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Volume Author/Editor: Thomas M. Stanback, Jr.

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Chapter Author: Thomas M. Stanback, Jr.

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SUMMARY AND CONCLUSIONS

THIS STUDY has primarily investigated the effects of changes in depreciation provisions on modernization expenditures in the textile industry. In addition, attention has been given to the effects within the industry of the 1962 introduction of the investment tax credit. The investigation relied principally on interviews with executives of twenty-five textile firms, conducted during the spring and summer of 1963, although it also included additional data provided by most of these firms and gleaned from published financial reports.

The textile industry was selected for examination because it was permitted to radically shorten the tax life of its basic equipment before other industries were authorized to do so under the general depreciation reform embodied in IRS Revenue Procedure 62-21 of July 1962. We were able, therefore, to observe the response to shortened depreciation lives over a somewhat longer period than would have been possible in other industries. In addition, the textile industry had the reputation of being in need of modernizing, while at the same time facing abundant opportunities for implementing technological advances.

The findings of the study fall under three general headings: (1) The experience of the industry with the depreciation provisions of the Internal Revenue Code of 1954, the special tax provisions of October 1961, and the IRS Revenue Procedure 62-21 of July 1962. (2) The influence of liberalized depreciation on modernization expenditures. (3) The influence of the investment credit on modernization expenditures.

DEPRECIATION EXPERIENCE SINCE 1954

A large majority of firms interviewed were prompt to adopt the accelerated depreciation permitted by the Internal Revenue Code of 1954. The 1961 liberalizing provisions were adopted immediately by all firms, but the impact varied widely, since some firms were already using service lives about as short as those permitted by the new legislation while others were not. In general, the legislation seems to have lessened the inequality in effective service lives.

Firms favored what they considered to be a "realistic" attitude toward the new depreciation legislation. At the time of interview, only a minority of firms had adopted the composite depreciation accounts called for under Revenue Procedure 62-21. The majority preferred to retain their previous item depreciation accounts, which made it possible for them to retain proof of service life performance in dealing with tax agents. Moreover, the firms strongly preferred using the same depreciation accounts for tax and financial accounting and, generally, were unwilling to make future use of service lives shorter than those justified by operational experience.

INFLUENCE OF LIBERALIZED DEPRECIATION ON MODERNIZATION EXPENDITURES

Liberalized depreciation may contribute to capital modernization in two principal ways: First, it may stimulate the demand for new capital equipment by its effect on computed rates of return and pay-back periods, its effect on risk, and its effect on the length of the replacement cycle. This type of influence is designated the demand effect. Second, by reducing corporate income taxes and increasing the internal cash flow of the corporation in the years immediately following any capital expenditure, liberalized depreciation provides additional internal funds. If these funds are considered less costly than funds procured in the capital market, they may effect an increase in modernization expenditures. A possible third way for liberalized depreciation to influence modernization expenditures is by altering the rules of thumb that management uses in allocating capital funds to modernization or by reducing management's unwillingness to replace equipment, a result of the more rapid reduction of the undepreciated book value of assets. This last avenue of influence involves logically incorrect approaches to the investment but requires investigation nevertheless.

In dealing with the demand effect several questions were asked: What factors are taken into account in arriving at the decision to modernize? What investment formulas are used? Is there evidence that the effect of tax savings on return or pay-back is recognized even when using pretax investment formulas? Has liberalized depreciation served to alter the decision to modernize by purchasing new equipment rather than by modifying the old?

Every firm in the sample computed savings in variable unit costs as the principal basis for judging the desirability of modernization proposals. This finding serves to establish in management a continuing, aggressive, cost-profit orientation toward the investment decision-making process. While depreciation liberalization is not directly relevant to direct cost savings, the ultimate impact of it will appear in the after-tax earnings. Given strong motivation to increase after-tax earnings, sooner or later the favorable effect of depreciation will probably be taken into account.

It was not possible to judge the weight of factors which act to alter the real cost of capital to the firm. Possible obsolescence due to technological change was generally greater than in earlier years but there was no evidence that it has been so great as to impose serious limitation on the total volume of acceptable projects. Firms handle the uncertainty due to change without explicit costing, postponing projects in which technology gives evidence of being in a state of flux or giving such projects lower priority. Moreover, no effort is made explicitly to estimate the effect on overhead costs of uncertainty as to probable rate of utilization. On the other hand, the industry's history of cyclical instability of investment expenditures indicates that over-all prospects regarding prices and profits are important in determining the total amount of the capital expenditure budget.

Thus, while the adverse effects of uncertainty as to obsolescence and rate of utilization may not be explicitly measured in the investment decision, they are taken into account at least informally. The effect of depreciation liberalization on taxes in the years immediately following expenditure tends to offset these inhibiting considerations.

All of the interviewed firms used more or less formal rules for evaluating investment proposals. Thirty-six per cent of the firms interviewed used investment computation formulas which made explicit part, if not all, of the tax savings of liberalized depreciation and thereby made management aware of an increased incentive for modernizing. Moreover, more than half of this group was comprised of large firms, so that, in terms of volume of expenditure, it is a very important segment of the sample.

The remaining 64 per cent of firms made use of pretax payback formulas which did not make explicit the tax savings resulting from liberalized depreciation. There was little evidence that, at time of interview, these firms were recognizing informally (i.e., outside of the formal investment computations) that liberalized depreciation resulted in reduction in the after-tax payback period or in an increase in the effective rate of return. Here again, the heavy emphasis in these firms upon analysis of explicit variable-cost savings indicates a degree of rationality which should bring about an early realization of these advantages.

Finally, in some firms, particularly those using after-tax payback or rate-of-return formulas, depreciation liberalization has acted to encourage modernization by purchasing new facilities rather than by modifying existing ones.

The cash flow effect influenced firms to widely differing degrees. Twelve firms, about half of the sample, indicated in their debt policy and in the degree of constraint imposed by availability of internally generated funds that the cash flow effect of liberalized depreciation was significant. Most of these firms were either small or medium size, hence their portion of the sample of firms interviewed somewhat overstates the relative importance of the cash flow influence.

When examined together, the demand and cash flow effects showed relatively little overlapping—firms influenced in one way were usually not influenced in the other. Nineteen of the interviewed firms, roughly three-fourths of the sample, appeared to experience either the demand or cash flow effect from liberalized depreciation.

Regarding the third type of influence which could be exerted by liberalized depreciation, the findings were less definite. More than half of the firms interviewed testified that, to some degree, the amount of depreciation charges provided a basis for guidance in determining the size of the modernization budget. A minority, six firms, volunteered that the amount of accumulated depreciation on the books was a consideration in replacing a given asset, therefore, liberalized depreciation acted to increase modernization by causing equipment to be "written-off" more quickly.

INFLUENCE OF THE INVESTMENT CREDIT ON MODERNIZATION EXPENDITURES

The investment credit provision in force at time of interview provided for a tax credit equal to 7 per cent of the purchase price of most capital goods but it also reduced the depreciable basis of the facility by the amount of the credit. In this form the effect of the credit on profitability paralleled that of depreciation liberalization.

The interviews revealed little appreciation of this fact. Most executives regarded the credit as effectively 3½, not 7, per cent and of only nominal importance in the investment decision. There were a number of factors which helped to explain the lack of enthusiasm for the credit. These included the relatively recent enactment of the credit and the widespread controversy regarding the accounting treatment of the credit which accompanied its enactment and which colored its early history.

LESSONS FOR TAX POLICY

The evidence regarding the effect of liberalized depreciation and the investment credit suggests certain lessons for tax policy. The depreciation reforms of 1954 and 1961–62 appear to have resulted in changes which executives regarded as consistent with their concepts of "realistic" depreciation. Evidence accumulated from the interviews indicates that further shortening of lives or acceleration of depreciation might meet with less enthusiasm.

It would also seem that any tax reform which relies upon the demand effect and a thorough-going appreciation of the discount principle is likely to be of limited success until further educational work has been done.

To the extent that the responses derived from the sample interviews are representative of the American economy, two conclusions seem appropriate. The tendency for executives to fail to take account of the fact that "time is money" stands as an important deterrent to the full effectiveness of legislation (such as the investment credit) which depends upon appreciation of the principle for full effectiveness. Second, there seems to be a lag in realization and learning which delays such legislation in attaining its full effectiveness.