

DOCKET SECTION

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

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Docket No. R97-1

POSTAL RATE AND FEE CHANGES, 1997

UNITED STATES POSTAL SERVICE
INTERROGATORIES AND REQUESTS FOR PRODUCTION OF DOCUMENTS TO
THE OFFICE OF THE CONSUMER ADVOCATE WITNESS SMITH
(USPS/OCA-T600-1-8)

Pursuant to rules 25 and 26 of the Rules of Practice and Procedure and rule 2 of the Special Rules of Practice, the United States Postal Service directs the following interrogatories and requests for production of documents to the Office of the Consumer Advocate witness Smith: USPS/OCA-T600-1-8.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

Daniel J. Foucheaux, Jr.
Chief Counsel, Ratemaking


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January 16, 1998

USPS/OCA-T600-1. Please refer to page 1 of your testimony.

- a. Please provide a list of all published econometric studies that you have performed.
- b. Please provide a list of all completed but not published econometric studies that you have performed.

USPS/OCA-T600-2. Please refer to page 2 of your testimony.

- a. Please provide the number of years that you have studied United States Postal Service mail processing costs and operations prior to reviewing witness Bradley's testimony.
- b. Please provide complete copies of all studies of United States Postal Service mail processing costs and operations that you have authored or participated in.

USPS/OCA-T600-3. Please refer to page 11 , line 17 of you testimony where you state:

He [witness Bradley] quotes Dr. William Greene, a noted econometrician, as stating that technological change can be measured with an autonomous time trend. However, I believe that witness Bradley's interpretation of Dr. Greene's comment is incorrect.

And page 12 line 4 where you state:

Witness Bradley is not addressing a macroeconomic problem. Instead, on the microeconomic issue of technological change, witness Bradley needs to address the fundamental driver of technological change impacting the mail handling process.

And page 12 line 13 where you state:

An explicit modeling of capital related variables is required in order to explain technological change and other important microeconomic factors driving costs.

- a. Please confirm that on page 465 of Econometric Analysis (2nd edition) the same Dr. Greene states:

A study by Greene (1983) examines the cost of electric power generation for a large number of firms, each observed in each of several years. The basic model, for the i th firm in year t ,

$$\text{Cost}_{it} = C(Y_{it}, P_{it}, t),$$

where Y is output and p is vector of factor prices, provides estimates of the rate of technological change,

$$\delta_t = \frac{-d \ln C}{dt}$$

- b. Please confirm that the referred to study is a microeconomic study.
- c. Please confirm that the above equation does not include "an explicit modeling of capital related variables."
- d. Please confirm that Dr. Greene's model includes a time trend to capture the effect of technological change.

USPS/OCA-T600-4. Please refer to your testimony on page 20 at line 15 where you state:

I conclude that each of the "alpha sub i " in witness Bradley's method relates to a short-run, "monthly" facility specific cost relationship.

Please confirm that this comment is based upon the accounting period (monthly)

frequency of the data. If you do not confirm, please provide all bases for asserting that the α_i are “monthly” facility specific cost relationships.

USPS/OCA-T600-5. Please consider the following equation: -

$Y = X*Z$, where X, Y and Z are all variables.

- a. Please confirm that $\ln Y = \ln X + \ln Z$ where “ln” stands for natural log. If you do not agree, please provide the formula for $\ln Y$.
- b. Please confirm that $d \ln Y = d \ln X + d \ln Z$. If you do not agree, please provide the formula for $d \ln Y$.

USPS/OCA-T600-6. Please refer to page 6, line 23 of your testimony.

Assume that the cost function for a firm facing fixed factor prices $w \gg 0$ is defined as:

$$c(w,y) \equiv \min_x w * x \text{ s.t. } x \in V(y)$$

where x is the input into production, y is the output of production and $V(y)$ is the input requirement set, and $X(w,y)$ solves the firm’s cost minimization problem

- a. Please confirm that for this cost function:

$$c(w,y) \equiv \min_x w * x(w,y)$$

If you do not confirm, please provide what you think is the correct expression.

- b. Please confirm that $x(w,y)$ is known as the conditional factor input demand equation. If you do not confirm, please provide what you think to be the correct interpretation of $X(w,y)$.

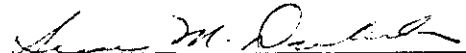
USPS/OCA-T600-7. Please refer to page 15 line 15 where you state: "I am unable to confirm that the signs are consistent with a correct methodology."

- a. Please define the term "correct methodology."
- b. Please provide the exact criteria by which it can be determined whether a methodology is correct or incorrect.
- c. Please confirm that in a panel data regression, a time trend variable will capture the effects of all factors which vary over time, including but not necessarily limited to, technological change. If you do not confirm, please explain.

USPS/OCA-T600-8. As an econometrician, is it your testimony that in general (without reference to witness Bradley's testimony) the methodology of estimation constrains the "correct" signs for estimated parameters?

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.


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