Postal Regulatory Commission
Submitted 3/9/2017 2:10:48 PM
Filing ID: 99337
Accepted 3/9/2017

BEFORE THE
POSTAL REGULATORY COMMISSION
WASHINGTON, D.C. 20268-0001

INSTITUTIONAL COST CONTRIBUTION REQUIREMENT FOR COMPETITIVE PRODUCTS	))	Docket No. RM2017-1

REPLY DECLARATION OF JOHN C. PANZAR
ON BEHALF OF
AMAZON FULFILLMENT SERVICES, INC.

(March 9, 2017)

I. INTRODUCTION

My name is John C. Panzar. I am Professor of Economics in the Business School of the University of Auckland and Louis W. Menk Professor, Emeritus, at Northwestern University. My professional work has included analysis of economic pricing and costing principles for the United States Postal Service and other multiproduct firms. Since 1984, I have sponsored testimony to the Postal Regulatory Commission ("PRC" or "the Commission") and its predecessor, the Postal Rate Commission, for several parties (and the Commission itself). In 2014, the Commission contracted with me to prepare a report on the proper role of costs for postal regulation.[1] I also filed an initial declaration in this proceeding.[2]

---

[1] Panzar (2014).

[2] Panzar (2017).

The purpose of this reply declaration is to respond to the initial comments of UPS[3] and its advocates, J. Gregory Sidak[4] and the Former Utility Regulators.[5] Those parties argue for approaches that are essentially Fully Distributed Costing ("FDC") (also known as fully allocated costing ("FAC")), a methodology long discredited by the Commission and the courts.[6,7] My conclusions are easily summarized: the initial comments of UPS present no legitimate case for keeping—let alone increasing—the minimum contribution requirement.

---

[3] United Parcel Service, Inc. (2017a).

[4] Sidak (2017).

[5] Former Utility Regulators (2017).

[6] United States Supreme Court (1982); Postal Regulatory Commission (2016).

[7] I do not respond to the comments submitted by mailers. The vast majority of mailers agree with me that the minimum contribution requirement should be eliminated altogether. Docket No. RM2017-1, Comments of Market Dominant Mailers and Competitive Shippers (January 23, 2017); Docket No. RM2017-1, Comments of Stamps.com (January 23, 2017); Docket No. RM2017-1, Initial Comments of the American Catalog Mailers Association (January 23, 2017). Only a single mailer – the Greeting Cards Association – proposes *an increase* in the minimum contribution requirement and even it preaches conservatism, presumably to avoid the harms that a binding appropriate share requirement would cause. Docket No. RM2017-1, Initial Comments of the Greeting Card Association (January 23, 2017), p. 4. In its comments, the Association of Postal Commerce does not make a specific proposal, but suggests retaining a minimum contribution requirement. However, it also advocates a conservative approach due to the negative impact that a binding constraint would have on market-dominant mailers. Docket No. RM2017-1, Comments of the Association of Postal Commerce (January 23, 2017), p. 1, 6-7. These mailer commenters appear to want to retain a nonbinding constraint as a backup. As I explained in my initial declaration, while it is possible that such a constraint would have little effect, its only possible effect would be harmful. Therefore, the Commission should reject this argument for retaining any minimum contribution requirement.

In support of their positions, UPS, Mr. Sidak and the Former Utility Regulators make several fallacious arguments to justify large increases in the appropriate share requirement. The main arguments are:

1. The costing approach approved by the PRC in Docket No. RM2016-2 is wrong because it does not attribute enough cost.
2. Economies of scale/scope provide the Postal Service with an unfair competitive advantage.
3. The Postal Service has incentives to maximize scale, not profit.
4. The presence of the Postal Service in the industry harms dynamic efficiency by stifling private sector investment and innovation.

This reply declaration responds to these points, reiterates the discussion of the harm of fully distributed costing from my initial declaration, and puts into proper context UPS's citation to my prior work.

II. RESPONSE TO SPECIFIC UPS ARGUMENTS

A. As a matter of both law and economics, the Commission's causality-based costing approach is correct.

During the 46 years since the Postal Reorganization Act took effect, the Commission has devoted considerable time and effort to develop and refine the causality-based costing methodology used to attribute Postal Service costs to various products and services. As I have testified,[8] the incremental cost–based methodology developed by the Postal Service and approved by the Commission is the economically correct way to implement the statutory requirement that all cost attribution must be based upon causal relationships. Therefore, any

[8] For example, in Panzar (2014) and Panzar (2016).

further quasi-cost allocation through a minimum contribution requirement is unnecessary and inappropriate.

UPS's Initial Comments suggest that Docket No. RM2016-2 somehow changed a prior PRC position that limited "institutional" costs to fixed costs.[9] This view has no basis in fact. For many years, the Cost and Revenue Analysis ("CRA") methodology developed by the Postal Service and accepted by the Commission had defined the Postal Service's institutional costs as a residual: i.e., the difference between total costs and the total amount of attributable costs, summed over all products. The CRA had defined a product's attributable costs as the total of its volume variable costs plus its "specific fixed" costs: i.e., any fixed costs caused by that product.[10] The change adopted by the Commission in Docket No. RM2016-2 was to redefine attributable costs as the incremental costs of a product. As explained in detail in Panzar (2014), a product's incremental costs will exceed the total of its volume variable and specific fixed costs when there are economies of scale. Therefore, the effect of the Commission's decision in Docket No. RM2016 is to include *less* variable common costs in the institutional cost of the Postal Service, not *more*! Thus, there is no basis for the UPS conclusion that:

> This ruling [RM2016-2] thus makes it even more essential that competitive products bear their proportional share of institutional costs.

UPS (2017a), p. 12.

---

[9] "Significantly, the Commission's ruling also for the first time expressly approved the Postal Service's practice of including within 'institutional' costs both fixed *and variable* common costs." UPS (2017a), p. 12. Emphasis in original, footnote omitted.

[10] This relationship was first exposited by Bradley, Colvin and Smith (1993). The basic principles are also explained quite clearly in Office of the Inspector General (2012). *See also* Panzar (2014).

To conclude, as I pointed out in my Initial Declaration,[11] a minimum contribution requirement is not a rational way to provide a margin of safety against potential errors in USPS incremental cost estimates. Current Commission procedures for assessing costing methods are the right avenue for reviewing and improving cost methods.

B. A minimum contribution requirement should not be used to "level the competitive playing field" between the Postal Service and private carriers.

In its initial comments,[12] UPS claims that private competitors have to incur the same kinds of fixed and common costs as the Postal Service, but have no legal monopolies to exploit to help recover these costs. Hence, UPS argues, a price floor set only at the level of incremental cost is unfair because it allows the Postal Service to "piggyback" competitive products onto an existing network "designed around letters and flats," an option unavailable to UPS and other private competitors. UPS concludes (at p. 15): "The private sector cannot duplicate [the] low marginal costs" that the Postal Service enjoys because of the letter and mailbox monopolies.

As I explained in my initial declaration,[13] whether or not the Postal Service and private parcel carriers compete on a "level playing field" is irrelevant to the issue of the minimum contribution requirement. Fairness to ratepayers requires that, if necessary, integrated firms be allowed to price all the way down to incremental cost to capture competitive volumes.[14]

---

[11] Panzar (2017) at pp. 6-7. See also Amazon (2017), at pp. 33-34.

[12] UPS (2017a) at pp. 3-4; 6-7; and 10.

[13] Panzar (2017) at p. 8.

[14] Amazon (2017) at p. 38.

That some of the Postal Service's economies of scope and density result from the provision of its market dominant or legal monopoly products does not justify establishing a higher price floor. The letter and mailbox monopolies result from a policy repeatedly left in place by Congress, most recently in the 2006 amendments to the law. As long as the American people through their elected representatives choose to maintain the monopolies, they will confer scale economies on the Postal Service. Raising the minimum price floor would not eliminate those economies, but merely transfer their benefits from shippers and consumers to already-profitable private competitors like UPS.[15] In any event, as detailed by the Postal Service,[16] its modest share of competitive product revenue suggests that it is not operating at a net competitive advantage.

In a similar manner, UPS argues[17] that the minimum contribution requirement should be used to ensure that the Postal Service's revenues from competitive products are sufficient to cover the total costs of a (hypothetical) stand-alone competitive enterprise operated by the Postal Service. As I explained in my initial declaration,[18] UPS confuses the appropriate test for a *price ceiling* as a benchmark for a *price floor*. The stand-alone cost test has long been recognized by economists as a method for determining the *maximum* price that the users of a service can be charged without making them victims of cross subsidization.[19]

---

[15] Amazon (2017) at pp. 39-40; Panzar (2017) at p. 8.

[16] Docket No. RM2017-1, Comments of the United States Postal Service, ("USPS") at p. 11.

[17] UPS (2017) at pp. 33-34.

[18] Panzar (2017) at pp. 8-10. See also Amazon (2017) at pp. 37-38.

[19] In additional to the seminal contribution of Faulhaber (1975), see Baumol, Panzar and Willig (1988)); Baumol and Sidak (1994); and Sidak and Spulber (1997).

C. Contrary to Mr. Sidak's claim, the Postal Service is aggressively pursuing contribution from competitive products.

In his initial comments,[20] Mr. Sidak argues that "the Postal Service has the incentive and ability to expand scale at the expense of profit."[21] Therefore, he advocates that the Commission increase the minimum contribution requirement to protect market-dominant customers. Even if his arguments were valid, the effect of increasing the minimum contribution requirement until it is binding would benefit UPS and other private carriers, *not* market dominant consumers.

Let me explain. Mr. Sidak bases his argument on a theoretical analysis that he developed early this century.[22] The key assumption of this analysis is that the Postal Service (or other State-Owned Enterprise "SOE") maximizes a weighted sum of profits and total revenue rather than profit alone.[23] Not surprisingly, *given that assumption*, the SOE *may* have an incentive to set below-cost prices for products with very elastic demands; i.e., competitive products. This, indeed, would be a problem if the SOE *did* have this desire and was allowed to act on it. Neither is the case. On the latter point, this type of predatory behavior is prevented by the incremental cost price floor.

Further, *if* the theory were applicable, one would find the Postal Service pricing its competitive products at, or very close to, the price floor. Extensive evidence in this proceeding

---

[20] Sidak (2017) at p. 7.

[21] Sidak (2017) at p. 11.

[22] See, Sappington and Sidak (2003a); Sappington and Sidak (2003b).

[23] Sidak (2017), p. 11 and note 26.

has disproven this hypothesis. The Postal Service has aggressively increased the prices of its competitive products; in FY 2016, competitive products generated contribution levels three times the amount required by the Commission.[24] Put simply, a decade of experience under the PAEA emphatically refutes Sidak's scale-maximizing hypothesis.

Perhaps in anticipation of this rather obvious difficulty, Sappington and Sidak (2003a,b) speculate that the SOE will make (inefficient) capital investments (e.g., vans with overly large parcel capacities) that lower the measured incremental costs of its competitive service, allowing it to seemingly "pass" the incremental cost test while continuing to pursue scale at the expense of profit. Mr. Sidak's current declaration offers no evidence, however, that the Postal Service has actually behaved in this way. The notion that the Postal Service is replacing its ancient fleet of delivery vehicles not because they are worn out, but because the Postal Service wants to game the incremental cost test, is certainly not self-evident.

Additionally, the price cap regulation of market dominant products under the Postal Accountability and Enhancement Act (PAEA) eliminates the concern that that a scale-seeking Postal Service will be able to harm the customers of its market dominant products. Mr. Sidak recognizes this, but speculates that the Postal Service could make up the foregone profits by cutting the quality of market dominant services, thereby increasing their *quality adjusted* prices.[25] The scenario he envisions seems to be that the Postal Service can cut the cost of supplying market dominant products by reducing their quality of service because the PRC

---

[24] USPS (2017), p. 10, fn. 25; MDMCS Comments, pp. 4-6.

[25] Sidak (2017), pp. 10-16.

cannot effectively oversee quality. The fallacy in this argument is that, if saving money by secretly cutting corners on quality is feasible, the USPS can do that regardless of its competitive product pricing strategies. Competitive product pricing decisions do not add to or detract from the profitability of the former strategy.

D. The Postal Service is not stifling innovation or investment.

UPS argues that Postal Service price competition harms consumer welfare in the long run by stifling the profit incentive of private firms to compete, invest and innovate. UPS 20, 25-27. This theory is clearly incorrect and runs counter to recent statements of David Abney, UPS chairman and CEO, and Richard Peretz, UPS's CFO about UPS's historic investment levels and strong financial performance. In a recent press release about its February 21, 2017 investor conference themed "*Invest. Grow. Deliver.",* David Abney, UPS's chairman and CEO, stated:

> Over the next several years, you will see the most sweeping transformation of our network in its history…We are adding more flexible capacity, more technology, more capabilities and becoming more efficient, ultimately to improve customer and shareowner value.

UPS (2017b). And UPS CFO Richard Peretz added:

> The strong financial hallmarks of UPS remain unchanged…We are great stewards of capital, generate strong cash from operations and have a generous shareowner distribution policy…We continue to deliver the highest operating margins in the industry…This legacy combined with our future growth prospects makes UPS a high-quality investment today, and for years to come as we build the smart logistics network.

Id. These proclamations are hardly the voices of an industry where innovation is being stifled. And the same is true of smaller private carriers, as the Postal Service's Office of the Inspector General recently noted:

- Technology is driving a heightened level of innovation in product and service offerings in last mile parcel delivery and is transforming the way delivery providers interact with their customers.

- It has empowered customers with tools like real-time tracking, and has raised their expectations. Consumers now expect delivery to be flexible, visible, and fast — all at a low price.

- It is also democratizing the last mile, which is witnessing an invasion by a variety of new entrants that do not need to make considerable investment in labor or capital, from large ecommerce platforms, to brick and mortar retailers and even small startups.[26]

III. UPS'S PROPOSALS ARE VERSIONS OF FULLY DISTRIBUTED COST PRICING AND SHOULD BE REJECTED.

The UPS position on appropriate share reflects a very thinly masked fully distributed cost (FDC) pricing mechanism and as such provides no actual support for a discussion of the required minimum contribution requirement. The false premise behind UPS's recommendations is clearly stated:

> It is reasonable to assume that institutional costs are incurred roughly in proportion to the importance of each product to the enterprise, as measured by the costs associated with each product.

UPS (2017), p. 35. Given this premise, it is not surprising that UPS concludes that:

> Accordingly, competitive products' share of institutional costs for these categories should correlate with their share of attributable costs.

UPS (2017), p. 35.

These statements are completely contrary to the logic behind the Commission's decision in Docket No. RM2016-2, which found that institutional costs are precisely those

---

[26] Office of Inspector General (2016).

costs that are *not* caused by any individual product. While UPS understandably hides behind euphemisms, it is clearly proposing that the Commission base the minimum contribution requirement on fully distributed costs. The fundamental identity between the current UPS proposal and FDC methodologies that the Commission and the courts rejected 30-40 years ago is astounding![27]

UPS is proposing to determine the minimum contribution requirement by first *allocating* (there is no other word for it) to competitive products a proportion of institutional costs equal to the competitive products' share of total attributable costs. UPS does not go so far as to recommend that the price of each competitive product be set so that the revenues from each product exactly cover its fully allocated costs. Rather, the UPS proposal would require only that that competitive products collectively cover their aggregate fully allocated costs (with institutional costs allocated in proportion to attributable costs). The inherent vices of fully allocated cost ratemaking would remain, however: institutional costs would be allocated between competitive products and market dominant products not on the basis of cost causation (there is none, by definition), and not on the basis of willingness or ability to pay, but solely on the basis of an arbitrary accounting convention. Since the Postal Service's competitive products (by definition) are likely to have more elastic demand and greater competition than its market-dominant products, the resulting price scheme is likely to lead to allocative inefficiency and jeopardize the Postal Service's ability to recover all of its costs.

---

[27] See Braeutigam (1980) for a thorough discussion of FDC methodologies.

UPS offers a number of adjustments to attempt to make its FDC approach more palatable. For example, it suggests (i) that the allocation of institutional costs be made using a rolling three-year average of attributable costs;[28] or that (ii) "the Commission could phase-in the increase of the appropriate share percentage."[29] UPS also proposes in the alternative that the Commission allocate institutional costs in proportion to revenue rather than attributable costs:

> If the Commission declines to use attributable cost as the relevant metric, the appropriate share requirement should be set to equal the revenues from competitive products as a percentage of total revenues.

UPS at p. 39. None of these adjustments, however, eliminate the harmful effects of FDC ratemaking.

My initial declaration made clear why nothing good can come from adopting such a policy.[30] UPS witness Sidak, in his scholarly writings, has agreed:

> In a frequently cited article criticizing FDC pricing, William J. Baumol and others have written:
>
> > The "reasonableness" of the basis of allocation selected makes absolutely no difference except to the success of the advocates of the figures in deluding others (and perhaps themselves) about the defensibility of the numbers. There just can be no excuse for continued use of such an essentially random, or, rather, fully manipulable calculation process as a basis for vital economic decisions by regulators. (Footnote omitted.)
>
> There are other problems with FDC pricing as well. As Ronald R. Braeutigam has observed, "FDC pricing will lead to prices which are in general economically inefficient, which is not surprising given the fact that the practice

---

[28] UPS (2017) at p. 35.

[29] UPS (2017) at pp. 36-37.

[30] Panzar (2017), pp. 11-13. See also Amazon (2017) at pp. 44-45.

> focuses heavily on cost and little on conditions of demand (including demand elasticities) which are important in determining the size of the deadweight losses from any pricing policy."[31]

At best, the new FDC constraints would turn out non-binding and lacking any effect. However, if the constraints forced the Postal Service to raise its prices and competitors reduced or maintained their prices, the Postal Service would suffer a devastating losses in the volumes and the profit contributions obtained from competitive products. Alternatively, if competitors responded by raising their own prices, the result could be a massive cost increase for mailers and consumers.[32] Rural shippers and consumers would be hit the hardest.[33]

IV. RESPONSE TO MISLEADING CITATION TO MY RM2016-2 DECLARATION BY UPS

My purpose in this section is to clarify a misleading citation to my declaration in RM2016-2 made in the initial comments of UPS:

> In RM2016-2, for example, Professor John Panzar explained how the Postal Service's ability to exploit the cost advantages arising from the postal monopoly could naturally lead to a 'monopoly industry configuration' where the Postal Service becomes the sole provider of competitive products and services.

UPS (2017), p. 25. The context of my actual declaration reveals, however, it was discussing an illustrative hypothetical example involving was only a single competitive service with a totally inelastic demand. The example demonstrated that, when incremental costs were used to determine a price floor, the Postal Service could successfully capture the competitive volumes *if and only if* it was socially efficient for it to do so. For simplicity, the example

---

[31] Sidak and Spulber (1997), p. 42 (footnote omitted).

[32] Amazon (2017 at pp. 45-46; Panzar (2017) at pp. 12, 14-15.

[33] Amazon (2017) at pp. 47-51; Panzar (2017) at p. 12.

included only one service subject to competition. By construction, when the parameters were such that the Postal Service was more efficient than its rivals, it would become "the sole provider of competitive products and services" (UPS (2017), p. 25) *in that example*. This should not be interpreted as suggesting that the use of the incremental cost price floor would lead to the monopolization of competitive products by the Postal Service! Indeed, as discussed above, even with today's nonbinding minimum contribution requirement, the Postal Service is far from monopolizing package delivery.

V. CONCLUSION

I continue to recommend that the appropriate minimum contribution requirement for competitive products be eliminated. As I concluded in my initial comments, a positive minimum contribution requirement has the effect of raising the rate floor for the Postal Service's competitive offerings above the incremental cost standard. The only possible beneficiaries would be the Postal Service's rival carriers. Consumers, the Postal Service and postal sector efficiency could only lose, never gain. The "least bad" possible result would be that the constraint would remain redundant and non-binding, and have no effect on competitive outcomes.

REFERENCES

Amazon Fulfilment Services, Inc. (2017). Comments in PRC Docket No. RM2016-2 (Jan. 23, 2017).

Baumol, William J., Panzar, John C., and Willig, Robert D. (1988). *Contestable Markets and the Theory of Industry Structure*, 2nd ed., Harcourt: New York.

Baumol, William J., and Sidak, J. Gregory (1994). *Toward Competition in Local Telephony*, MIT and AEI Press.

Bradley, Michael D., Colvin, Jeffrey L., and Smith, Marc A. (1993). "Measuring Product Costs for Ratemaking: The United States Postal Service," in M. A. Crew and P. R. Kleindorfer, eds., *Regulation and the Nature of Postal and Delivery Services*. Kluwer Academic Publishers.

Braeutigam, Ronald R. (1980). "An analysis of fully distributed cost pricing in regulated industries," *Bell Journal of Economics*, 11:182-196.

Faulhaber, Gerald (1975). "Cross-Subsidization: Pricing in Public Enterprises," *American Economic Review*, Vol. 65, No. 5, 966-977.

Former Utility Regulators (2017). Docket No. RM2017-1, Comments of Former Utility Regulators (filed January 23, 2017).

Office of the Inspector General, United States Postal Service (2012). "A Primer on Postal Costing Issues," RARC-WP-12-008.

Office of Inspector General, United States Postal Service (2016). Report No. RARC-WP-16-012, *Technological Disruption and Innovation in Last Mile Delivery* (June 6, 2016) (available at www.uspsoig.gov/document/technological-disruption-and-innovation-last-mile-delivery).

Panzar, John C. (2014). "The Role of Costs for Postal Regulation," report to Postal Regulatory Commission.

Panzar, John C. (2016). Docket No. RM2016-2, Declaration of on behalf of Amazon Fulfillment Services, Inc. (January 16, 2016).

Panzar, John C. (2017). Docket No. RM2017-1, Declaration on behalf of Amazon Fulfillment Services, Inc. (January 23, 2017).

Postal Regulatory Commission (2016). Order No. 3506 in Docket No. RM2016-2, *Periodic Reporting (UPS Proposals One, Two, and Three)* (Sept. 9, 2016).

Sappington, David, and Sidak, J. Gregory (2003a). "Competition Law for State-Owned Enterprises," Antitrust Law Journal, Vol. 71, No. 2, pp. 479-523.

Sappington, David, and Sidak, J. Gregory Sidak (2003b). "Incentives for Anticompetitive Behavior by Public Enterprises," *Review of Industrial Organization* 22: 183.

Sidak, J. Gregory (2017); Declaration on Behalf of United Parcel Service in PRC Docket No. RM2017-1, *Institutional Cost Contribution Requirement for Competitive Products* (January 23, 2017).

Sidak, J. Gregory, and Spulber, Daniel (1997). *Deregulatory Takings and the Regulatory Contract,* Cambridge University Press.

United Parcel Service, Inc. (2017a). Initial Comments in Docket No. RM2017-1, *Institutional Cost Contribution Requirement for Competitive Products* (January 23, 2017).

United Parcel Service, Inc. (2017b). Press release dated February 21, 2017.

United States Supreme Court (1982). *National Association of Greeting Card Publishers v. United States Postal Service*, 462 U.S. 810.

VERIFICATION

I, John C. Panzar, declare under penalty of perjury that the foregoing is true and correct. Executed on March 8, 2017.

John C. Panzar