

# ECONOMICS OF TAXATION



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# Tax vs. User Fee/Charge

## 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 good or service
- Benefits received directly related to amount paid

“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

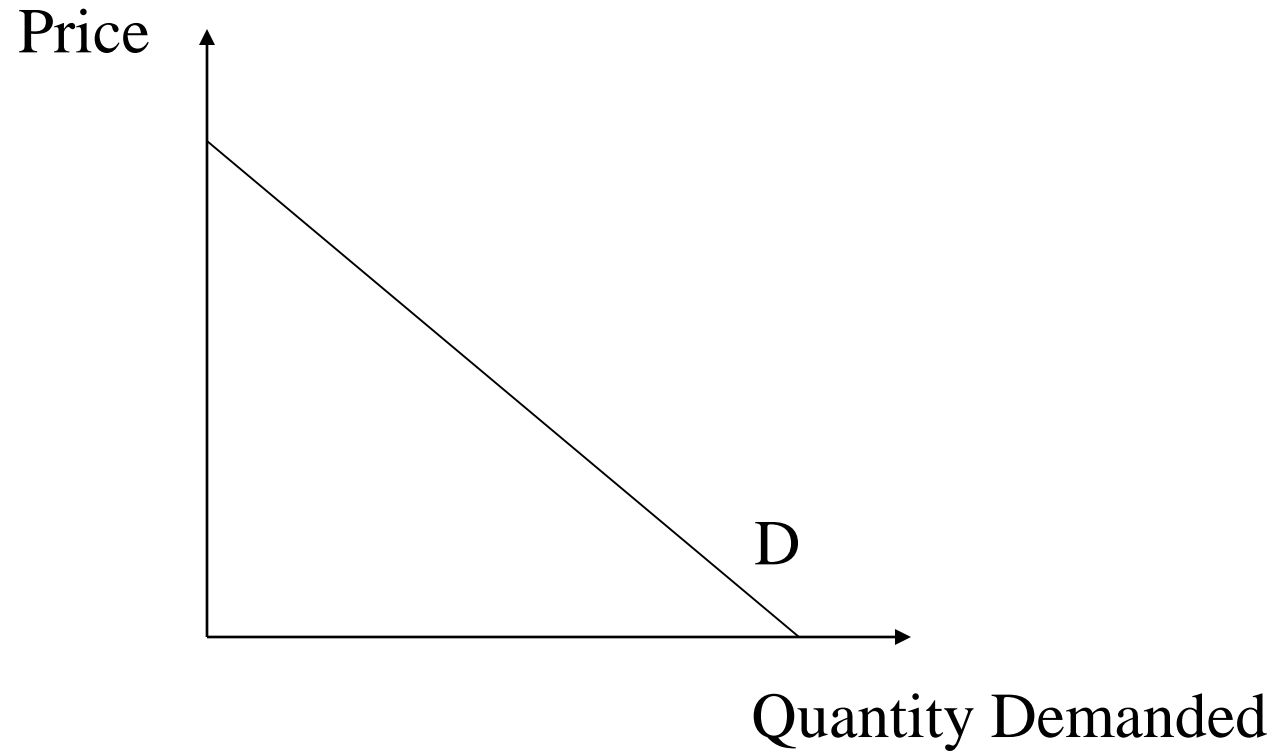
“There is one difference between a tax collector and a taxidermist – the taxidermist leaves the hide.”

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

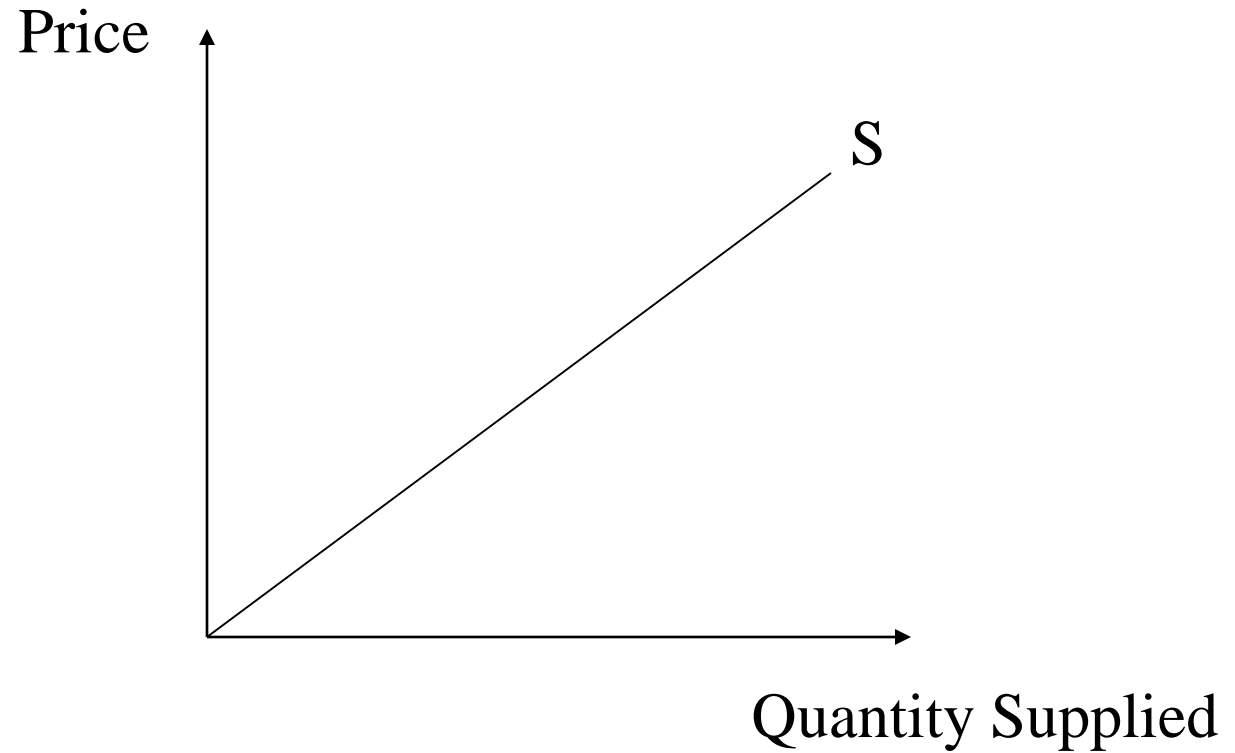
# Economic Efficiency

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

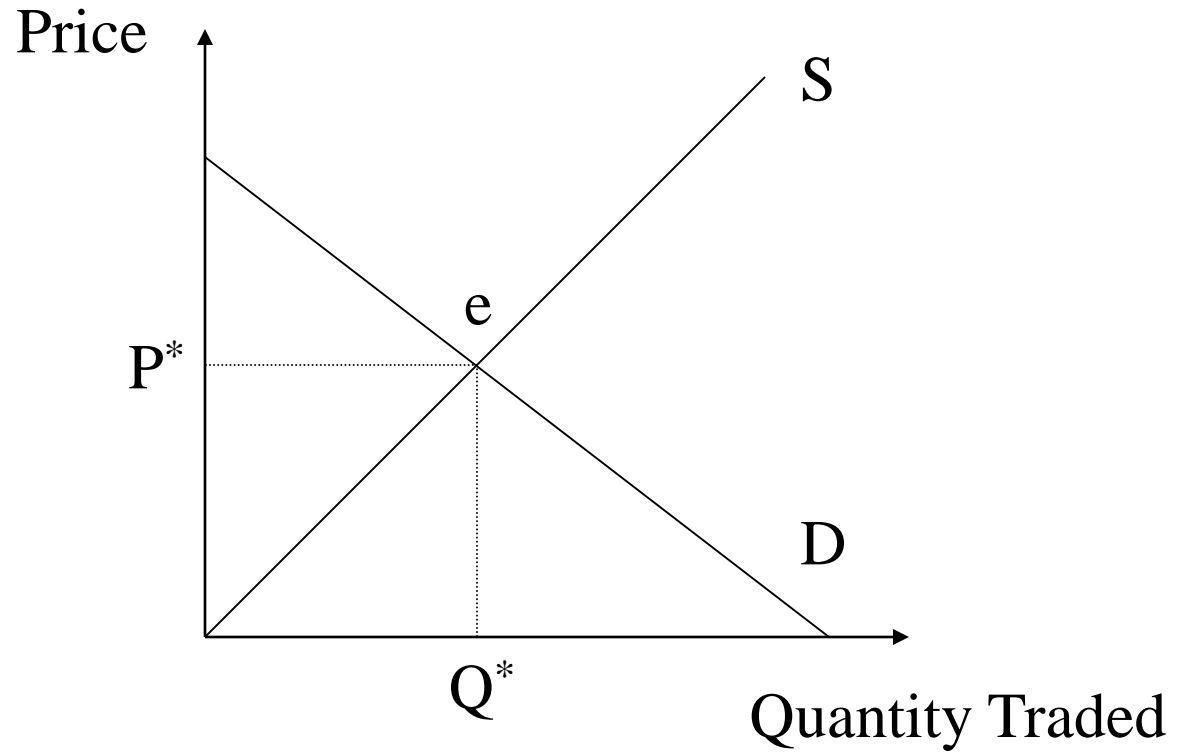
# Demand Curve



# Supply Curve

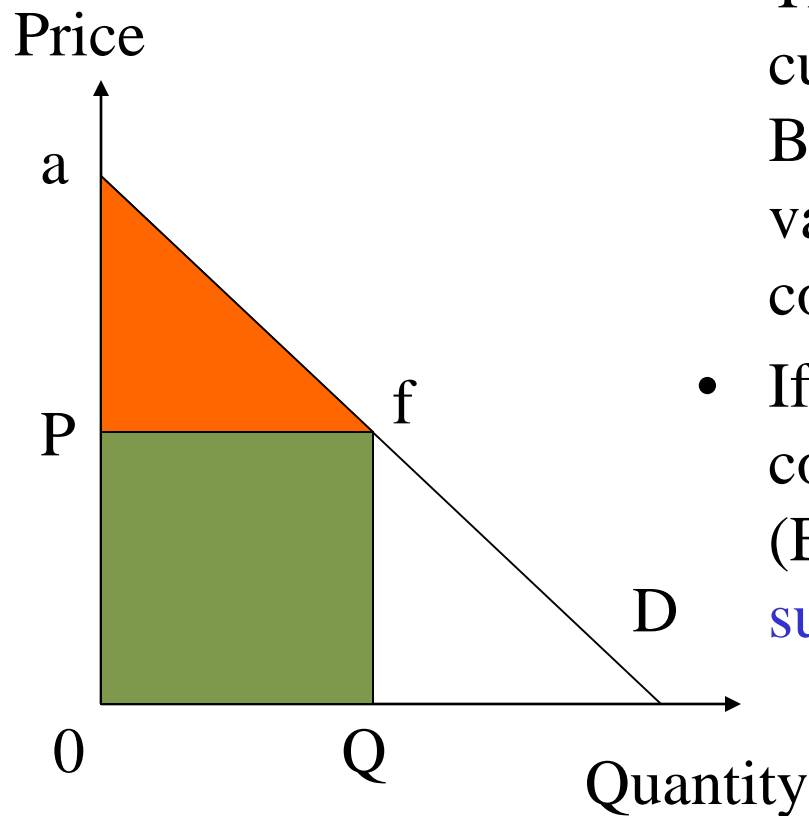


# Market Equilibrium



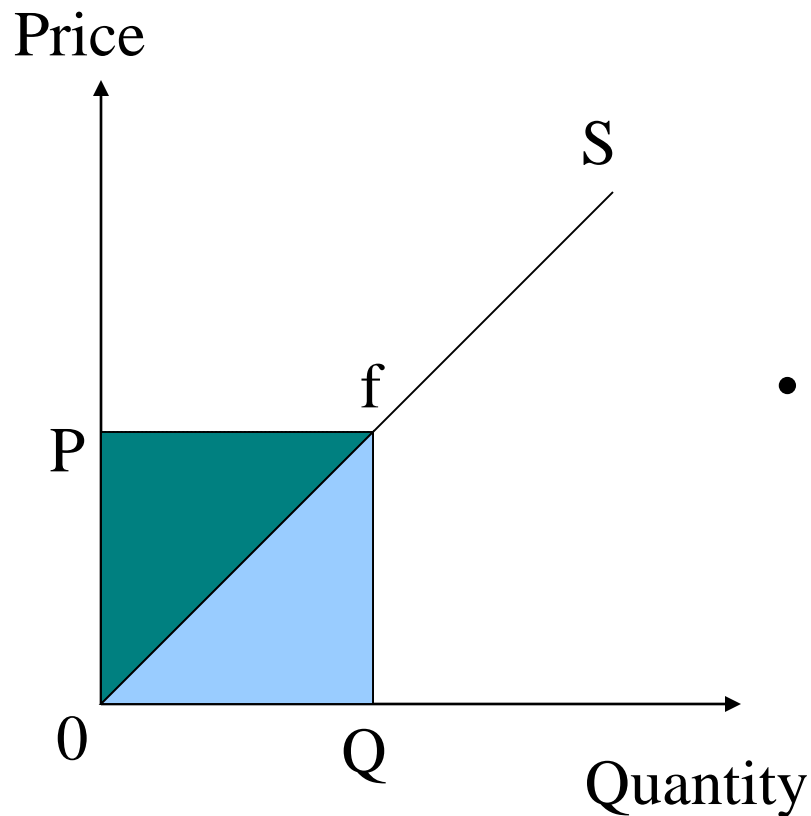


# Consumer Surplus



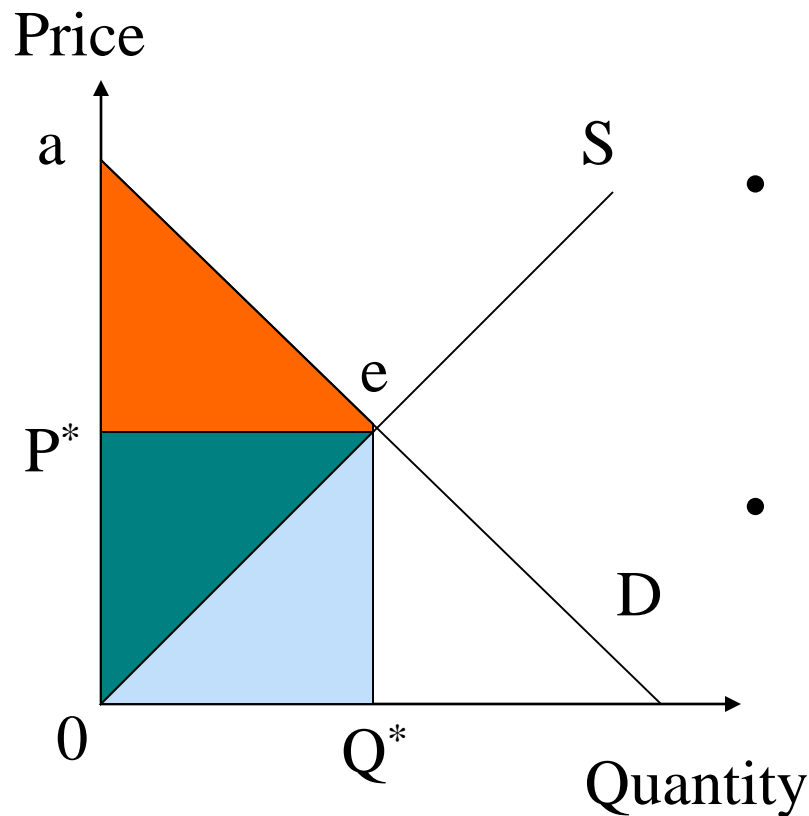
- The area under the demand curve (consumer's benefit:  $B = \int_0^Q D(Q) dQ$ ) represents monetary value from the commodity the consumer purchased.
- If we subtract from it the consumer's expenditure ( $E = P \cdot Q$ ), we get the **consumer surplus** ( $CS = B - E = \int_0^Q (D(Q) - P) dQ$ ).

# Producer Surplus



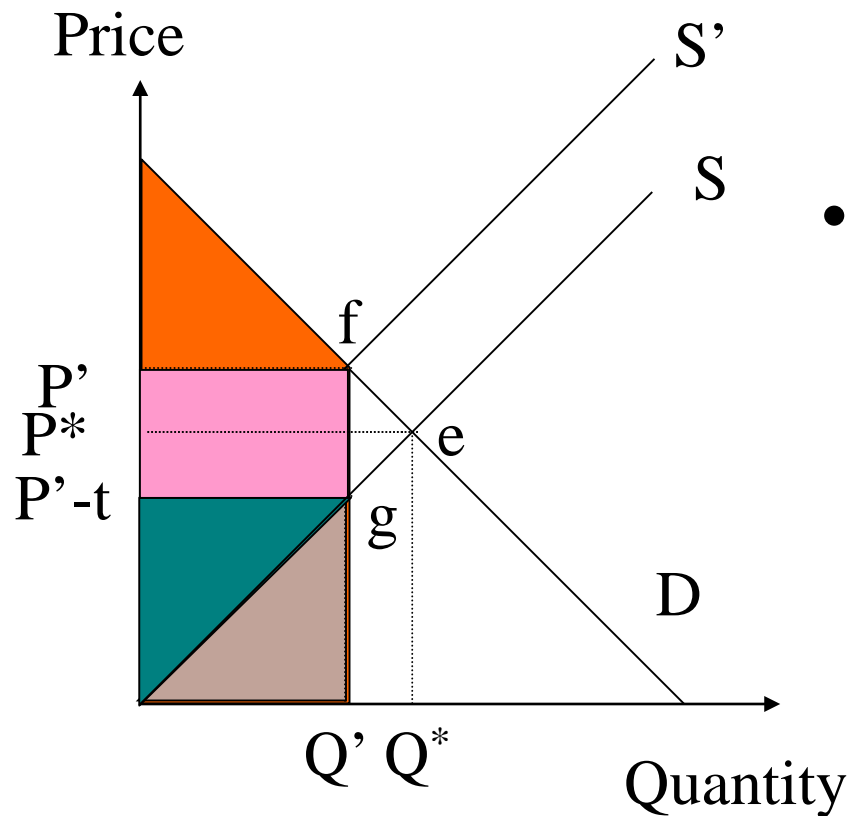
- The area under the supply curve (producer's cost:  $C=0fQ$ ) represents the cost of producing the commodity the firm sold.
- If we subtract it from the the firm's revenue ( $R=PfQ0$ ), we obtain the **producer surplus** ( $PS=R-C=Pf0$ ).

# 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.

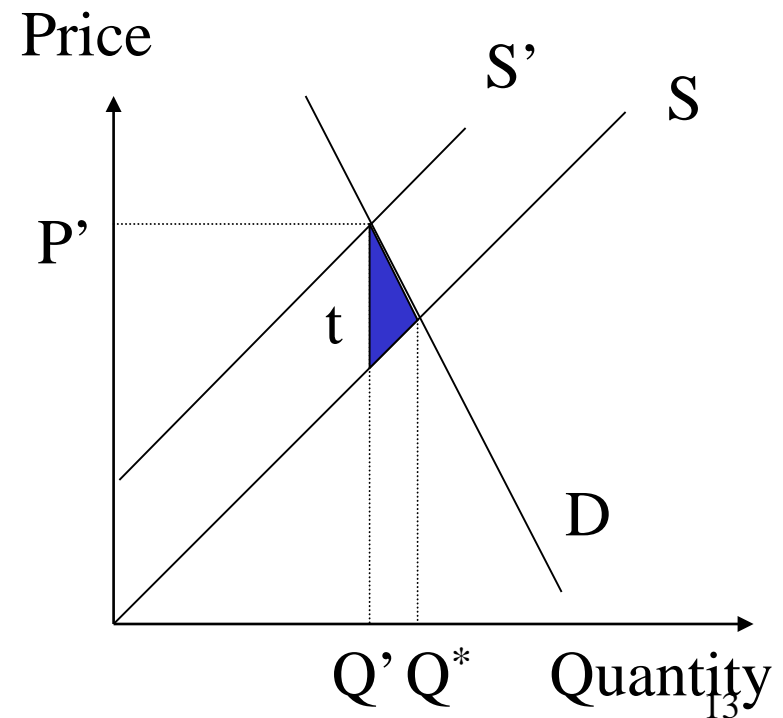
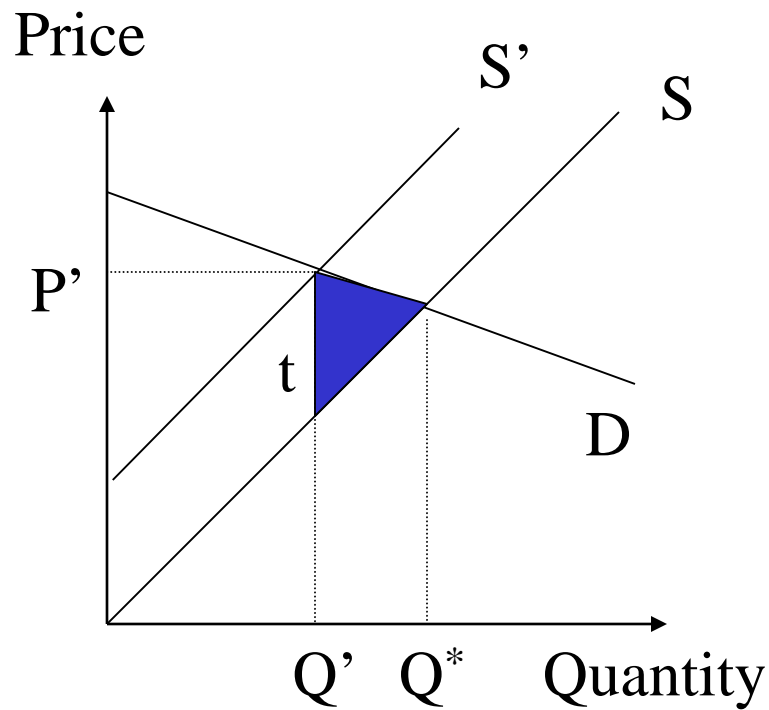
# Tax Policy (1)



- 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 **deadweight 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

# BUILDING AN APPROPRIATE FISCAL ARCHITECTURE



# Meaning of “Appropriate”

- There is no single perfect or ideal system
- The theory of an optimal revenue and expenditure system is more of a metric against which to evaluate relative strengths and weaknesses of policy alternatives, via application of the “economics of taxation”:
  - Will the proposed system be more economically efficient?
  - Will the proposed system be more socially equitable?
  - Will the proposed system generate more net resources (revenue) and more value for money (cost-effective expenditures)?
- While evaluation criteria remain constant, what is best will change over time depending on a country’s fiscal architecture → systems are dynamic, not static

# 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; local or regional/national; immediate settlement or settlement over time)
  - Open (significant trade) or closed (protected)
  - Resource endowment (curse of natural resources)
- Capacity of tax administration
  - Hard (physical) and soft (institutional) infrastructure
  - Quality of tax legislation and tax design (policy formulation)
  - Operational autonomy and integrity (implementation)
- Sophistication of tax payers
  - Literacy rate (text and numeric)
  - IT usage (recordkeeping and reporting, tax filing)
  - Supporting services (tax accountants, lawyers, & advisors)
- Social compact (political and cultural expectations of citizenry)