If during a particular period demands in all industries were to rise by the same amount, then, granted the assumptions made above, in industries with greater than average increases in unit labor costs, gross business incomes per unit should rise by a smaller amount than unit costs; more simply, gross profit margins as a percent of value added should fall.<sup>10</sup> The opposite results would be expected to emerge in those industries whose advance in unit labor costs was less than average. These expectations, in turn, would be modified by two other considerations. If the demand for the products of an industry increased at a sufficiently greater than average rate, then gross margins might increase, even though the rise in unit labor costs were greater than average. Further, when we modify our assumption that a relative increase in unit labor costs implies a relative increase in total costs (excluding gross margins), we must modify our conclusions. In particular, if indirect taxes form a significant proportion of total costs, then the relationship between prices, demands, and unit labor costs could be altered by a change in indirect taxes which differed sharply from the average. The same is true of capital consumption allowances. We have data for these two nonlabor costs, and can include their influence in the analysis. As was indicated earlier, however, relative shifts in the unit cost of raw materials cannot be formally incorporated into the data. We will attempt a qualitative evaluation of such costs at a later point.

It may be worth the risk of excessive repetition to recast the foregoing analysis in somewhat simpler terms. We are stating that the

profit maximization hypothesis implies the following:

1. When relative costs increase and relative demands are unchanged, gross "profit" margins will be narrowed, i.e., gross business income per unit of output will rise by less than costs per unit, and will thus decline as a percent of value added. The opposite holds true for decreases in relative costs.

2. When relative demands increase and relative costs are unchanged, gross profit margins will be widened, and vice versa for relative

decreases in demand.

3. The actual behavior of gross margins, therefore, will depend largely on the combined influence of relative changes in demand

and costs.

4. Relative changes in unit labor costs, the largest single element of costs, are taken as indicative of relative changes in total costs. The analysis will be explicitly modified to take into account the effects of significant changes in indirect taxes and capital consumption allowances. The analysis is seriously weakened, however, by its failure to include more specifically changes in relative costs of raw materials, although we shall attempt to indicate in a general way the influence of such costs.

Table 7 presents a three-way cross-classification of manufacturing industries; each industry is classified according to the direction of change in its relative unit labor costs, its relative demand, and its

gross margin.

<sup>10</sup> This is not exactly accurate. It is possible that a change in average unit costs may alter both average cost curves and marginal cost curves in such a fashion that profit maximization would lead to behavior different from that suggested in the text. However, for purposes of building our hypothesis, we will assume that any change in average cost curves results in a change in marginal cost curves which maintains the same relative relationship between the two. Similarly, changes in the relative elasticities of demand would change relative prices; we have, therefore, assumed constancy of relative elasticities of demand. These relationships may also be affected by the degree of competitiveness and by deviation from simple profit maximizing behavior.