

DESIGN OF APPROPRIATE SUBNATIONAL REVENUE SYSTEMS



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“The art of taxation consists in so plucking the goose as to obtain the largest amount of feathers with the least possible amount of hissing.”

J.B. Colbert, c. 1665, Louis XIV's
Controller-General of Finance

Terminology (1)

Tax

- Compulsory contribution to government without reference to a particular benefit
- Goes to treasury/general funds for allocation via expenditure policies/budgetary processes
- Diverts control of economic resources from taxpayers to state for own use/transfer to others
- Usually paid in money, sometimes in kind

User Fee

- Voluntary payment for a specific good or service
- Benefits received directly related to amount paid
- Consumption based (usage or permission)
- Best for private goods & services (rival & excludable)
- Characterized by user pays principle

Terminology (2)

Appropriate

- There is no single perfect or ideal revenue system
- The theory of optimal taxation is more of a metric against which to evaluate relative strengths and weaknesses of tax policy alternatives:
 - Will the tax system be more economically efficient?
 - Will the tax system be more socially equitable?
 - Will the tax system generate more net revenue?
- While evaluation criteria remain constant, what is best will change over time depending on a country's fiscal architecture - revenue systems are dynamic, not static
- The objectives of this session are to:
 - Review the most important factors determining the design of an appropriate subnational revenue system
 - Develop a conceptual framework with which to evaluate specific subnational revenue alternatives

Fiscal Architecture

- Structure of the economy
 - Rural (subsistence) or urban (disposable income)
 - Formal (salaried) or non-formal (self-employed)
 - Complexity of transactions (barter, cash, or electronic)
 - Open (significant trade) or closed (protected)
 - Resource endowment (curse of natural resources)
- Capacity of revenue administration
 - Hard (physical) and soft (institutional) infrastructure
 - Quality of revenue legislation & design (policy formulation)
 - Operational autonomy and integrity (implementation)
- Sophistication of citizens
 - Literacy rate (text and numeric)
 - IT usage (recordkeeping and reporting, tax filing)
 - Supporting services (tax accountants, lawyers, & advisors)
- Social compact (political and cultural expectations)

Economics of Taxation

- Economic Efficiency

How much distortion does the tax cause?

- Social Equity

How fair is the tax?

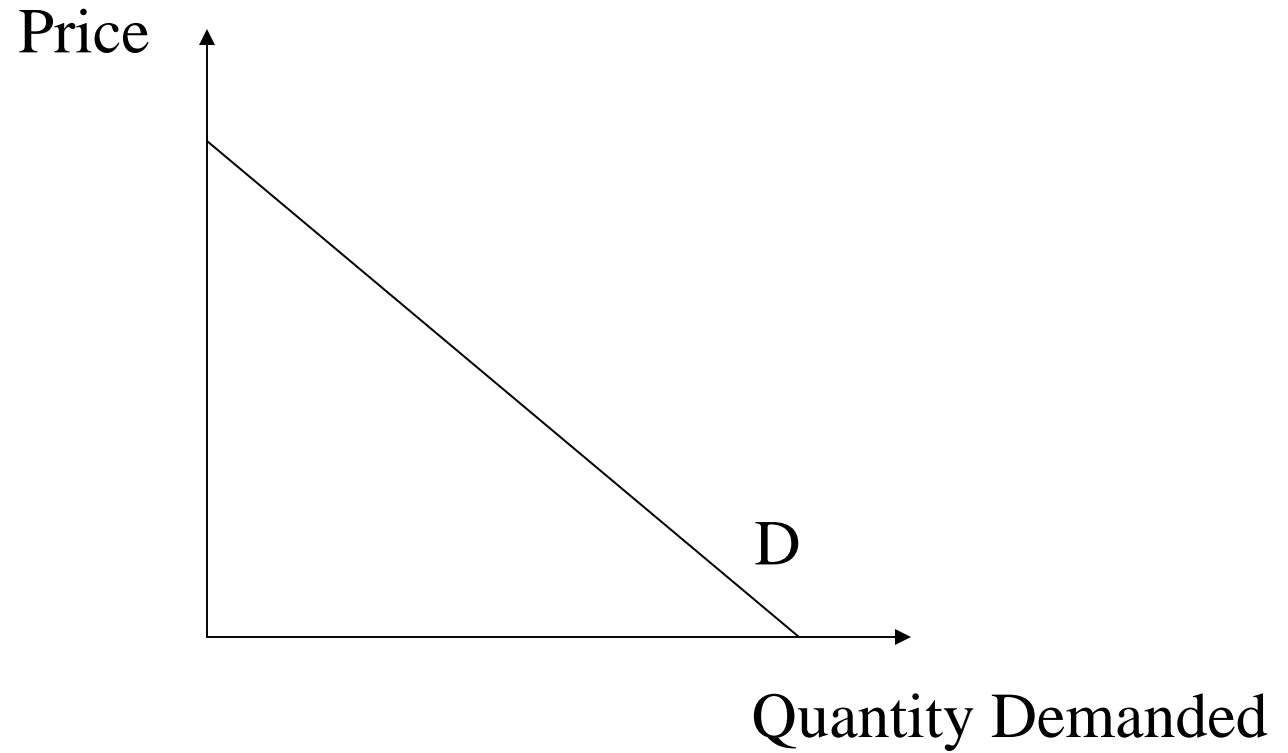
- Administrative Feasibility

How much net revenue does the tax generate?

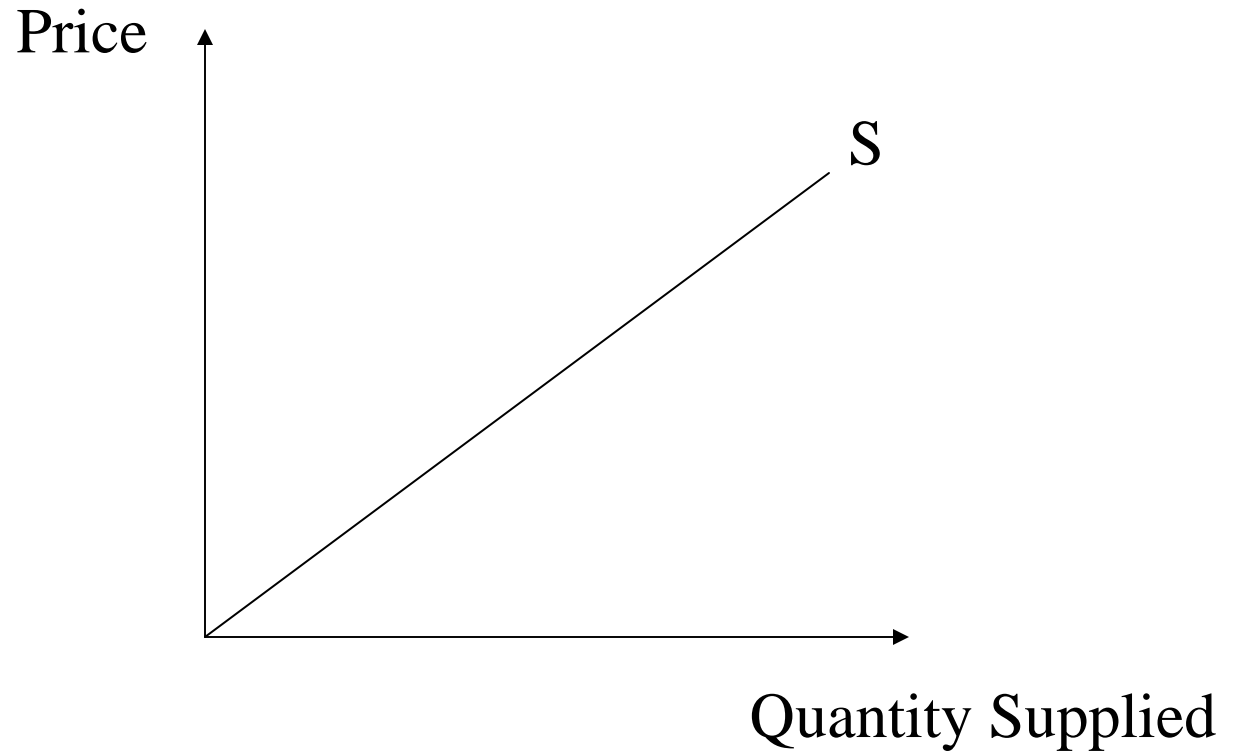
Economic Efficiency

- Marginal Social Benefit =
Marginal Social Cost
- Behavioral Change →
Excess Burden/Deadweight Loss
- Price Elasticity of Demand
- Income and Price (Substitution) Effects

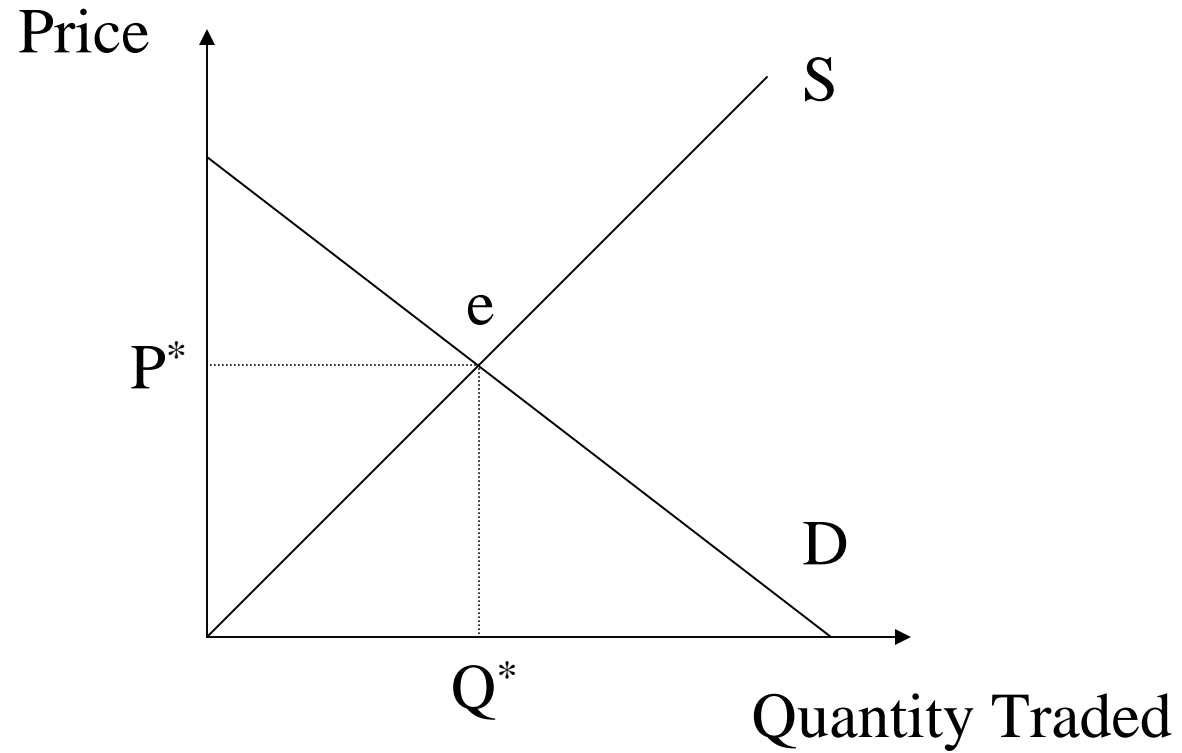
Demand Curve



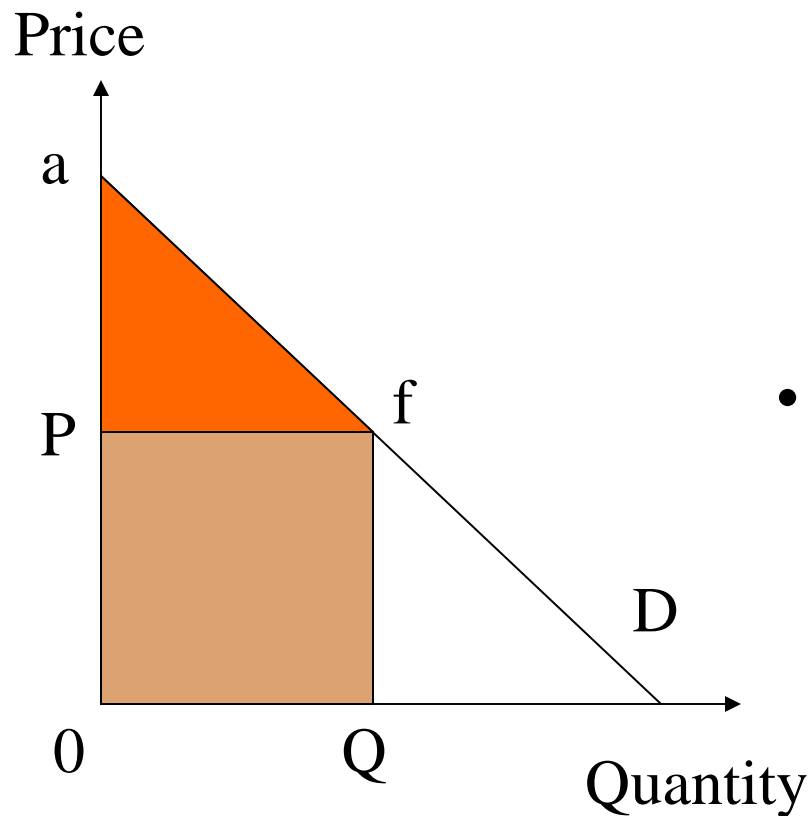
Supply Curve



Market Equilibrium

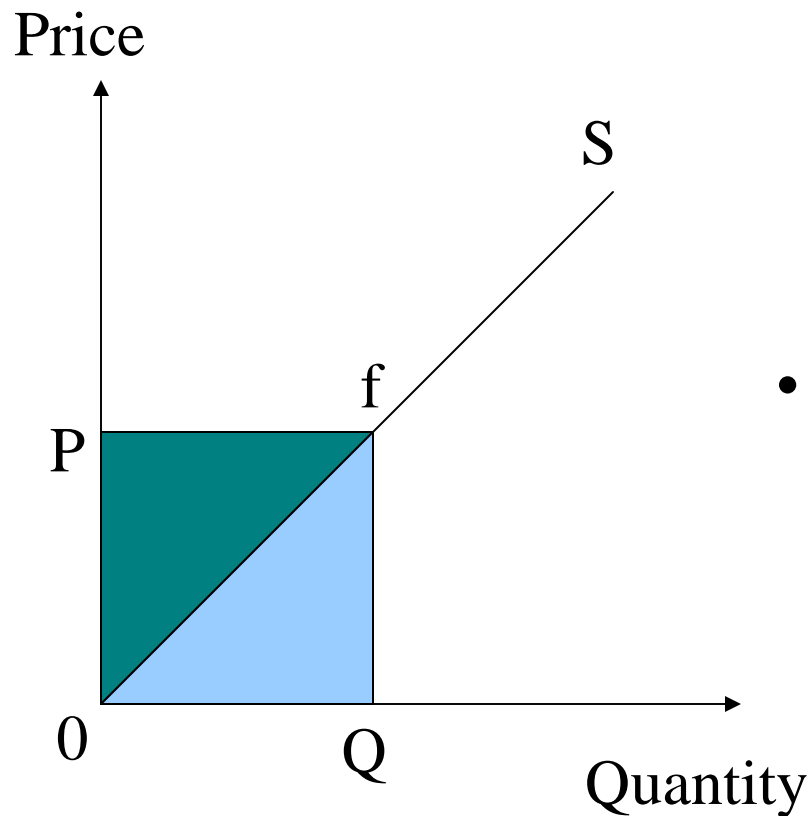


Consumer Surplus



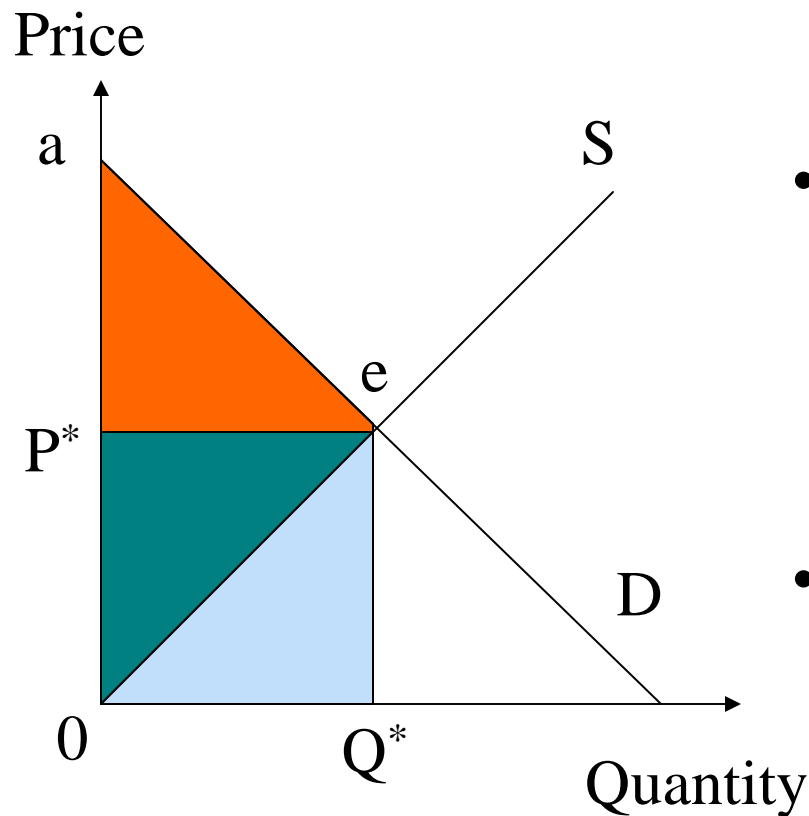
- The area under the demand curve (consumer's benefit: $B = \int_0^Q D(Q) dQ$) represents monetary value from the commodity the consumer purchased.
- If we subtract from it the consumer's expenditure ($E = P \cdot Q$), we get the **consumer surplus** ($CS = B - E = \int_0^Q (D(Q) - P) dQ$).

Producer Surplus



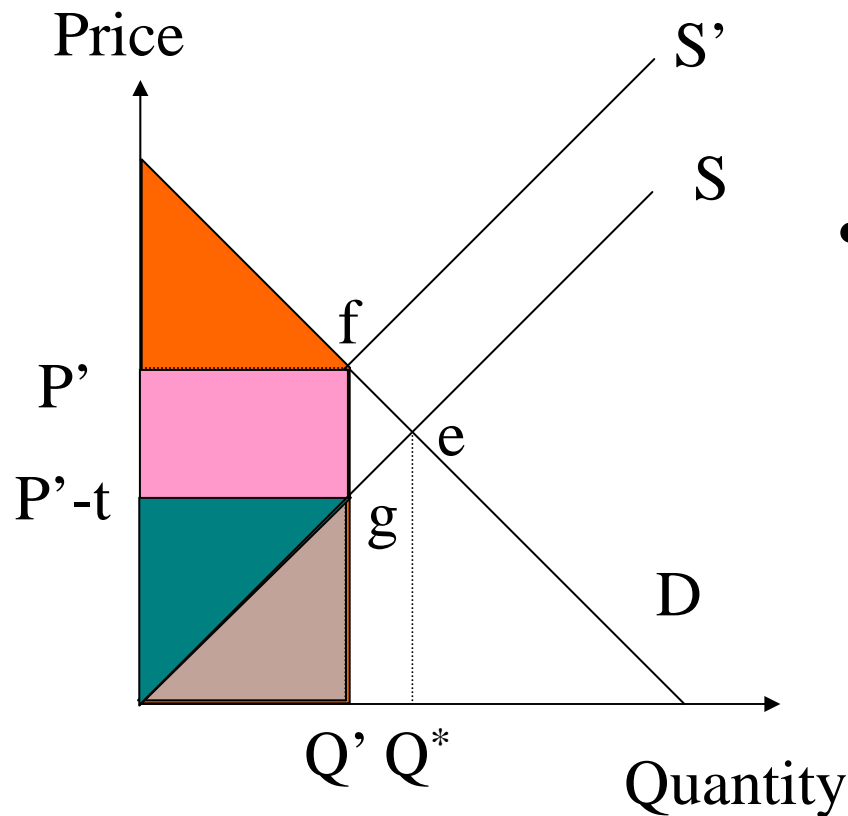
- The area under the supply curve (producer's cost: $C=0fQ$) represents the cost of producing the commodity the firm sold.
- If we subtract it from the the firm's revenue ($R=PfQ0$), we obtain the **producer surplus** ($PS=R-C=Pf0$).

Social Surplus



- The **social surplus** is the sum of the consumer surplus and the producer surplus.
- This can be also calculated as the area (B-C), because
$$CS+PS=B-E+R-C$$
 due to the fact $E=R$.
- The social surplus is maximized under the market equilibrium output.

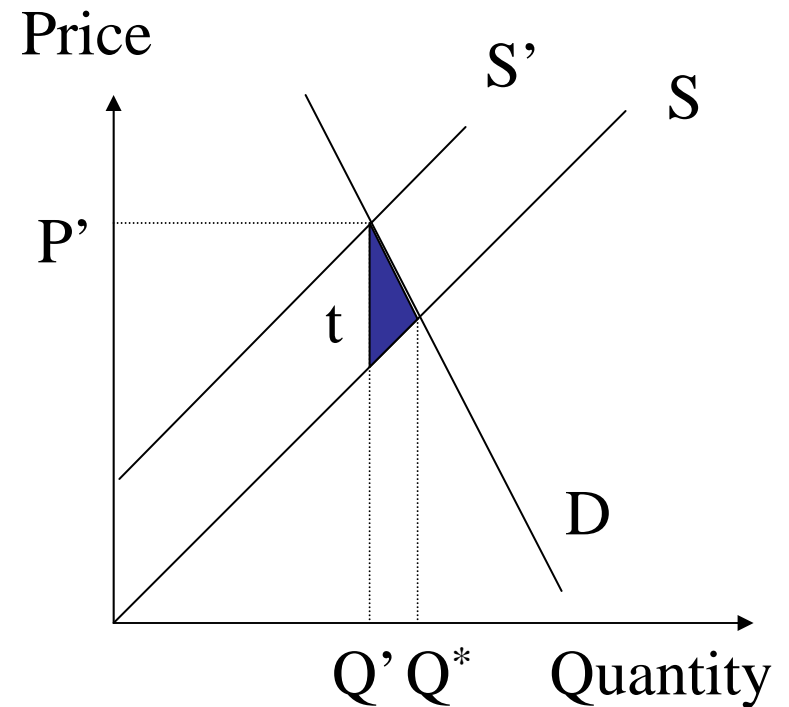
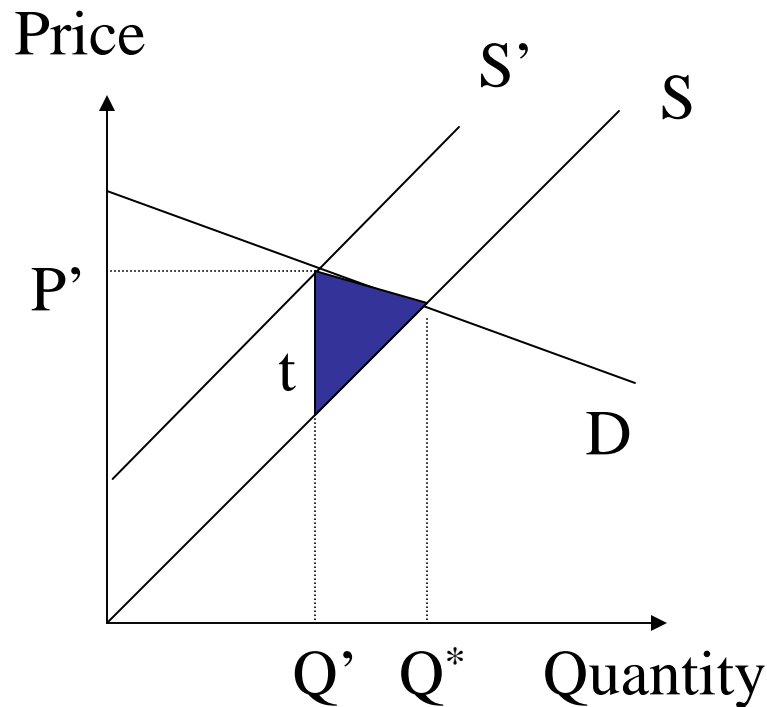
Tax Policy (1)



- The market equilibrium output under the tax Q' is smaller than Q^* .
- The distortion caused by the tax is given by the triangle (efg) referred to as the **dead-weight loss** (or **excess burden**) of the tax.

Tax Policy (2)

The more the commodity is price-elastic, the larger the dead-weight loss:



Social Equity

- Horizontal and Vertical Equity
- Policy Objective vs. Administrative Feasibility
- Tax Policy vs. Expenditure Policy

Tax Incidence

- Ultimate Bearer of Tax Burden
- Net Changes in Income/Wealth
- Statutory vs. Economic Incidence
- Progressive/Proportional/Regressive

Examples from the United States

Income

- Income tax: increasing % as Y increases
- Progressive: tax burden/ Y rises as Y rises

Insurance

- Social security: flat/constant % of Y
- Proportional tax: tax burden/ Y constant as Y rises

Consumption

- Sales tax: flat/constant % of sales
- Regressive: tax burden/ Y falls as Y rises

Features of a Sound Tax Regime

- Low Tax Rates
- Large Tax Bases
- Design Simplicity

Tradeoffs

Tax Rate vs. Tax Base

- Key is sequencing
- Revenue objectives secondary at beginning

Simplicity vs. Complexity

- Again, key is sequencing
- Increase sophistication as capacity increases

Revenue vs. Regulation

- Primary objective is resource mobilization
- Appropriate tool for particular policy objective

“There is one difference
between a tax collector and a
taxidermist – the taxidermist
leaves the hide.”

Mortimer Caplan, Director,
United States Bureau of Internal
Revenue, 1963