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The American Consumer Institute
Center for Citizen Research

Comments of American Consumer Institute
Center for Citizen Research
Docket No. RM2017-1
Institutional Cost Contribution Requirement for Competitive Products

Submitted to the United States Postal Regulatory Commission, September 12, 2018

Pursuant to Order No. 4742, the American Consumer Institute Center for Citizen Research (ACI) submits these comments regarding the Revised Notice of Proposed Rulemaking (Notice) to evaluate the institutional cost contribution requirement for competitive products.[1] In doing so, the Postal Regulatory Commission (Commission) proposes a modification to its formula-based approach.

Though the Commission's efforts to correct for weaknesses in its formula-based approach are commendable, the latest proposed formula contains a number of serious flaws – both practical and theoretical – that make its use entirely unsuitable for determining the appropriate share of institutional costs. We recommend that the Commission abandon this approach and move toward a more precise approach. The Commission should initially use an affiliate transactions rule that would set the appropriate share of institutional costs so that market-dominant and competitive products pay a similar cost burden. Specifically, competitive products should be charged the same percentage of institutional costs as the percentage of total USPS revenues they generate for the USPS. For example, if competitive products account for 30% share and market-dominant products account for 70% share of USPS revenues, then they should cover 30% and 70% of total institutional costs, respectively.

This sort of affiliate transactions rule is common in regulated industries and well-established by regulatory commissions. Once a rule is in place, the Commission can take the time to complete a full accounting of competitive costs, and then later adjust the appropriate share accordingly, whether it be higher or lower.

The Proposed Formula Misses the Mark

For this review, the Postal Accountability and Enhancement Act (PAEA) directs the Commission to assess and establish the "institutional costs contribution requirement" to determine the minimum share that the United States Postal Services (USPS) competitive products should make towards various overhead costs.[2] Keep in mind that subsections (a)(1),

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[1] Institutional Cost Contribution Requirement for Competitive Products, Revised Notice of Proposed Rulemaking, Order No. 4742, regarding Docket No. RM2017-1, August 7, 2018. Referred to generally as the *Notice*.
[2] 39 U.S. Code § 3633. Referred to here as the *PAEA*.

(a)(2) and (a)(3) direct that there should be no subsidy of competitive products by the USPS from its market-dominant products, and that the Commission should "ensure" that competitive products cover their attributable costs and the appropriate share of institutional costs. If competitive product prices are set too low and do not fully recover joint and overhead costs, the risk is that a portion of competitive costs will be shifted to monopoly products to recover. Therefore, from the plain language of the PAEA, Congress was focused on preventing the USPS market-dominant products from providing any financial assistance for the benefit of competitive products, as well as directing that the competitive products of USPS pay, at a minimum, all fixed and variable costs.

This raises two problems with the Commission's approach. First, the proposed formula appears to be more focused on USPS setting its competitive prices too high, and not too low, contrary to the emphasis in the PAEA. Second, the proposed formula appears to keep the USPS minimum appropriate share too low, contrary to the PAEA stating that all competitive products cover their attributable and institutional costs. These two points deserve further discussion:

1. **Setting Competitive Prices Too High Should Not Be the Commission's Concern.** In establishing its formula-based approach, the Commission incorporates a modification of the Lerner Index, for the purpose of measuring market power[3] – namely, the "competitor's ability to profitably set prices well above costs with little chance that entry or expansion by other competitors would erode such profits."[4] However, the harm that the USPS could do to its competitors and to consumers of market-dominant products is to shift revenues (and earnings) from its captive monopoly market to support its competitive products. Similarly, USPS could shift its costs and risks from its competitive products to its market-dominant products, a practice contrary to the PAEA's explicit direction for no subsidization and for full cost recovery.[5] Simply put, the Lerner Index and the modification are wrongly concerned about the ability of the USPS to set its competitive prices too high, rather than setting prices too low. Predatory pricing and below market pricing should be the concern of the Commission, and the formula does not address this important issue.

2. **The Proposed Formula Continues an Artificially Low Minimum Appropriate Share.** The PAEA's requirements to "prohibit the subsidization of competitive products" and the full recovery of attributable and institutional costs are completely consistent with the well-accepted regulatory practice of spreading institutional costs proportionately across regulated and unregulated products. For example, competitive products would pay the same percentage of institutional costs as the percentage of total USPS revenues they generate for USPS.[6] This approach is frequently used to regulate the affiliate transactions of telecommunications service

[3] Notice, p. 9.
[4] Notice, p. 5.
[5] Subsection (2)(3) of the PAEA makes clear there should not be any "subsidization" -- that is allowing revenues of the monopoly products to support any part of competitive products.
[6] The relative importance of expenses is also common, where the recovery of overheads is based on a cost factor.

providers, electric utilities and other regulated service industries. There is a long history on the proper treatment of transactions between regulated public utilities and their nonregulated affiliates.[7] For a regulated company with an unregulated affiliate these rules require the regulated entity to charge the competitive entity the higher of either the prevailing market price or fully allocated costs for the products it provides the unregulated entity.[8] The use of 5.5% was set as a convenient and low starting point to provide the Commission adequate time to determine actual costs. However, by using the 5.5% FY2007 benchmark, the formula incorporates a downward bias in institutional cost recovery and it fails to determine what the actually appropriate share should be. After more than a decade since the passage of the PAEA, the Commission should be able to determine the actual costs of these competitive products by a full cost accounting model. In the absence of such data, the Commission should initially use an affiliate transactions rule that would set the appropriate share of institutional costs so that market-dominant and competitive products pay the same percentage of costs. To do this the Commission should require competitive products to pay, at a minimum, the same percentage of institutional costs as the percentage of total USPS revenues they generate for the USPS. The Commission should impose such an affiliate transaction rule, even temporarily, until it receives from the USPS the information it requires to determine actual costs.

The Lerner Index and its Modification are Unsuitable for Establishing the Appropriate Share

The modification of the Lerner Index – revenue over variable costs – has some limitations that should disqualify it from consideration. The most obvious is that firms with large economies of scale and scope will appear to have higher gross profits (revenues minus operating expenses) and, therefore, higher market power. Competitive industries have varying degrees of gross profitability in large part due to higher capital costs, and "a positive Lerner Index could simply reflect the firm's need to earn non-negative profits rather than market power."[9] Therefore, the Lerner Index and its modified proxy are not appropriate for determining cost shares for high fixed costs companies, such as postal services.

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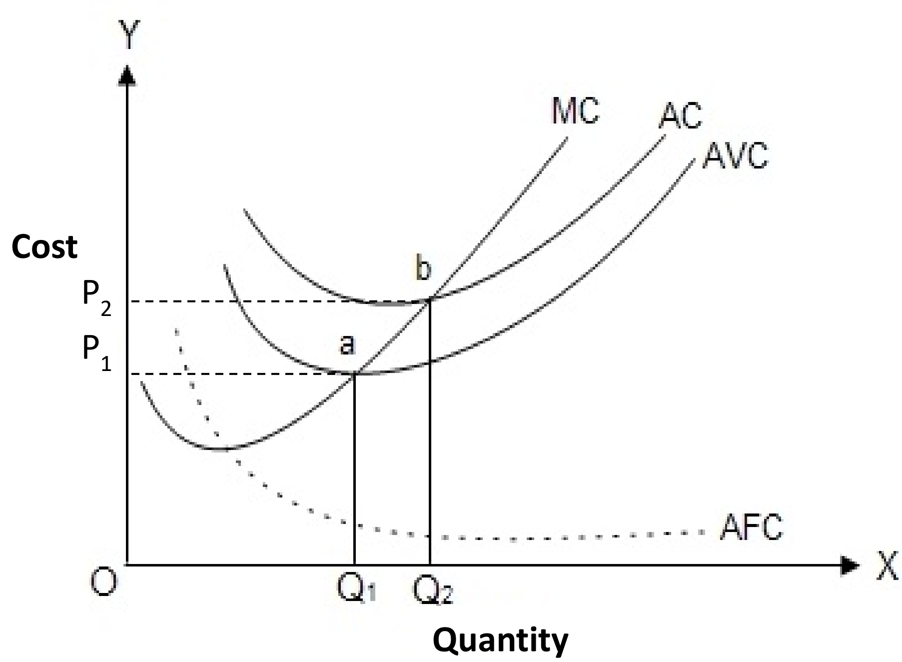
[7] The GAO analyzed and made recommendations to Congress, and later Congress directed the establishment rules for "protection against abusive affiliated transactions." See "Telecommunications: Controlling Cross-Subsidy Between Regulated and Competitive Services," General Accounting Office, GAO #88-34, October 1987; and Telecommunications Act of 1996, Pub. LA. No. 104-104, 110 Stat. 56, 1996.

[8] For some examples, see "An investigation of the Need for Affiliate Transaction Rules and Cost Allocation Requirement for all Jurisdictional Utilities," Before the Public Service Commission, Commonwealth of Kentucky, Case No. 369, September 3, 1998; "Affiliate Transactions Price Guideline for Transactions between Verizon Incumbent Local Exchange Carriers and Verizon Non-Regulated Affiliates," January 17, 2002, at http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/19734.pdf; and for a federal example, see "Cross-subsidization Restrictions on Affiliate Transactions," United States Federal Energy Regulatory Commission, Docket No. RM07-15-000, Order No. 707, final order issued February 21, 2008.

[9] Laura Spierdijka and Michalis Zaourasa, "Measuring Banks' Market Power in the Presence of Economies of Scale: A Scale-Corrected Lerner Index," Journal of Banking and Finance, Vol. 87, Feb. 2018, pp. 40-48.

The formula has an error in its logic by virtue of the fact that the proposed formula does not consider the institutional costs of the USPS in its calculation of the appropriate share of institutional costs, only relying on variables for market power and market size. The best way to know the appropriate costs is to measure it. We now know for certain that after 10 years, a 5.5% minimum share is wrong because much has changed in the market and the figure was never based on precise information. Whether the correct number is higher or lower, the figure served as a placeholder 10 years ago, and nothing more. Using the 5.5% minimum today as a benchmark in the proposed formula would render all of calculations going forward wrong.

Moreover, as the Commission notes, the proposed formula does not use marginal costs; it uses attributable costs as a proxy.[10] As the chart below shows, pricing at marginal cost (where P=MC) would be the profit maximizing point, where price is P_2 and quantity is Q_2. This is also the point where the Lerner Index would be zero, indicating no market power. However, using a substitute for marginal cost, such as attributable costs or variable costs, creates a significant measurement bias. In the chart below, where P=AVC, price is P_1 and quantity is Q_1. Thus, the Commission's formula assumes very different prices and quantities, and should not be used as a determinant of the appropriate share of institutional costs. In fact, what is missing from the Lerner Index is precisely what the modified formula attempts to measure – the institutional costs – essentially adding an irrelevant variable to the proposed formula.



Problems with the Proposed Formula

The modified formula may unintentionally provide the USPS a perverse means to game the system. Say, for example, USPS modestly lowers prices to or near a predatory level. Lower

[10] Notice, p. 10.

prices will result in a lower modified Lerner Index, which will mean a lower competitive contribution margin in the Commission's proposed formula. That, in turn, will lower the USPS' appropriate share of institutional costs. In effect, the formula encourages predatory, or certainly below market pricing – precisely what the PAEA sets out to prohibit. Ironically, lower prices could offset increased market share as measured by revenue, leading to only a modest increase in market size, further mitigating the impact of the minimum appropriate cost share.

The construction of the formula has additional problems. The proposed formula uses the Consumer Price Index, a measure of household input prices, as a revenue deflator. The prices of consumer goods and services – eggs, clothing, televisions, transportation and so on – have little bearing on the rate changes of the competitors' products in question. In addition, the use of the CPI to deflate revenues assumes that all competitors have the same price changes. Trying to fix the proposed formula's shortcomings by removing price effects simply introduces new problems.

The Commission also assumes equal weights with no economic justification for why the variables should be weighted in this manner.[11] Index weights, however, matter as much as the variables in formulae do. The argument that equal weights is appropriate is no truer than arguing that the estimated coefficients of a multiple regression should be the same for all of the regression's variables. For the Consumer Price Index, for example, the individual market basket indexes are weighted by dollar value from the annual Personal Consumption Expenditure Survey – they are not just averaged. In the absence of any empirical evidence to justify equal weights, the Commission should abandon this proposed formula-based approach.

Importantly, applying equal weights makes the appropriate share indisputably biased. As the table below shows, the annual percentage changes in Competitive Contribution Margin average 4.2% with a high value of 18.1%, a low value of -7.9% and the range of 26.0%.[12] In comparison, the Competitive Growth Differential averages 1.2% with a high value of 2.7%, low value of -0.2% and the range of 2.9%.[13] The differences in these two series, in terms of variance, is significant. This means that the arbitrary assignment of a 50% weight makes movements in the Competitive Contribution Margin to be more influential over the composite index, compared to movements in the Competitive Growth Differential. In effect, the two components in the formula do not have equal effects on the composite index, because series have different ranges of change. This means there is a bias in the formula. If the weights are biased, then so are the formula results and the formula should be abandoned, and the Commission should use an approach that places the same burden of recovery on institutional costs on market-dominant and competitive products.

[11] Notice, p. 44.
[12] Notice, Table IV-1, P. 17.
[13] Notice, Table IV-2), p. 31.

Variance of Components are Different

	% Change in Competitive Contribution Margin	Competitive Growth Differential
	-5.90%	0.70%
	13.40%	1.20%
	15.70%	0.90%
	-7.90%	-0.20%
	3.70%	2.70%
	5.50%	2.50%
	0.40%	1.20%
	-2.60%	0.20%
	18.10%	1.40%
	1.30%	1.10%
Average	**4.17%**	**1.17%**
Hi	**18.10%**	**2.90%**
Low	**-7.90%**	**-0.20%**
Range	**26.00%**	**2.90%**

It is also worth noting that the results from the modified formula are likely to be influenced by mixed effects. For example, the Lerner Index may compare the unit price to its marginal cost, while the modified Lerner components remove the units to make the comparison of revenue to costs. The problem is that this comparison lumps all products and costs together. While individual prices may or may not change, revenues will change as the mix of products changes. It is methodologically incorrect to not account for mixed and substitution effects. The use of a modified Lerner Index to cover a range of products creates changes in the component that have no bearing on the appropriate share of institutional costs. These formulas should be abandoned for an adoption of a traditional affiliated transactions rule.

Relevant Variables

In modifying the formula, the Commission fails to empirically demonstrate that the two components – the Competitive Contribution Margin and the Competitive Growth Differential – have any explanatory power in determining an appropriate institutional cost share specifically in the production of competitive products. Furthermore, there is no evidence that these variables adequately explain the variation in "prevailing competitive conditions in the market."[14] Instead of using these irrelevant variables, there are many other variables that may provide more accurate information on "prevailing competitive conditions" in the market:

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[14] PAEA, at subsection (b).

Ability to shift profits	Economies of scale
Ability to shift revenues	Geographic disparities
Ability to shift costs	First to market advantage
Intangible value of the brand	Rate changes
Intangible value of the mailbox	Price elasticity
Number of firms in the market	Cross-price elasticity
Quality of service	Barriers to entry
Herfindahl–Hirschman Index	Economic output
Innovation	Labor market conditions
Demand for substitute goods	Outsourcing
Demand for complementary goods	Number of suppliers
Economies of scope	Supply chain issue

The relevant statutory section said that in making the appropriate share determination, "the Commission shall consider all relevant circumstances, including the relevant competitive conditions."[15] Missing relevant variables are as harmful as adding irrelevant ones. What is absent from the proposed formula is incorporating the PAEA's specific reference to "the degree to which any costs are uniquely or disproportionately associated with competitive products" – which is precisely what the PAEA directs the Commission to do. A full cost accounting would accomplish the PAEA's directive.

Conclusion

While the Commission has made a good attempt to develop a formula-based approach and attempted to correct for deficiencies, the formula is still riddled with problems and now has some new ones. The formula is based on two components that are not relevant in explaining the variation in the appropriate share of institutional costs, and it may be excluding more pertinent variables. The use of 50% weights between the two components is arbitrary and, because of differences in the variance of the components, creates a clear bias that favors one component over another. The formula relies on the change in consumer prices to remove the rate effects from the revenues of competitors. The formula is focused on deterring the USPS from setting prices that are too high, while the PAEA is focused on prohibiting the USPS from setting prices that are too low. The formula does not incorporate any component or factor that identifies institutional costs uniquely associated with competitive products, as required by the PAEA – specifically, "the degree to which any costs are uniquely or disproportionately associated with competitive products."

In light of all of this, the proposed formula is entirely unsuitable for determining the actual appropriate share of institutional costs. Instead, the Commission should require an

[15] Ibid.

extensive study to determine the institutional costs used in producing competitive products, including time/motion studies. However, the USPS has no reason to provide these studies, because the 5.5% share is so low that it has no incentive to do so.

Therefore, for this rulemaking, the Commission should immediately employ a simple affiliate transactions rule that requires competitive products to pay, at a minimum, the same burden of institutional costs as market-dominant products, based on the relative size of competitive and non-dominant revenues. Later, the Commission should revisit the appropriate share once an extensive study of institutional costs and time/motion analyses are completed, and not before then.

Since the enactment of the PAEA in 2006, the Postal Service's product mix has shifted dramatically, such that parcels have taken on increasingly larger shares of overall volumes. These trends must be more closely observed and accounted for by the Commission to determine the "appropriate" share of USPS's institutional costs that its competitive products must bear. We recommend the Commission employ a simple affiliated interest rule that abides by the PAEA's prohibition on subsidies and a requirement for full cost recovery. This is the correct choice for the Commission to make in order for it to protect consumers of market-dominant products, until it receives the full cost information it requires.

Respectfully submitted,

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