

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

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POSTAL RATE COMMISSION
OFFICE OF THE SECRETARY

POSTAL RATE AND FEE CHANGES, 2000

Docket No. R2000-1

RESPONSE OF UNITED STATES POSTAL SERVICE
WITNESS BERNSTEIN TO INTERROGATORIES OF
THE GREETING CARD ASSOCIATION
(GCA/USPS-T41-1-33)

The United States Postal Service hereby provides the responses of witness Bernstein to the following interrogatories of the Greeting Card Association:
GCA/USPS-T41-1-33, filed on March 3, 2000.


Each interrogatory is stated verbatim and is followed by the response.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

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GCA/USPS -T41-1. Please state when you were retained by the Postal Service to prepare the testimony submitted in this proceeding.

RESPONSE:

My work at RCF on behalf of the Postal Service has been continuous since 1992. I do not recall the exact date on which I was asked to prepare my testimony for the current case. I believe that it was some time in the Spring of 1999.

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GCA/USPS-T41-2. Please state the assignment you were given at that time.

RESPONSE:

In general, I was asked to prepare testimony similar to my testimony in R97-1. More specifically, I was asked to calculate Test Year Ramsey prices for the mail subclasses and special services that have estimated elasticities of demand, compare the Ramsey prices to other sets of Test Year rates including, but not limited to, rates based on the Postal Rate Commission's recommended mark-ups in R97-1, and as part of that comparison, analyze the impact on mailers as measured by the change in consumer surplus.

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GCA/USPS-T41-3. *With whom did you consult or confer during, or for, the preparation of your testimony? What was the purpose of each such consultation or conference.*

RESPONSE:

I cannot possibly recall the purpose of each consultation I had during the course of preparing my testimony. Within RCF, I consulted with George Tolley and Tom Thress regarding the mail product demand equations and the volume forecasts, and with other colleagues regarding the development of the computer program used to calculate the prices presented in my testimony. Within the Postal Service, I spoke with individual in the pricing area about the general scope of my testimony, my preliminary Ramsey price calculations, and the "effective Test Year" price elasticities. I spoke with individuals in the costing area regarding Test Year cost data. I also consulted with the Postal Service attorney assigned to my testimony about a host of issues related to its preparation.

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GCA/USPS-T41-4. In preparing your testimony, did you consider alternatives to the pricing scheme you testify to? If your answer is in the affirmative, please describe each such scheme and your reasons for rejecting it.

RESPONSE:

I do not recall testifying to a pricing "scheme." My testimony presents prices based on the Ramsey pricing formula. As I stated in my testimony, the prices presented in my testimony are not pure Ramsey prices, i.e., those that would be obtained from a strict application of the Ramsey pricing formula. I chose to reject a presentation of pure Ramsey prices because they would violate certain regulations and common practices of postal rate-making and therefore would not provide rate makers with information that I believe would be of use.

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GCA/USPS-T41-5. Please provide your definition of the term "welfare economics" and state whether your testimony here addresses issues of welfare economics.

RESPONSE:

A definition of "welfare economics" that is consistent with the issues addressed in my testimony is presented in "A Dictionary of Economics," by Harold Sloan and Arnold J Zurcher. They define welfare economics as "the extent to which an economic system attains predetermined goals assumed to maximize human welfare, and the evaluation of public policies designed to effect economic changes to those ends."

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GCA/USPS-T41-6. In your testimony, do you claim to give any consideration to the value of mail to recipients? If your answer is other than an unqualified "no," please

- a. Identify and describe that consideration:
- b. Provide any and all quantifications of that consideration that your testimony relies upon.
- c. State whether and how such consideration extends beyond such value to recipients as is reflected in consumption of mail services by senders.

RESPONSE:

a. Mail services are a joint activity between the sender and the recipient, and the decision to use the mail reflects consideration of the values of both parties. For example, when a bank sends a statement to a household, it seems unlikely that the bank receives any direct benefit from the activity. Instead, the statement is mailed because the bank realizes that the recipient values statements through the mail as opposed to some other alternative, such as having to come to the bank to pick up the statement. The value to the recipient is indirectly, or implicitly, embedded in the bank's demand curve for mail. That is, if recipients no longer valued bank statements through the mail, banks would stop sending them. In other words, for a joint product such as the mail, it is essentially meaningless to divorce the value to the sender from the value to the recipient.

Consider another example: Periodicals Mail. Magazines are mailed because that is the most effective way for subscribers (the recipients) to receive the magazine. If Periodicals postage rates increase, this might lead to an increase in the price of magazines subscriptions. Some subscribers, but not many given the inelasticity of the demand for Periodicals, may choose to cancel their subscription in response to the

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price increase which will in turn reduce the sender's use of Periodical mail. Clearly, the sender's demand for mail reflects the value to the recipient.

Even in the small portion of mail services which do not reflect a business-like activity, the value to the recipient is included in the sender's demand curve for mail. Consider the decision to send a birthday card. A mailer makes a decision whether it is worth the time and \$1.75 for a card and \$0.33 for the postage to send a birthday card. To some extent, this may reflect the mailer's own value inherent in the joy of giving. But quite clearly, it also reflects the mailer's view of the value of the birthday card to the recipient. That is, even if the mailer received no value, a birthday card would still be sent because of the perceived value to the recipient.

If postage rates increase to \$0.34, the mailer must now decide if it is worth the time and \$2.09 (\$1.75 for the card plus \$0.34 for postage) to mail the card as opposed to \$2.08 (\$1.75 for the card plus \$0.33 for postage). Most likely, the one cent increase in postage will have little impact on the decision as it represents a small portion of the total cost of sending a birthday card, consistent with the relatively inelastic demand of First-Class letter mail. But if the mailer chooses not to send the card, he or she is implicitly measuring the value of the card to the recipient.

b. As explained in my response to (a), the value to the recipient and the value to the sender are jointly reflected in the demand curve, which is quantified by the price elasticity of demand.

c. Again, as stated in my response to (a), the demand curve for mail reflects the value to senders and recipients.

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GCA/USPS-T41-7. Please confirm that your testimony does not provide or reflect a quantified consideration of i) dead-weight losses to senders of First-Class mail and/or First-Class single-piece mail specifically or ii) losses, whether or not of an economic nature associated with increases in mailing costs. If you do not so confirm, please explain where and how such losses were considered.

RESPONSE:

Not confirmed. Dead-weight gains or losses refer to the overall impact to buyers and sellers, which in regard to postal rates can be measured by the sum of consumer surplus and Postal Service net revenues. When prices are raised further from marginal cost, a dead-weight loss occurs because the increase in Postal Service net revenues is less than the decrease in consumer surplus. Conversely, when prices are moved closer to marginal cost, a dead-weight gain occurs because the increase in consumer surplus exceeds the decrease in Postal Service net revenues. The Ramsey-based rates that I present yield dead-weight *gains*, in that they raise the same level of net revenue for the Postal Service as other rate schedules while yielding a higher level of total consumer surplus. Similarly, my testimony shows the gains to mailers associated with an overall *decline* in mailing costs.

However, on a product-by-product basis, users of some mail products experience a gain due to a lower price and others experience a loss due to a higher price. First-Class letters is one subclass that has a higher Ramsey price than R97-1 Index price. Considering this subclass only, the dead-weight loss is approximately equal to the change in consumer surplus (-\$2,611.1million) plus the change in Postal Service net revenues earned from First-Class letters (+\$2,293 million). Therefore, the dead-weight loss within the First-Class letter subclass is \$318.1 million.

I did not calculate Ramsey prices for single-piece First-Class letters and have no measure of the dead-weight gains or losses for this mail product.

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With regard to the recipients of First-Class letters, a measure of the loss that results from a Ramsey price higher than the R97-1 Index price is the decline in volume due to that price increase. As stated in my response to GCA/USPS-T41-6, much of this loss is already reflected in the loss of consumer surplus experienced by users of First-Class letters.

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GCA/USPS-T41-8. Please confirm:

- a. That you have neither performed nor relied on any investigation or factual inquiry into the dead-weight losses referred to in GCA/USPS-T41-7, or their nature and incidence in their preparation of your testimony. If you do not so confirm, please explain where and how such losses were considered; and,
- b. That your testimony does not address whether and how dead-weight losses may vary in the amount and rapidity which they are incurred, or with respect to the classes of mailers on which they are inflicted. If you do not so confirm, please identify where and explain how these matters are addressed.

RESPONSE:

a. Not confirmed. Although I do not use the term "dead-weight," my entire testimony focuses on what are essentially the dead-weight gains and losses resulting from different postal rate schedules. As explained in my response to GCA/USPS-T41-7, the "dead-weight" gains and losses resulting from changes in postal rates are equal to the change in consumer surplus plus the change in Postal Service net revenues. Since all Test Year postal rate schedules must generate the same net revenues, the net revenue requirement is treated as a constraint common to the rate schedules I examined. Thus, the overall dead-weight gains are equal to the overall change in consumer surplus, or \$1,272 million. For individual mail products, the dead-weight gains or losses are equal to the sum of consumer surplus and postal net revenues. Although I do not present this specific calculation, my Table 11 (which shows net revenues under the different rate schedules) and my Table 13 (which shows the change in consumer surplus) will provide the necessary information.

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b. With respect to the rapidity of the gains, I am not sure what exactly is meant by that, but I take account of the lagged response of mail demand to changes in mail prices through my calculation of effective Test Year elasticities.

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GCA/USPS-T41-9. Do you contend that the magnitude of the dead-weight loss on mailers of First-Class mail and/or single-piece First-Class Mail is substantially less than the magnitude of the effect of mail cross-elasticity on single-piece First-Class mail. If your answer is not an unqualified "no," please provide the basis of any such contention.

RESPONSE:

First, my testimony does not quantify the impact on single-piece mailers separate from the impact on the entire subclass. But more to the point, I find this to be a particularly confusing question. Dead-weight losses are measured in dollars whereas cross-elasticity effects are measured in terms of percentage change in volume with respect to a percentage change in price. I don't understand what kind of comparison you are asking me to make. However, to be responsive, let me simply say that I do not contend whatever it is you are stating in your question.

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GCA/USPS-T-41-10. Please confirm that you seek to optimize the sum of Postal Service net revenues and total consumer (mailer) surplus.

RESPONSE:

Not confirmed. The optimal (e.g., maximum) sum of Postal Service net revenues and total consumer surplus would occur when postal product prices are set equal to their marginal costs. This would yield a large negative net revenue for the Postal Service, but it would be substantially less than the large positive increase in mail consumer surplus. However, this rate schedule is not permitted.

What I do in my testimony is compare the impact on consumer surplus of different rate schedules that yield the same level of Postal Service net revenues. The Ramsey-based prices I present yield a gain in consumer surplus relative to rates based on the PRC R97-1 mark-ups. It is not, however, the optimal or maximum gain possible.

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GCA/USPS-T41-11.

- a. Do you agree with the statement that the relevant measure of value in welfare economics is the marginal utility to individuals of an additional unit of consumption? If you do not agree, please explain your understanding of what the relevant measure of value is.
- b. Do you recognize differences between the meaning of "utility" for an individual person and the meaning of "utility" for a collective enterprise such as the Postal Service of corporate enterprises? If you do, please explain your understanding of those differences.

RESPONSE:

- a. I believe that the relevant measures in welfare economics are marginal benefit and marginal cost. Marginal utility is a term often used in economics, but I refer the simple straightforward term "marginal benefit."
- b. Within economics, "utility" is often used to refer to the marginal benefit of consumption. A person will consume a unit of a good if its marginal utility exceeds its price. For a corporation, the purchase of inputs to production is typically analyzed in terms of marginal revenue product or some similar term. A corporation will purchase a unit of an input if the marginal revenue product (the revenue the input generates for the firm) exceeds its price. To me, the distinction between "marginal utility" and "marginal revenue product" is largely semantic. In either case, a good is purchased as long as its marginal benefit exceeds its price. That is why I prefer to use the common term, marginal benefit, as the relevant measure of value.

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GCA/USPS-T41-12. Do you agree that the types of mailers covered by the Ramsey-type prices you present in your testimony include corporations, nonprofits, and governmental units as well as individuals. If your answer is in the affirmative, please provide your understanding as to whether and how marginal utility of mail to these different types of mailers may vary inter se.

RESPONSE:

Corporation, nonprofits, governmental units and individuals are affected by postal rates, whether these rates are Ramsey-based or not. The marginal utility, or marginal benefit, of mail to these mailers is measured by the demand curve for mail. For example, if the price of a single-piece letter is increased from 33 cents to 34 cents, there will be a decline in letter volume. Most likely, less mail will be sent by corporations, nonprofits, government units and individuals. For all of these parties, there is a reduction in letter volume to the extent that the marginal benefit of some letter mail is more than 33 cents but less than 34 cents. Therefore, no distinction has to be made between these different types of mailers.

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GCA/USPS-T-41-13.

- a. Please confirm that your testimony assumes that the price and volume changes of all classes of mail can be summed meaningfully, without distinction as to the type of mailer being affected.
- b. If you so confirm, please also confirm that in so equating the sum of price and mailing volume changes, you do not address whether a change in mailing volume on the part of e.g., a catalog mailer, has the same value or disvalue to that mailer as a change in mailing volume of (single-piece) letters has to a household. If you do not confirm this additional proposition, please explain why.

RESPONSE:

- a. My testimony used price and volume changes of individual mail products to calculate the change in consumer surplus for users of that product. I believe that changes in consumer surplus can be summed meaningfully.
- b. Your proposition is a bit of an oversimplification. However, I can confirm what appears to be your general point, that I treat \$1 to a catalog mailer to be of equal value as \$1 to a household mailer.

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GCA/USPS-T41-14. Please confirm that at USPS-T-41, p. 31-33, you compare directly - and treat as equal in value - gains in net revenue to the USPS and increased costs to mailers.

RESPONSE:

Confirmed.

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GCA/USPS-T41-15. Please confirm that when costs that are not incurred efficiently are allocated on the basis of Ramsey pricing, the allocation of those costs will be directed to captive (inelastic demand) customers. If you do not so confirm, please provide and explain your understanding as to why Ramsey prices would not place most of the burden of productive inefficiency on inelastic classes.

RESPONSE:

I cannot say how Ramsey pricing, or any other pricing strategy, would allocate the costs of an inefficiency without specific knowledge of how the alleged inefficiency affects Postal Service costs, including the costs of individual mail products.

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GCA/USPS-T-41-16. In preparing your testimony, have you inquired into the effects (i) on future productive efficiency of the Postal Service and (ii) on the efficiency of the economy as a whole if Ramsey prices are used, thereby serving to place the burden of productive inefficiency on the most inelastic trade? If you have so inquired, describe and provide that inquiry and results.

RESPONSE:

I have made no formal inquiry regarding the issues raised in your question. I like to think that to the extent that my testimony brings attention to the issue of pricing efficiency, it will also inspire the Postal Service to seek out any other kinds of efficiency gains that may be possible. With respect to the economy as a whole, Ramsey pricing should make the economy more efficient as it increases the overall consumer surplus of users of the mail and lowers the overall cost of postal services. As a final note, I do not contend that Ramsey prices serve to place the burden of productive inefficiency on the most inelastic trade.

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GCA/USPS-T41-17. Do you agree that many ECSI values are not reasonably quantifiable?

RESPONSE:

I believe that many ECSI values are not *objectively* quantifiable. However, to the extent that consideration of ECSI values leads to a change in postal rates, the impact of that change on postal volumes, revenues, costs, net revenues, and consumer surplus is quantifiable.

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GCA/USPS-T41-18. Please refer to USPS-T41, at 86. Please confirm that it is your view that ECSI values can be reflected in Ramsey-type prices only if and to the extent that they can be quantified.

RESPONSE:

The above statement is tautologically true. Any reflection of ECSI values in Ramsey-type prices, or for that matter any other types of prices, is by its very nature some kind of quantification of those values.

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GCA/USPS-T-41-19. Please confirm the following:

- a. In your testimony, you do not modify your Ramsey prices to reflect ECSI values for First-Class mail;
- b. In your testimony, you treat change in consumer surplus – i.e., all that benefit which does not accrue to the producer (USPS) – as identical with the change in mailer surplus.
- c. In your testimony, your quantitative analysis includes no term for value of mail to recipients; and
- d. You consider only effects from Ramsey pricing that would occur in the market for postal services.

RESPONSE:

- a. Confirmed.
- b. Confirmed.
- c. Please see my response to GCA/USPS-T41-6.
- d. Confirmed, understanding that for many mailers, their uses of postal services are part of a larger productive enterprise and so the effects quantified in my testimony may ultimately be borne elsewhere in the economy. For example, higher rates for Periodicals Mail might lead to higher prices for magazines subscriptions, but the impacts of these higher prices are captured by the analysis presented in my testimony.

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GCA/USPS-41-20. With regard to the increase in rates for single-piece First-Class mail that would result from implementation of Ramsey pricing:

- a. Please confirm that implementation of Ramsey-type prices presented in your testimony would increase postal rates for First-Class single-piece mail by over 12%:
- b. Please identify and provide each and every study your testimony relies on regarding the effect of an increase in postal rates of that size (i.e., 12%) on mail volumes, marginal costs, and revenues, and:
- c. Please confirm that for estimates of mail volumes your testimony relies solely on the testimony of witness Tolley. If you do not confirm, please identify and provide the volume estimates relied upon for your testimony.

RESPONSE:

a. Not confirmed. The prices presented in my testimony are fixed-weight index prices, or average revenue per piece, for mail subclasses. The Ramsey First-Class letters price of \$0.3704 reflects the impact of workshare discounts and extra ounce charges. It is directly comparable to the before-rates fixed weight index price of \$0.3437, presented in my Summary Table 1. Comparing these two prices, the Ramsey price of the First-Class letter subclass is about 7.8 percent greater than the before-rates price.

b. The impact of an increase in postal rates on mail volumes are based on the demand elasticity estimates presented by witness Thress (USPS-T-7), adjusted by my calculation of the effective Test Year elasticity as explained at pgs. 59-61. I assume that marginal costs are not affected by the changes in rates, which is a simplifying assumption made for all the rate schedules I considered in my testimony. The impact of price changes on revenues is given in my testimony where appropriate, as for

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example my Table 11 which compares, among other things, revenues at the Ramsey-based rates and at rates based on the R97-1 mark-up index.

c. The starting points for the volume forecasts presented in my testimony are the before-rates Test Year volumes presented in the testimonies of Dr. Tolley (USPS-T-6) and Dr. Musgrave (USPS-T-8). The after-rates volumes presented in my testimony were obtained by adjusting the before-rates volumes for the impact of changes in postal rates, using the effective Test Year volume elasticities discussed in my testimony at pgs. 59 - 61.

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GCA/USPS-T41-21. Please identify and provide any and all studies of the accuracy of Postal Service costs and volumes that you relied on in the preparation of your testimony.

RESPONSE:

I did not rely on any studies of the accuracy of Postal Service costs and volumes in the preparation of my testimony. I would note that the volume and cost information used in my testimony is the same as used by all other witnesses.

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GCA/USPS-T41-22. Do you agree that marginal costs incurred to provide a postal service are likely to change over time?

RESPONSE:

Yes.

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GCA/USPS-T-41-23. Please confirm that you are using a "Point Elasticity" throughout the analysis you testify to. If you do not confirm, please identify and explain any use of an elasticity other than a point elasticity.

RESPONSE:

Confirmed.

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GCA/USPS-T-41-24. Please provide all analyses you have performed or relied on regarding your testimony employing an "Arc Elasticity."

RESPONSE:

At some time in the past, before the presentation of my testimony in this case or R97-1, I performed some Ramsey price analysis using what I called "linearized" demand curves. These demand curves essentially took the point elasticity estimates and converted them into arc elasticities as would occur with a linear demand curve. A feature of these demand curves is that the price elasticity changes as the price changes. I found that this move from point elasticity to arc elasticity had only a small effect on the Ramsey prices.

I have not performed any similar calculations for the present case, though based on my earlier work, I suspect that doing so would not meaningfully affect the results.

I also think that the Ramsey prices presented by Roger Sherman (Docket No. R97-1, OCA-T-300) used linear (arc) elasticities in his calculation of Ramsey mail volumes, though I believe he used the point elasticities to calculate Ramsey prices. Professor Sherman found that the difference was not meaningful.

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GCA/USPS-T-41-25. Please provide your understanding or assumptions, if any, as to the expected life of the rates sought in this proceeding.

RESPONSE:

Typically, rates are changed every two to four years and I would expect that to be true for this case. My testimony makes no assumptions regarding the expected life of rates in this case. As was true for other witness, rates presented in my testimony were calculated for the Test Year beginning October 1, 2000 and ending September 30, 2001. I think it is well understood that the new rates will not actually take effect on October 1, 2000. As such, the expected life of the rates presented in my testimony did not seem particularly relevant to me.

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GCA/USPS-T41-26. Please confirm that (i) in deriving your Ramsey prices you assume that the elasticities used for that purpose do not change with price and volume, and (ii) you recognize (USPS-T-41, at 50-52, 59-60) that with respect to worksharing elasticities (i.e., the relation between the size of the discount and a change in the volume of mail workshared) do change. If you do not so confirm, please explain why.

RESPONSE:

I make no assumptions about the price elasticities used in my testimony. Instead, I use the elasticity estimates of witnesses Thress and Musgrave obtained from their econometric work. Both these witnesses estimate logarithmic demand curves which have the feature that the elasticities do not change when price or volume change. In the case of the elasticity estimates of Mr. Thress, the details of which I am quite familiar, the logarithmic constant elasticity demand specification has an excellent record of explaining the response of mail volumes to changes in postal rates.

With respect to the worksharing categories of First-Class letters, the demand equations estimated for Mr. Thress include terms for the logarithm of the own-price and the logarithm of the discount. The constant discount elasticity can be mathematically converted into a cross-price elasticity, but the resulting cross-price elasticity will have the feature that its magnitude depends on the prices of the single-piece and workshared categories. Again, this is not my assumption, but a mathematical result given the features of the demand equations estimated for single-piece and workshared letters.

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GCA/USPS-T-41-27. Please explain why elasticities that change with price and volume could not also exist for base rates. Please provide all studies of elasticities relied upon for your response.

RESPONSE:

Elasticities that change with price and volume could exist for base rates. It is simply a matter of which demand specification (constant elasticity or varying elasticity) most accurately explains the historical relation between mail volumes and base rates. The work of Mr. Thress, and Dr. Tolley before him, as well as that of Dr. Musgrave, has found that a constant elasticity specification has been exceedingly successful at explaining this historical relation and that is why it is used in the mail volume demand equations.

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GCA/USPS-T-41-28. Please provide the citation for the Robert Mitchell work referred to at line 25 on p. 75 of USPS-T-41.

RESPONSE:

Robert Mitchell's paper is "Postal Worksharing: Welfare, Technical Efficiency, and Pareto Optimality," which he presented at the Sixth Conference on Postal and Delivery Economics, the Center for Research in Regulated Industries at Rutgers University, Montreux, Switzerland, June 17-20, 1998.

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GCA/USPS-T-41-29. Please state whether you consider equity (in any sense) to be a consideration at any stage in the construction of Ramsey-type prices. If your answer is in the affirmative, explain how such consideration should be given.

RESPONSE:

My testimony addresses equity in that it treats all users of the mail equally. I view a dollar gained (or lost) by a user of one mail product to be equal to a dollar gained (or lost) by a user of another mail product. This consideration allows me to use the sum of the changes in consumer surpluses across different mail products as a measure of the overall impact of price changes on users of the mail.

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GCA/USPS-T-41-30. Reference USPS-T-41, p. 99. Please -

- a. Provide the definition of "economic equity" used in your testimony.
- b. State any other definitions of the term "economic equity" of which you are aware.
- c. Explain why the importance of additional money to rich (or poor) persons could not vary in the same way as consumption of additional goods (declining marginal utility, which you acknowledge at USPS-T41, p. 17);
- d. State whether you believe that is it consistent with equity (or with "economic equity") for a multi-product firm to construct prices based on relative demand when it enjoys a statutory monopoly on some but not all of its product lines.
- e. Identify any "fairness and/or equity" issues - other than income redistribution - you addressed in preparing your testimony and explain how and why you chose to address any such issues or chose not to address them.

RESPONSE:

- a. My testimony does not directly address the issue of "economic equity" except to the extent that I consider a dollar to one mailer to be equal to a dollar of another mailer.
- b. There are many definitions of "economic equity," of which I am aware. For example, with regard to the issue of taxes, some people argue that economic equity requires that everyone pay the same level of taxes (say, \$5,000) regardless of their income. Others argue that equity requires that everyone pays the same percentage of their income in taxes. Still others argue that equity requires that those who have higher incomes pay a greater percentage of their income in taxes than those with lower income.

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Beyond tax issues, equity definitions might have to do with equality of outcome versus equality of opportunity. And of course, there is the view that many people seem to have, that equity means a little bit more for me and a little bit less for everyone else.

c. Money may experience declining marginal utility in that money is used to purchase goods and the consumption of goods experiences declining marginal utility. However, it does not follow that money is therefore less valuable to a rich person than to a poor person. For example, declining marginal utility implies that John's seventh apple is worth less to him than his sixth apple. Similarly, Jane's third apple is worth less to her than her second apple. However, this logic does not allow any comparison between the value of John's seventh apple and the value of Jane's third apple. Maybe John really likes apples and even though he is apple-richer than Jane, he still values his seventh apple more than she values her third apple. How would we know this? We would know this if at the current price of apples, John bought seven and Jane only bought two. That would imply that John's seventh apple is worth more to him (because he bought it) than Jane's third apple is worth to her (because she did not buy it).

d. Yes.

e. The incremental cost test is applied in my testimony to ensure that there is no cross-subsidization of postal products, which would be unfair to actual or potential competitors.

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GCA/USPS-T-41-31. Please -

- a. Confirm that in your testimony that a lower level of competition justifies higher Ramsey prices (USPS-T-41, at 44).
- b. Explain fully your understanding, if any, as to whether the assignment of higher Ramsey prices in circumstances of limited competition would tend to invite collusion among potential or actual competitors.

RESPONSE:

a. The discussion you refer to at page 44 regards Ramsey pricing with competing private firms. As explained in that section of my testimony, competing firms only need to be considered if they are pricing above marginal cost. Given this condition, one term in the expanded Ramsey pricing equation presented in that discussion is the cross-price elasticity between the Postal Service and the competing private firm. A high cross-price elasticity is often viewed as a measure of the degree of competitiveness between two firms. Equation (8b) shows that if the rival firm does not adjust its price in response to a change in the Postal Service, then a greater cross-price elasticity (greater competition) justifies a *higher* Ramsey price, in contrast to the proposition presented in your question.

However, as my testimony explains, if the rival firm changes its price in response to a change in the price of the postal product, then a lower Ramsey price might result. This result is more of a function of the strategy of the rival firm than it is to the level of competition between the two firms.

b. Collusion is more likely to occur when there is limited competition, since it is easier for a few firms to agree to fix prices than it is for many firms to do so. However, I do not believe that Ramsey pricing makes collusion more likely, and in fact believe that it

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makes it less likely. Collusion generally is motivated by low prices, as for example when OPEC responds to a low price of oil by agreeing to cut production to drive up prices. High prices tend to cause collusive arrangements to break down because of the larger profit opportunities that can be realized if a firm cheats on the pre-arranged agreement.

More to the point, it would seem extremely difficult for the Postal Service to engage in collusive activities, whether based on Ramsey pricing or any other principle. Price-fixing is illegal in the United States and, if that were not enough of a hindrance, it would seem that the Postal Rate Commission would oppose any price-fixing efforts by the Postal Service and its competitors. Furthermore, because Postal Service rates remain in place for a relatively long period of time, it seems far more likely that competing firms would attempt to undercut Postal Service prices to take market share, the exact opposite of what would occur under a collusive arrangement, and made possible because the Postal Service cannot immediately respond to a cut in a competitor's price with a price reduction of their own.

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GCA/USPS-T-41-32. Have you, in preparing your testimony, reviewed any other regulatory commission's practices regarding pricing to captive customers? If you did, please identify the regulatory commission, the practices reviewed and any examples of the adoption or rejection of Ramsey prices for such customers.

RESPONSE:

For my testimony, I did not review the pricing practices of other regulatory commissions.

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GCA/USPS-T41-33.

- a. Please confirm that in your testimony you use the term "consumer surplus" and do not use the term "consumer's surplus."
- b. In your testimony, are you making interpersonal comparisons of cardinal utility?

RESPONSE:

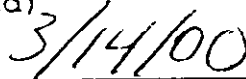
- a. I can confirm that the term "consumer's surplus" does not appear in my testimony.
- b. Nowhere in my testimony do I specifically compare the cardinal utility of two or more people. My testimony examines the impact on mailer consumer surplus of changes in postal rates. Consumer surplus changes act to measure changes in utility in terms of dollars, specifically in terms of dollars spent on postal services versus dollars that could be spent on other products. The value, or utility, of dollars spent on postal services is measured by the mail product demand curves which are integral to the calculations of consumer surplus changes presented in my testimony.

DECLARATION

I, Peter Bernstein, declare under penalty of perjury that the foregoing answers are true and correct to the best of my knowledge, information and belief.

A handwritten signature in cursive script, appearing to read "Peter Bernstein", written over a horizontal line.

(Signed)

A handwritten date "3/14/00" written over a horizontal line.

(Date)

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon all participants of record in this proceeding in accordance with section 12 of the Rules of Practice.



Eric P. Koetting

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