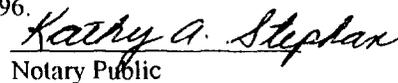


I hereby swear, under penalty of perjury, that the foregoing is true and correct, to the best of our knowledge and belief.



Leonard Waverman

Subscribed and sworn before me this 24th day of December, 1996.



Notary Public

My Commission expires: 4-11-97



APPENDIX I.

115. To estimate the effect of Nucor's entry into hot-rolled sheet production, we assume that hot-rolled sheet prices are a function of average variable costs for integrated firms, capacity utilization, and a time trend. We estimate the following equation for 1970-94 with annual data:

$$\text{PHOTR} = f(\text{VARCOSTR}, \text{CAPUTIL}, \text{TIME}, \text{NUCOR_CAP}) \quad (1)$$

where PHOTR is the real unit value of hot-rolled sheet shipments by all U.S. producers,¹⁰² VARCOSTR is the real value of the variable costs of iron ore, coal, and labor, TIME is the time trend, and NUCOR-CAP is Nucor's sheet capacity. The deflator for variable costs and steel prices is the GDP deflator. The labor cost component in VARCOST includes a 3.7 percent productivity growth factor. Iron ore and coal prices are U.S. prices in the lower Great Lakes as estimated by Paine Webber's *World Steel Dynamics*. Capacity utilization is the ratio of raw steel production to raw steel capability as reported by the American Iron and Steel Institute.

116. Because CAPUTIL depends on macroeconomic forces as well as prices, we use a two-stage least-squares procedure to estimate (1). Instruments for CAPUTIL are world raw steel production, real U.S. GDP, and the trade-weighted real value of the dollar, lagged one year. The results of this estimation are as follows:

117. Each million tons of Nucor's new flat-rolled capacity (2.2 million tons in all) reduced the

	CONSTANT	CAPUTIL	VARCOSTR	TIME	NUCOR-CAP
PHOTR	-2.76	+2.99 t=5.37	1.58 t=12.09	0.22 t=1.91	-0.16 t=2.10
R ² = 0.926					

price of hot-rolled sheet by more than 4 percent. Hence, its first two plants appear to be associated with about a 9 percent reduction in real hot-rolled sheet prices.

¹⁰² *Current Industrial Report, Ma33-B Annual Issues.*