COMPARATIVE CAPITAL SUBSTITUTION INCENTIVES

Since the OASDHI tax applies to wages and salaries, an employer can reduce his tax liability by changing his factor mix so as to reduce labor utilization in achieving a given product goal. The most obvious approach lies in the introduction or expansion of laborsaving capital equipment. The practicability of such an adjustment, however, de-

pends heavily on industry conditions.

The strength of at least four of the barriers to a tax-reducing substitution of equipment relates to industry conditions. Technical problems, high absolute cost, financing difficulties, and/or union opposition to substitution can present formidable obstacles in some industries, but never arise in others.4 Technical problems unique to the industry can limit or preclude the availability of laborsaving equipment. For instance, despite years of experimentation, farm machinery engineers have failed to invent a practical machine to pick grapes. Vending machines can function as surrogate clerks, but in a sharply limited way. For still other industries, remarkable laborsaving equipment exists, but its absolute cost can be formidable, or its scale may prove unsuitable for any but the largest firms. Petroleum refining provides one such example. In yet other industries, an almost trivial piece of equipment, such as an electric screwdriver, can save considerable amounts of labor, yet financing difficulties may preclude even modest outlays for additional equipment. For example, mobile home manufacturers, as a group, report acute difficulty in obtaining financial support and generally must borrow from relatives or friends—a situation which makes substitution of laborsaving equipment a remote possibility. Union resistance to automation seems more determined in some industries—newspaper publishing, for instance—than in others, and may act as a significant barrier to an otherwise feasible change in laborcapital proportions.

In those industries where such difficulties can be overcome, there remains the question of the price at which a given piece of equipment, with known laborsaving potential and durability, should be purchased. The answer depends primarily on the current price of the contemplated equipment vis-a-vis the discounted cost of labor which will be saved over the expected life of the equipment. The large increase authorized by the Social Security Act of 1965 (particularly the base increase from \$4,800 to \$6,600) makes a marked difference in the second variable, opening widely differing opportunities for tax-saving capital substitution which, while peculiar to one period, illustrates the general point that the significance of the payroll tax varies from one industry to the next. The increased base makes little difference in total tax liability in those industries where the average wage lies near the old base. But, the effect of the base increase is sharply felt in those industries where average wages exceed the old base, amounting to as much as \$75 additional tax liability per employee in 1966 (considering the employer's share alone) and successively higher amounts

in subsequent years as the rate automatically increases.

⁴ Other variables associated with investment decisions—uncertainty of future tax treatment of capital goods, uncertainty as to the income stream which will be generated by the additional investment, and the risk of decreased flexibility in output levels associated with a larger fixed investment—seems less immediately linked to industry variables.
⁵ Other considerations may include the effect of the substitution on the quality of output and associated changes in the amount of nonlabor inputs.