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## Chapter 6

# THE INVESTMENT CREDIT

### HISTORICAL BACKGROUND

SHORTENING service lives for tax depreciation purposes was, in fact, the second of two major approaches undertaken by the Kennedy Administration to provide tax encouragement for investment and modernization. The investment tax credit, enacted as part of the Revenue Act of 1962, was originally proposed in a Presidential tax message to Congress on April 20, 1961. In its original form, the measure would have given the taxpayer a credit against his tax liability equal to 15 per cent of the amount by which his purchases of depreciable facilities exceeded his depreciation allowance for the taxable year.<sup>61</sup> Substantial opposition to the credit proposal was voiced by representatives of the U.S. business community. Criticism was directed against the complexity of the proposed credit provisions and was also based on the contentions that (1) what was principally needed was fundamental reform of the existing depreciation rules for which the proposed credit was not a substitute, and (2) the credit was likely to be regarded by the Administration as a "gimmick" which would be withdrawn when the pace of economic activity had sufficiently accelerated.

The 1962 revenue legislation was enacted early in October 1962, after the administrative depreciation reforms of October 1961 and July 1962. As enacted, the credit differed materially from its original conception. In the first place, except in special circumstances, plant and buildings are not eligible for the credit.

<sup>61</sup> For details of the credit as originally proposed, cf. Statement of Secretary of the Treasury C. Douglas Dillon, *Hearings before the Committee on Ways and Means*, House of Representatives, on the President's 1961 Tax Recommendations, 87th Congress, 1st Session, May 3, 1961, pp. 21 ff.

Even more important, the credit was not based on the excess of capital goods purchases over the year's depreciation accrual. Instead, the credit, at a maximum rate of 7 per cent, applies to the full amount of the purchases of eligible facilities: Facilities with tax lives of less than four years do not qualify for the credit; in the case of facilities with service lives of four and five years, one-third of the amount is eligible; for facilities with lives of six and seven years, two-thirds are taken into account; while for facilities with service lives of eight years or more the full cost is used for purposes of computing the credit. In the case of public utilities, only  $\frac{3}{4}$  of property otherwise qualified is taken into account. The credit might not, in any case, exceed the taxpayer's tax liability of up to \$25,000 plus 25 per cent of the liability in excess of \$25,000.<sup>62</sup> In the event that property is disposed of prior to the end of its useful life, part or all of the credit previously allowed may be added to the tax liability in the year of the disposition.

An important aspect of the credit in the form originally enacted was that it reduced the depreciable basis of the facilities on which it was granted. A facility costing \$1,000, for example, on which the full 7 per cent credit has been granted would have had a depreciable basis, ignoring salvage, of \$930. The effective credit rate, thus, fell short of the nominal rate. This was the rule at the time the interviews were conducted. In the Revenue Act of 1964, however, this reduction of basis provision was eliminated. Reflecting the initial provision, firms are required to take the credit.

In the following discussion, reference will be made to the credit provisions as originally enacted.

#### EFFECT OF CREDIT ON PROFITABILITY

The credit may be viewed as providing a price reduction on qualified facilities in an amount up to 7 per cent of the facilities' nominal price. Presumably, the effect of this price reduction on purchase of qualified assets should be the same as in the case of

<sup>62</sup> The 25 per cent limitation was increased to 50 per cent in spring 1967 when the credit which had been suspended in the fall of 1966 was reinstated.

any price reduction and should depend on the price elasticity of demand for the facilities. In turn, this elasticity should depend on the substitutability of various inputs in the firm's production function and upon the conditions of demand for its output. The direction of effect seems clear, even though it is not possible to generalize about the magnitude of the effect.

Additional perspective on the effect of the credit on profitability, however, can be obtained by comparing it with depreciation liberalization. Using the same assumptions as those in Table 1, the full 7 per cent credit increases the present value of the stream of gross earnings after tax on a ten-year asset, under straight-line depreciation, by 4.2 per cent. This may be compared with the 3.5 per cent increase in present worth resulting from the use of double declining balance instead of straight line. Taken in conjunction with double declining balance, the credit serves to increase the present worth of the after-tax earnings in this example by 7.5 per cent. With an eight-year service life for tax purposes and double declining balance depreciation, the credit increases the present worth of after-tax earnings by 9.6 per cent.

The credit also serves to accelerate pay-back. Using the example of Table 1, the credit reduces time of pay-back under straight-line depreciation from 5.7 to 5.3 years, under declining balance, from 5.1 to 4.8 years, and under declining balance with an eight-year tax life, from 4.8 to 4.5 years. The results are summarized in the following table.<sup>63</sup>

<i>Depreciation Method and Tax Service Life</i>	<i>Present Worth of After- Tax Gross Earnings</i>		<i>Pay-Back Period (Years)</i>	
	<i>Without Credit</i>	<i>With Credit</i>	<i>Without Credit</i>	<i>With Credit</i>
	Straight line, 10 years	\$1,000,000	\$1,042,231	5.7
Double declining balance, 10 years	1,035,492	1,075,147	5.1	4.8
Double declining balance, 8 years	1,058,442	1,096,484	4.8	4.5

<sup>63</sup> See notes to Table 1.

Despite the stress placed on its contribution to modernization, the investment tax credit does not differentiate the incentive effects to modernization outlays from those to expansionary investment. Whether the credit is particularly significant in encouraging modernization depends on the rate of return elasticity of the demand for modernization compared with other facilities, as discussed in Chapter 5 and illustrated in Figure 1.

#### COMPANY RESPONSE TO THE CREDIT

Although the response of the executives we interviewed was far from uniform, there was a tendency among them to deprecate the incentive effects of the credit and the extent of their company's investment response to it. Most of the executives regarded the credit as effectively 3½ instead of 7 per cent (Table 7).

This view stems from the fact that the investment credit reduces the depreciable basis of the facilities by 7 per cent (see above) and thereby reduces tax deductions of roughly 50 per cent of this amount over the life of the asset.<sup>64</sup> In a number of cases, significant administrative and accounting costs were deemed to be involved, detracting from the credit's value. In very few cases was there any very precise estimate of the effect of the credit on rate of return or pay-back. Indeed, in only three of the firms was the credit included in the investment computation, although two other firms planned to revise the investment formula to take account of the credit.

The above table suggests that the effect of the credit on profitability is very much of the same order of magnitude as depreciation liberalization. The interviews revealed little appreciation of this relationship.<sup>65</sup>

Thus the interview responses on the whole suggest that the credit had had little effect on the companies' investment programs. In several of the cases in which any influence was acknowl-

<sup>64</sup> One cannot avoid wondering if the same executive being offered a 7 per cent price reduction in equipment cost by the manufacturer would have been so sensitive to the fact that the depreciable basis of the equipment was being reduced as well.

<sup>65</sup> A precise comparison is difficult to make. A rigorous formulation requires comparing the effect of the alternative tax changes on rate of return when the tax savings from each over a given period of time are equal.

TABLE 7. Summary of Executive Responses Regarding Savings Due to the Investment Credit <sup>a</sup>

(Question 27: *Is it your impression that you can effect significant savings in the purchase of capital equipment by taking advantage of the new 7 per cent tax credit? Would you state your understanding of the extent of the saving in practice?*)

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<i>Class A Firms</i>	
C	b
D	States "understand it's something more than 3½ per cent because of interest on money."
S	Executive says he sees it as a "sweetener." "It's certainly not a full 7 per cent," but has not "figured it out."
E	Sees it as "½ of 7 per cent." Executive admits you get the use of your money which makes it worth a bit more, "perhaps 4 per cent but feels it's insignificant."
F	Says "you get money now that you wouldn't get 'til many years down the road," but hasn't figured what it's worth.
<i>Class B Firms</i>	
I	States, "It's a sweetener." Has not figured what it's worth.
V	No estimate given. <i>Firm does not include investment credit in investment computation but is revising formula to include it.</i>
J	States he understands that it's more than 3½ per cent because of interest on money but had never figured what it's worth.
L	States "if you forget the use of your money, it's 3½ per cent." Finds record keeping and rebates on disposed property a "nuisance."
G	No estimate. Has had problems computing state income taxes as result of investment credit. Says it costs firm more than it's worth.
P	Says it's not extremely important but it's worthwhile. Answers, "it's worth 3½ per cent, but you do get interest on your money and that makes it better."
N	Sees it as worth 7 per cent, but adds that it does reduce depreciation deduction.

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(continued)

TABLE 7. (concluded)

<i>Class C Firms</i>	
K	Sees it as worth "½ of 7 per cent."
Y	Sees it as worth 3½ per cent.
M	<sup>b</sup>
O	Sees it as "merely an advance."
H	<sup>b</sup>
<i>Class D Firms</i>	
W	No estimate given. <i>Firm does not include investment credit in computation now but is revising formula to include it.</i>
Q	No estimate. President expresses enthusiasm for this tax reduction.
A	Sees it as worth 3½ per cent.
X	No estimate. Financial vice president stated he disliked investment credit. Tremendous administrative problems involved. Have to keep track of each asset. Different states have different regulations. Company had experienced problems in reporting to stockholders.
B	Controller stated administrative difficulties not significant. They feel they are equipped to handle such things. Company is happy to have this tax break. No estimate of advantage.
U	<i>Company recognizes investment credit in its investment computation.</i> Controller sees advantage as "about 3½ per cent."
R	States company regards it as a "very nice saving." "Something we really like." Executive states it amounts to 3.5 per cent. <i>Investment credit is noted in investment proposal.</i>
T	No estimate. <i>Company includes investment credit in investment formula.</i>

<sup>a</sup> Coded as in Table 3, pp. 48-53, to prevent identification.

<sup>b</sup> No response.

edged, the effect was attributed to the increase in cash flow generated by the credit rather than to its contribution to greater profitability of investment.

#### FACTORS INFLUENCING EXECUTIVE OPINION

In addition to the widely held view that the investment tax credit amounted to only a 3½ per cent saving, two factors help explain the lack of enthusiasm for the credit and the minimization of its influence on the size of the companies' capital budgets. In the first place, at the time of the interviews, the credit had been available for only a very short while. There had been, accordingly, little opportunity for management to determine what the effect of the credit would be in actual operation and to attribute to it the changes in tax liabilities and in after-tax earnings it would generate. Its effect on the company's resources and on the profitability of its operations, in other words, were still largely hypothetical and, as such, not too much stock was placed in them.

The second factor contributing to the early lack of appreciation of the credit was widespread confusion about how to treat the credit for nontax accounting purposes.

Passage of the investment credit legislation resulted in considerable discussion and controversy as to the appropriate method of reporting the credit to stockholders. One body of opinion held that the credit should be taken as income in the year it was received; another maintained that it should be allocated over the life of the asset. A third opinion was that half should be taken as income, the remainder being allocated.

In December 1962 the Accounting Principles Board of the American Institute of Certified Public Accountants issued a statement in which it concluded that the credit should be reflected as net income over the productive life of the asset and not in the year in which the asset was put into service. The Board's opinion was not unanimous, however (the vote was 14 to 5), and the controversy has continued.

Following the statement of the Accounting Principles Board,

the Securities Exchange Commission stated that in view of the lack of unanimity within the accounting profession and business community it would accept any of the alternatives if accompanied by an appropriate indication to the stockholder of the accounting practice being followed.<sup>66</sup>

Throughout the interviews, it became increasingly clear that executives generally failed to appreciate the principle of discounting future income and expenses or to use discount functions effectively in assessing their investment programs. As a consequence, the effect of both depreciation liberalization and tax devices such as the investment credit on the profitability of proposed undertakings was not widely appreciated. In large part, this accounts for the emphasis placed on cash flow effects by many of the executives interviewed.

<sup>66</sup> In March 1964 the Accounting Principles Board issued another statement in which it reaffirmed its original belief in the allocation principle but noted the existing practices and stated that either approach was acceptable.