#### **Elementary Theories of Product and Factor Taxation**

G.E. Public Finance, B. Com (H) 4th Sem

Part-A-Unit – 3 Elementary Theories of Product and Factor Taxation

Readings: R.A. Musgrave and P.B. Musgrave, Public Finance in Theory and Practice, 5th Edition, Chapter 14 (pp 234-242), Chapter – 15 (pp 249-256 only part A and B)

#### Taxation:

Taxation goes back as far as recorded history. However, it was not until the start of the great civilizations that we see tax collected for a kingdom by an organized group dedicated to that sole task. There have been taxes to help maintain resources like boats, cities safe 5 passage, ports palaces, construction projects and perhaps the most popular reason, to fund conflicts and all through this tax has grown and evolved as civilizations themselves evolved.

## **Taxes Basic Concepts:**

Every tax has two parts: a base and a rate structure. The tax base is the measure or value upon which the tax is levied. In the United States, taxes are levied on a variety of bases, including income, sales, property, and corporate profits. The tax rate structure determines the portion of the tax base that must be paid in taxes. The final incidence, or burden distribution, of a tax will.depend on how it is imposed initially, what rate structure is used, how the base is defined, and how general is its coverage. But this is only the beginning. In the end, economic incidence will depend on how the economy responds. This response depends on conditions of demand and supply, the structure of markets, and the time period allowed for adjustments to occur.

**Taxes on Stocks versus Taxes on Flows** Tax bases may be either stock measures or flow

measures. The local property tax is a tax on the value of residential, commercial, or industrial property. A homeowner, for instance, is taxed on the current assessed value of his or her home. Current value is a *stock variable*—that is, it is measured or estimated at a point in time. Other taxes are levied on *flows*. Income is a flow. Most people are paid on a monthly basis, and they have taxes taken out every month. Retail sales take place continuously, and a retail sales tax takes a portion of that flow. Figure 19.1 diagrams in simple form the important continuous payment flows between households and firms and the points at which the government levies six different taxes.

**Proportional, Progressive, and regressive Taxes**: A tax whose burden is the same proportion of income for all households is a proportional tax. A tax that exacts a higher percentage of income from higher-income households than from lower-

income households is a progressive tax. A tax that exacts a lower percentage of income from higher-income families than from lower-income families is a regressive tax. Excise taxes (taxes on specific commodities such as gasoline and telephone calls) are regressive. The retail sales tax is also a regressive tax. Suppose the retail sales tax in your state is 5 percent. You might assume that it is a proportional tax because everyone pays 5 percent. But all people do not spend the same fraction of their income on taxable goods and services. In fact, higher-income households save a larger fraction of their incomes. Even though they may pay more taxes in dollars than lower-income families, they end up paying a smaller proportion of their incomes in sales tax.

Marginal versus Average Tax rates: In thinking about tax rates commentators often refer to an individual's average tax rate. An average tax rate is simply the total tax paid divided by total income. marginal tax rate, that is, how much of the next dollar earned goes to the government, given one's current income level. With a progressive income tax like the one we have in the United States, marginal tax rates and average tax rates are not equal.

The actual incidence of the tax may differ markedly from the intended incidence. If two taxes that are imposed on firms, the employer-paid portion of the social security tax and the corporation income tax. As a result of either tax, wages might fall or prices might rise. If wages fall, we say that the tax has been shifted backward ( to a factor of production of labor). If wages fall by less than the amount of the tax, we say they have been fully shifted, if partially then partially shifted. If prices rise, we say that the tax has been shifted forward (to consumers). As per economist the effect of the tax officially levied on employers is essentially the same as that levied on workers. Thus, although the government levied only half of the tax on employees, they bear the full burden of the tax in the form of lower wages.

A product tax may be imposed per unit of product, in which case it is referred to as a "unit tax." State taxes on gasoline, cigarettes, and liquor. Alternatively, the product tax may be imposed as a percentage of price, in which case it is referred to as an "ad valorem tax." General product or "sales taxes" are necessarily of the ad valorem form, with a uniform rate applied to a wide range of products.

### Tax Incidence:

The economic effects of taxation are manifold. They include micro effects on the distribution of income and the efficiency of resource use as well as macro effects on the level of capacity output, employment, prices, and growth. All these effects interact. Thus, the distributional effects (or incidence) of particular budget measures depend on their effects on capacity output and employment just as the latter depend on concurrent changes in distribution.

Tax incidence refers to the way in which this gross burden is shared among individual households. Tax burden is the tax imposed on the individuals.

Excess Burden The total burden may exceed the revenue collected because an efficiency loss, or "excess burden," results. Input Effects There is another reason why tax revenue and total burden as measured by the loss of income available for private use may differ. Employment Effects Furthermore, changes in output may result, not because of adjustments in factor inputs in response to changes in after-tax factor rewards but because of resulting changes in the level of aggregate demand and unemployment. Introduction of a tax may reduce the level of employment, or an increase in expenditures may raise it. This once more complicates the problem of observing the effects of taxation on the distribution of income. As is evident from these considerations, the concept of tax burden is more complex than suggested by the simple formulation in which revenue and burden are set equal to each other.

### Statutory Incidence, Economic Incidence, and Tax Shifting

# **Alternative Concepts of Incidence**

Absolute Tax Incidence One way is to examine the distributional effects of imposing a particular tax while holding public expenditures constant.

# Summary:

Various concepts of incidence were considered and the following distinctions were drawn:

- 1. Statutory incidence differs from economic incidence and it is the latter that matters.
- 2. The opportunity cost of resource transfer to public use, associated with an increase in public services, imposes a burden on consumers as a group because resources are withdrawn from private use. This transfer is to be distinguished from redistribution among consumers which arises in the case of tax-financed transfers or tax substitutions.
- 3. Owing to efficiency costs, employment, and output effects, the tax burden may exceed the revenue gain.
- 4. Budget incidence allows for distributional effects of both tax and expenditure policies.
- 5. To formulate the problem of tax incidence, the differential approach is most useful.

The problem of incidence deals with the effects of fiscal operations on the distribution of real income among households:

- 6. Incidence thus involves taxation effects on both the sources and uses side of the household account.
- 7. Distributional changes which result are viewed primarily in terms of distribution among income brackets, but other groupings may also be considered.
- 8. An overall measure of incidence may be derived by observing the resulting change in the coefficient of inequality.
- 9. Taxes may be grouped as direct or indirect, and as in rem or personal. The latter distinction is most important.

A survey of the estimated distribution of tax burdens and expenditure benefits in the U.S. fiscal structure shows the following:

- 10. The income tax is the major progressive element in the tax structure, just as the payroll ta:lt is the major regressive element. Sales taxes tend to be regressive. The roles of the corporation income tax and of the property tax greatly depend on the shifting assumption which is applied.
- 11. The distributiQn of the federal tax burden is progressive and that of state and local taxes tends to be proportional.
- 12. Burden distribution for the tax system as a whole is progressive over the lower part of the income range and then approaches a proportional pattern.
- 13. The distribution of benefits is strongly pro-poor, owing to the role of transfer payments, especially at the federal level.
- 14. The resulting distribution of net benefits is distinctly pro-poor, but more or less proportional over the remainder of the income range.