

USPS/PB-T1-1 On page 15 of your rebuttal testimony (USPS-RT-13) on behalf of the Postal Service in Docket No. R97-1, you testified (Tr. 34/18457) as follows:

There may be good reasons to depart from this Efficient Discount Policy when setting rates. For example, as Witness Bernstein points out, Ramsey optimal prices may involve different discounts (footnote).

Footnote: In other words, efficient “discounts” do not necessarily yield efficient “rates.” Logically, this is not surprising, as the scope of the inquiry involved in exploring efficient discounts does not address the broader issue of the efficiency of the base rate to which the discount is applied.

Do you still agree with this portion of your previous testimony? If not, why not?

RESPONSE

Yes.

USPS/PB-T1-2 During oral cross examination on your rebuttal testimony in Docket No. R97-1 (Tr. 34/18465-66), you defined “efficient discount policy” as “the situation where the discount between a full-service sub-class of mail and one for which work sharing provided is equal to the per unit postal cost saved,” and when asked if you support and recommend utilization of that policy, you replied:

A As I explained in the testimony, it's the starting point for ensuring cost efficiency -- that is, ensuring that mailers engage in work sharing only when they are at least as efficient as the Postal Service at the margin in providing that work.

So, in that sense, I recommend it, but there may be demand side reasons or reasons in accordance with the Postal Statute for deviating from that efficient discount policy.

To further elaborate, I guess, if I could – you might want to rename it the cost-efficient discount policy, because that's what the term "efficiency" should refer to.

Do you still agree with this portion of your previous testimony? If not, why not?

RESPONSE

Yes.

USPS/PB-T1-3 During oral cross examination on your rebuttal testimony in Docket No. R97-1 (Tr. 34/18481), you were asked if there is a tension between the “efficient discount policy rate” and the “efficient rate.” You responded that:

A. There’s a pricing tension between demand-side considerations, value of service, elasticity of demand, and cost efficiency considerations. There’s certainly a tension there, anytime the rate is not consistent with the efficient discount policy.

The following exchange then occurred (Tr. 34/18482-84):

Q And in terms of pricing and determining prices, would you agree that it is necessary to examine both the efficient rate as well as the efficient discount policy rate before making a final judgment?

A I would say that it would be desirable to examine both in the following sense.

The "efficient" rate -- I would like to put the term in verbal quotes -- in order to do that, let me use the term Ramsey rate that comes from maximizing some well-understood total surplus function.

That rate takes into account this trade-off between the supply side and the demand side that I have been discussing, so if I were charged with the task of maximizing total surplus, I would want to know the Ramsey rate and that rate would reflect -- in some cases it will depart from the efficient discount rate, but that rate will reflect the right trade-off between the cost considerations and demand considerations.

But that is only -- now for the Commission's purposes I would think that would be useful information, but their statutory responsibility isn't as simple as maximizing total surplus.

They may be willing to trade off demand side considerations against cost side efficiencies as well, and I would think they would want to know both numbers.

If they were just interested in Ramsey-like total surplus calculations they wouldn't have to pay any great attention to the efficient discount policy because the Ramsey calculation has made that trade-off automatically.

So I guess that's saying yes, I would like -- if I were in the position of setting the rates I would like to see both numbers.

Q And you wouldn't simply by rote choose the efficient discount policy rate over the efficient or Ramsey rate?

A No.

Do you still agree with these portions of your previous testimony? If not, why not?

RESPONSE

Yes.

USPS/PB-T1-4 Would you agree that application of ECPR will lead to no improvement in cost efficiency if, relative to the status quo, it leads to no change in mailer behavior? If not, please identify the change in cost efficiency in the following scenario. Assume that a particular activity can be performed by the Postal Service at a unit cost of 10 cents, and further assume that there are two sets of mailers for whom it is feasible to conduct this activity themselves. The first set constitutes 60 percent of mailers, and for those mailers it costs 6 cents to conduct the activity. The second set constitutes 40 percent of mailers, and for them it costs 12 cents to conduct the activity. The current status quo discount is 7 cents, and therefore 60 percent of the mailers engage in the worksharing activity. Application of ECPR would increase the discount to 10 cents. Please confirm that increasing the discount from 7 cents to 10 cents under this scenario would not lead to any change in mailer behavior, or in the cost efficiency of the postal system. Please explain your answer fully.

RESPONSE

Yes, but I believe it unlikely that application of ECPR will not change behavior given how discounts have changed behavior in the postal arena to date. The Cohen *et al.* paper I cite in my testimony shows that in 2004, almost 150 billion pieces of mail of the total 206 billion pieces of mail availed themselves of worksharing discounts.

USPS/PB-T1-5 Please consider the following scenario. Assume that a particular activity can be performed by the Postal Service at a unit cost of 10 cents, and further assume that there are three sets of mailers for whom it is feasible to conduct this activity themselves. The first set constitutes 60 percent of mailers, and for those mailers it costs 6 cents to conduct the activity. The second set constitutes 5 percent of the mailers, and for them it costs 9 cents to perform the activity. The third set constitutes 35 percent of mailers, and for them it costs 12 cents to conduct the activity. The current status quo discount is 7 cents, and therefore 60 percent of the mailers engage in the worksharing activity. Application of ECPR would increase the discount to 10 cents. Please confirm that increasing the discount from 7 cents to 10 cents under this scenario would lead to the mailers in the second set (5 percent of the total) to start worksharing, and that this change in mailer behavior would improve the cost efficiency of the postal system. Please also confirm, however, that the mailers in the first set (60 percent of the total) will receive a rate reduction of 3 cents without any effect on their behavior, that this lost revenue (assuming sub-unitary elasticity) will need to be made up by higher rates for some other mailers, and that the higher rates charged elsewhere could lead to an overall loss in efficiency notwithstanding the increase in cost efficiency relating to the 5 percent of the mailers in the second set. Please explain your answer fully.

RESPONSE

Confirmed that mailers in the second set would change behavior and begin worksharing. Also confirmed that mailers in the first set will receive a rate reduction with no change in behavior. Also confirmed that lost revenue will need to be made up from elsewhere. Since my testimony is focused on the application of the ECPR discount regime at the subclass level, the lost revenue

would presumably come from mailers within the subclass. If higher rates are also required elsewhere this could (but doesn't necessarily have to) lead to a decrease in overall welfare. Also, my testimony sets forth the arguments in favor of instituting a system of cost-based discounts at the subclass level. It does not specifically address the issue of how one makes changes from an existing system of discounts that are less than avoided cost. Note that in the above example, and under ECPR more generally, the issues of "lost revenues" does not arise when one considers introducing an avoided cost discount of 10 cents for the first time.

USPS/PB-T1-6 On page 26 of your testimony, you note that Cohen, et al. (2006) “argue that the end result of this process is an increase in volume far greater than what would be predicted on the basis of price elasticities alone.” Do you agree with their argument? Why, or why not?

RESPONSE

I do not know the precise basis for their argument, so I can neither agree nor disagree. My interpretation of their statement is that the introduction of worksharing discounts set off a dynamic process of learning on the part of mailers and consolidators that has accelerated the growth of worksharing.

USPS/PB-T1-7

- a. Would you agree that, with respect to ECPR, the issue is how much worksharing activity changes when discounts change, and that if a higher discount results in little additional worksharing activity, then its primary effect is to give away money to mailers who are already worksharing, while raising the rates for other mailers (nonworksharing mailers, or mailers of another subclass)? If not, why not?
- b. Would you agree that the magnitude of the response by mailers to a change in a worksharing discount is a function of the price elasticity in some form or another, and it is therefore not advisable generally to attempt to ignore demand factors when setting worksharing discounts as part of an omnibus postal rate proceeding? If not, why not?

RESPONSE

- a. I believe that the issue with ECPR is that it encourages productive efficiency. As to whether or not it gives money away, please see my response to USPS/PB-T1-4 above.
- b. The magnitude of the response is a function of the distribution of the mailers costs to perform the activity. The price elasticities of workshared products, are themselves, in large part determined by this distribution. In general, productive efficiency is important. If I knew I would get no response to a discount, I might carefully consider whether to implement it but usually discounts have elicited responses and I would not take as the starting position that the discount will not

induce a response. Again, the arguments in my testimony refer to the desirability of a system of cost based discount, not on the practical details of moving toward them from some other system of discounts. (See my answer to USPS/PB-T1-5).

USPS/PB-T1-8 Is the 2006 Bern conference paper cited in footnote 24 on page 36 of your testimony the same as the paper ““Clean” Mail and “Dirty” Mail: Efficient Work-Sharing Discounts with Mail Heterogeneity,” previously circulated in draft form? If so, please provide a copy of a version of that paper that can be cited and quoted.

RESPONSE

The paper cited in my testimony is a revised version of the Bern conference paper. I have attached a copy to my response.

USPS/PB-T1-9 Your section heading on page 45 indicates your intent to present the case for basing *intra-subclass* rate differences on Postal Service cost differences. Why does not the same case apply to basing *inter-subclass* rate differences on Postal Service cost differences? Please explain fully.

RESPONSE

The arguments in favor of cost based rate differences apply any time mailers can make use of price differences to efficiently alter their behavior. However, as earlier citations to my past testimony have revealed, there is generally a tension between cost efficiency considerations and Ramsey-style, demand side factors. If price elasticities within a subclass are assumed to be approximately equal, then the issue of different elasticity based markups does not apply as strongly within the subclass as it might across subclasses. Thus, the issue of demand is less important within a subclass than across subclasses and the case for ECPR does not need to consider the tensions described earlier.

USPS/PB-T1-10 On page 49, you state that Ramsey Pricing weighs surplus dollars equally, and that this neutrality would not allow postal ratemakers to exercise independent judgment with respect to the non cost factors specified in the Act.

- a. Is your concern only applicable to mechanistic application of Ramsey Pricing (i.e., rates are automatically and invariably set at the levels calculated by the Ramsey model), or would it also apply to a procedure where the price levels suggested by the Ramsey model are considered as useful information for ratemakers, but do not preclude subsequent adjustment based on consideration of other factors of the Act? Please explain fully.
- b. Would you agree that if one has reservations about weighing surplus dollars equally, one might have the same type of reservations about imposing an equal unit contribution requirement (what you refer to on page 48 as the “same nominal markup”) on different mailers? If not, please explain fully.
- c. Would you agree that if one has reservations about weighing surplus dollars equally, one might have the same type of reservations about imposing a strict obligation on each type of mailer to cover the costs they impose on the Postal Service, regardless of their unique financial circumstances.? If not, please explain fully.
- d. Would you agree that if one starts down the road of thinking about dollars from different mailers differently, such an approach can call into question some of the most basic types of economic analysis that are routinely applied in ratemaking proceedings? If not, please explain fully.

RESPONSE

- a. My concern is the former.
- b. No. The equal markup condition is a required to provide incentives for cost efficiency, not as an end in itself.
- c. No. The restrictions on cross-subsidy also have a role in ensuring productive efficiency by not creating incentives for inefficient entry.
- d. No. As suggested in part (a), such an approach may be required so as to “not preclude subsequent adjustment based on consideration of other factors of the Act.”

USPS/PB-T1-11 On page 49, you note that Ramsey pricing requires demand elasticity estimates, and ECPR pricing does not. Is your point that, for instances in which separate demand elasticities are not routinely estimated (e.g., the 3-digit mail and 5-digit mail in your example on page 48), a substantial hurdle is presented to any attempt to use Ramsey Pricing at that level, or is your point that, even in situations in which the demand elasticity estimates are available, it is better to ignore them and focus exclusively on cost differences at the margin? Please explain fully.

RESPONSE

As a practical issue, I believe there is a substantial hurdle to estimating the demand elasticities for each class, subclass, rate category, and rate element of mail. Given the uncertainties that would be inherent in these estimates, I would prefer to establish prices that one can be reasonably confident will maximize productive efficiency rather than merely attempt to maximize total surplus based upon much less reliable estimates. Also, remember that my testimony focuses on the desirability of applying ECPR at the subclass level, where elasticity differences (and any theoretical gain from applying them to rates) are presumably quite small.

USPS/PB-T1-12 On the top of page 50, you discuss the constantly changing and evolving postal industry, changing worksharing technology, and changing demand elasticities.

- a. Would you agree that changing technologies may cause shifts in demand curves, without necessarily causing material changes in the price elasticities? If not, please explain fully.
- b. If evolving technology is causing changes in demand elasticities, are those not likely to be circumstances in which it is most critical to know the magnitude of the effect that setting discounts at a particular level is going to have on mailers' choices to workshare or not (which is precisely the type of information encompassed in the price elasticities), rather than relying on a procedure which ignores that information? Please explain your answer fully.

RESPONSE

- a. I agree that this is possible, but it is far from certain.
- b. I disagree with the conclusion that applying ECPR to discounts within a subclass need in any sense ignore information about changing demand elasticities. Recall that ECPR relates to differences between rates. Elasticity considerations would still be required to determine the overall rate level of a subclass. And, again, the arguments in my testimony refer to the desirability of a system of cost based discount, not on the practical details of moving toward them from some other system of discounts. (See my answer to USPS/PB-T1-5).

USPS/PB-T1-13 Please refer to page 49 of your testimony. There you indicate that Ramsey Pricing does not automatically ensure that prices are free of cross-subsidization. On behalf of Valpak, witness Mitchell in his testimony in this case makes the same point, but also states that the “argument that cross subsidies are bad and should be avoided is a fairness argument, not an economic one,” and that “[n]othing in notions relating to the efficiency of resource allocation argue that cross subsidies are bad or explain how to avoid them.” VP-T-3 at 10-11. Do you agree with these statements? Are they consistent with your previous testimony on this subject, USPS-T-11 at 8-12 (Docket No. R97-1)? Please explain fully.

RESPONSE

I do not agree with the last quoted statement of Witness Mitchell. As noted above, there is an important economic efficiency reason to avoid cross-subsidization. Cross-subsidization creates incentives for inefficient entry. I do not believe the statement is consistent with my cited prior testimony.

USPS/PB-T1-14 Please refer to page 36 of your testimony, where you state:

The basic theoretical result [of your recent Clean Mail/Dirty Mail paper] was that an efficient allocation of mail processing activity between the Postal Service and mailers requires a worksharing discount equal to the average Postal Service processing cost of the type of mail just at the margin of being profitable for mailers to workshare.

- a. Would you agree that the profitability of worksharing for a specific type of mail is a function of the specific level of the workshare discount, and, therefore, in order to be able to identify the type of mail just at the margin of being profitable for mailers to workshare, it is necessary to have a particular discount in mind already? If not, why not?
- b. Please explain how the theoretical result described above can be practically applied to aid in the determination of the most appropriate worksharing discount.

RESPONSE

- a. Yes.
- b. The theoretical analysis described above establishes the conditions that must be satisfied for a discount to minimize postal sector costs. Given sufficient information about the worksharing cost curves of mailers and the Postal Service, it would be possible to calculate the cost efficient discount. Even with less information, it might be possible to design an iterative procedure that would converge to the desired result. Perhaps the most “practical” application of the analysis lies in understanding why using a “benchmark” mail type such as BMM would not lead to the cost efficient discount.