# Why the Postal Service Is Not Subsidizing Package Delivery 

BY ROBERT D. ATKINSON I JUNE 2018

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president's assertions, the facts show USPS is not getting taken to the proverbial cleaners and is making a significant "profit" on packages, which in turn plays a key role in helping offset USPS's chronic losses from traditional mail business.

In December 2017, President Trump tweeted, "Why is the United States Post Office, which is losing many billions of dollars a year, while charging Amazon and others so little to deliver their packages, making Amazon richer and the Post Office dumber and poorer? Should be charging MUCH MORE!" ${ }^{1}$ The president's tweet and other public statementsincluding the announcement on April 12, 2018 of an executive order calling for a task force on the U.S. Postal Service (USPS) to, among other things, examine "the expansion and pricing of the package delivery market and USPS's role in competitive markets,"-have led to new debate about USPS's role in shipping packages. The president and some private shippers argue USPS is competing unfairly, hurting private package delivery companies, and unfairly helping shippers like Amazon. As this report shows, that argument is false.

As the volume of traditional mail continues to decline-and e-commerce increases-the importance to USPS of package shipping will only grow. Yet, because USPS operates both a traditional "monopoly" business (first-class mail) and a "competitive" businesses (packages), it is critical that it not unfairly subsidize package shipments in order to gain competitive advantage over private shippers like the United Parcel Service (UPS) and FedEx. Notwithstanding the president's assertions, the facts show USPS is not getting taken to the proverbial cleaners and is in fact making a significant "profit" on packages, which plays a key role in helping offset USPS's chronic financial losses from its declining traditional mail business.

There are two central issues involved in the debate over whether USPS is charging too little for package delivery: Is USPS abiding by the requirements of the 2006 Postal Accountability and Enhancement Act (PAEA), and is the law itself designed in such a way as to allow USPS to undercharge for package delivery?

With regard to the first measure, PAEA directs the [Postal Regulatory Commission] PRC to promulgate (and from time to time revise) regulations to: (1) prohibit the subsidization of competitive products by market-dominant products; (2) ensure that each competitive product covers its attributable costs; (defined as "the direct and indirect postal costs attributable to such product through reliably identified causal relationships,) and (3) ensure that all competitive products collectively cover what the Commission determines to be an appropriate share of Postal Service institutional costs." ${ }^{2}$

On this issue, the record is clear: USPS is abiding by the provisions in the statute. The Postal Regulatory Commission, whose job, among other things, is to regulate the prices USPS can charge for products (e.g., packages) that compete with the private sector, has determined USPS is abiding by the law and not using its mail monopoly to unfairly subsidize package delivery. Moreover, in May 2018, the U.S. Court of Appeals for the District of Columbia ruled in favor of the PRC in a complaint brought by the United Parcel Service (UPS) that asserted USPS was unfairly competing in the parcel marketplace. ${ }^{3}$ The court ruled that because "the Commission's exercise of its authority [was] 'reasonable and reasonably explained,' we deny UPS's petitions for review." ${ }^{4}$

This leaves the question of whether Congress got it right when it drafted the PAEA, especially in how it defined institutional costs. Congress mandated package delivery must recover both actual direct and indirect costs (such as an extra truck to carry packages), and institutional costs that cannot be reliably attributed to a particular product. President Trump, UPS, and some others want PRC to require USPS to charge a much higher price for packages, based on the notion a much larger share of USPS's institutional costs should be covered by competitive product prices. In particular, holders of this position argue USPS should not be able to use any of the benefits of its vast mail delivery network to keep package prices lower than they otherwise would be, and that USPS should price packages as if it was operating a completely separate, and more expensive, delivery network.

ITIF believes this position is based on faulty reasoning that confuses network economies of scale with subsidies. In fact, by utilizing its already established mail network, USPS not only lowers the total overall costs of package delivery in the United States, it is able to reduce its deficits on the monopoly side of the business (e.g., firstclass mail, marketing mail, etc.), which has been badly hurt by the rise of the Internet and e-commerce. Indeed, if it were not for parcel delivery, USPS deficits would be much higher. Parcels generate approximately 30 percent "profits" for USPS and this revenue reduces the USPS deficit, caused in part by its higher costs from its universal service obligation (it must deliver mail at the same price to every household in America, regardless of where they live) ${ }^{5}$ and from the declining volumes of mail, particularly first-class mail. While there are a host of reforms Congress and USPS could make to improve efficiency and financial viability, requiring USPS to charge more for packages is not one of them. ${ }^{6}$

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## BACKGROUND ON USPS'S COMPETITIVE PACKAGE BUSINESS

In PAEA, Congress established a framework for PRC to use in governing the parcel delivery market to ensure USPS was competing fairly against private-sector businesses. Under the legislation, USPS provides two kinds of products: market dominant (e.g., firstclass mail, marketing mail, newspapers and magazines, etc.), wherein its mail delivery and letterbox monopoly apply (private companies are not allowed to deliver this kind of mail to post boxes or through home mail slots); and competitive services (such as packages), in which USPS faces substantial direct competition. For the former, PRC sets an annual price cap based on the consumer price index. For the latter, USPS is permitted to set prices for products as long as the minimum prices do not involve cross-subsidization from marketdominant product revenue, which involves covering an appropriate share of overhead costs.

After PAEA was passed, USPS revenue from competitive products grew from $\$ 7.9$ billion in 2007 to $\$ 20.7$ billion in 2017, although some of this was from the transfer of products from the market-dominant side to the competitive side. ${ }^{7}$ During this same period, competitor revenue from shipping similar products also grew, from $\$ 77.7$ billion in 2007 to $\$ 84.8$ billion in 2017, while USPS's market-dominant volume decreased significantly, from 211 billion to 144 billion pieces, and its competitive volume increased from 1.6 billion to 5 billion pieces.

The PAEA requires PRC to promulgate regulations that "prohibit the subsidization of competitive products by market-dominant products by ensuring "that each competitive product covers its costs attributable," defined as "the direct and indirect postal costs attributable to such product through reliably identified causal relationships," and "ensure that all competitive products collectively cover what the Commission determines to be an appropriate share of the institutional costs of the Postal Service." (Institutional costs are residual costs that cannot be specifically attributed to either market-dominant or competitive products through reliably identified causal relationships.) The PRC has identified about half of all USPS costs as attributable to a particular product. And there is a broad agreement that it does a good job in ensuring that competitive product prices cover their attributable costs and are not subsidized.

A more controversial issue concerns how the phrase "appropriate" is defined and how PRC measures and allocates institutional costs. PRC initially required USPS packages to cover at least 5.5 percent of USPS institutional costs. It had initially settled on this amount because it appeared to reflect the accurate historical cost share. At the time, the Commission believed setting this rate too high could hinder the Postal Service's flexibility to compete, while setting it too low could give the Postal Service an artificial competitive advantage.

The PAEA requires PRC to update this methodology every five years. In February 2018, it issued a notice of proposed rulemaking to "To Evaluate the Institutional Cost Contribution Requirement for Competitive Products." In particular, given that the PRC now had 11 years of data on competitive products costs and prices to evaluate, it sought input on whether it should change the existing 5.5 percent requirement to cover

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institutional costs to a formula that calculates the minimum amount that competitive products as a whole are required to contribute to institutional costs annually.

It is important to note that since the PRC established the 5.5 percent institutional baseline contribution that the USPS has exceeded it every year. In 2017 competitive product revenues (including parcels) were $\$ 20.7$ billion while total attributable competitive product costs were $\$ 13.9$ billion, with institutional costs approximately $\$ 6.8$ billion. Parcels covered 49 percent more than their attributable costs. ${ }^{8}$ Using the PRC's new proposed formula, its minimum institutional contribution share would have been 10.8 percent for 2018, instead of 5.5 percent. But the USPS revenue from parcels in 2017 accounted for 23.2 percent of institutional costs, significantly higher than either the existing 5.5 percent baseline or the proposed 10.8 percent level.

PRC has proposed using a Postal Service Lerner Index to determine whether USPS is engaged in predatory pricing to gain market share in competitive markets, including packages. A negative number implies USPS is pricing below cost. However, the index has never been negative, leading PRC to conclude, "that there is no evidence that the Postal Service has engaged in predatory pricing."9

Not only does USPS generate "profits" from packages, it is able to compete with the private sector while suffering from a government-imposed economic disadvantage. The PRC updated a 2007 Federal Trade Commission (FTC) estimate of the net economic disadvantage USPS faces due to regulatory obligations and government structure. On the one hand, USPS receives implicit subsidies, including its exemption from state and local taxes, parking tickets, vehicle registration fees, tolls, and tax compliance. The FTC estimated that these implicit subsidies provided a benefit of $\$ 38$ million to $\$ 113$ million to Postal Service competitive products.

But USPS also faces higher costs from government requirements. The largest was the wage premium the Postal Service must pay its employees due to the statutes that govern the Postal Service's relationship with its employees. When this and other factors are included, the net result is negative, with the FTC determining the Postal Service incurred an estimated net economic disadvantage of between $\$ 92$ million and $\$ 1.7$ billion. ${ }^{10}$

Critics of USPS's package pricing structure assert the FTC study and PRC update are flawed, and that USPS actually enjoys net subsidies. If this is true, then it suggests USPS could be unfairly competing in the package market. Economic consultant Rob Shapiro makes this argument in his filing to the PRC on the behalf of UPS. His main argument is the FTC and PRC fail to include the economies of scope derived from the letter and mailbox monopolies. Shapiro asserts that the extensive last mile network USPS has for its monopoly products (e.g., delivering the mail) gives it an unfair cost (and price) advantage over competitive parcel services. He writes, "The broadest case of cross-subsidization involves USPS's ability to pick up or drop off packages when it delivers mail to U.S. residences and businesses, at little additional cost. We estimate that the value of this cross-subsidy and others totaled $\$ 9.64$ billion in FY 2016." ${ }^{11}$ Likewise, he argues it is evidence of a cross-
subsidy because USPS hires peak seasonal workers at a lower rate during the Christmas season than do private package companies. He writes, "Most broadly, USPS draws on the large economies of scale and scope provided through its monopoly operations to reduce costs in its competitive business." ${ }^{12}$ Shapiro goes on to claim, "This confers a 'network advantage' over private competitors, since their costs to pick up and deliver packages exceed the USPS's incremental cost to do the same along with its normal mail service."

As such, Shapiro is arguing USPS is unfairly competing with private package delivery companies like USPS and that by definition, PRC should require USPS to increase its parcel prices to offset this unfair advantage. The appropriate share level, he argues, should be based on the stand-alone costs of the Postal Service's competitive services, assuming USPS did not have an existing network for market-dominant products.

But Shapiro is arguing USPS should not be able to benefit from its already existing economies of scale from its extensive last mile delivery network. In fact, he proposes USPS essentially create a completely separate business that does not take advantage of any existing economies of scale. Shapiro writes, "This type of cross-subsidization is widely recognized and, thus far, tolerated by the government: Congress has refused to legally separate the USPS's public and private operations in distinct entities that would not share facilities, equipment, or workers." ${ }^{13}$ Shapiro argues the payments of 5.5 percent of institutional costs "seriously undervalue the support that USPS's competitive business derives from its use of USPS facilities, equipment, and workers, and so constitute a cross-subsidy from the monopoly operations to its competitive business." The postal reform Act's "most critical shortcoming is its failure to approach USPS's competitive business and monopoly operations as fundamentally separate, distinct entities. ${ }^{14} \mathrm{He}$ goes on to write, "This network enables the USPS to draw on the substantial economies of scale and scope created by its institutional investments and so reduce the costs and prices for its competitive products, which depend on the same offices, vehicles, routes, and delivery points as letter mail." ${ }^{15}$

Shapiro also argues USPS letter box monopoly gives it an unfair advantage over private package delivery companies. He writes, "If the USPS had to deliver all mail to customers' doors, as private delivery services have to do under the mailbox monopoly, it would have increased USPS's delivery costs for its 501.1 million curbside delivery points by $\$ 129$ each or $\$ 6.5$ billion in 2016 and raised the delivery costs for each of its 36.9 million centralized delivery points by $\$ 193$ each or $\$ 7.1$ billion in 2016." ${ }^{16}$

## USPS PRICING: MAXIMIZING PRODUCTIVE EFFICIENCY

At one level, Shapiro is right. These are real advantages USPS enjoys. The real question is whether government policy should seek to limit USPS's, and society's, ability to benefit from these efficiencies. In fact, the economy, and consumers, are better off with Congress focusing, as they have, on enabling USPS to maximize productive efficiency.

Productive efficiency is the ability of organizations to produce in ways that lead to the most output with the fewest inputs. In other words, a productively efficient organization is one

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decrease total GDP by reducing the overall productivity of the package delivery industry, as it would shift from being a relatively efficient low-cost production network to one whose costs are significantly higher.
that uses the least amount of energy, materials, labor, and machines to produce a given unit of output. This is different from allocative efficiency. An allocatively efficient market is one in which scarce goods and services are consumed on the basis of the prices consumers are willing to pay for them, and scarce goods and services are produced on the basis of marginal costs equaling the prices charged for them. While periodically both goals can be achieved at the same time, in other cases, policies impact one goal more than others. In general, the economy-wide gains from productive efficiency usually significantly outweigh the gains from allocative efficiency. ${ }^{17}$

Some who focus principally on allocative efficiency argue USPS should not have a monopoly over first-class and other related mail. But allowing USPS to have a letter and mailbox delivery monopoly maximizes productive efficiency. Indeed, eliminating the last mile delivery monopoly would be highly inefficient, with the modest allocative efficiency gains dwarfed by the large productive efficiency losses. How could it possibly be more efficient to have multiple postal carriers passing each residence six days a week? Clearly having one carrier deliver all the mail is much more efficient than having two or three. This is why USPS's monopoly lowers the total cost society pays to have its mail delivered. In their zeal for ever more competition regardless of the costs, some economists fail to recognize the efficiencies that can come from natural monopolies. No American streets have two separate gas mains or sewer and water mains because that would raise total costs and prices. It is most efficient to have just one gas main for each street and house. Likewise, it is most efficient to have one organization deliver the mail.

Second, opening up last mile mail delivery to competition would lead to highly inequitable results. If USPS had no letter and mailbox monopoly, new delivery companies would simply "cherry pick" the most profitable areas (densely populated, with higher perhousehold incomes) to serve. This would relegate the least-profitable and highest-cost areas to USPS, whose finances would become even more unsustainable absent massive public subsidies. The delivery monopoly helps USPS afford its universal service delivery obligations without having to charge higher rates for rural delivery. This gets to a core argument for having a regulated monopoly to deliver mail: The nation needs an organization to deliver mail to both high- and low-cost locations at a reasonable and equitable price. To be sure, this function need not be performed by a government corporation; rather, as is the case in a number of other countries, mail delivery could be handled by a regulated private company. But to lower costs and ensure universal service, a monopoly of some kind is required.

USPS monopoly protection generates enormous productive efficiencies. It is much cheaper to have only one organization be responsible for delivering mail to over 157 million delivery points six days a week. ${ }^{18}$ By taking advantage of its economies of scale, USPS is able to keep costs (and prices) down for package delivery. As such, requiring USPS to structurally separate package delivery from market-dominant mail, or charge prices as though the two functions were separate, would raise costs for USPS package delivery. This would lead to fewer package shipments overall (e.g., package shipment prices would

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increase, leading to less demand) and if competitors do not raise prices by the same amount USPS prices increase, it would lead to reduced USPS package market share. Forcing USPS to raise package prices this way would also decrease total GDP by reducing the overall productivity of the package delivery industry because packages would shift from the more efficient low-cost production network to the higher cost ones.

It is important to note that USPS's competitors such as UPS and FedEx take advantage of these economies of scale by hiring the Postal Service to deliver millions of packages to the last mile, particularly in high-cost rural areas, because it can do so more cost-effectively. ${ }^{19}$

In other words, what Shapiro calls a subsidy, most economists would call economies of scale. Calling on USPS to create a completely separate delivery network for packages would be like mandating Verizon or Comcast to each lay two wires to each home-one for video [cable TV] and one for data [broadband] -because being able to provide both on one wire would be unfair to a competitor that might sell only one of those services.

Shapiro also claims USPS has a significant motive to underprice packages, asserting USPS "leverages its subsidized monopoly operations to cross-subsidize and thereby advantages its competitive business. The purpose is to keep costs and prices low for its competitive products, whose customers can go elsewhere and are thus price-sensitive, and allow prices to rise for its monopoly products, without lack of competition makes its consumers less price sensitive." ${ }^{20}$ This is a problematic statement for two reasons. First, USPS is limited by the PRC in the price increases it can levy on its monopoly operations. Second, if it has so much pricing power for these products, why is it running such large annual losses?

Indeed, it is wrong to even conclude that USPS monopoly gives it pricing power, even if it gives USPS carte blanche pricing power through the PRC. In this sense, even in its "dominant" products, USPS does not appear to have what economists would define as a defensible monopoly wherein it can act with little concern about competition. It is unfortunate Congress used the term "market-dominant products" to refer to first-class and marketing mail.

At one time, USPS was like the incumbent wireline telephone companies of the past that also once had a defensible monopoly in voice services, before the development of broadband and cellular service. However, today, wireline telephone companies have anything but a monopoly, even though there has been little to no entry into the wireline circuit-switched telephone market. This is because there is now cellular service, phone service from cable TV providers, and voice over Internet services. In other words, the competition phone companies faced was not from other wireline phone companies, but rather from other technologies. This is the same today for USPS.

While competitors are not legally allowed to deliver mail to mailboxes, USPS faces intense competition from the Internet in its traditional mail service. Indeed, over the last 11 years, first-class mail volumes have declined by over 30 percent, as more households and business use the Internet to conduct business (e.g., electronic bill payments, online invitations,
emails, etc.). The same dynamic is true for advertising mail, with more advertising switching to Internet advertising. As a result, if USPS were to increase prices significantly on the monopoly side, it would clearly lose even more volume. In other words, USPS competition in market-dominant products is not from other companies providing the same service, but rather from companies providing a fundamentally different service (e.g., eservices). This calls to mind famed economist Joseph Schumpeter's dictum, "In capitalist reality, as distinguished from its textbook picture it is not [price] competition which counts but the competition from the new commodity, the new technology ... which strikes not at the margins of the profits of the existing firms but at their ... very lives." ${ }^{21}$

Finally, Shapiro claims USPS uses its letter box monopoly unfairly for packages, when in fact, most parcels are too big to fit inside letter boxes, in the door slot, or at the curb, so much like UPS and FedEx, USPs must leave them at the door. ${ }^{22}$

## PRICES, REVENUE, AND VOLUME

Some will argue that even if USPS is covering all appropriate costs (attributable direct and institutional) from its package delivery services that if it can generate even more revenue by raising prices, that it should do so. But doing so would not only reduce overall productivity, it would have negative implications for equity.

If USPS were forced to raise package prices, there are several possible scenarios in terms of the impact on volume and revenue.

The first is that increased USPS prices would lead to volume declines and reduced overall "profits". Although USPS would make more "profit" on each package, it would deliver fewer of them (see Figure 1). Some volume declines from prices going up would be expected (economists refer to this function as elasticity of demand). In this scenario the private carriers do not also increases their prices. As a result, USPS would likely lose market share, particularly in urban and suburban areas where USPS, FedEx, and other shippers' prices are closer to those of USPS. Depending on the amount of the rate increase, USPS might not lose market share to private shippers in rural areas because most private shippers now charge a surcharge to deliver to these places because of higher delivery costs.

Figure 1: Modeling Price and Quantity for USPS Packages: Price Increases, Volume Declines, Revenue Declines


Some will thus argue that with little diversion in these rural areas, USPS should increase prices for rural package delivery. ${ }^{23}$ But this ignores the very real impacts on rural consumers and shippers who would then have to pay more in the aggregate. Since a local store might not be available to a rural consumer, the choice would either be to pay more to buy from an e-commerce site or forgo the purchase altogether. At the same time, a rural e-commerce seller facing higher shipping costs would likely lose market share to urban sellers offering shipping via a private carrier.

Some might also argue these impacts would be minimized because while USPS might charge more, the shippers would absorb the costs and not increase shipping prices for their customers. In other words, e-commerce companies would "eat" the increase and just have reduced profits. But this is not only illogical but counter to what economic research has found. ${ }^{24}$ While sellers might absorb some of the cost increases, their ability to absorb all, or even most of them, particularly over time, is limited.

So, the first scenario result of higher prices, lower volume, and reduced revenues is clearly not in the public interest. USPS receives less revenue, consumers pay higher prices, and overall productivity falls (see Figure 1). However, even if the result of higher prices is lower volume and the same revenues, that too would not be in the public interest (see Figure 2). As noted previously, because fewer shipments would take advantage of the lower cost structure USPS enjoys from its last mile network, overall economy-wide package shipping productivity would decline. In addition, package shipping costs would go up, leading to two negative implications for equity and opportunity. The first would be for low- and middle-income households that are more price sensitive would have fewer packages delivered-with the second being for rural buyers and sellers. As their costs increase, there would be less rural e-commerce consumption and less ecommerce production and fewer related jobs in rural areas.

Figure 2: Modeling Price and Quantity for USPS Packages: Price Increases, Volume Declines, Revenue is Constant


## If the Trump

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A third scenario assumes prices go up, but volume does not fall as much because UPS and FedEx raise their prices as well. As a result, USPS is able to increase its "profits", which then can help offset losses on the mail-dominant side of the business (see Figure 3). Why would this not be an optimal outcome? The answer is the same reason it is not an optimal outcome in scenario one. Package delivery productivity would go down as USPS package market share declined. And there would be negative impacts on equity, particularly in rural areas.

Figure 3: Modeling Price and Quantity for USPS Packages: Price Increases, Volume Declines, Revenue Increases


This goes to a key policy issue: What is the purpose of the U.S. Postal Service? The Second Continental Congress established the forerunner to the modern Postal Service, appointing Benjamin Franklin to be the first postmaster general in $1775 .{ }^{25}$ In the more than two centuries since, the Postal Service (known previously as the Post Office and the Post Office Department) served as the primary means of communication between citizens and businesses in the far-flung colonies, states, and territories. Indeed, a key purpose of the Postal Service was universal service and tying a large nation with disparate population centers together. Today the governing regulation for the Postal Service, 39 U.S.C. § 101(a), states that it must "provide postal services to bind the Nation together through the personal, educational, literary, and business correspondence of the people. It shall provide prompt, reliable, and efficient services to patrons in all areas and shall render postal services to all communities." ${ }^{26}$

In this sense, maximizing revenue is not the goal Congress has decided is appropriate for the Postal Service. If it were, Congress would allow USPS to reduce or eliminate services, or charge higher prices in certain parts of the nation (e.g., rural households). As such, any efforts to change package rates that impact this core mission of tying the nation together should not be made by USPS, the PRC, or even the Trump Administration. This is a decision only Congress can and should make. And Congress has made it clear that "profit" maximization is not the goal for USPS. Tying the nation together in the most cost-effective and productive way is.

## CONCLUSION

If the Trump Administration and Congress want to fix the Postal Service's finances, reforms on the competitive products side are not the place to look. As previously noted, packages provide a healthy surplus that reduces net USPS losses from market-dominant products-hardly evidence of cross-subsidization from market-dominant products to competitive products. Rather, USPS needs to focus on cost-cutting on the marketdominant side, which should include opening up more of the non-last mile network to competition, labor reforms, and better management of real estate. But seeking to increase package rates is a solution in search of a problem.

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## ERRATA

This report was updated on June 19, 2018 to correct text on page 4 that included estimated figures for 2018, but listed them as 2017 figures. The report has been updated to include the actual 2017 figures.

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