 through 2019, annual first-class mail output had fallen from 77.6 billion pieces of mail per year to 54.9 billion pieces of mail per year, a cumulative decline in output of 29.3 percent over 10 years.³¹ Over that same time period, first-class, single-piece mail volume, which measures the volume of mail bearing postage stamps (such as bill payments, personal correspondences, cards, and so forth), had fallen from 28.9 billion pieces per year to 16.5 billion pieces per year, a

³¹ See A Decade of Facts and Figures, U.S. POSTAL SERVICE, https://facts.usps.com/table-facts/. That is, (77.6 billion pieces per year – 54.9 billion pieces per year) ÷ 77.6 billion pieces per year = 29.3 percent.

decline of 42.9 percent.³² Beginning in March 2020, the use of the Internet and mobile data for purposes of correspondence, bill payment, and advertising likewise exploded.³³

Those rates of decline in output increased with the onset of the COVID-19 pandemic, as Table 1 reports.

Table 1. The Decline, During Selected Months in 2020, in Output and Revenue of Market-Dominant Products,
Relative to the Same Months in 2019

	Change in Output, Relative to the Same Month in 2019, of Market-Dominant Products	Change in Revenue, Relative to the Same Month in 2019, of Market-Dominant Products
April 2020	-29.4%	-22.4%
May 2020	-28.8%	-22.9%
June 2020	-12.3%	-14.8%
July 2020	-13.9%	-10.3%
August 2020	-18.3%	-14.4%

Sources: USPS Financial Information (Unaudited) 2 (April 2020) [hereinafter Postal Service Unaudited Financial Information (Apr. 2020)], https://www.prc.gov/docs/113/113243/2020.5.26%20April%202020%20Monthly%20Financial%20Report%20 to%20the%20PRC.pdf; Postal Service Unaudited Financial Information (May 2020), supra note 12, at 2; Postal Service Unaudited Financial Information (June 2020), supra sources to Figure 3, at 2; Postal Service Unaudited Financial Information (Aug. 2020), supra sources to Figure 3, at 2; Postal Service Unaudited Financial Information (Aug. 2020), supra sources to Figure 3, at 2.

In April 2020, market-dominant products experienced a decline in output of 29.4 percent and a decline in revenue of 22.4 percent, relative to April 2019.³⁴ In May 2020, those declines were 28.8 percent for output and 22.9 percent for revenue, relative to May 2019.³⁵ In June 2020, July 2020, and August 2020, those declines were between 12.3 percent and 18.3 percent for output and between 10.3 percent and 14.8 percent for revenue, relative to the same months in 2019.³⁶

³² Id. (28.9 billion pieces per year – 16.5 billion pieces per year) ÷ 28.9 billion pieces per year = 42.9 percent.
33 See, e.g., COVID-19: How Cable's Internet Networks Are Performing: Metrics, Trends & Observations,

NCTA—The Internet & Television Association (Aug. 2020), https://www.ncta.com/COVIDdash-board.

³⁴ Postal Service Unaudited Financial Information (Apr. 2020), *supra* sources to Table 1, at 2.

³⁵ Postal Service Unaudited Financial Information (May 2020), *supra* note 12, at 2.

³⁶ Postal Service Unaudited Financial Information (June 2020), *supra* note 12, at 2; Postal Service Unaudited Financial Information (July 2020), *supra* sources to Figure 3, at 2; Postal Service Unaudited Financial Information (Aug. 2020), *supra* sources to Figure 3, at 2.

B. Increasing Revenue from Competitive Products (Particularly Packages)

In stark contrast to this long-term decline in demand for the market-dominant products of the Postal Service, demand for its competitive products increased significantly over this time period, as Table 2 reports.

Table 2. The Increase, During Selected Months in 2020, in Output and Revenue of Competitive Products, Relative to the Same Months in 2019

	Change in Output, Relative to the Same Month in 2019, of Competitive Products	Change in Revenue, Relative to the Same Month in 2019, of Competitive Products
April 2020	34.9%	36.9%
May 2020	61.2%	55.6%
June 2020	71.3%	67.6%
July 2020	50.6%	46.5%
August 2020	39.4%	40.0%

Sources: Postal Service Unaudited Financial Information (Apr. 2020), supra sources to Table 1, at 2; Postal Service Unaudited Financial Information (May 2020), supra note 12, at 2; Postal Service Unaudited Financial Information (June 2020), supra note 12, at 2; Postal Service Unaudited Financial Information (July 2020), supra sources to Figure 3, at 2; Postal Service Unaudited Financial Information (Aug. 2020), supra sources to Figure 3, at 2.

In April 2020, competitive products experienced an increase in output of 34.9 percent and an increase in revenue of 36.9 percent, relative to April 2019.³⁷ In May 2020, those increases were 61.2 percent for output and 55.6 percent for revenue, relative to May 2019.³⁸ In June 2020, those increases were 71.3 percent for output and 67.6 percent for revenue, relative to June 2019.³⁹ In July 2020, those increases were 50.6 percent for output and 46.5 percent for revenue, relative to July 2019.⁴⁰ And in August 2020, those increases were 39.4 percent for output and 40.0 percent for revenue, relative to August 2019.⁴¹

Figure 4 shows the long-term decline in revenue recorded for market-dominant products and the long-term increase in revenue recorded for competitive products from 2012 through June 2020.

³⁷ Postal Service Unaudited Financial Information (Apr. 2020), *supra* sources to Table 1, at 2.

³⁸ Postal Service Unaudited Financial Information (May 2020), *supra* note 12, at 2.

³⁹ Postal Service Unaudited Financial Information (June 2020), *supra* note 12, at 2.

⁴⁰ Postal Service Unaudited Financial Information (July 2020), *supra* sources to Figure 3, at 2.

⁴¹ Postal Service Unaudited Financial Information (Aug. 2020), *supra* sources to Figure 3, at 2.

2020

Competitive Products

0.0

2012

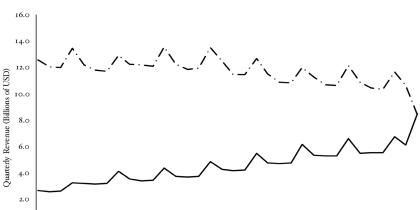


Figure 4. Quarterly Revenue from the Sale of Market-Dominant Products and Competitive Products, 2010–2019

Note: This figure reports data collected from 34 quarterly reports that the Postal Service filed with the Postal Regulatory Commission for the period from January 2012 through June 2020. See, e.g., Quarter 3 Fiscal Year 2020 Revenue, Pieces, and Weight Report, supra note 11, at 1.

Total Market Dominant

2016

For the month of April 2019, the Postal Service's revenue from domestic competitive products was \$1.9 billion, which was about 32.4 percent of the Postal Service's total domestic and international revenue from all products of \$5.9 billion.⁴² One year later in April 2020, after domestic market-dominant revenue had fallen by more than 20 percent and domestic revenue from competitive products had increased by more than 35 percent compared with April 2019, the total revenue derived from domestic competitive products—\$2.6 billion—constituted 46.1 percent of the Postal Service's total domestic and international revenue of \$5.7 billion.⁴³ By May 2020, revenue from domestic competitive products had grown to \$2.9 billion, which was 48.7 percent of the Postal Service's total revenue in May 2020 of \$6.0 billion.⁴⁴

That is, as of May 2020, domestic competitive products had begun to generate nearly 50 percent of the Postal Service's total revenue. Moreover, *more than half* of the Postal Service's total revenue in May 2020 came from domestic and international competitive products. If one disaggregates international revenue into market-dominant and competitive categories, then, for the first time in the Postal Service's history, in May 2020, competitive

⁴² Postal Service Unaudited Financial Information (Apr. 2020), *supra* sources to Table 1, at 2. That is, $\$1,913,342 \div \$5,910,329 = 32.4$ percent.

⁴³ *Id.* That is, \$2,619,066 ÷ \$5,686,114 = 46.1 percent.

⁴⁴ Postal Service Unaudited Financial Information (May 2020), *supra* note 12, at 2. That is, $$2,934,168 \div $6,025,474 = 48.7$ percent.

revenue had begun to exceed total market-dominant revenue.⁴⁵ This pattern continued in June 2020. Although domestic competitive revenue fell slightly in July 2020 and August 2020, the share of the Postal Service's revenue from competitive products remained close to 50 percent.

Table 3 disaggregates international revenue into market-dominant and competitive categories and aggregates revenue by category across the domestic and international categories.

Month in 2020	Domestic Market Dominant [A]	Domestic Competitive [B]	International Market Dominant [C]	International Competitive [D]	Share Competitive [E] = ([B] + [D]) ÷ ([A] + [B] + [C] + [D])
April	\$2,956.14	\$2,619.07	\$10.67	\$100.24	47.82%
May	\$2,897.40	\$2,934.17	\$15.71	\$178.20	51.65%
June	\$2,922.18	\$2,819.99	\$10.85	\$174.05	50.51%
July	\$3,237.82	\$2,725.24	\$13.06	\$184.13	47.23%
August	\$3,155.92	\$2,606.23	\$14.02	\$185.31	46.83%

Table 3. U.S. Postal Service Revenue by Product Type (Millions), Selected Months in 2020

Sources: Postal Service Unaudited Financial Information (Apr. 2020), supra sources to Table 1, at 2; Postal Service Unaudited Financial Information (May 2020), supra note 12, at 2; Postal Service Unaudited Financial Information (June 2020), supra note 12, at 2; Postal Service Unaudited Financial Information (June 2020), supra note 12, at 2; Postal Service Unaudited Financial Information (July 2020), supra sources to Figure 3, at 2; Postal Service Unaudited Financial Information (Aug. 2020), supra sources to Figure 3, at 2.

Table 3 indicates that the share of total Postal Service revenue that competitive products contributed approached or exceeded 50 percent on a month-to-month basis during the COVID-19 pandemic.

C. The Christmas Spike in Demand for Competitive Products

The empirical observation that is most comparable to the observed increase in e-commerce package deliveries during the COVID-19 pandemic is the increase in demand for competitive products (relative to the level of demand during the preceding months of the calendar year) typically observed during the Christmas season. Demand for the competitive products of the Postal Service consistently peaks in December of each calendar year. For example, in December 2019, competitive product volume exceeded the volume from

⁴⁵ Competitive revenue in May 2020 was \$2.934 billion compared with market-dominant revenue of \$2.897 billion. *Id.* The Postal Service's unaudited financial information reports revenue from market-dominant products, competitive products, and international products. If one sums international market-dominant revenue in May 2020 (which was \$15.71 million) and reported market-dominant revenue, and if one sums international competitive revenue in May 2020 (which was \$178.20 million) and reported competitive revenue, then revenue from competitive products exceeded 50 percent of the Postal Service's total revenue from January 2020 through May 2020. *Id.*

April 2019 by nearly 50 percent. 46 Figure 4 above illustrates, for 2012 through 2019, the annual oscillation of demand that produces the Christmas spike for both market-dominant products and competitive products.

In April, May, and June 2020, the Postal Service's volume of shipping and package delivery increased approximately 50 percent over the same period in 2019, from approximately 1.4 billion units to 2.1 billion units.⁴⁷ Revenue increased by more that 50 percent, from \$5.4 billion to \$8.3 billion.⁴⁸ The revenue increase from packages was large enough to offset decreasing revenue from first-class mail, marketing mail, international products, and other products and services, such as post office box rentals and insurance.⁴⁹ In total, the Postal Service's revenue increased in this period from 2019 to 2020 by \$553 million.50

D. Postal Cost Increases During the COVID-19 Pandemic

As we shall see in Part III, despite its increasing total revenue, the Postal Service's controllable loss increased by \$467 million for the three months ending June 30, 2020 compared with the same period in 2019.51 The controllable loss was \$1.5 billion from April 2020 through June 2020, compared with \$1.1 billion from April 2019 through June 2019.52 That is, although total revenue increased by approximately \$500 million from April 2020 to June 2020 compared with the same three-month period in 2019, controllable costs (which were not exclusively peculiar to the COVID-19 pandemic) increased by more than \$1 billion (that is, \$553 million plus \$467 million). Consequently, incremental controllable *costs* appeared to be approximately twice as high as incremental revenues recognized from April 2020 to June 2020.

⁴⁶ See USPS Financial Information (Unaudited) 2 (Apr. 2019) [hereinafter Postal Service Unaudited Financial Information (Apr. 2019)], https://www.prc.gov/docs/109/109186/2019.5.24%20April%20 2019%20Monthly%20Financial%20Report%20to%20the%20PRC.pdf (reporting the volume of total domestic competitive products during April 2019 as 444,277,000 pieces); USPS Financial Information (Unaudited) 2 (Dec. 2019) [hereinafter Postal Service Unaudited Financial Information (Dec. 2019)], https://www.prc.gov/docs/112/112293/2020.2.6%20December%202019%20Monthly%20Financial%20 Report%20to%20the%20PRC.pdf (reporting the volume of total domestic competitive products during December 2019 as 664,016,000 pieces). Thus, 664,016,000 pieces ÷ 444,277,000 pieces = 149.45 percent.

⁴⁷ U.S. Postal Service 10-Q (June 30, 2020), *supra* note 24, at 35.

⁴⁹ *Id*.

 $^{^{50}}$ *Id.* That is, \$17.639 billion in 2020 – \$17.083 billion in 2019 = \$553 million.

⁵¹ *Id.* at 34.

⁵² Id. From both April 2019 through June 2019 and April 2020 through June 2020, the Postal Service identified the same amount of controllable cost, \$333 million, arising from "Retiree Health Benefits Normal Cost." Postal Service Unaudited Financial Information (Apr. 2020), supra sources to Table 1, at 3; Postal Service Unaudited Financial Information (May 2020), supra note 12, at 3; Postal Service Unaudited Financial Information (June 2020), supra note 12, at 3.

E. The Persistence of Cost and Volume Patterns Observed During the COVID-19 Pandemic

Declining retail sales by brick-and-mortar companies and increasing e-commerce package deliveries had already become the new norm before the COVID-19 pandemic.⁵³ The pandemic accelerated the decline in first-class mail volume and the growth in package volume, and there is no indication that this trend will end once the disruption from the COVID-19 pandemic eventually subsides. The Postal Service has recognized that the cost and volume patterns observed during the COVID-19 pandemic will likely persist even when the pandemic has receded.⁵⁴ The decrease in first-class mail volume and the increase in package volume are consistent with longer-term trends and the observed evolution of the mail mix. Analysis of the Postal Service's costs and revenues for ratemaking purposes must recognize this changing mix in the demand for the Postal Service's products.

III. THE APPROPRIATE SHARE
OF INSTITUTIONAL COSTS TO BE BORNE
BY COMPETITIVE PRODUCTS
AFTER THE COVID-19 PANDEMIC

Pursuant to the appropriate share rulemaking that the PRC concluded in January 2019, RM2017-1, competitive products of the Postal Service need to contribute only 8.8 percent to the recovery of institutional costs. In other words, the PRC determined that the Postal Service was obligated to price its competitive products such that they would generate enough free cash flow to pay for not less than 8.8 percent of the Postal Service's institutional costs. Yet, by May and June 2020, more than *half* of the Postal Service's total revenue came from its sale of competitive products.

In April 2020, the U.S. Court of Appeals for the D.C. Circuit found the PRC's appropriate share order "largely incomprehensible," and the court remanded the case to the agency for further consideration.⁵⁶ In an opinion by Judge Harry Edwards, the D.C. Circuit ruled that the PRC had erred in

⁵³ See, e.g., Derek Thompson, What in the World Is Causing the Retail Meltdown of 2017?, ATLANTIC (Add. 10, 2017).

⁽Apr. 10, 2017).

54 See, e.g., Postal Service Delivery Vehicle Acquisition Strategy Audit Report, supra note 10, at 1.

⁵⁵ Order Adopting Final Rules Relating to the Institutional Cost Contribution Requirement for Competitive Products at 28 tbl.III-1, No. 4963, Dkt. No. RM2017-1 (P.R.C. Jan. 3, 2019) [hereinafter PRC, 2019 Appropriate Share Order], https://www.prc.gov/docs/107/107901/Order4963.pdf, remanded for further consideration by United Parcel Serv., Inc. v. PRC, 955 F.3d 1038 (D.C. Cir. 2020).

⁵⁶ UPS v. PRC, 955 F.3d at 1042 (quoting U.S. Postal Serv. v. PRC, 785 F.3d 740, 753 (D.C. Cir. 2015)).

assuming the absence of instructional costs "uniquely or disproportionately associated with competitive products." 57

If one applies the cost estimates typically observed only during Christmas peaks to the sustained period of increased demand for e-commerce package deliveries that has been observed during the COVID-19 pandemic, the need for accurate and realistic estimates of the costs of e-commerce package deliveries becomes apparent. For example, during peak periods, city carrier compensation increases, overtime costs increase, and temporary hires increase. The Postal Service and the PRC typically assert that economies of scale and scope are present in e-commerce package deliveries. Yet, those economies of scale and scope start to vanish as increasing demand requires new capital expenditures, such that new fixed costs must be spread across those deliveries. It appears as of this writing, in November 2020, that the Postal Service has hit that capacity constraint. Consequently, any regulatory tool that assumes persistent, unexhausted economics of scale and scope will be inadequate to evaluate the true behavior of the Postal Service as it approaches its true capacity constraints.

Institutional costs increase as e-commerce package deliveries increase, but only a small proportion of those cost increases is currently required by statute or by regulation to be covered specifically by package revenue. The institutional-cost-recovery burden imposed on market-dominant products will become too great for those products to cover.

Any analysis of the effect of the COVID-19 pandemic must examine not only the pandemic's direct costs, which are less likely to recur unless another pandemic happens, but also the pandemic's indirect costs, which will recur as the Postal Service's product mix evolves. That is, even if certain costs decline as the pandemic recedes, the costs of increased e-commerce package deliveries are likely to persist.

⁵⁷ *Id.* at 1050 (quoting 39 U.S.C. § 3363(a)(2)).

⁵⁸ See, e.g., Postal Service Unaudited Financial Information (Dec. 2019), supra note 46, at 3–4; see also U.S. Postal Service, Office of Inspector General, RISC Report 1–2 (2019), https://www.uspsoig.gov/sites/default/files/document-library-files/2019/RISC-WP-20-001.pdf.

⁵⁹ See, e.g., Order Concerning United Parcel Service, Inc.'s Proposed Changes to Postal Service Costing Methodologies (UPS Proposals One, Two, and Three) at 55, Dkt. No. RM2016-2 (PRC Sept. 9, 2016), https://www.prc.gov/docs/97/97114/Order3506.pdf ("[T]he Postal Service exhibits economies of scale and scope[.]"); Initial Comments of the United States Postal Service at 16 n.43, Dkt. No. RM2017-1 (PRC Jan. 23, 2017), https://www.prc.gov/docs/98/98758/Initial%20Comments%20Public_Redacted.pdf; Initial Comments of the United States Postal Service on UPS Proposals One and Two at 14, Dkt. No. RM2016-2 (PRC Jan. 25, 2016), https://www.prc.gov/docs/94/94809/Initial.Comments.Prop.1.2.pdf ("[T]he Postal Service is subject to economies of scale, density, and scope[.]"); see also John C. Panzar, The Role of Costs for Postal Regulation 10 (2014), http://www.prc.gov/sites/default/files/reports/J%20Panzar%20Final%20 093014.pdf; John C. Panzar, Protecting the Package Delivery Market and the Economy from Distortions Resulting from Fully Distributed Cost Pricing 1 (Oct. 2020) ("The Postal Service has earned substantial profits serving [its] growing package business. It is able to do so because of the economies of scope between its letter and package delivery services that allow it to realize cost efficiencies in delivering mail and packages together."); cf. J. Gregory Sidak, Why Should the Postal Service Deter Amazon's Competitive Entry into Last-Mile Parcel Delivery?, 2 Criterion J. On Innovation 101, 115–16 (2017).

A. The Direct Effects of the COVID-19 Pandemic on Postal Costs

The COVID-19 pandemic has increased the Postal Service's costs of providing both market-dominant products and competitive products. For the three months ending on March 31, 2020, the Postal Service reported an increase in controllable costs of \$348 million compared with the same period in 2019.60 The majority of that period preceded the issuance of stay-at-home orders, which substantially increased the demand for e-commerce package deliveries.

The Postal Service reported that, from April 2020 through June 2020, relative to the same period in 2019, its compensation and benefits costs increased by \$632 million, in part owing to increases in paid sick leave attributed to the pandemic.⁶¹ Similarly, relative to the same period in 2019, transportation expenses increased by nearly 11 percent, "driven by an increase in air transportation costs resulting from the surge in Shipping and Packages volumes and a shift from commercial carriers to chartered air carriers due to the reduction in commercial flights associated with the COVID-19 pandemic[.]"62

Relative to April 2019, total unit volume of the Postal Service in April 2020 fell by 27.2 percent, and its total revenue fell by 3.8 percent. ⁶³ Yet, controllable personnel expenses increased by 2.9 percent, and controllable non-personnel expenses increased by 4.1 percent despite substantial decreases in fuel costs.64 In May 2020, the pattern continued. Total unit volume fell by 25.4 percent relative to May 2019, and revenue increased by 3.3 percent. ⁶⁵ Yet, controllable personnel expenses increased by 2.5 percent, and controllable non-personnel expenses increased by 7.4 percent despite significant decreases in fuel costs.⁶⁶ In June 2020, total unit volume fell by 9.0 percent relative to June 2019, and revenue increased by 11.0 percent.⁶⁷ Yet, controllable personnel expenses increased by 9.2 percent, and controllable non-personnel expenses increased by 10.7 percent, again despite significant decreases in fuel costs.⁶⁸

That is, in each of April, May, and June of 2020, the Postal Service paid more money to deliver fewer units of mail with relatively flat revenue across April 2020 and May 2020 and an 11-percent increase in revenues in June 2020.

⁶⁰ Press Release, U.S. Postal Service, U.S. Postal Service Reports Second Quarter Fiscal 2020 Results (May 8, 2020), https://about.usps.com/newsroom/national-releases/2020/0508-usps-reports-secondquarter-fiscal-2020-results.htm.

⁶¹ U.S. Postal Service 10-Q (June 30, 2020), supra note 24, at 32.

⁶³ Postal Service Unaudited Financial Information (Apr. 2020), supra sources to Table 1, at 2.

⁶⁵ Postal Service Unaudited Financial Information (May 2020), supra note 12, at 2.

⁶⁷ Postal Service Unaudited Financial Information (June 2020), supra note 12, at 2.

B. Institutional Costs Apparently Borne by Competitive Products

Substantial evidence indicates that the minimum share of institutional costs that the Postal Service allocates to competitive products for recovery is implausibly low. At least four categories of costs merit the attention of policymakers.

The first category is overtime costs. The Postal Service's Office of Inspector General reported that the Postal Service's overtime costs in its 2019 fiscal year exceeded \$5 billion.⁶⁹ In a 2020 audit report, the Office of Inspector General found that, "[a]lthough package volume grew, overtime costs and hours trended upward and consistently exceeded their planned overtime budgets from FY 2014 to FY 2019, despite declining mail volume and increased employee levels."⁷⁰ Figure 5 reproduces the trend lines that the Office of Inspector General published in its 2020 audit report.

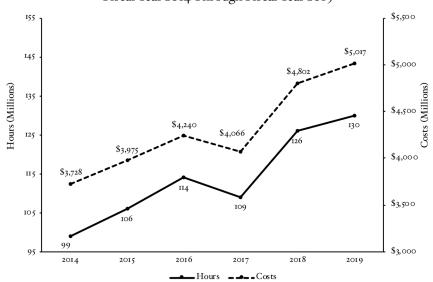


Figure 5. The Postal Service's Overtime Costs and Hours, Fiscal Year 2014 Through Fiscal Year 2019

Source: Office of Inspector General, United States Postal Service, Audit Report: Assessment of Overtime Activity, supra note 69, at 4 fig.i.

The Office of Inspector General thus appeared to suggest that the principal cause of the Postal Service's incremental overtime costs in and around 2019 was package-delivery services. To the extent that the Postal Service attributed a substantial share of its overtime costs during that time period

⁶⁹ Office of Inspector General, United States Postal Service, Audit Report: Assessment of Overtime Activity 4 fig.1 (Aug. 25, 2020), https://www.uspsoig.gov/sites/default/files/document-library-files/2020/20-209-R20.pdf.

⁷⁰ *Id.* at 6.

to market-dominant products (whose volume is decreasing) as opposed to its competitive products (whose volume is increasing), the Postal Service was likely (1) underreporting the overtime costs that package deliveries cause and thus (2) overstating any "profits" supposedly earned from package deliveries.

The second, third, and fourth cost categories concern specific measures of carrier cost attribution and vehicle cost attribution in the Postal Service's 2019 fiscal year:

- The Postal Service attributed only 8.7 percent of its approximately \$16.8 billion in city carrier costs to packages but more than 51 percent of those same costs to institutional costs.⁷¹
- The Postal Service attributed a mere 11.2 percent of its approximately \$8.5 billion in rural carrier costs to packages but 64.1 percent of those same costs to the institutional cost category.⁷²
- The Postal Service attributed only 15.7 percent of its vehicle depreciation costs to packages.⁷³

How plausible were those disparately low measures of cost attribution when, during the same period of time, the Postal Service reported that (I) the revenues from competitive products nearly equaled the revenues from market-dominant products⁷⁴ and (2) the total weight of competitive products nearly equaled the total weight of market-dominant products that the Postal Service delivered?⁷⁵ Put differently, how confident should we be in the Postal Service's reporting of the profitability of its package-delivery services in fiscal year 2019? If the Postal Service does invest \$6 billion in LLVs that are optimized for an increasing volume of package deliveries and a decreasing volume of first-class mail, can we expect the Postal Service to begin to attribute its vehicle depreciation costs in a faithful manner?

The implausibly low share of costs that the Postal Service attributed to competitive products strongly suggests that competitive products are not nearly so "profitable" as the Postal Service portrays them to be. If the Postal Service were to calibrate its cost attribution practices to indicate more plausibly the incremental costs of competitive products, would policymakers observe incremental costs of competitive products that exceed their

⁷¹ U.S. Postal Service, Public Cost Segments and Components, Fiscal Year 2019 tab CSSummary (2020).

⁷² *Id*.

⁷³ *Id.* tab CS20.

⁷⁴ See supra Figure 4 and accompanying text.

⁷⁵ U.S. Postal Service, Revenue, Pieces, and Weight FY 2019, at 2 (2020), https://about.usps.com/what/financials/revenue-pieces-weight-reports/fy2019.pdf (reporting that the weight in fiscal year 2019 of items in the "Total Market Dominant Mail" service category was 12,922,509,000 pounds); *id.* at 3 (reporting that the weight in fiscal year 2019 of items in the "Total Competitive Mail" service category was 11,629,246,000 pounds).

incremental revenues, such that competitive products would be seen to be incrementally *un*profitable?

C. The Indirect Effects of COVID-19 on Postal Costs

We saw that postal costs increased and unit volume decreased from the spring of 2019 to the spring of 2020. An important factor in this change is the Postal Service's evolving product mix. As its product mix changes, the Postal Service's costs are surely changing.

1. Package Volume and Weight

Packages consume far more cubic space in every stage of the postal network than do letters. Packages are also heavier per piece than letters. For example, from January 1, 2020 through March 31, 2020, the Postal Service delivered 14.3 billion pieces of first-class mail that weighed a total of 712.9 million pounds, and 32.5 billion total pieces of market-dominant products weighing 2.9 billion pounds. Over this time period, the Postal Service also delivered 1.5 billion pieces of competitive products that weighed a total of 3.2 billion pounds. Table 4 reports the total pieces of mail, the total weight of mail, and the average weight per piece for the first half of 2020.

Table 4. U.S. Postal Service Pieces, Weight, and Average Weight, First Half of 2020

	January 2020–March 2020			April 2020–June 2020		
	Pieces (Millions)	Weight (Millions of Pounds)	Average Weight (Pounds)	Pieces (Millions)	Weight (Millions of Pounds)	Average Weight (Pounds)
First Class	14,256	713	0.050	12,042	608	0.050
Market Dominant	32,540	2,867	0.088	24,486	2,195	0.090
Competitive	1,472	3,200	2.174	2,085	4,123	1.977
Total	34,013	6,067	0.178	26,570	6,318	0.238

Sources: Quarter 2 Fiscal Year 2020 Revenue, Pieces, and Weight Report, supra note 76, at 1–3, 5; https://about.usps.com/what/financials/revenue-pieces-weight-reports/fy2020-q3.pdf; Quarter 3 Fiscal Year 2020 Revenue, Pieces, and Weight Report, supra note 11, at 1–3, 5.

Note: Market-dominant totals include first-class mail. Total pieces and weight might not precisely match the sum of market-dominant and competitive products, owing to rounding each value to the nearest million units.

⁷⁶ Preliminary Revenue, Pieces, and Weight by Classes of Mail and Special Services for Quarter 2 Fiscal Year 2020 (Jan. 1, 2020—Mar. 31, 2020) Compared with the Corresponding Period of Fiscal Year 2019, at 1–2, https://about.usps.com/what/financials/revenue-pieces-weight-reports/fy2020-q2.pdf [hereinafter Quarter 2 Fiscal Year 2020 Revenue, Pieces, and Weight Report].

⁷⁷ Id. at 3.

In both quarters, the average weight per piece of the first-class mail and of market-dominant mail as a whole did not change substantially. The average weight per piece of competitive products did decrease by slightly less than 0.2 pounds per piece, or about 9 percent of the average weight from January 2020 through March 2020. Yet, as the mail mix changed, with declining market-dominant mail pieces and increasing competitive mail pieces, the total weight per piece increased.

2. The Number of Truck Rolls and the Per-Unit Costs of Letter Mail

If the increased demand for the Postal Service's e-commerce package deliveries increases the number of truck rolls required to deliver market-dominant products, then the Postal Service's per-unit costs of delivering those market-dominant products necessarily will increase. In other words, holding other factors constant, as the volume of the Postal Service's e-commerce package deliveries increases, its per-unit costs of letter mail could also increase.

Consider the following simplified example based on the 2020 measures of weight per piece presented above in Table 4. The Postal Service's current long-life vehicle has a cargo capacity of 1,000 pounds. Suppose that each LLV carries, on average, 1,000 pounds of products.⁷⁸ Market-dominant products each weigh 0.088 pounds on average, such that approximately 11.3 market-dominant products weigh a combined total of 1 pound on average, and competitive products each weigh 2 pounds on average. From January 2019 through March 2019, competitive products comprised approximately 44.3 percent of the combined total weight of market-dominant and competitive products delivered by the Postal Service.⁷⁹ In the same threemonth period in 2020, which occurred primarily before state governors began issuing lockdown orders in response to the COVID-19 pandemic, competitive products comprised approximately 52.8 percent of the combined total weight of market-dominant and competitive products. 80 And, from April 2020 through June 2020, when lockdown orders plainly were in effect, competitive products comprised approximately 65.3 percent of the combined total weight of market-dominant and competitive products.81

Consequently, in our example, a typical LLV carrying 1,000 pounds of Postal Service products could deliver 215 competitive products and

⁷⁸ It seems more likely that the cubic volume of packages represents the binding constraint on the cargo capacity of LLVs. However, volume per-piece data are not available.

⁷⁹ Quarter 2 Fiscal Year 2020 Revenue, Pieces, and Weight Report, *supra* note 76, at 3, 5. That is, 2,510,956 pounds ÷ 5,671,434 pounds = 44.3 percent.

⁸⁰ *Id.* That is, 3,200,128 pounds \div 6,067,082 pounds = 52.8 percent.

⁸¹ Quarter 3 Fiscal Year 2020 Revenue, Pieces, and Weight Report, *supra* note 11, at 3, 5. That is, 4,123,139 pounds ÷ 6,317,801 pounds = 65.3 percent.

6,364 market-dominant products (under the 2019 product mix);⁸² 265 competitive products and 5,340 market-dominant products (under the January 2020 through March 2020 product mix);⁸³ and 325 competitive products and 3,977 market-dominant products (under the April 2020 through June 2020 product mix).⁸⁴ In this example, 15.7 truck rolls would be required to deliver 100,000 market-dominant products (under the 2019 product mix);⁸⁵ 18.7 truck rolls would be required to deliver 100,000 market-dominant products (under the predominantly pre-pandemic-lockdown 2020 product mixes);⁸⁶ and, 25.1 truck rolls would be required to deliver 100,000 market-dominant products (under the pandemic-lockdown 2020 product mixes).⁸⁷

In this example, a mere 9-percentage-point increase in the share of weight dedicated to competitive products, from January 2019 through March 2019 to January 2020 through March 2020, increases the number of truck rolls on a given delivery route by 19.1 percent. 88 This effect intensifies following the more extreme changes in product mixes produced by the COVID-19 pandemic lockdown. The 12-percentage-point increase in the share of weight dedicated to competitive products, from January 2020 through March 2020 to April 2020 through June 2020, increases the number of truck rolls by 34.2 percent. 89 Moreover, this effect does not even consider other ways in which competitive product deliveries might be more expensive, such as the time required to carry the package to the recipient's doorstep or to acquire the recipient's signatures or to record the delivery on a handheld device, even if no signature is required. 90

In each scenario in the above example, the actual cost to the Postal Service of delivering the same 100,000 market-dominant products should not change. However, as the share of the mail flow dedicated to competitive products increases, the required number of truck rolls will increase. The costs of the truck's use, its driver's time, its fuel, its maintenance, its insurance, and so on will—mistakenly—primarily repose in the category of institutional

⁸² Quarter 2 Fiscal Year 2020 Revenue, Pieces, and Weight Report, *supra* note 76, at 1–3, 5. That is, 220 competitive products at 2 pounds per product weigh 440 pounds, and 6,364 market-dominant products at 0.088 pounds per piece weigh 560 pounds.

⁸³ *Id.* That is, ²⁶⁵ competitive products at ² pounds per product weigh ⁵³⁰ pounds, and ^{5,340} market-dominant products at 0.088 pounds per piece weigh ⁴⁷⁰ pounds.

⁸⁴ *Id.* That is, 325 competitive products at 2 pounds per product weight 650 pounds, and 3,977 market-dominant products at 0.088 pounds per piece weigh 350 pounds.

 $^{^{85}}$ That is, 100,000 market-dominant products \div 6,364 market-dominant products per LLV = 15.7 truck rolls.

 $^{^{86}}$ That is, 100,000 market-dominant products \div 5,340 market-dominant products per LLV = 18.7 truck rolls.

 $^{^{87}}$ That is, 100,000 market-dominant products \div 3,977 market-dominant products per LLV = 25.1 truck rolls.

⁸⁸ That is, (18.7 truck rolls – 15.7 truck rolls) ÷ 15.7 truck rolls = 19.1 percent.

 $^{^{89}}$ That is, (25.1 truck rolls – 18.7 truck rolls) + 18.7 truck rolls = 34.2 percent.

⁹⁰ To the extent that items classified as market-dominant products increasingly advertise and stimulate demand for e-commerce products, the likelihood will tend to increase that the Postal Service will later deliver an e-commerce package to the same recipient of that market-dominant (advertising) mail.

costs, which currently are disproportionately covered by market-dominant products. Although the stand-alone costs of those market-dominant products do not change, the total amount of institutional costs that must be covered by those products is increasing.

3. Economies of Density

E-commerce package deliveries require more carriers, more city carrier office time, larger trucks, and more truck rolls—all because of the far greater cubic volume of packages than letters. Increased package unit volume (and increased cubic volume moving through the postal network) suggests that each truck and each carrier can visit *fewer* delivery points per trip. The cost of visiting each delivery point on a given route is greater when that task is spread over ten LLVs than when it is spread over two LLVs. The ballooning cost is most vivid when one imagines multiple LLVs passing the very same delivery point on the very same day.

In this respect, more e-commerce package deliveries increase the Postal Service's costs of providing market-dominant products. Our example indicates that, as the scale of e-commerce package deliveries grows, institutional costs grow, and the total costs that must be covered by market-dominant products grow. In addition to this perverse outcome resulting from the allowed rate design of the Postal Service, to the extent that there is an increase in new shared costs (in particular, extra truck rolls), there could be diseconomies of scale within the current delivery network. That is, in the short run, there might be diseconomies of scale during peak seasons.

This insight is not new. In 1996, Daniel Spulber and I observed that "the volumetric limits of a mail truck, as well as the weight and volumetric limits of a postman's mail bag, imply *decreasing* returns to scale when the quantity of mail being delivered to a neighborhood reaches a certain level."⁹¹ In the long run, even if adjustments to the delivery network can mitigate the diseconomies of scale, the cost-accounting system used by the Postal Service and countenanced by the PRC could continue to burden market-dominant products with increased cost coverage as the output of competitive products increases.

The Postal Service is losing more money as demand for its package deliveries spikes and demand for its market-dominant services falls. Direct costs of the COVID-19 pandemic and indirect costs from the change in the product mix of the Postal Service must be absorbed either by its customers or by taxpayers generally.

⁹¹ SIDAK & SPULBER, PROTECTING COMPETITION FROM THE POSTAL MONOPOLY, *supra* note 3, at 49 (emphasis in original).

D. Maximizing Profits (or Minimizing Losses) from Competitive Products

The Postal Service has failed to break even in any year in the decade preceding 2020. What further evidence is required to prove conclusively that its business model is dysfunctional? Although, on a cash-flow basis, the Postal Service has managed to survive until 2020, its finances have deteriorated as its unit volume of packages has increased. In particular, the incremental cost of those additional e-commerce package deliveries exceeds their incremental revenue. Nevertheless, the Postal Service notes that revenues from mail services, "its most profitable revenue stream," are declining, while revenues from packages—"its most labor-intensive revenue stream," which "produces a lower contribution margin per piece"—have increased.⁹² Is that "lower contribution margin" actually negative?

On August 7, 2020, Postmaster General Louis DeJoy bluntly summarized the Postal Service's financial condition:

Our financial position is dire, stemming from substantial declines in mail volume, a broken business model and a management strategy that has not adequately addressed these issues. As a result, the Postal Service has experienced over a decade of financial losses, with FY 2019 approaching \$9 billion and 2020 closing in on \$11 billion in losses. Without dramatic change, there is no end in sight, and we face an impending liquidity crisis. 93

As stated in its SEC Form 10-Q on June 30, 2020, "the Postal Service expects that its liquidity may worsen." 94

As we saw in Part II.D, the Postal Service recorded revenues in the second quarter of 2020 that exceeded by approximately \$500 million its revenues recorded in the second quarter of 2019. Yet, the Postal Service recorded costs in the second quarter of 2020 that exceeded its costs in the second quarter of 2019 by more than \$1 billion. The increased year-over-year revenues of the Postal Service did not come close to covering its increased year-over-year costs. This year-over-year pattern mimics the changes in costs and revenues that the Postal Service typically has experienced during the annual Christmas peak in e-commerce package deliveries.

1. Attributable Costs

The observation that the Postal Service is running incremental losses on increased levels of e-commerce package deliveries is consistent with the

⁹² U.S. Postal Service 10-Q (June 30, 2020), *supra* note 24, at 10-11.

⁹³ Press Release, U.S. Postal Service, Postmaster General Louis DeJoy's Opening Remarks for the USPS Board of Governors Aug. 7 Meeting 2 (Aug. 7, 2020), https://about.usps.com/newsroom/national-releases/2020/0807-pmg-bog-meeting-comments.pdf.
94 U.S. Postal Service 10-Q (June 30, 2020), *supra* note 24, at 11.

conjecture in the scholarly literature on regulation that the Postal Service is not maximizing profit on the sale of its competitive products. ⁹⁵ Even if packages currently are not profitable in the aggregate, a gradual process of discovering the profit-maximizing prices for e-commerce package deliveries would eventually reveal the loss-minimizing prices for those products. ⁹⁶ If packages are in fact not profitable at *any* price, the profit-maximizing price-discovery process would advise the management of the Postal Service to increase its price of e-commerce package delivery until its quantity demanded fell to zero, which would eliminate any losses.

Arguments that the Postal Service is not really losing money on its provision of competitive products typically rely on the application of the attributable costs test, which requires that individual competitive products (and any sets of competitive products) cover their attributable costs. ⁹⁷ However, this analysis rests on a false comparison. That competitive products cover their attributable costs (as that term or art is defined by statute or regulation) is not substantial evidence that those products are truly profitable as an economic matter; much less is it substantial evidence that the Postal Service has succeeded in *maximizing* profit from its sale of those competitive products. For example, from November 2018 to December 2018, total competitive revenues increased by approximately \$598 million. ⁹⁸ Yet, despite market-dominant revenue having fallen, postal salaries and benefits increased by \$307 million, and non-personnel operating costs increased by \$227 million. ⁹⁹

With the Postal Service making fewer market-dominant deliveries, one would expect its costs to decrease. Yet, to the contrary, those costs have

⁹⁵ See, e.g., Sidak, Maximizing the U.S. Postal Service's Profits from Competitive Products, supra note 3, at 645–55; David E.M. Sappington & J. Gregory Sidak, Competition Law for State-Owned Enterprises, 71 Antitrust L.J. 479, 499–502 (2003).

⁹⁶ See Sidak, Maximizing the U.S. Postal Service's Profits from Competitive Products, supra note 3, at 647 ("The price for competitive products that minimizes the Postal Service's net losses is also the profit-maximizing price. That result eventuates because maximizing the difference between revenues and costs when the firm is making positive profits produces the same 'first-order conditions' for pricing—that is, the mathematical conditions that the price must satisfy—as does minimizing the difference between costs and revenue when the firm is operating at a loss.").

⁹⁷ See, e.g., United Parcel Serv, Inc. v. PRC, 955 F.3d 1038, 1041 (D.C. Cir. 2020) ("[Section] 3633(a)(2) only requires the [Postal Regulatory] Commission to 'ensure that each competitive product covers its costs attributable.' The term costs attributable is narrowly defined as 'the direct and indirect postal costs attributable to [a particular competitive] product through reliably identified causal relationships.' However, it is not at all clear that 'uniquely or disproportionately associated' costs described under § 3633(b) include only those costs that are attributable 'through reliably identified causal relationships.' And § 3633(b) makes it clear that 'the Commission shall consider . . . the degree to which any costs are uniquely or disproportionately associated with any competitive products.") (third and fourth alterations in original) (emphasis in original) (citations omitted) (first quoting 39 U.S.C. § 3363(a)(2); and then quoting 39 U.S.C. § 3631(b)).

⁹⁸ See USPS Financial Information (Unaudited) 2 (Nov. 2019), https://www.prc.gov/docs/111/111520/2019.12.23%20November%202019%20Monthly%20Financial%20Report%20to%20 the%20PRC.pdf [hereinafter Postal Service Unaudited Financial Information (Nov. 2019)]; Postal Service Unaudited Financial Information (Dec. 2019), supra note 46, at 2.

⁹⁹ Postal Service Unaudited Financial Information (Nov. 2019), *supra* note 98, at 3; Postal Service Unaudited Financial Information (Dec. 2019), *supra* note 46, at 3.

increased by more than revenues from competitive products have increased. A similar pattern emerged in 2019. When we compare November revenues and costs to December revenues and costs for 2019, we observe that, although competitive revenue increased by \$1.021 billion, salaries and benefits increased by \$750 million, and other operating non-personnel expenses increased by \$540 million.¹⁰⁰ Although total market-dominant revenue did slightly rise over that same period, its increase of \$81.3 million was too small to make the Postal Service incrementally profitable in its busiest month of the year.¹⁰¹

2. Incremental Profit

The Postal Service cannot maximize the profits from its incremental provision of competitive products without first correctly measuring its profits from the sale of those products. To do so requires, for a given interval of time, subtracting the incremental costs of competitive products from their incremental revenues. I have previously discussed incremental costs, how they differ from decremental costs, and how the Postal Service should allocate its shared or common costs for purposes of properly applying the PAEA's statutory requirements.¹⁰²

The same principles apply when identifying the Postal Service's incremental profits. The incremental costs of existing competitive products are not the difference between the total costs including those existing products and the total costs if those products are excluded; that difference would measure the decremental costs of competitive products. 103 Instead, one must identify the difference between the Postal Service's total costs when providing competitive products and its total costs if the Postal Service had not offered competitive products at all. That measure of incremental cost is necessary to identify the incremental profit that the Postal Service earns on its provision of competitive products, even where that incremental cost might vary from statutorily measured costs. That measure of costs will include direct costs of competitive products, such as the additional fuel or driver time necessary to carry a package or receive a signature acknowledging a delivery. It will also include indirect costs, such as the costs of additional truck rolls, as we saw in the example in Part III.C.2. This measure will include costs that currently enter into the Postal Service's cost-accounting analysis as institutional costs, as the provision of competitive products might require the Postal Service's

¹⁰⁰ Postal Service Unaudited Financial Information (Nov. 2019), *supra* note 98, at 2–3; Postal Service Unaudited Financial Information (Dec. 2019), *supra* note 46, at 2–3.

¹⁰¹ Postal Service Unaudited Financial Information (Nov. 2019), supra note 98, at 3; Postal Service Unaudited Financial Information (Dec. 2019), supra note 46, at 3.

Sidak, Maximizing the U.S. Postal Service's Profits from Competitive Products, supra note 3, at 621–28.
 Id. at 628.

additional investment in network infrastructure or increased variable costs associated with the increasing number of truck rolls necessary to deliver packages along with market-dominant products.

Note that, although this measure of incremental costs would likely exceed those measures currently used by the Postal Service or the PRC in the application of the PAEA, this measure of incremental costs is still likely to be conservative. It will not value the degree to which the Postal Service's provision of competitive products degrades the quality of market-dominant products, and it will not include the opportunity cost of the Postal Service's investments in infrastructure to provide those competitive products.

To identify the incremental profits of the Postal Service's competitive products accurately, one must accurately calculate the incremental costs of those products. That calculation requires identifying what would be the Postal Service's costs of providing only market-dominant products.

3. The Postal Service's Solvency Under Various Costing Tests

Whether the Postal Service's prices for package delivery satisfy the attributable cost standard is a question of law under the PAEA. But the answer to that legal question does not answer the economic question of whether the Postal Service's pricing of e-commerce package delivery will enable the enterprise to be financially solvent. In my experience many incorrectly contend that, by satisfying the requirements of the PAEA, the Postal Service earns a profit from its provision of competitive products. No one to my knowledge has purported to argue that the Postal Service is actually maximizing its profits from its provision of competitive products.

As the volume of and revenue from market-dominant mail decline, packages are an increasing share of the Postal Service's business. The Postal Service claimed in 2019: "We do not receive tax dollars for operating expenses and rely solely on the sale of postal products and services to fund our operations." However, in the debate over supporting the Postal Service during the COVID-19 pandemic, few policymakers seem concerned with that preexisting standard created by the PAEA.

Marginal tinkering with methods of cost accounting and overhead allocation will not save an enterprise that has lost more than \$80 billion since 2006. Until the Postal Service is maximizing its profits from competitive products and services, the burden of its institutional costs will fall more heavily on the American consumers who use market-dominant products most intensively.

¹⁰⁴ U.S. Postal Service 2019 10-K (Nov. 14, 2019), supra note 24, at 1.

IV. OPTIMAL INCREMENTAL INVESTMENT BY THE POSTAL SERVICE IN THE AFTERMATH OF THE COVID-19 PANDEMIC OF 2020

As we have seen, the Postal Service's infrastructure was designed to transport and deliver "the personal, educational, literary, and business *correspondence* of the people." Although some components of the Postal Service's network (such as trucks) are usable for both letters and packages, other components (such as sorting machines) are not. It might be tempting to chant old refrains—that economies of scope supposedly exist between the delivery of packages and the delivery of letter mail, or that the Postal Service's delivery network for letter mail has unused capacity—to justify incremental investment to accommodate the increase in demand for packages and the diminution of demand for letter mail. It might consequently be argued that the sharp growth in demand for e-commerce package delivery observed during the COVID-19 pandemic requires the Postal Service—if it truly wants to transform itself into a package-delivery company for e-commerce—to make specialized capital investments of a nature that might render its delivery of mail less efficient.

A. Should the Postal Service Make Specialized Capital Investments to Transform Itself into a Government-Owned Package-Delivery Company, or Should It Consolidate Its Activities into the Most Efficient Network Possible for the Provision of Market-Dominant Products?

Students of public utility regulation will recognize the similarities here to the Supreme Court's 1945 decision in *Market Street Railway*. ¹⁰⁶ The earthquake of 1906 had severely damaged the infrastructure of San Francisco's municipal railway, which necessitated new capital investment to repair the rail network just as the demand for automobiles was beginning to surge, which in turn precipitated a long and steady decline in ridership on municipal railroads throughout the United States. The case posed the question of whether the Due Process Clause (and implicitly the Takings Clause) required regulators to grant a rate increase for an obsolescing regulated industry—municipal railways in San Francisco in the 1940s—to a level that would suffice to elicit

¹⁰⁵ Pub. L. No. 91-375, 84 Stat. 719, 719 (1970) (codified as amended at 39 U.S.C. § 101(a)) (emphasis added).

¹⁰⁶ Market St. Ry. v. R.R. Comm'n of Cal., 324 U.S. 548, 566–67 (1945). In the 1990s, when debate raged over whether newly mandated network unbundling regulation (at regulated rates) would harm the incentive of incumbent telecommunications network operators to continue to make investments in sunk infrastructure, Daniel Spulber and I analyzed the law and economics of *Market Street Railway* in depth. See Sidak & Spulber, Deregulatory Takings and the Regulatory Contract: The Competitive Transformation of Network Industries in the United States, supra note 13, at 256–62, 461–63; J. Gregory Sidak & Daniel F. Spulber, Givings, Takings, and the Fallacy of Forward-Looking Costs, 72 N.Y.U. L. Rev. 1068, 1087–93 (1997).

future capital investment. The Court said no. Capital *dis*investment seemed the more efficient policy to promote in the face of the technological obsolescence that had sharply reduced consumer demand to use the regulated service.

The Postal Service's market-dominant products are the municipal street cars of 21st century "correspondence." Regulated prices for those products should not be raised to cover additional investment at a time when disinvestment would be more efficient in light of technological obsolescence and falling demand. If the Postal Service were not in the business of delivering packages, its optimal investment strategy more likely would focus on *reducing* the capacity of its mail-delivery network to reflect the clearly declining demand for market-dominant products.

Perhaps the Postal Service has already begun formulating that strategy of disinvestment. Testifying before the Senate on August 21, 2020, Postmaster General DeJoy said that the Postal Service had removed some mail sorting machines from service to make room for more package processing:

On the [mail sorting] machines . . . , mail volume is dropping. This is a process that I was unaware about. It's been around for a couple of years now. We evaluate the machine capacity. These machines run about 35-percent utilization, the mail volume is . . . dropping very rapidly, especially during the COVID crisis, and package volume is growing. . . . We have hundreds of these machines everywhere and still it's not any kind of drain on capacity. 107

It is therefore unpersuasive to contend that, instead of consolidating its mail operations into a more efficient network for producing the services that Congress in 1970 commanded the Postal Service to provide, the Postal Service should instead request public funding to expand its capacity to deliver packages, a task that Congress never has commanded the Postal Service to perform. Unless Congress revises the mission of the Postal Service and its universal service obligation, the Postal Service will best discharges its statutory mandate under the Postal Reorganization Act of 1970 by maximizing the efficiency of its provision of market-dominant products and services.

B. Does the Postal Service Have Enough Capacity to Meet the Demand for E-Commerce Package Deliveries?

The Postal Service appears not to have enough capacity to meet the demand for e-commerce package deliveries during the COVID-19 pandemic. On April 17, 2020, the Postal Service issued a press release stating that, "due to

¹⁰⁷ See The U.S. Postal Service: Hearing Before the S. Comm. on Homeland Sec. and Gov. Affs., 116th Cong. (Aug. 21, 2020) (remarks at 22:06 of Louis DeJoy, Postmaster General), https://www.c-span.org/video/?474940-1/senate-hearing-us-postal-service.

limited transportation availability," expected delivery times for Priority Mail two-day service and three-day service would be extended to three and four days, and first-class package service commitments would also be extended. The Postal Service did not say whether this transportation constraint had arisen at the level of intercity transport or local distribution.

Packages require collection, inward sortation, intercity transport, outward sortation, and delivery. Each of those processes in the vertical chain of production has its own capacity characteristics and could potentially become the bottleneck for the network's overall capacity. For parts of the Postal Service's package-delivery network that depend on third parties, such as intercity transport by commercial airline flights, the capacity constraints on e-commerce package delivery might be beyond the Postal Service's control.

In contrast, considering the huge declines in mail volume since 2006, the Postal Service has sufficient (and likely excess) capacity to deliver market-dominant products. If the Postal Service is investing to increase its capacity, is that investment related to the performance of its market-dominant products? The presumptive answer is no.

C. "Essential" Packages and the Privatization of Package Delivery

Some might misinterpret this article as proposing that Congress privatize the package-delivery operations of the Postal Service. To be precise, I do not make that proposal here. I propose merely that the Postal Service optimize its delivery network to match the demand for critical correspondence. Package delivery is a market in which private firms have competed with one another even before the federal government entered that market; and that market now includes the recent vertical entry by one of the largest customers of package-delivery services—Amazon. Rather than propose that Congress privatize the package-delivery operations of the Postal Service, I propose far more modestly that a state-owned enterprise not be allowed to sacrifice the quality of its public product (the delivery of correspondence mail) so as to crowd out private investment in package-delivery services.

Press Release, U.S. Postal Service, COVID-19 Continuity of Operations Update:
 Expected Delivery Changes for Priority Mail and First-Class Package Services (Apr. 17, 2020),
 https://about.usps.com/newsroom/service-alerts/pdf/expected-delivery-changes-april-17.pdf.
 George J. Stigler, The Division of Labor Is Limited by the Extent of the Market, 59 J. Pol. Econ. 185,

¹⁸⁷ fig.1 (1951).

¹¹⁰ See, e.g., United States Postal Service's Total Mail Volume from 2004 to 2019 (in Billion Units), STATISTA (Nov. 15, 2019), https://www.statista.com/statistics/320234/mail-volume-of-the-usps/ ("After reaching a peak of around 213 billion units in 2006, the U.S. Postal Services (USPS) has experienced a year-on-year decline in mail volume every year since; by 2019, this number had dropped by 33 percent to just 142.57 billion units.").

Some might argue that a state-owned enterprise must continue to deliver "essential" packages, including prescription medications, especially in rural areas of the United States. That argument is unpersuasive. Instead of defining "essential" package-delivery duties for the Postal Service, why not allow private carriers to bid competitively to supply medical supplies to all delivery points in a given region of the country for a given level of government subsidy? That scheme could replicate for the Postal Service's USO the reverse-auction proposal that telecommunications regulators have successfully deployed in many instances. That auction format was recognized to be so theoretically insightful and so practically successful that, in October 2020, two Stanford economists, Paul Milgrom and Robert Wilson, were awarded the Nobel Prize for their "improvements to auction theory and inventions of new auction formats." In 2020, there is no need to preserve a stand-alone federal package-delivery network for medical supplies or for any other kind of "essential" product delivered by package to the end user.

Moreover, it would be unconvincing to argue that large capital expenditures—for example, the capital expenditures for a fleet of larger package-delivery trucks—are even necessary for the Postal Service to serve those rural areas. The Postal Service's request for an unrestricted \$6 billion to buy new LLVs is not narrowly tailored to the goal of serving those rural customers. Rural customers certainly should not be portrayed as the justification for increasing the package-delivery capacity of the Postal Service in more densely populated geographic markets that already sustain competition between two or more private carriers.

D. Who Should Bear the Cost of Expanding the E-Commerce Package-Delivery Infrastructure of the Postal Service?

The debate over how much more money to give the Postal Service commonly presumes that Congress and the Treasury *should* continue to give the Postal Service billions of dollars to spend. Why? Perhaps as part of the economic response to the COVID-19 pandemic Congress and the Treasury (and the Office of Management and Budget) regard those billions of dollars as nothing more than a fiscal stimulus. Such macroeconomic policymaking bears little resemblance to policymaking predicated on microeconomic principles. Why

¹¹¹ See, e.g., High-Cost Universal Service Support, Federal-State Joint Board on Universal Service, 23 FCC Rcd. 1495 (2008); Rural Broadband Auctions, Fed. Commc'ns Comm'n (Nov. 14, 2019), https://www.fcc.gov/auctions/ruralbroadbandauctions; see also Incentive Auction Task Force and Media and Wireless Telecommunications Bureaus Announce the Commission Is Ready to Pay Reverse Auction Winning Bids, 32 FCC Rcd. 5715 (2017).

¹¹² The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2020, Nobel Prize, https://www.nobelprize.org/prizes/economic-sciences/2020/summary/.

not simply dump bushel baskets of newly printed \$100 bills from helicopters if the immediate objective is to increase aggregate demand in the economy?

If, on the other hand, we are entitled to demand from the investment decisions of the Postal Service (and, by extension, Congress and the Treasury) some degree of microeconomic sobriety, we should pause to ask two antecedent questions. What is the productivity of the proposed investment? If the productivity of that investment is low, is the optimal level of investment more or less than the currently proposed levels? As we saw above, the declining demand for products and services that form the Postal Service's statutory mandate indicates that disinvestment is likely to be the more efficient policy. In other words, it appears that the capital stock of the Postal Service's network should shrink, not expand.

Why should the Postal Service build a network designed for e-commerce package deliveries? A package network for e-commerce will cost billions of dollars, yet it will not help the Postal Service to scale and configure the optimal mail-delivery network for letters and other market-dominant products, which, to repeat the obvious, is the "basic function" that Congress identified for the Postal Service in the Postal Reorganization Act of 1970.¹¹³

Moreover, what market failure requires the Postal Service to compete against private carriers in the delivery of packages? If (as seems obvious) no market failure indeed exists, then what justifies the Postal Service's investment in duplicating the network infrastructure for e-commerce package delivery that other competitive firms already provide? Is it a waste of taxpayers' money for the Postal Service to build a duplicate infrastructure? How does the Postal Service possibly improve its ability to discharge its obligation under the Postal Reorganization Act of 1970 if it subsidizes the infrastructure for, and operating losses from, e-commerce package delivery with revenue from market-dominant products? Would it therefore be grossly negligent for the Postal Service's management to continue to pursue its \$6 billion capital investment in LLVs designed to carry packages rather than letter mail, when no substantial evidence indicates that e-commerce package delivery by the Postal Service is even profitable?

Perhaps the Postal Service's most productive use of government largesse in 2020 or thereafter would be not to invest in network infrastructure for either correspondence mail or a new fleet of LLVs to handle e-commerce package deliveries, but rather to pay off the sources of the Postal Service's perennial "uncontrollable" losses—namely, its unfunded pension liability—so as to eliminate that albatross as a political obstacle to a more rational and dispassionate discussion of what the Postal Service is trying to accomplish today, half a century after Congress enacted the Postal Reorganization Act.

¹¹³ Pub. L. No. 91-375, 84 Stat. 719, 719 (codified as amended at 39 U.S.C. § 101(a)).

Conclusion

Today, the concern over displacement of letters by electronic correspondence is quaint. It is like someone reflecting in 1920 about whether any doubt remained about the answer to the question, posed in 1906, of whether automobiles and trucks might someday outnumber horse-drawn carriages and wagons. A century later, we might similarly ask, Did the PAEA work? Is the Postal Service better off financially than it was nearly 14 years ago? Are senders and recipients of correspondence mail better off? Are senders and recipients of packages?

Debates over the Postal Service's solvency fail to focus on what the optimal level of investment in the postal network should be. Rather than discharge its statutory mandate to deliver correspondence mail—a mandate whose justification has steadily withered away—the Postal Service's management has pivoted to a new mandate of its own creation: e-commerce package delivery, which despite its rapid growth is, when undertaken by the Postal Service, evidently a loss-making enterprise that requires enormous incremental investment. This strategy ignores that the Postal Service's optimal level of investment should be declining over time to reflect substitution away from correspondence by mail, and it erroneously assumes that the Postal Service can be competitive in e-commerce package delivery when substantial evidence indicates that the Postal Service subsidizes the costs of e-commerce package delivery through its provision of market-dominant mail products. Yet, the sustainability of that subsidy will continue to erode as traditional mail service obsolesces.

Cost accounting must become more transparent and more consistent with a Postal Service that evidently gives great priority to expanding its e-commerce package-delivery business. It is unsustainable for the Postal Service to have an increasing share of its total costs put into the institutional cost category. One cannot require first-class mailers to subsidize the wide-spread use of the Postal Service as a public enterprise engaged in the business of e-commerce package delivery.

The Postal Service is a public enterprise asking Congress to pay for network infrastructure that the Postal Service will use to compete against the private sector in e-commerce package delivery. As the Postal Service is redefining itself as an e-commerce package-delivery company, it is demanding taxpayer-funded largesse from Congress. Some context is informative: the Postal Service has requested congressional funding that exceeds the market capitalization of FedEx, which was approximately \$70 billion as of November 2020.¹¹⁴ That is, the Postal Service is requesting more money from

¹¹⁴ See FedEx Market Cap, YCHARTS (Nov. 2, 2020), https://ycharts.com/companies/FDX/market_cap.

American taxpayers than it would cost to buy a fully functioning e-commerce package-delivery network.¹¹⁵

The COVID-19 pandemic has not exposed any market failure that requires the Postal Service to make risky incremental investment in e-commerce infrastructure for package delivery. To the contrary, private carriers have demonstrated the willingness and ability to invest to increase the capacity of the distribution network for e-commerce packages. While no one in the federal government seems to have noticed, America's national champion in e-commerce—Amazon—has acquired a market capitalization as of November 2020 of approximately \$1.5 trillion¹¹⁶ and has found it entirely feasible to deploy from scratch its own network of trucks for e-commerce package deliveries. Where is the market failure that would compel policymakers to supply the Postal Service billions of dollars so that it can accelerate its transformation into a state-owned package-delivery enterprise?

The Postal Service is in an unsustainable financial position, but there remains time to solve its problems through management, regulation, and, if necessary, legislation. With eroding demand for market-dominant products, the producer surplus that the Postal Service is able to generate through its sale of market-dominant products will be less and less capable of supporting a USO burden, much less subsidizing e-commerce package deliveries. The future of the Postal Service will more resemble 2020 than 1970.

116 See Amazon.com Market Cap, YCHARTS (Nov. 2, 2020), https://ycharts.com/companies/AMZN/market_cap.

¹¹⁵ See, e.g., Jory Heckman, USPS Requests \$75B Amid Pandemic to Recover from 'Steep' Drop in Mail Volume, Fed. News Network, Apr. 9, 2020; Eric Katz, USPS Requests \$75B in Emergency Funds to Keep Agency Alive, Gov't Exec., Apr. 9, 2020; see also Jory Heckman, Updated: House Coronavirus Spending Bill Gives USPS \$25B, Wipes Slate on Its Treasury Debt, Fed. News Network, Mar. 20, 2020.