

BEFORE THE
POSTAL RATE COMMISSION
WASHINGTON, D.C. 20268B0001

POSTAL RATE AND FEE CHANGES, 2006

Docket No. R2006-1

**RESPONSES OF GREETING CARD ASSOCIATION WITNESS
JAMES A. CLIFTON TO INTERROGATORIES OF THE UNITED
STATES POSTAL SERVICE (USPS/GCA-T1-63g.)**

(October 31, 2006)

The Greeting Card Association ("GCA") hereby provides the response of James A. Clifton to the following interrogatory of the United States Postal Service filed on October 4, 2006: USPS/GCA T1-63g.

The interrogatory is set out verbatim followed by the response.

Respectfully submitted,

/s/ James Horwood

James Horwood
Spiegel & McDiarmid
1333 New Hampshire Ave. NW
2nd Floor
Washington, D.C. 20036

Date: October 31, 2006

**RESPONSE OF GREETING CARD ASSOCIATION WITNESS CLIFTON TO
INTERROGATORIES OF THE UNITED STATES POSTAL SERVICE**

USPS/GCA-T1-63: In your response to USPS/GCA-T1-16, you quote Dennis Carlton and Jeffrey Perloff, “All else the same, the larger a cross-elasticity of demand, the larger in absolute value is the direct elasticity of demand.”

- a. Please confirm that Carlton and Perloff are talking about true (i.e., not estimated) price elasticities under long-run equilibrium conditions in the quoted text. If not confirmed, please explain fully.
- b. Question USPS/GCA-T1-16 asked about your quote that “[a] direct estimate of that cross price elasticity, b_2 , would greatly sharpen the estimate for b , the own-price elasticity of demand for single piece payments mail.” Please confirm that the relationship between the estimated values b and b_2 is a mathematical relationship, not an economic relationship. If not confirmed, please explain fully.
- c. Consider the following two equations:

$$(1) \quad V = a + bX_1 + u$$

$$(2) \quad V = a + b_1X_1 + b_2X_2 + u$$

Please express the OLS estimator of b in equation (1) as a function of the OLS estimator of b_1 in equation (2).

- d. Please confirm that the OLS estimator of b in equation (1) and the OLS estimator of b_1 in equation (2) in part c. of this question will be identical if sample correlation between X_1 and X_2 is zero. If not confirmed, please explain fully.
- e. On page 17, at line 20 through page 18, line 2, you claim that “[o]ther things being equal, a further property of the demand specification in equation (2) is that when the cross price elasticity b_2 is high, the absolute value of the own price elasticity, b , will also tend to be high.” Please confirm that this statement is only true mathematically if the prices P and P_2 are correlated. If not confirmed, please explain fully.
- f. Please define the mathematical term “correlation” as it is commonly used in the fields of statistics and econometrics.
- g. Please answer USPS/GCA-T1-17(d) using the definition of “correlation” in part f. above.

RESPONSE:

g. The only thing I would add to what has been said in response to USPS/GCA-T1-63a.-f. is that even if the USPS does not compete, its competitors might compete and so there might be correlation between P and P_2 .