CHAPTER - I

INTRODUCTION

The financing of government is a matter of universal concern, for practically everyone enjoys some advantages for the services of governments and also contributes to their support. The governments all over the world have entered and are entering into a great number of public projects, such as social security, protection and other services of public utility like railways, heavy electrical, atomic energy, etc. Government business is the largest single business in every advanced modern state. The total expenditures and revenues of a government are much larger than the revenues and expenditures of a single man within the country. Again not only the total public expenditure is very large, but it is increasing at a very rapid rate and this gradual expansion of public expenditure is largely due to the expansion in the functions of modern governments. The method of public finance has certain effects on economic life and can, therefore, be used as instruments or means for bringing about desired social and economic changes.

Traditionally, revenue and expenditure process of the government is referred to as public finance. Public finance was supposed to deal with the financial aspects of public bodies or the government sector. Thus the subject matter of public finance was revenue, expenditure and debt aspects.¹

Public finance is concerned with income and expenditure of public authorities and with the adjustment of one to other.² It is also concerned with the explanation of revenue and expenditure process of the public authorities and effects of fiscal operations on social and economic policy are considered outside its scope. It is also obvious from the fact that, it is argued, the fiscal problems, pure and simple, should not be confused with alien considerations of social and economic policy.³ Thus, public finance is concerned to with how public authorities have collected revenue, how they make expenditure and how revenue expenditure process is administered, it is not concerned with how revenue and expenditure process of government is affecting or will affect the economic and social aspects of the economy.

In the modern world, the main object of raising finances for the State is to develop the social and economic conditions of the people in the society through public expenditure. There are so many ways and means to improve the finances of the State and taxation is one of the means of raising the finances of the state, particularly in developing countries like India. Taxation, in fact, is the fuel, for a Welfare State just as blood is for the human body. Among the various sources of finance available to the state, taxation is a unique source from more than one point of view. According to P.R.Panchamuki, “Taxation is a peculiar institution created by the people in a democratic set up in which they themselves subject to this institution”. A good tax system must be based on

certain principles such as productivity, elasticity, simplicity, flexibility and uniformity.

There is no single criterion by which means of raising government finance could be evaluated. In reality, the system of government finance that merges is one that makes trade-offs between two main normative criteria such as equity and efficiency\textsuperscript{4}.

1.1 Equity

The distribution of the burden of raising the government finance should coincide with commonly held notions of fairness and the ability to pay. Every person should be taxed according to his ability that is the rich should pay more and the poor less so that taxes should be progressive in nature.

1.2 Efficiency

The system of government finance should raise revenues with only a minimal loss in the efficiency of the private sector. The study of public finance is concerned with the revenue and expenditure patterns of a government. In India since independence, there has been a sustained and significant expansion in the budgetary operations of the governments at the centre and at the state levels, reflecting the increasing involvement of the governments in diverse, regulatory, welfare and investment activities. It is important in this context to understand how

governments raise their resources, for purposes and how effectively they spend such resources and also what the impact of such fiscal operations on social welfare and on development⁵.

1.3 Taxation as a Powerful Instrument of Public Policy

Taxation has, of late, emerged as a powerful instrument of public policy in the developed as well as in the developing countries. The rationale and the degree of government interferences in the field of economic activities have always ignited high emotions amongst the industrialists, intellectuals and the administrators in a market-oriented economy. From the days of Adam Smith, canons have been formulated, extended and occasionally have also been modified so as to make the tax structure relevant and meaningful in facing the challenges confronting an economy. The goals of taxation are so much linked to those of the over-all economic policy in the country that its structure has necessarily to be in consonance with the goals of public policy. It is a matter of crucial importance to the developing economies that their policies and programmes for economic development should be fully backed by an appropriate tax policy. The question of whether the theories of taxation and tax policies mainly based on the experience of the western democracies are best suited to the developing economies is a matter on which sufficient attention does not seem to have been paid by the scholarly world. It looks as though these have

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been accepted as universally applicable and only a few modifications have been suggested so as to help the Government, to administer these taxes better perhaps. It would have helped immensely in the gigantic task of developing our economy, had sufficient attention been bestowed on evolving a set of theories of taxation in keeping with the socio, political and structural characteristics prevailing in this country\(^6\).

While in the developing countries the taxation policy is being used to achieve the three-fold objective of resource allocation, income redistribution and economic stabilization, the principal objective of a taxation policy in a developing country is to augment adequate revenues for sustaining and for raising the country’s capital formation process. This has been particularly the case in India, where, ever since the inception of economic planning, the taxation policy had been geared to mobilize sufficient resources to finance the increasing revenue requirements of the successive five-year plans\(^7\).

Tamil Nadu, since its inception in 1957, has inherited a fairly expanded tax structure. Ever since 1957, the state government, in its search for revenue, has widened and deepened the tax base, although a tax like agricultural income tax, with high revenue potential had not yet been tapped. The state government finds it hard to mobilize the necessary resources to carry out its programmes that have been therefore, to be based, on the stability criterion as


a guide for tax policy, but on the adequacy criterion of raising sufficient resources. Even though the criterion of adequacy could be interpreted in more than one way, the emphasis had been in recent years, on the build-in-ability of the tax structure to respond, by way of higher yields, to a raise in income.

1.4 Instruments of Fiscal Policy

The importance of public finance and that of fiscal policy in many underdeveloped countries arises from the fact that the State, under its democratic auspices, is called upon to play an active and important role in promoting economic development. For various reasons such as the low ratio of their savings to their national income, the governments of all the underdeveloped countries have been virtually forced to play an important role in economic development. To enable them to do this effectively, they have to interfere in the day today economic life of the people in the country, control and regulate economic activities and compel the people to behave in particular ways. A democratic country like India, therefore, has to rely on indirect methods of regulation and indulge in over-all controls through fiscal and monetary policies. It could thus be seen that in a democratic country, the fiscal policy is the most powerful and the least undesirable weapon of control, which the State could employ to promote economic development.

1.5 Promotion of Private Instrument

Taxation could be indulged in to ensure and promote collective savings and at the same time to promote private investment. By this means, the
sacrifices involved in the efforts of promoting capital formation could be distributed more equitably and the poorer sections should be made to understand that all classes of people are making sacrifices in their potential consumption. Taxation, if well conceived, could also be used as the best means of raising the incremental savings ratio, which is one of the most crucial determinants of growth. It is probably on these grounds that Prof. Ragnar Nurkse says, “I believe that public finance assumes a new significance in the face of the problem of capital formation in underdeveloped countries.”

1.6 Indian Fiscal System

Under the Indian fiscal system, the financial powers are meticulously divided between the centre and the states. The Indian Constitution gives specific recognition to the fact that the power of the centre to levy taxes is much larger in fiscal terms than that of the states and it provides for the distribution of a portion of tax revenues of the centre to the states. The states are required to shoulder the responsibility of promoting economic development in their territories within the framework of the financial constraints imposed on them. The developmental responsibilities of the states are enormous while the resources available for fulfilling them are limited. For mobilization of resources, the state government’s options are restricted to the adoption of the taxation efforts, because of their limited scope for borrowings and for earning adequate

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returns from their public undertakings. As such, the functional role of state’s
taxes has become crucial for the healthy growth of the nation as a whole.

It is generally criticized that the State governments in India have not
made adequate efforts to mobilize sufficient financial resources.\(^9\) However, an
examination of the growth of the central and that of the states tax revenues have
revealed that the states have kept pace with the centre. Throughout the period of
analysis, the relative position of the centre and that of the states with regard to
the tax revenues had maintained the constant ratio of 2:1. This close compliance
had arisen because of the similar needs to raise sufficient revenues for the plans,
which to some extent, had been indicated, to the states by the planning
commission.\(^11\)

The background against which the state government keeps up their
relative positions with the centre deserves a special attention. The central
Government enjoys a more comfortable position with many elastic sources of
revenue, which have a nation wide tax base. Most of the taxes relating to
industrial activities and having inter-state base have been allocated to the central
government. These include: the taxes on non-agricultural income, corporation
tax, custom duties, excise duties except those mentioned in the state list, capital
gains tax, estate and succession duties except those mentioned in the state list,

of Development Studies, Madras, 1986, p.3.
\(^11\) Indian Institute of Public Opinion, "The Growth of Indian Taxation", Monthly Commentary on
Indian Economic Conditions, Vol.XXVI, No.9, 1986, P.X.
capital gains tax, estate and succession duties on properties other than that of agricultural land, taxes on the sale and purchase of newspapers and advertisements therein and the sale and purchase of goods included in the inter-state trade. In contrast, the taxes allocated to the states are limited and they are mostly the less elastic sources of revenue. The state governments are given the power to tax the agricultural income, and the succession duties and estate duties in respect of agricultural land. In addition to these, the states can levy excise duties on alcoholic liquors and narcotics and taxes on profession, vehicles, and passengers travelling by road or in land waterways, entertainment and subject to certain restrictions, on sales and purchase of goods. Some of the sources of revenue like land revenue, and state’s excise duties are entangled with political constraints, making it difficult for the state government to raise more revenues. The state government’s scope for raising additional revenues has been further restricted because of the inroads made by the central government into their taxing power, particularly in the field of sales tax and VAT. The centre has also imposed some restrictions on the revision of rates of the sales tax on certain essential and declared goods. It has also taken over the power to levy sales tax on commodities under the additional union excise duty agreement.\(^1\)

In the background of the narrow tax bases and the political and administrative constraints confronting the states in tapping some of the tax

sources, it is really appreciable that the state government has continued to keep pace with the centre in their tax efforts. Even then, the states are forced to face the problem of fiscal inadequacy because of the ever-increasing expenditures of the state on the one hand and the limited non-tax revenue sources available to them on the other. Therefore, greater tax efforts on the part of the states at the present juncture are expected to ensure a better fiscal discipline.

The state constituting the union of India differ in their special features of facing the financial problems, due to their division of function, per capita income levels and their level of economic development. As development takes place, the tax structure of each state undergoes a change according to its financial needs, capacity to raise revenue and resource availability. Consequently, the emphasis on the different sources of tax revenues will not be the same, in spite of the uniform frame work enjoyed by virtue of the constitution of India. Some states may not be levying a particular tax because the concerned tax base might not exist. Thus a purchase tax on sugarcane cannot be levied in states like Assam, Orissa, Punjab, Rajasthan and West Bengal, which do not grow sugarcane. The state’s excise duty is very low in Tamil Nadu and Gujarat because of the partial and the full prohibition policies adopted by them respectively. Some states levy a tax that falls on apportion of the agricultural income. Similarly professional tax is levied only in Assam, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra and Tamil Nadu. The fact that different political parties with almost different ideologies have come to power in different
states at different time has complicated the problems further. As such, an analysis of the tax structure of an individual state is more appropriate in the Indian context than an analysis of all or a number of states. The need for a study of the individual states is all the more important in view of the fact that the states have been constantly complaining about the inadequacy of the tax resources at their disposal.

The views expressed by a civil servant, Sri. S. Venkataramanan, a Former Finance Secretary to the government of Tamil Nadu on the resources and constraints of the Tamil Nadu State Government expressed in a seminar on “Perspective Planning of Tamil Nadu” are worth mentioning. “State Governments as a class have to be confined to the sales taxes and the land revenue. Land revenue is relatively inflexible with the availability of land being limited. Agricultural income tax seems to be politically sensitive. Sales taxes have their own limitations in the context of the need to control inflation. The really responsive tools of taxation, such as the income and the excise, are in the hands of the centre. The resource estimation on the part of the states, therefore, consists of “second guessing” as to how price trends would be like and how much of volume changes would influence the turn over in trade. The so called buoyancy of the sales taxes is a reflection of both the volume changes and the price changes. 

13 Venkataramanan S, “Constraints and Resources”, in Malcom S. Adhisheshiah(Ed) Techniques of Perspective Planning, Published by Madras Institute of Development studies and Institute for Techno- Economic Studies for state Planning Commission, 1972, p.120.
The study of the state finance in the Indian federal set up assumes very great importance on various grounds. Firstly it enables the researcher to forecast the ability of the state government to raise additional resources through taxation. Secondly it helps us to assess the relative tax efforts of the various state governments federated under the constitution. In the above background the present study aims at analyzing the tax revenues of the Tamil Nadu State Government in terms of its taxation and its tax efforts. The fiscal performance of a state government refers to the resource mobilization effort of the state government and the collective result of an overall financial prudence, economy of expenditure consistent with efficiency. The governmental efforts of resource mobilization and the commitment of the government to the people's development are reflected in the analysis of the tax structure and expenditure. Hence this study tries to analyze the trends and responsiveness of the taxes and the tax efforts of the Tamil Nadu state government.

1.7 Taxation

It is a well-recognized fact from time immemorial, that the state needs money to finance its activities, to maintain its internal and external security and to run the administration for the well-being of its people. Taxation is one of the major devices used by the government to extract money from the people in order to run the administration and to promote the well-being of its people.

Broadly speaking, taxes are instruments used for regulating the consumer’s purchasing power in relation to goods and services, by providing incentives for production and investments and savings. Taxation reduces the spending potential of the private and the public sector that creates a balance between income and consumption. Wealth is, in a way redistributed, persons are asked to contribute to the exchequer in the form of taxes in a fixed proportion, determined by law, according to their capacity. Thus taxes are increased during the times of war and emergencies to subdue inflation and are reduced in times of depression to stimulate production.

1.8 Role of Taxation

Taxes are compulsory payments associated with certain activities. The revenues collected through taxation are used to purchase the resources necessary to produce the government supplied goods and services or to redistribute the purchasing power among the people.

Taxation reallocates resources from the private sector to the government sector to be used in two ways. Firstly, the ability of the individuals to command resources gets reduced, because taxation reduces the income for spending on goods and services. Secondly, the revenues collected by the government are used to purchase those services used to produce the goods and services that individuals can no longer afford because of the effects of taxes on their income.
Government also charges some fees for certain goods and services provided by them. These user charges are used for financing the cost of the government supplied goods and services such as roads, for providing medical care and for expanding educational services. Governments also run enterprises often that sell goods such as water, providing gambling services or selling alcoholic beverages. When the revenues of these undertakings exceed costs, the net revenues are collected for welfare measures.

1.9 Direct and Indirect Tax Revenue of the Central and State Governments

The distinction between direct and indirect taxes should be based on the immediate and not on the ultimate incidence. Taxes, which are legally shifted and those which are not shifted at all, are direct, but those which are shifted quickly through commercial competition between consumers are indirect. Thus, taxes levied on permanent and recurring occasions are direct but those levied on occasional and particular events are indirect. The following table 1.1 clearly explains the direct and indirect tax revenue of the central and state governments of India from 1980-1982 to 2008-2009.
Table 1.1 Direct and Indirect Tax Revenue of the Central and State Governments

<table>
<thead>
<tr>
<th>Year</th>
<th>Centre (Gross)</th>
<th>State</th>
<th>Centre &amp; State Combined</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Direct</td>
<td>Indirect</td>
<td>Total</td>
</tr>
<tr>
<td>1980-81</td>
<td>2907</td>
<td>10242</td>
<td>13149</td>
</tr>
<tr>
<td>1981-82</td>
<td>3552</td>
<td>12264</td>
<td>15816</td>
</tr>
<tr>
<td>1982-83</td>
<td>3873</td>
<td>13786</td>
<td>17659</td>
</tr>
<tr>
<td>1983-84</td>
<td>4320</td>
<td>16367</td>
<td>20687</td>
</tr>
<tr>
<td>1984-85</td>
<td>4626</td>
<td>18802</td>
<td>23428</td>
</tr>
<tr>
<td>1985-86</td>
<td>5564</td>
<td>23067</td>
<td>28631</td>
</tr>
<tr>
<td>1986-87</td>
<td>6193</td>
<td>26602</td>
<td>32795</td>
</tr>
<tr>
<td>1987-88</td>
<td>6695</td>
<td>30918</td>
<td>37613</td>
</tr>
<tr>
<td>1988-89</td>
<td>8771</td>
<td>35649</td>
<td>44420</td>
</tr>
<tr>
<td>1989-90</td>
<td>9950</td>
<td>41631</td>
<td>51581</td>
</tr>
<tr>
<td>1990-91</td>
<td>11024</td>
<td>46489</td>
<td>57513</td>
</tr>
<tr>
<td>1991-92</td>
<td>15207</td>
<td>52059</td>
<td>67266</td>
</tr>
<tr>
<td>1992-93</td>
<td>18132</td>
<td>56434</td>
<td>74566</td>
</tr>
<tr>
<td>1993-94</td>
<td>20298</td>
<td>55392</td>
<td>75690</td>
</tr>
<tr>
<td>1994-95</td>
<td>26966</td>
<td>65328</td>
<td>92294</td>
</tr>
<tr>
<td>1995-96</td>
<td>33563</td>
<td>77661</td>
<td>111224</td>
</tr>
<tr>
<td>1996-97</td>
<td>38891</td>
<td>89871</td>
<td>128762</td>
</tr>
<tr>
<td>1997-98</td>
<td>48274</td>
<td>90946</td>
<td>139220</td>
</tr>
<tr>
<td>1998-99</td>
<td>46600</td>
<td>97197</td>
<td>143797</td>
</tr>
<tr>
<td>1999-00</td>
<td>57959</td>
<td>113794</td>
<td>171753</td>
</tr>
<tr>
<td>2000-01</td>
<td>68306</td>
<td>120297</td>
<td>188603</td>
</tr>
<tr>
<td>2001-02</td>
<td>69197</td>
<td>117863</td>
<td>187060</td>
</tr>
<tr>
<td>2002-03</td>
<td>83085</td>
<td>133181</td>
<td>216266</td>
</tr>
<tr>
<td>2003-04</td>
<td>105090</td>
<td>149258</td>
<td>254348</td>
</tr>
<tr>
<td>2004-05</td>
<td>132771</td>
<td>172187</td>
<td>304958</td>
</tr>
<tr>
<td>2005-06</td>
<td>165201</td>
<td>200949</td>
<td>366150</td>
</tr>
<tr>
<td>2006-07</td>
<td>230192</td>
<td>243320</td>
<td>473512</td>
</tr>
<tr>
<td>2007-08</td>
<td>304760</td>
<td>280650</td>
<td>585410</td>
</tr>
<tr>
<td>2008-09</td>
<td>365000</td>
<td>322715</td>
<td>687715</td>
</tr>
</tbody>
</table>

Source: Annual Financial Statement, Govt. of India.
1.10. Central Government Budgets Since 1950-51

The budget of the Government of India, for any year, gives a complete picture of the estimated receipts and expenditures of the government for that year on the basis of the budget figures of the two previous years. Every budget for instance, gives three sets of figures: a) Actual figures for preceding year, b) budget and revised figures for the current years and c) budgets estimates for the following year. For instance, the budget estimate for the year 2008-09 contains:

a) Actual or accounts for the year 2006-07
b) Budget and revised figures for the year 2007-08 and
c) Budget estimates for 2008-09

The budget in India is divided into two parts, viz. revenue budget and capital budget.

1.10.1 Revenue Budget

The revenue budget deals with receipts from taxation and from non-tax sources and expenditure met out of these sources

Tax revenue comes broadly from three sources"

a) Taxes on income and expenditure
b) Taxes of property and capital transactions and
c) Taxes on commodities and services.

Non tax revenue consists of:

a) Currency, coinage and mint
b) Interest receipts and dividends and
c) Other non-tax revenue

Revenue expenditure is met out of current revenue. Revenue expenditure is on a)such general services as general administration including policy, judiciary, defence, collection of taxes; b)social and community services, such as education, medical and public health, labour and employment; and c)economic services, like agriculture, industries, transportation, trade, etc.

1.10.2 Capital Budget

Capital budget consists of capital receipts and capital expenditure. The capital receipts are composed of:

a) net recoveries of loan and advance made previously to state government, union territories and public sector undertakings;

b) net market borrowings

c) net small savings collections; and

d) other capital receipts, such as provident funds, special deposits etc.

Capital expenditure consists of expenditure on capital items, mainly in the form of loans of state and union territories for financing plan projects and other capital expenditure on economic development, on social and community development and capital expenditure on defence. In table 1.2 is summarized the central government budgets from 1950-51 to 2011-12.
Table 1.2 Central Government Budgets from 1950-51 to 2011-12.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue Account:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receipts</td>
<td>406</td>
<td>12830</td>
<td>201450</td>
<td>789892</td>
</tr>
<tr>
<td>Expenditure</td>
<td>347</td>
<td>14540</td>
<td>301610</td>
<td>1097162</td>
</tr>
<tr>
<td>Revenue surplus(+)</td>
<td>+59</td>
<td>-1710</td>
<td>-100160</td>
<td>-307270</td>
</tr>
<tr>
<td>Revenue deficit(-)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Account</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receipts</td>
<td>120</td>
<td>8770</td>
<td>161000</td>
<td>467837</td>
</tr>
<tr>
<td>Disbursements</td>
<td>182</td>
<td>9630</td>
<td>60840</td>
<td>160567</td>
</tr>
<tr>
<td>Deficit/ Surplus</td>
<td>-62</td>
<td>-860</td>
<td>+100160</td>
<td>+307270</td>
</tr>
<tr>
<td>Over all budgetary deficit</td>
<td>-3</td>
<td>-2570</td>
<td>Nil</td>
<td>Nil</td>
</tr>
</tbody>
</table>

Source: Government of India, Budget Glaance, 2011-12 and earlier issues

It is inferred from the table that the expenditure on the revenue account has been rising very fast. For instance, revenue expenditure was Rs.347 crores in the year 1950-51 and it has increased Rs.14540 crores in 1980-81. Further it has increased Rs.1097162 crores in 2011-12. In the first 30 years (1951-81) revenue expenditure had risen by more than 40 times. In the next 31 years (1981-2012) revenue expenditure had risen by 75 times. The conclusion is simple. The revenue expenditure of the central government is rising extremely fast. The enormous increase in public expenditure of the government was due to expansion of government machinery, new departments, increase in defence
expenditure and continuous rise in the salaries of government servants because of the rise in prices and the consequent rise in the cost of living.

To meet its current expenditure, the government raises certain taxes and other receipts. The revenue receipts had increased from Rs.406 crores in the year 1950-51 to Rs.12830 crores in the year 1980-81 and Rs.789892 in 2011-12. It is observed from the table, during the first 3 decades (1951-81), revenue receipts rose by 30 times. During the next 30 years (1981-2012), revenue receipts rose by nearly 62 times. This huge increase in revenue receipts reflects the imposition of new taxes, broadening the tax coverage, better tax administration and rise in prices and incomes due to general pressure and consequent increase in tax revenues. It is clear from the table both revenue expenditure and revenue receipts were rising fast and regularly over the years.

1.11. Revenue of the central government

The total revenue receipts of the central government consist of tax revenue and non-tax revenue. The estimates of revenue receipts have been grouped under two broad heading viz. Tax revenue and Non-tax revenue. The revenue of central government in the revenue account is presented in the table1.3
### Table 1.3 Revenue of the Central Government

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Revenue</td>
<td>357</td>
<td>9390</td>
<td>133660</td>
<td>664457</td>
</tr>
<tr>
<td></td>
<td>(88)</td>
<td>(73)</td>
<td>(66)</td>
<td>(84)</td>
</tr>
<tr>
<td>Non-tax revenue</td>
<td>49</td>
<td>3440</td>
<td>67790</td>
<td>125435</td>
</tr>
<tr>
<td></td>
<td>(12)</td>
<td>(27)</td>
<td>(34)</td>
<td>(16)</td>
</tr>
<tr>
<td>Total revenue receipts</td>
<td>406</td>
<td>12830</td>
<td>201450</td>
<td>789892</td>
</tr>
<tr>
<td></td>
<td>(100)</td>
<td>(100)</td>
<td>(100)</td>
<td>(100)</td>
</tr>
</tbody>
</table>

Source: Government of India, Budget Glaance, 2011-12 and earlier issues

Table 1.3 reveals that the total current revenue of the central government consists of tax revenue and non-tax revenue. This has been rising quite fast, partly on account more taxes and higher rates of taxes and partly due to inflation. The total revenue receipts of the central government Rs 406 crores in 1950-51, but it rose to Rs.12830 crores in 1980-81 and in the year 2011-12 budget it would be Rs.789892 crores. Between 1980-81 and 2011-12, the total revenue receipt had increased by 62 times.

### 1.12 Expenditure of the Central Government

There has been tremendous increase in the expenditure of the central government, particularly in revenue expenditure financed through current taxation and other current non-tax revenues. The expenditure of the central government is presented in table 1.4.
Table 1.4 Expenditure of the Central Government

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue Expenditure</th>
<th>Capital Expenditure</th>
<th>Total Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950-51</td>
<td>350</td>
<td>180</td>
<td>530</td>
</tr>
<tr>
<td>1980-81</td>
<td>14540</td>
<td>9630</td>
<td>24170</td>
</tr>
<tr>
<td>2001-02</td>
<td>301610</td>
<td>60840</td>
<td>362450</td>
</tr>
<tr>
<td>2009-10</td>
<td>897232</td>
<td>123606</td>
<td>1020838</td>
</tr>
<tr>
<td>2010-11</td>
<td>1053677</td>
<td>162899</td>
<td>1216576</td>
</tr>
<tr>
<td>2011-12</td>
<td>1097162</td>
<td>160567</td>
<td>1257729</td>
</tr>
</tbody>
</table>

Source: Government of India, Budget Glance, 2011-12 and earlier issues

Before 1987-88, the revenue expenditure of the central government was broadly classified into three types, viz civil expenditure, defence expenditure and grants-in-aid to states and union territories. At the same time, the central government also had adopted another classification of expenditure, viz development expenditure, defence expenditure and other expenditure. The main reason is,

a) Under development expenditure, the central government included expenditure on social and community services, on economic services and grants-in-aid to the states and union territories for the development purposes.

b) Defence expenditure of the central government was on armed forces and it included pensions given to the retired armed personnel.
c) Other expenditure of the central government consists of collection of taxes and duties, administrative services, interest payments, pension and other retirement benefits, other grants to the states, etc.

1.13. **Budgets of the State Governments**

In India, each state government prepares its own budget of income and expenditure every year. The following table 1.5 presents the budgetary position of the states since 1951-52.

**Table 1.5 Budget of State Governments**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a. Revenue account</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receipts</td>
<td>396</td>
<td>16290</td>
<td>237950</td>
<td>913038</td>
</tr>
<tr>
<td>Expenditure</td>
<td>392</td>
<td>14810</td>
<td>291520</td>
<td>937408</td>
</tr>
<tr>
<td>Surplus(+) Deficit (-)</td>
<td>+4</td>
<td>+1480</td>
<td>-53570</td>
<td>-24370</td>
</tr>
<tr>
<td><strong>b. Capital Account</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receipts</td>
<td>137</td>
<td>5580</td>
<td>111590</td>
<td>242360</td>
</tr>
<tr>
<td>Disbursements</td>
<td>189</td>
<td>7960</td>
<td>55680</td>
<td>237176</td>
</tr>
<tr>
<td>Surplus / Deficit</td>
<td>-52</td>
<td>-2380</td>
<td>+55910</td>
<td>+5684</td>
</tr>
<tr>
<td>Over all Surplus/ Deficit</td>
<td>48</td>
<td>-900</td>
<td>+2340</td>
<td>-18686</td>
</tr>
</tbody>
</table>

Source: RBI, Handbook of statistics on the Indian Economy 2011-12
From the table 1.5, it is revealed that the receipts and expenditure of the states on the revenue account have been continuously increasing. For instance, in 1951-52, the current revenue of the states was a mere Rs.396 crores, but it went up to Rs.16290 crores in 1980-81 and finally it is expected to exceed Rs.804943 crores in 2009-2010 and Rs. 913038 crores in 2011-12. The basic reason for this huge increase in state revenue is the necessity to finance the continuously rising expenditure of states which has gone up from Rs.392 crores in 1951-52 to Rs.937408 crores in 2011-12. Increase in the state revenues over the last five decades are, due to imposition of new taxes, specially on commodities, rise in the rates of taxes, greater share in central government taxes and increasing receipts from the central government by way of general and particular grants, etc. There are many reasons for the increase in the expenditure of the states over the years. The most important reasons are, expansion in civil administration, higher salaries and wages due to rise in prices and cost of living, increase in the provision of government services in the form of education, public health, etc., as well as increased development expenditure. The first part of the states’ budgets is revenue receipts and revenue expenditure. A very interesting point was the surplus revenue over current expenditure which states made regularly for many years in the past. In table 12 current account surplus was Rs.4 crores in 1951-52 and it rose to Rs.1480 crores in 1980-81. Since 1986-87, however, states too, like the centre, have started increasing heavy deficits in their current account. The 2001-2002 state budgets
incurred a revenue deficit of Rs.53570 crores. Finance commission has transferred huge funds from the centre to the states. Accordingly, states have avoided revenue receipts in recent years. In 2011-12, states expected a revenue deficit of Rs.24370 crores.

The second part of state budgets consists of capital receipts of states and disbursements out of them. Capital receipts consist of market loans, borrowing from the central government, collecting small savings of the public and provident fund contributions. Capital outlay or disbursements are on various development projects like river valley projects, schemes for agricultural development etc. As capital revenue was less than capital disbursements, state government had experienced deficit in the capital account in the first four decades since 1951-52. Later, they had budgeted for larger surpluses in the capital account.

We take revenue deficits and surpluses and capital deficits surpluses together and calculate the over-all surplus /deficit of the states. In 2010-11 budget, states anticipate revenue receipts of Rs.24370 crores, but of a capital surplus of Rs.5648 crores the net over all deficit is Rs.18686 crores. It would be clear from table 12 that states have generally managed to get over all budget surpluses meaning that the aggregate disbursements are below aggregate receipts.
1.14 Current Revenue of the State Government

State governments in India collect revenue from different sources to meet their revenue expenditure. Table 1.6 shows that the important sources of revenue for the states are state’s own taxes, state’s share in central taxes, states share in the tax proceeds of the central government, grants-in –aid and other contributions from the centre and state’s own non-tax revenue. The following table 1.6 clearly explains the revenue of the state governments on revenue account.

Table 1.6 Revenue of the State Governments on Revenue Account

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Revenue</td>
<td>280</td>
<td>10400</td>
<td>168710</td>
<td>627148</td>
</tr>
<tr>
<td>Non税 revenue</td>
<td>120</td>
<td>5890</td>
<td>69240</td>
<td>285891</td>
</tr>
<tr>
<td>Of which</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Grants from the centre</td>
<td>30</td>
<td>2620</td>
<td>37780</td>
<td>183282</td>
</tr>
<tr>
<td>b) State own non tax revenue</td>
<td>90</td>
<td>3270</td>
<td>31460</td>
<td>102609</td>
</tr>
</tbody>
</table>


The tax revenue of the states consists of two parts; viz.a) revenue from states taxes, comprising broadly taxes on income, taxes on property and capital transactions and taxes on commodities and services and share in central taxes. In the 2010-2011 budget, the tax revenue of states is placed at Rs.627148 crores of which, revenue from state’s own taxes would be Rs.418151 crore and the state’s share in central taxes would be Rs.208997 crores. The second source
of current revenue to the states is known as non-tax revenue. This consists of, grants from the central government and states own non-tax revenue, consisting of interest receipts, dividends and profits, general services, social services and economic services, under which the states are given a percentage share of the total tax proceeds of the central. Now, the state governments depend heavily upon the centre for their revenue receipts:

a) They received their share in taxes-till 1999-2000, from personal income tax and excise duties, imposed and collected by the centre but the proceeds were shared with the states: This method of sharing has now been given up under constitution amendment Act 2000 under which the states are given a percentage share of the total tax proceeds of the centre. Between 2000 and 2005, states got 29.5 per cent of all the tax collections of the centre. For instance, the states received Rs50730 crores in 2000-01 from the centre as their share of taxes. The share of the states in central taxes was raised to 30.5 per cent of all central taxes for the five year period 2005—10. This was the recommendation of the 12th finance commission. Accordingly, states expect to receive Rs.208997 crores during 2010-11 as their share from central taxes.

b) Besides a share in central taxes, the states receive grants from the central government on the basis of the recommendations of the finance commission. Grand-in-aids from the centre are anticipated to be Rs.183282 crores in 2010-11. Grants from the centre are made for state plan schemes, central plan schemes, centrally sponsored schemes, special plan schemes and
non-plan grants which consist of statutory grants, grants for natural calamities and non-plan no-statutory grants. Thus, the states hope to receive from the central government during 2010-11 share in taxes: Rs.208997 crores, grants-in-aid: Rs.183282 crores and total transfers from the centre: Rs.392279 crores. This would amount to 57.5 per cent of the total revenue receipts of the central government. This is the extent of state’s dependence on the centre for their current revenues.

1.15 Statement of the Problem

The ratio of the tax revenue to gross national product (GNP), called the tax ratio, is substantially, higher in developed countries than in low income countries. According to the world development report 1988, tax revenue/GDP ratio for low income countries in 1975 was about 14 per cent; it increased to about 15 per cent in 1985. The comparative figures for middle income and industrial countries were about 18 per cent and 20 per cent and above 27 per cent and about 32.1 per cent respectively. It opens to a country to alter its level of taxation and the rate of growth through changes in the individual elements that constitute the tax structure. Charles Mansfield in his article has stated “Economic development depends, for more than is commonly recognized, organized tax structure”. Fiscal adjustments since 1991-1992 have been concentrated at the Central Government level, with little progress at State Government level. The fiscal situation of the states is no different from that of the centre. It will be more correct to say that states fiscal situations are worse than that of the Central
Government. In this situation a probe into the tax structure assumes greater importance for those states in which government outlay is raising faster than revenue. In this background a study of famous of Tamil Nadu state level is imperative.¹⁵

### 1.16 Reason for Choosing the Topic

Though the state governments in India play a pivotal role in the economic development of India, there are various aspects of their financial positions, which though doubtless, require an in-depth study, have not been so far studied. There are many studies on the principles and methods of distribution of the resources between the union and the states, but there are only very limited studies on the intrinsic financial structure of the state governments and also about their position and performance. Similarly there are only a handful of studies on the financial position of the Tamil Nadu state finance. Eminent personalities like Sonachalam, Chidambaram and Guhan have intensively analyzed the finances of the Tamil Nadu state during different periods of time. These studies are excellent works on the finances of the Tamil Nadu state. The present study may be considered as an extension in this area of research with an additional analysis of the responsiveness of the taxes in terms of their elasticity and buoyancy coefficients, using the regression analysis covering the period from 1990-1991 to 2007-2008.

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1.17 Importance of the Study

The study of the tax system of the Tamil Nadu state is not a sheer academic exercise, but has some policy implications also. The results of the study would be of much use to the administrators and policy makers, who depend on rough and readymade tax revenue forecasting, for forming their tax policies. Ultimately, the wide gap that exists between the budget estimates and the actual realization of the amount by way of tax revenues could be reduced and the budget exercises could be made more realistic. Particularly, this study would be of great help to the Tamil Nadu government for the purpose of making policy decisions regarding the discretionary measures to be introduced in the tax system.

In a federation, where the state governments continue to depend on the central government for financial assistance, only a clear picture of the relative tax efforts made by the different states will be able to give a suitable and rational criterion for resource transfers from the centre to the states. In this aspect, the tax effort analysis carried out in this study might be of much help to the central governments in making their policy decisions regarding their financial assistance to the states.

On the academic side, the present study might suggest further and newer aspects of the related problems to a researcher, who is interested in studying the other dimensions of the tax system at the state level.
1.18 Objectives of the Study

The major objectives of the present work are: to analyze the tax revenue of Tamil Nadu State Government in terms of the responsiveness of the tax system and its tax effort for a period of 18 years from 1990-1991 to 2007-2008. The specific objectives of the study includes,

a. To study the trend, pattern and growth performance of the various taxes of the Tamil Nadu State Government during the period from 1990-1991 to 2007-2008.
b. To analyze the responsiveness of the tax system in terms of its buoyancy and elasticity co-efficient.
c. To examine the nature of the tax efforts undertaken by the state government.
d. To give suitable suggestions for a secure taxation policy.

1.19 Hypotheses

1. There has been a growing trend in the amounts of taxes collected by the state government during the period covered by the study.

2. The tax system of the Tamil Nadu state government has been buoyant and elastic due to the discretionary changes made in the different items of taxes.

3. The tax revenues of the state government in terms of its effort during the period covered in this study have been improving.

1.20 Methodology

The methodology of the present study includes sources of data collection, period of study, tools of analysis and concepts used for the study that had been adopted.
1.20.1 Source of Data

This study is mainly based on secondary data. The necessary and relevant data needed for the analysis had been collected from the various issues of the Budget Memorandum of the Tamil Nadu State Government published by the Directorate of Statistics, Government of Tamil Nadu, Chennai and from the various issues of Tamil Nadu Economic Appraisal published by the Applied Research Department of the Government of Tamil Nadu, Chennai. In addition to the above sources journals, newspapers, magazines, periodicals, and books have also been used.

1.20.2 Choice of Study Period

The choice of the study period is 18 years period from 1990-1991 to 2007-2008, which is considered to be long, enough to give a concrete picture about the trend and the structure of the tax revenues.

1.21 Tools of Analysis

There are several techniques available for the analysis of a tax system. Among the various available techniques a suitable methodology has to be framed for carrying out the present study on the tax revenue of Tamil Nadu State.

1.21.1 Trend Analysis

To analyze the growth patterns of the various taxes of the state government, the straight-line equations have been fitted for the study. The slope
co-efficient of the trend line have also been considered. The following trend equation has been used.

\[ T = a + b_t \]

Where,

\[ T - \text{ Tax amount in lakhs of Rupees} \]
\[ t - \text{Time trend variable taking values 1, 2, 3…} \]

‘a’ is the intercept term and ‘b’ is the regression co-efficient showing the annual growth or annual decline in the revenue accrued, to the state government from the various taxes under consideration. To get the constant annual compound growth rate, another semi-log model of the following type has been used.

\[ \log Y = a + b_t \]

Compound growth rate = \[ (\text{antilog} (b - 1) \times 100) \]

Where

\[ Y = \text{Actual value of the variable} \ t \ = \ \text{Time} \]

‘a’ and ‘b’ are the parameters to be estimated

In order to study the overall growth and the levels of growth of the tax revenue, the compound growth rates of the revenues of the taxes are estimated by using the principle of least squares.
In order to test the significance of the estimated parameter, t-test has been used by using the following formula,

\[
t = \frac{b_i}{\sqrt{SE(\beta_i)^2}}
\]

Where \( b_i \) = Parameters to be estimated

\( SE(\beta_i) \) = Standard Error of \( \beta_i \).

### 1.21.2 Measurement of Elasticity and Buoyancy

An analysis of the tax revenue is assessed by using concepts like tax buoyancy, tax elasticity and tax effort. An analysis of the buoyancy highlights the nature of the existing tax structure and its impact on resource mobilization. The study of tax elasticity brings out the scope for mobilization of the government resources. The growth in tax revenue in the Government is conceptualized to have come about on account of both changes in income and changes in tax policy. Given that the tax parameters are held constant, the response of the tax yield to change in the national income is taken as the automatic change. Similarly, changes in the tax yield resulting from changes in the tax parameters, namely, tax rates and tax base, without any changes in the income of the state are considered as an increase due to discriminatory changes. The former is the elasticity or built-in flexibility of a particular tax or a tax system. The latter reflects the outcomes of the actions of the government through imposition of new taxes, revision of the existing tax structure, widening of the tax base, tax amenities, promoting strict tax compliance and other administrative measures. The change
in the tax yield stemming from the combined effects of automatic changes in discriminatory changes is defined as the measure of buoyancy of a tax or that of a tax system. In other words, the measure of buoyancy takes into account both the automatic changes and the discriminatory changes in the total tax yield.

In order to get the measure of tax elasticity, the effects of the discriminatory changes in the tax yield should be separated from the total yield. For this, the growth of the tax yield should be decomposed into the automatic and discriminatory changes;

\[ T = tY \] 

By total differentiation, the equation (1) becomes

\[ DT = t.dy + y.dt \]

By discrete approximation

\[ \Delta T = t\Delta Y = +Y\Delta t + t\Delta Y \]

\[ Y \cdot \Delta T + t\Delta Y = \text{Discriminatory changes}. \]

\[ t\cdot \Delta Y = \text{Automatic changes} \]

Where,

\[ T = \text{Tax revenue} \]

\[ Y = \text{Income} \]

\[ T = \text{Average tax rate} \]

The effect of automatic changes alone in the tax yield is the measure of tax elasticity.

M.M. Sury (1978) had further decomposed the automatic changes into the expected automatic changes and the unexpected automatic changes. The reason behind this decomposition is that it is important to know about the
extent of the unexpected changes in the automatic response for effecting discretionary changes through appropriate fiscal policies, over and above the expected changes in the automatic response on account of the increase in the tax base due to the process of economic development.

\[ t.\Delta Y = t.\Delta Y_E + t.\Delta Y_{UE} \ldots \ldots \ldots (4) \]

where,

\[ t.\Delta Y_E = \text{Expected Automatic Changes} \]
\[ j.\Delta Y_{UE} = \text{Unexpected Automatic changes}. \]

The expected automatic changes will have their influence on the discretionary changes though appropriate fiscal policy while it is not so in the case of the unexpected automatic changes.

The buoyancy and elasticity of a tax or a tax system are empirically estimated with the help of the following exponential functional form:

\[ T = \alpha Y^\beta \ldots \ldots \ldots (5) \]

Taking logarithms on both sides, the equation (5) becomes in the stochastic form:

\[ \ln T = \ln \alpha + \beta \ln Y + u \ldots \ldots (6) \]

Where,

\[ T \text{ refers to tax yield; and} \]
\[ Y \text{ denotes income and } U \text{ is the disturbance term. The slope coefficient of the model (6), } \beta \text{ is the measure of the buoyancy of a tax or that of the tax system.} \]
When the discretionary changes are netted out from the tax yield (T) the model (6) becomes

\[ \ln T^1 = \ln \alpha + \beta_1 \ln Y + U \ldots \ldots \ldots (7) \]

Where,

\[ T^1 = T - Y \Delta t - \Delta Y - \Delta YE \]; the slope coefficient of the model (7), \( \beta_1 \), is the measure of the gross elasticity of a tax or that of the tax system.

After netting off the effects of both discretionary changes and expected automatic changes from the tax yield, the model (6) becomes

\[ \ln T^{11} = \ln \alpha + \beta_{11} \ln Y + U \ldots \ldots \ldots (8) \]

Where,

\[ T^{11} = T - Y \Delta t - \Delta Y - \Delta YE \]; The slope coefficient of the model (8), \( \beta_{11} \) is the measure of the net elasticity of a tax or that of the tax system.

If the value of \( \beta \) was found to be more than one, the buoyancy or elasticity of a tax or the tax system should be considered as relatively high. If the value of \( \beta \) was found to be less than one then the buoyancy or elasticity of tax or that of the tax system should be considered as relatively low. The above tax yield models (6 to 8) assume explicitly that the buoyancy and the elasticity are constant over a period of time.

### 1.21.3 Measurement of the Tax Effort

In this study, the following measures have been used to study the tax effort of the Tamil Nadu Government.

i. Per capita tax revenue
ii. Tax-income ratio

iii. Incremental tax-income ratio

iv. Income elasticity of the tax revenue

v. Stochastic regression measure, and

vi. The taxable capacity approach

All these measures have been used for the various taxes of the tax system and for the different periods of the study.

The following formulas have been used to calculate the above measures.

i. Per-capita tax revenue $\text{Per-capita tax revenue} = \frac{\text{Tax revenue}}{\text{Population}} = \frac{T}{P}$

ii. Tax-income ratio $\text{Tax-income ratio} = \frac{\text{Tax revenue}}{\text{NSDP}} = \frac{T}{Y}$

iii. Incremental tax income ratio $\text{Incremental tax income ratio} = \frac{\text{Changes in tax Revenue}}{\text{Changes in NSDP}} = \frac{\Delta T}{\Delta Y}$

iv. Income Elasticity of Tax revenue $E = \frac{\text{Relative change in the tax revenue}}{\text{Relative change in the NADP}} = \frac{\frac{\Delta T}{T}}{\frac{\Delta Y}{Y}}$

Where, $E$ is the income elasticity of the tax revenue. This elasticity measure is different from the elasticity obtained in the analysis of the responsiveness of the tax system using the Division method, which is an
aggregate coefficient showing the average response. The elasticity used here to study the tax effort is calculated every year without considering the effects of the discretion changes in the tax system of the state.

v. Stochastic regression measure

The following regression model has been used to study the aggregate tax effort of the Tamil Nadu Government.

\[ \log \Phi = \alpha + \beta \log x + \mu \]

Where,
\[ \Phi = \text{Tax-income ratio } [T / Y] \]
\[ x = \text{per capita NSDP } [Y / N] \]
\[ N = \text{Population of the state} \]
\[ \alpha, \beta \text{ are the constants to be estimated and} \]
\[ \mu = \text{disturbance} \]

Here \( \beta \) measures the elasticity of the tax effort with respect to the per capita NSDP.

To study the trends in the above measures of tax effort, straight line equations have been fitted for all the individual taxes of the state for the two sub-periods separately as also and for the whole period of the study. The slope coefficients of the trend lines have been used for this purpose.

\[ Z = a \ b_t + U_t \]

Where,
\[ Z = \text{a measure of the tax effort}, \]
\[ T = \text{time trend variable taking values 1,2,3.....} \]
\[ U_t = \text{Disturbance term} \]
‘a’ is the intercept term and ‘b’ is the slope coefficient showing the annual growth or annual decline in the measure of the tax effort during the period of the study.

1.21.4 Taxable Capacity Approach

There is an alternative method of measuring the tax performance of the state governments. The method adopted here is known as the “Taxable Capacity Ratio” or the “Adjusted Tax Ratio” approach. This method has been widely used in the IMF studies to measure the tax effort of the developing countries. In this method, the actual tax-GNP ratio is compared with that of the estimated “Taxable Capacity Ratio” in order to find out whether the state was making an adequate tax effort. For inter countries comparisons of tax effort an index had been evolved by dividing the actual tax-ratio by the estimated ‘Capacity Ratio’. The states were then ranked serially to show their relative positions in respect of tax performance in a group of selected states.17

1.21.5 Measuring the Taxable Capacity Ratio

For the purpose of measuring the taxable capacity ratio (T), a multiple regression equation of the following form as made out in the earlier studies, had been estimated

\[ T = f [ V_1, V_2, V_3,...V_n] \ldots 1 \]

Where, $T$ is the tax-GNP ratio and $V_1$, $V_2$, $V_3$, … $V_n$ are the taxable capacity factors, also referred to as ‘tax handles’. For estimating the equation, the cross country data on tax ratios and the capacity variables have been used.

The taxable capacity ratio ($T$) for a state is then obtained by plugging the observed values of the taxable capacity factors of the individual state into the estimated equation. The ratio thus obtained is taken to represent the relative taxable capacity of the state, that is, the ratio of the GNP that a country could collect by way of tax from the available tax handles.

Having estimated the $T$, the Tax effort Index (TEI) of the individual state is obtained by using the equation

$$\text{TEI} = \frac{T^*}{T} \quad \ldots \quad (2)$$

The TEI could be interpreted as follows: A value of TEI which was greater than one would mean a ‘high tax effort’: and if the $\text{TEI} = 1$ it would indicate a ‘good tax effort’ and if the value of $\text{TEI}<1$ (less than one) it would imply a ‘low tax effort’. This is the method adopted for the present study.

The major problem in using this method is the problem of specifying the “tax capacity factors or the appropriate proxies thereof”. A number of variables have been suggested in the earlier studies. In fact, as Bahl\(^{18}\) had observed, “one may consider an almost infinite number of variables that conceivably affect the taxable capacity”. But ‘data limitations’ and

‘Methodological and apriori constraints’ limit the choice of the explanatory variables. Some authors (for example K.N.Reddy)\(^{19}\) have ignored this problem and have used a number of capacity factors that have strong multicollinearity among them.

In this analysis, however, there are three tax capacity factors, namely (i) the per capita state income, (ii) the degree of industrialization (the percentage contribution of industries to the state income) and (iii) the degree of urbanization (percentage of the urban population of the total to the state population) have been considered.

With a view to estimating the ‘Taxable Capacity Ratio’ (T) the following equation was estimated. Inconformity with that of the previous studies, a linear specification mode I has been used.

\[ T = a + by + CI + du + e \ldots (3) \]

Where Y is per capita income; ‘I’ represents the degree of industrialization U is the urbanization and rate and ‘e’ is error term.

The multiple log-linear tax capacity models discussed so far have been used to estimate the taxable capacity for the state governments progressively of the tax system.

1.21.6 Progressive of the Tax System

The tax system is said to be progressive if the ratio between the tax revenues and the income of the state increases at a greater percentage than the

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percentage increase in the income of the state. On the country, the tax system is said to be regressive if the ratio between tax revenues and the income of the state increased at a lesser percentage than that of the percentage increase in the income of the state. To assess whether the tax system of the state has been moving towards progressivity (or becoming less regressive) in the course of economic development a model of the following form has been used.

\[
\text{Log} \left( \frac{T}{Y} \right) = \alpha + \beta \log Y + u
\]

Where,

- \( T \) is the tax revenue and \( Y \) is the income
- \( \beta > 1 \) indicates progressivity
- \( \beta < 1 \) indicates regressively,
- \( \beta = 1 \) indicates neither progressivity nor regressively.

The Taxable Capacity Ratio (T) for the individual states was obtained by plugging in to the estimated equation the observed values for \( Y \) and \( U \) for the states. The Tax Effort Index (TEI) was then obtained by using the equation (2) for the 15 major states of India. The above model has been fitted for the periods 1990-1991 to 2007-2008.

1.21.7 Relationship between Tax Income Ratio and Economic Development

Generally it is assumed that a change in the per capita NSDP leads to a change in the tax-income ratio. That is a change in per capita NSDP is assumed to be the cause and hence change in the tax-income ratio is assumed to be the effect. But a change in the tax-income ratio could also bring about a change in the per capita NSDP. It is a matter of interest to study and analyze the
effect of a change in the tax-income ratio on a change in the per capita NSDP; that is a change in economic development. That is a two-way causation between tax-income ratio and economic development could also be expected. To analyze this fact, models of the following forms have been used in this study and the relationship had been probed into.

Model I : \[ \log \left( \frac{T}{Y} \right) = \log a + \log \left( \frac{Y}{N} \right) + u \]

Model II : \[ \log \left( \frac{Y}{N} \right) = \log b_0 + b_1 \log \left( \frac{T}{Y} \right) + v \]

Where, \( T \) is Tax revenue in lakhs of rupees, \( Y \) is NSDP in lakhs of rupees, \( N \) is Population and \( u \), and \( v \) are disturbance terms, \( a, b, b_0 \) and \( b_1 \) are the constants to be estimated.

In Model I , \( Y / N \) is the cause and \( T / Y \) is the effect.

In Model II , \( T / Y \) is the cause and \( Y / N \) is the effect.

1.22 Concepts Used

The fiscal concepts that are used in the explanatory analysis of the tax revenues in Tamil Nadu are explained in order to clarify the conceptual issues arising out of the nature of the data used. Hence an explanation of the fiscal concepts used is quite in order here.

1.22.1 Tax Revenue

The tax revenue consists of direct taxes and the indirect taxes. Alternatively, the tax revenue could be defined as the sum of the state’s own tax revenue and that of the shared tax revenue.
1.22.2 Land Revenue

Land revenue is based on the principle of certainty, economy and convenience. This tax brings a definite amount of income to the state government every year. The state government need not spend much on the collection of the land revenue because the farmers pay it at a time when their harvest is reaped and sold in the market.

1.22.3 Sales Tax

Sales tax constitutes the most important among the various sources of the tax revenue for the states in India. The State Government imposes the sales tax on the sales of the goods and services in the state. Tamil Nadu was the first state in India to introduce the “sales tax” in the year 1939.

1.22.4 State’s Excise Duties

‘State’s excise duties’ is an important tax imposed on goods and services. It is a major item of revenue for the state government. Excise duties are levied on alcoholic liquors and narcotics by the state governments.

1.22.5 Motor Vehicles Tax

The Indian Motor Vehicles Act of 1914 was primarily concerned with the regulation and control of the motor traffic. Different fee rates are levied for registration permits, driving licenses and the like. The fees and the rates are revised and increased from time to time.
1.22.6 Entertainment Tax

The Madras Entertainment Tax Act of 1939 had empowered the province of Madras to levy a tax on all forms of entertainments (like cinema, horse race, drama, circus, sports and the like) for which entrance fee was collected.

1.22.7 Tax Elasticity

The elasticity measures the response of the tax yield to changes in the national income when the tax parameters are held constant. It reflects the built-in flexibility of a tax or a tax system. It is referred to as an automatic change in the tax yields.

1.22.8 Tax Buoyancy

The change in the tax yield stemming from the combined effects of ‘automatic’ changes and; discretionary’ changes are defined as the measure of buoyancy of a tax or a tax system. It is defined as the ratio of the percentage change in unadjusted tax revenues over a given period to the percentage change in state’s income over the same period. The buoyancy coefficient of a tax is calculated as a single number by relating the historical tax revenue receipts to the historical levels of the state income.

1.22.9 Tax Effort

The tax effort is usually assessed by way of relating the actual tax revenue to some measure of taxable capacity.
1.22.10 Taxable Capacity

Taxable capacity is the ratio that would result if a state government applied to its tax bases a set of effective tax rates.

1.23 Limitations of the Study

The findings that emerge from this study are subject to the following limitations,

1. This study, by and large, has utilized the time series data on state finances published by the Evaluation and Applied Research Department of the Government of Tamil Nadu, through its publication “Tamil Nadu-Economic Appraisal” for various years. The conclusions arrived at in this study are subject to the veracity and the limitations of those data that have been used.

2. The statistical tool of regression analysis has been employed for the elasticity calculating the elasticity coefficients for various taxes. The limitations of regression analysis are to be kept in mind while interpreting the conclusions arrived at in this study.

3. In this study, the time series data of the taxes of the Tamil Nadu State Government have been analyzed, to find out the linear trend and the compound growth rates only. Various advanced econometric tools of the forecasting models of the time series analysis have not been attempted in this study.
1.24 Chapter Scheme

The present thesis has been organized into six chapters; the first chapter is an introductory chapter that deals with the Analysis of the tax revenue of the Tamil Nadu state in a federal set up, the choice of the topic, statement of the problem, objectives, hypothesis, methodology of the study, and limitations of the thesis.

The second chapter deals with the profile of the Tamil Nadu.

The third chapter gives an account of a review of the related literature adopted in the present study.

The fourth chapter is concerned with the analysis of the tax revenues in Tamil Nadu state.

The fifth chapter examines the responsiveness of the state taxes of Tamil Nadu to changes in income and in the respective tax bases, buoyancy and elasticity and the tax effort of the Tamil Nadu state government.

The sixth chapter summarizes the findings, suggestions and the conclusion that have emerged from this study.