Fiscal Incentives And Corporate Tax Saving

Vinay D. Lall

NATIONAL INSTITUTE OF PUBLIC FINANCE AND POLICY

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NIPFP

The corporate profits tax has now become one of the most important taxes in the country and from the point of view of operations in the organised sector, it has a very important role to play. The basic tax law, the Income-tax Act, 1961, is now over two decades old and has, through amendments, become very complicated. Yet, very little is known of the actual effect of the tax on the sector on which it is levied. When there is a general feeling now that we should restructure the system of the corporate profits tax, so as to simplify it, it is necessary that we should have a proper idea of what have been the economic effects of the existing system.

This study is the first in a series the NIPFP has undertaken to assess the economic impact of the corporate profits tax. It evaluates the effect of fiscal incentives granted to companies under the income tax law. Estimates are presented on the diminution in the tax base due to fiscal incentives, the effective tax liability and the tax savings generated by the incentives. Among the other relevant issues on which empirical evidence is presented are the operational problems in claiming the reliefs, frequency of claim of the reliefs and the impact on rate of return on corporate investment in terms of discounted present values.

Three sources of data are utilised, namely, *ex-ante* data on projects financed by a leading financial institution, *ex-post* data from assessed income tax returns and *ex-post* published company finances data. The analysis is made for individual incentives as well as for all incentives taken together. The results are presented at both aggregated and disaggregated levels for different categories of corporate assessees.

The empirical analysis is preceded by a study of the economic aspects of fiscal incentives and an analysis of the major provisions of the income tax law relating to fiscal incentives in India.

Rs 40

R J Chelliah

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Preface

The National Institute of Public Finance and Policy is an autonomous, non-profit organisation whose major functions are to carry out research, do consultancy work and undertake training in the area of public finance and policy. In addition to carrying out, on its own, research studies on subjects that are considered to be important from the national point of view in terms of policy formulation, the Institute also undertakes research projects on subjects of public interest, sponsored by member governments and other institutions.

The present study is a part of an overall study of the theoretical and quantitative aspects of corporate profits taxation in India. The corporate profits tax has now become one of the most important taxes in the country and from the point of view of operations in the organised sector, it has a very important role to play. The basic tax law, the Income-tax Act, 1961, is now over two decades old and has, through amendments, become very complicated. Yet, very little is known of the actual effect of the tax on the sector on which it is levied. When there is a general feeling now that we should restructure the system of the corporate profits tax, so as to simplify it, it is necessary that we should have a proper idea of what have been the economic effects of the existing system. We have also to have a proper idea of the alternatives that can be thought about. It is for the purpose of enabling an informed discussion on the lines of corporate tax reform that this study was undertaken.

The present study assesses the impact of the various fiscal incentives that are available to companies in India, either when they undertake an investment programme or any other specified activity, such as export development and scientific research. This study could be successfully completed only because we obtained valuable co-operation and support from the Central Board of

Direct Taxes (CBDT), Ministry of Finance, Government of India and the Industrial Credit and Investment Corporation of India Ltd. (ICICI), both of which made available to us primary data on the basis of which the quantitative exercises could be undertaken.

The study was conducted by Vinay D Lall, who has also drafted the Report. S Gopalakrishnan and A K Gupta rendered research assistance almost throughout the project. They also compiled the data from the appraisal reports in the ICICI. Towards the end, Gautam Naresh and Sonika Jethwaney helped in preparing the final tables. K K Atri and A K Halen processed the data on the NIPFP computer.

The Governing Body of the Institute does not take responsibility for any of the views expressed by the author in the Report. The responsibility for the conclusions arrived at and the views expressed belongs to the Director and the staff of the Institute and more particularly to the author of the Report.

February 17, 1983

R J CHELLIAH
Vice Chairman

Acknowledgements

The empirical exercises in this study have been possible due to generous access to primary data granted by the Central Board of Direct Taxes (CBDT), Ministry of Finance, Government of India, and the Industrial Credit and Investment Corporation of India Ltd. (ICICI). When this study was undertaken in the middle of 1979, V V Badami, then Chairman of the CBDT, gave us the necessary access to data from assessed income tax returns of major corporate assessees and S Kumarasundaram, then Joint Managang Director, ICICI, gave us access to investment appraisal reports of ICICI-assisted companies. C C Choksi, Senior Partner, C C Choksi and Co., Chartered Accountants, Bombay, provided to us information from assessed income tax returns of their clients. But for the co-operation of these organisations, the study could not have been undertaken.

Several officials from the Income Tax Department and the ICICI made available to me their time, expertise and in-depth knowledge of the intricacies of the income tax law and financing of industrial projects, clarified many misgivings, helped to develop the methodology, select the proper sample and interpret the results more satisfyingly than would have been otherwise possible. Among the discussions I had with several Commissioners and Assistant Commissioners of the Income Tax Department, I would like to especially recall those with K K Sen, B Laxmipathy, R N Bose and W A Khan. Among the officials of the ICICI, I wish to mention in particular, the discussions with S Kumarasundaram, S V Shah and V C Shah.

Among my colleagues whose time and expertise I extensively exploited are R J Chelliah, K Srinivasan, A Bagchi and J S Kapoor. Apart from giving suggestions on methodological issues, R J Chelliah went through earlier drafts and suggested changes, the impact of which is evident in the study.

K Srinivasan and A Bagchi made suggestions on the part relating to the fiscal reliefs under the income tax law, and the analysis of CBDT data. Valuable suggestions were also made by some senior Assistant Commissioners of income tax who attended a course on Economics of Income Taxation at the Institute in May, 1981, and where I had the opportunity to present some of the empirical results.

The data were processed on the NIPFP computer by K K Atri and A K Halen. Other NIPFP colleagues who were associated with the project in the collection, processing and tabulation of the data at some point of time are S Gopalakrishnan, A K Gupta, Gautam Naresh and Sonika Jethwaney.

The secretarial assistance was provided by N Natarajan and the final typing was done by K R Subramaniam. Neeru Uppal helped in checking the typescript. C. Cecil suggested editorial improvements and also saw the publication through the press.

VINAY D LALL

Feburary 17, 1983

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I. Introduction

1. Objectives of the Study

The corporate profits tax system in India has remained largely unchanged for over two decades. The last major change was made in the year 1959-60 when the partial imputation system was replaced by the classical system of taxation of corporate-source income. Under the present system, the company is treated as a separate economic entity and the shareholder gets no credit or allowance for any part of the tax levied at the corporate level. Under the earlier system, the shareholder was given credit for the corporate tax paid by the company on the distributed component of profits.

The present Income-tax Act, 1961, which replaced the Indian Income-tax Act of 1922, is also now over two decades old. Over the years, the Act has been subject to several revisions off and on through amendments, additions of new provisions and important judicial rulings. As a result, what Kaldor (1956) observed a quarter century ago is perhaps even truer today. The company tax provisions in India are, to quote Kaldor, "a perfect maze of unnecessary complications, the accretion of years of futile endeavour. . ." (p 84).

There has been some discussion during the last few years on the need to replace the Income-tax Act, 1961. A number of Commissions/Committees have examined particular aspects of the income tax system. The Economic Administration Reforms Commission (Jha Commission) is also seized of the problem. At the same time, there has been a noticeable absence of scientific quantitative studies on the actual operations and effects of the income tax system. This may be attributed partly to inadequacies in the data base.

However, to keep any discussion on tax reform in its proper perspective, it is necessary to analyse the impact of the existing

system, identify its weaknesses and propose and assess an alternative tax system. Such a study is all the more desirable in the case of the corporate profits tax, as not only is this tax a major instrument for mobilising resources but it also directly affects operations in a growth-oriented segment of the economy.

There have been few studies of issues relating to the Indian corporate profits tax. Sahota (1961), Rao (1979) and Khadye (1981) presented estimates on the elasticity and buoyancy of the corporate profits tax system on the basis of time-series data, but they did not offer any economic explanation for the results obtained. Lall (1967), the Expert Committee on Unemployment, Ministry of Labour and Rehabilitation (1972), Jhaveri (1973), NCAER (1976), Somayajulu (1977) and the Expert Committee on Tax Measures to Promote Employment (Dandekar Committee, 19 0) presented some estimates on the tax-saving effect of selected fiscal incentives, in particular, the development rebate, investment allowance and tax holiday, mainly on the basis of *ex-post* data from published annual reports and assessment data from income tax returns. These studies related to selected years and did not cover all the fiscal incentives. Laumas (1966), Lall (1967, 1974), Gandhi (1968) and Rao (1980) presented some evidence on the shifting of the corporate profits tax in India. A few econometric studies on corporate finances in India have been made over the last decade and a half, but these [for example, Sastry (1966), Krishnamurty and Sastry (1971, 1975), Swamy and Rao (1975)] have not assessed the impact of the corporate profits tax; only Venkatachalam and Sarma (1978) and Lall, Srinivasa and Atri (1982) have assessed econometrically the effect of the corporate profits tax on selected aspects of corporate operations, namely, retentions, gross resource mobilisation, equity finance to debt finance ratio and retentions to fresh issues ratio.

This study presents empirical evidence on one aspect of the operations of the corporate profits tax in India, namely, the effect of fiscal incentives.[1] Specifically, the objectives of the

1. Another study, Economic Impact of the Corporate Profits Tax (due in January 1983), provides empirical evidence on the sensitivity of the corporate profits tax and its effect on corporate operations, such as the level of corporate investment, profitability, dividend policy and capital structure.

study are:

(i) To quantify the extent of diminution in the corporate profits tax base due to fiscal incentives (at aggregate level and for individual incentives), estimate the effective corporate tax liability and the corporate tax savings or gains to the companies;[2]

(ii) To examine at the disaggregated level whether factors like age, size and capital intensity of operations have a bearing on the extent of the diminution in the tax base and on the level of tax savings;

(iii) To measure the effect of tax savings generated by fiscal incentives on the total return over the 'economic' life of a project; and

(iv) To measure the proportion of expected corporate tax savings generated by fiscal incentives to the anticipated project cost.

2. Framework of the Study

In order to place the quantitative analysis in proper perspective, the following chapter discusses the economic aspects of fiscal incentives and examines the provisions under the income tax law relating to fiscal incentives granted to companies. The methodology developed to assess the tax-saving effect of fiscal incentives is explained in Chapter III. Empirical evidence on the tax-saving effect of fiscal incentives is presented in the next three chapters: on the basis of *ex-ante* data relating to project proposals (Chapter IV), on the basis of *ex-post* data on income-tax assessments of major corporate assessees (Chapter V), and on the basis of *ex-post* data on company finances relating to major companies (Chapter VI).

2. The study does not attempt to quantify the tax loss to the national exchequer because of the fiscal incentives, nor does it attempt to identify and quantify the impact of the fiscal incentives on the attainment of the objectives for which they were formulated. Further, the fiscal incentives linked to indirect taxes, state taxes and municipal levies fall outside the purview of the study.

II. Fiscal Incentives Under The Income Tax Law

1. Economic Aspects of Fiscal Incentives

a. Purpose and definition. Under the Indian Income-tax Act, 1961, fiscal incentives can be broadly classified into two categories:

(i) Those designed to help the taxpayer to replace his assets or to expand his business, particularly in directions in which Government is, for the time being, interested; and

(ii) Those designed to serve extraneous purposes not connected with or incidental to the taxpayer's business or other sources of income.

From the point of view of the economist and the corporate tax planner, the purpose of a fiscal incentive is somewhat different. The primary function is to make the specific activity which is sought to be encouraged more attractive or rewarding by improving its net profitability or, in other words, raising the total return on the investment and reducing the capital risk involved. A recent definition of an investment incentive by Bracewell-Milnes, B and Huiskamp, J C L (1980, p. 20) brings out clearly the economic character of a fiscal incentive as well as its primary purpose: ". . . We define an investment incentive as any measure conditional on new investment taking place which is designed to increase the prospective net-of-tax return from the investment relatively to its cost at the time of the investment decision."

b. Characteristics of fiscal incentives. The timing of the incentive, thus, is crucial—it should be known before the specific investment or expenditure is incurred or the activity is undertaken. The gains from a fiscal incentive improve the

profit prospects before the investment decision is made and is not available on investments already made. A fiscal incentive cannot therefore be considered a windfall, as its availability is known or expected when the investment is being planned. Further, it is, to quote Bracewell-Milnes and Huiskamp (1980, p. 20) again, "not a command", but a "carrot" which makes investment (or the activity) more attractive to the investor "absolutely as well as relatively". There is no forced action as happens, for example, in a scheme of a tax levy or a tax rate change. Thus, when a tax is introduced or the tax rate is raised on retained profits or is reduced on distributed profits, there is forced action or command to increase distribution and to reduce retention.

Fiscal incentives are, by and large, of a temporary nature for a specified period of time and for specific purposes. Further, in some cases the fiscal incentive may be restricted to certain industries and/or operations in selected locations.

Bird, R M (1980) has tabulated an interesting taxonomy of fiscal incentives, based on Canadian experience. The tabular presentation, which is self-explanatory, summarises the main characteristics and features relevant to fiscal incentives in other countries also.

Richard Bird's Taxonomy of Tax Incentives

A. Characteristics	:	1. Timing of receipt of benefits: deferred or immediate?
		2. Certainty of receipt of benefits: permanent or temporary?
		3. Certainty of receipt of benefits: in cash or kind?
		4. Discretionary or non-discretionary?
		5. Breadth of incentive: broad or narrow?
		6. Depth of incentive: open-ended or limited?
		7. Conditional or unconditional?
		8. Marginal or infra-marginal?
		9. Regional or non-regional?

B. Bases	:	1. Output
		2. Inputs
		a. total costs
		b. purchases of goods and services
		c. labour
		d. capital
		3. Profits
C. Delivery Mechanisms	:	1. Taxes on goods and services
		2. Income taxes
		a. exclusion
		b. deduction
		c. credit
		d. rate reduction

Source : Bird, R M (1980), *Tax Incentives for Investment : The State of the Art*, p. 16.

c. Effectiveness of fiscal incentives. Fiscal experts are not sure about the effectiveness of fiscal incentives. In an exhaustive analysis of major fiscal incentives in several countries, Lent, G E (1967, p. 307) concludes: "It is impossible to determine conclusively the 'success' or 'failure' of any country's investment-incentive programme because we do not know what the record would have been in its absence."

It is also believed by some economists that as the number of fiscal incentives is increased, their cumulative effect generally becomes weaker and in order to continue to produce a strong impact each new incentive needs to be given an additional strength. To quote Bird (1980, p. 14), "The more incentives are given, the more are needed to achieve the differential effect presumably sought in the first place. Since for the most part no one has the slightest idea of the impact or effect of any of these provisions, escalation of nominal incentives seems particularly likely, first in the form of broadening the scope of the original concession and then by attempting to re-establish the original differentiation. Recent experience offers ample evidence of such escalation."

A similar problem arises in estimating the loss to the

national exchequer as a result of the fiscal incentives. Exercises on estimating the 'revenue loss' or 'revenue sacrifice' become largely academic as the loss or sacrifice is notional rather than real. They tend to overlook the likely and desired snowballing effect of the fiscal incentive on economic activities, resulting in a higher level of corporate income, profits and tax revenue. While it is, in principle, to quote Bird, (1980, pp. 15-16) "at least as difficult to measure the cost of tax incentives as of tax expenditures," in practice, "it is probably harder because one would expect the behavioural changes induced by incentives to be more marked since their purpose is precisely to change behaviour." He, therefore, suggests that "incentive studies must be concerned not only with how much the provision costs but also with the benefits that result from it . . ."

Thus, according to fiscal experts, it is not possible to come to any definite conclusion as to what the investment situation (or export or research activity) would have been in the absence of the fiscal incentive or to point out the exact relationship between a fiscal incentive and the specific activity which is sought to be encouraged. Two possibilities can, however, be visualised on *a priori* basis: First, some of the activity which is sought to be encouraged would have taken place even without the relevant fiscal incentive, and, secondly, the fiscal incentive may influence, at least to some extent, the formulation of an investment proposal. What cannot be denied, however, is that the tax relief generated by a fiscal incentive diminishes the corporate profits tax base by allowing some expenditure as a deduction (which would not have been allowed in its absence) by either exempting some part of corporate profits or income from the tax base or levying a preferential tax rate. The fiscal incentive, thus, reduces the effective tax liability and so generates, in terms of the original tax liability, some tax savings or gains to the corporation. Such tax savings have a bearing on the net rate of return on the investment and also the total return over the economic life of the project.

Tax savings to the companies can also be taken to represent the maximum level of 'revenue loss' that would be sustained by the national exchequer, if additional economic activities as envisaged do not take place and, consequently, no additional profits are generated. If, however, some part of the envisaged increase

in economic activities materialises, the 'revenue loss' would be less than the tax savings to the companies. It cannot be ruled out that the additional tax revenue due to the increased level of economic activities might exceed the tax savings or the initial 'revenue loss' suffered by the national exchequer.[3]

2. Economic Classification of Fiscal Incentives in India

Fiscal incentives in India may be classified on economic considerations broadly into three categories:

a. Investment-linked fiscal incentive;
b. Expenditure-linked fiscal incentive; and
c. Income-linked or profits and gains-linked fiscal incentive.

Essentially, the investment-linked and expenditure-linked fiscal incentives have the same base, i.e., expenditure, but while the former is based on expenditure on capital account and can, therefore, be taken to reflect corporate investment, the latter is based on expenditure on current account. Expenditure-linked fiscal incentives may be further sub-divided into two categories, depending on whether the expenditure is related to actual operations or promotion of the business of the company or is unrelated to such operations and incurred on programmes of national importance, which the government may seek to promote.

Investment-linked incentives, as the term suggests, are dependent upon actual investment being made in the industrial sector in general, in selected industries or in backward areas. The development rebate and investment allowance (sections 33 and 32A)[4] relate to this category. It is sometimes held that these reliefs constitute corporate savings, which are retained in business. This view is partially correct. In the short-run, these reliefs constitute corporate savings but they are subsequently used for day to day corporate operations. In fact, such reliefs

3. Speeches of Finance Ministers, when introducing a fiscal incentive, invariably lay emphasis on what is sought to be attained, i.e., the activity to be encouraged. The loss in revenue is hardly given any importance, as the Ministers anticipate the snowballing effect of the incentive on the specific sector and also on the economy to compensate for any loss in tax revenue.

4. Sections mentioned, unless otherwise specified, refer to those under the Indian Income-tax Act, 1961.

are obtained with reference to expenditure already incurred on capital account. Tax holiday (section 80J) as it existed upto March 31, 1981, belonged to this category of fiscal incentives, but now (section 80I) belongs to the income-linked category, after its base was changed from capital employed to profits and gains, effective for new businesses becoming operative after March 31, 1981.

The current account expenditure-linked fiscal incentives are related to specified expenditures already incurred. These expenditures are either fully or partly deductible, and in some cases on some weighted basis also. A relief accrues from such expenditure as the admissible deduction exceeds what would have been ordinarily allowed. Such reliefs, which are related to expenditure connected with corporate business operations, include those on scientific research (section 35), on acquisition of patent rights or copy rights (section 35H), export market development (section 35B), selected agricultural development (section 35C), amortization of certain preliminary expenses (section 35D) and prospecting for certain minerals (section 35E). Expenditure not related to corporate business operations but which also provides tax relief includes expenditure encouraged by the company in approved programmes of national importance, such as rural development (section 80CC and section 80CCA), promotion of family planning among employees (section 36(1)(ix)), donations to eligible charitable institutions (section 80G) and donations for scientific research or for rural development (section 80GGA).

The third group of fiscal incentives is linked to specific types of income and generate tax savings as part of such income is deductible from the tax base. These tax reliefs relate to income originating from priority industry (former section 80I), units located in backward areas (section 80HH) and rural areas (section 80HHA), construction contracts abroad (section 80HHB), exports of specified products (section 89A), new investments in selected industries (section 80I) and also such income as originating in the form of dividends (paid out of tax-holiday profits) from new industrial undertakings, ships and hotels (section 80K), inter-corporate dividends from companies engaged in manufacture of specified articles (section 80M), and royalties, commission, fees, etc., received from selected foreign

companies (section 80O).

Major Incentives

a. *Development rebate.* The development rebate (section 33) was incorporated into the Indian corporate profits tax system in 1955 on the recommendation of the Taxation Enquiry Commission (Matthai Commission, 1954)[5]. The development rebate was abolished in 1974, to be subsequently replaced in 1976 by the investment allowance. During the intervening period, 1975 to 1976, an additional initial depreciation was allowed, and the unabsorbed portion of this allowance could be carried forward indefinitely, just as the usual depreciation.

The development rebate was related to the actual cost of new machinery and plant installed by the company after March 31, 1954. No rebate was allowed on old assets installed before this date as the objective of the incentive was to stimulate new investment for replacement of an old asset, or for expansion of an existing unit or for setting up a new enterprise. The rate of the rebate was uniform at 25 per cent, but subsequently, the Finance Act, 1958, introduced a special rate of 40 per cent for ships acquired after December 31, 1957. Frequent changes in the rate of the rebate were made between 1963 and 1974, when the incentive was withdrawn. At the time of its abolition, the rate of the development rebate was 40 per cent for ships, 20 per cent for machinery and plant in non-priority sector industries[6] and 35 per cent for plant and machinery in priority sector industries, if the machinery and plant were installed before April 1, 1970, and the rates were 15 per cent and 25 per cent, respectively, if the machinery and plant were installed on or after that date.

A major change in the scheme of the development rebate was made through the Finance Act, 1958, when three condi-

5. Prior to the development rebate, an initial depreciation allowance at the rate of 20 per cent of the cost of new plant and machinery installed after March 31, 1945, was available under the Income tax (Amendment) Act, 1946. The Matthai Commission recommended a development rebate as the initial depreciation allowance was not found to be a sufficient stimulus for new investments in the industrial sector.
6. The rate was reduced from 25 per cent by the Finance Act, 1961.

tions were imposed,[7] viz.,

(i) A separate development rebate reserve was to be created by transferring from the profits and loss account an amount equivalent to 75 per cent of the rebate actually allowed (50 per cent in the case of ships acquired after February 28, 1966, *vide* Finance Act, 1966);

(ii) The development rebate reserve could not be utilised for 10 years for distribution of dividends or for remittance outside India either as profits or for creation of an asset outside India;[8] and

(iii) The asset could not be sold or transferred for 10 years, except to the government.

The development rebate was allowed over and above the depreciation allowance and as such there was no reduction in the written-down value of the asset. The rebate was not available for road transport vehicles and office appliances, with effect from April 1, 1960.

The abolition of the development rebate was strongly recommended in the Bhoothalingam Report (1967) and its abolition, proposed in the Budget speech of 1971, was also supported by the Wanchoo Committee (1971), as the incentive resulted in "the more liberal and less careful use of capital resources than otherwise", to quote Bhoothalingam (p. 23) and had "outlived its utility", to quote the Wanchoo Committee (p. 113).

b. Investment allowance. The investment allowance (section 32A), like the development rebate, is related to the actual cost of investment in machinery and plant. The purpose is also to stimulate new investment in such capital assets. The rate for the investment allowance is 25 per cent or 35 per cent, the higher rate being applicable to machinery and plant utilising indigenous techniques and know-how process developed in approved national research institutions. The relief is not available for machinery and plant installed in office premises or in

7. These conditions were imposed on the basis of the recommendation of the Direct Taxes Enquiry Committee (Tyagi Committee) (1958), which observed that the relief was being misused by the assessees who used the tax savings generated by the relief to incur expenses or to pay dividends.

8. The reserve could, however, be used for other purposes in the business such as to meet liabilities, acquire stocks or to make investments.

residences, or to office appliances and road transport vehicles.

The investment allowance is available on entitled ship or aircraft acquired and machinery and plant installed after March 31, 1976. The eligible industries, apart from shipping and airways, are power generation, industries engaged in construction, manufacture or production of items not specified in the Eleventh Schedule of the Income-tax Act, 1961 (which lists low priority industries) and all small-scale industries (i.e., units with a value of installed machinery and plant not exceeding Rs 20 lakh effective from August 1, 1980 and Rs 10 lakh prior to that date), even if they manufacture the Eleventh Schedule listed items. In fact, the investment allowance is available to other units also when they manufacture an Eleventh Schedule listed item, provided the machinery and plant is used mainly to manufacture non-Eleventh Schedule articles.

Like the development rebate, the investment allowance can be availed of only if an amount equivalent to 75 per cent of the allowance (50 per cent in the case of ships) is debited from the profits and loss account and credited to a specially created investment allowance reserve. Similarly, the investment allowance reserve cannot be utilised for a 10-year period to declare dividends, to make remittances outside India as profits or for creation of assets outside India.

The investment allowance provides for carry-forward of the unavailed relief upto eight years. In the case of multi-plant companies, available profits from units other than the one wherein the relief-generating investment has been made, can be used to set off the unabsorbed relief.

Recently, the Choksi Committee (1978) recommended further liberalisation of the investment allowance scheme. It recommended that the allowance should be granted even if the asset acquired/installed is not brought into use in the year of installation or in the immediately succeeding year and that assessees engaged in the business of operation of ships or aircraft should be granted the investment allowance in respect of any new machinery and plant installed for the purpose of their business. The Choksi Committee's recommendations have not yet been implemented.

c. Tax holiday. Tax holiday (section 80I) is available on profits and gains generated by newly established industrial

undertakings, engaged in the manufacture of articles not listed in the Eleventh Schedule of the Income-tax Act, 1961, and also to a ship, cold storage and eligible hotel business which became operative from April 1, 1981. The rate of the relief is 25 per cent and it is available for eight assessment years.

The tax holiday is granted to an industrial undertaking subject to the conditions that

(i) the company is not formed by the splitting up, or the reconstruction, of a business already in existence, but that it is formed by the transfer to a new business of machinery or plant previously used for any purposes;

(ii) it manufactures or produces any article or thing not specified in the Eleventh Schedule or operates a cold storage plant; and

(iii) in case of an industrial undertaking, it employs ten or more workers using power or 20 or more workers without using power.[9]

In the case of a ship, tax holiday is granted if it is owned by an Indian company and was not, prior to its acquisition, owned or used in Indian territorial waters by a person resident in India. For a hotel to be eligible for the relief, it is necessary that,

(i) the business should not have been formed by the splitting up, or the reconstruction of a business already in existence or by the transfer to a new business, of a building previously used as a hotel or of any machinery or plant previously used for any purpose;

(ii) the business is owned and carried on by a company registered in India with a paid-up share capital of not less than Rs. 5 lakh; and

(iii) the hotel should be approved by the Central Government for the purpose of the relief.

Prior to April 1, 1981, the base of the tax holiday was different. The tax holiday (then section 80J) was calculated with reference to the amount of capital employed. The definition of capital employed was intended to include owned capital (paid-up share capital plus reserves, i.e., net worth), but this was not originally

9. The Eleventh Schedule condition, however, is not applicable to a small-scale industrial undertaking.

specified. Several High Courts, on appeals by assessees, held that the restricted definition of capital employed was *ultra vires* of the Income-tax Act as it excluded borrowed capital.[10] The Central Board of Direct Taxes (CBDT), Ministry of Finance, Government of India, subsequently amended Rule 19A of the Income Tax Rules 1962, through the Income Tax (Third Amendment) Rules, 1971, on May 28, 1971, to specifically exclude borrowed 'moneys and debt' from the definition of capital employed, effective from the assessment year 1972-73.

The scope of section 80J (tax holiday) was considerably reduced with effect from April 1, 1979, when articles specified in the Eleventh Schedule were excluded from the relief. The rate of the tax holiday was 7.5 per cent of the qualifying capital employed and the relief was available for the first five years after the commencement of the business. Prior to March 31, 1976, and before the abolition of the relief to shareholders on dividends from new industrial undertakings, hotels and ships (under section 80K), the relief was allowed at the rate of six per cent of the capital employed. Any 'deficiency' in tax holiday in the event of insufficiency of profits could be set off in any of the seven immediately following assessment years but only from future profits relating to the plant in which the relief-qualifying investment was made, and not, as in the case of the development rebate and the investment allowance, against the profits from other plants in the case of companies owning more than one plant.

The tax holiday for the current year (under both section 80J and section 80I) and the deficiency for earlier years under section 80J) are allowed only after some of the other reliefs, like investment allowance and backward area relief, have been fully utilized.

d. Comparative assessment of investment allowance and tax holiday. It might be useful to compare the main merits of

10. In two cases relating to Century Enka Ltd. the Calcutta High Court held Rule 19A to be *ultra vires* for this reason (see *Income Tax Reporter* [*ITR*] 107 *ITR* 909 and 107 *ITR* 123). The Madras High Court gave a similar judgement, in the case of Madras Industrial Linings Ltd. (110 *ITR* 256), the Allahabad High Court in the case of Kota Box Manufacturing Co. (1978, *Tax Law Report*, 640) and the Gujarat High Court in the case of Cibatul Ltd. (115 *ITR* 879).

investment allowance and tax holiday, the two major fiscal incentives now available under the Indian corporate profits tax system:

(i) While investment allowance is in the nature of an outright grant, which falls due in the first year of the installation of the machinery and plant, tax holiday is in the form of a deduction from income. As such, investment allowance is due even in the absence of profits, but tax holiday can arise only when profits accrue.

(ii) The discounted value of a similar amount of tax holiday and investment allowance in current values would be higher in the case of the latter as it can be claimed fully in the first assessment year if profits are available but tax holiday can be claimed fully not before the end of the fifth assessment year.

(iii) In the event of insufficient profits generated by the new investment against which the investment allowance may be claimed in the year due, it can be adjusted against profits from earlier investments and from other plants within the company, in the case of a multi-plant company. This is not the case with tax holiday. In the absence of profits from the specific tax holiday generating investment, the relief cannot be utilised. Therefore, in terms of profits against which the reliefs can be claimed, investment allowance is more flexible; tax holiday, in fact, is less beneficial to, and discriminatory against, new companies.

(iv) In the event of insufficient profits, the unavailed portion of the investment allowance due, can be carried forward. There cannot be any carry forward in the case of the tax holiday. In the absence of profits, the relief cannot be utilised.

(v) Investment allowance is admissible with reference to a new qualifying asset falling in the prescribed categories even if it is acquired second-hand, outside the country. Investment allowance, thus, aims at specifically encouraging the expansion of an existing industry or replacement of assets which have outlived their utility; in effect, it bridges, to some extent, the gap between

the original cost of the asset to be replaced and its increased replacement cost. Tax holiday, on the other hand, being in the form of a deduction from taxable profits (and even earlier, before April 1, 1981, when it was granted upto a percentage of capital employed), need not wholly reflect or represent additional fixed assets. Even though both the reliefs are designed to raise the rate of return, only the investment allowance is directly related to the level of fixed assets formation.

(vi) Investment allowance is biased in favour of capital-intensive operations while tax holiday is neutral between capital-intensive and labour-intensive techniques of operations. While the former is linked to a capital base such as the value of plant and machinery installed, the latter is linked to profits and gains which makes it neutral between the use of alternative production techniques. Even in the case of the earlier method of granting the tax holiday, the bias towards capital-intensive techniques may be said to have been less acute than in the case of the investment allowance, as the whole of the incremental capital employed might not be necessarily invested in machinery and plant.

(vii) The tax benefit to the company and the tax revenue loss to the national exchequer is limited and known in advance in the case of the investment allowance. In the case of tax holiday, its open-ended feature allows an uncertain tax benefit and the revenue loss is also uncertain. This open-ended feature of tax holiday can be plugged by restricting the tax benefit to some specified ratio of investment.

(viii) The open-ended feature of tax holiday, however, has a plus point; it carries the advantage of permitting a discrimination in favour of growing, efficient and profit-making companies, as such companies would stand to gain more; the incentive, thus, in a way, also penalises inefficiency.

e. Backward area relief. The backward area relief (section 80HH) is granted in the form of a reduction in taxable profits and gains of an industrial unit or hotel located in a backward area, as listed in the Eighth Schedule of the Inome-tax Act,

1961. The relief is granted subject to the following conditions:

(i) The operations commenced after December 31, 1970;

(ii) the business is not formed by the splitting up or the reconstruction of a business already in existence in any backward area;

(iii) the business is not formed by the transfer to a new business of machinery or plant previously used for any purpose in any backward area; and

(iv) the business employs ten or more workers using power or 20 or more workers not utilising power.

At present, the relief is granted at the rate of 20 per cent of the qualifying base. As in the case of tax holiday, there is no carry-forward, as the base is the current year's profits and gains; however, this relief has precedence in claim over tax holiday in the case of an assessee entitled to both these reliefs. The relief is available annually for the first ten assessment years.

f. Rural area reliefs. A number of reliefs are specifically designed to promote activities in the rural areas. A rural area (defined under section 35CC) is one which does not have a municipality and is beyond 15 km. of the limits of a municipality or cantonment area. A relief is granted for newly established small-scale industrial establishments having an annual turnover not exceeding Rs 20 lakh (section 80HHA) on the lines of the backward area relief. As such, an assessee can avail of either of these two reliefs. The rate of the relief is 20 per cent of the profits and gains generated by such an establishment and the relief is available for the first 10 assessment years. The relief applies to manufacturing activity undertaken after September 30, 1977, in any rural area; other conditions relating to splitting up and reconstruction of business, transfer of machinery or plant and employment of workers are similar to those applicable to the backward area relief.

Agricultural development allowance (section 35C) is available to a company engaged in activities like manufacture or processing of any article or thing made from or using as raw material any product of agriculture, animal husbandry, dairy or poultry farming. The relief is related to the expenditure incurred after February 29, 1968, in the provision of any goods, services or facilities for the specified activity. Specifically, the goods, services and facilities include fertilisers, seeds, pesticides,

concentrates for cattle and poultry feed, tools or implements used by the cultivator, grower or producer, and dissemination of information on or demonstration of or advice on modern production technologies in the field of agriculture, animal husbandry, dairy or poultry farming. A weighted rate of deduction of 120 per cent of the expenditure actually incurred is allowed; the economic relief is, thus, 20 per cent.

Another relief granted to rural area activities is through the rural development allowance (section 35CC), which is available for expenditure on programmes for the uplift of the rural population. The relief is also given for payments made to associations and institutions for carrying out similar rural development programmes (section 35CCA).

Profits and gains from livestock breeding, poultry farming or dairy farming (section 80JJ) upto Rs 15,000 or 20 per cent of profits and gains, whichever is higher, and from mushroom cultivation (section 80JJA) upto Rs 10,000 or 33.33 per cent, whichever is less, are allowed as reliefs to improve the net return on these activities. Finally, donations for rural development are also entitled to a tax relief (section 80GGA).

g. Priority industry relief. A special relief (section 80I) for priority industries listed in the Ninth Schedule of the Income-tax Act was available upto March 31, 1973. The relief rate was eight per cent of the annual profits and gains of such industries and was reduced to five per cent in 1972. It was withdrawn in the following year. As in the case of other fiscal reliefs related to profits and gains, no carry-forward was possible.

h. Export market development allowance. Among the current expenditure-based fiscal reliefs, the export market development allowance scheme is the most important. Under the scheme (section 35B), a weighted deduction of 150 per cent of actual expenditure is permissible; the 'economic' relief could be taken as the balance above 100 per cent.

The expenditure eligible for deduction has to be not in the nature of a capital expenditure or a personal expenditure and has to be wholly and exclusively incurred after February 29, 1968 in promoting exports. The entitled expenditure relates to advertisement or publicity outside India, maintenance of a branch office or agency outside India, expenses on travel abroad and "such other activities for the promotion of the sale

outside India" of the goods, services and facilities that are being exported. With effect from August 1, 1981, the CBDT has extended the applicability of this relief to the following categories of expenditure also:

(i) Conducting pre-investment surveys and the preparation of feasibility studies or project reports, subject to certain conditions;

(ii) Maintenance outside India of a warehouse for the promotion of the sale outside India of the goods;

(iii) Maintenance of a laboratory or other facilities for quality control or inspection of the goods;

(iv) Purchase of foreign trade periodicals or journals related to the business of the assessee.

i. Expenditure on scientific research. Non-capital expenditure on scientific research (section 35) is wholly deductible, whether made directly or through payments made to a scientific research association or to a university, college or other institution and which is to be used for scientific research. Capital expenditure for scientific research is also wholly deductible but if incurred before April 1, 1967, 20 per cent of the expenditure is deductible in the first year and the balance in four equal annual instalments. If the capital expenditure is incurred after March 31, 1967, 100 per cent of such expenditure is deductible in the first year and in the case of insufficient income, the expenditure is shown as a business loss and carried forward as any other business loss. Donations for scientific research are entitled to tax relief under section 80GGA (this section also provides tax relief for donations for rural development).

j. Preliminary and prospecting expenditure. Preliminary expenditure (section 35D), such as on preparation of feasibility reports, project reports, market surveys, engineering services and legal charges are deductible upto 2.5 per cent of the total project cost. Expenditure on prospecting for, or extraction or production of, certain minerals (specified in Part A or Part B of the Seventh Schedule), or on the development of a mine or other natural deposits (section 35E) is fully deductible.

k. Export turnover relief. The Finance Act, 1982, has provided for an export turnover relief (section 89A) to stimulate exports of specified goods. This relief is available to all Indian corporate and resident non-corporate assessees to the extent of

10 per cent of the income tax otherwise payable on profits and gains. The base for the relief is the sales proceeds of the specified goods and merchandise exported, but it excludes the cost of freight and insurance. The eligibility criterion for availability of the relief is that the export turnover in any year should exceed that of the preceding year by more than 10 per cent. The relief will be available for a period of five years, commencing from the assessment year 1983-84.

The section 89A relief departs from the usual form of reliefs granted to the corporate sector under chapters IV and VIA of the Income-tax Act, 1961. In particular, while section 35B relief serves to reduce the taxable income or the tax base, the section 89A relief is granted in terms of the actual tax liability.

l. Foreign construction contract relief. The Finance Act, 1982, provides for relief to a special category of business, namely, construction business abroad (section 80HHB). This relief provides for a 25 per cent deduction of taxable income of an Indian corporate assessee or a non-corporate assessee resident in India who derives any profits and gains from the business of a project under a contract entered into by him with the government of a foreign State or any statutory or public authority or agency in a foreign State, or with a foreign enterprise. Four conditions have been specified for entitlement to the relief:

(i) Payments for the project should be in foreign currency;
(ii) The profits should be repatriated to India in foreign exchange to the extent of 25 per cent within 6 months;
(iii) The assessee should maintain a separate account in respect of the profits and gains from the project; and
(iv) The assessee should create a special 'foreign projects reserve account' and credit to it a sum equal to 25 per cent of the profits and gains from the projects. The proceeds of this reserve have to be utilised during a period of five immediately succeeding assessment years for the purpose of the business and should not be used for distribution as dividends or as profits or for any non-business purpose.

It has also been specified that if the amount in the 'foreign project reserve account' is used for purposes of distribution by way of dividends or by way of profits or for any other non-business purpose, the deduction originally allowed will be

deemed to have been wrongly allowed. Moreover, the income tax officer will be competent to recompute the total income of the assessee for the relevant assessment year and to withdraw the tax benefit granted to the taxpayer within a period of 4 years from the end of the accounting year in which the foreign projects reserve account was utilised for a non-authorised purpose.

m. Other incentives. The other fiscal incentives available to corporate assessees are deductions in respect of certain inter-corporate dividends (section 80M), royalties, etc., received for the provision of technical know-how in India (section 80MM), dividends received from certain foreign companies (section 80N), royalties, etc., received from certain foreign enterprises (section 80O) and profits and gains from the business of publication of books (section 80QQ).

III. Data Sources and Methods of Estimation of Tax Saving Effects

1. Introduction

In order to estimate the effect of fiscal incentives on the tax liability of companies and also to estimate the tax savings, the hypothetical tax liability in the absence of the reliefs has to be first worked out. The hypothetical tax base and the tax liability would depend upon the incentives available and the incentives actually utilised. The amount of the reliefs would, in turn, depend upon the rate at which the fiscal reliefs are granted. In this study, we examine the effects of three major fiscal incentives on the basis of *ex-ante* data and all the available incentives on the basis of *ex-post* data.

2. Data

a. Ex-ante project data. The ex-ante data consist of investment and cash flow information on 88 major investment schemes of 73 projects received, processed and accepted by one of the leading financial institutions, namely, the Industrial Credit and Investment Corporation of India Ltd. (hereinafter, called the ICICI). The data obtained from the appraisal reports are the institutionally-revised estimates of the promoter's original estimates of cash flows. The revised estimates, nevertheless, give an idea of the expectations of the promoter and also of the experienced financial and technical analysts in the financial institution. It would have been interesting to have the projections of the gains from the fiscal incentives as made by the promoter, but these were not available for most of the projects, as such data are not called for by the financial institution.

The ICICI data relate to investment and the anticipated flow of income without the fiscal reliefs. These data were used

by us to estimate the tax savings arising from investment allowance, tax holiday (under section 80J, which was operative when the projects were envisaged and implemented) and backward area relief during each of the first eight years of the operations of the 73 projects. In the case of investment allowance and tax holiday, we have also estimated the unavailed or 'lost' relief at the end of the eight-year period. Such an estimate is not made for the backward area relief as the incentive is non-operative in the absence of profits and gains which constitute the base for the relief.

The *ex-ante* analysis is restricted to the first eight years of the operations of the project, as unabsorbed investment allowance and unabsorbed tax holiday (in the form it existed during the study period) could be carried forward upto the end of this period. Upto the eighth year, there could, therefore, arise some variation between the total income stream including the fiscal reliefs and excluding them, as well as in the subsequent tax liabilities. After the first eight years and upto the end of the economic life of the project (varying from, say, 10 to 15 years), there would be no such variation (except, due to the backward area relief, upto the tenth year) between the income flow with and without the gains from fiscal incentives.

b. Ex-post assessed income tax data. Ex-post data on each of the assessed fiscal reliefs, taxable income and tax were made available mainly by the CBDT and partly by a leading chartered accountant's firm. The source of the data is the assessed income tax returns of corporate assessees for seven assessment years, 1970-71 to 1976-77. In case an appeal was pending, the data relate to the stage upto which the Income-Tax Department had made the assessment. While the CBDT made available data for 99 corporate assessees, the chartered accountant's firm provided data for nine corporate assessees. The CBDT obtained the data through its 'field formation' offices and the data collection was co-ordinated by its Directorate of Inspection (Research, Statistics and Publications) in New Delhi.

The data from the assessed income tax returns were obtained separately for 10 fiscal incentives, namely, investment allowance, tax holiday, backward area relief, priority industry relief, export market development allowance, exemption of

specified inter-corporate dividends, exemption of dividends received from new industrial undertakings, deduction of expenditure on scientific research, deduction of donations to charitable institutions and exemption of royalty, commission, fees and other payments received from abroad. The reliefs due to all other fiscal incentives are shown together under 'other reliefs'. Data were also obtained on assessed depreciation, income tax, surcharge on income tax and on capital gains tax.

c. Ex-post company finances data. The analysis of *ex-post* assessed income tax data is supplemented by that of company finances data on corporate tax provision and corporate profits before tax (non-assessed). These data relate to a sample of 223 public limited companies (hereinafter, called the NIPFP companies) operating in the manufacturing segment of the private corporate sector. They are for a 15-year period, 1961-62 to 1975-76. The main reason for undertaking this exercise is to allow a comparative evaluation of the results with those of some earlier studies, which were based only on such data. It was also felt that an analysis of the effective tax rates at the disaggregated level for different categories of companies classified according to their capital-output ratio, age and size (measured in terms of total assets) might be interesting.

3. Period

The analysis of *ex-ante* project data relates to the first eight years of the operation of a project. ICICI projections were generally available for five years, and in some cases upto seven. In the case of six projects, the projections were available only for the first three years of their operations and, in the case of 25 others, for the first four years.

In the case of the projects for which data were not available for all the years the estimates upto the sixth year were based on the observed growth rate between the last two years for which data were available, and the sixth year's estimate was repeated for the seventh and eighth years, on the assumption that the project would have reached its 'peak' level by the end of the sixth year.

On the basis of data for the year when the projects were approved by the ICICI, it is seen that as many as 54 of the 73 projects were approved between 1972 and 1975. Only six

projects were approved later and 13 prior to 1972 (Table A.1).

The analysis of *ex-post* assessed income tax data relates to seven assessment years, 1970-71 to 1976-77. In the case of 10 assessees, data were not available for one or two of the intervening years and in the case of 35 others, for the first or second and/or sixth or seventh year; the missing data were estimated on the basis of the data for the preceding and/or following years. Thus, for as many as 63 assessees, all data were available for seven years; for 85 assessees for six years and for 98 assessees for five years. A separate analysis is made for the 63 assessees for whom no data had to be estimated by us for any of the seven years.

The company finances data for 223 NIPFP companies were analysed for a 15-year period, 1961-62 to 1975-76; the estimations are made on the basis of data on tax provision and profits before tax. Analysis is also made for a seven-year period, 1969-70 to 1975-76, which period is comparable with that relating to the assessment and project data.

4. Selection of Samples

a. ICICI projects. The objective was to obtain data on major projects approved by the ICICI between 1970-71 and 1976-77, which could have, subsequent to their commercial operations, actually gained from some of the fiscal reliefs. The projects were selected from among those that ICICI approved during the period in the light of discussions with several officials in the appraisal, follow-up and merchant banking departments of the ICICI as well as with senior managerial personnel of the ICICI.

b. Income tax assessees. A list of major corporate assessees was submitted to the Directorate of Inspection, CBDT, with a request that the relevant data for about 80 per cent of the listed companies might be made available, assessee-wise. The composition of the list was decided upon on the basis of discussions with the officials of the Income Tax Department, financial institutions and industrial companies and with some leading chartered accountants and tax lawyers. Discussions were held with several Commissioners of Income Tax in Bombay, Calcutta and Delhi, and officials in the Directorate of Inspection, (Research, Statistics and Publications), CBDT. An attempt was

made to include a number of companies for which *ex-ante* data had been obtained on some of their projects and to include assessees who could be expected to have derived some benefit from the fiscal reliefs in at least some of the assessment years. The assessees included growing companies, large-sized and medium-sized companies and companies operating in different industries and assessed in major centres. The Directorate of Inspection (Research, Statistics and Publications), CBDT, made available to us the data from among the listed corporate assessees without indicating at any stage the identity of the assessees to whom the data related. The data from the chartered accountant's firm relate to some of the major clients but again the identity of the assessee was not disclosed. From earlier discussions with the senior partner of the firm, it can be said that the assessees are mainly from Bombay and Ahmedabad and they are generally engaged in large-scale manufacturing activities.

c. NIPFP companies. The company finances data relate to 223 companies having a combined paid-up share capital of Rs 873.2 crore in 1975-76; these companies account for 42.2 per cent of the paid-up capital of all the 7626 non-government public limited companies (i.e., Rs 2066.8 crore) and 56.8 per cent of those companies having a paid-up share capital of Rs 50 lakh or more (i.e., Rs 1537.0 crore). Each sample company had a paid-up share capital of Rs 50 lakh or more in 1975-76. The data, compiled from the *Bombay Stock Exchange Directory*, relate to tax provision in the respective financial year and not assessment year. The company finances data cannot be presumed to be the data indicated in the income tax returns for the relevant assessment year, filed subsequently by the assessee. The company finances data may be expected, *a priori*, to underestimate the tax liability, as some of the deductions might not be allowed at the assessment stage.

5. Classification and Analysis

a. Ex-ante project data. The analysis on the basis of the *ex-ante* data on ICICI projects is made at the aggregate level.

b. Ex-post assessed income tax data. The analysis of the *ex-post* assessed income tax data is made at the aggregate level as well as at the disaggregated level for groups of corporate

assessees classified according to three criteria, namely, their location, the capital intensity of operations and the type of industrial activity.

On the basis of the available information on the centre at which the assessment was made, the 108 assessees are classified into six groups, namely, Ahmedabad, Bombay, Calcutta, Delhi and Madras assessees, with the sixth group including assessees for whom location data were not available. While centre-wise revenue data are not published by the Income Tax Department in their annual publication *All India Income Tax Statistics* (*AIITS*), it is found that the five States in which the five major centres are located together accounted for 82.1 per cent of the corporate assessees, 79.6 per cent of the assessed corporate income and 79.7 per cent of the assessed corporate tax collections during the assessment year 1975-76.

The 108 corporate assessees whose data are studied account for a substantial proportion of the total assessed corporate income and tax in the five respective States, even though in terms of numbers they constitute a small proportion, between 0.7 per cent and 2.7 per cent. While the 22 Bombay assessees (0.7 per cent of a total of 3183 Maharashtra corporate assessees) account for 27.1 per cent and 26.3 per cent, respectively, of the total assessed income and assessed tax of all Maharashtra assessees, the proportionate contributions of Calcutta assessees in our sample are 56.5 per cent and 57.8 per cent, respectively, of the total assessed corporate income and tax of all West Bengal corporate assessees. In the case of Delhi assessees, the corresponding proportions are 56.6 per cent and 53.7 per cent, respectively, in the case of Ahmedabad assessees they are 60.1 per cent and 58.7 per cent, respectively, of corporate assessees in Gujarat and in the case of Madras, they are as high as 93.7 per cent and 94.2 per cent, respectively, of corporate assessees in Tamil Nadu.

Capital intensity is judged on the basis of available data on assessed depreciation. The assessees are grouped into 'highly capital-intensive' (average annual assessed depreciation above Rs 1 crore), 'moderately capital-intensive' (above Rs 50 lakh and less than Rs 1 crore) and 'less capital-intensive' (below Rs 50 lakh) assessees.

The industry-wise classification is based on the available

data on the product/activities with which the assessees are associated. The assessees are classified into five broad industry groups, namely, 'chemicals', 'engineering', 'textiles', 'diversified', and 'miscellaneous', including unclassified assessees.

c. Ex-post company finances data. The analysis of *ex-post* NIPFP sample company data is made at the aggregate level as also at disaggregated levels, according to the capital intensity of the sample companies, their size and age. In the absence of company finances data on each of the individual fiscal incentives, the analysis is restricted to the estimation of the actual tax base, the effective tax rate and tax savings inclusive of all the incentives.

Capital intensity is measured by the ratio of total assets to the value of production (i.e., net sales plus change in stock of finished goods and work-in-progress). Companies are classified into those having 'high' capital-intensity or high capital-output ratio (the ratio exceeding 1:1.50), 'moderate' capital-intensity (between 1:0.75 and 1:1.50) and 'low' capital-intensity (below 1:0.75).

The size of a company is measured in terms of total assets in 1975-76, the terminal year of the study. Companies are classified into small companies (less than Rs 15 crore), medium-size companies (between Rs 15 crore and Rs 30 crore), large companies (above Rs 30 crore but below Rs 50 crore) and larger companies (above Rs 50 crore).

The age of a company is determined with reference to the year of its incorporation as a public limited company under the Indian Companies Act, 1956. Sample companies are accordingly classified into old, if incorporated before 1951, and new, if incorporated between 1956 and 1961.

While the results derived from the aggregate analysis may be taken to broadly hold good for the corporate sector as a whole, the findings for the specific groups of companies are likely to be subject to error, because no attempt has been made to give proper representation to these groups on the basis of stratified random sampling.

6. Methodology for Estimation

a. Introduction. While in the case of the income tax assessment data, the information on each fiscal relief was available,

in the case of the *ex-ante* project data, the amount of each selected fiscal relief had to be first computed. In the case of the NIPFP sample companies, data are available for development rebate and it was possible to only estimate the aggregate amount of all fiscal reliefs taken together.

b. Ex-ante project data. The estimates of effective tax rates, fiscal reliefs and tax savings are made project-wise for each of the first eight years of operation of the 73 projects studied. The individual years are not identical calendar years but are identical years with reference to the commencement of the project. Thus, the data for the first year of the project are those for the first year of commercial operation of the project. The first year of project operation was generally between 1973 and 1977.

The ICICI data that are used relate to the capital cost of the project, including the break-up into four categories of gross fixed assets (namely, land, buildings, plant and machinery and other assets) and the projected estimates of net worth (paid-up share capital plus reserves) and operating profits before depreciation for the first five or six years of commercial operations. All computations were done by us applying the relevant rates for depreciation, fiscal reliefs and tax to the ICICI data, taking the order of priority of deductions as stipulated under the income tax law. This was done because the projected figure of depreciation in the ICICI appraisal reports was computed using the straight-line method which is not acceptable under the Income-tax Act[11].

The depreciation provision for the first year was estimated on the basis of the data on gross fixed assets expected to be fully installed in the first year. The depreciation provision for subsequent years was computed on the value of the net fixed assets at the beginning of the relevant year. The annual depreciation provision was computed using the reducing-balance method (as against the straight-line method used in the appraisal report). The estimates of depreciation were computed

11. The ICICI estimates tax liability on the basis of profits, net of depreciation computed according to the reducing-balance method, but these estimates are not presented in the appraisal reports. The straight-line method of computing depreciation is preferred for estimating the cash flow, because of its simplicity. There, however, seems to be no justification for adopting this practice.

separately for each of the components of gross fixed assets at rates specified under the income tax law. While no depreciation is provided for land, the depreciation rate for building has been taken at five per cent, for miscellaneous fixed assets at 20 per cent and for machinery and plants, generally at 10, 15, 20 or 30 per cent, as permissible under the income tax law, depending upon the broad category of the plant (identified from appraisal reports and discussion with the ICICI officials). However, as different plants and machinery within a company are eligible for depreciation at different rates, the selection of a single rate for the entire machinery and plant in each company leads to some degree of under-estimation or over-estimation, depending upon the exact composition of the machinery and plant.

The data on estimated commercial or business profits before depreciation were obtained from the appraisal reports. The profit estimates were derived from the total sales income, net of cost of selling, maintenance, overheads and other miscellaneous expenses, and they formed the starting point for our exercises. Depreciation, as computed by us, is deducted from business profits to derive the operating profits for the current year. The order of priority for major deductions, including depreciation, is as follows in accordance with the provisions of the income tax law:

(i) Current year's depreciation and amortised expenditure on scientific research (sections 32 and 35).
(ii) Carried forward losses of earlier years (only from business under certain conditions) [section 72(1)].
(iii) Unabsorbed depreciation and amortised expenditure on scientific research for earlier years [sections 32(2) and 35(4)]
(iv) Unabsorbed development rebate [section 33(2) (ii)].
(v) Current development rebate [section 33(2) (i)].
(vi) Unabsorbed development allowance [section 33A(2) (ii)].
(vii) Current development allowance [section 33A(2) (1)].
(viii) Unabsorbed investment allowance [section 33A(3) (ii)].
(ix) Current investment allowance [section 33A(3) (i)].
(x) Unabsorbed capital expenditure on scientific research [section 35(4)].
(xi) Expenditure on prospecting for certain minerals [section 35E(4)].

(xii) Expenditure for promoting family planning [section 36 (1) (ix)].
(xiii) Backward area relief (section 80HH)
(xiv) Deduction in respect of profits from a new industrial undertaking, ship or hotel [section 80I(3)].

We thus see that the deductions under chapter VI A (under section 80) can be made only if the income after adjustment of all other allowances, rebates and losses is positive. The amount that is left after all chapter VI A deductions are made, constitutes taxable profits or the actual tax base and the statutory tax rate is applied to this base to estimate the actual tax liability. When the amount of fiscal reliefs is added back to the actual tax base, we get the hypothetical tax base on which the statutory tax rate would have applied in the absence of the fiscal reliefs.

In the absence of adequate profits, unavailed investment allowance can be carried forward upto the end of eight years; the old section 80J tax holiday had a similar carry forward provision.Business losses can also be carried forward upto the end of eight years but unabsorbed depreciation can be carried forward indefinitely. The set-off of the old tax holiday in subsequent years was, however, restricted to profits from the plant in which the incentive-linked investment was made but such restriction does not apply to set-off of investment allowance and other permissible deductions.

We have taken as the statutory tax rate for each project the rate that was in force in the year when the project was approved even though the rate might have changed when the project went into stream and definitely did change during the eight-year period. In six of the nine years during the period from 1970-71, the starting point for the *ex-ante* data, to 1978-79, when the project reports were actually studied at the ICICI and data were compiled, the statutory corporate tax rate for Indian public limited companies in which the public are substantially interested was 57.75 per cent, inclusive of the income tax at the rate of 55 per cent and a surcharge at 5 per cent of the income tax. The income tax rate of 55 per cent has remained unchanged since the starting year of the study period but while there was no surcharge in 1970-71 and 1971-72, it was introdnced in 1972-73 at the rate of 2.5 per cent of the income tax and increased to 5.0 per cent the following year (Table A.2).

The following computations are made to estimate the tax savings arising from the fiscal reliefs:

The hypothetical corporate profits tax base, which includes corporate profits before fiscal reliefs and tax are deducted, is first worked out. The hypothetical tax base amounts to operating profits net of brought-forward loss and depreciation. The hypothetical corporate tax liability is derived by applying the statutory tax rate to the hypothetical tax base. In other words, the hypothetical tax base is multiplied by the statutory tax rate. Each of the three fiscal reliefs is estimated, project-wise, by applying the fiscal relief rate as under the income tax law when the project was approved to the projected data on the relevant base, subject to the availability of profits. The actual corporate tax base is then estimated by deducting the amount of fiscal reliefs from the hypothetical corporate tax base and it is this base which represents the 'taxable profits'. The actual corporate tax liability is then determined by multiplying the actual corporate tax base by the statutory corporate tax rate. The effective corporate tax rate is estimated by dividing the actual corporate tax liability by the hypothetical corporate tax base. Corporate tax savings are estimated by deducting the actual corporate tax liability from the hypothetical corporate tax liability. Alternatively, these can be derived by multiplying the amount of fiscal reliefs by the statutory tax rate. Fiscal reliefs as per cent of the hypothetical tax base are computed to estimate the diminution in the hypothetical tax base caused by the fiscal reliefs. Tax savings as per cent of the hypothetical tax liability (which works out to be the same) indicate the extent of diminution of tax liability arising from the tax savings.

The estimates of fiscal reliefs and tax savings were first made for each of the 73 projects, annually, for first eight years of their operations and then the estimates of the individual projects for each year were added up to derive the estimates at the aggregate level for the year concerned. An alternative method could have been to aggregate the basic data for the 73 projects and then estimate the tax savings for the projects taken together. The main reason for not adopting the latter alternative was that the first step in the computational exercises,

namely, the estimation of depreciation would have created problems because of the existence of different rates of depreciation for different categories of plant and machinery. The second problem in adopting the aggregate-level method of estimation of tax savings directly arises from the differences between the statutory tax rates in different years. (We have used the tax rate in the year in which the project was approved as being applicable throughout the first eight years of its operations). Thirdly, the negative profits of some of the projects (in whichever years these arise) would reduce the profits against which fiscal reliefs can be claimed by the other projects having positive profits. And, finally, all the projects were not entitled to claim all the three fiscal reliefs that were being studied.

c. Ex-post assessed income tax data. The computation of tax savings generated by fiscal reliefs in the case of assessed income tax data was simple. The assessment data on individual fiscal reliefs were added together to arrive at the total assessed fiscal reliefs, year-wise, for each assessee. The amounts of these fiscal reliefs were then added to the net assessed income, to derive the hypothetical corporate tax base on which the statutory tax rate would have been applicable in the absence of the fiscal reliefs. The standard statutory corporate tax rate (actual tax liability as per cent of the assessed income) was applied to the hypothetical tax base to compute the hypothetical tax liability. The difference between the hypothetical tax liability and the actual tax liability shows the amount of tax savings as a result of the diminution in the tax base caused by the fiscal reliefs. Alternatively, the tax savings can be estimated by applying the standard tax rate to the amount of fiscal reliefs.

The assessed fiscal reliefs and the estimated tax savings generated by the reliefs for each assessee were added up for each assessment year to obtain the combined yearly value of fiscal reliefs and tax savings for the 108 assessees.

b. Ex-post NIPFP company finances data. The company finances data include those on tax provision, profits before tax, and development rebate or investment allowance. Profits before tax may be considered to represent the hypothetical tax base and fiscal reliefs may be assumed to be implicitly taken into account when determining the tax provision, as presented in the profits and loss account statements. Evidence of this implicit

consideration lies in the fact that tax provision as per cent of profits before tax (called the effective tax rate) is generally lower than the statutory tax rate. Earlier studies have taken the difference between the effective tax rate and the statutory tax rate as the tax savings rate.

The actual tax base was determined by dividing the tax provision by the statutory tax rate to determine the actual base from which it is derived. The method of estimating the actual tax base can be put in the following form:

$$ATB = \frac{a}{b} \times 100$$

where, a = tax provision.
b = statutory tax rate, and
ATB = actual tax base

The statutory tax rates for different years were taken as applicable, under the income tax law in the respective years, to Indian public limited companies in whom the public are substantially interested.

7. Data Limitations

The *ex-ante* and the *ex-post* data suffer from a number of limitations which are now pointed out.

a. Ex-ante project data. Data on possible or expected fiscal reliefs were not available in the appraisal reports and had to be computed by us on the basis of the rates on which these reliefs are available according to the income tax law. The starting point for the computation of the incentives was the data on gross fixed assets in the first year and the annual data on net worth as given in the appraisal reports. To the extent the ICICI estimates of project costs were subsequently revised or did not materialise, our estimates of fiscal reliefs would be prone to error.

The analysis of *ex-ante* data does not take into account the changes in the rates of corporate tax during the period 1970-71 to 1976-77, when the ICICI projects were approved. We have used for each project the statutory tax rate that existed in the year when the project was approved and the rate might have changed after the project went into stream. As such, for the same year, different statutory tax rates were used for different projects, the statutory tax rates ranging between 55.0 per cent

and 57.75 per cent. Further, it was assumed that all the projects would be liable to the statutory tax rate as applicable to Indian companies in which the public are substantially interested. As such, the estimation of corporate tax savings could be inaccurate if the companies were actually subject to different statutory tax rates.

Another limitation stems from the use of a common rate of depreciation for the machinery and plant project-wise, for it is likely that a project may have different types of machinery and plant which would be, according to the income tax law, entitled to depreciation at different rates.

Finally, in the case of tax holiday, the estimates of both the entitlement and the relief are on the higher side. The over-estimation is caused by our use of estimates of total profits of the company (including probably those generated from earlier investments in the same plant as well as in other plants of the company) as the base for computing the fiscal reliefs. While such a base for the computation of fiscal reliefs provides a proper estimate of investment allowance, which can be claimed from profits generated by earlier investments also and which gets priority over other fiscal reliefs, the appropriate profits base for computing tax holiday would have been the profits generated by the new investment. To arrive at such an estimate of profits, project-wise break-up of income and expenditure would be required. Some idea about the extent of over-estimation of tax holiday on this ground is obtained from a comparison of the proportions of tax holiday that can be claimed from the tax holiday entitlement at the aggregate level and at the disaggregated level for new industrial undertakings. Some degree of over-estimation in the case of the tax holiday entitlement and claim arises also because of our treating all the investment schemes studied as being eligible for the relief on the assumption that each of the investment projects would be treated by the tax authorities as a new unit. To the extent some of the projects relating to substantial expansion, diversification and modernisation may not be so treated under the income tax law, the estimates would be on the higher side.

b. Ex-post assessed income tax data. The statutory tax rate (called by us, the standard statutory tax rate, which is the assessed tax as per cent of the assessed income) for the com-

putation of tax savings generated by the fiscal reliefs is different from what might have been applicable in individual assessments. This is due to the fact that the identity of the assessee was not known to us to enable us to use the appropriate statutory tax rate; therefore estimated averages were used.

In the case of expenditure type of fiscal reliefs, the 'economic relief could be taken to be the difference between what would have been ordinarily allowed and what is specifically allowed. This is true of the weighted deductions like the export market development allowance and the agricultural development allowance; only the eligible expenditure above the normal 100 per cent (i.e., 50 per cent or 20 per cent) could be regarded as tax relief. In the case of income-type fiscal reliefs, like inter-corporate dividends and the dividends from priority industries, the full amount of dividends would be taken as the relief.

The estimates of tax savings might be on the lower side for assessments on which there are some appeals pending before various appellate authorities, such as the Income-tax Appellate Tribunal, the High Courts and the Supreme Court, as some of the pending appeals might go in favour of the assessees.

c. Ex-post company finances data. The main limitation arises from the use of the statutory tax rate as applicable to Indian companies, in which the public are substantially interested, even though some of the sample companies might be liable to different statutory tax rates. The estimation of fiscal reliefs is also made only at the aggregate level for all reliefs and, that too, indirectly.

The NIPFP data are also subject to the usual limitations applicable to any study based on aggregation of data contained in the annual reports of the companies, namely, problems arising from a change in the accounting years, the changes in currency values and also from amalgamations of companies within the study period.

d. Classifications. The classification of corporate assessees has some limitations. The purpose of the classification was to study at the disaggregated level whether there were any marked differences in the tax base diminution and in tax savings for corporate assessees having different characteristics. Depreciation as the measure of capital intensity for the *ex-post* assessed income-tax data has been used in the absence of a

superior alternative measure. The use of this measure suffers from the limitation that depreciation is dependent upon the age of the plant and equipment, apart from the value of the capital assets.

The classification of *ex-post* company finances data, size-wise and age-wise, is for facilitating comparisons among the sample companies and does not represent, in the global context, what the terms 'large', 'small', 'old' and 'new', generally connote.

IV. The Fiscal Incentive Impact: Analysis of Ex-ante Project Data

1. Sample of Projects

The analysis of *ex-ante* data relates to 73 ICICI-financed projects (hereinafter called ICICI projects) covering 88 investment schemes. As much as 38.6 per cent of the investment schemes represented substantial expansion of existing undertakings, 22.7 per cent were for setting up new units by existing undertakings, 20.5 per cent for setting up new industrial undertakings and the remaining schemes were for diversification (10.2 per cent) or modernisation programmes (8.0 per cent) of existing undertakings. The bulk of the ICICI projects were proposed to be located in non-backward areas (70.5 per cent). (Table A.3).

Industry-wise, the distribution of investment schemes, in terms of numbers, is representative of the situation in the private corporate sector. Chemicals, inclusive of fertilisers, form the most important industry group for schemes both in backward and non-backward areas with 28 of the 88 schemes being in this line. There are, among the selected projects, 18 schemes for the manufacture of machinery and 12 for iron and steel products. Other ICICI projects were ventures in textiles, tyres and tubes, paper and paper products, cement, food and finished leather.

2. Fiscal Reliefs, Tax Savings and Diminution in Tax Base

a. Overall results. The 73 ICICI projects are estimated to receive by way of the three fiscal reliefs studied an amount of Rs 464.4 crore during the first eight years of their operations. The tax savings generated by these reliefs would amount to Rs 266.7 crore and represent 38.5 per cent of the total envisaged project cost of Rs 692.0 crore in current values. In discounted

present values,[12] the tax savings would amount to Rs 187.86 crore, forming 27.1 per cent of the total project cost (Table IV.1).

The three fiscal reliefs would together, in effect, reduce the tax base of the 73 projects during the first eight years of their operations by 24.2 per cent. The tax savings, similarly, would reduce to the same extent the hypothetical tax liability that would have arisen in the absence of the fiscal reliefs. In other words, the actual corporate tax base would be reduced to 75.8 per cent of the hypothetical tax base. The effect of the diminution in the tax base is reflected in the effective tax rate which would be 43.5 per cent as compared to the average annual statutory tax rate of 57.4 per cent that was applicable to public limited companies in which the public are substantially interested during the study period.

Among the three fiscal reliefs studied, the most important, in terms of its share of the total reliefs, would be tax holiday (amounting to 63.8 per cent of the total of the three reliefs). The investment allowance would be the second important relief (23.5 per cent), followed by backward area relief (12.7 per cent).

The high proportionate contribution of tax holiday arises from our assumption that all the 73 projects whose data were studied are eligible to claim tax holiday and investment allowance. Such an assumption results in the estimates of tax holiday being on the higher side, as all the projects may not be entitled to the relief.[13]

The aggregate-level analysis of the relative importance of

12. The rate of discount used being 10 per cent.
13. Various criteria have been identified on the basis of court decisions as being necessary to be met for determining the eligibility of a new investment for this relief. These include investment of fresh capital, employment of the required number of workers, manufacture of items not listed in the Seventh Schedule, earning of profits that is distinctly attributable to the new undertakings and distinct and separate identity of the new unit, say, through maintenance of separate books of accounts. As such, even diversification and modernisation programmes were eligible to claim the relief. For details see, 107 *ITR* 195 (Textile Machinery Corporation Ltd. *v.* CIT (1977), 108 *ITR* 367 (CIT *v.* Indian Aluminium Co. Ltd.) (1977), 107 *ITR* 164 (CIT *v.* Hindustan Motors Ltd.) (1977), 94 *ITR* 73 (CIT *v.* Orient Paper Mills) (1974) and 92 *ITR* 173 (CIT *v.* Ganga Sugar Corporation Ltd.) (1973).

TABLE IV.1

Fiscal Incentives, Tax Base, Effective Tax Rate and Tax Savings
(*Ex-ante* data relating to 73 ICICI projects)

(*Rs lakh*)

Year of project operation	*Actual corporate profits tax*		*Hypothetical corporate profits tax*		*Tax rate (per cent)*		*Fiscal incentives*		*Col. 8 as per cent of col. 4*	*Col. 8 as per cent of col. 3*	*Col. 1 as per cent of col. 3*
	Base	*Liability*	*Base*	*Liability*	*Statutory*	*Effective*	*Relief*	*Tax savings*			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
First	6169.5	3551.4	13526.9	7786.1	57.56	26.25	7357.4	4234.7	54.39	31.31	45.61
Second	11548.0	6637.0	17591.5	10110.2	57.47	37.73	6043.5	3473.2	34.35	19.74	65.65
Third	14096.8	8095.3	20998.9	12059.2	57.43	38.55	6902.1	3963.9	32.87	18.88	67.13
Fourth	16610.0	9535.6	24130.6	13853.1	57.41	39.52	7520.4	4317.5	31.17	17.89	68.83
Fifth	18810.2	10796.8	27184.8	15603.8	57.40	39.72	8374.6	4807.0	30.81	17.68	69.19
Sixth	25364.1	14542.9	28734.8	16475.7	57.34	50.61	3370.7	1932.8	11.73	6.73	88.23
Seventh	25993.7	14928.3	29698.7	17056.1	57.43	50.27	3705.0	2127.8	12.48	7.16	87.52
Eighth	27040.6	15486.4	30204.4	17298.3	57.27	51.27	3163.8	1811.9	10.47	6.00	89.53
Total	145633.2	83573.7	192070.6	110242.5	—	—	46437.5	26668.8	—	—	—
Annual Average	18204.2	10446.7	24008.8	13780.3	57.39	43.51	5804.6	3333.6	24.19	13.88	75.82

the three fiscal reliefs conceals the role of the backward area relief, which would be claimed by about one-fourth of the ICICI projects whose data were studied. An analysis of only backward area projects, which is more appropriate to assess the importance of this relief, brings out a somewhat different picture, the contribution of the relief going up substantially, as is seen later in this chapter (sub-section 4c).

The tax base diminution effect of investment allowance (assuming it was the only relief in operation) for the 73 ICICI projects taken together is expected to be 5.7 per cent and the effective tax rate would be 51.8 per cent instead of 57.75 per cent in its absence. The tax base diminution effect of tax holiday is estimated to be 15.4 per cent and the effective tax rate would be 46.4 per cent.

b. Annual trends. Estimated annual data on tax savings and effective tax rates point to a clear trend. There are three distinct phases: the impact of fiscal reliefs is most pronounced in the first year of operations, it is substantial yet gradually declining during the next four years and is moderate during the sixth to eighth year.

The diminution in the hypothetical tax base (and also in tax liability) due to the three fiscal reliefs is as much as 54.4 per cent in the first year of operations, the actual corporate tax base being 45.6 per cent of the hypothetical tax base. The extent of diminution in the tax base decreases thereafter. The tax base diminution is 34.4 per cent in the second year and gradually falls to 30.8 per cent by the end of the fifth year of operations. The diminution in the tax base is substantially lower from the sixth to the eighth year.

This trend in the extent of diminution in the tax base is reflected in the effective tax rates as well as other indicators of the tax-saving effect of the fiscal reliefs, such as the proportion of tax savings to the hypothetical tax base and to the hypothetical tax liability and that of the actual tax base to the hypothetical tax base.

The ICICI projects have, on the average, an effective tax rate of 26.3 per cent in the first year of the operations, a result of the substantial tax savings through utilisation of available fiscal reliefs. The effective tax rate rises to 37.7 per cent in the

second year (still substantially lower than the statutory tax rate) and then rises marginally every year during the next three years (to 38.6 per cent, 39.5 per cent and 39.7 per cent, respectively). There is a sharp increase in the effective tax rate to 50.6 per cent in the sixth year of operations because three-fourth of the projects would be able to claim by the end of the fifth year their whole entitlement of investment allowance, and the rest of the projects would be able to claim the bulk of their entitlement. 'Fresh' tax holiday would not also arise after the end of the fifth year of operations. In fact, only 22.1 per cent of the total fiscal reliefs that would be claimed by the 73 ICICI projects during the first eight years of their operations is expected to be claimed from the sixth to the eighth year. The effective tax rate expected in the seventh year (50.3 per cent) is almost the same as in the sixth year and rises further to 51.3 per cent in the eighth year.

3. Elimination of Corporate Tax Liability

Fiscal reliefs not only make a substantial dent in the tax liability for most projects but also totally eliminate tax liability in all the years studied in the case of some projects and for some years in the case of others. Through the use of the three fiscal reliefs studied and subject to the condition that profits are available against which these reliefs could be claimed, more than one-tenth of the ICICI projects would not be liable to any corporate tax during each of the first eight years of their operations. In the case of 8.2 per cent of the projects, the corporate tax liability would not arise in seven out of the eight years.

TABLE IV.2

Elimination of Corporate Profits Tax Liability Due to Fiscal Reliefs
(*Ex-ante* data relating to ICICI projects)

Upto end of year	8	7	6	5	4	3	2	1	None	Total
Number of projects	9	6	6	6	6	5	8	6	21	73

In all, almost two-fifth of the ICICI projects would have no corporate tax liability from four to eight years during the first eight years of their operations and more than one-half of them for at least three years (Table IV.2).

On the other hand, 28.8 per cent of the projects would have corporate tax liability in each of the eight years of their operations for in spite of claiming all the entitled fiscal reliefs wholly, they would still have taxable profits. Another 8.2 per cent of the projects would have some corporate tax liability in seven years and another 11.0 per cent in six years.

4. Disaggregated Analysis

The disaggregated analysis of the three fiscal reliefs brings out their relative importance during the eight-year period as well as from year to year.

a. Investment allowance. The 73 projects expect to receive by way of the investment allowance 25 per cent of the total value of their plant and machinery to be installed through their investment schemes. During the first eight years of their operations, the 73 projects together would be able to claim 92.9 per cent of their entitled investment allowance (Table IV.3).

Even though tax holiday cannot be claimed until the whole of the entitled investment allowance in any particular project is fully claimed, these results do not imply that none of the projects can claim tax holiday, because, as explained earlier in this chapter, an aggregate-level analysis conceals project-level differences.

A substantial proportion of the ICICI projects (38.4 per cent) would be able to claim their entitled investment allowance fully in their first year of operations, 9.6 per cent in the second year and 11.0 per cent in the third year. In other words, almost three-fifth of the ICICI projects would be able to fully claim their entitled investment allowance during the first three years of their operations. Only a small proportion of the ICICI projects (5.5 per cent) would not be able to avail of their investment allowance fully by the end of the eighth year of their operations; the investment allowance lost in the case of such projects would represent 7.1 per cent of their entitlement (Table IV.4).

TABLE IV.3

Composition of Fiscal Reliefs of ICICI Projects

(*Rs lakh*)

Year of project operation	*Investment allowance*	'A'	*Tax holiday*	'A'	*Backward area relief*	'A'	*Total fiscal reliefs*	'A'
First	3597.7 (48.9)	32.9	3582.7 (48.7)	12.1	176.9 (2.4)	3.0	7357.3 (100.0)	15.8
Second	856.1 (14.2)	7.8	4728.9 (78.2)	16.0	458.4 (7.6)	7.8	6043.4 (100.0)	13.0
Third	764.9 (11.1)	7.0	5455.9 (79.0)	18.4	681.2 (9.9)	11.5	6902.0 (100.0)	14.9
Fourth	583.4 (7.8)	5.3	6122.9 (81.4)	20.7	814.1 (10.8)	13.8	7520.4 (100.0)	16.2
Fifth	1161.0 (13.9)	10.6	6300.7 (75.2)	21.3	912.2 (10.9)	15.5	8373.9 (100.0)	18.0
Sixth	1978.1 (58.5)	18.1	462.6 (13.7)	1.6	937.8 (27.8)	15.9	3378.5 (100.0)	7.3
Seventh	1537.4 (41.4)	14.1	1220.0 (32.9)	4.0	953.3 (25.7)	16.1	3710.7 (100.0)	8.0
Eighth	458.6 (14.5)	4.2	1739.8 (55.8)	5.9	965.3 (30.6)	16.4	3163.7 (100.0)	6.8
Total	10937.2 (23.5)	100.0	29613.5 (63.8)	100.0	5899.2 (12.7)	100.0	46449.9 (100.0)	100.0

Notes: *1.* Figures in parentheses indicate percentage of total fiscal reliefs (horizontal)
2. Figures under 'A' are year-wise percentage of the eight-year total (vertical)

TABLE IV.4

Timing of Claim of Full Entitlement of Investment Allowance and Tax Holiday by ICICI Projects

(Number of projects)

Year of project operation	Investment allowance	Tax holiday
First	28	NA[1]
Second	7	NA
Third	8	NA
Fourth	26[2]	NA
Fifth		46
Sixth		6
Seventh		4
Eighth		7
Relief lost	4(8.41)[3]	10(23.94)[3]

Notes: *1.* NA: Not applicable as tax holiday is annually available for five years and so the full entitlement can be claimed earliest in the fifth year.

2. From the fourth to the eighth year.

3. Amount of relief (in parentheses) in Rs crore. The relief is lost if there is inadequacy of profits.

The investment allowance, because its claim is to be met fully before that of the other two fiscal reliefs, becomes the most important fiscal relief in the first year of operations. As long as profits are available, the entitled investment allowance is claimed, partly or fully, depending on the level of profits, and only thereafter the available profits can be used to meet the claim of backward area relief (if applicable) and of tax holiday. As such, at the aggregate level, almost one-third of the total investment allowance expected to be claimed by the ICICI projects during the first eight years of their operations is expected to be claimed in the first year itself. Also, in the first year, investment allowance would be the most important fiscal relief (accounting for 48.9 per cent of the total of the three fiscal reliefs in that year). In the following four years, tax holiday would be the most important, accounting for between 75.2 per cent and 81.4 per cent of the total fiscal reliefs that can be claimed by

the ICICI projects; the share of investment allowance would be between 7.8 per cent and 14.2 per cent. After the end of the fifth year, as no 'fresh' tax holiday or investment allowance is available, but only the unavailed portion of these reliefs can be claimed (upto the end of the eighth year), no clear pattern is seen in our study as regards the relative importance of investment allowance and tax holiday.

b. Tax holiday. The order of priority of claiming tax holiday (after investment allowance and backward area reliefs) tends to make it more important with the passage of time because, first, companies start generating larger profits and gains and, secondly, other eligible reliefs having priority would have already been claimed. After the end of the first five-year period from which point only the unavailed tax holiday can be claimed, the contribution of tax holiday tapers off. Thus, out of the total tax holiday benefit which the 73 projects are estimated to receive during the first eight years of their operations, only 12.1 per cent is expected to be received during the first year (as compared to 32.9 per cent in the case of investment allowance), and this proportion would improve gradually from 16.0 per cent to 21.3 per cent from the second to the fifth years. The share of the fourth and fifth years, the last two years when 'fresh' tax holiday is still available, is quite high because even the unavailed portion of the tax holiday due in the preceding three (or four) years can be claimed. After the end of the fifth year, i.e., from the sixth to the eighth year, the tax holiday claim tapers off, and becomes an insignificant proportion of the total eight-year claim (Tables IV.3 and IV.4).

Tax holiday would work out to be the most important fiscal relief, annually accounting for between 75 per cent and 81 per cent of the three fiscal reliefs that can be claimed during the second to fifth years of project operations. Its proportionate share would be almost the same as that of investment allowance (48.7 per cent as compared to 48.9 per cent) in the first year and would be the highest in the eighth year (55.0 per cent), when the value of the other reliefs would be small. In fact, over the eight-year period as a whole, tax holiday would account for 63.8 per cent of the three fiscal reliefs estimated to be claimed by the ICICI projects. To some extent, the estimate of tax holiday is on the higher side as it is based on total corporate

profits of the companies (in the case of existing companies, it includes profits generated by earlier investments also) and not on the profits generated only by the specific investment programme. Some element of over-estimation also arises, as has been shown earlier in this chapter (sub-section 2a), due to the treatment of all the projects studied as being eligible for the relief, whereas some of them might not be.

Project-wise, 63.0 per cent of the projects are expected to claim their full entitlement of tax holiday in the minimum time period of five years and another 23.3 per cent in between six and eight years. In other words, 86.3 per cent of the projects would be able to fully claim their tax holiday. Only 13.7 per cent of the 73 projects would not be able to fully claim their tax holiday entitlement, and 5.5 per cent would not claim their full entitlement of investment allowance also (Table IV.4).

c. Backward area relief. As the backward area relief is to be set off against 'profits and gains' remaining after investment allowance has been fully claimed, the relative importance of the relief increases with the passage of time. In the first two years of project operations, the backward area relief would make a negligible contribution: 2.4 per cent in the first year and 7.6 per cent in the second to the total fiscal reliefs that can be claimed by the ICICI projects. In fact these two initial years together account for just one-tenth of the total backward area relief that the projects would claim during the first eight years of their operations. Thereafter, the relative importance of this relief would improve and from the sixth year onwards, it would account for more than one-fourth of the annual fiscal reliefs that would be claimed by the ICICI projects.

Among the 73 projects, 19 projects (26.0 per cent) located in backward areas would actually claim the backward area relief, which was expected to add upto 12.7 per cent of the total fiscal reliefs claimed by the 73 ICICI projects during the first eight years of their operations (Table IV.3).

An assessment of the backward area relief in proper perspective would require a study of the three fiscal reliefs for the 19 backward area ICICI projects separately, of whom three are not expected to be able to claim the relief due to insufficient profits. Over the eight-year period, backward area relief would

constitute more than one-half of the total fiscal reliefs that are expected to be claimed by the backward area projects. The tax base diminution effect of the relief would be 18.7 per cent.

5. Fiscal Reliefs, Tax Savings and Diminution in Tax Base of New Industrial Undertakings

A more realistic picture of the tax-saving effect of fiscal reliefs, and, in particular, tax holiday and backward area relief, can be seen from an analysis of data relating to projects representing new industrial undertakings. There are 18 such projects, and two of these projects are proposed to be set up in backward areas. The basic difference between the projects undertaken by the new industrial undertakings and those undertaken by the existing undertakings is that the former would not be able to get the benefit of setting off unabsorbed depreciation and investment allowance against profits generated by earlier investments in the same plant or other plants of the undertaking. As such, the projects of the new industrial undertakings would need a longer period to claim their entitled fiscal reliefs. More of such projects would also lose some part of their entitlement than projects undertaken by the existing undertakings.

The 18 projects of new industrial undertakings would claim 94.5 per cent of their entitlement of investment allowance and 62.6 per cent of their entitlement of tax holiday. While only four of the 73 projects would lose a part of their entitled investment allowance, three of them would be new industrial undertakings. Similarly, while 10 of the 73 projects would lose a part of their entitled tax holiday, six of them would be new industrial undertakings and these new undertakings would account for the bulk (73.7 per cent) of the lost relief.

Only two of the 18 new industrial undertakings would be able to claim backward area relief. These two units would not be able to claim any backward area relief in their first year of operations, 0.5 per cent of the total eight-year claim in the second year and only 35.0 per cent during the first five years (as against 51.6 per cent by all the 26 backward area projects). This situation arises because the claim to investment allowance receives priority and available profits and gains are limited.

Even though the new industrial undertakings stand to lose

in terms of full claim of fiscal relief as compared to the existing undertakings, they do succeed in eliminating or reducing their tax liability. The annual data show that the new industrial undertakings would have no tax liability in the first and second years of their operations. The effective tax rate is expected to be 3.3 per cent in the third year and between 14.9 per cent and 17.6 per cent from the fourth to the sixth years and 19.8 per cent and 33.7 per cent, respectively, in the seventh and the eighth year of their operations (Table IV.5).

The low effective tax liability of the new undertakings is due to low profits against which the fiscal reliefs can be claimed. The total hypothetical tax base of the 18 new industrial undertakings in the first two years of their operations would be fully absorbed by fiscal reliefs. In the following years, the hypothetical tax base would progressively increase. Hence, the proportion of diminution in the tax base falls with the passage of time and the fiscal reliefs would reduce the tax base by 40.2 per cent towards the end of the study period from 100.0 per cent at the beginning.

6. Bunching of Fiscal Reliefs

An analysis of annual data on ICICI projects including those to be implemented by new industrial undertakings, brings out the bunching of major reliefs during the first five years of operations. Four-fifth of the reliefs to be claimed by the projects during the eight years are expected to materialise within the first five years. Such a bunching is most evident in the case of investment allowance: two-fifth of the total investment allowance that would be claimed by the ICICI projects would be obtained in the first two years of operations. In the case of tax holiday, 88.5 per cent of the total claim is expected to materialise in the first five years.

It may be added that one-third of the ICICI projects are expected to fully claim both these reliefs within the minimum time, nearly two-third of the projects would claim their full tax holiday in five years and almost one-third would claim their full investment allowance in the first year of operations.

7. Surrender of Fiscal Reliefs

While in terms of numbers, a small proportion of ICICI

TABLE IV.5

Fiscal Incentives, Tax Base, Effective Tax Rates and Tax Savings of New Industrial Undertakings

(*Ex-ante* data relating to 18 ICICI projects) (*Rs lakh*)

Year of project operation	Actual corporate profits tax		Hypothetical corporate profits tax		Tax rate (per cent)		Fiscal Incentives		Col. 8. as per cent of col. 4	Col. 8. as per cent of col. 3	Col. 1 as per cent of col. 3
	Base	Liability	Base	Liability	Statutory	Effective	Relief	Tax savings			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
First	0.0	0.0	38.2	21.4	56.02	0.0	38.2	21.4	100.00	56.02	0.00
Second	0.0	0.0	200.7	113.8	56.70	0.0	200.7	113.8	100.00	56.70	0.00
Third	27.2	15.4	473.8	268.6	56.69	3.25	446.6	253.2	94.27	53.44	5.74
Fourth	267.8	151.9	864.0	489.9	56.69	17.57	596.2	338.0	68.99	39.12	31.00
Fifth	384.9	216.9	1369.8	772.0	56.36	15.83	984.9	555.1	71.90	40.52	28.10
Sixth	583.8	328.8	2210.9	1245.2	56.32	14.87	1627.1	916.4	73.59	41.45	26.41
Seventh	887.6	499.6	2524.2	1420.8	56.29	19.79	1636.6	921.2	64.84	36.49	35.16
Eighth	1612.6	907.6	2695.0	1516.9	56.29	33.68	1082.4	609.3	40.17	22.61	59.84
Total	3763.9	2120.2	10376.6	5848.6	—	—	6612.7	3728.4	—	—	—
Annual Average	470.5	265.0	1297.1	731.0	56.56	20.43	826.6	466.0	63.75	35.93	36.27

projects would not be able to fully claim their investment allowance and tax holiday (5.5 per cent and 13.7 per cent, respectively), in terms of their actual loss with respect to their entitlement, the proportion would be substantial. Four ICICI projects would lose 32.2 per cent of their entitlement of investment allowance, the loss for individual projects ranging from 15.7 per cent to 69.2 per cent. Similarly, 10 ICICI projects would lose 80.7 per cent of their entitlement of tax holiday, the project-wise loss being 100.0 per cent in the case of the four projects which would also lose some proportion of their entitled investment allowance and from 46.2 per cent to 94.2 per cent in the case of the other six projects.

The inability to benefit from the fiscal reliefs is more clearly brought out in the analysis of new industrial undertakings, for in their case profits generated by earlier investments are not available for set-off. It is, therefore, seen that six of the 10 tax holiday-losing projects are those of new industrial undertakings and these units would account for almost three-fourth of the total tax holiday loss. Similarly, three of the four investment allowance-losing projects would be those undertaken by new companies and they would account for 70.3 per cent of the total loss of investment allowance by the ICICI projects, whose data were studied.

In the case of projects of the new industrial undertakings, many of the fiscal incentives are, thus, in effect, incentives only in name. It needs to be pointed out here that the *ex-ante* ICICI data, which reflect the optimistic and hopeful expectations of the entrepreneur and of the financial institution, tend to conceal the actual extent of surrender of fiscal reliefs. The conclusion on surrender and loss of the reliefs would become even sharper if *ex-post* data on ICICI projects are studied. Such data are not uniformly available, and only for the last two to three years, some data are now being called for by the ICICI.

Inadequacy of profits and restriction on the time limit within which more than one relief has to be simultaneously claimed are the main reasons for the redundancy of some of the fiscal reliefs. As much as 54.8 per cent of the ICICI projects are not expected to avail themselves of investment allowance in the first year of their operations because they would not be able to fully claim their current year's depreciation due to inadequacy

of commercial profits[14]. In subsequent years, the proportion is expected to be much smaller: 8.2 per cent of the projects would carry forward some proportion of unabsorbed depreciation and/or loss. Inadequacy of profits, thus, not only defers the claim of depreciation but also delays the utilisation of fiscal reliefs, and when profits continue to be inadequate upto the end of the period within which the reliefs are to be claimed, the fiscal reliefs are lost.

It is, therefore, not surprising to find as was shown in section 5 of this chapter, that the new industrial undertakings, which are more likely to encounter the problem of inadequate profits especially in the initial years, are expected to claim in the first year of their operations only 1.1 per cent of their eight-year investment allowance claim, whereas the 73 projects together are expected to claim 32.9 per cent.

8. Fiscal Reliefs, Tax Savings and the Return on Investment in Discounted Present Values

a. The problem. The impact of fiscal incentives is normally measured in terms of the reduction in the effective tax rate or in the diminution in the tax base, as has been shown in the preceding sections. But the problem is that the return from earlier investments and from the new investments get mixed in the case of existing undertakings, and, therefore, we are unable to quantify the tax-saving impact of the fiscal incentive. This problem arises because there are various types of companies that may be eligible for the fiscal incentives. Table IV.6 presents the estimates of the tax-saving effect of investment allowance for three types of companies, namely,

(i) a new company with inadequate or low profits (A);
(ii) an existing company with low profits (B); and
(iii) an existing company with large profits (C), including those from earlier investments.

We, thus, see that the tax base diminution effect and the effective tax rate would vary, depending on the level of profits before tax and before fiscal reliefs are claimed. A more appropriate analysis would be in terms of tax saving flows generated

14. It is interesting to see that in the case of existing undertakings, none of the projects would have loss brought forward from earlier investments in the same plants or other plants within the company.

TABLE IV.6

Effect of Fiscal Incentives

(Rs lakh)

	A	B	C
1. Investment	100	100	100
2. Profits	10	40	10
3. Investment allowance entitlement	25	25	25
4. Investment allowance claimed	10	25	25
5. Tax base	Nil	15	55
6. Tax liability (at 50 per cent rate)	—	7.50	27.50
7. Effective tax rate (6 as per cent of 2)	—	18.75	34.38
8. Diminution in the tax base (4 as per cent of 2)	100.00	62.50	31.25

by fiscal reliefs of similar type of companies, namely, companies which do not have the advantage of profits generated by earlier investments. Further, the tax savings and the annual income flows have to be discounted to present values as they are staggered over a number of years. Ideally, the discounting of the income and tax saving flows should be done over the economic life of the project.

An attempt is made, first, to measure, under a hypothetical framework, the income and tax saving flows that are generated over an assumed economic life of a project for a given unit of investment, inclusive of and exclusive of fiscal reliefs. Two models are developed, incorporating different expected rates of return and project life-spans, based on data obtained for 38 of the 73 ICICI projects. Secondly, a similar analysis is made on the basis of the projected data for the 73 ICICI projects. The latter exercise is restricted to the first eight years of operations (even though the economic life of the individual ICICI projects would be generally longer than that), as investment allowance and tax holiday, the two major fiscal reliefs, can be carried forward only upto the end of eight years. The third fiscal relief studied, namely, backward area relief, is available for two more years, but only 26.0 per cent of the ICICI projects studied would be

eligible to claim it. After the tenth year of operation, there would be no difference in the income flows inclusive of, and exclusive of, the tax savings generated by fiscal reliefs on any given unit of investment. Among the major reasons for restricting the analysis to eight years is that data could not be projected satisfactorily by us beyond the first eight-year period.

b. The hypothetical models. As stated above, two alternative hypothetical models are used with different assumed rates of return and economic life-span. The following assumptions have been made:

An investment of Rs 1,000 is made in plant and machinery in the first year. It is assumed that there would be no additional investment during the life-span of the plant and machinery installed in the first year. The whole investment is financed by equity capital and the whole of the profits after tax is distributed. The economic life of the plant is assumed to be 10 years in model 1 and 15 years in model 2. The annual rate of return during the economic life of the project is assumed to be uniform at 12 per cent in model 1 and would range between zero per cent and 14 per cent in model 2. The rate of return is net of all expenses (deducted from gross income), depreciation and tax. The statutory tax rate is assumed to be 57.75 per cent throughout the period. The income and tax saving flows over the economic life of the project are discounted to their present values at the rate of 10 per cent (the rate generally used in the ICICI projects during the first half of the seventies).

(i) MODEL 1

An investment of Rs 1,000 would generate a total income flow of Rs 1,200 in current values over a 10-year period assuming an average annual rate of return of 12 per cent. The discounted present values of the total income stream would amount to Rs 759.38. The total life-time return would be 75.9 per cent of the investment instead of 120.0 per cent in current values (Table IV.7).

If investment allowance, which the project would be able to claim fully by the end of the third year of its operations, is available, the present value of the investment allowance would be Rs 235.11. Similarly, the present value of tax holiday, which

the project would be able to claim fully by the end of the sixth year, would be Rs 263.56. The tax savings, generated by investment allowance and tax holiday would, in present value terms, amount to Rs 286.22. The total income flow, inclusive of the tax savings generated by investment allowance and tax holiday, would add upto Rs 1,045.60 in present value, or 104.6 per cent of the original investment. There is thus an improvement in the income stream by 37.7 per cent due to the tax savings generated by the two fiscal reliefs. In terms of the cash flow concept of the return on investment (i.e., profits after tax plus depreciation), tax savings generated by the two fiscal reliefs would improve the income stream by 18.8 per cent. In terms of the profits before tax, tax savings due to the two reliefs would be 15.9 per cent.

(ii) MODEL 2

Assuming a changing rate of return[15] over the assumed economic life-span of 15 years, the investment of Rs 1,000 would yield an income of Rs 1,430 in current value and Rs 591.20 in present value. The present value of investment allowance, which would be fully available by the fourth assessment year and the sixth year of the economic life-span of the project, would add up to Rs 165.20, resulting in a tax saving of Rs 134.40. Tax holiday, which would be fully available by the seventh assessment year and the ninth year of the investment, would amount to Rs 179.60, resulting in a tax saving of Rs 103.70. The tax savings due to the two fiscal reliefs would improve the total return on the investment from 59.1 per cent to 79.0 per cent and in terms of the profits before tax, the tax savings would be 14.2 per cent.

c. Analysis of ex-ante data. The total investment of the 73 ICICI projects in present value adds up to Rs 692.0 crore, which is expected to earn a total income before tax (discounted to the present value) of Rs 1,215.2 crore during the first eight years of the operations. On this income or the hypothetical tax base, the

15. The assumed rates of return are zero per cent in the years 1 and 2, 6 per cent in the year 3, 7 per cent, 8 per cent, 9 per cent, 10 per cent, 11 per cent and 12 per cent respectively, during the years 4 to 9, 12 per cent in the year 10, 13 per cent in the years 11 and 12, and 14 per cent in the years 13 to 15.

TABLE IV.7

Income Flows, Tax Savings and Total Return on Investment During the Economic Life-time of the Project in Current and Present Values

	Hypothetical models		Ex-ante data of ICICI projects	
	I	II	III (73 projects)	IV (18 new industrial undertakings)
	(Amounts in Rs)		(Amounts in Rs crore)	
	1	2	3	4
1. Economic life of project (number of years)	10	15	8	8
2. Annual rate of return (per cent)	12	0 to 14[1]	—[3]	—
3. Investment	1000.00	1000.00	692.00	168.4
4. Income flows (IF)				
a. Profits after tax				
(i) CV[4]	1200.00	1430.00	819.95	103.76
(ii) DPV[4]	759.38	591.20	518.64	57.98
b. Profits before tax				
(i) CV	2840.24	3384.62	1920.70	243.05
(ii) DPV	1797.35	1399.29	1215.18	135.82
5. Tax Savings[5] due to				
a. Investment allowance (IA)	3[2]	4[2]		
(i) CV	144.38	134.40	63.16	20.35
(ii) DPV	135.78	95.40	45.00	12.29
b. Tax holiday (TH)	6[2]	7[2]		
(i) CV	216.56	216.60	171.02	17.19
(ii) DPV	150.44	103.70	121.61	9.38
c. Backward area relief (BAR)				
(i) CV	—	—	34.07	0.65
(ii) DPV	—	—	21.04	0.36

	1	2	3	4
6. Total income flows after tax, inclusive of tax savings				
a. IF + IA				
(i) CV	1344.38	1564.40	883.11	124.11
(ii) DPV	895.16	686.60	563.64	70.27
b. IF + TH				
(i) CV	1416.56	1646.60	990.97	120.95
(ii) DPV	909.82	694.90	640.25	67.36
c. IF + BAR				
(i) CV	—	—	854.02	104.41
(ii) DPV	—	—	539.68	58.34
d. IF + IA + TH + BAR				
(i) CV	1560.94	1781.00	1088.20	141.95
(ii) DPV	1045.60	790.30	706.29	80.01
7. Total return after tax on investment (in per cent)				
a. IF				
(i) CV	120.00	143.00	118.49	61.62
(ii) DPV	75.94	59.12	74.95	34.43
b. IF + IA				
(i) CV	134.44	156.44	127.62	73.70
(ii) DPV	89.52	68.66	81.15	41.73
c. IF + TH				
(i) CV	141.66	164.66	143.20	71.82
(ii) DPV	90.98	69.49	92.52	40.00
d. IF + BAR				
(i) CV	—	—	123.41	62.00
(ii) DPV	—	—	77.99	34.64
e. IF + IA + TH + BAR				
(i) CV	156.09	178.10	157.25	84.29
(ii) DPV	104.56	79.03	102.07	47.51

Notes: 1. Rate of return assumed to be zero per cent in the years 1 and 2, 6 per cent in the year 3, then annually increasing by 1 per cent to reach 12 per cent in year 9, remains at 12 per cent in the year 10, would be 13 per cent in the years 11 and 12, and 14 per cent in the years 13, 14 and 15.

2. Indicates the year in which the incentive would be fully claimed.
3. — Not applicable
4. CV: current values, DPV: Discounted present value, discounted at the rate of 10 per cent.
5. Tax savings (TS) are computed by applying the statutory tax rate of 57.75 per cent to the estimated amount of the fiscal reliefs.

hypothetical tax liability would be Rs 696.5 crore, resulting in hypothetical profits after tax of Rs 518.6 crore. The hypothetical return before tax on the capital invested over the first eight years of operations would be 175.6 per cent and that after tax would be 75.0 per cent.

The fiscal reliefs lead to a substantial change in the above situation. Tax holiday, investment allowance and backward area relief would together result in a tax saving at present value of Rs 187.6 crore over the first eight years of operations. As a per cent of profits before tax, tax savings would be 15.4 per cent. The profits after tax, after allowing for the tax savings, would add upto Rs 706.3 crore and would be 102.1 per cent of the total investment as compared to 75.0 per cent without the tax savings generated by the three fiscal reliefs.

In the case of new industrial undertakings, however, the situation is somewhat different because of inadequacy of profits. The tax savings generated by fiscal reliefs would improve the total life-time return on the investment from 34.4 per cent without the fiscal reliefs to 47.5 per cent inclusive of them.

In addition to the tax savings generated by fiscal reliefs, the projects would be claiming depreciation on their investments in plant and machinery. The amount of depreciation should also be included in the gross return on investment in any comprehensive analysis of the recoupment of the initial capital investment. The 73 ICICI projects would claim a total depreciation of Rs 128.8 crore over the first eight years of their operations, their present value being Rs 94.4 crore.

If the present value of depreciation is added to the total income stream, inclusive of the tax savings due to the fiscal reliefs, the total return after tax on the investment of the 73 ICICI projects would aggregate to Rs 800.6 crore. The total gross life-time return after tax would be 115.7 per cent of the capital investment. In terms of recoupment of investment, such a gross definition of return would be the most appropriate.

If, however, we examine the corporate retention position (i.e. funds available for the replacement of fully depreciated plant and machinery), it would be necessary to deduct the dividend payments from the gross return of Rs 800.6 crore on the investment of Rs 692.0 crore. Assuming an average annual rate of dividend of 12 per cent on a share capital investment of

Rs 366.5 crore (including Rs 54.0 crore of preference shares), the total dividend payments over the eight-year period would amount to Rs 351.9 crore in current value and Rs 234.6 crore in present value. The total retention of funds, in present value, which would include the tax savings due to fiscal reliefs, the depreciation provision and profits after payment of tax and dividends, would be Rs 566.0 crore. This would be the amount of gross funds retained and which would be available to the 73 projects for reinvestment in the future; such gross cash return would be 81.8 per cent of the initial corporate investment.

It, thus, appears that the return on corporate investment is substantially improved by tax savings arising from the fiscal reliefs. Even though the depreciation allowance is based on the historical cost of the capital equipments and the fiscal reliefs are based mainly on taxable profits and capital employed though sometimes also on the historical cost of the plant and machinery, as the fiscal reliefs are available over and above the depreciation allowance, it appears that to some extent (even if not intentionally!) the problem of inflation seems to have been taken care of by the income tax laws. The position would further improve if the interest earned on depreciation funds is also added.

V. The Fiscal Incentive Impact : Analysis of Ex Post Income Tax Assessment Data

1. Sample of Income tax Assessees

The 108 corporate assessees, data on whose assessed income tax and fiscal reliefs are analysed for seven assessment years, 1970-71 to 1976-77, are important corporate tax payers, assessed in major assessment centres and operating in different segments of the industrial sector. As much as 33.3 per cent of these assessees are assessed in Calcutta, 20.4 per cent in Bombay, 17.6 per cent in Madras, 11.1 per cent in Delhi and 9.3 per cent in Ahmedabad; the assessment centres of the remaining assessees (8.3 per cent) are not known, but they are believed to be assessed mainly in Bombay and Ahmedabad. Industry-wise, 30 of the assessees are engaged in the engineering industry, 15 in chemicals, 12 in highly diversified activities, 8 in textiles and 43 in other industries (Table A.5).

The income tax data used in this study relate to assessments of the relevant years. These data are thus different from the data published annually by the Income Tax Department in their publication, *AIITS*, wherein the annual data relate to assessments completed during a year, not all of them being necessarily related to that assessment year[16].

16. The Directorate of Inspection (Research, Statistics and Publications) has started publishing data in another volume of the *AIITS* on the basis of the assessment year and not on the basis of the year in which the assessment is actually made, with effect from the assessment year 1974-75. Such data relate to assessed income and tax, but data on the fiscal reliefs or deductions are not shown separately.

2. Assessed Income, Tax and Fiscal Reliefs

a. Overall results. The combined assessed income and tax of the 108 assessees more than doubled during the seven assessment years, 1970-71 to 1976-77, from Rs 113.4 crore to Rs 229.1 crore in the case of the former and from Rs 64.2 crore to Rs 129.0 crore in the case of the latter. The total annual fiscal reliefs of the 108 assessees increased from Rs 34.2 crore in 1970-71 to Rs 46.0 crore in 1976-77, though it was higher at Rs 77.7 crore in 1975-76 (Table V.1).

The increase in assessed income, fiscal reliefs and tax over the seven-year period could be attributed partly to inflationary conditions and partly to the increase in the volume of operations and profits of the assessees. As such, the last three assessment years, 1974-75 to 1976-77 which may be considered the post-inflation years, together account for 55.1 per cent of the total assessed income, 55.3 per cent of the total assessed tax and 51.2 per cent of the total fiscal reliefs for the seven-year study period.

The 108 assessees covered by the study form only 0.6 per cent of the total number of corporate assessees shown in the *AIITS* for 1976-77 (16,939), who together had an assessed income of Rs 932.7 crore and were assessed to corporate tax of Rs 560.0 crore but they contributed as much as 24.6 per cent of the total assessed income and paid 23.0 per cent of the total assessed tax in that year. Data for the preceding assessment years also indicate a substantial contribution to total assessed income and tax: 32.8 per cent and 32.4 per cent of the assessed income and assessed tax, respectively, in 1975-76 and 30.6 per cent and 30.1 per cent, respectively, in 1974-75. It is thus seen that our sample of 108 assessees constitutes an important segment of corporate tax-payers and accounts for a sizeable proportion of the assessed corporate income and tax.[17]

b. Tax base diminution, effective tax rates and tax savings. The fiscal reliefs reduce the hypothetical tax base of the 108

17. In terms of total corporate tax revenue collections as shown in the annual reports of the Comptroller and Auditor General of India, Government of India, the 108 assessees were 0.3 per cent of the total assessees (40,237) and accounted for 13.1 percent of the total tax coltections (Rs 984.2 crore) in 1976-77.

TABLE V.1

Fiscal Incentives, Tax Base, Tax Rates and Tax Savings
(*Ex-post* data relating to 108 assessees)

(Rs lakh)

Assessment year	Actual corporate profits tax		Hypothetical corporate profits tax		Tax rate (per cent)		Fiscal Incentives		Col. 8 as % of col. 4	Col. 8 as % of col. 3	Col. 1 as % of col. 3
	Base	Liability	Base	Liability	Statutory	Effective	Relief	Tax savings			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1970-71	11340.97	6420.59	14757.56	8354.72	56.61	43.51	3416.59	1934.13	23.15	13.11	76.85
1971-72	14538.14	8076.81	17812.83	9896.23	55.56	45.34	3274.69	1819.42	18.38	10.21	81.62
1972-73	15757.22	8978.27	19465.36	11091.17	56.98	46.12	3708.14	2112.90	19.05	10.85	80.95
1973-74	19567.62	11378.57	22151.51	14625.60	58.15	45.24	5583.89	3247.03	22.20	12.91	77.80
1974-75	22914.26	13298.27	27314.12	15853.25	58.04	48.69	4399.86	2553.68	16.11	9.35	83.89
1975-76	29278.87	16971.05	37046.40	21473.11	57.96	45.81	7767.53	4502.66	20.97	12.15	79.03
1976-77	22907.73	12896.26	27510.79	15487.78	56.30	46.83	4603.06	2591.52	16.73	9.42	83.27
Total	136304.81	78020.12	169058.57	96780.86	—	—	32753.76	18760.74	—	—	—
Annual Average	19472.12	11145.73	24151.22	13825.84	57.24	46.15	4679.10	2680.11	19.38	11.10	80.63

assessees during the seven assessment years, 1970-71 to 1976-77, by 19.4 per cent; in other words, the actual tax base is 80.6 per cent of the hypothetical tax base. This extent of diminution in the tax base resulted in an effective tax rate of 46.2 per cent as compared to the average standard statutory tax rate of 57.2 per cent.[18] The total assessed corporate tax amounted to Rs 780.2 crore as against a hypothetical tax liability, in the absence of any of the fiscal reliefs, of Rs 967.8 crore. The fiscal reliefs diminished the tax base by 19.4 per cent and generated over the seven-year period, tax savings of Rs 187.6 crore (Table V.1).

c. Distribution of corporate assessees by effective tax rates. Disaggregated analysis reveals that more than one-fourth of the assessees studied averaged an annual effective tax rate of less than 20.0 per cent and another one-tenth, of less than 40.0 per cent during the seven-year period; thus two-fifth of the assessees averaged an annual effective tax rate of less than 40.0 per cent. On the high-tax rate side, one-fifth of the assessees averaged an effective tax rate of more than 55.0 per cent, and another one-fifth between 50.1 per cent and 55.0 per cent (Table V.2).

The number of assessees having high effective tax rates has increased over the years. While one-fourth of the assessees (28

TABLE V.2

Effective Corporate Tax Rates: Frequency Distribution of 108 Assessees

(Number of assessees)

Percentages	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	Average annual
Upto 20.0	39	39	34	30	24	23	26	31 (28.70)
20.1—30.0	8	4	4	5	3	1	1	3 (3.70)
30.1—40.0	12	9	11	7	6	5	4	8 (7.41)
40.1—45.0	5	7	5	6	9	7	8	7 (6.48)
45.1—49.0	13	14	11	6	9	8	7	9 (8.33)
49.1—50.0	3	5	4	3	4	3	5	4 (3.70)
50.1—55.0	20	23	22	23	24	29	20	23 (21.30)
Above 55.0	8	7	17	28	29	32	37	22 (20.38)
Total	108	108	108	108	108	108	108	108 (100.00)

Note: Figures in parentheses are percentages of the total.

18. The average standard statutory tax rate was obtained by dividing the total assessed tax by the total assessed income of the seven assessment years and this tax rate was used to work out the tax savings due to the fiscal reliefs.

TABLE V.3

Corporate Tax Savings as Per Cent of Corporate Profits Tax Base and Tax Liability Frequency Distribution of 108 Assessees

(Number of assessees)

Percentages	1970-71		1971-72		1972-73		1973-74		1974-75		1975-76		1976-77		Average annual	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
Upto 5.0	42	45	44	42	48	45	58	46	57	42	56	47	65	53	53	46
5.1—10.0	22	9	28	10	21	15	19	23	21	16	23	20	15	17	21	16
10.1—15.0	11	10	11	15	10	10	8	8	14	12	11	10	13	10	11	11
15.1—20.0	5	8	6	8	13	10	8	4	3	8	3	8	5	5	6	7
20.1—25.0	9	5	8	6	4	3	5	4	3	9	2	6	1	4	5	5
25.1—30.0	7	4	0	4	0	3	4	3	5	3	3	3	1	3	3	3
Above 30.0	12	27	11	23	12	22	6	20	5	18	10	14	8	16	9	20
Total	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108

Notes: A: Corporate tax savings as per cent of hypothetical tax base.
B: Corporate tax savings as per cent of hypothetical tax liability.

out of 108) had an effective tax rate of more than 50.0 per cent in 1970-71, the proportion has increased continuously upto 1975-76, there being a decline in the last year of the study period. Thus, while 25.9 per cent of the assessees fell in the above-50 per cent effective tax rate bracket in 1970-71, 27.8 per cent fell in this bracket in 1971-72, 36.1 per cent in 1972-73, 47.2 per cent in 1973-74, 49.1 per cent in 1974-75 and 56.5 per cent in 1975-76. However, there was a decline to 52.8 per cent in 1976-77.

d. Significance of tax savings. The rising proportion of assessees falling in the high-effective tax rate brackets and a lower proportion in low-effective tax rate brackets indicates that the magnitude of tax savings has reduced over the years. Thus, we find that corporate tax savings as per cent of the hypothetical tax liability was less than 10.0 per cent in the case of 50.0 per cent of the assessees in 1970-71 and in the case of 64.8 per cent of the assessees in 1976-77. It follows from these findings that the proportion of assessees having a substantial diminution in their hypothetical tax base, say, more than 25.0 per cent, has declined, e.g., from 28.7 per cent in 1970-71 to 17.6 per cent in 1976-77 (Table V.3).

Data on individual assessees thus reveal that the proportion of assessees in low tax-base diminution brackets in later years is higher than in the earlier years, whereas in the case of high tax-base diminution brackets the proportion is lower. In other words, over the years, more and more assessees are being liable to higher effective tax rates; alternatively, this finding suggests that they are engaged less in activities which give rise to fiscal reliefs or some of them do not generate enough income against which the reliefs may be claimed.

3. Disaggregated Analysis

a. Development rebate/investment allowance. The data on reliefs under sections 33 and 32A have been merged together for purposes of analysis. This relief turns out to be the most important, in terms of its proportionate share of the total fiscal reliefs utilised by the 108 assessees during the seven-year period as a whole as well as in each of the individual assessment years. While over the seven-year period, the development rebate/investment allowance accounted for 52.9 per cent of the total fiscal

TABLE V.4

Composition of Ex-post Fiscal Reliefs
(Data relating to 108 assessees)

(Rs lakh)

Assessment Year	Development rebate-Investment allowance (33/32A)	Scientific research (35)	Export market development allowance (35B)	Donations to charitable institutions (80G)	Backward area relief (80HH)	Priority industry relief (80I)	Tax holiday (80J)	Dividends from new industrial undertakings, hotels etc. (80K)	Inter-corporate dividends (80M)	Royalties, etc. received from abroad (80O)	Other fiscal reliefs	Total fiscal reliefs
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1970-71	1761.60	61.86	137.22	17.37	0.00	295.89	1044.78	5.72	50.27	8.58	33.30	3416.59
	(51.56)	(1.81)	(4.02)	(0.51)	(0.00)	(8.66)	(30.58)	(0.17)	(1.47)	(0.25)	(0.97)	(100.00)
1971-72	1682.07	85.93	148.49	34.00	2.30	348.85	830.88	16.26	82.34	9.37	34.20	3274.69
	(51.37)	(2.62)	(4.53)	(1.04)	(0.07)	(10.65)	(25.37)	(0.50)	(2.51)	(0.29)	(1.05)	(100.00)
1972-73	1737.01	112.39	144.40	58.84	0.00	163.08	1285.18	97.36	69.57	8.10	32.21	3708.14
	(46.84)	(3.03)	(3.89)	(1.59)	(0.00)	(4.40)	(34.66)	(2.62)	(1.88)	(0.22)	(0.87)	(100.00)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1973-74	3132.08	94.12	192.40	37.41	0.00	0.11	1506.89	384.42	136.06	0.00	100.40	5583.89
	(56.09)	(1.68)	(3.45)	(0.67)	(0.00)	(N)	(26.99)	(6.88)	(2.44)	(0.00)	(1.80)	(100.00)
1974-75	2890.36	164.10	150.11	23.59	24.10	0.00	790.58	38.26	71.38	9.36	238.02	4399.85
	(65.69)	(3.73)	(3.41)	(0.54)	(0.55)	(0.00)	(17.97)	(0.87)	(1.62)	(0.21)	(5.41)	(100.00)
1975-76	4403.55	136.45	820.10	24.97	143.06	0.00	1903.31	73.78	70.58	11.81	179.92	7767.53
	(56.69)	(1.76)	(10.56)	(0.32)	(1.84)	(0.00)	(24.50)	(0.95)	(0.91)	(0.15)	(2.32)	(100.00)
1976-77	1704.27	130.03	421.49	70.75	140.69	1.641	1381.60	497.41	64.89	25.59	164.70	4603.06
	(37.02)	(2.82)	(9.16)	(1.54)	(3.06)	(0.04)	(30.01)	(10.81)	(1.41)	(0.55)	(3.58)	(100.00)
Total	17310.94	784.88	2014.21	266.93	310.15	809.57	8743.22	1113.21	545.09	72.81	782.75	32753.76
	(52.85)	(2.40)	(6.15)	(0.82)	(0.95)	(2.47)	(26.69)	(3.40)	(1.66)	(0.22)	(2.39)	(100.00)
Annual Average	2472.99	112.13	287.74	38.13	44.31	116.65	1249.03	159.03	77.87	10.40	111.82	4679.11
	(52.85)	(2.40)	(6.15)	(0.82)	(0.95)	(2.47)	(26.69)	(3.40)	(1.66)	(0.22)	(2.39)	(100.00)

Notes: 1. Arising out of pending assessments.
2. Figures in parentheses are percentages of total annual fiscal reliefs.
3. Figures in parentheses below the name of each relief refer to the relevant section in the Income-tax Act, 1961.
N: Negligible

reliefs received by the 108 assessees, the share was more than 50.0 per cent in five years and in the remaining two years, it was 46.8 per cent and 37.0 per cent, respectively (Table V.4).

b. Tax holiday. Tax holiday ranks second in importance among the fiscal reliefs utilized by the corporate assessees. Over the seven-year period, the contribution of this relief to the total fiscal reliefs was more than one-fourth. The annual proportionate share of tax holiday in total fiscal reliefs ranged from 18.0 per cent in 1974-75 to 30.6 per cent in 1970-71. In each of the seven assessment years, the proportionate share of tax holiday was next only to that of the development rebate/investment allowance (Table V.4).

The development rebate/investment allowance and tax holiday are, thus, found to be, for the assessees studied, the two most important fiscal reliefs in the corporate tax system. These two fiscal reliefs together account for between a minimum of 67.0 per cent of the total fiscal reliefs utilized by the assessees to a maximum of 83.7 per cent in different assessment years, the seven-year average being 79.6 per cent.

In terms of the diminution in the tax base and also in terms of tax savings, the effect of these two reliefs is, therefore, most significant. The development rebate/investment allowance would diminish the hypothetical tax base over the seven-year period by 10.2 per cent and in the absence of any other fiscal reliefs, the tax rate would have fallen from 57.2 per cent (standard statutory rate) to 51.4 per cent (effective rate), owing to the tax-reducing effect of this relief alone. The tax base-diminution impact of the tax holiday is less, roughly one-half of that of the investment allowance: the hypothetical tax base would be diminished over the seven-year period by 5.2 per cent and the effective tax rate would fall to 54.2 per cent due to this relief alone.

A more meaningful estimate of the tax base diminution effect of investment allowance and tax holiday can be obtained from an analysis of only those assessees who received the respective reliefs. Such a study reveals that the tax base diminution effect in their case works out to 11.6 per cent due to investment allowance alone and the tax base diminution effect due to the holiday alone is 10.6 per cent. The effective tax rate if only the investment allowance was operational would have been 50.6 per cent (instead of the average statutory tax rate of

57.2 per cent) and it would have been 51.1 per cent if only tax holiday was available (Table V.5).

c. Comparative analysis of the estimates of the Dandekar Committee, AIITS and NIPFP. Some additional data are now available for tax holiday and investment allowance for four assessment years, 1975-76 to 1978-79. The Expert Committee on Tax Measures to Promote Employment (Dandekar Committee, 1980) in their Report (p. 32) estimated, on a census basis, tax holiday at Rs 32.3 crore for 1975-76 as against our estimate of Rs 19.0 crore for 108 major assessees; our estimate is, thus, 58.9 per cent of the total assessed tax holiday in the year. Similarly, for 1976-77, our estimate of Rs 13.8 crore is 41.1 per cent of the Dandekar Committee's estimate of the total assessed tax holiday of Rs 33.6 crore. In other words, comparable data for two assessment years show that the 108 assessees account for between two-fifth and three-fifth of the total assessed annual tax holiday.

The Dandekar Committee's estimates of tax holiday on a census basis are substantially higher than the figures shown in the *AIITS*. According to the *AIITS*, tax holiday received by 550 assessees amounted to Rs 3.5 crore (the tax relief being Rs 2.0 crore) in the assessment year 1975-76 which is only 11.2 per cent of the Dandekar Committee's census estimate and 18.4 per cent of our estimate for 108 assessees. Similarly, for the assessment year 1976-77, the *AIITS* figure of tax holiday for 427 assessees at Rs 3.7 crore (the tax relief being Rs 2.1 crore) is only 11.0 per cent of the census estimate presented by the Dandekar Committee and 26.8 per cent of our estimate for 108 assessees. One possible explanation for the large difference between the figures given in the *AIITS* and by the Dandekar Committee is that while the former relate to assessments completed during the year, the latter relate to assessments for the specific year. Another reason could be that the *AIITS* figures relate to original assessments (i.e. the first assessment at the Income Tax Officer's level) and do not take into account subsequent revisions, which would have been taken into account in the estimates of the Dandekar Committee and ours. However, the extent of the variations is large enough to question the reliability of the *AIITS* figures. The evidence provided by our data for only 108 assessees also suggests that the *AIITS*

TABLE V.5

Assessees Claim of Investment Allowance, Tax Holiday, Export Market Development Allowance and Backward Area Relief and Their Tax Base Diminution Effect

(relating to relief-claiming assessees)

(Rs crore)

	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	Total
1. *Investment allowance*								
a. Number of assessees	86	84	90	88	85	88	69	590
b. Amount of relief	17.62	16.82	17.37	31.32	28.90	44.04	17.04	173.10
c. HTB	136.39	165.46	182.47	230.94	237.29	319.75	216.84	1489.14
d. Diminution in tax base (per cent)	12.92	10.17	9.52	13.56	12.18	13.77	7.86	11.62 (50.55)
2. *Tax holiday*								
a. Number of assessees	51	49	52	34	32	32	30	280
b. Amount of relief	10.44	8.31	12.85	15.07	7.91	19.03	13.82	87.43
c. HTB	88.85	95.90	121.53	117.60	114.40	161.83	121.61	821.73
d. Diminution in tax base (per cent)	11.76	8.66	10.57	12.81	6.91	11.76	11.36	10.64 (51.12)
3. *Export market development allowance*								
a. Number of assessees	45	50	52	63	68	66	64	408
b. Amount of relief	1.37	1.49	1.44	1.92	1.50	8.20	4.21	20.14

	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	Total
c. HTB	68.31	90.99	104.56	148.14	188.55	255.52	176.10	1032.16
d. Diminution in tax base (per cent)	2.01	1.63	1.38	1.30	0.80	3.21	2.39	1.95 (56.08)
4. *Backward area relief*								
a. Number of assessees	0	1	0	0	2	4	4	11
b. Amount of relief	0.00	0.02	0.00	0.00	0.24	1.43	1.41	3.10
c. HTB	0.00	3.83	0.00	0.00	14.82	35.68	24.64	78.97
d. Diminution in tax base (per cent)	0.00	0.60	0.00	0.00	1.63	4.01	5.71	3.93 (54.95)

Notes: 1. HTB: Hypothetical tax base of assessees receiving the relief.
2. Figures in parentheses are the effective tax rates resulting from the diminution in the tax base.

figures are far from complete. The apparent incompleteness of the *AIITS* figures emphasises the need for the collection and publication of more comprehensive data.

A study sponsored by the Dandekar Committee and undertaken by the Indian Institute of Management, Ahmedabad, estimated tax holiday for 95 corporate assessees at Rs 10.7 crore in 1977-78 and Rs 15.1 crore in 1978-79 and investment allowance at Rs 12.2 crore and Rs 20.5 crore, respectively.[19] The per assessee tax holiday in this study works out to Rs 0.11 crore in 1977-78 and Rs 0.16 crore in 1978-79 and the per assessee investment allowance to Rs 0.13 crore and Rs 0.22 crore, respectively. Our average annual per assessee estimates are found to be comparable: Rs 0.12 crore for tax holiday and Rs 0.23 crore for development rebate/investment allowance on the basis of data of 108 assessees.

d. Export market development allowance. The most important among the other eight individual fiscal reliefs which were studied is the export market development allowance, which is in the form of a weighted deduction. This relief is found to be third in order of importance for the assessees studied, accounting for 6.2 per cent of the total fiscal reliefs in the seven assessment years (Table V.4).

The diminution in the hypothetical tax base of the 108 assessees taken together, because of the export market development allowance was found to be 1.2 per cent and the tax rate (effective) would be reduced from 57.2 per cent to 56.6 per cent owing to this relief alone. If, however, an analysis is made of only the assessees taking advantage of this relief, which is more appropriate, the magnitude of the tax base diminution effect, assuming no other reliefs were claimed, would be 2.0 per cent and the effective tax rate would have been 56.1 per cent (Table V.5).

e. Income-linked reliefs. Among the income-linked reliefs, dividends received from new industrial undertakings, hotels, etc. account for 3.4 per cent of the total fiscal reliefs that the assessees received during the seven-year period, deductions of

19. Expert Committee on Tax Measures to Promote Employment, (Dandekar Committee, 1980), *Report*, p. 32.

selected inter-corporate dividends account for another 1.7 per cent and deductions for royalties, fees, etc. received from selected foreign enterprises, 0.2 per cent. Together, these three fiscal reliefs generated from preferential tax treatment to corporate income from specific sources, not directly related to their manufacturing operations, would reduce the hypothetical tax base by 1.0 per cent (Table V.4).

f. Backward area relief. Backward area relief was claimed by only four assessees studied because most of the assessees did not operate in backward areas. Over the seven-year period, this relief cumulatively accounted for only 1.0 per cent of the total reliefs claimed by the assessees studied (Table V.4).

If we consider only the assessees receiving the backward area relief, it is found that the tax base diminution effect is 3.9 per cent and the effective tax rate would be reduced to 55.0 per cent owing to this relief alone (Table V.5).

g. Deductions for scientific research. The contribution of the relief available through deduction of expenditure on scientific research amounted to 2.4 per cent of all fiscal reliefs claimed by the assessees during the seven-year period. As much as 51.9 per cent of the 108 assessees whose assessment data were studied had undertaken expenditure which enable them to claim this relief, and among them 8.3 per cent of the assessees availed of the relief in all the seven assessment years (Tables V.5 and V.6).

h. Other reliefs. Priority industry relief was an important relief, accounting for between 4.4 per cent and 10.7 per cent of all the reliefs received from 1970-71 to 1972-73, when it was operative. More than one-sixth of the assessees studied received this relief in all the three assessment years.

Deduction of donations to charitable institutions was claimed by one-sixth of the total assessees in each of the seven assessment years, one-tenth in six years and one-fifth in four or five years. The total amount of the relief, during the seven-year period, accounts for 0.8 per cent of the total fiscal reliefs claimed by the 108 assessees.

Disaggregated annual data on each of the ten fiscal reliefs for different categories of assessees are presented in Table A.5.

TABLE V.6

Frequency of Claims of Fiscal Reliefs by 108 Assessees

(Number of assessees)

Number of years/ Fiscal incentives	Seven	Six	Five	Four	Three	Two	One	Nil	Total
1. Investment allowance	49	25	7	8	8	3	1	7	108
2. Scientific research	9	4	5	13	8	10	7	52	108
3. Export market development allowance	30	11	7	8	17	4	6	25	108
4. Donations to charitable institutions	17	11	9	11	8	11	5	36	108
5. Backward area relief	0	0	0	0	3	1	0	104	108
6. Priority industry relief	0	0	0	1	19	11	12	65	108
7. Tax holiday	10	6	7	13	18	11	6	37	108
8. Dividends from new industrial undertakings, ships, hotels, etc.	2	1	2	4	3	7	7	82	108
9. Selected inter-corporate dividends	13	5	7	5	8	3	7	60	108
10. Royalty, commission, etc. from selected foreign enterprises	0	1	0	0	0	2	1	104	108

4. Frequency of Claims of Fiscal Reliefs

While some idea may be had from the ICICI data on the issue of redundancy of fiscal reliefs, a similar exercise cannot be attempted on the basis of income-tax assessment data, in the absence of information for working out the annual or total relief entitlement. An analysis of the information on the frequency of claim of individual reliefs by the 108 assessees, however, brings out interesting results. Such an analysis is, of course, subject to the limitation that all the assessees may not be entitled to receive all the reliefs in each of the years.

By and large, the assessees who were studied are growing companies and they could be expected to claim the two major reliefs, investment allowance and tax holiday, both linked to new investment, subject to the availability of profits. Our results show that 45.4 per cent and 9.3 per cent of the assessees, res-

pectively, received these two reliefs in all the seven years, another 23.1 per cent and 5.6 per cent, respectively, in six years and another 6.5 per cent received both the reliefs in five years. However, as much as 34.3 per cent of the assessees did not receive tax holiday in any assessment year and 6.5 per cent did not, similarly, receive investment allowance in any single year. These findings, while not throwing any light on the issue of redundancy of the reliefs, however, suggest that all the assessees did not embark on fresh investment and capital formation activity and of those who did, their new investment programmes were not productive of sufficient income to benefit from the entitled reliefs to the maximum extent (Table V.6).

Among the other reliefs, export market development allowance was received by 27.8 per cent of the assessees in all the seven assessment years, by 10.2 per cent in six assessment years and by 6.5 per cent in five assessment years. About one-fourth of the assessees did not receive this relief in any single year, either because they did not undertake any relief-generating activity or because they did not generate enough profits against which to claim the relief.

5. Fiscal Reliefs, Tax Base Diminution and Tax Savings: Disaggregated Results

a. Location, capital intensity and industry groups. The extent of diminution in the tax base as a result of fiscal reliefs varies among the different categories of assessees. This has already been noted earlier in this chapter (sub-section 2c) in the analysis of the 108 assessees distributed by different effective tax rate brackets. Equally revealing are the results for assessees classified into various groups. While the detailed results are presented for each assessment year in Tables A.5 and A.6, the salient findings are presented below :

(i) In all the centres, the effective tax rate is found to be lower than the average statutory tax rate but the tax base diminution effect of the fiscal reliefs is found to be the most pronounced in the case of Bombay assessees and the least in the case of Calcutta assessees. The low impact of fiscal reliefs in the case of Calcutta assessees is linked to the low capital formation

TABLE V.7

Fiscal Incentives, Tax Base and Tax Savings of 63 Assessees

(Rs lakh)

Assessment Year	Actual corporate profits tax		Hypothetical corporate profits tax		Tax rate (per cent)		Fiscal incentives		Col. 8 as % of col. 4	Col. 8 as % of col. 3	Col. 1 as % of col. 3
	Base	Liability	Base	Liability	Statutory	Effective	Relief	Tax savings			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1970-71	4675.87	2665.36	6060.54	3454.51	57.00	43.98	1384.67	789.15	22.84	13.02	77.15
1971-72	6385.07	3453.23	8006.94	4330.15	54.08	43.13	1621.87	876.92	20.25	10.95	79.74
1972-73	7297.72	4206.10	9223.47	5316.41	57.64	45.60	1925.75	1110.31	20.88	12.04	79.12
1973-74	8111.15	4750.69	11423.69	6690.86	58.57	41.59	3312.54	1940.17	29.00	16.98	71.00
1974-75	10671.98	6251.78	13670.84	8008.38	58.58	45.73	2998.86	1756.60	21.93	12.85	78.06
1975-76	13991.61	8167.32	18961.46	11067.80	58.37	43.07	4969.85	2900.48	26.21	15.30	73.79
1976-77	10818.51	6223.63	13286.35	7643.93	57.53	46.84	2468.35	1420.30	18.58	10.69	81.42
Total	61951.91	35718.11	80633.80	46512.04	—	—	18681.89	10793.93	—	—	—
Annual Average	8850.27	5102.59	11519.11	6644.58	57.66	44.30	2668.84	1541.99	23.21	13.39	76.83

of the Calcutta companies, as compared to those assessed elsewhere. To some extent the effect may also be due to inadequate generation of profits from existing as well as newly undertaken projects. Data on investment allowance, which is the only fiscal relief to be directly linked to additional capital formation, provides evidence on the slow-down in capital formation activity of the Calcutta companies.

(ii) The maximum benefit of fiscal incentives is obtained by assessees engaged in highly capital-intensive industries and there seems to be a direct relationship between the level of capital intensity of an assessee's operations and the tax base diminution effect of the fiscal incentives. As such, therefore, the effective tax rate was found to be inversely related to the capital intensity of the assessee's operations.

(iii) Among the broad industry groups under which the assessees were classified, the tax base diminution effect of fiscal incentives is the highest in engineering industry, followed by textiles, highly diversified industry and chemicals.

b. Analysis of 63 assessees. Out of the 108 assessees included in the study, data were estimated for one or more years for 41.7 per cent of them to complete the seven-year series; actual data were thus available for the seven assessment years for 63 assessees (58.3 per cent). The analysis was made of these 63 assessees to see whether there was any marked difference in the diminution of the corporate tax base and in tax liability and tax savings of such assessees for whom all data were actuals as compared to assessees including those for whom some data were estimated.

The impact of fiscal reliefs is found to be more pronounced for assessees for whom all data are actuals than for the sample as a whole, which includes assessees for whom some data are estimated. The diminution in the tax base for the former group of assessees is higher at 23.2 per cent as compared to 19.4 per cent for the latter. This results in a lower average annual effective tax rate in their case: 44.3 per cent as compared to 46.2 per cent (Table V.7).

It follows from these results that the estimation of fiscal reliefs for the assessment years for which data were not available for 45 assessees might have been on the lower side. Alternatively, these assessees had a relatively smaller assessed income and assessed tax and they claimed smaller amounts of fiscal reliefs either because they were so entitled or because they did not earn enough profits to claim the whole of their entitlement of the fiscal reliefs.

VI. The Fiscal Incentive Impact : Analysis of Ex-Post Company Finances Data

1. Introduction

The company finances data relate to 223 companies having a combined paid-up share capital of Rs 873.2 crore in 1975-76; these companies accounted for 42.2 per cent of the paid-up capital of all the 7626 non-government public limited companies and 56.8 per cent of those companies having a paid-up share capital of Rs 50 lakh or more. Each sample company had a paid-up share capital of Rs 50 lakh or more in 1975-76. The tax data, compiled from the *Bombay Stock Exchange Directory*, relate to tax provision in the respective financial year and not in the assessment year.

2. Tax Base Diminution, Effective Tax Rate and Tax Savings

The 223 NIPFP companies provided for a total corporate tax liability of Rs 1758.1 crore over the 15-year period, 1961-62 to 1975-76 on an estimated actual corporate tax base of Rs 3202.7 crore. The hypothetical tax base of the sample companies for the 15-year period is estimated to be Rs 3844.2 crore and the amount of the fiscal reliefs is estimated at Rs 641.5 crore. The fiscal reliefs would, thus, diminish the hypothetical tax base by as much as 16.7 per cent, generating corporate tax savings of Rs 352.7 crore. These tax savings would form 9.2 per cent of the hypothetical tax base (Table VI.1).

As a result of the diminution in the hypothetical tax base, the actual tax base of the NIPFP companies would on the average be only 83.3 per cent of it. The effective tax rate would

TABLE VI.1

Fiscal Incentives, Tax Base, Tax Rates and Tax Savings of 223 NIPFP Companies

(Rs crore)

Year	Actual corporate profits tax		Hypothetical corporate profits tax		Tax rate (per cent)		Fiscal Incentives		Development rebate and investment allowance	Col. 8 as per cent of col. 4	Col. 8 as per cent of col. 3	Col. 1 as per cent of col. 3
	Base	Liability	Base	Liability	Statutory	Effective	Relief	Tax savings				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1961-62	112.56	50.65	119.44	53.75	45.00	42.41	6.88	3.10	4.60	5.77	2.60	94.24
1962-63	116.32	58.16	137.19	68.60	50.00	42.39	20.87	10.44	18.46	15.22	7.61	84.79
1963-64	140.30	70.15	166.14	83.07	50.00	42.22	25.84	12.92	13.20	15.55	7.78	84 85
1964-65	150.92	75.46	180.08	90.04	50.00	41.90	29.16	14.58	20.53	16.19	8.10	83.81
1965-66	165.48	82.74	181.24	90.62	50.00	45.65	15.76	7.88	12.38	8.70	4.35	91.30
1966-67	149.65	82.31	190.76	104.92	55.00	43.15	41.11	22 61	26.69	21.55	11.85	78.45
1967-68	124.09	68.25	166.69	91.68	55.00	40.94	42.60	23.43	30.27	25 56	14.06	74.44
1968-69	128.44	70.64	194.59	107.02	55.00	36.30	66.15	36.38	41.47	34.00	18.70	66.01
1969-70	164.85	90.67	248.09	136.45	55.00	36.55	83.24	45.78	31.82	33.55	18.45	66.41
1970-71	228.67	125.77	277.67	152.72	55.00	45.29	49.00	26.95	32.07	17.65	9.71	82.35
1971-72	266.04	146.32	313.32	172.33	55.00	46.70	47.28	26.01	35.75	15.09	8.30	84.91
1972-73	256.79	144.75	307.32	173.24	56.37	47.10	50.53	28.48	40.71	16.44	9.27	83.56

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1973-74	345.44	199.49	417.75	241.25	57.75	47.75	72.31	41.77	57.40	17.31	10.00	82.69
1974-75	455.39	262.99	520.48	300.58	57.75	50.53	65.09	37.59	51.61	12.51	7.22	87.49
1975-76	397.77	229.71	423.42	244.53	57.75	54.25	25.65	14.82	18.55	6.06	3.50	93.94
Total	3202.71	1758.06	3844.18	2110.80	—	—	641.47	352.74	435.51	—	—	—
Average Annual	213.51	117.20	256.27	140.72	54.89	45.73	42.76	23.52	29.34	16.71	9.18	83.31
Total (1969-70 to 1975-76)	2114.95	1199.70	2508.05	1421.10	—	—	393.10	221.40	267.91	—	—	—

be 45.7 per cent as compared to the average statutory tax rate of 54.9 per cent.

Of the estimated total fiscal reliefs of Rs 641.5 crore, which the 223 NIPFP companies are estimated to claim during the 15-year period, 71.0 per cent is to be in the form of development rebate/investment allowance (actuals as in the profit and loss accounts) and 29.0 per cent (the residual) in the form of other reliefs.

The 15-year period, 1961-62 to 1975-76, is not wholly comparable with the seven or eight-year periods to which data on ICICI projects and income tax assessees relate. To make the analysis of the NIPFP company finances data more comparable, an analysis was made for the seven-year period, 1969-70 to 1975-76. The hypothetical tax base is found to decline from 16.7 per cent for the 15-year period to 15.6 per cent for the seven-year period and the actual tax base forms 84.3 per cent of the hypothetical tax base (as compared to 83.3 per cent for the 15-year period) and the annual average effective tax rate is higher at 47.8 per cent (as against 45.7 per cent).

3. Disaggregated Analysis

a. Capital intensity of companies. The analysis is restricted to two points of time, 1971-72 and 1975-76, and the 223 NIPFP companies are classified into three groups, based on their capital-output ratio. The results show that the effective tax rate declines progressively with an increase in the capital-output ratio or the capital intensity of the companies . In each of the two years, the effective tax rate is the highest (and very near to the statutory tax rate) for low capital-output ratio companies: 53.7 per cent in 1971-72, when the statutory tax rate was 55.0 per cent and 57.3 per cent in 1975-76 when the statutory tax rate was 57.8 per cent. The effective tax rate falls to 46.5 per cent in 1971-72 for companies with moderate capital-output ratios and to as low as 26.8 per cent for companies with high capital-output ratios, as compared to the sample average of 46.1 per cent. In 1975-76, similarly, the respective effective tax rates were 57.3 per cent, 44.4 per cent and 46.6 per cent for low, moderate and high capital-output ratio companies (Table VI.2).

A study of the distribution of NIPFP companies in different effective tax rate brackets shows that a large proportion of

companies with high capital-output ratios had low effective tax liability. As much as 70.0 per cent of high capital-output ratio companies in 1975-76 and 82.6 per cent in 1971-72 had effective tax rates of less than 35 per cent as compared to 46.1 per cent and 42.4 per cent of the companies, respectively, in the moderate capital-output ratio category and 35.1 per cent and 37.3 per cent, respectively, in that of the low capital-output ratio category (Table VI.3).

b. Size of companies. The size of a company also has a bearing on the level of its effective tax rate and consequently on the extent of its tax savings. The analysis of the NIPFP company finances data substantiates the generally-held hypothesis that the larger a company is (in terms of its total assets), the larger would be its capital base and, therefore, the larger would be the eligible quantum of fiscal reliefs, as these are primarily linked to capital investment. Over the 15-year period, the average annual effective tax rate of small companies is the highest at 49.4 per cent, followed by that of medium-sized companies at 47.1 per cent, large companies at 42.6 per cent and

TABLE VI.2

Corporate Tax Rates of 223 NIPFP Companies, Classified According to Capital-Output Ratio

(per cent)

	Number of companies		Effective tax rate	
	1971-72	1975-76	1971-72	1975-76
Low capital-output ratio companies (below 1:0.75)	75	111	53.74	57.34
Moderate capital-output ratio companies (1:0.75 to 1:1.50)	125	102	46.47	44.43
High capital-output ratio companies (above 1:1.50)	23	10	26.77	46.56
All companies	223	223	46.70 (55.00)	54.25 (57.75)

Note: Figures in parentheses are statutory tax rates.

TABLE VI.3

Effective Corporate Tax Rates of 223 NIPFP Companies Classified According to Capital-Output Ratios: Frequency Distribution

(Number of companies)

Effective tax rate	Less than 35.0 per cent		35.0 per cent to 45.0 per cent		45.1 per cent to 50.0 per cent		Above 50.0 per cent		Total	
Groups	1971-72	1975-76	1971-72	1975-76	1971-72	1975-76	1971-72	1975-76	1971-72	1975-76
1. Low capital output ratio companies (below 1:0.75)	28 (37.33)	39 (35.14)	6 (8.00)	9 (8.11)	7 (9.33)	7 (6.30)	34 (45.34)	56 (50.45)	75 (100.00)	111 (100.00)
2. Moderate capital output ratio companies (1:0.75 to 1:1.50)	53 (42.40)	47 (46.08)	14 (11.20)	5 (4.90)	9 (7.20)	11 (10.78)	49 (39.20)	39 (38.24)	125 (100.00)	102 (100.00)
3. High capital output ratio companies (above 1:1.50)	19 (82.61)	7 (70.00)	1 (4.35)	1 (10.00)	1 (4.35)	1 (10.00)	2 (8.69)	1 (10.00)	23 (100.00)	10 100.00)
All companies	100 (44.84)	93 (41.70)	21 (9.42)	15 (6.73)	17 (7.62)	19 (8.52)	85 (38.12)	96 (43.05)	223 (100.00)	223 (100.00)

Note: Figures in parentheses are percentages to horizontal total.

TABLE VI.4

Effective Corporate Tax Rates of 223 NIPFP Companies Classified According to Size and Age

(Per cent)

	Size of companies				Age of companies		All companies (223)	
	Small (114)	Medium (58)	Larger (27)	Large (24)	Old (176)	New (47)	ETR	STR
1961-62	46.59	48.84	38.88	40.86	40.60	76.85	42.41	45.00
1962-63	46.52	48.47	34.46	43.00	41.01	67.05	42.39	50.00
1963-64	46.67	49.05	35.03	41.05	42.50	38.97	42.22	50.00
1964-65	45.45	48.90	33.75	42.46	42.78	31.95	41.90	50-00
1965-66	45.32	47.83	49.86	43.22	47.76	23.92	45.65	50.00
1966-67	48.78	47.22	42.05	40.10	44.18	34.71	43.15	55.00
1967-68	50.08	44.49	40.95	35.98	40.95	40.85	40.94	55.00
1968-69	45.86	42.75	41.30	28.61	35.85	38.94	36.30	55.00
1969-70	44.69	41.91	31.11	33.58	37.76	30.35	36.55	55.00
1970-71	48.45	46.72	44.36	44.21	47.34	35.11	45.29	55.00
1971-72	41.73	48.04	50.79	46.05	49.23	36.55	46.70	55.00
1972-73	49.70	49.15	40.13	36.37	47.96	37.78	41.10	56.37
1973-74	50.19	50.56	49.16	44.62	50.29	36.07	47.75	57.75
1974-75	52.69	53.77	51.08	48.23	52.12	42.30	50.53	57.75
1975-76	76.79	50.22	55.89	49.25	54.56	53.15	54.25	57.75
Average annual	49.37	47.71	42.59	41.19	44.99	42.03	45.73	54.89

Notes: 1. Figures in parentheses are number of companies.
2. ETR: Effective Tax Rate, STR: Statutory Tax Rate
3. Size is measured in terms of total assets as follows:
Small: Less than Rs 15 crore,
Medium: Rs 15 crore to less than Rs 30 crore,
Large: Rs 30 crore to less than Rs 50 crore, and
Larger: Rs 50 crore and above
4. Age is determined with reference to the year of incorporation as a public limited company; the two groups are : Old (upto 1955) and New (after 1955).

larger companies at 41.2 per cent, the all-company average being 45.7 per cent (Table VI. 4).

c. Age of companies. The age of the companies also has some relationship with the level of effective tax rate and the extent of

tax savings. By and large, the older companies have few expansion programmes. Conversely, new companies with their various expansion programmes have a lower effective tax liability as fiscal reliefs are generally linked to fresh investments. Further, in the case of the fiscal reliefs that are available upto a specific period, the incentives are more important for new companies. Thus, we find that among the NIPFP companies, those established before 1956 averaged an annual effective tax rate of 45.0 per cent, while those established between 1956 and 1961, averaged 42.0 per cent (Table VI.4).

Annexure I

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Annexure II

STATISTICAL TABLES

TABLE A.1
Year-wise Distribution of ICICI Projects

(Number of projects)

Industry/year	1970	1971	1972	1973	1974	1975	1976	1977	Total
1. Cement	—	—	—	—	—	—	—	1	1 (1.37)
2. Chemicals and fertilisers	2	—	5	5	3	5	1	—	21 (28.70)
3. Finished leather	—	—	—	—	2	—	—	—	2 (2.74)
4. Food	—	—	1	1	—	—	—	—	2 (2.74)
5. Iron and steel products	2	2	2	2	1	2	1	—	12 (16.44)
6. Machinery	3	1	3	2	4	2	2	—	17 (23.29)
7. Paper and paper products	—	—	1	—	1	1	—	—	3 (4.11)
8. Services	1	—	—	—	1	—	1	—	3 (4.11)
9. Textiles	1	—	1	2	1	1	—	—	6 (8.22)
10. Tyres and tubes	—	1	1	—	3	1	—	—	6 (8.22)
	9 (13.33)	4 (5.48)	14 (19.18)	12 (16.44)	16 (21.91)	12 (16.44)	5 (6.85)	1 (1.37)	73 (100.00)

Notes : 1. Relates to the year of approval of the projects by the ICICI and does not relate to the commencement of the operations.
2. Figures in parentheses are percentages to total.

TABLE A.2

Trends in Statutory Corporate Profits Tax Rates for Indian Companies in which the public are substantially interested

(Per cent)

Year	Corporate profits tax	Surcharge	Total tax
1961-62	45.00	—	45.00
1962-63	50.00	—	50.00
1963-64	50.00	—	50.00
1964-65	50.00	—	50.00
1965-66	50.00	—	50.00
1966-67	55.00	—	55.00
1967-68	55.00	—	55.00
1968-69	55.00	—	55.00
1969-70	55.00	—	55.00
1970-71	55.00	—	55.00
1971-72	55.00	—	55.00
1972-73	55.00	2.50	56.37
1973-74	55.00	5.00	57.75
1974 75	55.00	5.00	57.75
1975-76	55.00	5.00	57.75
1976-77	55.00	5.00	57.75
1977-78	55.00	5.00	57.75
1978-79	55.00	5.00	57.75
1979-80	55.00	5.00	57.75
1980-81	55.00	7.50	59.13
1981-82	55.00	2.50	56.37
Annual average (1961-62 to 1981-82)	53.57	2.26	55.94
Annual average (1961-62 to 1975-76)	53.00	1.17	53.64

Source : Government of India, Ministry of Finance, *Budgets of the Central Government* (annual).

TABLE A.3

Distribution of ICICI Projects by Type of Investment Activity and Industry Group

(Number of investment schemes)

	Backward area schemes						Non-backward area schemes						Total schemes					
	A	B	C	D	E	F	A	B	C	D	E	F	A	B	C	D	E	F
1. Cement	—	—	1	—	—	1	—	—	—	—	—	—	—	—	1	—	—	1
2. Chemicals and fertilisers	2	2	5	1	4	14	5	5	4	—	—	14	7	7	9	1	4	28
3. Finished leather	—	—	—	—	—	—	1	1	—	—	—	2	1	1	—	—	—	2
4. Food	1	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—	—	1
5. Iron and steel products	—	—	1	1	—	2	2	2	3	2	1	10	2	2	4	3	1	12
6. Machinery	—	—	2	—	—	2	3	3	7	—	3	16	3	3	9	—	3	18
7. Paper and paper products	—	—	1	1	—	2	1	1	—	—	—	2	1	1	1	1	—	4
8. Services	—	—	—	—	—	—	1	1	2	—	—	4	1	1	2	—	—	4
9. Textiles	—	—	1	—	—	1	3	2	4	1	1	11	3	2	5	1	1	12
10. Tyres and tubes	—	—	2	1	—	3	1	1	1	—	—	3	1	1	3	1	—	6
	3	2	13	4	4	26	17	16	21	3	5	62	20	18	34	7	9	88

Notes : A : New unit of an existing industrial undertaking

B : New industrial undertaking

C : Substantial expansion of an existing industrial undertaking

D : Modernisation of an existing industrial undertaking

E : Diversification of an existing industrial undertaking

F : Total of all projects.

TABLE A.4

Distribution of Assessed Income, Tax and Fiscal Reliefs : Disaggregated Results
(relating to 108 assessees)

(Rs crore)

		1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
1. *Location of Assessees*								
a. Ahmedabad (10)	(a)	5.33	5.19	4.45	4.43	12.90	12.95	12.70
		(4.70)	(3.57)	(2.82)	(2.26)	(5.63)	(4.42)	(5.54)
	(b)	3.25	2.30	2.55	2.56	7.42	7.52	6.90
		(5.07)	(2.84)	(2.84)	(2.25)	(5.58)	(4.43)	(5.35)
	(c)	1.48	2.03	1.75	2.65	2.26	4.59	1.53
		(4.33)	(6.19)	(4.71)	(4.75)	(5.13)	(5.90)	(3.33)
b. Bombay (22)	(a)	31.57	38.81	40.94	46.99	60.77	84.60	67.72
		(27.84)	(26.70)	(25.98)	(24.42)	(26.52)	(28.89)	(29.56)
	(b)	17.45	21.38	23.04	27.25	35.24	49.06	34.20
		(27.17)	(26.47)	(25.66)	(23.94)	(26.50)	(28.91)	(26.52)
	(c)	12.99	12.81	13.28	22.05	10.02	29.15	25.46
		(38.02)	(39.12)	(35.81)	(39.48)	(22.77)	(37.53)	(55.31)
c. Calcutta (36)	(a)	62.58	81.30	88.30	108.51	108.03	123.25	78.27
		(55.18)	(55.92)	(56.04)	(55.45)	(47.15)	(42.09)	(38.10)
	(b)	35.31	46.19	50.66	62.91	62.58	71.27	52.25
		(54.99)	(57.19)	(56.42)	(55.29)	(47.06)	(41.99)	(40.82)

(*Contd.*)

		1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
	(c)	9.64	8.53	11.16	15.25	12.34	22.90	9.02
		(28.23)	(26.04)	(30.10)	(27.31)	(28.04)	(29.48)	(19.60)
d. Delhi	(a)	6.19	10.03	11.55	19.78	23.28	31.58	25.89
(12)		(5.46)	(6.90)	(7.33)	(10.11)	(10.16)	(10.79)	(11.30)
	(b)	3.46	5.52	6.49	11.40	13.51	18.02	14.83
		(5.39)	(6.83)	(7.23)	(10.02)	(10.16)	(10.62)	(11.50)
	(c)	4.99	2.24	5.89	6.05	3.37	2.64	4.15
		(14.60)	(6.84)	(15.88)	(10.84)	(7.67)	(3.40)	(9.02)
e. Madras	(a)	6.57	7.23	9.51	9.80	16.09	29.97	20.25
(19)		(5.79)	(4.97)	(6.04)	(5.01)	(7.02)	(10.24)	(8.84)
	(b)	4.09	3.96	5.48	6.17	9.53	17.79	11.94
		(6.38)	(4.90)	(6.09)	(5.42)	(7.17)	(10.48)	(9.26)
	(c)	3.35	4.18	2.59	1.56	1.63	3.31	2.82
		(9.81)	(2.78)	(6.89)	(2.79)	(3.71)	(4.27)	(6.13)
f. Others	(a)	1.18	2.81	2.82	6.17	8.07	10.45	15.26
(9)		(1.04)	(1.93)	(1.79)	(3.15)	(3.52)	(3.57)	(6.66)
	(b)	0.65	1.43	1.59	3.50	4.70	6.06	8.85
		(1.00)	(1.77)	(1.77)	(3.08)	(3.53)	(3.57)	(6.86)
	(c)	1.71	2.95	2.42	8.28	14.38	15.08	3.05
		(5.01)	(9.02)	(6.53)	(14.83)	(32.69)	(19.42)	(6.62)

(*Contd.*)

		1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
2. *Capital Intensity*								
(a) High (30)	(a)	64.61 (56.97)	78.30 (53.86)	85.23 (54.09)	90.89 (46.45)	125.26 (54.56)	153.72 (52.50)	124.23 (54.24)
	(b)	35.53 (55.34)	43.64 (54.03)	47.94 (53.39)	52.68 (46.30)	72.40 (54.44)	86.76 (52.30)	65.80 (51.03)
	(c)	22.42 (65.63)	22.56 (68.91)	26.00 (70.11)	43.58 (78.05)	30.44 (69.19)	64.42 (82.93)	33.97 (73.80)
(b) Moderate (21)	(a)	17.28 (15.24)	23.83 (16.39)	26.68 (16.93)	35.31 (18.04)	41.56 (18.14)	55.86 (19.08)	42.90 (18.73)
	(b)	10.11 (15.75)	12.67 (15.68)	15.28 (17.02)	20.39 (17.92)	24.13 (18.14)	32.09 (18.91)	26.92 (20.88)
	(c)	5.74 (16.80)	4.87 (14.88)	5.95 (16.06)	7.81 (13.99)	6.04 (13.72)	4.87 (6.27)	6.97 (15.13)
(c) Low (57)	(a)	31.52 (27.79)	43.25 (29.75)	45.67 (26.98)	69.48 (35.51)	62.33 (27.20)	83.20 (28.42)	61.93 (27.03)
	(b)	18.57 (28.92)	24.46 (30.29)	26.56 (29.59)	40.71 (35.78)	36.46 (27.42)	48.86 (28.79)	36.23 (28.10)
	(c)	6.01 (17.58)	5.31 (16.21)	5.13 (13.83)	4.45 (7.96)	7.52 (17.08)	8.39 (10.80)	5.09 (11.07)

(*Contd.*)

		1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
3. *Industry*								
(a) Chemicals (15)	(a)	10.25	13.73	15.06	19.82	23.33	30.13	32.40
		(9.03)	(9.45)	(9.56)	(10.13)	(10.18)	(10.29)	(14.15)
	(b)	5.71	7.65	8.74	11.46	13.50	17.63	16.76
		(8.89)	(9.48)	(9.74)	(10.07)	(18.26)	(10.39)	(14.55)
	(c)	2.48	3.14	2.52	2.23	2.14	2.37	1.52
		(7.25)	(9.58)	(6.80)	(3.98)	(4.86)	(3.05)	(3.30)
(b) Engineering (30)	(a)	22.53	37.72	42.01	49.40	52.23	71.37	58.80
		(19.87)	(25.95)	(26.66)	(25.24)	(22.79)	(24.38)	(25.67)
	(b)	12.80	20.06	24.43	28.72	30.34	41.59	33.22
		(19.94)	(24.84)	(27.34)	(25.34)	(22.82)	(24.50)	(25.76)
	(c)	12.51	9.94	12.95	16.34	8.11	14.26	9.43
		(36.61)	(30.35)	(34.93)	(29.26)	(18.44)	(13.36)	(20.48)
(c) Textiles (8)	(a)	4.17	7.72	6.52	4 27	16.32	16.51	13.82
		(3.68)	(5.31)	(4.14)	(2.18)	(7.12)	(5.64)	(6.03)
	(b)	2.68	3.70	33.99	2.44	9.46	9.52	7.52
		(4.17)	(4.58)	(3.78)	(2.14)	(7.11)	(5.61)	(5.83)
	(c)	2.01	0.87	2.05	3.08	1.47	1.63	1.20
		(5.88)	(2.64)	(5.52)	(5.51)	(3.25)	(2.10)	(2.61)
(d) Others (43)	(a)	38.52	46.06	47.92	67.04	64.09	75.75	71.84
		(33.96)	(31.68)	(30.41)	(34.26)	(27.97)	(25.87)	(71.76)

(Contd.)

		1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
	(b)	22.11 (34.44)	26.60 (32.93)	27.15 (30.24)	39.32 (34.56)	37.36 (28.09)	44.10 (25.99)	39.31 (30.48)
	(c)	12.77 (37.38)	15.57 (47.85)	15.42 (41.58)	21.31 (38.16)	26.63 (60.52)	48.00 (61.79)	19.41 (42.18)
(e) Diversified (12)	(a)	37.94 (33.46)	40.15 (27.61)	46.06 (29.23)	55.15 (28.19)	73.17 (31.93)	99.02 (33.82)	52.20 (22.79)
	(b)	20.91 (32.56)	22.76 (28.18)	25.95 (28.90)	31.85 (27.99)	42.23 (31.75)	56.88 (33.51)	30.16 (23.39)
	(c)	4.41 (12.89)	3.14 (9.58)	4.15 (11.17)	12.89 (23.09)	5.64 (12.83)	11.41 (14.69)	14.47 (31.42)
Total (108)	(a)	113.41 (100.00)	145.38 (100.00)	157.57 (100.00)	195.68 (100.00)	229.14 (100.00)	292.79 (100.00)	229.08 (100.00)
	(b)	64.21 (100.00)	80.77 (100.00)	89.78 (100.00)	113.77 (100.00)	132.99 (100.00)	169.71 (100.00)	128.96 (100.00)
	(c)	34.17 (100.00)	32.75 (100.00)	37.08 (100.00)	55.84 (100.00)	44.00 (100.00)	77.68 (100.00)	46.03 (100.00)

Notes : 1. Figures in parentheses are percentages to total.
2. Figures in parentheses below category of assessee relate to number of assessees in the group.
3. a : Assessed income.
b : Assessed tax.
c : Assessed fiscal reliefs.

TABLE A.5

Composition of Ex-Post Fiscal Reliefs: Disaggregated Results

(relating to 108 assessees)

(Rs crore)

Assessment Year	Development rebate/investment allowance (33/33A)	Scientific research (35)	Export market development allowance (35B)	Donations to charitable institutions (80G)	Backward area relief (80HH)	Priority industry relief (80I)	Tax holiday (80J)	Dividends from new industrial undertakings, hotels, etc. (80K)	Selected inter-corporate dividends (80M)	Royalties, commission and fees from abroad (80O)	Other reliefs	Total fiscal reliefs
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
I. *Location of Assessees*												
a. Ahmedabad (10)												
1970-71	1.12	0.01	0.09	0.03	0.00	0.03	0.13	0.00	0.06	0·00	0.00	1.48
1971-72	1.06	0.02	0.08	0.14	0.00	0.02	0.31	0.06	0.33	0.00	0.00	2.03
1972-73	0.77	0.17	0.14	0.04	0.00	0.00	0.29	0.00	0.32	0.00	0.00	1.74
1973-74	1.75	0.11	0.12	0.05	0.00	0.00	0.32	0.05	0.27	0.00	0.00	2.65
1974-75	1.05	0.12	0.28	0.03	0.00	0.00	0.38	0.15	0.25	0.00	0.00	2.26
1975-76	2.94	0.31	0.46	0.05	0.00	0.00	0.35	0.29	0.20	0.00	0.01	4.59
1976-77	0.15	0.09	0.71	0.04	0.00	0.00	0.20	0.14	0.20	0.00	0.00	1.53
Total	8.84	0.83	1.88	0.38	0.00	0.05	1.97	0.69	1.63	0.00	0.01	16.28
	(54.3)	(5.1)	(11.5)	(2.3)	(0.0)	(0.3)	(12.1)	(4.2)	(10.0)	(0.0)	(0.1)	(100.0)

(*contd.*)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
b. Bombay (22)												
1970-71	6.55	0.51	0.91	0.04	0.00	0.63	4.27	0.00	0.07	0.00	0.00	12.99
1971-72	7.33	0.62	0.95	0.05	0.00	0.50	3.30	0.00	0.07	0.00	0.00	12.81
1972-73	3.65	0.63	0.84	0.13	0.00	0.27	7.65	0.01	0.09	0.00	0.00	13.28
1973-74	14.36	0.69	1.32	0.09	0.00	0.00	1.69	3.73	0.27	0.00	0.00	22.05
1974-75	6.35	0.98	0.56	0.04	0.19	0.00	1.70	0.09	0.12	0.00	0.00	10.02
1975-76	21.29	0.64	2.18	0.04	1.20	0.00	3.56	0.08	0.07	0.09	0.00	29.15
1976-77	10.38	0.76	1.46	0.41	1.25	0.00	6.72	4.17	0.12	0.19	0.00	25.46
Total	69.91	4.83	8.22	0.80	2.64	1.40	28.79	8.08	0.81	0.28	0.00	125.76
	(55.7)	(3.8)	(6.5)	(0.6)	(2.1)	(1.1)	(23.0)	(6.4)	(0.6)	(0.2)	(0.0)	(100.0)
c. Calcutta (36)												
1970-71	6.53	0.05	0.15	0.04	0.00	1.43	1.03	0.01	0.12	0.09	0.20	9.64
1971-72	4.02	0.13	0.21	0.08	0.02	2.07	1.65	0.01	0.10	0.09	0.14	8.53
1972-73	7.53	0.21	0.21	0.32	0.00	0.96	1.50	0.01	0.09	0.08	0.26	11.16
1973-74	2.98	0.08	0.20	0.10	0.00	0.00	11.30	0.00	0.14	0.00	0.45	15.25
1974-75	5.89	0.34	0.48	0.07	0.00	0.00	3.58	0.03	0.07	0.09	1.80	12.34
1975-76	11.75	0.13	4.75	0.08	0.07	0.00	4.19	0.00	0.10	0.03	1.77	22.90
1976-77	2.78	0.21	0.71	0.19	0.04	0.00	4.01	0.02	0.09	0.07	0.91	9.02
Total	41.48	1.15	6.71	0.88	0.13	4.46	27.26	0.08	0.71	0.45	5.53	88.84
	(46.3)	(1.3)	(7.4)	(1.0)	(0.1)	(5.0)	(30.6)	(0.1)	(1.5)	(0.5)	(6.2)	(100.00)

(*contd.*)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
d. Delhi												
(12)												
1970-71	1.24	0.02	0.10	0.03	0.00	0.43	3.04	0.00	0.03	0.00	0.11	4.99
1971-72	0.57	0.02	0.13	0.04	0.00	0.28	0.97	0.00	0.08	0.00	0.15	2.24
1972-73	3.17	0.02	0.16	0.04	0.00	0.24	1.24	1.95	0.05	0.00	0.03	5.89
1973-74	3.99	0.00	0.15	0.10	0.00	0.00	1.68	0.06	0.04	0.00	0.02	6.05
1974-75	1.88	0.11	0.12	0.06	0.05	0.00	0.64	0.00	0.10	0.00	0.42	3.38
1975-76	2.01	0.04	0.17	0.03	0.16	0.00	0.11	0.00	0.05	0.00	0.08	2.64
1976-77	2.63	0.04	0.43	0.05	0.12	0.00	0.14	0.00	0.07	0.00	0.65	4.15
Total	15.49	0.25	1.26	0.35	0.33	0.95	7.82	1.01	0.42	0.00	1.46	29.34
	(52.8)	(0.8)	(4.3)	(1.2)	(1.1)	(3.2)	(26.6)	(3.5)	(1.4)	(0.0)	(5.0)	(100.0)
e. Madras												
(19)												
1970-71	0.74	0.01	0.11	0.03	0.00	0.45	1.74	0.04	0.22	0.00	0.02	3.35
1971-72	1.44	0.06	0.10	0.03	0.00	0.59	1.59	0.09	0.25	0.00	0.05	4.19
1972-73	1.21	0.08	0.07	0.06	0.00	0.11	0.85	0.00	0.15	0.00	0.03	2.59
1973-74	0.63	0.05	0.10	0.04	0.00	0.00	0.05	0.01	0.15	0.00	0.53	1.56
1974-75	1.13	0.05	0.11	0.04	0.00	0.00	0.06	0.05	0.12	0.00	0.06	1.63
1975-76	1.99	0.23	0.50	0.04	0.00	0.00	0.19	0.05	0.24	0.00	0.06	3.31
1976-77	0.98	0.14	0.87	0.02	0.00	0.02	0.32	0.27	0.12	0.00	0.08	2.82
Total	8.12	0.62	1.86	0.26	0.00	1.20	4.80	0.51	1.26	0.00	0.83	19.45
	(41.7)	(3.2)	(9.5)	(1.3)	(0.0)	(6.2)	(24.7)	(2.6)	(6.5)	(0.0)	(4.3)	(100.0)

(contd.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
f. Others												
(9)												
1970-71	1.43	0.02	0.01	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	1.71
1971-72	2.40	0.03	0.02	0.00	0.00	0.02	0.49	0.00	0.00	0.00	0.00	2.95
1972-73	1.04	0.01	0.02	0.00	0.00	0.02	1.33	0.00	0.00	0.00	0.00	2.42
1973-74	7.61	0.01	0.04	0.00	0.00	0.00	0.13	0.00	0.49	0.00	0.00	8.28
1974-75	12.60	0.04	0.03	0.00	0.00	0.00	1.58	0.08	0.05	0.00	0.00	14.38
1975-76	4.07	0.00	0.05	0.00	0.00	0.00	10.61	0.31	0.05	0.00	0.00	15.09
1976-77	0.11	0.06	0.04	0.00	0.00	0.00	2.42	0.37	0.05	0.00	0.00	3.05
Total	29.26	0.17	0.21	0.00	0.00	0.04	16.80	0.76	0.64	0.00	0.00	47.88
	(61.1)	(0.36)	(0.44)	(0.0)	(0.0)	(0.1)	(35.1)	(1.6)	(1.3)	(0.0)	(0.0)	(100.0)
2. *Capital Intensity*												
a. High												
(30)												
1970-71	13.00	0.28	0.96	0.05	0.00	2.28	5.60	0.00	0.04	0.00	0.20	22.41
1971-72	13.68	0.36	1.11	0.11	0.02	1.96	4.91	0.06	0.32	0.00	0.03	22.56
1972-73	12.43	0.49	0.99	0.37	0.00	1.04	10.20	0.07	0.33	0.00	0.08	26.00
1973-74	24.01	0.64	1.29	0.11	0.00	0.00	13.25	3.78	0.42	0.08	0.08	43.66
1974-75	22.32	0.91	0.53	0.09	0.19	0.00	5.81	0.33	0.25	0.00	0.01	30.44
1975-76	36.98	0.53	6.97	0.11	1.24	0.00	17.62	0.72	0.24	0.33	0.02	64.76
1976-77	12.23	0.43	1.99	0.44	1.27	0.00	12.37	4.95	0.21	0.01	0.50	34.40
Total	134.65	3.64	13.84	1.28	2.72	5.28	69.76	9.91	1.81	0.42	0.92	244.23
	(55.1)	(1.5)	(5.7)	(0.5)	(1.1)	(2.2)	(28.5)	(4.1)	(0.7)	(0.2)	(0.4)	(100.0)

(contd.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
b. Moderate (21)												
1970-71	2.53	0.18	0.18	0.06	0.00	0.30	2.29	0.02	0.10	0.00	0.08	5.74
1971-72	1.54	0.15	0.17	0.16	0.00	0.82	1.61	0.04	0.19	0.00	0.20	4.88
1972-73	2.73	0.23	0.18	0.12	0.00	0.30	1.34	0.89	0.13	0.00	0.03	5.95
1973-74	5.49	0.15	0.19	0.19	0.00	1.00	0.08	0.06	0.63	0.00	0.01	6.80
1974-75	3.80	0.33	0.18	0.07	0.00	0.00	1.33	0.01	0.27	0.00	0.06	6.05
1975-76	3.14	0.21	0.29	0.07	0.00	0.00	0.87	0.01	0.22	0.00	0.65	5.46
1976-77	3.35	0.48	1.25	0.11	0.00	0.00	0.91	0.00	0.20	0.01	0.65	6.96
Total	22.58	1.73	2.44	0.78	0.00	1.42	8.43	1.03	1.74	0.01	1.68	41.84
	(54.0)	(4.1)	(5.8)	(1.9)	(0.0)	(3.4)	(20.1)	(2.5)	(4.2)	(0.0)	(4.0)	(100.0)
c. Low (57)												
1970-71	2.09	0.16	0.24	0.06	0.00	0.38	2.55	0.04	0.36	0.09	0.05	6.02
1971-72	1.60	0.35	0.20	0.06	0.00	0.71	1.80	0.07	0.32	0.09	0.12	5.32
1972-73	2.21	0.40	0.27	0.10	0.00	0.29	1.31	0.01	0.23	0.08	0.22	5.12
1973-74	1.82	0.15	0.44	0.08	0.00	0.00	0.75	0.00	0.30	0.00	0.91	4.45
1974-75	2.78	0.40	0.80	0.08	0.05	0.00	0.76	0.04	0.20	0.09	2.31	7.51
1975-76	3.92	0.63	0.94	0.07	0.19	0.00	0.54	0.01	0.24	0.11	1.72	8.37
1976-77	1.47	0.39	0.97	0.16	0.14	0.02	0.54	0.02	0.24	0.24	0.91	5.10
Total	15.89	2.48	3.86	0.61	0.38	1.40	8.25	0.19	1.89	0.70	6.24	41.89
	(37.9)	(5.9)	(9.2)	(1.5)	(0.9)	(3.3)	(19.7)	(0.5)	(4.5)	(1.7)	(14.9)	(100.00)

(contd.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
3. *Industry*												
a. Chemicals (15)												
1970-71	0.88	0.28	0.07	0.01	0.00	0.03	1.20	0.00	0.00	0.00	0.00	2.48
1971-72	0.76	0.39	0.03	0.01	0.00	0.26	1.37	0.06	0.27	0.00	0.00	3.14
1972-73	0.74	0.50	0.03	0.03	0.00	0.00	0.96	0.00	0.25	0.00	0.00	2.52
1973-74	0.41	0.18	0.07	0.08	0.00	0.00	1.26	0.04	0.19	0.00	0.00	2.23
1974-75	0.58	0.51	0.06	0.02	0.00	0.00	0.66	0.13	0.18	0.00	0.00	2.14
1975-76	0.63	0.44	0.14	0.02	0.03	0.00	0.67	0.29	0.15	0.00	0.00	2.37
1976-77	0.22	0.41	0.15	0.06	0.02	0.02	0.34	0.14	0.14	0.01	0.01	1.52
Total	4.23	2.71	0.55	0.23	0.05	0.31	6.46	0.66	1.18	0.01	0.01	16.40
	(25.8)	(16.5)	(3.3)	(1.4)	(0.3)	(1.9)	(39.4)	(4.0)	(7.2)	(0.01)	(0.1)	(100.0)
b. Engineering (30)												
1970-71	6.29	0.01	0.24	0.05	0.00	1.29	4.27	0.01	0.04	0.00	0.31	12.51
1971-72	3.85	0.15	0.33	0.07	0.02	1.71	3.45	0.04	0.12	0.00	0.20	9.94
1972-73	3.87	0.27	0.33	0.13	0.00	0.66	7.52	0.00	0.07	0.00	0.10	12.95
1973-74	3.11	0.25	0.38	0.10	0.00	0.00	12.31	0.00	0.09	0.00	0.09	16.34
1974-75	3.03	0.46	0.62	0.10	0.00	0.00	3.74	0.01	0.10	0.00	0.07	8.11
1975-76	4.96	0.33	3.91	0.11	0.07	0.00	4.60	0.01	0.09	0.09	0.08	14.27
1976-77	2.58	0.51	0.92	0.38	0.04	0.00	4.06	0.00	0.11	0.18	0.66	9.43
Total	27.69	1.98	6.73	0.94	0.13	3.66	39.95	0.07	0.62	0.27	1.51	83.55
	(33.1)	(2.4)	(8.1)	(1.1)	(0.2)	(4.4)	(47.8)	(0.1)	(0.7)	(0.3)	(1.8)	(100.0)

(*contd.*)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
c. Textiles												
(8)												
1970-71	0.91	0.00	0.04	0.02	0.00	0.14	0.84	0.00	0.06	0.00	0.00	2.01
1971-72	0.47	0.00	0.01	0.13	0.00	0.00	0.13	0.01	0.09	0.00	0.02	0.86
1972-73	0.72	0.01	0.03	0.03	0.00	0.06	0.16	0.89	0.11	0.00	0.03	2.05
1973-74	1.85	0.02	0.05	0.07	0.00	0.00	0.87	0.03	0.13	0.00	0.06	3.08
1974-75	1.03	0.06	0.17	0.03	0.00	0.00	0.01	0.01	0.09	0.00	0.06	1.47
1975-76	1.28	0.01	0.15	0.03	0.00	0.00	0.05	0.01	0.06	0.00	0.06	1.63
1976-77	0.44	0.01	0.57	0.03	0.00	0.00	0.01	0.00	0.06	0.00	0.08	1.20
Total	6.70	0.11	1.02	0.34	0.00	0.20	2.07	0.95	0.60	0.00	0.31	12.30
	(54.5)	(0.17)	(8.3)	(2.7)	(0.0)	(1.6)	(16.9)	(7.7)	(4.9)	(0.0)	(2.5)	(100.0)
d. Others												
(43)												
1970-71	7.89	0.06	0.90	0.05	0.00	1.02	2.42	0.03	0.29	0.09	0.03	12.77
1971-72	10.38	0.07	0.96	0.05	0.00	1.12	3.62	0.05	0.21	0.09	0.12	15.57
1972-73	1.43	0.03	0.88	0.22	0.00	0.69	3.76	0.00	0.15	0.08	0.18	15.42
1973-74	18.29	0.06	1.22	0.04	0.00	0.00	0.22	0.00	0.64	0.00	0.82	21.31
1974-75	21.67	0.09	0.35	0.05	0.05	0.00	1.82	0.07	0.18	0.09	2.25	26.63
1975-76	30.68	0.21	2.47	0.03	0.16	0.00	12.21	0.31	0.26	0.03	1.64	48.00
1976-77	9.74	0.20	0.99	0.14	0.12	0.00	6.80	0.38	0.18	0.06	0.82	19.41
Total	108.08	0.72	7.77	0.58	0.33	2.83	29.85	0.84	1.91	0.44	5.86	159.21
	(67.9)	(0.4)	(4.9)	(0.4)	(0.2)	(1.8)	(18.7)	(0.5)	(1.2)	(0.3)	(3.7)	(100.0)

(contd.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
e. Diversified (12)												
1970-71	1.65	0.25	0.13	0.05	0.00	0.48	1.71	0.01	0.11	0.00	0.00	4.41
1971-72	1.36	0.25	0.15	0.08	0.00	0.41	0.75	0.01	0.13	N	0.00	3.14
1972-73	2.62	0.31	0.18	0.17	0.00	0.41	0.45	0.08	0.12	0.00	0.01	4.14
1973-74	7.65	0.43	0.20	0.09	0.00	0.00	0.41	3.77	0.31	0.00	0.03	12.89
1974-75	2.59	0.53	0.29	0.04	0.19	0.00	1.67	0.15	0.17	0.00	0.01	5.64
1975-76	6.49	0.38	1.54	0.05	1.17	0.00	1.50	0.13	0.15	N	0.01	11.41
1976-77	4.06	0.18	1.59	0.10	1.23	0.00	2.61	4.46	0.15	0.01	0.08	14.47
Total	26.42	2.33	4.08	0.58	2.59	1.10	9.10	8.61	1.14	0.01	0.14	56.10
	(47.1)	(4.2)	(7.3)	(1.0)	(4.6)	(2.6)	(16.2)	(15.3)	(2.0)	(0.0)	(0.3)	(100.0)

Notes : 1. Figures in parentheses below the category of assessees relate to number of assessees.
2. Figures in parentheses below seven-year total are percentages to total fiscal reliefs.
3. N denotes less than Rs. 0.01 crore.

TABLE A.6

Ex-Post Fiscal Reliefs, Tax Base, Tax Rates and Tax Savings : Disaggregated Results
(relating to 108 assessees)

Rs crore

Assessment year	Actual corporate profits tax base	Actual corporate profits tax liability	Hypothetical corporate profits tax base	Hypothetical corporate profits tax liability	Statutory corporate profits tax rate (per cent)	Effective corporate profits tax rate (per cent)	Fiscal reliefs	Corporate tax savings	Col. 8 as % of Col. 4	Col. 8 as % of col. 3	Col. 1 as % of col. 3
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Location of Assessees											
a. Ahmedabad (10)											
1970-71	5.33	3.25	6.81	4.15	60.98	47.72	1.48	0.90	21.69	13.22	78.27
1971-72	5.19	2.29	7.22	3.19	44.12	31.72	2.03	0.90	28.21	12.47	71.88
1972-73	4.45	2.55	6.19	3.55	57.30	41.20	1.74	1.00	28.17	16.16	71.89
1973-74	4.43	2.56	7.08	4.09	57.79	36.16	2.65	1.53	37.41	21.61	62.57
1974-75	12.90	7.42	15.16	8.72	57.52	48.94	2.26	1.30	14.91	8.58	85.09
1975-76	12.95	7.52	17.54	10.19	58.07	42.87	4.59	2.67	26.20	15.22	73.83
1976-77	12.70	6.90	14.23	7.73	54.33	48.49	1.53	0.83	10.74	5.83	89.25
Total	57.95	32.49	74.23	41.62	—	—	16.28	9.13	—	—	—
Average Annual	8.28	4.64	10.60	5.94	56.06	43.77	2.32	1.30	21.89	12.26	78.11

(contd.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
b. Bombay (22)											
1970-71	31.57	17.45	44.56	24.63	55.27	39.16	12.99	7.18	29.15	16.11	70.85
1971-72	38.81	21.38	51.62	28.44	55.09	41.42	12.81	7.06	24.82	13.68	75.18
1972-73	40.94	23.04	54.22	30.52	56.28	42.49	13.28	7.48	24.51	13.80	75.51
1973-74	46.99	27.25	69.04	40.04	57.99	39.47	22.05	12.79	31.94	18.53	68.07
1974-75	60.77	35.24	70.75	41.05	57.99	49.78	10.02	5.81	14.15	8.21	85.85
1975-76	84.60	49.06	113.75	65.96	57.99	43.13	29.15	16.90	25.63	14.86	74.37
1976-77	67.72	34.20	93.18	47.06	50.50	36.70	25.46	12.86	27.33	13.80	72.68
Total	371.40	207.62	497.16	277.91	—	—	125.76	70.29	—	—	—
Average Annual	53.06	29.66	71.02	39.70	55.90	41.76	17.96	10.04	25.29	14.14	74.71
c. Calcutta (36)											
1970-71	62.58	35.31	72.22	40.75	56.42	48.89	9.64	5.44	13.35	7.53	86.65
1971-72	81.30	46.19	89.83	51.03	56.81	51.42	8.53	4.84	9.48	5.39	90.50
1972-73	88.30	50.66	99.46	57.06	57.37	50.94	11.16	6.40	11.22	6.43	88.78
1973-74	108.51	62.91	123.76	71.76	57.98	50.83	15.25	8.85	12.33	7.15	87.68
1974-75	108.03	62.58	120.37	69.73	57.93	51.99	12.34	7.15	10.25	5.94	89.75
1975-76	123.25	71.27	146.15	84.52	57.83	48.76	22.90	13.25	15.68	9.07	84.33
1976-77	87.27	52.25	96.29	57.65	59.87	54.26	9.02	5.40	9.37	5.61	90.63
Total	659.24	381.17	748.08	432.54	—	—	88.84	51.37	—	—	—
Average Annual	94.18	54.45	106.87	61.78	57.81	50.95	12.69	7.33	11.87	6.86	88.13

(contd.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
d. Delhi											
(12)											
1970-71	6.19	3.46	11.18	6.25	55.94	30.95	4.99	2.79	44.64	24.96	55.37
1971-72	10.03	5.52	12.27	6.75	55.00	44.99	2.24	1.23	18.22	10.02	81.74
1972-73	11.55	6.49	17.44	9.80	56.22	37.21	5.89	3.31	33.78	18.98	66.23
1973-74	19.78	11.40	25.83	14.89	57.63	44.13	6.05	3.49	23.44	13.51	76.58
1974-75	23.28	13.51	26.66	15.47	58.03	50.68	3.38	1.96	12.67	7.35	87.32
1975-76	31.58	18.02	34.22	19.53	57.06	52.66	2.64	1.51	7.73	4.41	92.29
1976-77	25.89	14.83	30.03	17.20	57.28	49.38	4.14	2.37	13.78	7.89	86.21
Total	128.30	73.23	157.63	89.98	—	—	29.33	16.75	—	—	—
Average Annual	18.33	10.46	22.52	12.85	57.06	46.45	4.19	2.39	18.60	10.62	81.40
e. Madras											
(19)											
1970-71	6.57	4.09	9.92	6.18	62.25	41.23	3.35	2.09	33.82	21.07	66.23
1971-72	7.23	3.96	11.42	6.25	54.77	34.68	4.19	2.29	36.64	20.05	63.31
1072-73	9.51	5.46	12.10	6.95	57.41	45.12	2.59	1.49	21.44	12.31	78.60
1973-74	9.80	6.17	11.36	7.15	62.96	54.31	1.56	0.98	13.71	8.63	86.27
1974-75	16.09	9.53	17.72	10.50	59.23	53.78	1.63	0.97	9.23	5.47	90.80
1975-76	29.97	17.79	33.28	19.76	59.37	53.46	3.31	1.97	9.97	5.92	90.05
1976-77	20.25	11.94	23.07	13.60	58.97	51.76	2.82	1.66	12.21	7.20	87.78
Total	99.42	58.94	118.87	70.47	—	—	19.45	11.53	—	—	—
Average Annual	14.20	8.42	16.98	10.07	59.30	49.59	2.78	1.65	16.38	9.72	83.62

(contd.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
f. Others											
(9)											
1970-71	1.18	0.65	2.89	1.59	55.08	22.49	1.71	0.94	59.20	32.53	40.83
1971-72	2.81	1.43	5.77	2.94	50.89	24.78	2.96	1.51	51.36	26.17	48.70
1972-73	2.82	1.59	5.24	2.95	56.38	30.34	2.42	1.36	46.10	25.95	53.82
1973-74	6.17	3.50	14.45	8.20	56.73	24.22	8.28	4.70	57.32	32.53	42.70
1974-75	8.07	4.70	22.45	13.07	58.24	20.94	14.38	8.37	64.04	37.32	35.95
1975-76	10.45	6.06	25.53	14.80	58.01	23.50	15.08	8.74	59.05	34.23	40.93
1976-77	15.26	8.85	18.31	10.62	57.99	48.33	3.05	1.77	16.67	9.67	83.34
Total	46.76	26.78	94.64	54.20	—	—	47.88	27.42	—	—	—
Average Annual	6.68	3.82	13.52	7.73	57.18	28.25	6.84	3.91	50.59	28.92	49.41
2. *Capital Intensity*											
a. High											
(30)											
1970-71	64.61	35.53	87.03	47.86	54.99	40.83	22.42	12.33	25.76	14.17	74.24
1971-72	78.30	43.64	100.86	56.21	55.73	43.29	22.56	12.57	22.36	12.46	77.63
1972-73	85.23	47.94	111.23	62.57	56.25	43.10	26.00	14.63	23.38	13.15	76.63
1973-74	90.89	52.68	134.47	77.94	57.96	39.18	43.58	25.26	32.41	18.78	67.59
1974-75	125.25	72.40	155.70	89.99	57.80	46.50	30.45	17.59	19.55	11.30	80.44
1975-76	153.72	88.76	218.14	125.96	57.74	40.69	64.42	37.20	29.53	17.05	70.47
1976-77	124.25	65.80	158.22	83.79	52.96	41.59	33.97	17.99	21.47	11.37	78.53
Total	722.25	406.75	965.65	543.85	—	—	243.40	137.10	—	—	—
Average Annual	103.18	58.11	137.95	77.69	56.32	42.12	34.77	19.58	25.20	14.20	74.80

(*contd.*)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
b. Moderate											
(21)											
1970-71	17.28	10.11	23.02	13.47	58.51	43.92	5.74	3.36	24.94	14.60	75.07
1971-72	23.83	12.67	28.71	15.27	53.17	44.13	4.88	2.59	16.96	9.02	83.00
1972-73	26.68	15.28	32.63	18.69	57.27	46.83	5.95	3.41	18.25	10.45	81.77
1973-74	35.31	20.39	43.12	24.90	57.75	47.29	7.81	4.51	18.11	10.46	81.89
1974-75	41.56	24.13	47.59	27.64	58.06	50.70	6.03	3.51	12.70	7.38	87.33
1975 76	55.86	32.09	60.73	34.89	57.45	52.84	4.87	2.80	8.03	4.61	91.98
1976-77	42.90	26.92	49.87	31.29	62.75	53.98	6.97	4.37	13.97	8.76	86.02
Total	243.42	141.59	285.67	166.17	—	—	42.25	24.58	—	—	—
Average Annual	34.77	20.23	40.81	23.74	58.18	49.57	6.04	3.51	14.79	8.60	85.21
c. Low											
(57)											
1970-71	31.52	18.57	37.52	22.10	58.91	49.49	6.00	3.53	15.97	9.41	84.01
1971-72	43.25	24.46	48.56	27.46	56.55	50.37	5.31	3.00	10.93	6.18	89.07
1972-73	45.66	26.56	50.80	29.55	58.17	52.28	5.14	2.99	10.12	5.89	89.88
1973-74	69.48	40.71	73.92	43.31	58.59	55.07	4.44	2.60	6.00	3.52	93.99
1974-75	62.33	36.46	69.85	40.86	58.50	52.20	7.52	4.40	10.77	6.29	89.23
1975-76	83.20	48.86	91.59	53.79	58.73	53.35	8.39	4.93	9.16	5.38	90.84
1976-77	61.93	36.24	67.02	39.22	58.52	54.07	5.09	2.98	7.60	4.45	92.41
Total	397.37	231.86	439.26	256.30	—	—	41.89	24.44	—	—	—
Average Annual	56.77	33.12	62.75	36.61	58.34	52.78	5.98	3.49	9.53	5.56	90.47

(Contd.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
3. *Industry*											
a. Chemicals (15)											
1970-71	10.25	5.71	12.72	7.09	55.71	44.89	2.47	1.38	19.46	10.85	80.58
1971-72	13.73	7.65	16.87	9.40	55.72	45.35	3.14	1.75	18.62	10.37	81.39
1972-73	15.06	8.74	17.58	10.21	58.03	49.72	2.52	1.46	14.34	8.30	85.67
1973-74	19.80	11.46	22.04	12.76	57.88	52.00	2.24	1.30	10.19	5.90	89.84
1974-75	23.33	13.60	25.47	14.85	58.29	53.40	2.14	1.25	8.42	4.91	91.60
1975-76	30.13	17.63	32.50	19.02	58.51	54.25	2.37	1.39	7.31	4.28	92.71
1976-77	32.40	18.76	33.92	19.64	57.90	55.31	1.52	0.88	4.48	2.59	95.52
Total	144.72	83.55	161.10	93.00	—	—	16.38	9.45	—	—	—
Average Annual	20.67	11.94	23.01	13.29	57.76	51.89	2.34	1.35	10.16	5.87	89.83
b. Engineering (30)											
1970-71	22.53	12.80	35.04	19.91	56.81	36.53	12.51	7.11	35.71	20.29	64.30
1971-72	37.72	20.26	47.66	25.60	53.71	42.51	9.94	5.34	20.86	11.20	79.14
1972-73	42.01	24.55	54.96	32.12	58.44	44.67	12.95	7.57	23.57	13.77	76.44
1973-74	49.40	28.72	65.74	38.22	58.14	43.69	16.34	9.50	24.86	14.45	75.14
1974-75	52.23	30.34	60.34	35.05	58.09	50.28	8.11	4.71	13.44	7.81	86.56
1975-76	71.37	41.59	85.64	49.90	58.27	48.56	14.27	8.31	16.65	9.70	83.34
1976-77	58.80	33.22	68.23	38.55	56.50	48.69	9.43	5.53	13.83	7.81	86.18
Total	334.06	191.28	417.61	239.12	—	—	83.55	47.84	—	—	—
Average Annual	47.72	27.33	59.66	34.17	57.27	45.81	11.94	6.84	20.01	11.46	79.99

(*Contd*).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
c. Textiles											
(8)											
1970-71	4.17	2.68	6.18	3.97	64.27	43.37	2.01	1.29	32.49	20.87	67.48
1971-72	7.72	3.70	8.59	4.12	47.93	43.07	0.87	0.42	10.19	4.89	89.87
1972-73	6.52	3.39	8.57	4.46	51.99	39.56	2.05	1.07	23.99	12.41	76.08
1973-74	4.27	2.44	7.34	4.19	57.14	33.24	3.07	1.75	41.77	23.84	58.17
1974-75	16.32	9.46	17.79	10.31	57.97	53.18	1.47	0.85	8.24	4.80	91.74
1975-76	16.52	9.52	18.15	10.46	57.63	52.45	1.63	0.94	8.99	5.78	91.02
1976-77	13.82	7.52	15.03	8.17	54.41	50.03	1.21	0.66	8.07	4.39	91.95
Total	69.34	38.71	81.65	45.59	—	—	12.31	6.88	—	—	—
Average Annual	9.91	5.53	11.66	6.51	55.80	47.43	1.75	0.98	15.01	8.40	84.99
d. Others											
(43)											
1970-71	38.52	22.11	51.29	29.44	57.40	43.11	12.77	7.33	24.90	14.29	75.10
1971-72	46.06	25.60	61.72	35.64	57.75	43.10	15.66	9.04	25.36	14.65	74.63
1972-73	47.93	27.15	63.34	35.88	56.65	42.86	15.41	8.73	24.36	13.78	75.67
1973-74	67.04	39.32	88.35	51.82	58.65	44.50	21.31	12.50	24.12	14.15	75.88
1974-75	64.10	37.36	90.73	52.88	58.28	41.18	26.63	15.52	29.35	17.11	70.65
1775-76	75.75	44.10	123.75	75.05	58.22	35.64	48.00	27.95	38.79	22.59	61.21
1976-77	71.84	39.31	91.26	49.94	54.72	43.07	19.42	10.63	21.29	11.65	78.72
Total	411.24	235.95	570.44	327.32	—	—	159.20	91.37	—	—	—
Average Annual	58.75	33.71	81.49	46.76	57.38	41.37	22.74	13.05	27.91	16.01	72.09

(Contd.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
e. Diversified (12)											
1970-71	37.94	20.91	42.35	23.34	55.11	49.37	4.41	2.43	10.41	5.74	89.59
1971-72	40.15	22.76	43.28	24.54	56.69	52.59	3.14	1.78	7.25	4.11	92.77
1972-73	46.06	25.95	50.20	28.28	56.34	51.69	4.14	2.33	8.24	4.64	91.75
1973-74	55.15	31.85	68.05	39.30	57.75	46.80	12.90	7.45	18.96	10.95	81.04
1974-75	73.17	42.23	78.81	45.48	57.71	53.58	5.64	3.25	7.17	4.13	92.84
1275-76	99.02	56.85	110.43	63.40	57.41	51.48	11.41	6.55	10.33	5.93	89.67
1976-77	52.20	30.16	66.67	38.52	57.78	45.24	14.47	8.36	21.70	12.54	78.30
Total	403.69	230.73	459.79	262.82	—	—	56.10	32.09	—	—	—
Average Annual	57.67	32.96	65.68	37.54	57.15	50.18	8.01	4.58	12.20	6.97	87.80

Note: Figures in parentheses relate to number of assessees in each group.

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(National Institute of Public Finance and Policy)

VINAY D. LALL, SRINIVASA MADHUR and K.K. ATRI

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1982 188pp Rs 50

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(National Institute of Public Finance and Policy)

ANUPAM GUPTA, with contributions by PAWAN K. AGGARWAL

This study is the first of its kind in India in as much as no attempt has so far been made to empirically examine the manner in which the personal income tax affects the distribution of income and distributes the tax burden. The form and content of the personal income tax in India are intended to impart elements of elasticity and progressivity to the tax system. The tax is rightly considered an instrument not only for regulating the flow of purchasing power but also for reducing economic inequalities.

The study seeks to examine the impact of the personal income tax on the basis of the data published by the Income Tax Department. It first examines critically the available data on income tax assessments and the characteristics of assessees in order to evaluate their reliability and comparability over time. Recommendations for improvement in the collection and presentation of the data are put forward. Secondly, estimates of the elasticity of the personal income tax with respect to the tax base and income are computed and are explained in terms of the progressivity of the tax structure and distribution of income. Thirdly, the impact of the personal income tax on the distribution of income among the tax payers is examined on the basis of the comparisons of pre-tax and post-tax distributions.

Further, the redistributive impact of the tax is explained in terms of the progressivity of the tax structure and the distribution of the real burden of the tax.

This significant study is likely to be of interest not only to scholars but also to policy makers and the lay reader.

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