INVESTMENT ALLOWANCE
(SECTION 32A OF THE INCOME TAX ACT, 1961)
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Preface

National Institute of Public Finance and Policy is an autonomous non-profit organisation carrying out research and imparting training in the field of public economics and related policy.

The present study was sponsored by the Central Board of Direct Taxes to evaluate the costs and benefits of four incentive provisions in the Income-tax Act, viz., Rural Development Allowance (Section 35 CC of the Income-tax Act, 1961), Investment Allowance (Section 32A), Backward Area Allowance (Section 80HH) and the partial Tax Holiday for the newly established undertakings, etc. (Section 80I). The studies were intended to ascertain

(*a*) Whether and if so, to what extent the underlying purpose of the incentive has been achieved, qualitatively and quantitatively;
(*b*) Cost in terms of revenue forgone;
(*c*) Whether there has been abuse of the provisions, and,
(*d*) Problems of implementation: Whether there have been difficulties in operation and if there have been problems arising from disputes over interpretation, court rulings and/or audit objections.

The report presented here deals with Investment Allowance (Section 32A). Among the core chapters, chapters 2, 3, 4 and 5 have been written by Dr. J.V.M. Sarma, while chapters 6 and 7 have been written by Shri H.K. Sondhi.

Investment Allowance is now making way for a new funding scheme enacted as section 32AB (Investment Deposit Account). A critique of section 32AB is outside the scope of the study. However, some points of relevance of the new provision have been noted in the light of experience with the two earlier incentives.

It is hoped the Government and also students of public finance will find this report useful. We are grateful to the Central Board of Direct Taxes, Ministry of Finance, Government of India, for permission to publish the report.

The Governing Body of the Institute does not take responsibility for the views expressed in the report. That responsibility belongs to the Director and, more particularly, to the authors of the report.

AMARESH BAGCHI
DIRECTOR

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J V M SARMA
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Introduction

General

CAPITAL allowances in the form of accelerated depreciation or development rebate have been in operation in India with a brief interruption for almost forty years now. Along with tax holiday for new industrial undertakings, capital allowances were considered necessary to further industrialisation and capital formation especially in crucial areas. It was the Taxation Enquiry Commission (Matthai Commission, 1953-54) which suggested an incentive by way of deduction in computation of taxable income of a sum equal to 25 per cent of the cost (in addition to full recovery of cost through depreciation provisions) on all specific acts of investment in fixed assets in the form of plant and machinery, whether intended for replacement or for expansion by new or existing concerns. The Commission recommended introduction of this incentive, which was termed as "development rebate", on a selective basis to be confined to the group of industries broadly described as producers' goods and capital goods industries.[1]

However, development rebate appeared on the statute in 1955 as a universal machinery installation allowance. It was given at the rate of 25 per cent of the cost in respect of all new machinery or plant installed after March 31, 1954 for business purposes, irrespective of the line of manufacture or production. Subsequently, road transport vehicles and office appliances etc., were debarred from the allowance and to prevent its abuse, creation of a statutory reserve came to be insisted upon. When the standard rate of development rebate was reduced to 20 per cent from April 1961 and later to 15 per cent from April 1970, increased support was given to a segment of the industrial sector, e.g., industries listed in the Fifth Schedule to the Income Tax Act became entitled to development rebate at 35 per cent and 25 per cent in April 1965 and 1970 respectively. New plant and machinery installed after March 1967 for the business-related scientific research and in approved hotels also got the higher rates. Ships had been given 40 per cent development rebate from as early as January, 1958. Thus, the principle of selectivity recommended by the Matthai Commission for grant of development rebate was not followed, except to the extent it may be said to have been applied by grant of the rebate at a higher rate to certain industries.

With widespread idle capacity in the late sixties, it began to be felt that the emphasis should shift towards prudent and economic use of capital.[2] On the view that the practice of offering a development rebate in respect of new investment in plant and machinery had had full play, a notification directing its discontinuance after May 1974 was issued in May, 1971.[3] Later, while for cases involving delayed deliveries the availability period was extended to May 1975, the critical shortage of petroleum products and the need to switch over to alternative sources of energy led to allowance of the rebate for coal-fired equipment if installed before June 1977.[3]

There was a steep escalation in capital costs which could not be foreseen when the decision to withdraw development rebate was taken. Referring to it, the Union Finance Minister in his Budget Speech for 1976-77 said that this had not only prevented faster expansion of capacity, but had also imposed considerable strain on existing undertakings which were obliged to replace worn-out and obsolete equipment and unless the corporate sector was enabled to provide adequately for renewals and renovation, employment and industrial growth would be jeopardised. He, therefore, announced a scheme of investment allowance, at the rate of 25 per cent of the cost of a new ship or aircraft acquired and new machinery or plant installed after March 31, 1976 in priority industries listed in the Ninth Schedule to the Act, and hoped that it would facilitate investment in priority industries and reduce their dependence on publicfi nancial institutions.[4] Like the erstwhile development rebate allowed under section 33 of the Act, with which it had points in common as also differences in material respects, the investment allowance admissible under section 32A was over and above full recoupment of the cost through depreciation allowance.

Section 32A saw a number of amendments till the Long Term Fiscal Policy (LTFP) announced in December 1985 proposed its withdrawal. While acknowledging that the investment allowance (and its earlier version, the development rebate) had played a role in the industrialisation of the Indian economy, LTFP said that it tended to favour the larger and more well established concerns with good access to the market for borrowed funds and ability to set it off against profits of old established units without waiting for profits from fresh investment. In order to retain the merits of the investment allowance while removing some of its drawbacks, LTFP outlined a new 'funding' provision. These proposals have since been given a statutory mantle. While a new section 32AB (Investment Deposit Account) has been inserted in the Act from April 1, 1987, it has been notified that the investment allowance under section 32A shall not be allowed in respect of any ship or aircraft acquired or any machinery or plant installed after March 31, 1987.

Salient Features of the Investment Allowance Scheme

The salient features of the investment allowance scheme as evolved over the years were as follows:

(*i*) The incentive was available in respect of the specified assets acquired/installed any time during the eleven-year period between April 1, 1976 and March 31, 1987. Any corporate or non-corporate taxpayer could obtain a deduction of 25 per cent of the actual cost of a specified asset in computation of its taxable business income for the previous year of acquisition/installation of the asset or of the immediately succeeding previous year if that happened to be the year in which the asset was first put to use. This was in addition to full write-off of the cost of the asset allowed under the depreciation provisions of the Act.

(*ii*) The specified assets were:

A. a new ship or new aircraft acquired after March 31, 1976 by the taxpayer engaged in the business of operation of ships or aircraft;

B. any new machinery or plant installed after March 31, 1976 for the purposes of business of:

(*a*) generation or distribution of electricity or any other form of power; or

(*b*) a small-scale industrial undertaking for the manufacture or production of any article or thing;

(*c*) an industrial undertaking other than small scale:

—upto March 31, 1978: for construction, manufacture, or production of any one or more of articles or things listed in the Ninth Schedule of the Act (Appendix I) (listed priority industries).

—after March 31, 1978: for construction, manufacture or production, mainly of any article or thing not listed in the Eleventh Schedule of the Act (Appendix II) (other than the listed low priority industries).

C. any new machinery or plant installed after March 31, 1983 for the purposes of business of repairs to ocean-going vessels or other powered craft, if the business thereof carried on by an Indian company was approved for the purpose by the Central Government.

(*iii*) Investment allowance at the higher rate of 35 per cent was allowed in respect of:

A. new machinery or plant developed through indigenous technology and installed after June 30, 1977 subject to the prescribed conditions being fulfilled;

B. any new machinery or plant notified in this behalf installed after May 31, 1983 to assist control of pollution or protection of environment in industrial undertakings referred to in items (*ii*) *B*. *a*, *b* and *c* above.

(*iv*) A ship or aircraft used by any other person before its acquisition by the assessee provided it was not owned at the time by any person resident in India was treated as a "new ship" or "new aircraft". Similarly, machinery or plant which before its installation by the assessee was used outside India by any other person was also treated as "new machinery or plant" if it had not been earlier used in India, was imported in India from a foreign country and no depreciation in respect thereof had been allowed or was allowable under the Indian income tax provisions in computing the total income of any person for any period prior to the date of the installation of machinery or plant by the assessee.

(*v*) Following assets were specifically barred from investment allowance:

A. any machinery or plant installed in any office premises or any residential accommodation, including accommodation in the nature of a guest house;

B. any office appliances and road transport vehicles;

C. any ship, machinery or plant in respect of which the deduction by way of development rebate was allowable under section 33 of the Act.

D. any machinery or plant, the whole of the actual cost of which was allowed as a deduction (whether by way of depreciation or otherwise) in computing the income chargeable under the head "profits and gains of business or profession" of any one previous year.

(*vi*) Investment allowance was admissible only if the prescribed particulars were furnished by the taxpayer and an amount equal to 75 per cent of the investment allowance (50 per cent for a ship) to be actually allowed was debited to the profit and loss account of the relevant previous year and credited to the Investment Allowance Reserve Account.

(*vii*) If due to inadequate profits, the investment allowance for a year could not be fully allowed, the balance could be carried forward for set off in the following eight assessment years.

(*viii*) Since the assessment year 1984-85, the aggregate of deduction under section 32A and deductions under other provisions listed in section 80VVA could not exceed 70 per cent of a corporate assessee's pre-incentive total income for a particular assessment year. To the extent full deduction due under section 32A could not be allowed in any assessment year by virtue of only this restriction, the unadjusted deduction was allowed to be carried forward for set off without any time limit.

(*ix*) The investment allowance allowed was liable to be withdrawn, if

A. the ship, aircraft, machinery or plant was sold or transferred, before the expiry of eight years from the end of the year of acquisition/installation to any one other than the Government, a local authority, a statutory corporation or a Government company. Subject to prescribed conditions, the allowance in respect of transfers in connection with amalgamation of the availing company with another company or succession of the availing partnership firm by a company was retained if the amalgamating/successor company continued to fulfill the prescribed conditions.

B. the investment allowance reserve was not utilised for acquiring new assets other than the assets barred under items (*v*) *A*, *B* and *D* above before the expiry of the following ten years.

(*x*) If the Central Government considered it necessary or expedient, it was empowered to omit any article or thing from the Eleventh Schedule list or to direct that investment allowance would not be allowed in respect of any asset acquired/installed after a specified date.

(*xi*) The new "funding scheme" (section 32AB) is operative from April 1, 1987, i.e., for and from the assessment year 1987-88. A transitional provision permits an assessee to avail of investment allowance or the funding scheme for a particular assessment year at his option. If he chooses the latter, he does not lose the benefit of set-off of the unabsorbed investment allowance, if any, for an earlier assessment year to which he might be entitled.

The change in the eligibility criterion after March 31, 1978 from the manufacture of the Ninth Schedule (Appendix I) priority goods to manufacture mainly of other than the Eleventh Schedule (Appendix II) low priority articles considerably enlarged the area of eligibility. Extensive pruning of the Eleventh Schedule list in 1982 widened it still further. Raising of the aggregate value of machinery or plant installed for an industrial undertaking to be deemed small-scale and thus entitled to investment allowance irrespective of the line of manufacture or production also extended its scope.

Other Countries

An investment incentive comes within the genre of fiscal concessions attaching to new investment which are designed to increase the prospective net-of-tax return from the investment relative to its cost at the time of the investment decision. A wide range of investment incentives is available to serve different purposes, from the more traditional aims of policy [growth, regional, sectoral and conjunctural (economic management)] to the more recent innovations of profit sharing, worker participation and environmental control.[5] So far as encouraging investment in machinery or plant is concerned, Appendix III gives a gist of the provisions relating to investment allowance (tax allowance additional to 100 per cent depreciation) and its sister incentive—investment tax credit (relief against tax instead of income) etc. of various countries, viz., Australia, Canada, Federal Republic of Germany, Japan, Kenya, Republic of Korea, Malaysia, New Zealand, United Kingdom and the United States of America (as of 1985). In the nature of things, the choice of a tax incentive by a country and its exact shape depends upon the state of its economy, its tax system and its perception as to how the object in view may best be realised. Lately, there is a noticeable shift from high nominal rates of tax with generous allowances and reliefs to fewer tax incentives with comparatively low tax levels.

NOTES AND REFERENCES

1. "We suggest the following criteria as the basis on which industries should be selected for the grant of the proposed development rebate : (1) Importance of the industries concerned from the point of view of national development, and (2) extent to which they are unlikely to be developed either by way of expansion of existing concerns or establishment of new concerns—if left to the voluntary effort of private enterprise and without any special stimulus by ways of tax relief. In practice this should mean confining the concession we have recommended to the group of industries that are broadly described as producers' goods and capital goods industries. . . ." *Report of the Taxation Enquiry Commission* (1953-54), Vol. II, page 99.
2. *Final Report on Rationalisation and Simplification of the Tax Structure, 1967*, p. 23, para 5.17.
3. Government of India, Ministry of Finance, Department of Economic Affairs: *Speeches of Union Finance Ministers, 1947-48 to 1984-85 presenting Central Government Budgets*, Budget Speech 1971-72 (Final) May 28, 1971, p. 341, para 42. (Notification No. S.O. 2167 dated May 28, 1971) : No development rebate in respect of a ship acquired or machinery or plant installed after May 31, 1974. Later, in order not to deny relief on account of inability to secure timely deliveries, Finance Act, 1974 extended the operation of development rebate by one year upto May 1975 (for ships : upto December, 1976) if contracts for purchase were made before December 1, 1973, while coal-fired equipment or any machinery or plant for converting oil-fired equipment into coal-fired equipment was allowed development rebate, if installed before June, 1977.
4. *Ibid*—Budget Speech 1976-77 (March 15, 1976), p. 418, para 1.9.
5. Milnes & Huiskamp (1977), have catalogued Investment Incentives as follows:

A. **Incentives which operate through the tax system**

(*i*) Accelerated Depreciation: *a*. Depreciation at choice: *b*. Free depreciation; *c*. Initial allowances; *d*. Advanced depreciation; *e*. Depreciation on the basis of replacement cost; and *f*. Declining-balance depreciation.

(*ii*) Valuation Discount: This incentive consists of allowances, including favourable methods of inventory valuation, in the end-year valuation of business assets for the computation of fiscal profit.

(*iii*) Tax Free Reserves—conditional on an act of new investment.

(*iv*) Investment Deductions: *a*. Investment allowances, *b*. Investment tax credits.

(*v*) Investment Payments: An incentive granted independently of whether any income tax or corporation tax liability exists. It may be regarded as a subsidy even though the legal authority for the investment payment is provided by a tax statute; an intermediate form between a cash grant and a tax-related allowance.

(*vi*) Concessional tax rates; changes in tax rates; tax exemptions.

(*vii*) Carry-back and carry-forward of losses.

B. Direct Subsidies

(*viii*) Investment Grants.

(*ix*) Cheap Loans; Interest Subsidies.

(*x*) Concessional Prices and other Price Subsidies.

(*xi*) Discouragements to investment; selective investment tax—generally intended to relieve congestion in crowded areas.

2

Investment Allowance and Growth of Investment in India

General

THE machinery and equipment component of the total gross domestic capital formation in India in constant prices (1970-71 prices) has gone up from Rs 1,237 crore in 1960-61 to Rs 6,942 crore in 1984-85, registering a growth of 6.5 per cent per annum (Table 2.1). The private sector component, whose share is over 60 per cent, has registered a growth rate of 5.8 per cent per annum while the public sector component has grown at the rate of 7.8 per cent per annum during the same period. The private sector figures include capital formation by households as well, and separate figures for the corporate sector as such are not available. To what extent the investment incentives, particularly development rebate and investment allowance, are responsible for the growth remains unknown.

An attempt is made here to quantify the effect of the above tax incentives on the growth of private corporate investment, by examining the extent of the inducement effect on the investment decision making process of the corporate sector. This is done in an integrated model of corporate behaviour covering its three major aspects, namely, investment, financing and dividend decisions. The model is estimated using sample data published by the Reserve Bank of India. The impact of the incentives is quantified with the help of the estimated model.

The Framework

What we mean by the inducement effect of investment in-

TABLE 2.1

Gross Domestic Capital Formation in Machinery and Equipment by Public and Private Sectors (1960-61 to 1982-83) (at 1970-71 prices)

(Rs crore)

Year	*Public sector*	*Private sector*	*Total*
1960-61	572.51	664.65	1237.16
1961-62	522.83	879.23	1402.06
1962-63	567.38	1015.60	1582.98
1963-64	567.93	1304.35	1872.28
1964-65	754 91	1372.21	2127.13
1965-66	837.30	1380.48	2217.77
1966-67	850.99	1345.75	2196.74
1967-68	855.70	1354.59	2210.29
1968-69	902.22	1364.44	2266.67
1969-70	748.65	1657.64	2406.28
1970-71	887.00	1459.00	2346.00
1971-72	887.94	1780.63	2668.57
1972-73	1123.10	1867.08	2990.19
1973-74	1155.66	2185.00	3340.67
1974-75	1132.35	2177.11	3309.46
1975-76	1619.93	1850.52	3470.45
1976-77	1984.13	2015.29	3999.41
1977-78	2027.81	2185.98	4213.79
1978-79	1812.94	2841.76	4654.70
1979-80	1852.71	2942.10	4794.81
1980-81	2014.62	3089.39	5104.01
1981-82	2252.36	3114.67	5367.03
1982-83	3004.32	2532.21	5536.52
1983-84	3624.11	3007.21	6631.32
1984-85	3873.73	3608.72	6942.45

Source: Government of India, *National Accounts Statistics*, Central Statistical Organisation.

centive is the amount of new investment (fixed) that could take place at the 'margin' which is specifically attributable to the particular incentive provision.

Basically there are three reasons as to why companies go in for investment in machinery and equipment: First, when output demand is expected to increase, additional capacity needs to be created. Second, old worn-out equipment needs to be replaced. And third, plants need to be modernised to catch up with changing technology, Given these reasons, the decision to invest in additional equipment by a company crucially depends on expected cost imputable to the additional investment, which is also known as the 'cost of capital' in the literature pertaining to corporate investment behaviour. More specifically, the 'cost of capital' is interpreted as the minimum rate of return per annum required by the equity holders to make it worthwhile to invest in the additional equipment rather than in other available investment opportunities.

In the present study, the quantification of the inducement effect of the tax incentives under study is attempted in two steps: First, the importance of the cost of capital in the investment decision is measured by fitting an investment function in which gross investment is described as a function of expected sales turnover and expected cost of capital. The exact form of the investment function is discussed in the Technical Note. Second, an attempt is made to measure the reduction in the cost of capital due to the tax incentives and simulate the investment model to quantify the effect of such reduction on the investment.

a. The investment model

The model, in brief, consists of two equations which are as follows (for derivation, see the Technical Note):

$$K_t/K_{t-1}=A^{gs}.\ (p/c)_t{}^{*gs}.\ Q^{*gk}{}_t.\ K^{-g}{}_{t-1} \qquad (2.1)$$

and

$$I_t/K_{t-1}=K_t/K_{t-1}-(I-d) \qquad (2.2)$$

where K denotes the capital stock, $(p/c)^*$ denotes the expectations regarding the radio of output price to cost of capital, I denotes the gross investment, Q^* denotes the expected sales turnover and d denotes the ratio of 'economic' depreciation. The parameters A, g, and s respectively, can be interpreted as the distribution pattern of value-added between capital and labour, lag in adjustment of actual capital stock growth to 'desired' capital stock growth, and the elasticity of substitution between capital and labour.

b. Effect on the cost of capital

Corporate taxation affects investment decision *via* the cost of capital. A levy of corporation tax pushes up the required rate of return. And any relief from the corporation tax, therefore, has an opposite effect. The extent of the reduction, however, depends upon the nature and type of the tax relief. The cost of capital including the extent of tax relief can be solved by using the project viability condition, namely, that for an investment project to be viable, the present value of the sum of the annual capital rentals should be at least equal to the value of the machinery intended to be purchased.

Using this condition, a general expression for the 'cost of capital', c, has been derived in the case of Indian companies as follows:

$$c=q(r+d)\left[\frac{1-B}{(1-u)\,(1-Av)}-\frac{zu}{1-u}+\frac{Bi}{r+p}\right] \qquad (2.3)$$

where $$z=d'/(d'+r+p)$$

where r=discount rate (minimum net rate of return expected by shareholders), d='real or economic' depreciation rate, d'= rate of tax depreciation allowance, B=the gearing ratio, A= the dividend pay-out ratio, u=corporation tax rate (including surcharge), v=personal income tax rate on dividends, z=sum of the present value of the tax deductions' association with unit capital spending, i=rate of interest on debt capital, p=rate of inflation, and q=price of new machinery. (For a brief derivation, see the Technical Note).

The cost of capital is made up of three main components: (i) The minimum return required in the face of the 'Classical' income tax system with double taxation of dividends; less (ii) the tax saving per unit of the minimum return due to tax depreciation in the face of inflation, plus (*iii*) the extra required return to pay for the real interest payments on debt capital.

The cost of capital expression, apart from containing the main policy parameters of the corporate behaviour such as, dividend pay-out ratio, gearing ratio, and discount rate, also contains the relevant facets of the income tax system in this country. Thereby it shows what would be the likely change in c if the rate of investment allowance is changed.

The rental cost formula is helpful in quantifying the inducement effect of investment incentives. In particular, the sum of the present values of tax deductions associated with one unit of capital (as denoted by z in the rental cost) varies with different incentive schemes: for example, under the development rebate/investment allowance scheme along with the existing tax depreciation allowance, the unit deduction z_1,

$$z_1=(d'/(d'+r+p)+k, \tag{2.4}$$

where k denotes the rate of investment allowance. Under the scheme of 'initial depreciation' (which existed during the two intervening years after the discontinuation of development rebate) the unit deduction is given by z_2, where

$$z_2=k+\frac{(1-k)\,d}{d+r+p} \tag{2.5}$$

where k denotes the rate of initial depreciation.

A similar expression can also be derived for the new 'funding' scheme, introduced in 1987-88 as follows: Under the scheme, a new portion (say, k) of taxable income is allowed as tax deduction, provided it is used for purchasing machinery either in the current year or in the subsequent years (by depositing the amount with the specified financial institutions). The funding scheme, in a way, allows a company to get the entire cost deducted from tax if *by some means* the machine is acquired in advance and payment is made later. The company can retain k portion of its taxable income every year until the cost of the machinery is covered. Further, the cost of deferring the payment could be assumed to be negligible, as machinery acquisition is not a once for all activity, but a continuing process.

Therefore, it is possible to get the entire equity cost of the new machinery as tax deduction (in course of time), in addition to the depreciation allowance. Thus, given the debt-equity policy, the unit tax deduction z_3 under the funding scheme is,

$$z_3 = \frac{d'}{d + r + p} + (1 - B). \tag{2.6}$$

Given the reduction in the cost of capital—due to the tax incentive—, to what extent companies go for new investment depends upon the sensitivity of investment to changes in the cost of capital, which is estimated by the above investment model.

In order to have an idea of the full impact of tax incentives on corporate behaviour one also needs to know how the dividend pay-out ratio, A, and the capital structure parameter, B, are affected by the incentives as there is an in-built bias in the investment allowance provision in favour of profit retention and internal financing. The impact mechanism will be discussed in detail in Chapter 3. While simulating the investment model, effects of a change in c on the debt-equity, as well as dividend pay-out are taken into account.

Data and Estimation

The investment model is fitted to aggregate time-series data pertaining to three samples (manufacturing) of medium and large public limited companies (1960-1982), private limited companies (1965-1982), and government companies separately, the data source for financial variables being the Reserve Bank of India's publication, *Financial Statistics of Joint Stock Companies* as well as their *Bulletins*. Apart from the fact that continuous time-series data are available in a fair amount of detail, the sample coverage is fairly high. The sample covers as much as 80 per cent of the total paid-up capital in the case of non-government non-financial public limited companies, 30 per cent in the case of private limited companies and 35 per cent in the case of non-financial government sector companies.

The financial variables are interpreted as follows: The variable K_t is taken to be the stock of fixed assets (machinery and plant) in real terms. For this, first the net investment series are defined by the wholesale price index relevant to machinery and plant, and then the series are cumulated to obtain the capital stock in constant prices. The variable Q_t is proxied by real income from sales (net of excise duties). The gross cash flow variable Y_t is interpreted as profits before tax and depreciation and other provisions. The discount rate r is proxied as three-year moving average of profits after tax per rupee of net-worth. Interest rate i is taken as interest payments on outstanding debt. Debt-equity ratio is represented as a ratio of long-term debt over equity capital. Corporation income tax rate is proxied by tax provision over gross cash flow, while the individual income tax rate relevant to dividend income is computed from the *All India Income Tax Statistics*. The tax depreciation rate, d', rate of investment allowance k, as well as the proportion of investment allowance required to be retained, are taken to be the same as the statutory rates. Finally, inflation rate is interpreted as change in the wholesale price index.

The estimation procedure briefly is as follows: First, the dividend equation was fitted, which yielded estimates for the parameters l and s_1. Using these estimates, the long-run dividend pay-out ratio series A^* are generated. Next, the debt-equity equation was fitted using the estimated series for A^*, which was used to generate B^* series. Then, with the help of the estimated series of A^* and B^* and other tax, interest and price elements, the value of c is computed. Finally, the investment function (equation 5) is estimated using the c_t series and the sales variable as a proxy for Q_t.

Regression Results

The regression results of the investment function for the three samples are presented in Table 2.2. (The regression estimates of the debt-equity equation and dividend equation will be discussed in Chapter 4.) The regression of the investment functions are significant in all the three cases. The coefficient of (p/c) is significant in the case of medium and large public limited companies as well as medium and large private limited companies while it turns out to be insignificant in the case of government sector companies. The coefficient of Q/K_{t-1} denotes the lag parameter, whose estimate is significant in all the three cases. The estimate of the elasticity of substitution works out

TABLE 2.2

Regression Results of the Investment Function

Dependent variable= log (K_t/K_{t-1}) / *Sample*	*Const.*	*Coefficient of log* (p/c)	*Coefficient of log* (Q/K_{t-1})	R^2	*F*	*DW*
1. Med & large public ltd cos.	0.1981**	0.0295	0.1525	0.83	62.48	1.5
2. Med & large pvt. ltd cos.	0.2143*	0.0411*	0.2628**	0.83	55.22	1.4
3. Government companies	1.8723**	0.0073	0.0336*	0.57	15.84	1.6

Notes: *, ** denotes that the coefficients are significant at 10 per cent and 5 per cent levels, respectively.

to be 0.19 in the case of public limited companies, 0.17 in the case of private limited companies, and 0.22 in the case of government companies. In brief, the estimated equation shows that both the cost factors as well as expected demand for output are important in determining the corporate investment.

Quantification of the Impact of the Tax Incentives

The estimated equation is simulated for the effect of investment allowance (or development rebate) by substituting the actual cost variable with an alternative computed without the tax incentive, e.g., the rate of investment allowance, k. The effect of k being zero is not only felt through z variable but also through the gearing ratio function. In other words, if k is zero, to that extent the overall effective corporation tax rate would be higher, leading to some amount of substitution of equity financing with debt financing, thus raising B. On the other, the unit tax benefit as indicated by z, would also be lowered. The combined effect would alter the estimate for the rental cost of capital. The hypothetical variable c', thus computed, is substituted for the actual c in the equation, and the change in the investment series *via* change in K_t/K_{t-1} is computed and presented in Table 2.3. The government sector is left out while

TABLE 2.3

Estimated Increase in the Fixed Investment (Machinery and Plant) Attributable to the Investment Allowance/Development Rebate in the Private Corporate Sector (1960-61 to 1982-83)

(*Rs crore*)

Year	*Public limited companies*	*Private limited companies*	*Total private corporate sector*
1960-61	1.39	0.39	1.78
1961-62	2.37	0.91	3 28
1962-63	3.96	0.92	4.88
1963-64	3.49	1.11	4.60
1964-65	4.86	1.15	6.01
1965-66	4.05	0.90	4.95
1966-67	3.91	1.74	5.65
1967-68	6.34	2.56	8.90
1968-69	4.57	2.24	6.81
1969-70	6.16	2.23	8.39
1970-71	4.38	1.16	5.54
1971-72	3.12	1.60	4.82
1972-73	5.41	1.39	6.80
1973-74	6.79	1.71	8.50
1974-75	22.73	2.86	25.59
1975-76	12.74	2.07	14.81
1976-77	9.47	2.07	11.54
1977-78	11.35	3.03	14.38
1978-79	23.51	3.27	26.78
1979-80	42.31	4.14	46.45
1980-81	36.83	4.24	41.87
1981-82	39.17	2.63	51.80
1982-83	58.64	12.44	71.08

simulating the investment function as the rental cost variable in that case is not found to be significant.

The table shows that the difference between the actual investment and the hypothetical investment is not negligible. It shows that up to 1972-73, the effect was less than Rs 9 crore and the effect has been more pronounced from 1973-74 onwards, i.e., ever since the revival of investment allowance (notwithstanding the two-year initial depreciation allowance). The jump in the inducement effect between the years 1973-74 and 1974-75 from Rs 8.50 crore to Rs 25.59 crore might also be due to factors such as increased awareness of the tax benefits.

a. Projections

For estimating the likely inducement effect for the next five years from 1987-88 to 1991-92, the model is simulated with alternative tax incentive schemes. The cost of capital that will be faced by the corporate sector under the different schemes is computed as well as the change in the investment, taking into account the likely change in the debt-equity policy, is worked out. These are given in Table 2.4.

TABLE 2.4

Cost of Capital under Investment Allowance and Funding Schemes (Average Estimates for 1986-87 to 1991-92)

Tax situation	*Rental cost of capital as a proportion of equipment price*
Without tax incentives	0.3041
With investment allowance	0.2402
With 'funding' scheme	0.1378

Table 2.4 shows that without any tax incentives the expected rental cost of capital would be approximately 30 per cent of the machinery price, on an average. The rental cost with the investment allowance is 24 per cent while with the funding scheme it is expected to be 13.8 per cent, which is substantially lower compared to the investment allowance. This is obvious, because while only a fraction of the investment expenditure is deductible under the investment allowance scheme, under the new scheme, tax deduction up to the entire equity-financed por-

tion could be obtained in course of time, with proper planning. In this way the funding scheme is much more powerful in the long-run compared to the investment scheme.

To what extent would these changes in the rental cost affect the investment plans over the next five years? Table 2.5 presents the projected growth of the capital stock (plant and machinery) from 1986-87 to 1991-92 based on the Reserve Bank of India sample of medium and large public limited companies. The projections are made with the help of the estimated investment function described above. They show that the likely growth of fixed capital (machinery) is 350 per cent with the funding scheme, while it is 286 per cent with the investment allowance scheme, whereas without these schemes the likely growth would be only 214 per cent.

TABLE 2.5

Capital Stock Growth Projection under Investment Allowance and the Funding Schemes (1986-87 to 1991-92)

(Index)

Year	*Without tax incentives*	*With investment allowance*	*With funding scheme*
1986-87	100	100	100
1987-88	117.08	127.36	129.57
1988-89	137.60	159.24	164.38
1989-90	160.01	196.07	204.81
1990-91	185.20	238.18	251.29
1991-92	213.51	286.03	348.59

3

Investment Allowance—Tax Revenue Forgone

Introduction

One of the terms of reference of this study relates to the estimation of the likely cost to the exchequer involved in granting the investment allowance to the corporate sector. Ultimately, evaluation of any tax incentive involves an appraisal of the costs as against the resulting gains. The cost of providing a tax incentive could be viewed either in a limited sense as a loss in tax revenue, or in a larger sense a tax expenditure,"the difference between government expenditure with and without the incentive" (Milnes and Huiskamp, 1977). Further, a distinction can also be made between short-run or 'first round' cost, ignoring the potential revenue gain due to availing of the incentive, as against long-run or 'full cost', which takes into account such gains.

In this chapter we confine ourselves to measuring the cost of granting the investment allowance as tax revenue forgone. We make an attempt to estimate both the 'short-run' or 'first round' revenue loss, as well as the the long-run or 'full' loss to the exchequer with the help of the econometric results of the investment function, obtained in the previous chapter. We also attempt, with the help of a survey, to identify the major categories of beneficiary companies classified according to their type, size class, category of industry, and so on, which have availed of the investment allowance and are thereby responsible for the tax revenue forgone.

Data and Methodology

In estimating the tax costs due to the grant of investment allowance over the period 1960-61 to 1982-83, we mainly depended upon *Financial Statistics of Joint Stock Companies* (RBI). Also, a detailed analysis of the pattern of revenue loss distribution among different types of companies has been attemped by means of a sample of income tax assessment records obtained from the Income Tax Department. The purpose is to bring out sectoral biases, if any, in the pattern of availing of the investment allowance provision. For collecting the data from the assessment records, a proforma was circulated among Income Tax Commissioners located in different States. Though the sample was originally drawn on a stratified random basis, the final sample has turned out to be somewhat different from the intended sample, due to some non-response.

The sample consists of 156 companies out of which investment allowance is claimed by 149 companies. About 54 per cent are public limited, 36 per cent are private limited, 8.3 per cent belong to the government sector and the remaining could not be classified. Almost all the companies are large in terms of size, having paid-up capital above Rs 50 lakh. About 60 per cent fall in the class of Rs 1 crore to Rs 20 crore. About 28 per cent had been making losses. However, the gross income of 45 per cent of the companies ranged from Rs 1 crore to well over Rs 25 crore per annum. The sample covered 10 categories of industries, 31 per cent of the sample companies belonging to engineering industry, 20 per cent to chemical and pharmaceuticals, 11 per cent to textiles, 8 per cent to cement, and the rest to paper, sugar, edible oil and so on. Over one-third of the sample companies are located in backward areas.

a. Estimation of revenue forgone in the short-run

For the three samples of public limited, private limited and government companies, estimates of the short-run tax revenue forgone due to the grant of development rebate/investment allowance are not directly available. Therefore, we have computed it indirectly. There are two data items from which the tax loss can be indirectly estimated. First, the gross investment (plant and machinery) of the manufacturing segment of the sample multiplied by the rate of investment allowance and the appropriate effective tax rate can be taken as an estimate of the tax revenue forgone. However, the limitation of this method is that it assumes that the entire machinery investment of the manufacturing sector is eligible for the tax incentive, which is not true. Certain categories of plant and machinery, as specified from time to time in the Income-tax Act and Finance Acts, are not eligible for development rebate/investment allowance. For example, in the case of investment allowance, plant and machinery used in the production of certain categories of industries as specified in the Eleventh Schedule of the Income-tax Act are not eligible for investment allowance. The aggregate data used by us do not facilitate the segregation of machinery into different categories. Therefore, this method is likely to give an unduly large estimate of the tax loss.

The other source is the statutory reserve. The yearly addition to the development rebate/investment allowance reserve represent 75 per cent of the investment allowance. For example, if k is the rate of investment allowance and a is the proportion of the allowance to be credited to the reserve, then the addition to the investment allowance reserve during the year would be ak per rupee of the eligible investment. Therefore, using the investment reserve figure it is possible to compute the eligible investment and the tax loss. While there is an element of underestimation in the second method because it fails to take into account the yearly withdrawal from the statutory reserve, it avoids the error of taking the non-eligible investment into account in the estimation of the tax loss. The downward bias that is built in the second method is expected to be much less serious compared to the upward bias of the first method. Therefore, we followed the second method for estimating the short-run tax revenue forgone due to the tax incentives.

The estimates of the tax forgone might still differ from the true tax loss. Apart from the statistical errors, there is an important reason for that. The effective use of development rebate or investment allowance in any year, is subject to the condition that the company makes sufficient profits in that year. If the current profits are not sufficient, then the allowances can be carried forward up to a maximum of eight years subject to extension of the period where required in terms of s. 80 VVA of the Income-tax Act. Detailed computation of the tax loss, taking into account such carry-forward conditions, is possible only at the individual level and not at the aggregate level. Any such attempt at the aggregate level might yield spurious results. However, we should not rule out the possibility that the claims as computed by us, in respect of plant and machinery in any particular year, can be actually spread over the subsequent years as well. In other words, our estimate of tax forgone shows the maximum claim in respect of current year's investment whereas the figure of true tax forgone is related not only to current year's investment but also to the past years' investments in plant and machinery. The latter can be regarded as a moving average of the figures computed by us. The revenue forgone in the short-run due to the investment incentives from 1960-61 onwards is shown in Table 3.1. Wherever there are gaps due to non-availability of data, figures are interpolated.

b. Estimation of revenue forgone in the long-run

In the preceding chapter, while estimating the function we noticed that whereas in the case of public and private limited companies the cost of capital variable plays a significant role in determining the investment, in the case of government companies, the variable turns out to be not important for investment decisions. In view of that, it can be concluded that in so far as government sector companies are concerned, the revenue forgone due to investment allowance in the long-run is the same as that in the short-run. Whatever investment has taken place in these companies, is irrespective of the tax policies. Investment allowance has no discernible impact on their investment growth. Therefore, there is no 'revenue gain' in their case.

In the case of public and private limited companies, the variable representing the rental cost of capital has turned out to be significant, making it possible to conduct some simulation exercises. Using the investment equation, we estimated the hypothetical series of investment in the absence of investment incentives (development rebate, initial depreciation and investment allowance). After converting the difference between the fitted and simulated series of investment into current prices, they are cumulated to obtain the likely additional capital stock series. The likely additional tax yield due to the tax incentives is computed by first estimating the return on the additional capital stock and then multiplying the return with the effective tax rate. The resulting additional tax yield is subtracted from the short-run revenue forgone, to obtain its long-run counterpart.

Estimates of Tax Revenue Forgone

a. Short-run estimates

The loss to the corporation tax revenue ranged from Rs 7.04 crore in 1960-61 to Rs 285.5 crore in 1982-83 (Table 3.1). The

TABLE 3.1

Estimated Tax Revenue Forgone to Corporate Tax Revenue (Short-run)

(Rs crore)

Year	*Corporate tax revenue*	*Tax revenue forgone due to development rebate/investment allowance*	*Per cent of share in tax forgone in corporate tax revenue (%)*
1960-61	111.05	7.04	6.34
1961-62	156.46	7.29	4.66
1962-63	221.50	7.67	3.46
1963-64	274.59	7.42	2.70
1964-65	314.05	9.89	3.15
1965-66	304.84	13.71	4.50
1966-67	328.90	16.75	5.09
1967-68	310.51	17.90	5.76
1968-69	299.77	17.46	5.82
1969-70	353.40	13.45	3.89
1970-71	370.52	12.14	3.27
1971-72	472.07	14.15	2.99
1972-73	557.86	23.37	4.19
1973-74	582.60	33.89	5.81
1974-75	709.48	43.95	6.19
1975-76	861.70	47.69	5.53
1976-77	984.23	71.83	7.29
1977-78	1220.77	90.75	7.43
1978-79	1251.47	108.79	8.69
1979-80	1391.90	128.64	9.24
1980-81	1310.79	153.53	11.71
1981-82	1969.97	193.24	9.81
1982-83	2184.51	270.66	12.38

revenue loss as a proportion of corporation tax revenue ranged from 6.34 per cent in 1961-62 to as high as 13 per cent in 1982-83 (Table 3.1). It averaged to 4.06 per cent between 1960-61 and 1964-65, to 5.0 per cent between 1965-66 and 1969-70, and to 4.49 per cent between 1970-71 and 1974-75, 7.63 per cent between 1975-76 and 1979-80, and for the last three years it was 11.53 per cent. Particularly after 1979-80, the revenue forgone was notably higher.

Table 3.2 gives the relative shares of the tax revenue forgone in the short-run for government and non-government

TABLE 3.2

Estimated Tax Revenue Forgone due to Development Rebate/ Investment Allowance (Short-run) (1960-61 to 1982-83)

Year	*Government*		*Non-government*			
			Public limited		*Private limited*	
	Rs crore	*% share*	*Rs crore*	*% share*	*Rs crore*	*% share*
1960-61	2.12	30.2	4.01	56.6	0.93	13.3
1961-62	2.54	34.1	3.94	53.2	0.93	12.8
1962-63	1.73	22.0	4.91	64.4	1.03	13.5
1963-64	2.33	31.4	4.41	59.5	0.68	9.1
1964-65	3.20	32.4	5.88	59.5	0.81	8.2
1965-66	6.18	45.1	6.54	47.7	0.97	7.1
1966-67	8.74	52.2	6.87	41.0	1.14	6.8
1967-68	5.30	29.8	11.12	62.1	1.45	8.1
1968-69	6.79	38.9	9.15	52.4	1.52	8.7
1969-70	5.67	41.2	7.01	51.0	1.07	7.8
1970-71	4.54	37.4	6.70	55.2	0.90	7.4
1971-72	6.62	46.8	6.37	45.0	1.16	8.2
1972-73	12.95	55.4	8.13	34.8	2.29	9.8
1973-74	15.05	44.4	13.73	40.5	5.12	15.1
1974-75	20.00	45.5	19.03	43.3	4.92	11.2
1975-76	22.31	46.8	22.22	46.6	3.15	6.6
1976-77	30.96	43.1	37.57	52.3	3.38	4.7
1977-78	42.11	46.4	45.56	50.2	3.08	3.4
1978-79	48.30	44.4	58.31	53.6	2.28	2.1
1979-80	56.86	44.2	68.05	52.9	3.73	2.9
1980-81	77.23	50.3	70.32	45.8	5.83	3.8
1981-82	93.14	48.2	93.91	48.6	6.18	3.2
1982-83	131.62	46.1	131.62	51.3	7.42	2.6

sectors due to the tax incentives. The share of the private sector in the revenue forgone is only slightly higher compared to that of the public sector companies. Also, public limited companies account for over 50 per cent of the revenue loss, whereas private limited companies account for about 6 per cent of the revenue loss.

b. Long-run estimates

Table 3.3 shows the additional tax revenues of the government as a result of the inducement effect of the three invest-

TABLE 3.3

Estimated Additional Tax Revenue due to the Impact of Investment Incentives (1960-61 to 1982-83)

(*Rs crore*)

Year	*Public limited companies*	*Private limited companies*	*Total revenue gain*
1960-61	0.04	0.03	0.07
1961-62	0.09	0.10	0.19
1962-63	0.19	0.19	0.38
1963-64	0.22	0.25	0.47
1964-65	0.27	0.29	0.56
1965-66	0.43	0.34	0.77
1966-67	0.53	0.46	0.99
1967-68	0.41	0.41	0.82
1968-69	0.44	0.46	0.90
1969-70	0.53	0.54	1.07
1970-71	0.64	0.41	1.05
1971-72	0.97	0.60	1.57
1972-73	1.16	0.66	1.82
1973-74	1.70	0.93	1.63
1974-75	3.88	1.38	5.26
1975-76	2.79	1.13	3.92
1976-77	3.28	1.48	4.76
1977-78	4.43	1.69	6.12
1978-79	7.84	1.78	9.62
1979-80	11.92	2.26	14.18
1980-81	11.59	2.22	13.81
1981-82	14.50	2.57	17.07
1982-83	16.54	2.65	19.19

ment incentives, namely, development rebate, initial depreciation, and investment allowance, for public limited and private limited companies. The revenue gain averaged to Rs 0.62 crore during the sixties and was around Rs 2.5 crore during the early seventies whereas after 1976-77, it went up to a much higher level, the average being around Rs 12 crore for the five years, 1977-78 through 1982-83. The reduction in the revenue loss during these years ranged from 6.12 per cent to 19.2 per cent. The estimated additional revenue is deducted from the short-run tax revenue forgone to obtain the net revenue loss due to these incentives, which is as shown in Table 3.4.

TABLE 3.4

Tax Revenue Forgone (Long-run) due to Investment Incentives (1960-61 to 1982-83)

(*Rs crore*)

Year	*Government companies*	*Public limited companies*	*Private limited companies*	*Total*
1960-61	2.12	3.97	0.86	6.95
1961-62	2.54	3.85	0.74	7.13
1962-63	1.73	4.72	0.65	7.10
1963-64	2.33	4.18	0.43	6.94
1964-65	3.20	5.59	0.52	9.31
1965-66	6.18	6.20	0.63	13.01
1966-67	8.74	6 41	0.68	15 83
1967-68	5.30	10.71	1.04	17.05
1968-69	6.79	8.69	1.08	16.58
1969-70	5.67	6.47	0.53	12.67
1970-71	4.54	6.29	0.49	11.32
1971-72	6.62	5.77	0.56	12.95
1972-73	12.95	7.47	1.63	22.05
1973-74	15.05	12.80	4.19	32.04
1974-75	20.00	15.15	3.54	38.69
1975-76	22.31	19.43	2.02	43.76
1976-77	30.96	34.29	1.90	67.15
1977-78	42.11	41.13	1.39	84.63
1978-79	48.30	50.47	0.50	99.27
1979-80	56.86	56.13	1.47	114.46
1980-81	77.23	58.73	3.61	139.57
1981-82	93.14	79.41	3.61	176.16
1982-83	131.62	115.08	4.77	251.47

Disaggregated analysis of the short-run revenue loss on the basis of the sample assessment records shows that the deduction under s. 32A during the period 1977-78 to 1982-83, formed as much as 60 per cent of the total tax deduction claimed by the sample companies. The other major tax deductions claimed were under Chapter VIA of the Income-tax Act, particularly under s. 80J (or tax holiday from 1981-82, s. 80I) or s. 80HH (backward area development allowance). However, there is a marked difference between public sector and private sector companies regarding these shares. In the case of private sector companies, the deduction under investment allowance formed 67 per cent of the total tax deductions, whereas in the case of government sector companies tax holiday was the major deduction. Further, the time trend shows that in the case of the private sector companies the importance of investment allowance in the total deduction has been growing. It grew from 58.9 per cent in 1977-78 to 81.5 per cent for public limited companies, and from 38.7 per cent to 79 per cent for private limited companies (Table 3.5).

TABLE 3.5

Proportion of Investment Allowance in Total Tax Deductions—by Public Limited and Private Limited Companies (1977-78—1982-83)

(Per cent)

Year	*Public limited*	*Private limited*
1977-78	58.90	38.74
1978-79	63.10	62.35
1979-80	59.43	51.20
1980-81	78.26	55.23
1981-82	81.53	78.98
1982-83	58.41	71.02

Source: The sample of Income tax Assessment Records.

c. Extent of investment allowance deduction by different characteristics of companies

Size classification of companies confirms that the deduction was higher for large sized companies. About 30 per cent of the investment allowance deduction of the sample companies was accounted for by companies with paid-up capital Rs 1 crore to Rs 5 crore and 26.5 per cent by those that fall in the range of Rs 10 crore to Rs 15 crore (Table 3.6).

TABLE 3.6

Investment Allowance and other Major Tax Deductions—Paid-up Capital Classification

(Per cent)

Paid-up capital size class (Rs crore) / *Item*	*0-0.5*	*0.5-1.0*	*1-5*	*5-10*	*10-15*	*15-20*	*Above 20*	*Un-classi-fied*
1. Sample portion	9.5	13.5	43.2	9.5	4.1	1.4	1.4	17.6
2. Gross income	0.5	2.5	29.2	25.7	25.7	11.3	0.3	5.7
3. Tax	0.2	2.8	26.1	25.7	26.0	12.8	0.3	6.1
4. Total deductions	2.2	2.9	28.6	9.4	27.1	15.5	3.1	11.3
(*a*) s. 32A	2.6	2.9	30.4	11.0	26.6	18.2	3.0	5.3
(*b*) ch. VIA	1.3	2.7	24.8	6.0	28.3	10.1	3.3	23.5
(*i*) s. 80HH	1.2	5.4	29.6	0	37.1	0	2.2	24.5
(*ii*) s. 80 J/I	1.6	1.6	21.2	6.8	25.0	14.0	4.7	25.2

Source: As for Table 3.5.

Income classification of the sample shows that companies whose income was over Rs 25 crore were responsible for 54 per cent of the investment allowance deduction (Table 3.7). An interesting aspect is that the loss-making companies also accounted for a sizable portion (25.6 per cent) of the investment allowance deduction.

Industry-wise classification shows that a large part of the investment allowance deduction was due to engineering industries, whose share of the deduction in the sample is 46 per cent (Table 3.8). The other major industries were chemicals and

TABLE 3.7

Investment Allowance and other Major Tax Deductions —Income-size Classification

(*Per cent*)

Paid-up size class (Rs crore) / *Item*	*Loss making*	*0-1*	*1-10*	*10-25*	*Above 25*	*Non-reportive*
1. Sample portion	28.3	5.0	17.2	11.1	17.2	21.2
2. Gross income	(—)19.2	0.1	5.0	12.7	101.4	NA
3. Tax	0	0.1	4.8	10.8	84.4	NA
4. Total deductions	21.8	1.5	8.4	6.8	59.4	2.1
(*a*) s. 32A	25.6	2.2	9.3	6.0	54.1	3.0
(*b*) ch. VI A	14.1	0.6	6.5	8.7	69.5	0.4
(*i*) s. 80 HH	0	0.6	7.5	12.0	80.0	0
(*ii*) s. 80J/I	20.8	0.6	5.7	7.0	65.4	0.5

Source: As for Table 3.5.

TABLE 3.8

Investment Allowance and other Major Tax Deductions —Industry-wise Classification

(*Per cent*)

Industry / *Item*	*Cement*	*Chemical*	*Engineering*	*Paper*	*Plantation*	*Sugar*
1. Sample portion	7.7	20.0	30.7	3.1	3.1	6.2
2. Gross income	3.0	15.8	52.1	11.4	1.1	5.5
3. Tax	1.0	14.0	55.7	12.0	1.0	4.4
4. Total deductions	4.4	7.3	46.0	21.8	0.3	4.5
(*a*) s. 32A	4.4	6.5	46.1	19.7	0.2	4.9
(*b*) ch. VIA	4.3	8.8	45.7	26.0	0.7	3.8
(*i*) s. 80HH	0	15.4	24.9	33.2	0	0
(*ii*) s. 80J/I	6 0	6.6	46.4	25.7	0.24	5.0

TABLE 3.8 (Contd.)

(*Per cent*)

Industry / *Item*	*Textile*	*Vegetable oil*	*Mineral*	*Misc.*	*Unclassified*
1. Sample portion	10.8	4.6	1.5	9.2	3.1
2. Gross income	5.2	0.7	0.01	5.1	0.3
3. Tax	4.8	0.7	0	5.8	0.6
4. Total deductions	8.3	0.8	2.4	3.9	0.2
(*a*) s. 32A	10.3	0.9	2.9	3.8	0.3
(*b*) ch. VIA	4.4	0.7	1.4	4.2	0.1
(*i*) s. 80HH	2.0	1.3	0	23.3	0
(*ii*) s. 80 J/I	5.0	0.7	2.1	2.3	0.2

Source: As for Table 3.5.

pharmaceuticals, textiles, and cement.

Area-wise classification shows that the share of investment allowance deduction, in both backward and non-backward areas, was almost equal (Table 3.9).

TABLE 3.9

Investment Allowance and other Major Tax Deductions —Backward and Non-backward Area Classification

(*Per cent*)

Area	*Backward*	*Non-backward*
1. Sample portion	34.4	65.6
2. Gross income	29.5	70.5
3. Tax	30.4	69.6
4. Total deductions	58.2	41.8
(*a*) s. 32A	51.0	49.3
(*b*) ch. VI A	72.7	27.3
(*i*) s. 80HH	100.0	0
(*ii*) s. 80 J/I	73.1	26.9

Source: As for Table 3.5.

Summary

Investment allowance had been a major tax deduction. About 12 to 15 per cent of the corporation tax revenue was forgone by the government due to the tax provisions under section 32A of the Income-tax Act. In absolute terms the revenue loss was Rs 90 crore in 1977-78 and it went up to Rs 271 crore in 1982-83.

Roughly 46 per cent of the revenue loss due to investment allowance arose in the government sector and about 48 per cent arose in the public limited companies. The share of the government companies in the revenue loss had been rising.

In contrast, the long-run revenue gain as a result of additional income generation from investments spurred by the incentive was not appreciable. The revenue gain due to investment allowance, for instance, was estimated at an average of Rs 12 crore per year which is around 15 per cent of the revenue loss arising in the private corporate sector. But statistical exercise shows that the revenue gain in the government sector was negligible as the provision of investment allowance failed to show any significant impact.

The detailed analysis of the tax forgone on the basis of a sample of income tax assessment records shows that investment allowance formed 46 per cent of the total tax deduction for the large-sized companies. In the case of private sector corporations the share is even higher at 67 per cent, the major portion of which was claimed by the bigger companies, whether they made profits or not. About 25 per cent of the revenue loss is due to those companies which have been making losses.

4

Investment Allowance and Corporate Capital Structure

Introduction

AN important objective of investment incentives has been to enable companies to raise enough funds internally, in meeting their investment demand. The investment incentives alter the relative cost structure between internal and external financing. This is done in two ways: first, the tax reduction due to investment incentives reduces the effective tax rate, thereby making equity financing cheaper than debt financing and second, and more specifically, the condition that a large portion of the deduction due to investment allowance or development rebate is required to be put into the investment allowance reserve which is not allowed to be used for any purpose other than future investment, makes internal raising of funds more attractive than external financing. Thus, on the one hand, between equity and debt financing, investment incentives favour equity financing, and on the other, within equity financing, internal financing.

In this chapter we shall examine to what extent the investment allowance provision had the effect of altering the financing pattern of the corporations.

Methodology

In an earlier chapter, while discussing the investment decision-making process of corporations, we have noted that the key variable, namely, the rental cost of capital, depends, among others, upon the capital structure as well. The relevant aspects of the capital structure are summarised by two elements of the rental cost: (*i*) dividend pay-out ratio, and (*ii*) the gearing ratio. While the dividend pay-out ratio has a direct bearing on the pattern of equity financing, viz., how much finance to be raised by profit ploughbacks and how much by new issues, the gearing ratio represents the pattern of debt *vis a-vis* equity financing. While these two parameters have a bearing on the rental cost, they themselves are dependent on various tax provisions including the investment allowance.

a. The dividend pay-out ratio

The dividend pay-out ratio is assumed to be affected by taxation mainly in two ways: (*i*) The overall tax liability depresses the profits base available for distribution depending upon the effective tax rate, and (*ii*) dividend pay-out is also affected by the relative tax cost of dividends in terms of unit retained profits.

The effect of investment allowance on the dividend pay-out ratio is not only due to the fact that the effective tax rate is reduced and thereby the tax depression effect is less severe, but also due to the compulsory reserve-creating condition. The compulsion of investment allowance reserve makes retentions relatively cheaper than dividends to the extent of 75 per cent of the investment allowance claimed. However, it is quite possible that in order to meet the reserve-creating condition, companies might just switch funds from other non-statutory and non-obligatory reserves to the investment allowance reserve. In this case, investment allowance will have no impact on dividend pay-out ratio as no additional amount of profits is retained.

The impact of the investment allowance provision on the dividend pay-out ratio is tested by using the equation,

$$D_t = A_0 . Y^l . (1-u')^l . (1-v)^{l s_1} \left[\frac{1-u'(1-ak)}{1-u'} \right]^{l s_2} . D_{t-1}^{1-l} \qquad (4.1)$$

where D_t=current dividends, u'=effective corporation tax rate, v=relevant individual income tax rate applicable to dividend incomes, k=rate of investment allowance, a=proportion of investment allowance to be retained. Further, l, s_1 and s_2

represent respectively, the lag parameters and the reponse coefficients, which vary between zero and unity. (For derivation, see Technical Note.)

b. The debt-equity ratio

In the case of the debt-equity equation, investment allowance reduces the relative cost of equity financing in two ways: First, the effective corporation tax rate is reduced, and second, due to the partial reduction in the dividend pay-out ratio as a result of the investment allowance reserve. Thus the debt-equity equation consists of debt-equity ratio as the dependent variable and, long-run cost of debt financing and tax cost of equity financing as two independent variables. For computing the tax cost of equity financing, dividend income ratio estimated from equation 4.1 is used.

The long-run debt-equity ratio function is as follows:

$$\left[\frac{B}{1-B_t}\right]=A_1\left[\frac{1-i/(r+p)}{(1-u)\,(1-Av)}\right]^{ms_3}\left[\frac{B}{1-B}\right]_{t-1}^{1-m} \tag{4.2}$$

where i=interest rate on debt, r=real discount rate, P=rate of inflation, and u and v are tax rates as defined above. The cost of debt is represented by $[1-i/(r+p)]$ and the cost of equity, by $[(1-u)\,(1-v)]$. (For derivation, see Technical Note.)

Empirical Results

The dividend equation (4.1) as well as the debt-equity equation (4.2) are fitted to the Reserve Bank of India data on joint stock companies, for public limited, private limited and government companies separately.

a. The dividend pay-out equation

In this equation dividends are regressed on gross cash-flow and the three tax variables; representing the over-all tax cost, the tax differential cost, and the tax differential cost arising due to investment allowance provision. The equation is estimated in an adaptive expectations framework. The coefficients adjusted for the estimated lag are presented in Table 4.1.

It is worth noting that the coefficient estimated for the variable representing the tax differential cost due to investment

TABLE 4.1

Regression Results of the Impact of Investment Allowance on Dividend Pay-out Ratio of Public Limited, Private Limited and Government Companies

	Public limited companies	*Private limited companies*	*Government companies*
Constant	1.32**	1.28**	16.12**
Gross cash flow	0.28**	0.74**	1.52*
Over-all tax depression variable	1.31**	1.62*	0.86
Tax differential variable	0.49*	0.22	0.02
Tax differential due to investment allowance	0.10	0.18	0.04
Lag parameter	0.25**	0.32**	0.43**
R^2	0.95	0.94	0.62
F	126.87	68.57	73.15
DW	2.16	1.48	1.32

Note: ** and * indicate regression coefficient being significant at 5 per cent and 10 per cent levels respectively.

allowance turns out to be insignificant in all the three cases: public limited, private limited, as well as government companies. It shows that the statutory obligation of creating a special reserve in respect of development rebate or investment allowance has not affected the dividend policies of companies. This provision has not been strong enough to persuade companies to retain profits. The reserve condition under the investment allowance provision is largely met by diverting to the investment allowance reserve part of the retained profits which would have been put into other reserves. However, this is not to say that taxation has no impact on dividend policies. In fact, in the case of public limited companies, the other two tax variables have turned out to be significant. The long-run elasticity of dividend payments with respect to over-all effective tax cost is estimated to be more than unity in the case of private sector companies. It is 1.31 for public limited companies and 1.62 for private limited companies. The tax cost differential between dividends and retained profits also tnrns out to be important for dividend policies. However, in the case of government companies, tax policy impact on dividends appears to be insignificant as none of the three tax variables is significant.

Thus, it can be concluded that the requirement of additional reserve creating condition that is built into the investment allowance provision had not proved to be effective. It did not result in additional retentions. Companies might be simply shifting funds from other reserves to the investment allowance reserve to qualify for the tax deduction.

b. The debt-equity equation

The debt-equity equation turns out to be significant in all the three cases—public limited, private limited and government companies (Table 4.2). From this equation one can observe the

TABLE 4.2

Regression Results of the Impact of Investment Allowance on the Debt-Equity Ratio of Public Limited, Private Limited and Government Companies

	Public limited companies	*Private limited companies*	*Government companies*
Constant	5.34**	4.58*	21 22**
Cost of debt	5.55**	3.38**	2.21
Cost of equity	—27.87**	—16.20**	—5.23*
Lag parameter	0.38**	0.22**	0.32
R^2	0.87	0.85	0.42
F	79.04	62.11	19.84
DW	1.49	1.70	1.26

Note: ** and * indicate that the coefficient is significant at 5 per cent and 10 per cent levels respectively.

powerful role played by the relative costs of financing in determining the capital structure. The effect of investment allowance is felt only through tax rate reduction and not through its reserve-creating condition, which is clear from the dividend equation.

Summary

The measurement of the effect of investment allowance on the capital financing pattern of the corporate sector is attempted in this chapter in a two-equation model which was also used in estimating the investment equation in Chapter 2.

Investment allowance is supposed to encourage profit retentions *vis-a-vis* dividends, because of the condition that profits to the extent of 75 to 80 per cent of the investment allowance are to be retained in order to claim the deduction. The first equation captures the impact of the additional reserve creation of investment allowance provision. The empirical analysis in this study shows that there is no evidence to prove that companies retain extra amounts of profits for the purpose. They might be simply switching funds from other reserves to the statutory reserve for investment allowance reserve.

Between debt and equity financing, tax reduction due to investment allowance makes equity financing more attractive. Our study brings out the strong bearing of such tax reductions on capital budgeting.

5

Inflation and Investment Allowance

Introduction

AN important objective of the investment allowance had been to compensate for inflation and thereby enable the companies to replace their equipment. In fact, when the investment allowance was reintroduced in 1976, inflation compensation was the main motive. Generally companies are granted tax depreciation allowance at a rate varying between 15 and 30 per cent of the written-down cost of the capital equipment. Thus by the time a particular machine of a company went scrap, a company would have obtained a tax deduction equivalent to the cost of the machine. If the price of the machine did not change in the meantime, the machine could be replaced without any additional burden. However, in the face of inflation, the total depreciation allowance obtained would be inadequate to replace the machine. In the event, investment allowance is like an extra 25 per cent depreciation allowed in the first year.

In this chapter we shall examine to what extent the investment allowance supplemented the tax depreciation allowance and thereby compensated for inflation.

Methodology

Inflation affects the tax liability of corporations mainly in three ways: First, the value of the physical assets changes over time, thereby affecting the compensation of tax depreciation allowance. Second, the nominal value of the sales income changes over time. Third, inflation also affects the capital financing patterns as the cost of internal funds might increase faster than the interest costs because of the administered interest rates, making debt-financing more attractive. [For a detailed discussion of the inflation effects, see Sen (1987).]

In our model of investment behaviour discussed in the earlier chapters, all these three effects of inflation on the investment decision have been taken care of by the rental cost of capital. Particularly it was shown that, the expected present value of life-time tax depreciation allowances per unit of capital would be lower in the face of inflation.

The fully inflation-adjusted tax compensation requires the following: Let p and q' be the rates of change in the general price level (say, wholesale prices) and in the machinery price level, respectively Then the cost effectiveness of investment per unit (ignoring for the time being, the financing pattern and denoting u as an average effective tax rate on corporation income) would be

$$q=[c(1-u)+dq'u].\int e^{(q'-d-r-p)t}dt \tag{5.1}$$

which yields

$$c=q(r+d+p-q')\left[\frac{1-du/(r+d+p-q')}{1-u}\right] \tag{5.2}$$

The existing practice, however, is to compute sales income in current prices and depreciation allowances at constant prices, which makes the total tax depreciation allowances per unit of capital to be

$$d/(r+d+p). \tag{5.3}$$

The formula used in this study assumes that the rate of inflation in the machinery prices is the same as the general price rise (i.e., $p=q'$).

The shortfall in the tax depreciation allowances due to inflation can be computed as a difference between the hypothetical value of z when the tax depreciation is fully adjusted for inflation, and its actual value. In other words the shortfall

$$\triangle z = \frac{d}{d+r} - \frac{d}{d+r+p} = \frac{dp}{(d+r)\ (d+r+p)} \tag{5.4}$$

This shortfall $\triangle z$ when compared with the investment allowance k would give an idea to what extent investment allowance compensated for the loss in the value of tax depreciation due to inflation.

The required compensation in the tax depreciation allowances, namely, $\triangle z$ differs from company to company because, first, the effective rate of tax and the tax depreciation differ according to the type of company and type of machinery used as well as its intensity of use; and second, the discount rate differs. While some information is available on the discount rate, information on the effective tax depreciation is not available. In our regression analysis of investment behaviour in the earlier chapter, the best regressions are obtained when the effective tax depreciation rate is set to a constant 15 per cent.

Empirical Results

Aggregate analysis

For the present purpose $\triangle z$ is computed for different values of d, namely 15, 20, 25, 30 and 35 per cent, for public limited and private limited companies separately, as well as by major industry groups of public limited companies.

The rate of investment allowance in general had been around 25 per cent. It can be observed that the required compensation for inflation in the tax depreciation allowances was much lower than the rate of investment allowance. For example, in the case of medium and large public limited companies, the average required rate of compensation per rupee of the capital stock ranged between 12 per cent and 15 per cent (Table 5.1). The compensation rate is slightly higher for private limited companies, ranging from 14 to 18 per cent. Thus one can see that the loss in the value of tax depreciation allowances is more than compensated by the investment allowance. The average compensation required for the private corporate sector was 13 to 16 per cent whereas investment allowance has always been above 20 per cent.

It also needs to be noted that during the four years 1978-79,

TABLE 5.1

Required Per Unit Compensation for Inflation in the Tax Depreciation Allowances—Public Limited Companies (1976-77 to 1982-83)

Year	*Rate of tax depreciation*				
	0.15	*0.20*	*0.25*	*0.30*	*0.35*
1976-77	0.05	0.20	0.25	0.04	0.04
1977-78	0.11	0.10	0.10	0.09	0.08
1978-79	0.15	0.15	0.15	0.14	0.14
1979-80	0.22	0.22	0.22	0.21	0.20
1980-81	0.22	0.22	0.22	0.21	0.21
1981-82	0.14	0.14	0.13	0.13	0.12
1982-83	0.05	0.05	0.05	0.04	0.04
Average	0.13	0.13	0.13	0.12	0.12

TABLE 5.2

Required Per Unit Compensation for Inflation in the Tax Depreciation Allowance—Private Limited Companies (1976-77 to 1982-83)

Year	*Rate of tax depreciation*				
	0.15	*0.20*	*0.25*	*0.30*	*0.35*
1976-77	0.05	0.05	0.04	0.04	0.04
1977-78	0.11	0.11	0.10	0.09	0.09
1978-79	0.15	0.15	0.15	0.14	0.14
1979-80	0.23	0.23	0.22	0.21	0.21
1980 81	0.24	0.25	0.23	0.22	0.22
1981-82	0.38	0.32	0.32	0.27	0.24
1982-83	0.15	0.12	0.12	0.10	0.07
Average	0.18	0.18	0.17	0.15	0.14

1979-80, 1980-81 and 1981-82, when the price rise was much steeper than in the earlier years, the required compensation in the tax depreciation was also relatively high. For public limited companies the compensation rate was around 18 per cent and for private limited companies it was between 20 and 25 per cent during these four years.

b. Industry-group-wise analysis

As mentioned earlier, the required compensation in the tax depreciation allowance for inflation differs among companies according to their effective rates of tax depreciation as well as the company-specific discount rate. Broadly speaking, companies belonging to same industry, however, can be expected to have the same type of equipment and same expectations regarding the minimum expected net rate of return. Therefore, one can expect that inter-industry variation in the compensation rate would be higher than the intra-industry rate. The extent to which the compensation differs between industries can be estimated for different industry-groups. This is attempted below.

The Reserve Bank of India's classification of industries into six major groups is considered for the purpose. These are: 1. Plantation, 2. Mining and quarrying industries, 3. Agro-based manufacturing industries, 4. Heavy manufacturing industries, 5. Other manufacturing industries, and 6. Other industries. The average required compensations for the seven years 1976-77 through 1982-83 at different effective depreciation rates are presented in Table 5.3. The table shows that the compensation required is higher for the heavy manufacturing industry category, closely followed by agro-based manufacturing, mining and quarrying and other manufacturing. Thus, by and large, the compensation required is higher for the manufacturing sector. This may be because of the relatively high minimum expected rate of return in these industries.

Summary

One of the primary objectives of reintroducing investment allowance was to compensate for the loss in the tax depreciation allowance due to inflation. A quantification of the required compensation has been attempted with a view to see how far

TABLE 5.3

Required Per Unit Compensation for Inflation in the Tax Depreciation Allowance—by Major Industry-Groups (Public Limited Companies)
Average for 1976-77 through 1982-83

Industry group	*Rate of tax depreciation*				
	0.15	*0.20*	*0.25*	*0.30*	*0.35*
1. Plantations	0.10	0.10	0.10	0.10	0.09
2. Mining & quarrying	0.14	0.14	0.13	0.13	0.13
3. Agro-manufacturing	0.12	0.12	0.12	0.12	0.11
4. Heavy manufacturing	0.13	0.13	0.13	0.12	0.12
5. Other manufacturing	0.13	0.13	0.13	0 12	0.12
6. Other industries	0.12	0.12	0.12	0.11	0.11

the rate of investment allowance has compensated for inflation.

It is found that investment allowance granted at the rate of 25 per cent of the cost of machinery, has more than compensated for the loss due to inflation in the value of total expected tax deduction for depreciation. The required compensation was expected to be 13 to 16 per cent at the effective depreciation rate ranging between 15 per cent and 35 per cent. For public limited companies the rate was around 12 to 13 per cent, while for the private limited companies it was 13 to 16 per cent. Further, for the four yours, 1978-79 through 1981-82, when the price rise was much steeper than earlier years, the compensation required also went up. Even then, the required compensation was much lower than the existing rate of investment allowance.

6

Problems of Implementation

Matters of Interpretation

DATA furnished by the assessing officers for purpose of this study as to claims for investment allowance and their disposal are summarised in Table 6.1. This shows that in respect of the assessees in the selected sample for whom information was received, out of 553 completed assessments involving total claims of Rs 16,870 lakh for deduction under section 32A, in 413 assessments (74.7 per cent) claims of Rs 12,863 lakh (76.2 per cent) were accepted at the assessment stage. In the remaining 140 assessments (25.3 per cent) (claims: Rs 4007 lakh) there were full or partial disallowances amounting in all to Rs 335 lakh (1.99 per cent of total claims).

The above data show that although some disallowance of claim for deduction under section 32A was involved in over 25 per cent of the assessments in which such claims were made, the amount disallowed was only about 2 per cent of the total claims. Many terms and expressions used in section 32A are to be found in section 32 (depreciation), section 43 (definition of certain terms relevant to income from profits and gains of business of profession) and section 80J/80I (tax holiday). Although section 32A differed in material respects from section 33 (development rebate) which was operative till May 31, 1974, much of their terminology was similar. Over the years, sections 32, 33, 43 and 80J have been the subject matter of considerable litigation, and judicial pronouncements thereon have assisted in interpreting the provisions of section 32A, thus reducing disputes on its account.

Table 6.2 gives a classification of the disallowances accordding to reasons. Of the disallowances totalling Rs 215.15 lakh made in 79 assessments for which reasons inducing the dis-

TABLE 6.1

Disposal of Claims for Investment Allowance at the Assessment Stage

(*Rs lakh*)

1. Total number of assessees for which data received	156
2. Number of assessees out of (1) in which cases one or more assessments involving claim(s) for investment allowance had been completed	149
3. Number of completed assessments involved in (2)	553
4. Total amount of claims involved in (3)	168,70
5. Number of completed assessments out of (3) in which claims fully accepted at the assessment stage	413[1]
6. Amount of claims involved in (5)	128,63[1]
7. Number of completed assessments out of (3) in which claims were partly or fully disallowed	140
8. Amount of claims involved in (7)	4007
9. Amount disallowed out of (8)	335

Note: 1. Includes 14 completed assessments in which as against claims of Rs 367 lakh, claims allowed amounted to Rs 381 lakh.

Source: Income tax assesment records : data furnished by assessing officers: For modus of drawing study sample, refer page 33 (Summary, Ch. 3) of this study.

allowance were reported, disallowances of Rs 113 91 lakh (53 per cent), and Rs 32.32 lakh (16 per cent), pertained respectively to claims of investment allowance on assets found ineligible for the allowance and the government subsidy against capital investment not taken into account in determining the actual cost of the machinery or plant for working out the allowance. Other disallowances were on account of refusal of the higher rate of investment allowance, computation errors by the assessees, machinery not installed during the year, carry forward of the allowance due to the total income being determined at a loss, failure to create the requisite reserve, leasing of machinery, etc.

Subject to the fulfilment of certain conditions, investment allowance was available for new ships, new aircraft and specified new machinery or plant. To an eligible industrial undertaking the allowance was admissible with reference to the actual

TABLE 6.2

Reasons for Disallowance of Claims for Investment Allowance at the Assessment Stage

(*Rs lakh*)

Reason for disallowance	*Number of assessments in which disallowance made*	*Amount of investment allowance claimed*	*Disallowance out of (3)*
1. Ineligible assets[1]	38	1471.23	113.91
2. Government subsidy received against capital investment not taken into account in determining actual cost of the machinery or plant	15	992.21	33.32
3. Higher allowance (35%) due for indigenously developed technology refused; allowance restricted to 25%	7	112.79	14.64
4. Computation mistakes	5	34.62	6.61
5. Machinery not installed during the year	3	22.75	17.73
6. Total income determined being less, investment allowance carried forward	3	5.98	5.98
7. Requisite reserve not created	3	1.44	1.44
8. Machinery not used for the assessee's business (leased)	1	18.88	18.88
9. Want of evidence	1	0.04	0.04
10. Miscellaneous	3	101.00	2.60
	79	2760.94	215.15
11. Not reported	61	1245.82	119.65
TOTAL	140	4006.76	334.80

Note: 1. E.g. machinery or plant producing articles or things listed in the Eleventh Schedule; office appliances; old machinery items where whole cost allowed as deduction by way of depreciation or otherwise.

Source: Income Tax Assessment Cards: Data furnished by Assessing Officers.

cost of the new machinery or plant installed therein initially as also later by way of renewal, replacement or expansion. However, for an assessee engaged in the operation of ships or aircraft, eligibility for the allowance was restricted to the initial investment in the ship or aircraft and did not extend to renewals, replacements and additions. This was anomalous as both ships and aircraft have a number of independent work systems whose installation or replacement may markedly step up efficiency. The scheme of the new section 32AB avoids this anomaly. 'Ship' has not been defined in the Act. Even a non-self-propelled vessel has been held to be a 'ship' and thus entitled to development rebate.[1] This would also hold good for investment allowance and investment deposit account scheme.

For an industrial undertaking other than a small-scale one, the investment allowance was initially restricted to new machinery or plant installed for the business of construction, manufacture or production of any one or more of the articles or things specified in the list in the Ninth Schedule (priority industries). But, from April 1, 1978 new mahinery or plant installed and used *mainly* for construction, manufacture or production of any article or thing not specified in the Eleventh Schedule List (low priority goods) became eligible.[2] In other words, the test for eligibility shifted from a positive to a negative one. This had the effect of considerably enlarging the area of eligibility for investment allowance, e.g., the machinery for packing a popular brand of malted milk and the x-ray machine of a consulting radiologist were found entitled to it.[3] It would also seem that the condition as to the use of the installed machinery or plant for production *mainly* of the non-Eleventh Schedule goods needed to be satisfied only with respect to the year for which investment allowance was claimed. There was no provision for withdrawal of the allowances once granted, if in subsequent years the machinery or plant was utilised mainly or wholly for production of the Eleventh Schedule goods. Pruning of the Eleventh Schedule list in 1982 widened its scope still further and the machinery or plant, whether installed in a small-scale undertaking or not, manufacturing sophisticated consumer articles like household furniture, cutlery, chinaware and the like also became eligible for investment allowance. Thus, through statutory amendments and judicial pronouncements, the scope of what was originally intended to be a special incentive for industries considered important from the point of view of national development was widened considerably. However, large-scale manufacturers of some articles of daily mass, commercial and industrial use such as ordinary soap, typewriters and cork, rubber and polyethylene fittings remained outside its ambit.

Litigation had ensued following rejection of claims for investment allowance in respect of (*a*) computers installed in offices on the view that these constitute office appliances which are among the items specifically barred from investment allowance, and (*b*) machinery manufacturing computers on the ground that as a computer processes the data fed into it, it is nothing but a data processine machine and thus comes within the purview of item 22 of the Eleventh Schedule.[4] The controversy regarding (*a*) will not arise so far as section 32AB is concerned as it specifically prohibits a computer being considered as an office appliance with a stipulation that the term 'computers' does not include calculating machines and calculating devices. To avoid disputes regarding (*b*) computers may have to be specifically excluded from operation of item No. 22 of the Eleventh Schedule. This item would also need a review on another account. Looking to the functions performed by data processing machines, it has been held that these cannot be equated with office appliances and denied the benefit of development rebate.[5] This decision will also hold for investment allowance and the new incentive under section 32AB. And, if the benefit of section 32AB cannot be withheld from data processing machines, it may be invidious to deny it to the manufacturers thereof on the plea of their being hit by item No. 22. Following the removal of distinction in the Central Excise Tariff between aerated waters using synthetic essence and 'blended flavouring concentrates', the Comptroller and Auditor General has pointed out the desirability of suitably amending item 5 of the Eleventh Schedule.[6]

Except when engaged in generation of power or repairs to powered craft, it was construction, manufacture or production of an article or thing that made an industrial undertaking eligible for investment allowance. Judicial opinion has been in favour of the view that for an activity to constitute 'manufacture' or 'production', it should entail preparation or fabrication of a new product. Thus 'cold storage' which helps to prolong the useful life-span of a perishable commodity, and 'processing' which envisages a change in some properties of an existing natural or man-made product, are not 'manufacture' or 'production'. But, to determine whether a particular activity amounts to 'manufacture' or merely constitutes 'processing' has sometimes presented difficulty, e.g., while retreading of tyres and photo-developing have been considered by the Appellate Tribunal as 'manufacture', the courts have expressed divergent opinions on the question whether ginning of cotton is 'manufacture' or 'processing'.[7]

For purposes of section 32AB, construction, manufacture or production of the Eleventh Schedule goods by an industrial undertaking other than small-scale is not an 'eligible business'. It may, therefore, be argued that 'processing' of such goods is an 'eligible business'. Thus, the question whether a particular business amounts to 'manufacture or production' or is 'processing' will continue to crop up under section 32AB (and other provisions of the Act, which employ the expression 'manufacture or production', e.g., sections 80HH and 80I). While specifically denying the benefit of an incentive to construction, manufacture or production of an article, it may be inappropriate to make its availability for the 'processing' thereof a subject matter of argument. To avoid litigation, it may be desirable to clarify whether for purpose of 32AB(2)(*i*)(*a*), 'processing' comes within the ambit of the expression "manufacture or production".

It has been held that construction of dams and bridges does not amount to manufacture or processing of goods for allowing super tax rebate (since abolished) and the section 80HH backward area allowance.[8] And, the end products of execution of construction contracts are not "articles" for section 80HH and 80J purposes.[9] However, rigs and compressors for drilling bore wells, machinery for blasting, concrete lining and preparation of steel structures for tunnels and other water conductor systems employed in dam construction have been considered eligible for investment allowance by various branches of the Appellate Tribunal.[10] It is argued that sinking of a bore well, excavating a tunnel or building a dam amounts to construction of an article or thing and further that the article or thing prepared may be for internal consumption and not for sale.

The question whether a contractor undertaking a government contract for dam construction becomes an industrial undertaking entitled to investment allowance has been answered by the Tribunal in the affirmative by relying on an Orissa High Court decision in a section 80HH case which referred to the definition of 'industrial undertaking' for the purpose of the Industrial Disputes Act, 1947.[11] A similar view has been taken by a different bench of the Tribunal in respect of a contractor constructing water tunnels, etc., for the Government by applying the ratio laid down in a High Court judgement which dealt with the intepretation of the definition of 'industrial undertaking' contained in the Wealth-tax Act for the limited purpose of section 45(*d*) of that Act.[12] Controversy has also developed whether a hotel can be considered an industrial undertaking for grant of investment allowance.[13] Except for section 33B (Rehabilitation allowance) which became non-operative since the assessment year 1985-86, the expression, 'industrial undertaking' has not been defined anywhere in the Act although it is used in a number of provisions besides section 32A such as sections 10A, 80HH, 80HHA and 80I. Each provision separately lists the conditions which an 'industrial undertaking' has to fulfil for its purpose. The new section 32AB merely adopts the definition of a 'small-scale industrial undertaking' based on the aggregate value of the installed machinery and plant, contained in section 80HHA. In order to ensure a uniformity of approaeh, it would be appropriate to insert a definition of 'industrial undertaking' in section 2 which defines various terms and expressions commonly used in the Act. To the extent modification of the common definition contained therein is required for purposes of a particular provision, it may be indicated in the latter.

The term 'machinery' is not defined in the Act and section 43(3) merely gives an inclusive definition of 'plant', viz., 'plant' includes ships, vehicles, books, scientific apparatus and surgical equipment used for the purposes of the business or profession. It has been held that having regard to the fact that articles like books and surgical instruments are expressly included in the definition, the word 'plant' has to be given a wide meaning.[14] This gives rise to frequent disputes on whether an impugned item constitutes 'machinery or plant', e.g., the courts have expressed divergent views on whether a road in a factory constitutes a plant entitled to depreciation and development rebate.[15] The fencing round a refinery has been held to be 'plant' deserving development rebate.[16] The factory shed for accommodating turmeric dolls in polishing turmeric and x-ray machines of a radiologist have been considered by the Tribunal as plant and thus entitled to investment allowance which has been denied, however, to the laboratory equipment of a clinical biochemist.[17]

An generally understood, while 'machinery' is synonymous with a mechanical contrivance, 'plant' connotes a self-contained assembly of machinery items designed to produce a specific object. 'Plant' as defined in section 43(3) would also include technical know-how acquired in the shape of drawings, designs and charts, etc., necessary to put the machine assembly to work.[18] For the purpose of giving an incentive for increased investment in selected assets, some countries use the expression 'machinery or equipment'. Considering, however, that many judicial pronouncements from Indian courts are available explaining the meaning of the expression 'machinery or plant', it may be appropriate to continue with the said expression. If it is found that an incentive is being allowed on the authority of judicial pronouncements on a particular type of asset frustrating its objective, the appropriate remedy would seem to be to suitably enlarge the excluded categories of assets for the incentive.

Treatment of Machinery etc. taken on Hire-purchase/Lease

While depreciation under section 32 is given *inter-alia* on machinery or plant (including a ship and aircraft) owned by the assessee and used for the purposes of the business or profession, investment allowance under section 32A (and before it, development rebate under section 33) was allowed on a new ship, aircraft, machinery or plant owned by the assessee and wholly used for the purposes of the business carried on by him. In a credit or instalment sale, wherein the seller has merely the right to sue for arrear instalments but no right to recover the asset, the ownership is at once transferred to the purchaser.

But, under a hire-purchase transaction, while possession of the goods is delivered to the hirer and he has an option to purchase them, the property in the goods passes to the hirer only on completion of the purchase in the manner provided in the agreement. In the interregnum, the hirer is not the owner of the assets and strictly speaking not entitled to depreciation, development rebate or investment allowance.[19] However, under executive instructions, the Department has been allowing depreciation and development rebate in the first year, to the hirer on the full initial value of the asset if under the agreement it shall eventually become his property or he has the option to purchase it.[20] The courts have endorsed this pragmatic view treating a hire-purchase agreement as an agreement for sale or rather a sale to the 'hirer' with the facility of paying the purchase consideration in instalments on the security of the asset.[21] These instructions and court rulings should also hold for investment allowance. With the problem of 'ownership' out of the way, a 'hirer' under a hire-purchase agreement would be entitled to investment allowance as he has no difficulty in satisfying the other criterion, viz., use of the asset wholly for purposes of the business carried on by him.

The essential nature of a lease is that of a bailment, i.e., delivery of goods by one person to another for the latter's use during the term of the lease. Unlike a hire-purchase agreement, there is no option to purchase and the ownership of the goods remains with the lessor. Depending upon facts and circumstances of the case, commercial exploitation of an asset through leasing amounts to a business carried on by the lessor and his entitlement to depreciation is no longer in question. But, his claim for investment allowance meets resistance because of the dispute whether the criterion of the asset being wholly used for the purpose of his business is satisfied. The Tribunal benches have given conflicting decisions on the point. On the view that the word "wholly" does not mean "exclusively", a special bench of the Tribunal has found that the benefit of investment allowance cannot be denied to the lessor.[22] The matter is stated to be pending with the Madras High Court. For the purposes of section 32AB, leasing and hiring of machinery or plant has been made an eligible business except to the extent any machinery or plant is leased or hired to an industrial undertaking, other than small-scale, engaged in producing Eleventh Schedule goods.

'Lease' is an all-embracing term including in its ambit a 'lease in perpetuity' which from the tax angle is as good as a sale to the lessee. An ostensible lease may in effect be a conditional sale. Section 43 of the Act defines terms like 'actual case', 'paid' and 'speculative transaction' for the purposes of determination of taxable income from business or profession. To enable hire purchase and equipment leasing play their due role in the country's economy uninhibited by tax uncertainties, it may be appropriate to insert in section 43, provisions stating the circumstances in which a hirer/lessee may be deemed to be the owner of the asset, as also when the asset may be deemed to be wholly used for purposes of the lessor's business. To prevent abuse and artificial manipulation of profits which is possible if the parties to a hire purchase/lease are subject to common control and the transaction is not done at arm's length, 'transfer pricing' provisions similar to sub-sections (6) and (7) of section 80HH (backward area allowance) and sub-sections (8) and (9) of section 80I (tax holiday) may be incorporated.

Other Problems of Interpretation

'Actual cost' which forms the basis for allowance of depreciation and investment allowance (and its precursor, development rebate) has to be construed with reference to clause (1) of section 43. According to the said clause, as amended by the Finance Act, 1986, 'actual cost' means the actual cost of the asset to the assessee (excluding interest paid or payable in connection with the asset's acquisition as is relatable to the period after it is first put to use) reduced by that portion of the cost, if any, as has been met directly or indirectly by any other person or authority. Subsidies are granted by the Central and the State Governments against capital investment in industries set up in backward areas. In the context of the "10 per cent Central Outright Grant of Subsidy Scheme, 1971', the CBDT have been advised that as the subsidy is related to various assets, provisions of section 43(1) are attracted.[23] In many instances, the assessee's claim for government subsidy is not admitted by the appropriate authority by the time the relative income tax assessment is decided. This leads the assessee to claim investment allowance on the unreduced cost on the plea that even in the mercantile system of accounting, he cannot take credit for the subsidy till its sanction. It has been pointed out by some assessing officers that absence of a specific provision in section 155 authorising rectification of the deduction given by way of investment allowance as necessitated by the 'actual cost' undergoing a change on account of a subsidy received in a subsequent year, is creating difficulty and an enabling provision in this regard would be in order. Indeed, the assessees have generally objected to such subsidies being considered at all in computing the 'actual cost' of the asset. The Appellate Tribunal has opined that these subsidies cannot be taken into account as these are not granted specifically to meet cost of the asset and the fixed capital investment is only taken as a measure for determining the amount of subsidy.[24] To avoid repetitive litigation in instances in which determination of actual cost of an asset is material, it would be desirable to obtain an early authoritative court ruling as to whether such subsidies are to be taken into account in determining 'actual cost' under section 43(1) of the Act and if the answer is in the affirmative, to provide for corrective action in the event of their belated receipt. In the alternative, the controversy may be set at rest through a clarificatory amendment. The issue will continue to be relevant even "where a deduction is claimed for purchase of new machinery, etc., in terms of section 32AB(1)(*b*)."

As in the case of development rebate, sale or transfer of an asset within the prohibited period entails withdrawal for investment allowance except when the sale or transfer is to the Government or statutory corporations etc., or subject to prescribed conditions or is in connection with amalgamation of the available company with another company or on succession of the availing firm by a company. Disputes on whether conversion of a sole proprietory concern into a partnership or allotment of assets to co-owners on partition of a Hindu Undivided Family amounts to 'transfer' necessitating withdrawal of development rebate under section 33 have been taken to the Supreme Court.[25] Such disputes are likely to arise in respect of the new section 32AB as well. It may therefore be desirable to obtain the Supreme Court rulings early in the context that a subsequent transaction by the partnership of the co-owner within the prohibited period, which is admittedly a sale or transfer, may also not result in recapture of the allowance on the ground that under the statute the sale or transfer has to be by the assessee who availed of the allowance.[26] In the alternative, the relevant provision in section 32AB may be amended to clearly spell out the correct acceptable official position.

The stipulation for creation of reserve in order to obtain a deduction under section 32A follows a similar precondition for allowance of the erstwhile development rebate. It is now fairly settled that (*a*) an omission to create an adequate reserve or any reserve at all may be rectified by the time the relevant assessment is framed by the assessing officer even by debit to the profit and loss account of a subsequent year if the accounts of the relevant year stand finally adjusted and closed, and (*b*) the requisite reserve need not be created in the year of installation of machinery or plant if there are no book profits or the assessed income is nil or loss. To avoid withdrawal of the investment allowance, the investment allowance reserve has also to be utilised within a period of 10 years for acquisition of a new ship or a new aircraft or new machinery or plant for purposes of the business of the undertaking in which the asset wherefor the allowance was availed of has been installed. If the undertaking is closed meanwhile, the allowance is liable to be withdrawn either on sale or transfer of the asset following the closure or at the outside on expiry of the ten-year period. However, if the assessee itself ceases to exist meanwhile except by amalgamation or succession referred to in subsections (6) and (7) of section 32A, the investment allowance reserve cannot obviously be utilised in accordance with the scheme of section 32A leaving no scope for application of section 155(4A)(*b*) for withdrawal of the allowance.[26] Similar situations may arise under section 32AB except on succession of a firm by a company covered by clause (*ii*) of the proviso to sub-section (7) thereof. If through operation of law or by act of parties, a depositor assessee ceases to exist before making any withdrawals from the designated account or after making a withdrawal but before expiry of the period prescribed for utilisation of the amount withdrawn for specified purposes, there may be no occasion to fasten any income tax liability as envisaged under sub-section (6). Such situations should be provided for in the Investment

Deposit Account Scheme, 1986.

Development rebate remaining unadjusted due to lack of adequate profits could be carried forward for eight assessment years. It has been held that for set-off of the brought forward development rebate the business for which it was originally allowed need not be in existence in the year of set-off.[27] As the relevant provision for carry forward and set-off of investment allowance is similar, the above decision is likely to be followed in investment allowance cases as well. Although the scheme of the new section 32AB does not envisage any carry forward, the benefit of carry forward and set-off of the unabsorbed portion of the investment allowance will continue to be admissible even if the taxpayer claims the benefit of investment deposit account under section 32AB in subsequent year.

With the repeal of the investment allowance, there is no need to go into the following propositions for its modification, viz., that (*i*) in the absence of adequate profits, it may be allowed to be carried forward indefinitely instead of only for eight years; (*ii*) in the matter of set-off it should be given precedence over the brought forward depreciation which can be carried forward indefinitely, and (*iii*) in the event of competition between set-off of brought forward loss (also subject to 8-year time limit) and brought forward investment allowance, an earlier year loss or investment allowance should get precedence. These questions do not arise under the new funding provision of section 32AB which follows a different pattern.

Audit Objections

The statutory audit organisation of the Comptroller and Auditor General (C & AG) and the internal audit set-up of the Department have pointed out a number of errors on the part of the assessing authorities in acceptance of the claims for investment allowance. As to C & AG's annual audit reports, while Table 6.3 gives a year-wise break-up of the objections, Table 6.4 indicates the grounds of objection. Upto 1984-85, objections have been raised in cases of 83 assessees (114 assessments) involving excessive investment allowance amounting to Rs 370.71 lakh resulting in short levy of tax of Rs 208.18 lakh. By the time the respective annual audit reports were made, the Ministry had accepted objections is respect of 52 assessees. For

TABLE 6.3

Statutory Audit Objections—Year-wise Break up (1976-77 to 1984-85)

(*Rs lakh*)

C & AG Report for the year	*Number of assessees*	*Number of assessments*	*Investment allowance wrongly allowed/ carried forward/not withdrawn*	*Short-levy of tax*[1]
1976-77	—	—	—	—
1977-78	—	—	—	—
1978-79	1	1	6.85	3.95
1979-80	—	—	—	—
1980-81	—	—	—	—
1981-82	3	3	7.15	3.97
1982-83	13	16	26.26	16.37
1983-84	19	28	128.51	69.59
1984-85	47	66	201.94	114.30
TOTAL	83	114	370.71	208.18

(*i*) No. of assessees* in whose cases objections were accepted by the Ministry by the time the respective annual reports were made	52
(*ii*) No. of assessees* in whose cases the Ministry's replies were awaited	37
(*iii*) *a*. No. of assessees* in whose cases the objections were not accepted by the Ministry	4 (6 assessments)
b. Excessive investment allowance induced in (*iii*) *a*	Rs 17.08 lakh
c. Short levy of tax in (*iii*) *a*	Rs 10.91 lakh

Notes: *For a number of assessees, objections related to more than one assessment. By the time the respective annual audit reports were made, objections had been accepted by the Ministry in a few cases for some of the assessments, while its replies were awaited in respect of objections for other assessment.

1. As indicated in the audit paras; wherever not indicated: 50 per cent of the investment allowance wrongly allowed, etc.

Source: Government of India, Annual Reports of the Comptroller and Auditor General of India (C & AG), Union Government (Civil) Revenue Receipts Vol. II—Direct Taxes.

TABLE 6.4

Statatory Audit Objections—Grounds of Objection

(*Rs lakh*)

Ground of objection	*Number of assessees*	*Number of assess-ments*	*Investment allowance wrongly allowed/ carried forward/ not withdrawn*	*Short levy[1] of tax*
1. Ineligible Assets[2]	23	29	154.75	89.09
2. Incorrect determination of "actual cost" (government subsidies against capital investment not taken into account)	10	17	28.14	15.21
3. Allowance given for a year which was not the year of installation/ the immediately succeeding year in which the plant or machinery first used	5	5	17.80	9.24
4. Machinery or plant not employed in an "industrial undertaking"				
5. Industrial undertaking not engaged in "manufacture or production"	16	23	58.01	33.26
6. Machinery or plant not wholly used in the assessee's own business (leased)	2	4	17.25	7 09
7. Higher rate (35%) wrongly allowed	2	2	15.12	8.92
8. Non-creation of reserve or creation of inadequate reserve; investment allowance allowed not withdrawn on non-utilisation of the reserve during the specified period	5	7	18.63	11.12
9. Investment allowance allowed to registered firm allocated amongst partners instead of being carried forward in the firm's case	2	4	3.89	1.45
10. Incorrect carry forward should not have been carried forward	4	4	24.57	12.45

(*Contd.*)

TABLE 6.4 (Contd.)

11. Sale/transfer of the asset within the prohibited period	8	10	14.95	8.97
12. Ministerial lapses (arithmetic mistakes, etc.)	2	2	5.27	3.60
13. Miscellaneous	1	2	6.38	3.74
GRAND TOTAL	83	114	370.71	208.18

Notes: 1. 50 per cent of the investment allowance wrongly allowed, etc.

2. *Ineligible assets*:				
(*a*) Assets used in manufacture or production of non-9th schedule goods/11th schedule goods; office appliances or machinery or plant installed in office premises or loose tools, etc.	18	23	67.75	42.98
(*b*) Assets whose actual cost or 100% depreciation allowed as deduction in one year	3	3	25.71	15.15
(*c*) Machinery or plant not new	2	3	61.29	30.96
TOTAL (*a*+*b*+*c*)	23	29	154.75	89.09

Source: Government of India, Reports of the Comptroller and Auditor General of India, Union Government (Civil) Receipts Volume II—Direct Taxes: for the years 1979-77 to 1984-85.

four assessees involving excessive investment allowance of Rs 17.08 lakh with short levy of tax of Rs 10.91 lakh, objections were not accepted by the Ministry.

Objections pointing out excessive investment allowance of Rs 240.90 lakh in the case of 49 assessees were on three counts: (*a*) incentive allowed on ineligible assets (23 assessees; excessive allowance Rs 154.75 lakh); (*b*) government subsidies not taken into account in determining 'actual cost' of the asset (10 assessees; Rs 28.14 lakh) and (*c*) the industrial undertaking not engaged in manufacture or production (16 assessees; Rs 58.01

lakh). Other objections related to the allowance being given for a year which was neither the year of installation nor the immediately succeeding year; allowance in excess of that warranted by the reserve created; allocation of the allowance among partners of the assessee registered firm instead of its being carried forward in the firm's case; allowance not withdrawn on sale or transfer of the machinery within the prohibited period, arithmetical mistakes, etc. The four audit objections not accepted by the Ministry hinge around admission of investment allowance claims in respect of a freight barge and a cold storage plant, provision of adequate reserve and the question whether the blending of various cils to form a lubricant amounts to 'manufacture'.

Similar mistakes have been observed by Internal Audit, the majority of them pointing out investment allowance having been given on ineligible assets. As in the case of statutory audit, other internal audit objections related to allowance in excess of that warranted by the reserve created, allowance for a year in which the machinery was not put to use; allowance not withdrawn in spite of the sale or transfer within the prohibited period, etc. Objections in a few cases related to claims for investment allowance being allowed without the requisite particulars having been brought on record.

Only a few of the audit objections involve questions of interpretation. The questions which are of wide and continuing interest for purposes of the new section 32AB and other provisions of the Act have been dealt with earlier in this chapter. Most of the objections point to administrative lapses in giving effect to the statutory requirements of section 32A.

Abuse of the Incentive and Administrative Aspects

Abuse of a tax incentive like investment allowance may arise either on an assessee claiming tax relief in respect of an ineligible asset and getting away with it or on his availing of the concession and continuing to enjoy it without fulfilling all the prescribed conditions. This may be possible by legal subterfuge or through giving incomplete or misleading information to the assessing authority. In none of the cases of the selected sample for this study, for which information was furnished by the respective assessing officers, was any penal action reported for furnishing false or inaccurate particulars in respect of a claim for investment allowance. However, on the data furnished by the assessees, a number of claims for investment allowance were found by the assessing authorities to be inadmissible, partly or wholly, as indicated in the first three paragraphs of this chapter. As in the case of audit objections, a large majority of claims disallowed by the assessing officers on their own were claims in which the prescribed conditions were indisputably not fulfilled properly and the claims were patently untenable. Only in respect of a few of the disallowances, there could be an honest difference of opinion necessitating the thrashing out of the matter by the appellate authorities. There was some public criticism about the provisions of section 32A being complicated and cumbersome. Some of the assessing officers echoed this criticism by saying that such incentives tend to shift the focus of departmental energies from tax investigation to tax litigation. All the same, it is evident that most of the post-assessment work (appellate or corrective) thrown up by section 32A, was a direct result of inadequate scrutiny of the claims for investment allowance at the initial assessment stage.

A condition precedent for obtaining a deduction under section 32A was that the particulars prescribed in this behalf were furnished by the assessee in respect of the ship, aircraft, machinery or plant. However, the "prescribed particulars for depreciation and investment allowance" vide Rule 5AA of the Income Tax Rules, 1962 were patently inadequate to help decide whether the preferred claim for investment allowance fulfilled all the statutory requirements. The assessee was merely required to indicate the rate and amount of the investment allowance claimed and the investment allowance allowed on existing assets in an earlier year. He was not required to state whether the asset acquired was new or second-hand and if second-hand, why it was claimed as "new" for the purpose of section 32A; the date(s) of its installation and its being first put to use; the amount of reserve created; whether during the previous year there had been any utilisation of the investment allowance reserve created earlier and if the answer was in the affirmative, for what purpose, etc. All this information was left to be furnished *suo moto* by the assessee or to be gathered by the assessing officer. It is, therefore, no surprise that in the rush of assessment work, one or the other relevant information remained to be gathered or failed to attract due notice of the assessing authority and instances of incorrect deduction allowed under section 32A come to notice year after year. The new section 32AB has its own conditions for obtaining and retaining the tax advantage available thereunder.

It is desirable that simultaneously with the introduction of a new incentive as its subsequent modification, the statutory form of return of income and its prescribed accompaniments are reviewed closely in order that necessary amendments are made therein to clearly bring out how the prescribed conditions for availing of the incentive are fulfilled. Before the ITO can grant relief, there must be clear data on the assessment record sufficient to enable him to consider whether the relief should be granted[23]. Under the new concept of assessment by acceptance of all returns without any prior scrutiny, this becomes all the more necessary. Furnishing of the requisite data in a prescribed form along with the return will assist the assessees in preferring rightful claims and, if a case is subsequently selected for scrutiny by the department, enable it to satisfy itself as to the correctness of the claim without inconveniencing the assessee by calling for the missing details. As stipulated in section 44AB read with rule 60, every person carrying on a business or profession wlth gross receipts etc., above the prescribed minimum has to file an audit report in Form No. 3CD (for business)/No. 3CE (for profession) duly signed and verified by an accountant. It will be in order to also amend Forms No. 3CD and 3CE so as to clearly indicate the amounts of deduction to which the assessee may be entitled on account of the various tax incentives and how the prescribed conditions for grant of each incentive are fulfilled. So far as section 32AB is concerned, the prescribed audit report (Rule 5AB/Form No. 32AA) which is to accompany the return of income, gives the requisite information.

Ready availability of the requisite statistical data is essential if tax policy and administration are to keep pace with a rapidly changing environment. The absence thereof is nowhere felt more keenly than in the field of tax incentives. Simultaneously with the enactment of a tax incentive, an information system to ensure its correct and speedy accounting and feedback of the essential data to enable proper monitoring and evaluation thereof should be introduced. The Long Term Fiscal Policy announced in December, 1985 has promised a viable tax information system. Data thus available may be supplemented with in-depth analysis and case studies from time to time.

It is seen that the C&AG Reports for the years 1974-75 to 1978-79 indicated the number of assessees availing of some of the tax incentives and the amounts of relief allowed. However, this has been discontinued since 1979-80. As incentives constitute an important facet of tax policy and involve substantial expenditure of public revenue, Revenue Audit may consider reviving the practice of indicating in the annual reports the number of assessees availing of the various tax incentives and the amount of revenue forgone on their irrespective accounts. Indeed, so far as the major tax incentives are concerned, the relevant data could find place in the Union Government Annual Budget Papers as in the budgets of countries like the USA where tax expenditures are shown separately.

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27. CIT v. Kishnlal & Sons (Udyog) (P) Ltd. (1985) 154 *ITR* 735 (Cal). Also, ITO v. Raneegunje Coal Association Ltd. (1985) 14 *ITD* 313.
28. Anchor Pressing (P) Ltd. v. CIT (1986) 161 *ITR* 159 (SC).

7

The New "Funding" Scheme

Essential Features

Section 32AB (Investment deposit account) has been inserted in the Act with effect from April 1, 1987. It will apply in relation to the assessment year 1987-88 and subsequent assessment years.

The main features of this new incentive provision are given in Appendix IV. Essentially, it entitles an assessee carrying on a business or profession to reduce his taxable income by the sum utilised by him for purchase of new plant and machinery and/or deposited with the Industrial Development Bank of India for such utilisation. The maximum deduction available is 20 per cent of the profits of the eligible business or profession. It is hoped that by this scheme along with the proposed enhanced depreciation rates, the retained earnings and internal resources generation of the companies will improve. The new scheme is expected to be neutral as between small and large companies; insulate the timing of investment decisions from tax considerations and curb conspicuous extravagance in the corporate sector. It is also expected to help neutralise the bias in favour of borrowing and needless capacity creation.[1]

Points of General Importance

Investment allowance was initially meant for 'priority industries'. Its eligibility criterion became diluted over the years. Investment deposit account starts on a different note. It is qualitatively different from the investment allowance. Many businesses which have all the time been outside the purview of investment allowance, may avail of the new incentive, e.g., processing industries and cold storage plants. While leasing or hiring of machinery or plant is specifically included in its ambit, entitlement of hotels to it will not be questioned on the ground that a hotel is not an industrial undertaking engaged in any manufacture or production. Even professionals will benefit from it.

A critique of section 32AB is outside the scope of this study. However, to the extent the phraseology of section 32AB is drawn from section 32A, working of the new incentive may present similar problems. The more important of them are dealt with in Chapter 6. The recommendations made therein which are of interest from the viewpoint of section 32AB are listed in the section on "Problems of Implementation" in the Summary of Observations and Recommendations given in Chapter 8. The following paragraphs bring out a few points of general importance pertinent to section 32AB in the light of experience with the development rebate and investment allowance.

The use of the expression "eligible business or profession" implies that for getting tax benefit under section 32AB, the deposit in the Development Bank or the purchase of any new ship, plant, etc., should be out of income from the eligible business or profession and this is clearly spelt out in the executive instructions.[2] However, this expression is used in sub-section (1) of section 32AB only to prescribe the monetary limit to which the deduction is to be restricted, viz., 20 per cent of the profit of the eligible business or profession. It is, therefore, possible to argue that provided an assessee has an eligible business or profession, the actual deposits etc., upto the prescribed limit may be out of any income chargeable to tax under the head "profits and gains of business or profession", be it from an eligible business or profession or otherwise. Executive instructions cannot travel beyond the statutory provision. This also raises a question whether an assessee may avail of section 32AB if the "profits and gains of business or profession" included in his total income for a particular assessment year work out to a loss figure although the eligible business or profession by itself shows a profit for the year. Further, clause 9 of the Investment Deposit Account Scheme, 1986 (IDAS '86) makes no mention of eligible business or profession and may also be read to mean that the requirements of section 32AB may be satisfied if the amounts are utilised for the purposes of any business or profession carried on by an assessee irrespective of whether or not it is an eligible business or profession. That presumably is not the intention. Therefore, to avoid all controversy in cases of assessees carrying on both eligible and ineligible businesses, it may be desirable to amend sub-section (1) of section 32AB or at least clause 9 of the IDAS '86 to bring out clearly that the deposits have to be out of the profits of an "eligible business or profession" and the utilisations, whether initially or after withdrawals from the deposit account, have also to be for the specified purpose.

In 1980, while recommending discontinuance of investment allowance, the Expert Committe on Tax Measures to Promote Employment said, "A tax concession linked to the value of plant and machinery has a *prima facie* bias in favour of capital-intensive technology. Given the rising costs, direct and indirect, of employing labour, the preference for mechanisation is already strong. Even if fiscal measures may not succeed fully in neutralising the preference for capital-intensive teehnology, it would be inadvisable to strengthen these biases further."[3] The bias for capital-intensive technology remains under section 32AB.

It would seem that under the existing scheme of section 32AB, once an assessee obtains a tax deduction with reference to the profits arising from the use of an asset in an eligible business, there is no obligation on his part to similarly employ the asset in subsequent years for a prescribed length of time. For instance, with the possession of an asset reverting to lessor on determination of a five-year eligible lease he is free to utilise it in an ineligible business, leasing or otherwise. To avoid misuse of the scheme, it may be apropriate to amend sub-section (7) of section 32AB to provide that besides sale or transfer, utilisation of an asset acquired in accordance with the scheme for an ineligible business at any time before the expiry of eight years, will entail the adverse tax consequences spelt out therein.

Generally, a deduction by way of an income tax incentive is limited to a specified percentage of the total income (or gross total income) computed for the purposes of the Act. Section 32AB makes an innovation. The maximum deduction permissible thereunder both for corporate and non-corporate assessees is 20 per cent of the profits and gains of the eligible business or profession. It is stipulated that the 'profits' of the eligible business or profession shall be as per audited profit and loss account prepared in accordance with the requirements of the Companies Act, 1956 increased by the aggregate of depreciation, and a few other specified items debited therein and decreased by the current year depreciation as provided under section 32(1) of the Act. And, where in respect of the eligible business or profession no separate accounts are maintained or are available, its profits shall be such amount which bears to the total profits of the business or profession of the assessee after allowing depreciation under section 32(1), the same proportion as the total sales, turnover or gross receipts of the eligible business or profession bear to the total sales, turnover or gross receipts of the business or profession carried on by the assessee.

Preparation of accounts as required by the Companies Act and their audit by a qualified accountant by every assessee seeking tax relief under section 32 AB goes beyond the requirements of section 44AA and 44AB of the Act. This will add to the compliance cost of many assessees including the professionals and non-corporate business assessees. Evidently, this is considered a small sacrifice by them to ensure uniformity in determining the 'profits' qualifying for deduction as also to reduce uncertainty about interpretation of this term.[4] However, the general impression is that notwithstanding the detailed requirements of the Companies Act, the quantum of profits reflected in the accounts kept for the purpose of that Act has hitherto lent itself more easily to 'adjustments' within the accounting policies followed by the company than its total income (or gross total income) computed by an assessing authority under the Act. Evidently, that position has now to change. This casts an added responsibility on the taxpayers and the accountancy profession in the matter of correct and complete preparation of accounts and returns of income. The innovation may be best viewed as a measure supporting the new approach of general acceptance of returns on trust without any prior official scrutiny.

The provision for determination of profits of the eligible business or profession in proportion to its sales, turnover or gross receipts if separate accounts for it are not maintained or are not available, weakens the compulsion for maintenance and production of separate accounts. It gives an undue advantage to a taxpaper with other established business or profession *vis-a-vis* another taxpayer having only one new eligible business or profession as a new business may initially suffer losses and take time to catch up with the profit rate of an established business or profession. Accordingly, the actual working of this provision needs to be closely watched.

The Central Government is empowered to omit any article or thing from the Eleventh Schedule list thus extending the area of eligibility for the new incentive [S. 32AB(8)] and also to restrict it after making such inquiry as it thinks fit, by specifying the class of assessees to be excluded from its operation [S. 32AB(9)]. *Prima facie,* it may be appropriate to withhold the benefits of the new incentive from those classes of assessees who are engaged in highly profitable lines, thus not meriting any special tax incentive or who are burdened with indisputably high idle capacity.

Section 32AB is a bold measure aimed at encouraging corporate savings. But, many legal and administrative aspects need attention to ensure its smooth working. Its actual operation should be closely monitored and evaluated in order that the tax expenditure entailed by it serves the national scheme of priorities.

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3. Government of India, Ministry of Finance, Department of Revenue: *Report of the Expert Committee on Tax Measures to Promote Employment* (January, 1980), p. 125, para 8.4.
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8

Summary of Conclusions and Recommendations

Introduction

Capital allowances in the form of accelerated depreciation or development rebate have been in operation in India with a brief interruption for almost forty years now. Along with tax holiday for new industrial undertakings, capital allowances were considered necessary to further industrialisation and capital formation especially in crucial areas.

For producers' goods and capital goods industries, Taxation Enquiry Commission (1953-54) recommended a new incentive termed 'development rebate' by way of reduction in computation of taxable income of a stipulated sum over and above the cost of new plant and machinery whether intended for replacement or for expansion by new or existing concerns.

Development rebate as an allowance in the computation of business income was introduced in 1955 in respect of new machinery or plant installed after March 31, 1954. It remained on the statute book for two decades. The principle of selectivity recommended by the Taxation Enquiry Commission for grant of development rebate was not followed except to the extent it may be said to have been applied by grant of the rebate at a higher rate to certain industries.

Following an unforeseen steep escalation of capital costs, investment allowance was introduced in April 1976 to facilitate investment in new plant and machinery in priority industries listed in the Ninth Schedule to the Income-tax Act, 1961. Like the erstwhile development rebate, the allowance admissible under section 32A of the Act was given over and above full recoupment of the cost of the asset through depreciation allowance and was available for new ships or aircraft installed or new machinery or plant installed upto March 31, 1987. Investment allowance is no making way for a new "funding scheme" enacted as section 32AB (investment deposit account) of the Act. During its operative period section 32A has seen a number of amendments.

The change of eligibility criterion from the manufacture of the Ninth Schedule Priority Goods to manufacture mainly of other than the Eleventh Śchedule low priority articles considerably enlarged the area of eligibility. Extensive pruning of the Eleventh Schedule list widened it still further. Raising of the aggregate value of machinery and plant installed for an industrial undertaking to be deemed small-scale and thus entitled to investment allowance irrespective of the line of manufacture or production also extended its scope.

A wide range of investment incentives is available to serve different purposes. In the nature of things, the choice of a tax incentive by a country and its exact shape depends upon the state of its economy, its tax system and its perception as to how the object in view may best be realised. Lately, there is a noticeable shift from high nominal rates of tax with generous allowances and reliefs to fewer tax incentives with comparatively low tax levels.

Investment Allowance and Growth of Investment

In order to isolate the impact of investment allowance on growth of corporate investment in India, a model of the investment decision-making process at the company level has been constructed on the basis of certain plausible assumptions. This has been done in an integrated framework of corporate behavior covering its three major aspects, namely, investment, financial structure and dividend distribution.

Investment is determined by cost factors and the expected demand for output. Taxes are assumed to affect investment by altering the rental cost of capital or the net minimum required rate of return. Using the cost effectiveness criterion, a quantitative relationship showing the dependence of cost of capital on a few variables (factors) was derived which incorporates the major tax elements including the investment allowance. The cost of capital thus quantified was employed as a variable in the investment function. This relationship was used to estimate the impact of investment allowance. The parameters of the model were estimated using time series sample data relating to Indian companies published by the Reserve Bank of India. The empirical results show that both the cost as well the output demand factors play significant roles in corporate investment decisions.

The estimated model was used for simulating the effect of development/investment allowance by substituting a hypothetical rental cost variable computed without the development rebate/ investment allowance. The impact of the incentive was interpreted as the difference between the actual and the hypothetical investment in each year. The government sector was left out while simulating the model as the rental cost variable may not be the decisive factor for investment in the case of government companies.

The results of the simulation exercise show that investment induced by the incentive, on the average, was less than 2 per cent. In absolute terms the effect is not negligible, particularly, since the introduction of investment allowance, the inducement effect was more pronounced. The inducement effect of the investment allowance was markedly higher than that of its predecessor, viz., the development rebate.

In percentage terms, during the years 1960-61 through 1982-83, the inducement effect of development rebate/investment allowance was marginal both for public limited and private companies. While for public limited companies, it ranged between 0.9 per cent and 2.7 per cent of the investment which would otherwise have taken place, for private companies it generally hovered around 1 per cent. For public limited companies, the investment allowance inducement was from 1.5 to 2.4 per cent (1977-83) as against 0.9 to 2.7 per cent for development rebate (1960-61 to 1974-75). In absolute terms, the year 1982-83 saw the peak of the inducement effect of the investment allowance, viz., Rs. 58.64 crore and Rs. 12.44 crore for public limited and private limited companies respectively. These are rough approximations estimated with the help of the model and should be taken to indicate only the broad order of the dimensions involved rather than the exact quantum.

Revenue Forgone

Based on the relationships derived from the model, corporation tax forgone on account of development rebate/investment allowance appears to have ranged from Rs. 24.7 crore in 1960-61 to Rs 285.5 crore in 1982-83 (accounting year). For the years 1980-81, 1981-82 and 1982-83 the percentage of corporation tax forgone was 13.3, 11.1 and 13.0 respectively of the tax actually realised.

Government companies accounted for 46.1 per cent of the revenue forgone for the year 1982-83 because of investment allowance. After taking into account the estimated additional tax revenue of Rs 32 crore owing to the inducement effect of the incentive, net tax forgone in favour of non-government companies for the year 1982-83 works out to Rs 122 crore. For the companies falling in the selected sample, the amount of deduction claimed during the entire period 1977-78 to 1982-83 under section 32A was about 46 per cent of the total deductions claimed under section 32A and chapter VIA deductions taken together. The other major tax deduction was on account of tax holiday under section 80J/80I of the Act.

While for government companies, tax holiday is the major tax benefit, for other companies the investment allowance accounts for 67 per cent of the total tax deductions. For non-government companies, the importance of investment allowance had been growing over the years.

As was to be expected, the major portion of claims for investment allowance was made by large companies. Companies with paid-up capital of Rs 1 crore to Rs 5 crore and Rs 10 to Rs 15 crore accounted for 30 per cent and 26.5 per cent respectively of the total deductions claimed by the sample companies. While companies with total income of over Rs 150 crore during the study period claimed 54.1 per cent of the investment allowance deductions, loss-making companies accounted for 25.6 per cent.

Industry-wise: The share of engineering industries in the aggregate claims for investment allowance deduction was over 46 per cent. Other industries making substantial claims were paper, chemicals and pharmaceuticals, textiles and cement.

Area-wise: Over 51 per cent of the investment alllowance was claimed by industrial undertakings located in backward areas.

Investment Allowance and Corporate Capital Structure

An attempt was also made to measure the impact of investment allowance on the capital financial pattern with the help of a sub-model which formed part of the investment model.

Investment allowance may be expected to encourage profit retention *vis-a-vis* dividend distribution. This is because of the prescribed requirement to transfer 75 per cent of the investment allowance actually allowed to the statutory Investment Allowance Reserve Account.

The study did not find empirical evidence to show that the investment allowance led to additional retention of profits. The companies would seem to have switched funds which would otherwise have gone to other reserve accounts to the statutory Investment Allowance Reserve.

As compared with debt financing, the investment allowance makes equity financing more attractive. This effect is felt on account of the attendant tax rate reduction and not so much through the creation of the statutory Investment Allowance Reserve.

Inflation and Investment Allowance

One of the primary objectives of introducing the investment allowance after the abolition of development rebate was to compensate for the inadequacy of depreciation allowance due to inflation. An attempt has been made to quantify the required compensation in order to see how far the rate of investment allowance has compensated for inflation.

Given the depreciation allowances ranging from 15 to 35 per cent during the period under reference, capital allowance required to compensate for inflation is estimated at 13 to 16 per cent. Thus, the investment allowance at the rate of 25 per cent of the cost of machinery more than compensated for the erosion in the value of depreciation deduction through inflation. During the four-year period 1978-89 to 1981-82 the price rise was steeper than in earlier years. Even so the investment allowance more than compensated for inflation.

Problems of Implementation

A sample study of the assessments involving claims for investment allowance showed that in over 25 per cent of the assessments some disallowance was made. However, the amount disallowed was only about 2 per cent of the total claims. Over the years, sections 32, 33, 43 and 80J have been the subject matter of considerable litigation and judicial pronouncements thereon have assisted in interpreting the provisions of section 32A, thus reducing disputes on its account.

About 69 per cent of the disallowances were on two counts viz., (*i*) that, the assets were ineligible for the allowance (53 per cent) and (*ii*) that, the government subsidy against capital investment was not taken into account in determining the actual cost of the machinery or plant for working out the allowance (16 per cent).

For an assessee engaged in the operation of ships or aircraft, eligibility to investment allowance was restricted to the initial investment in the ship or aircraft and did not extend to renewals, replacements and additions. The scheme of the new section 32AB avoids this anomaly.

Through statutory amendments and judicial pronouncements, the scope of what was originally intended to be a special incentive for industries considered important from the point of view of national development was widened considerably. However large-scale manufacturers of some articles of daily mass, commercial and industrial use remained outside its ambit on account of the said articles being listed in the Eleventh Schedule. Experience shows that selectivity in the operation of such an incentive is very difficult to operate in practice through provisions like investment allowance and the Eleventh Schedule.

To determine whether a particular activity amounts to 'manufacture or production' or merely constitutes 'processing' has sometimes presented difficulty. This question will continue to crop up under section 32AB and other provisions of the Act, which employ the expression 'manufacture or production.' To avoid litigation, it may be desirable to clarify whether for purposes of section 32AB(2) (*i*) (*a*), "processing" comes within the ambit of the expression "manufacture or production".

It would be appropriate to insert a definition of 'industrial undertaking' in section 2 of the Income-tax Act, 1961 which defines various terms and expressions commonly used in the Act.

It may be appropriate to insert in section 43 of the Act provisions stating the circumstances in which a hirer/lessee may be deemed to be owner of an asset, as also when the asset may be deemed to be wholly used for purposes of the lessor's business.

To prevent abuse and artificial manipulation of profits which is possible if the parties to a hire-purchase/lease are subject to common control and the transaction is not done at arm's length, "transfer pricing" provisions may be incorporated.

It would be desirable to obtain an early authoritative court ruling as to whether government subsidies granted against capital investment are to be taken into account in determining 'actual cost' of assets under section 43(1) of the Act, and if the answer is in the affirmative, to provide for corrective action in the event of their belated receipt. In the alternative the controversy may be set at rest through a clarificatory amendment.

It may be desirable to obtain the Supreme Court's rulings early in respect of disputes whether conversion of a sole proprietory concern into a partnership or allotment of assets to co-owners on partition of a Hindu Undivided Family amounts to a "transfer". In the alternative, the relevant provision in section 32AB may be amended to clearly spell out the correct acceptable position.

If the assessee ceases to exist except by amalgamation or succession referred to in sub-sections (6) and (7) of section 32A, the investment allowance reserve cannot obviously be utilised in accordance with the scheme of section 32A, leaving no scope for application of section 155(4A) (b) for withdrawal of the allowance. Similar situations may arise under section 32AB and should be provided for in the Investment Deposit Account Scheme, 1986.

The court decision that for set-off of the brought forward development rebate the business for which it was originally allowed need not be in existence in the year of set-off, is likely to be followed in investment allowance cases as well.

With the repeal of the investment allowance, there is no need to go into the following propositions for its modification, viz., that (*i*) in the absence of adequate profits, it may be allowed to be carried forward indefinitely instead of only for eight years, (*ii*) in the matter of set-off it should be given precedence over the brought forward depreciation which can be carried forward indefinitely, and (*iii*) in the event of competition between set-off of brought forward loss (also subject to 8 years' time limit) and brought forward investment allowance an earlier year's loss or investment allowance should get precedence. These questions do not arise under the new funding provision of section 32AB which follows a different pattern.

The statutory audit organisation of the Comptroller and Auditor General and the internal audit set-up of the Department have pointed out to a number of mistakes on the part of the assessing authorities in acceptance of the claims for investment allowance. As to C & AG annual audit reports, upto 1984-85, objections have been raised in cases of 83 assessees (114 assessments) involving excessive investment allowance amounting to Rs 370.71 lakh resulting in short levy of tax of Rs 208.18 lakh. Objections pointing out excessive investment allowance of Rs 240.90 lakh in the case of 49 assessees were on three counts: (*a*) incentive allowed on ineligible assets (Rs 154.75 lakh), (*b*) government subsidies not taken into account in determining 'actual cost' of the assets (Rs 28.14 lakh) and (*c*) the industrial undertaking not engaged in manufacture or production (Rs 58.01 lakh). Similar mistakes have been observed by Internal Audit. Only a few of the audit objections involved questions of interpretation. Most of the objections point to administrative lapses in giving due effect to the statutory requirements of section 32A.

In none of the cases of the sample selected for this study, for which information was furnished by the assessing officers, was any penal action reported for furnishing false or inaccurate particulars in respect of a claim for investment allowance. However, on the data furnished by the assessees, a number of claims for investment allowance were found by the assessing authorities to be inadmissible. As in the case of audit objections, a large number of the claims found inadmissible by assessing officers on their own were claims in which the prescribed conditions were indisputably not fulfilled properly and the claims were patently untenable.

Most of the post-assessment work (appellate or corrective) thrown up by section 32A was the direct result of an inadequate scrutiny of the claims for investment allowance at the initial assessment stage.

A condition precedent for obtaining a deduction under section 32A was that the particulars prescribed in this behalf were furnished by the assessee. However, the particulars prescribed under Rule 5AA of the Income-tax Rules, 1962 were patently inadequate to help decide whether the preferred claim for investment allowance fulfilled all the statutory requirements. Much of the requisite information was left to be furnished *suo moto* by the assessee or to be gathered by the assessing officer. It is, therefore, no surprise that in the rush of assessment work, one or the other relevant information remained to be gathered or failed to attract due notice of the assessing authority and instances of incorrect deduction allowed under section 32A come to notice year after year.

It is desirable that simultaneously with the introduction of a new incentive or its subsequent modification, the statutory form of return of income and its prescribed accompaniments are reviewed closely in order that necessary amendments are made therein to clearly bring out how the prescribed conditions for availing of the incentive are fulfilled. Under the new concept of assessment by acceptance of all returns without any prior scrutiny, this becomes all the more necessary. It will be in order to also amend the audit report forms No. 3CD and 3CE prescribed under section 44/rule 6G for persons carrying on a business or profession with gross receipts etc. above the prescribed minimum so as to clearly indicate the amounts of deduction to which the assessee may be entitled on account of the various tax incentives and how the prescribed conditions for grant of each incentive are fulfilled. So far as section 32AB is concerned, the prescribed audit report (Rule 5AB/Form No. 3AA) which is to accompany the pattern of income, gives the requisite information.

Simultaneously with the enactment of a tax incentive, an information system to ensure its correct and speedy accounting and feedback of the essential data to enable a proper monitoring and evaluation thereof should be introduced.

The Comptroller and Auditor General may consider reviving the practice of indicating in the annual reports the number of assessees availing of the various tax incentives and the amount of revenue forgone on their respective accounts. Indeed, so far as the major tax incentives are concerned, the relevant data should find place in the Union Government Annual Budget Papers as in the budgets of countries like the USA where "tax expenditures" are shown separately.

The New "Funding" Scheme

To the extent the phraseology of section 32AB is drawn from section 32A, working of the incentive may present similar problems. The more important of them are dealt with in Chapter 6. The recommendations made therein which are of interest from the viewpoint of section 32AB are contained in the section on "Problems of Implementation" in that chapter.

It may be desirable to amend sub-section (1) of section 32AB or at least clause 9 of the Incentive Deposit Account Scheme, 1986 (IDAS '86) to bring out clearly that the deposits have to be out of the profits of an "eligible business or profession" and the utilisations, whether initially or after withdrawals from the deposit account, have also to be for the specified purposes.

Investment allowance was criticised for strengthening the bias for capital intensive technology. That bias remains under section 32AB.

It may be appropriate to amend sub-section (7) of section 32AB to provide that besides sale or transfer, utilisation of an asset acquired in accordance with the scheme for an ineligible business at any time before the expiry of eight years, will entail the adverse tax consequences spelt out therein.

The provision for determination of profits of the eligible business or profession in proportion to its turnover, etc., if separate accounts for it are not maintained or are not available, gives an undue advantage to a taxpayer with other established business/profession *vis-a-vis* another taxpayer having only one new eligible business/profession, as a new eligible business/profession may initially suffer losses and take time to catch up with the profit rate of an established business/profession. Accordingly, the actual working of this provision needs to be closely watched.

Prima facie, it may be appropriate to withhold the benefits of the new incentive from those classes of assessees who are engaged in highly profitable lines or are burdened with indisputably high idle capacity.

Section 32AB is a bold measure aimed at encouraging corporate savings. But, many legal and administrative aspects need to be attended to, in order to ensure its smooth working. Its actual operation should also be closely monitored and evaluated in order that the tax expenditure entailed by it serves the national scheme of priorities.

TECHNICAL NOTE

THE MODEL AND THE ESTIMATION

1. Derivation of the Rental Cost of Capital

Following Jorgenson (1963), Auerbach (1983), Nakamura and Nakamura (1982), Hulten (1984), Gupta and Gupta (1985), and others, taxes on company income are assumed to affect investment by altering the notions regarding the rental cost of capital, 'c', which is the minimum expected net rate of return. The notions about the level of 'c' depend upon factors such as equipment prices, debt-equity ratio, dividend pay-out ratio, profitability as well as various tax provisions. Since the focus of this study is to quantify the impact of some of the tax provisions, it is necessary to depict in detail exactly how these tax provisions affect the rental cost of capital. Let us denote the various elements of the rental cost by the following symbols:

q=equipment price,
Y=gross cash flow,
A=proportion of dividends D in Y,
B=proportion of debt in total capital,
d=real rate of depreciation,
r=shareholders' net discount rate,
i=rate of interest, and
p=rate of inflation.

Besides these, the tax elements considered are:

u=corporate income tax rate (including surcharges),
v=average rate of personal income tax on dividend incomes,
d'=rate of tax depreciation,

k=rate of investment allowance/development rebate, and,

a=proportion of k to be retained in order to claim the investment allowance.

The condition for the cost effectiveness of any investment item priced at q would be

$$(1-B)\, q=R-TC-TP \tag{1}$$

where
$$R=c\int e^{-(r+d)t}\, dt-Bqi\int e^{(r+p)t} dt,$$
$$TC=[R-qd'\int e^{-(r+d'+p)t}.dt-qk]u,$$
$$TP=[R-TC-akq]Av$$

R represents the minimum total expected profits which are net of the present value of the interest payments for given proportion of debt. TC represents the total tax liability due to corporation taxes along with the depreciation allowance and investment allowance. And TP represents the tax liability due to personal income taxation for given dividend pay-out ratio (long-run). Solving (1) for the rental cost, c,

$$c=q(r+d)\left\{\frac{1-B}{(1-u)(1-Av)}-\frac{zu}{(1-u)}+\frac{Bi}{(r+p)}\right\} \tag{2}$$

where $z=[d'/(d'+r+p)]$. + k

2. The Investment Model

Briefly, the investment function is derived as follows: Following the celebrated study of Jorgenson (1963), as well as various other studies such as Eisner (1963), Anderson (1964), Eisner and Nadiri (1968), Coen (1969), Auerbach (1983), first gross fixed investment I_t is defined as the change in the capital stock K_t,

$$I_t=K_t-(I-d)K_{t-1} \tag{3}$$

where d is the rate or depreciation. On the rate of investment,

$$I_t/K_{t-1}=K_t/K_{t-1}-(I-d) \tag{4}$$

Second, following the neoclassical approach it is assumed that companies first arrive at the level of capital stock 'K^*_t' required for meeting the expected demand for the output. Because of various delays, such as due to placement of orders for the equipment, installation. phasing and so on, it takes some time to realise the planned change in the capital stock. And these capital stock growth plans are also prone to revisions, depending upon the revised expectations with regard to the output demand. The adjustment of actual change in the capital stock to its desired change is assumed to be such that,

$$K_t/K_{t-1}=(K_t^*/K_{t-1})^g$$

where $$o<g\leqslant 1. \tag{5}$$

Third, assuming output level Q_t is guided by a CES type of production function, and that the objective of the companies is maximisation of profits over time, the first order condition that the marginal productivity of capital equals the ratio of the rental cost of capital and the price of the output, yields a behavioural function for the determination of the desired stock of capital as

$$K_t^*=A^s\,(p/c)^s{}_t\;Q^*{}_t \tag{6}$$

where p denotes price per unit of output Q, c denotes the rental cost per unit of capital, and s denotes the elasticity of substitution between capital and labour.

Substituting (6) in (5), the rate of change in the capital stock is obtained as

$$K_t/K_{t-1}=A^{gs}\,(p/c)^{gs}\,Q^{*g}\;K^{-g}{}_{t-1} \tag{7}$$

The parameters s and g denote the elasticity of substitution and the lag parameter respectively.

3. The Dividend Behaviour Model

Following the literature on corporate dividend behaviour, the most plausible and empirically convenient hypothesis regarding the dividends appears to be that the long-run or 'desired' dividends, D^* are determined by

$$D^*=A_o\,Y(1-u')\,x^s 1 \tag{8}$$

where x represents the relative opportunity tax cost of paying one rupee of net dividends in terms of net retentions and u' is the effective rate of tax on corporate income (before dividend payments). In other words, if P_d denotes the 'tax price' of D, and P_r the tax price of retentions, $x = P_r/P_d$. For example, under the current tax system $P_r = 1/(1-u')$ and $P_d = 1/1-u')(1-v)$ so that $x = (1-v')$.

To quantify impact of the investment allowance reserve condition, a component needs to be added for x, so that the D^* function would be

$$D^* = A_o\, Y(1-u')\,(1-v)^{s_1} \left(\frac{1-u}{1-u^e} \right)^{s_2} \tag{9}$$

where u^e is the likely effective corporation income tax rate in the absence of investment allowance provision. This takes care of the extra cost of dividend payments. The response coefficient for the 'cost' due to investment allowance is assumed to be not necessarily equivalent to that of $(1-v)$ because the nature of the obligation to retain profits is different.

The actual dividends, D, after taking into account the partial adjustment process, are determined as

$$D_t = A_o\, Y^1{}_t(1-u')^1\,(1-v)^{ls_1}\left(\frac{1-u}{1-u^e}\right)^{ls_2} D_{t-1}^{e-1} \tag{10}$$

where $o < 1 < 1$

4. The Debt Equity Model

With regard to B, the gearing ratio, a simple hypothesis is that the long-run marginal rate of substitution between debt and equity is a function of their relative costs. Thus the debt-equity ratio

$$\left[\frac{B}{1-B_t}\right] = A_1 \left[\frac{1-i/(r+p)}{(1-u)\,(1-Av)}\right]^{ms_3} \left[\frac{B}{1-B_{t-1}}\right]^{1-m} \tag{11}$$

Equations (10) and (11) indicate how investment allowance and other tax provisions affect A and B, which can be plugged into equation (7) to compute the rental cost of capital c.

APPENDIX I

THE NINTH SCHEDULE[1]

[SEE SECTION 32(1) (*vi*)[2] [***]]

List of Articles or Things

1. Iron and Steel (metal)
2. Non-ferrous metals
3. Ferro-alloys and special steels
4. Steel castings and forgings and alloy, malleable and S.G. iron castings[3]
5. Thermal and hydro-power generation equipment
6. Transformers and switch gears
7. Electric motors
8. Industrial and agricultural machinery
9. Earth-moving machinery
10. Machine tools
11. Fertilisers, namely, ammonium sulphate, ammonium sulphate nitrate (double salt), ammonium nitrate, calcium ammonium nitrate (nitrolime stone), ammonium chloride, superphosphate, urea and complex fertilisers of synthetic origin containing both nitrogen and phosphorus, such as ammonium phosphates, ammonium sulphate phosphate and ammonium nitrophosphate.
12. Soda ash
13. Caustic soda
14. Commercial vehicles
15. Ships
16. Aircraft
17. Tyres and tubes
18. Paper, pulp and newsprint
19. Sugar
20. Vegetable oils

21. Textiles (including those dyed, printed or otherwise processed) made wholly or mainly of cotton, including cotton yarn, hosiery and rope
22. Textiles (including those dyed, printed or otherwise processed) made wholly or mainly of jute, including jute twine and jute rope
23. Cement and refractories
24. Pesticides[4]
25. Carbon and graphite products[5]
26. Inorganic heavy chemicals (other than soda ash and caustic soda mentioned in items 12 and 13, respectively)
27. Organic heavy chemicals
28. Synthetic rubber and rubber chemicals (including carbon black)
29. Industrial explosives
30. Basic drugs
31. Industrial sewing machines
32. Finished leather and leather goods (including footwear made wholly or mainly of leather)
33. Electronic components and raw materials; computers and peripherals; communication equipment; process control, instrumentation, industrial and professional grade electronic equipment[6]

[*Explanation*: The article specified in item 24 does not include any formulation of pesticides unless the formulation is prepared by the manufacturer or producer of the basic pesticidal chemicals from which such formulation has been prepared][7]

REFERENCES TO APPENDIX I

1. Inserted by the Direct Taxes (Amendment) Act, 1974, w.e.f. 1-4-1975.
2. "and section 80M (1) (*a*) (*i*)" omitted by the Finance Act, 1984, w.e.f. 1-4-1985 which expression was earlier substituted for "section 32A(2) (*b*) (*ii*)" by the Finance (No. 2) Act, 1977, w.e.f. 1-4-1978, which expression was inserted by the Finance Act, 1976, w.e.f. 1-4-1976.

3. Substituted for "Steel castings and forgings and malleable iron and steel castings" by the Finance Act, 1976, w.e.f. 1-4-1976.
4. Inserted by the Finance Act, 1975, w.e.f. 1-4-1976.
5. Inserted by the Finance Act, 1976, w.e.f. 1-4-1976.
6. Inserted by the Finance Act, 1981, w.e.f. 1-4-1982.
7. Inserted by the Finance Act, 1975, w.e.f. 1-4-1976.

APPENDIX II

THE ELEVENTH SCHEDULE[1]

[SEE SECTION 32A], [SECTION 32AB,][2] [SECTION 80CC (3) (*a*) (*i*), SECTION 80-I(*2*)][3] and [SECTION 80J(*4*)]][4]

List of Articles or Things

1. Beer, wine and other alcoholic spirits
2. Tobacco and tobacco preparations, such as, cigars and cheroots, cigarettes, biris, smoking mixtures for pipes and cigarettes, chewing tobacco and snuff
3. Cosmetics and toilet preparations
4. Toothpaste, dental cream, tooth powder and soap
5. Aerated waters in the manufacture of which blended flavouring concentrates in any form are used.
6. Confectionery and chocolates
7. Gramophones, including record-players, and gramophone records
8. [***][5]
9. Cinematograph films and projectors
10. Photographic apparatus and goods

11-21. [***][6]

22. Office machines and apparatus such as typewriters, calculating machines, cash registering machines, cheque writing machines, intercom machines and teleprinters [*Explanation*: The expression "office machines and apparatus" includes all machines and apparatus used in offices, shops, factories, workshops, educational institutions, railway stations, hotels and restaurants for doing office work, for data processing and for transmission and reception of messages.]

23. Steel furniture, whether made partly or wholly of steel
24. Safes, strong boxes, cash and deed boxes and strong room doors.
25. Latex foam sponge and polyurethane foam
26. [***][7]
27. Crown corks, or other fittings of cork, rubber, polyethylene or any other material
28. Pilfer-proof caps for packaging or other fittings of cork, rubber, polyethylene or any other material
29. [***][8].

REFERENCES TO APPENDIX II

1. Inserted by the Finance (No. 2) Act, 1977, w.e.f. 1-4-1978.
2. Shall be inserted by the Finance Act, 1986, w.e.f. 1-4-1987.
3. Inserted by the Finance Act, 1981, w.e.f. 1-4-1981.
4. Inserted by the Finance Act, 1979, w.e.f. 1-4-1979.
5. Omitted by the Finance Act, 1981, w.e.f. 1-4-1982. Prior to omission of item 8, it read as under:
   "Broadcast television receiver sets; radios (including transistor sets); radiograms and tape recorders (including cassette recorders and tape decks)."
6. Omitted by the Finance Act, 1981, w.e.f. 1-4-1982. Prior to omission of items 11 to 21 they read as under:
   "11. Electric fans
   12. Domestic electrical appliances, not falling under any other item in this list.
   [*Explanation*: "Domestic electrical appliances" means electrical appliances normally used in the household and similar appliances used in places, such as, hotels, restaurants, hostels, offices, educational institutions and hospitals.]
   13. Household furniture, utensils, crockery and cutlery not falling under any other item in this list
   14. Pressure cookers
   15. Vacuum flasks and other vacuum vessels
   16. Tableware and sanitaryware
   17. Glass and glassware
   18. Chinaware and porcelainware
   19. Mosaic tiles and glazed tiles
   20. Organic-surface active agents: surface active preparations and washing preparations whether or not containing soap.
   21. Synthetic detergents."

7. Omitted by the Finance Act, 1981, w.e.f. 1-4-1982. Prior to omission of item 26, it read as under:
   "Pigments, colours, paints, enamels, varnishes, blacks and cellulose lacquers."
8. Omitted by the Finance Act, 1981, w.e.f. 1-4-1982. Prior to omission of item 29, it read as under:
   "Amplifiers or any other apparatus used for addressing the public".

APPENDIX III

INVESTMENT ALLOWANCE AND INVESTMENT TAX CREDIT IN OTHER COUNTRIES

Australia[1]

Investment allowance (18-40 per cent for capital expenditure exceeding A $ 500) is availabie in respect of "eligible property" or an eligible Australian ship which was ordered or the construction of which was commenced on or after January 1, 1976 and before July 1, 1985 and which is first used or is installed ready for use before July 1, 1987. Basically, the "eligible property" is new "plant or articles" as defined for purposes of depreciation allowances with certain specific exclusions, e.g., furniture and furnishings, cars, small commercial vehicles, tools and appliances of a kind ordinarily used for household purposes.

The eligible property must be acquired or constructed by the taxpayer company for its use wholly and exclusively in Australia for the purpose of producing assessable income. A leasing company is permitted investment allowance in respect of eligible property leased for 4 years or more. However, should the lessor-owner and the lessee agree, the former may pass all or part of the allowance on to the lessee.

The investment allowance is denied if the property is disposed of within 12 months. Even where the property is disposed of after 12 months, investment allowance may be denied if it is found that the property was intended to be disposed of at the time of purchase. In well defined circumstances, the 12-month retention requirement is not applicable to the disposal of a plant as part of reorganisation of a public company. The investment allowance has been terminated for expenditure incurred under contracts entered into after June 30, 1985.

Canada[2]

Following a policy of fiscal restraint, the February 1986 federal budget announced several corporate tax changes proposed in a discussion paper "The Corporate Income Tax System: A Direction for Change" presented along with May 1985 budget. A phased-in reduction in statutory corporate tax rates over three years is accompanied by a phasing out of general investment tax credit over the following three years. However, investment tax credit for research and development and for investment in the Atlantic region is retained.

Federal Republic of Germany[3]

Under the Berlin Development Law, a company with a permanent establishment in West Berlin may claim a tax-free premium of 25 per cent of the cost of new (*a*) depreciable movable fixed assets used in West Berlin for at least 3 years for manufacturing purposes and (*b*) computer equipment acquired by both the manufacturing and service industries, provided most of their customers are outside West Berlin. The premium is 40 per cent in respect of the cost of new movable fixed assets used for research and development purposes. If the investment exceeds 500,000 DM the investment premium on the excess is limited to 30 per cent. Automobiles and items costing individually upto 800 DM are generally excluded.

The Investment Premium Law provides for tax-free premiums of 8.75 per cent, or 10 per cent of the cost of investment for new depreciable fixed assets in certain regions. It also provides for premiums varying from 7.5 per cent to 20 per cent of the cost of investment in new depreciable fixed assets used for research and development purposes and production and distribution of energy.

More than one of the above premiums for investment may not be claimed in respect of the same asset. However, this restriction does not apply to the premiums for investment in fixed assets for the production and distribution of energy. An additional investment premium available to the German iron and steel industry allows eligible taxpayers to claim a 10 per cent tax-free investment allowance for cost of acquisition or manufacture of new movable assets and the additional costs of previously acquired assets, provided the assets remain in the taxpayer's enterprise for at least 3 years. The new law applies to assets for which orders have been placed after July 30, 1981 and are acquired or manufactured, etc., before January 1, 1986, and to additional or extension work and advance payments made upto January 1, 1986, provided the assets are acquired or manufactured by January 1, 1989.

Japan[4]

Instead of claiming increased initial depreciation (30 per cent of the acquisition cost), a corporation filing a blue tax return may elect to claim a tax credit equivalent to 7 per cent of the cost of acquiring machinery or equipment for efficient use of energy. The tax credit must not exceed 20 per cent of the corporation's tax liability. A small or medium-sized enterprise may also elect for a similar tax credit in respect of the cost of certain equipment, e.g., "mechatronics" machinery such as industrial robot and numerical control manufacturing machinery, which helps to make its operations highly developed. A corporation filling a blue return is entitled to certain tax privileges. It order to file such a return, approval of the Director of the District Office is needed. The books of the corporation must be maintained in accordance with the official requirements. A corporation permitted to file a blue return must maintain its books of accounts, financial statements and supporting documents for a period of 7 years from the date of filing. For this purpose, micro-films may be used if certain conditions are satisfied.

Kenya[5]

As an incentive to investment outside the municipal areas of Nairobi and Mombasa, an investment allowance is available on the cost of buildings and new machinery used for manufacturing purposes which are constructed or installed outside these areas. This allowance is given in addition to any other allowances including the normal depreciation allowance to which the investor might by entitled. This is to relieve these two cities from strains on infrastructure and also to provide job opportunities to other town centres. Among the changes announced by the Minister of Finance in his annual budget speech, June 1985, was an increase from 20 per cent to 50 per cent of the investment, effective 1 January, 1986.

To boost tourism, an investment deduction is also available in respect of hotel buildings.

Republic of Korea[6]

As an alternative to special depreciation available for key industries, a domestic corporation is entitled to obtain investment tax credit against corporation tax for investment in business assets as follows:

(*a*) to commence a new business using such new technology as may be prescribed; or
investment by December 31, 1983 in special equipment by way of facilities for increasing productivity, energy saving, anti-pollution, prevention of industrial hazards and mine-safety;
6 per cent (10 per cent in the case of an investment using domestically produced materials) of the amount invested in the business assets.

(*b*) To operate in the machine or electronics industry: 3 per cent (5 per cent of the investments using domestically produced or manufactured materials) of the investment.

Temporary investment tax credit: When the Government considers it necessary to grant an investment tax credit in accordance with a change in the economic situation, temporary tax credit for investment equal to 6 per cent (10 per cent in the case of an investment using domestically produced or manufactured materials or machinery) of the investment amount is allowed.

Malaysia[7]

For an approved project undertaken by a company in expanding its existing business of manufacturing and processing, a reinvestment allowance of 25 per cent is available in respect of the capital expenditure incurred between January 1, 1979 and December 31, 1986 on (*a*) factory, (*b*) plant and machinery, or (*c*) other apparatus used in Malaysia. The dividends paid from the amount attributable to investment allowance are exempt from tax.

Under the Investment Incentives Act, investment tax credit is available to a non-pioneer company which incurs a fixed capital expenditure on an approved project, which may not be less than 25 per cent of the expenditure. This credit is increased by an additional 5 per cent of the expenditure on satisfaction of each of the three specified conditions, viz., (*a*) "location in less developed areas", (*b*) "Malaysian content", i.e., a specified percentage of the value of the manufactured products coming from Malaysian raw materials and/or parts and components manufactured in Malaysia, excluding wages, salaries and the domestic inputs and (*c*) for manufacture of 'priority products'. Any manufactured products or class of products can be declared priority products from time to time. The amount of the company's adjusted income equal to the credit is exempt from tax. Dividends paid out of the exempted profits are also exempt in the hands of the shareholders.

New Zealand[8]

The following investment allowances for new plant and machinery first used in a taxpayer company's business were available until March 31, 1983:

— regional investment allowance
— export investment allowance
— high priority activity investment allowance
— fishing investment allowance.

Investment allowance is still available upto 40 per cent of the cost of new plant and machinery purchased or leased under a qualifying lease pursuant to an approved industry development plan. The expenditure must be incurred prior to the specified terminal date. The allowance is given in the year in which the plant or machinery is first used. It is not recoverable on sale of the asset unless the sale takes place within twelve months of the date of purchase.

United Kingdom[9]

The primary incentive in the business tax system until 1984 was that of accelerated depreciation allowance known as 'capital allowance', which were particularly generous. Expenditure on plant and machinery qualified for 100 per cent allowance in the first year. This acceleration element is being phased out. The first year allowance of 100 per cent for plant and machinery was reduced under the 1984 budget in three stages to nil by 1986 and replaced by an annual writing down allowance of 25 per cent on the reducing balance method.

One of the consequences of the pre-1984 very generous system of allowances for machinery and plant was rapid development of equipment leasing. Banks and other financial institutions with taxable profits, bought equipment and leased it out to "tax-exhausted" companies. The banks were able to claim the capital allowances, and were able to shelter their other income from tax. A substantial part of that benefit was passed on to the company lessees in the form of reduced lease rentals. Between 10 and 20 per cent of all investment in manufacturing industry was being financed through leasing. The phasing out of the accelerated allowance is expected to affect the leasing industry. With little or no incentive to pass on, leasing will have less advantage than previously over borrowed funds. In consequence, the banks will have to make reserves for the deferred tax charges which can be expected to fall due.

United States of America[10]

President Reagan had set an overhaul of the tax system as his top domestic goal for his second term. The signing of the Tax Reform Act of 1986 (HR 3838) into law by the President on October 22, 1986 climaxed years of work by both the administration and Congress beginning with the release in November, 1984 of the Treasury Deparment's blueprint of *Tax Reform for Fairness, Simplicity and Economic Growth.*

As against the existing corporate tax rates of 15-40 per cent on the first $ 1,00,000 of income and 46 per cent thereafter, the new law reduces the corporate tax rates to 15-30 per cent upto $ 75,000 and 34 per cent above $ 75,000. Investment tax credit of 6-10 per cent for a tax payer's investment in machinery and plant is repealed retroactively from January 1, 1986. However, 82.5 per cent of the unused tax credits of the past due to smallness of profits may be used to offset taxes owed in 1987, and upto 65 per cent in later years. Currently, full amount of unused credits may be carried forward 15 years or back three. As to depreciation, the existing law provides recovery periods of 3-19 years with accelerated write-off. While retaining system of rapid write-offs similar to the existing law, the new law permits larger write-offs for most property, but over longer periods.

The Tax Reform Act of 1986 retains the 20 per cent corporate minimum tax but redesigns it to make it more difficult to combine various tax benefits known as preferences—so as to escape all, or nearly all tax liability.*

NOTE

* The heart of the new tax is its use of reported "book income" as a separate new test of taxability, in addition to a list of "preference" items given favourable treatment under regular provisions of the tax law that would be subject to the minimum tax. A two-level method of figuring the tax would be used. A company would, first, calculate its taxable income under existing law, including all the various deductions, exemptions and exclusions. Then, starting with taxable income, it would add these preferences back and make other adjustments. and from this calculate minimum taxable income. Next, it would compare this minimum taxable income total with book income, as reported to shareholders or a regulatory agency or a bank for purposes of obtaining a loan. If book income is more than the minimum taxable income, one-half of the difference would be added to the minimum taxable income and the tax would be calculated on this total amount at a 20 per cent rate. A few existing preferences would remain untouched, even with the use of the book-income concept. One of the largest is the expensing, or writing-off in one year, of research and development costs.

  The book income basis for calculating the corporate minimum tax would remain in effect for three years, starting in 1987, after which the losses would shift to the "earnings and profits" concept.

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2. *Canadian Tax Journal*, May-June, 1986, Vol. 34, No. 3, p. 569.
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6. International Bureau of Fiscal Documentation. Amsterdam. *Taxes and Investment in Asia and the Pacific*, Vol. 2: Korea—85—Supplement No. 32, July 1984.
7. International Bureau of Fiscal Documentation, Amsterdam. *Taxes and Investment in Asia and the Pacific*; Vol. 2: Malaysia—169, 172-173: Original release July 1983 and Supplement No. 34, November, 1984.
8. International Bureau of Fiscal Documentation, Amsterdam. *Taxes and Investment in Asia and the Pacific*; Vol. 2; New Zealand—179: Supplement No. 33, September, 1984; Commonwealth Association of Tax Administrators (CATA). *5th Technical Conference: September 1984: Country Paper: New Zealand*: p. 19.
9. Comonwealth Association of Tax Administrators (CATA). *5th Technical Conference: September 1984: Country Paper: United Kingdom:* pp. 3-5, 11, 15-16.
10. *Congressional Quarterly: Weekly Report*: Vol 44, No. 40, October 4, 1986.

APPENDIX IV

MAIN FEATURES OF SECTION 32AB INCENTIVE PROVISION (Para 7.1.2)

(*i*) An assessee whose total income includes income chargeable to tax under the head "Profits and gains of business or profession" may out of such income utilise any amount during the previous year for purposes specified in the Investment Deposit Account Scheme, 1986 (IDAS '86) (for the business of growing and manufacturing tea in India, a similar scheme approved by the Tea Board) or deposit any amount for the said purposes with the Development Bank before the expiry of six months from the end of the previous year or before furnishing the return of his income, whichever is earlier. If he does this, he shall be allowed (except if he has claimed a deduction allowable under Section 33AB on tea development account) a deduction in computation of his total income of a sum equal to the aggregate of the amounts so utilised and/or deposited or a sum equal to 20 per cent of the profits of the "eligible business or profession" as per his audited accounts, whichever is less; the profits being computed in accordance with the requirements of the Companies Act, 1956 with an adjustment to provide only current year depreciation as per Section 32(1) of the Act. Every business or profession is an "eligible business or profession" except (*a*) construction, manufacture or production of the Eleventh Schedule goods (low priority items) by an industrial undertaking other than small-scale, and (*b*) the business of leasing or hiring of machinery or plant to such an undertaking[1]. The deposit account with the Development Bank shall carry simple interest at the rate of 10 per cent per annum. The depositor may make withdrawals therefrom for the specified purposes upto the limit of the minimum balance held for a year or close the account by withdrawing the entire amount held for a year.

(*ii*) The purposes specified in IDAS '86 are: Purchase of new ship, aircraft, machinery or plant for the purposes of the business or profession carried on by the depositor; purchase of new computers for intallation in his office or other business premises; and repayment of the principal amount of term loans of three years or more contracted after March 31, 1986 with a financial corporation providing long-term finance for industrial development in India, a scheduled bank or any other such institution notified in this behalf.

(*iii*) As for investment allowance, second-hand imported ships, aircraft, machinery or plant are to be deemed "new" for purposes of the new incentive.

(*iv*) To the extent the amount withdrawn from the deposit account is not utilised for the specified purposes within the previous year of withdrawal, it shall be deemed to be the profit and gains of the business or profession and charged to income tax as the income of that previous year [S. 32AB (6)]. IDAS '86 lays down a time limit of 15 working days for such utilisation [IDAS '86, Clause 9(*c*)].

(*v*) On sale or transfer otherwise, of an asset acquired in accordance with IDAS '86, before the expiry of eight years from the end of the previous year in which it was acquired, such part of the cost of the asset as is relatable to the deductions obtained on its account under section 32AB, shall be deemed to be the profits and gains of the business or profession of the year of sale or transfer and become chargeable to income-tax as the income of the year. This does not apply if the sale or transfer is to Government, a local authority, a statutory corporation, or a Government company or is in connection with the succession (satisfying the prescribed conditions) to a firm's business by a company and the scheme continues to apply to the company in the manner applicable to the firm.

(*vi*) No deduction shall be allowed in respect of any amount utilised for the purchase of (*a*) any machinery or plant to be installed in any office premises or residental accommodation including a guest house; (*b*) any office appliances (not being computers); (*c*) any road transport vehicles; and (*d*) any machinery or plant, the whole of the actual cost of which is allowed as a deduction (whether by way of depreciation or otherwise) in computing the chargeable income from business or profession of any one previous year. It has been clarified that a "computer for this purpose, is not a plant or a machinery", and hence, "in spite of any amount utilised for the purchase of a computer installed even in office premises deduction will be admissible"[2]. The term 'computers' does not include calculating machines and calculation devices.

(*vii*) A claim for deduction under this section has to be supported by an audit report in the prescribed form from an accountant along with a prescribed statement giving the requisite particulars.

(*viii*) The deduction due under section 32AB is subject to the discipline of section 80VVA as was the case with investment allowance.

(*ix*) If the Central Government considers it necessary or expedient, it is empowered to omit any article or thing from the Eleventh Schedule list. It is also open to the Central Government, after making such inquiry as it may think fit, to direct that the scheme shall not apply to any class of assessees from a notified date.

REFERENCES TO APPENDIX IV

1. The Eleventh Schedule: Appendix II, pp. 98 99 supra.
2. CBDT Circular No. 461 (F. No. 131/29/86-TPL dated 9-7-1986) 161 *ITR* 17 (St) para 17.6 (f.)

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