

UNITED STATES OF AMERICA
POSTAL REGULATORY COMMISSION
WASHINGTON, D.C. 20268-0001

Rate Adjustment Due to Extraordinary
or Exceptional Circumstances

Docket No. R2013-11

PRESIDING OFFICER'S INFORMATION REQUEST NO. 2

(Issued October 23, 2013)

To clarify the Postal Service request for rate adjustments due to extraordinary or exceptional circumstances, filed September 26, 2013, the Postal Service is requested to provide written responses to the following questions. Answers should be provided no later than October 30, 2013.

The following questions (questions 1–8) refer to the “Narrative Explanation of Econometric Demand Equations for Market Dominant Products as of November, 2012” filed with the Postal Regulatory Commission on July 1, 2013 (July 1 Narrative).

1. On page 4 of the July 1 Narrative the statement is made that “[i]n all cases, the overriding goal of the Postal Service’s econometric work is to produce the most accurate volume forecasts possible.”
 - a. Please explain to what degree an accurate own-price elasticity of demand is necessary to produce “the most accurate forecasts possible.”
 - b. Please explain to what degree does the analysis described in the July 1 Narrative use any forward looking data or input (as opposed to historical data or input) to produce volume forecasts other than that provided by Global Insight?

- c. Please explain whether the analysis described in the July 1 Narrative employs any Bayesian statistical techniques to produce volume forecasts? If so, please explain where such statistical techniques are used. If not, please explain why not.
 - d. Are the demand equations described in the July 1 Narrative constrained to have non-positive own-price elasticities? If so, please explain why such constraints are used.
 - e. Please explain how the goal quoted in the heading to this question impacts the choice of lag variables in any given year in the demand equations, including those for Single-Piece First-Class Letter Mail and workshared First-Class Letter Mail.
 - f. Please confirm whether the lag variables anticipate differences between consumer behavior and business behavior in one model year, but not in the subsequent model year. If confirmed, please explain in detail the reasons that consumer behavior and business behavior is expected to react differently in one model year, but not in the subsequent model year.
2. Please refer to pages 4-5 of the July 1 Narrative.
 - a. Please confirm whether it would be accurate to say that it is better to account for cross price elasticities with (essentially) non-price approaches such as “either simple dummy variables or non-linear Intervention analysis.” (July 1 Narrative, at 5.) If not confirmed, please explain.
 - b. Please refer to all demand equations where the analysis substitutes a non-price variable for a cross price variable. For each such demand equation, please state whether such substitution sharpens the own-price elasticity in that demand equation as well as, or better than, a cross price variable would. Please describe why this would be the case.
3. The July 1 Narrative at page 8 states that the recent recession “had a larger than expected negative impact on many categories of mail volume.” Please list in

order of importance each category of mail that consists of the “many categories” referred to in this quote and the corresponding associated volume impact.

4. Please confirm that both the Trend and Intervention Analysis approaches to Internet diversion presented in the July 1 Narrative at pages 7-13 do not capture the price impact of Internet diversion, but only the combined non-price and price impact of diversion. If not confirmed, please explain how the price impact of Internet diversion is captured by either or both of these approaches.
5. The July 1 Narrative at page 16 states that for the First-Class Single-Piece letters “[t]he diversion rate associated with this first round of diversion is estimated econometrically at an annual rate of -3.8%.” The “second trend is estimated to have increased the annual diversion rate by an additional -1.0%, bring total diversion to an annual rate of -4.7%”. And the “third trend is estimated to have more than doubled the prior diversion rate, leading to an overall annual diversion rate of -9.7%”.
 - a. Please confirm whether, based on the statements in the heading of this question, it would be accurate to state that the first diversion rate trend leads to an average annual change of -3.8% in Single-Piece First-Class Letter Mail volume, the second diversion trend leads to a change of -4.7%, and the third diversion trend leads to a change of -9.7%. If not confirmed, please explain.
 - b. Please clarify whether the annual diversion rate is applied to First-Class Single-Piece letters and cards, to Single-Piece Letters Flats and Parcels, or to both?
 - c. Please explain to what degree each of these three percentages is affected by use of “filtered macroeconomic data” as described on pages 7-8 of the July 1 Narrative.

- d. Are the trend lines for diversion for Single-Piece First-Class Letter Mail estimated using the “transfer function” noted in the discussion of Intervention Analysis on page 9 of the July 1 Narrative?
 - e. If your response to part (d) is answered affirmatively, please provide the computer output which shows that for Single-Piece First-Class Letter Mail, the trend reverts to a linear trend, not a step function, pulse function or non-linear trend. If your response to part (d) is answered negatively, please explain the reason(s) for not using the transfer function and Intervention Analysis for Single-Piece First-Class Letter Mail.
6. On page 12 of the July 1 Narrative it states that “it is not sufficient to merely plug linear time trends into all of one’s econometric equations and project these trends to continue unabated throughout the forecast period. Rather, it is important to evaluate every demand equation individually and determine the appropriate trend specification for each equation, if any.”
 - a. Please explain in detail how this was done for the Single-Piece First-Class Letter Mail demand equation(s), and for workshared First-Class Letter Mail equation(s).
 - b. For demand equations where there are multiple trends (for example the three Internet trends in the Single-Piece First-Class Letter Mail equation and the trends in the workshared First-Class Letter Mail equation), please explain the reason(s) for including the data past the end of the first Single-Piece First-Class Letter Mail trend in the estimation of that trend, and for including the data past the end of the second Single-Piece First-Class Letter Mail trend in the estimation of that trend, since the data used in the estimation of the third and final trend to date by definition can only be for the length of that trend to date?
7. Please refer to page 15 of the July 1 Narrative. Please explain why the starting dates for the three trends in diversion of Single-Piece First-Class Letter Mail

demand equations all begin in the fourth quarter of a year, whereas for other products such as workshared First-Class Letter Mail they do not.

8. On page 17 of the July 1 Narrative it states: “Historical trends are simply projected to continue forward at the same rate.” Please explain why you perform such an extrapolation.
9. Pursuant to the 2010 Annual Compliance Determination, please provide:
 - a. An explanation of how the proposed prices for Standard Mail Flats will move the Flats cost coverage toward 100 percent.
 - b. A statement estimating the effect that the proposed prices will have in reducing the intra-class subsidy of the Flats product.
 - c. All workpapers and data used to respond to subparts (a) and (b).
 - d. An updated schedule of future above-CPI price increases for Standard Mail Flats.

Ruth Y. Goldway
Presiding Officer