to hoard labor so that available labor is not used at its most efficient rate.

The value of 0.35 for the coefficient of the capital-labor ratio (K/Lp) appears consistent with some prior studies. For manufacturing Douglas found values for his capital coefficient ranging from 0.10 to 0.31 for time series data and from 0.25 to 0.47 for cross-section studies (40). Solow obtains a value of 0.353 for the coefficient of his capital-labor ratio, when a Cobb-Douglas type function was fitted to data for the private, nonfarm economy (41). Tintner obtained a coefficient for capital of 0.332 for the total private economy (42).

The comparison of these other results with our own are not conclusive in view of the differences in data coverage, definition and form in which the capital variable is introduced into the production function. The previous study closest to this one in its treatment of capital in capital-labor ratio form (Solow's) gives the same result, as already indicated.

That version of Douglas' own functions which comes closest to this study (time series for American manufacturing; series IV) adjusted each variable for time trends and correlated deviations from these trends. This is equivalent to introducing time as an explicit variable as done above (43). In this version Douglas found his capital coefficient (j) to be 0.30—a value also close to the 0.35 found for the total economy. Douglas, himself, came to the conclusion that the long-run norm for (j), his capital coefficient, for the period he studied (1899–1922) was probably about 0.34 in manufacturing.

If the compensation of capital roughly corresponded to the contribution which an increase in the K/Lp ratio made to output (Oa), then with a coefficient of 0.35 for K/Lp, we would expect the property share in GNP on the income side of the national account to be between 30 and 40 percent. Depending on the definition of the property share adopted, its value is in this range, and a rough estimate for the 1909–58 period is about 35 percent.

With a K/Lp coefficient of $+0.35$, we would expect the capital output ratio (K/Oa) to be falling and at a roughly proportionate rate over the long run. Indeed, this is the case.

The influence of the age of capital (k) is inverse and nonlinear as one would expect on theoretical grounds. This variable is an indirect measure of the degree to which the capital stock (K) incorporates the latest technology; when the average age rises, the capital stock is less modern, and vice versa. It would be expected, a priori, that an increase in the average age of the capital stock (k) would be accompanied by a reduction in the output (Oa) obtained from any given combination of K and L so the coefficient of k would be negative as it is.

Further, the influence would be expected to be nonlinear. When the average age is low—stock generally very up to date—an increase in the average age would imply a larger proportionate drop in technical efficiency, than when the average age is quite high and the capital stock already relatively out moded on the average. The negative slope of k and its parabolic shape give this result for the relevant range of the curve.

The time trend (0.00884) has a rate of rise of 2.07 percent per year and over the period 1909–58, it accounts for between one-half and two-thirds of the rise in output. This result agrees closely with those