TABLE 3.—*Aerospace industries—Regression analysis*

[Dependent variable: Production worker monthly man-hours] [1]

Independent variable [2]	Coefficient	Standard error	Beta	Partial correlation
Seasonal dummies:				
February	−117.4075	780.3	−0.0097	−0.0177
March	167.2887	823.7	.0138	.0239
April	−256.6500	641.7	−.0212	−.0471
May	−347.5373	827.5	−.0287	−.0494
June	147.2898	951.2	.0122	.0182
July	−797.1213	788.5	−.0695	−.1183
August	−127.6783	1024.0	−.0111	−.0147
September	687.8603	1023.0	.0600	.0790
October	807.6806	1017.0	.0704	.0932
November	894.8415	1193.0	.0780	.0881
December	153.0373	1254.0	.1334	.1423
t	[3] −356.9214	29.2	−3.2292	−.8215
t^2	[3] 1.6258	.1852	1.7354	.7190
Current expenditures	−.0001	.3378	−.0389	−.0382
Obligations, current	.0002	.3100	.0601	.0583
1-month lag	[3] 1.0772	.3140	.1884	.3748
2-month lag	[3] .9303	.3134	.1637	.3302
3-month lag	[3] .6327	.3220	.1103	.2256
4-month lag	[3] .7840	.3245	.1369	.2739
5-month lag	[3] .8744	.3248	.1541	.3024
6-month lag	[3] .9448	.3193	.1688	.3293
7-month lag	.5929	.3190	.1037	.2140
8-month lag	[3] .6790	.3197	.1193	.2429
9-month lag	[3] .7571	.3122	.1331	.2748
10-month lag	[3] .8686	.3148	.1527	.3092
11-month lag	[3] .9021	.3161	.1586	.3188
12-month lag	.4546	.2760	.0824	.1905
Unobligated appropriations	.0845	.0872	.1043	.1135
Budget	.1353	.0889	.2615	.1766
Intercept	25,279.4280			
R^2	.9272			
Standard error of estimate	1,045.1086			
Degrees of freedom	72			
Durbin-Watson statistic	.3708			

[1] In thousands.
[2] All money amounts are in millions of dollars.
[3] Significant at the 5-percent level.

(2) Expenditures and obligations: The three sets of regression coefficients reveal that current expenditures and obligations are not significant explanatory variables of employment, but that lagged obligations are all positive, all greater than their standard errors, and nine out of 12 coefficients in each regression are statistically significant. The fact that expenditures were not significant casts some doubt on the hypothesis that the industry is dependent upon the government for its working capital needs, but the importance of obligations is strongly reinforced. Contrary to the findings of Ando and Brown, the effects of obligations are felt almost immediately (the first lagged value is significant) and effects are fairly well spread out over the year, with a rather sharp drop between the 11th and 12th coefficient.

(3) Announcement effects: The coefficients of the unobligated appropriations and the budget variables are statistically significant in two of the three regressions, and positive, though not significant, in the third. These variables appear to exert more effect on total workers than on production workers, both in terms of the magnitude of regression coefficients and standardized regression coefficients (B's). Since total workers include managerial and research people whose employment may depend less on actual production contracts than on the preparation of proposals to the defense department based on expectations about the amount of subsequent production contracts, this result is consistent with a priori expectations.