APPLICATION OF SOCIAL ACCOUNTS TO THE PROBLEMS OF FEDERAL FINANCE.

This note points the relevancy of social accounting methods, viz., State Income, Money flows and input-output tables and techniques, in assessing fiscal capacity and hence resource mobilisation by States. These methods can be applied to two other problems of Federal Finance. They are (a) location of origin of income for the purpose of giving weightage in the scheme of distribution of Income Tax by F.C. (b) Estimation of consumption of goods subject to the levy of Union Excise duties and Additional Excise duties which may be distributed on the consumption basis.

In the distribution of Income tax 'origin' basis has been neglected on the ground that "even if it were practicable to ascertain precisely the contribution (which includes origin, collection and residence bases) of various units to the Income tax pool, distribution based solely on this criterion may not be satisfactory". So the problem of ascertaining relative importance of origin, collection and residence was left unsolved. Similarly, in the scheme of distribution of Union Excise duties, though consumption was recognised as an appropriate base for the distribution of proceeds to States, in absence of relevant data all the four Commissions adopted easier and ready basis viz. population. While the method followed in case of distribution of additional Excise duties levied in lieu of Sales tax is rational, consumption is the most appropriate basis. All these aspects pose questions to be solved.

1. The caution given by Prof. J.R. Hicks in his "Essays in World Economics" on p. 231 is kept in mind while attempting above note.
(A) In resource mobilisation main point is whether the information available through Social Accounts could be used in assessing the performance of States in a federal nation. Regional income aggregates or the per capita incomes are not fully representative of the economic activity of the region since they express in a shorthand form certain figures which cannot explain, in detail, the economy at work. The distinction drawn between Regional Income at factor cost and Regional product at factor cost is relevant in this context.

"For any given region income received will exceed income produced to the extent receipts of services and property income by in-region residents who own factors employed outside the region exceed the payments of factors employed within the region but owned without". ¹

Therefore the very concept of regional income, in so far as it permits distinction between product and factor costs with reference to inter-regional flows, implies to some extent flow of funds also. When these funds flow from one region to the other incomes available and liable for taxation by respective governmental levels also vary. Thus, product and factor costs i.e., regional incomes, as they are spent on current goods and services as well as on titles thereto (in capital transactions) are indicators of taxable wealth in various forms.

In the above framework the role of Input-Output technique is not mentioned. Regional Income viewed through input-output technique points that the total "Income of the State is the result of payments for inputs and outputs. We have to exclude inter-regional flows which are similar to international trade transfers or Balance of payments. These transfers make a substantial difference to the determination of State Income and fiscal policy. Both inputs and outputs have intra and inter regional aspects. Demand for inputs is a derived demand. Inter-regional income transfers and final income

¹. Refer "Regional Incomes" p. 26 N.B.E.R. (1957)
levels are dependent upon the input-output relations between regions as well as their quantitative significance. For instance, increased demand for outputs arising from within the region and met by inputs of the same region should, naturally, increase the regional income by the same degree as the increase in original demand; per contra, if the demand for a product or a major share of it has emanated from outside that region which could be met by that region if only it could effect 'infow' a certain quantum of inputs from other regions, then the net benefit of increase in regional income is minimum. Therefore, identification of the proportion of demand for inputs and outputs that emanate both from within and without the region are necessary for appreciation of the problems in the application of input-output techniques to regional incomes and their growth.¹

Given this description of Regional Income formation through money flows and input-output techniques, the next problem is to ascertain the performance of States in mobilising their internal resources. The purpose of resource mobilisation is firstly, maintaining monetary equilibrium; secondly, maintaining price stability and thereby preventing inflation; and thirdly, withdrawing money for developmental purposes. These are sought to be achieved by altering tax rate and base of each and every individual tax by the States. Under the present Constitutional arrangement in Indian Union, States can levy taxes on commodities and on certain types of capital transactions. Now it may be examined as to how optimum mobilisation could take place.

¹ Anthony Scott in his Essay on "Economic Goals of Federal Finance" Public Finance No. 3-1963 points that the treatment of growth in a federal society requires a foreign trade multipliers model, linking the level of income, tax receipts, spending, grants and inter-provincial trade. (emphasis added).
Assuming uniform federal taxation and revenue mobilisation by Union Govt., States can operate on additional monetary incomes through the variations in their taxes. Every commodity taxed under Sales tax enters both as inputs and outputs of different sectors. Multi-point Sales tax levied on articles of mass consumption may itself cause cost-push inflation; nevertheless, it is the only effective way of diverting and controlling growth of money increases of low income groups. Single and double-point sales taxes can be used to siphon money from high income groups. So also M.V.Tax and M.Sp. tax enter into the cost of living and hence costs of both inputs and outputs. Land Revenue, since it is a direct tax, would reduce demand in the same proportion as the reduction of money. It may be noted that all commodity taxes levied by States distort the budgets of consumers and producers differently. As a result it is difficult to perceive the exact impact of the fiscal action through commodity taxation. Therefore, in applying input-output analysis for fiscal action it must be assured that a given tax increase through rate and base variations produce minimum desirable distortion effects in the budgets consumers and producers. Further an increase in input costs may adversely effect several other related outputs. Tax rate should leave sufficient margin for optimum utilisation of the capacity of that product concerned under prevailing opinions of social optimum and allow necessary adjustments to be made in inputs and outputs in accordance with the principle of equi-marginal substitution by the producer. Here it may be pointed that the tax-subsidy process may be used in those cases where benefits and losses to entire economy can be perceived through input-output matrix.¹

In controlling inflation the general rule is that of preventing demand inflation emanating from factor market through indirect taxes

and for inflation generating in product market through direct taxes. It is quite difficult to say whether inflation at a particular point of time is due to excess demand in factor market or product market since inflation spreads to other market wherever it may begin. In underdeveloped economies main source of inflation is the shortages in product markets. Planned development also results in shortages in products required by economy because of lags in the yields and the nature investment. Therefore excess demand in product market has to be controlled by fiscal action. States in Indian Union can, according to the above prescription, influence factor markets, while the need of the hour is that of influencing product markets. On the other hand Union Govt. can, through its direct taxation, influence the product market. Thus it is evident that States are not efficient in controlling inflation. States taxation like inflation, has snow-ball effect on other States also. For instance, demand eminating from region "A" naturally increases the demand for factor inputs inside region "B". On the other hand, Govt. of region "B" in its anxiety to check increase in prices may impose some more commodity taxes thereby causing inflation. Another situation in "B" also may develop due to imported inflation. Production units in response to increased effective demand from other region, will increase the inputs and payments to them which may further accentuate the effective demand within the region "B" and cause inflation. Nevertheless, information available through input-output Tables enables the States to locate the points of bottlenecks or scarcity of different inputs

2. From this analysis it is clear that effective mobilisation by States might itself be one of the causes of cost-push inflation. Thus, States fiscal action may instead of preventing, actually promotes inflation in a federation.
3. From this the failure of Union Govt. to control product markets is evident. States success in operating commodity taxes prove that their actions actually accentuated inflation. Inflation, wherever and whenever starts, follows the course of vicious circle.
4. A.T. Peacock - Ibid.
and vary tax policy and rate structure in accordance with the optimum and efficient allocation and substitution of same input between different products. Variation in the rate of a particular tax or an item of tax schedule or on a product can therefore be made on a scientific basis. It can also enable optimum utilisation of existing physical resources in their alternative uses. By varying rate of taxation on an input the relative profitability of different outputs and the input combinations (particularly in utilising the one that is taxed) are effected. As a piece of analysis the input-output system provides excellent opportunity for case studies of tax policies in regard to individual commodities. As regards to overall economy of the State or region it can also provide a good ground for comparative study of impact of economic and fiscal policies.

Social Accounts can thus be utilised in assuring the Resource mobilisation by States. However it may be cautioned regarding use of familiar concepts mentioned in Second chapter. Tax Revenue as per centage of State income or per capita incomes is not correct since same quantum or per centage of income of State or Revenue (in two different States) does not portend the similar case or burden with which it is earned or borne.

(B) Further input-output technique may be used in locating the States' contribution of a region to Central income tax pool and the consumption of certain Excisable goods levied collected and (may or must be) distributed between Centre and States.

(1) Origin of Income: - This can be ascertained by identifying inputs and outputs availed and consumed respectively by the residents of two region. Alternatively if we can isolate the proportion of

State income, be it in the shape of inputs or outputs or transactions in real estate which utilise internal monetary resource that only change from one person to another but not the region, that is exclusively internal to State's economy by means of input-output tables and money flows then the origin element of income of the State can be established. When once this is decided as a proportion of State's income, then the divisible income tax proceeds can also be distributed in the same proportion. Now the divisible pool is distributed 80% on population and 20% on collection basis. If it can be ascertained that State income derives say 60-70% from within and the rest from incomes earned outside the State, then the new distributional arrangement may be that 80% on population, 10-15% on origin basis and 5-10% on collection basis.

(2) Input-output tables can be utilised to the best advantage in locating the regional consumption pattern of different commodities both as raw material inputs, intermediate goods and final products. For this purpose the inter-regional flow of goods both as inputs and outputs is required. In fact from the table constructed for each region with reference to inputs available, final bill of goods and inflow required to meet the final bill of goods, the consumption pattern of excisable commodities can be ascertained. This identification is possible in input-output tables and analysis. Using this information Union Excise duty proceeds can be allocated between States on consumption basis.