

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-T1-81-95)**

**(October 25, 2006)**

The Greeting Card Association ("GCA") hereby provides the responses of James A. Clifton to the following interrogatories of the United States Postal Service filed on October 6, 2006: USPS/GCA T1-81-95. Each interrogatory is set out verbatim followed by the response.

Respectfully submitted,

*/s/ James Horwood* \_\_\_\_\_

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

Date: October 25, 2006

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

**USPS/GCA-T1-81:** In your response to USPS/GCA-T1-48, you make the following claim: “It seems you are calculating the change in volume for a percentage change in price” while “[t]he sum of the coefficients of single-piece price and its lag which I have estimated gives the change in volume for one unit change in price.” Please confirm that for any specific change in price from  $P_1$  to  $P_2$ , this change could be expressed as either a “percentage change in price”, i.e.,  $(P_2 / P_1) - 1$ , or a “unit change in price”, i.e.,  $P_2 - P_1$ . If not confirmed, please explain fully.

**RESPONSE:**

Confirmed. However,  $(P_2 / P_1) - 1$  and  $P_2 - P_1$  are not the same values.

Please note:

Thress’s log-log Model is:

$$\ln(V_t) = a + b_1 \cdot \ln(X_{1t}) + b_2 \cdot \ln(X_{2t}) \dots + b_n \cdot \ln(X_{nt}) + \ln(\varepsilon_t), \text{ where } b_i$$

coefficients are elasticities, showing the percentage change in volume for a percentage change in the variable.

My linear model is:

$V_t = a + b_1 \cdot X_{1t} + b_2 \cdot X_{2t} \dots + b_n \cdot X_{nt} + \varepsilon_t$ , where  $b_i$  coefficients are slopes, showing a change in volume for a one unit change in the variable.

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

**USPS/GCA-T1-82:** In your response to USPS/GCA-T1-48, you make the following claim: “It seems you are calculating the change in volume for a percentage change in price” while “[t]he sum of the coefficients of single-piece price and its lag which I have estimated gives the change in volume for one unit change in price.” Please confirm that a change in price from \$0.410336 to \$0.451369 represents a unit change of \$0.041034. Please further confirm that this unit change in price could be written mathematically as ( $\$0.451369 - \$0.410336$ ). If not confirmed, please explain fully.

**RESPONSE:**

Confirmed.

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

**USPS/GCA-T1-83:** In your response to USPS/GCA-T1-48, you claim that the interrogatory “calculat[es] the change in volume for a percentage change in price.” USPS/GCA-T1-48(d) expresses the change in the First-Class single-piece letters price as “(\$0.451369 - \$0.410336).” Please confirm that (\$0.451369 - \$0.410336) expresses the “unit change in price.” If you cannot confirm, please identify the “unit change in price” which would result from an increase in the price of First-Class single-piece letters from \$0.410336 to \$0.451369.

**RESPONSE:**

Confirmed.

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

**USPS/GCA-T1-84:** In your response to USPS/GCA-T1-48, you claim that the interrogatory “calculat[es] the change in volume for a percentage change in price.” USPS/GCA-T1-48(g) expresses the change in the average First-Class worksharing discount as “(\$0.113192 - \$0.072158).” Please confirm that (\$0.113192 - \$0.072158) expresses the “unit change in price.” If you cannot confirm, please identify the “unit change in price” which would result from an increase in the average First-Class worksharing discount from \$0.072158 to \$0.113192.

**RESPONSE:**

Confirmed. However, your hypothetical makes no sense in light of the history of worksharing discounts and single piece rate changes. [See my response to USPS/GCA-T1-87 below for actual historical ranges of changes in the two sets of rates.] You are increasing the Single-Piece price by 10% whereas the corresponding WS discount in your hypothetical is increased by 58%. That is, the unit change in the single-piece price (\$0.041034 ) you have given in USPS/GCA-T1-82 is for a 10% increase in the single piece price. The \$0.041034 increase in the WS discount you have given above is equivalent to a 58% (0.041034/0.072158) increase in the WS discount.

What underscores your original interrogatory #48 as well as this set of interrogatories, 81-95, bearing on my original response to #48, is a fundamental mis-perception that USPS witness Thress has about the relationship between single piece volumes and workshared volumes at a mature stage of worksharing as it has existed for several years. The two key differences between my demand equation and witness Thress' are: (1) a straightforward linear VES approach which does not require any Box Cox or arbitrary non-linear transformation versus Thress' highly problematic double log CES approach; (2) an endogenous approach to the worksharing coefficient based on business facts, versus witness Thress' a priori restrictions on the sign and value of that worksharing coefficient, which negative restriction on the sign of the worksharing discount variable turns out to be at complete odds with known business facts about the positive contemporary relationship between workshared and single piece volumes.

The negative sign restriction in Mr. Thress' worksharing variable in the single piece demand equation is an untested presumption on his part that there is still substantial "conversion" of single piece mail to presort, as there clearly was many years ago when presort discounts were first instituted. It is an incorrect presumption today and has been for several years. There is little if any remaining conversion letter mail. When I ran the Thress data endogenously rather than imposing a presumption of conversion through a negative sign restriction, the sign for the worksharing variable was positive for both Thress' R2005-1 and R2006-1 single piece demand equations. The answer as to why is known to almost every large mailer, and a credit card company example is one way to illustrate why that coefficient is positive.

There is now considerably more worksharing mail volume in First Class than single piece volume. Suppose a credit card company, incentivized by an increase in a worksharing discount, sends one or more advertising letters by First Class or Standard Mail asking a potential customer to sign up for its credit card. When a potential customer signs up, several things happen in the First Class mailstream volume. To begin with, a welcome letter and the new plastic card will be sent at First Class workshared rates. The cardholder then begins using the card and a monthly bill becomes generated and is also sent at First Class workshared rates. All of this extra volume in workshared mail is not the result of conversion from single piece, but the result of the propensity of businesses to want to grow their companies, aided in this example by a greater worksharing discount initially.

Consistent with my econometric analysis and the specification of my single piece demand equation, deepening worksharing discounts now generate greater single piece volume, not less as in witness Thress' demand equation. For each monthly credit card billing statement sent, a payment must be made and most of these will be made by single piece mail. The extra workshared bills generate more

single piece volume, not less in this cycle of growth in credit card customers. In this real world example which typifies a substantial amount of letter volume increases, there is no conversion of single-piece letter mail to workshared letter mail, and accordingly no negative sign associated with the worksharing coefficient in the single piece demand equation.

This statement of business fact is, I believe, why our endogenous runs on Thress' workshared variable yielded a positive sign, as one would expect if one knew the business facts. As to these business facts, see also the legal brief submitted by MMA in response to the Commission's request for comments on de-linking. (Docket No. R2006-1, August 17, 2006, Comments of Major Mailers Association in Response to Notice of Inquiry No. 3).

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

**USPS/GCA-T1-85:** Your response to USPS/GCA-T1-48 failed to confirm part (d) of that question:

Please confirm that, given the functional form of your equation, the impact of a 10 percent increase in the price of First-Class single-piece letters would be equal to the following:

$$\begin{aligned} \text{Change in volume (pieces per adult per day)} &= \\ (\$0.451369 - \$0.410336) * (-1.0552) &= -0.0433 \end{aligned}$$

Please provide the correct formulation for the impact of an increase in the price of First-Class single-piece letters from \$0.410336 to \$0.451369 given the functional form of your equation. For the purposes of your answer, please interpret the change in the price of First-Class single-piece letters as a “unit change in price.”

**RESPONSE:**

Confirmed. \$0.0410336 rise in the single-piece price results in 0.0433 units decline in the single-piece volume, holding all other explanatory variables constant. However, note that your example necessarily entails having to raise the price of workshared letters in order to keep the discount constant.

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

**USPS/GCA-T1-86:** Your response to USPS/GCA-T1-48 failed to confirm part (g) of that question:

Please confirm that, given the functional form of your equation, the impact of a change in the average worksharing discount from \$0.072158 to \$0.113192 would be equal to the following:

$$\begin{aligned} \text{Change in volume (pieces per adult per day)} &= \\ (\$0.113192 - \$0.072158) * (1.2683) &= +0.0520 \end{aligned}$$

Please provide the correct formulation for the impact of an increase in the average worksharing discount from \$0.072158 to \$0.113192 given the functional form of your equation. For the purposes of your answer, please interpret the change in the average worksharing discount as a “unit change in price.”

**RESPONSE:**

Confirmed. A \$0.0410336 rise in the average worksharing discount results in 0.0520 units increase in the single-piece volume, holding all other explanatory variables constant. However, note that your example necessarily entails having to reduce the price of workshared letters or raise the price of single piece letters, or both, in order to vary the discount .

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

**USPS/GCA-T1-87:** Your response to USPS/GCA-T1-48 failed to confirm part (h) of that question:

Please confirm that, combining the impacts shown in d. and g. above, the total change in the volume of First-Class single-piece letters (pieces per adult per day) predicted by your model, given a 10 percent increase in the price of First-Class single-piece letters, holding the price of First-Class workshared letters constant, will be equal to an increase of 0.0087 (minus 0.0433 plus 0.0520).

Please provide the correct value for “the total change in the volume of First-Class single-piece letters (pieces per adult per day) predicted by your model, given a 10 percent increase in the price of First-Class single-piece letters, holding the price of First-Class workshared letters constant” given your responses to USPS/GCA-T1-85 and USPS/GCA-T1-86 above.

**RESPONSE:**

Not confirmed.

Your hypothetical example states that you are increasing the SP price by 10% which also means the WS discount is raised by about 58%. Over the 1983-2005 period of investigation, there has never been a case in which the Postal Service has increased the SP rate by 10% and the WS discount by about 58%. The attached table gives the non-log values of the single-piece price and worksharing discount along with the level change and the percentage change in the values of these two variables as well as their relative values and the absolute difference between the change in the single-piece price and the change in the worksharing discount. The average values and the minimum and the maximum values are also reported in this table.

The key facts from this table are: (i) the maximum change for the 1983-2005 period in the level of the WS discount is \$0.01249 in 1996PQ4 compared to your hypothetical example of \$0.041034; (ii) the maximum percentage change in the WS discount is 22.2% compared to your number of 58% ; The

22.2% maximum increase in WS discount corresponds to a 0.42% decrease in the single-piece price in 1996PQ4;

(iii) The maximum increase in the single-piece price was 9.6% corresponding to a 2.6% increase in worksharing discount in 1988PQ3; (iv) the average difference between the change in the single-piece price and the worksharing discount over the sample period in absolute term has been about 0.43 cent. Furthermore, as the last column shows, at the times that Postal Services changed the rates the Single-Piece rate was increased by several cents more than the increase in the worksharing discount. For example, in 1988PQ3 the change in the single-piece price was 3.63 cents higher than the change in the worksharing discount; in 1991PQ2 and 1995PQ2 these differences were about 2.0; and in 2002GQ4 it was 2.2 cents. The average of those large differences which must correspond to Postal Service rate increases, is about 2.4 cents. This implies on the average the single-piece price increases have been 2.4 cents larger than the increases in the worksharing discount. By contrast, your hypothetical assumes equal increases in single piece rates and worksharing discounts. [The Thress model, unlike my model, also presumes the impact of the own price coefficient and the WS discount are both negative so the combined impact is always negative even though we know the sign of the WS discount coefficient in the single piece equation is not negative, as discussed in my answer to USPS/GCA-T1-84.]

Furthermore, , your hypothetical example implicitly assumes that, when the single-piece price rose, for example, by 1 cent, the worksharing discount must have risen by 1 cent. In fact , over this period the average change for the single-piece has been  $-\$0.00038$  and for the worksharing discount has been  $+\$0.00025$ . If we run a simple linear regression between the worksharing discount as the dependent variable and the single-piece price as the explanatory variable, if the coefficient of the single-piece price is found to be statistically equal to 1 and significant, then this example make sense. Table

Two shows the regression output. This coefficient is found to be -0.076 and is insignificant, implying not only it is not statistically equal to 1, but also that there is not even a linear relationship between the worksharing discount and the single piece price over the 1983-2005 sample period.

TIME	PX01SP	D1_3WS	Table One				Relative Value SP-Price To WS-Discount	Absolute Value of Difference Between SP Price Level Change & WS Discount Level Change (Cents) (8)=absolute((3)-(4))
			Level Change		% Change			
			SP Price	WS Discount	SP Price	WS Discount		
(1)	(2)	(3)	(4)	(5)	(6)	(7)=(1)/(2)	(8)	
1983PQ1	\$0.43995	\$0.04848						
1983PQ2	\$0.43660	\$0.04811	-\$0.00335	-\$0.00037	-0.76%	-0.76%	9.08	0.298
1983PQ3	\$0.43191	\$0.04759	-\$0.00469	-\$0.00052	-1.07%	-1.07%	9.08	0.417
1983PQ4	\$0.42651	\$0.04700	-\$0.00541	-\$0.00060	-1.25%	-1.25%	9.08	0.481
1984PQ1	\$0.42213	\$0.05130	-\$0.00437	-\$0.00430	-1.02%	9.15%	8.23	0.867
1984PQ2	\$0.41866	\$0.05135	-\$0.00347	\$0.00005	-0.82%	0.10%	8.15	0.352
1984PQ3	\$0.41511	\$0.05092	-\$0.00356	-\$0.00044	-0.85%	-0.85%	8.15	0.312
1984PQ4	\$0.41171	\$0.05050	-\$0.00340	-\$0.00042	-0.82%	-0.82%	8.15	0.298
1985PQ1	\$0.40827	\$0.05008	-\$0.00344	-\$0.00042	-0.84%	-0.84%	8.15	0.302
1985PQ2	\$0.41538	\$0.05436	\$0.00711	\$0.00428	1.74%	8.55%	7.64	0.283
1985PQ3	\$0.43279	\$0.06345	\$0.01741	\$0.00909	4.19%	16.72%	6.82	0.832
1985PQ4	\$0.42882	\$0.06287	-\$0.00397	-\$0.00058	-0.92%	-0.92%	6.82	0.339
1986PQ1	\$0.42408	\$0.06217	-\$0.00474	-\$0.00089	-1.10%	-1.10%	6.82	0.404
1986PQ2	\$0.42091	\$0.06171	-\$0.00317	-\$0.00046	-0.75%	-0.75%	6.82	0.270
1986PQ3	\$0.42120	\$0.06175	\$0.00028	\$0.00004	0.07%	0.07%	6.82	0.024
1986PQ4	\$0.41758	\$0.06122	-\$0.00362	-\$0.00053	-0.86%	-0.86%	6.82	0.309
1987PQ1	\$0.41418	\$0.06072	-\$0.00340	-\$0.00050	-0.81%	-0.81%	6.82	0.290
1987PQ2	\$0.40986	\$0.06009	-\$0.00432	-\$0.00063	-1.04%	-1.04%	6.82	0.369
1987PQ3	\$0.40610	\$0.05954	-\$0.00377	-\$0.00055	-0.92%	-0.92%	6.82	0.321
1987PQ4	\$0.40159	\$0.05888	-\$0.00450	-\$0.00066	-1.11%	-1.11%	6.82	0.384
1988PQ1	\$0.39682	\$0.05818	-\$0.00477	-\$0.00070	-1.19%	-1.19%	6.82	0.407
1988PQ2	\$0.39461	\$0.05785	-\$0.00222	-\$0.00032	-0.56%	-0.56%	6.82	0.189
1988PQ3	\$0.43239	\$0.05934	\$0.03778	\$0.00149	9.57%	2.57%	7.29	3.629
1988PQ4	\$0.44046	\$0.05920	\$0.00807	-\$0.00014	1.87%	-0.24%	7.44	0.822
1989PQ1	\$0.43485	\$0.05844	-\$0.00561	-\$0.00075	-1.27%	-1.27%	7.44	0.486
1989PQ2	\$0.43007	\$0.05780	-\$0.00479	-\$0.00064	-1.10%	-1.10%	7.44	0.414
1989PQ3	\$0.42427	\$0.05702	-\$0.00580	-\$0.00078	-1.35%	-1.35%	7.44	0.502
1989PQ4	\$0.42035	\$0.05649	-\$0.00392	-\$0.00053	-0.92%	-0.92%	7.44	0.339
1990PQ1	\$0.41596	\$0.05590	-\$0.00439	-\$0.00059	-1.04%	-1.04%	7.44	0.380
1990PQ2	\$0.40745	\$0.05476	-\$0.00850	-\$0.00114	-2.04%	-2.04%	7.44	0.736
1990PQ3	\$0.40220	\$0.05405	-\$0.00526	-\$0.00071	-1.29%	-1.29%	7.44	0.455
1990PQ4	\$0.39711	\$0.05337	-\$0.00509	-\$0.00068	-1.27%	-1.27%	7.44	0.440
1991PQ1	\$0.39137	\$0.05260	-\$0.00573	-\$0.00077	-1.44%	-1.44%	7.44	0.496
1991PQ2	\$0.41365	\$0.05463	\$0.02228	\$0.00203	5.69%	3.86%	7.57	2.025
1991PQ3	\$0.44781	\$0.05784	\$0.03415	\$0.00321	8.26%	5.88%	7.74	3.094
1991PQ4	\$0.44433	\$0.05739	-\$0.00347	-\$0.00045	-0.78%	-0.78%	7.74	0.302
1992PQ1	\$0.44068	\$0.05692	-\$0.00365	-\$0.00047	-0.82%	-0.82%	7.74	0.318
1992PQ2	\$0.43756	\$0.05652	-\$0.00312	-\$0.00040	-0.71%	-0.71%	7.74	0.271
1992PQ3	\$0.43476	\$0.05616	-\$0.00280	-\$0.00036	-0.64%	-0.64%	7.74	0.244
1992PQ4	\$0.43172	\$0.05577	-\$0.00304	-\$0.00039	-0.70%	-0.70%	7.74	0.265
1993PQ1	\$0.42873	\$0.05543	-\$0.00299	-\$0.00034	-0.69%	-0.61%	7.74	0.265
1993PQ2	\$0.42668	\$0.05516	-\$0.00206	-\$0.00027	-0.48%	-0.48%	7.74	0.179
1993PQ3	\$0.42408	\$0.05482	-\$0.00259	-\$0.00034	-0.61%	-0.61%	7.74	0.226
1993PQ4	\$0.42226	\$0.05459	-\$0.00182	-\$0.00024	-0.43%	-0.43%	7.74	0.159
1994PQ1	\$0.42006	\$0.05430	-\$0.00221	-\$0.00029	-0.52%	-0.52%	7.74	0.192
1994PQ2	\$0.41867	\$0.05412	-\$0.00139	-\$0.00018	-0.33%	-0.33%	7.74	0.121
1994PQ3	\$0.41651	\$0.05385	-\$0.00215	-\$0.00028	-0.51%	-0.51%	7.74	0.187
1994PQ4	\$0.41303	\$0.05340	-\$0.00348	-\$0.00045	-0.84%	-0.84%	7.74	0.303
1995PQ1	\$0.41056	\$0.05308	-\$0.00247	-\$0.00032	-0.60%	-0.60%	7.74	0.215
1995PQ2	\$0.43431	\$0.05659	\$0.02374	\$0.00351	5.78%	6.61%	7.68	2.023
1995PQ3	\$0.44075	\$0.05757	\$0.00644	\$0.00098	1.48%	1.74%	7.66	0.546
1995PQ4	\$0.43863	\$0.05729	-\$0.00212	-\$0.00028	-0.48%	-0.48%	7.66	0.184
1996PQ1	\$0.43671	\$0.05704	-\$0.00193	-\$0.00025	-0.44%	-0.44%	7.66	0.168
1996PQ2	\$0.43456	\$0.05676	-\$0.00215	-\$0.00028	-0.49%	-0.49%	7.66	0.187
1996PQ3	\$0.43156	\$0.05637	-\$0.00299	-\$0.00039	-0.69%	-0.69%	7.66	0.260
1996PQ4	\$0.42977	\$0.06886	-\$0.00180	\$0.01249	-0.42%	22.16%	6.24	1.429
1997PQ1	\$0.42689	\$0.07430	-\$0.00288	\$0.00544	-0.67%	7.90%	5.75	0.831
1997PQ2	\$0.42493	\$0.07396	-\$0.00196	-\$0.00034	-0.46%	-0.46%	5.75	0.162
1997PQ3	\$0.42371	\$0.07375	-\$0.00122	-\$0.00021	-0.29%	-0.29%	5.75	0.101
1997PQ4	\$0.42287	\$0.07360	-\$0.00084	-\$0.00015	-0.20%	-0.20%	5.75	0.070
1998PQ1	\$0.42117	\$0.07330	-\$0.00170	-\$0.00030	-0.40%	-0.40%	5.75	0.140
1998PQ2	\$0.42070	\$0.07322	-\$0.00047	-\$0.00008	-0.11%	-0.11%	5.75	0.039
1998PQ3	\$0.42025	\$0.07314	-\$0.00045	-\$0.00008	-0.11%	-0.11%	5.75	0.037
1998PQ4	\$0.41908	\$0.07294	-\$0.00117	-\$0.00020	-0.28%	-0.28%	5.75	0.097
1999PQ1	\$0.41748	\$0.07266	-\$0.00160	-\$0.00028	-0.38%	-0.38%	5.75	0.132
1999PQ2	\$0.42017	\$0.07450	\$0.00270	\$0.00184	0.65%	2.53%	5.64	0.086
1999PQ3	\$0.42117	\$0.07567	\$0.00100	\$0.00117	0.24%	1.57%	5.57	0.017
1999PQ4	\$0.41871	\$0.07523	-\$0.00246	-\$0.00044	-0.58%	-0.58%	5.57	0.202
2000GQ1	\$0.41527	\$0.07461	-\$0.00344	-\$0.00062	-0.82%	-0.82%	5.57	0.282
2000GQ2	\$0.41167	\$0.07396	-\$0.00360	-\$0.00065	-0.87%	-0.87%	5.57	0.295
2000GQ3	\$0.40968	\$0.07360	-\$0.00200	-\$0.00036	-0.49%	-0.49%	5.57	0.164
2000GQ4	\$0.40778	\$0.07326	-\$0.00189	-\$0.00034	-0.46%	-0.46%	5.57	0.155
2001GQ1	\$0.40597	\$0.07294	-\$0.00182	-\$0.00033	-0.45%	-0.45%	5.57	0.149
2001GQ2	\$0.40895	\$0.07412	\$0.00299	\$0.00118	0.74%	1.62%	5.52	0.181
2001GQ3	\$0.40682	\$0.07377	-\$0.00213	-\$0.00034	-0.52%	-0.46%	5.51	0.179
2001GQ4	\$0.41278	\$0.07171	\$0.00596	-\$0.00206	1.47%	-2.79%	5.76	0.802
2002GQ1	\$0.41220	\$0.07161	-\$0.00059	-\$0.00010	-0.14%	-0.14%	5.76	0.048
2002GQ2	\$0.41125	\$0.07145	-\$0.00095	-\$0.00016	-0.23%	-0.23%	5.76	0.078
2002GQ3	\$0.40875	\$0.07102	-\$0.00250	-\$0.00042	-0.61%	-0.59%	5.76	0.208
2002GQ4	\$0.43654	\$0.07677	\$0.02779	\$0.00574	6.80%	8.09%	5.69	2.205
2003GQ1	\$0.43476	\$0.07645	-\$0.00178	-\$0.00031	-0.41%	-0.41%	5.69	0.147
2003GQ2	\$0.43152	\$0.07588	-\$0.00324	-\$0.00057	-0.75%	-0.75%	5.69	0.267
2003GQ3	\$0.43082	\$0.07576	-\$0.00069	-\$0.00012	-0.16%	-0.16%	5.69	0.057
2003GQ4	\$0.42874	\$0.07539	-\$0.00209	-\$0.00037	-0.48%	-0.48%	5.69	0.172
2004GQ1	\$0.42735	\$0.07515	-\$0.00138	-\$0.00024	-0.32%	-0.32%	5.69	0.114
2004GQ2	\$0.42334	\$0.07445	-\$0.00402	-\$0.00071	-0.94%	-0.94%	5.69	0.331
2004GQ3	\$0.41941	\$0.07375	-\$0.00393	-\$0.00069	-0.93%	-0.93%	5.69	0.324
2004GQ4	\$0.41788	\$0.07348	-\$0.00153	-\$0.00027	-0.36%	-0.36%	5.69	0.126
2005GQ1	\$0.41466	\$0.07292	-\$0.00322	-\$0.00057	-0.77%	-0.77%	5.69	0.265
2005GQ2	\$0.41236	\$0.07251	-\$0.00230	-\$0.00040	-0.55%	-0.55%	5.69	0.190
2005GQ3	\$0.40902	\$0.07193	-\$0.00334	-\$0.00059	-0.81%	-0.81%	5.69	0.275
2005GQ4	\$0.40542	\$0.07129	-\$0.00360	-\$0.00063	-0.88%	-0.88%	5.69	0.297
Aaverage 1983-2005	\$0.42096	\$0.06300	-\$0.00038	\$0.00025	-0.07%	0.49%	6.81	0.427
Minimum 1983-2005	\$0.39137	\$0.04700	-\$0.00850	-\$0.00206	-2.04%	-2.79%	5.51	
Maximum 1983-2005	\$0.44781	\$0.07677	\$0.03778	\$0.01249	9.57%	22.16%	9.08	
Average 2005	\$0.41037	\$0.07216						
Hypothetical Example 10% Increase in SP Price Holding WS Price Constant	\$0.45140	\$0.11320	\$0.04104	\$0.04104	10.12%	58%	3.99	

**Table Two**

Simple Linear Regression Between Worksharing Discount  
& Single-Piece Price Over 1983-2005 Period

Dependent Variable: Worksharing Discount

<i>Regression Statistics</i>	
Multiple R	0.097192
R Square	0.009446
Adjusted R Square	-0.00156
Standard Error	0.009299
Observations	92

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	7.42E-05	7.42E-05	0.858273	0.3567
Residual	90	0.007783	8.65E-05		
Total	91	0.007857			

	<i>Coefficient</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0.094857	0.034405	2.757066	0.007062	0.026505	0.163208793
SP Price	-0.075686	0.081697	-0.92643	0.3567	-0.237991	0.086618514

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

**USPS/GCA-T1-88:** Please answer USPS/GCA-T1-48(i) with respect to the answer which you provide in your response to USPS/GCA-T1-87.

**RESPONSE:**

Please see my responses to USPS/GCA-T1-84 and USPS/GCA-T1-87.

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

**USPS/GCA-T1-89:** USPS/GCA-T1-48(k) asked the following:

Please confirm that your model would predict that a reduction in the price of First-Class single-piece letters, coupled with an equal reduction in the average First-Class worksharing discount, would predict a reduction in the volume of First-Class single-piece letters. If you cannot confirm, please explain fully.

You do not appear to have answered this question. Please do so now. For the purposes of your answer, please interpret the word “reduction” to refer to a “unit change in price.”

**RESPONSE:**

Confirmed. However, please see my responses to USPS/GCA-T1-84 and USPS/GCA-T1-87.

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

**USPS/GCA-T1-90:** In your response to USPS/GCA-T1-48, you relied upon average own-price and discount elasticities over the period from 1983 – 2005, based upon your equation in Table A-8 of your testimony. For example, you calculated the discount elasticity based upon an average First-Class worksharing discount of “0.0610.”

The example in USPS/GCA-T1-48 refers explicitly to prices in “GFY 2005.” For example, the average First-Class worksharing discount used in steps (v) - (viii) of your response to USPS/GCA-T1-48 is equal to “\$0.072158.”

Please confirm that the average First-Class worksharing discount which is used to calculate the discount elasticity should be equal to the average First-Class worksharing discount identified in steps (v) – (viii) of your response to USPS/GCA-T1-48 in order for your answer to be correct mathematically. If not confirmed, please explain fully.

**RESPONSE:**

Confirmed.

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

**USPS/GCA-T1-91:** In your response to USPS/GCA-T1-48, you relied upon average own-price and discount elasticities over the period from 1983 – 2005, based upon your equation in Table A-8 of your testimony. The example in USPS/GCA-T1-48 refers explicitly to prices in “GFY 2005.”

Please repeat the calculations which you provide in response to USPS/GCA-T1-48 using own-price and discount elasticities for GFY 2005.

**RESPONSE:**

Using the average values for the year 2005, the single-piece price elasticity is -0.622 and the worksharing discount elasticity is +0.133. Following those steps (v) – (viii) in USPS/GCA-T1-48, we obtain a 0.00075 unit increase in the single-piece volume due to simultaneously increasing the single-piece price and the worksharing discount by an amount of \$0.041034 corresponding to a 10% increase in the single-piece price and a 58% increase in the worksharing discount. However, please see my response to USPS/GCA-T1-84 for a conceptual and factual explanation of such a result. Furthermore, see my response to USPS-GCA-T1-87, showing why equal amount of simultaneous increase or decrease in the single-piece price and the worksharing discount does not make any historical and statistical sense.

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

**USPS/GCA-T1-92:** In your response to USPS/GCA-T1-48, you indicate that “the impact of a change in the average worksharing discount from \$0.072158 to \$0.113192 would be” to increase volume by “3.64%.” Why do you believe that a change in the relative prices of First-Class single-piece and workshared letters that would make First-Class single-piece letters more expensive relative to First-Class workshared letters would lead to an increase in First-Class single-piece letters volume?

**RESPONSE:**

Please see my response to USPS/GCA-T1-84.

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

**USPS/GCA-T1-93:** In your response to USPS/GCA-T1-48, you indicate that “the impact of a change in the average worksharing discount from \$0.072158 to \$0.113192 would be” to increase volume by “3.64%.” What do you believe would be the source of this 3.64 percent increase in First-Class single-piece letters volume resulting from this increase in the average First-Class worksharing discount? That is, would this represent mail that was not previously sent through the Postal Service or would it represent mail that was previously sent as some other category of mail? If you believe that this would represent mail that was not previously sent through the Postal Service, to what incentives would such mail be responding in this case, in light of a 10 percent increase in the price of First-Class single-piece letters. If you believe that this would represent mail that was previously sent as some other mail category, what mail category do you believe this mail would have previously been sent as, and what precisely do you believe would be the incentives which would prompt such mail to shift to First-Class single-piece letters?

**RESPONSE:**

Please see my response to USPS/GCA-T1-84.

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

**USPS/GCA-T1-94:** In your response to USPS/GCA-T1-48, you indicate that “the impact of a change in the average worksharing discount from \$0.072158 to \$0.113192 would be” to increase volume by “3.64%.” In your opinion, would you expect an increase in the average First-Class worksharing discount to lead to an increase or a decrease in the volume of First-Class workshared letters? If your expectation is that an increase in the average First-Class worksharing discount would lead to an increase in the volume of First-Class workshared letters, please explain how this expectation is consistent with your response to USPS/GCA-T1-48 as quoted in this question. If your expectation is that an increase in the average First-Class worksharing discount would lead to a decrease in the volume of First-Class workshared letters, please explain your answer fully and provide all evidence in support of your position.

**RESPONSE:**

Please see my response to USPS/GCA-T1-84.

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

**USPS/GCA-T1-95:** In your response to USPS/GCA-T1-48, you claim that “[t]he sum of the coefficients of single-piece price and its lag which I have estimated gives the change in volume for one unit change in price.” Based on your model, what would be the impact on First-Class single-piece letters volume of a one-cent decrease in the price of First-Class single-piece letters, holding the price of First-Class worksharing letters constant? That is, based on your model, what would be the impact on First-Class single-piece letters volume of a one-cent decrease in the price of First-Class single-piece letters and a corresponding one-cent decrease in the average First-Class worksharing discount?

**RESPONSE:**

The combined impact of a one-cent simultaneous decrease in the single-piece price and the worksharing discount is a decline in the single-piece volume. However, please see my response to USPS/GCA-T1-84 for a conceptual and factual explanation of such a result. Furthermore, see my response to USPS-GCA-T1-87, showing why an equal amount of simultaneous increase or decrease in the single-piece price and the worksharing discount does not make any historical and statistical sense.