Economic Way of Thinking

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Economics Is a Science

- Economists play important roles in helping the society to manage its scarce resources, given its choices.
- Economics studies the production, distribution, and consumption of goods and services.
- Economists are interested in: Relative Prices, Demand, Supply, Market, Externality, ….Unemployment, Output (sometime measured by GDP), Price Level, Inflation, Deficit, Money Supply…Exchange Rate…

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Economics Is a Science

- The essence of science is using objective methods.

- *Therefore, analysis, plans, and forecasts based on economic reasoning are objective, transparent, and are preferred over traditional or indicative plans.*

- Economists create theories, collect data, model and analyze the data to verify or reject their theories. Good theories and models are used for forecasting.

- Microeconomics is the study of how households and firms make decisions and how they interact in the market.

- Macroeconomics is they study of economy-wide phenomena, including inflation, unemployment and economic growth.

- Econometrics: is a sub-field of economics that is concern with creating methodologies for measuring economic phenomena and reactions.

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Cost-Benefit Anlysis

-Opportunity cost: the cost anything is what you give up to get it.

The cost of building a road to Meghri from Sevan could be giving up opportunity to build several schools and hospitals.

-Marginal analysis: Only actions that have higher benefits than costs should be taken.

If the expected benefit of reducing "tariff (tax) on imports" by 1 more (marginal) dram is higher than its extra (marginal) expected cost to society, then we should reduce tariff on

4

Cost – Benefit Analysis in Action

- If the world price of a product is higher than the domestic price, then the benefit of exporting will exceed the cost of exporting.

- Since, to export more goods we need to employ more people, then *exports and employment are directly related.*

- Economists collect data and test the above theory. If the there is no relationship between exports and employment, then the above theory will be rejected.

Economic Abstract Models

- The most famous and importnat economic model is the model of Demand and the model of Supply

Together, Supply and Demand are used to explain the behavior of market in every economy in the world and for every good and service in the world.

Demand Model

(demand summarizes the behavior of consumers, and importers)

- Price rise causes fall in quantity demanded.

Price

10

5

90   280

Quantity

7
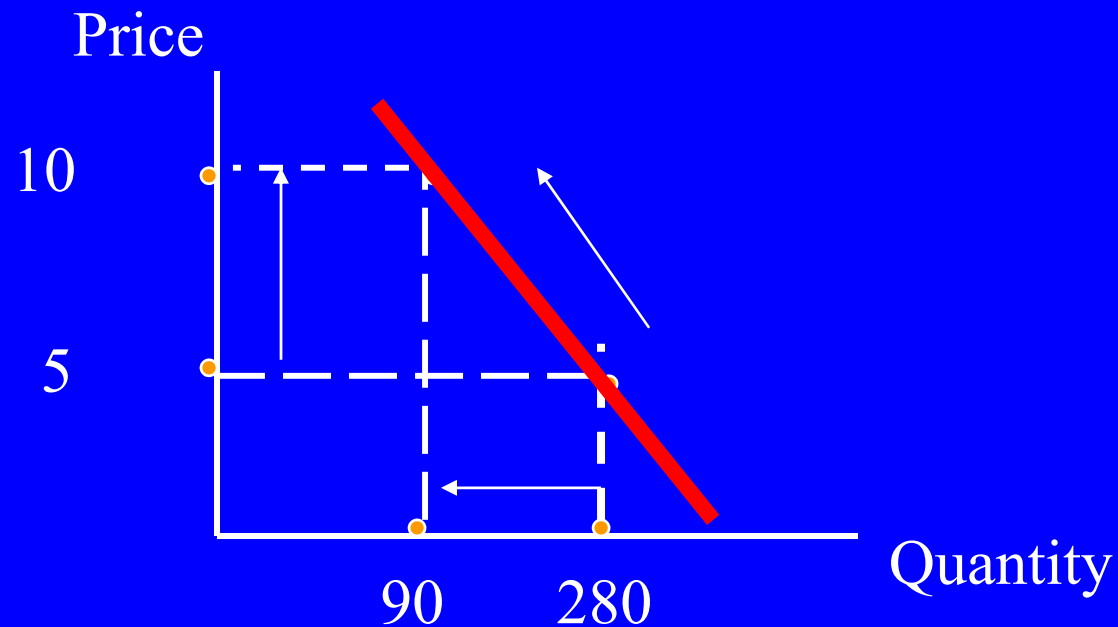
Demand = Q_d

- A general model of demand is written as:
- $Q_d = f(P)$
- A specific (linear) model of demand is:
- $Q_d = \alpha + \beta P$
- where, $\beta < 0$

NOTE:

$\alpha =$ demand, if $P = 0$

$\beta =$ change in Q_d because of one unit change in P.

Supply Model

(supply summarizes the behavior of producers, and exporters)

Price (P) increase causes rise in quantity supplied (Q).

Supply = Q_s

- A general model of demand is written as:
- $Q_s = f(P)$
- A specific (linear) model of demand is:
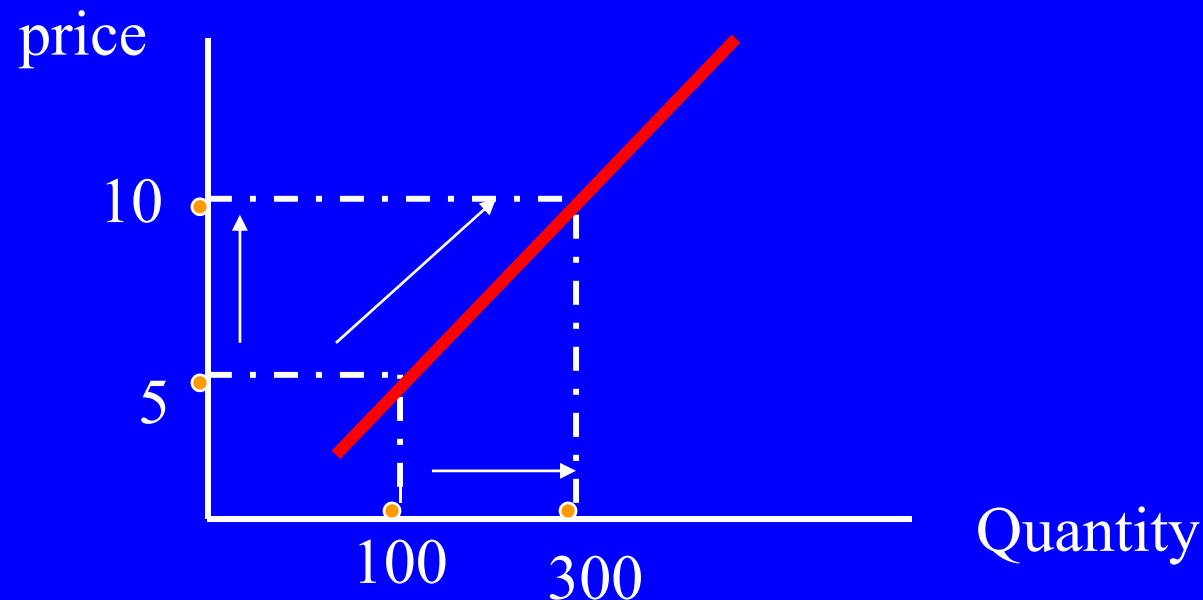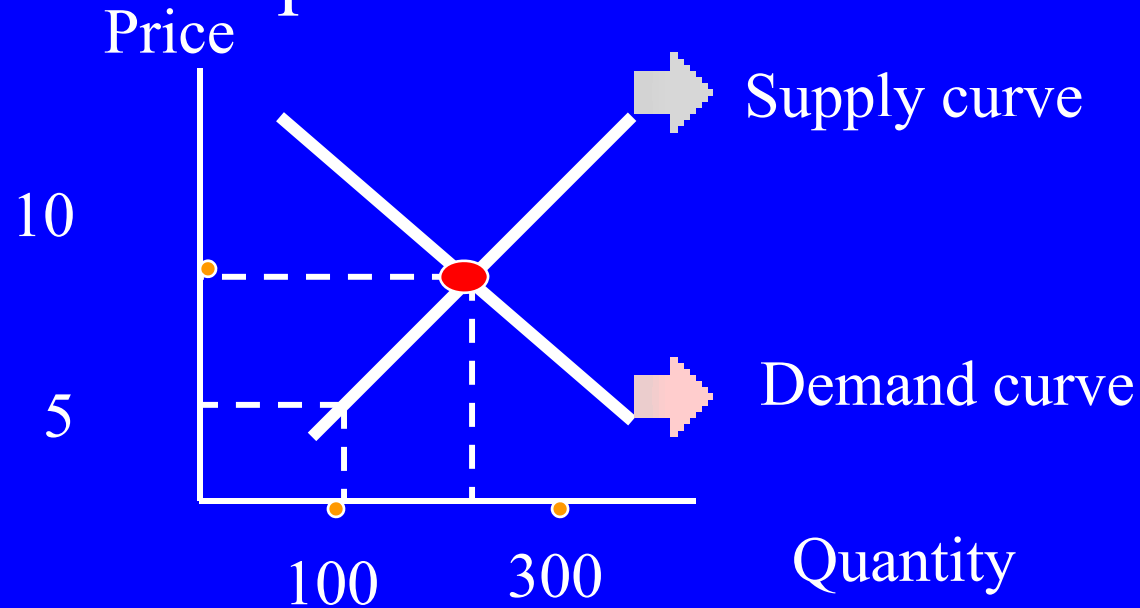- $Q_s = \alpha + \beta P$
- where, $\beta > 0$

NOTE:

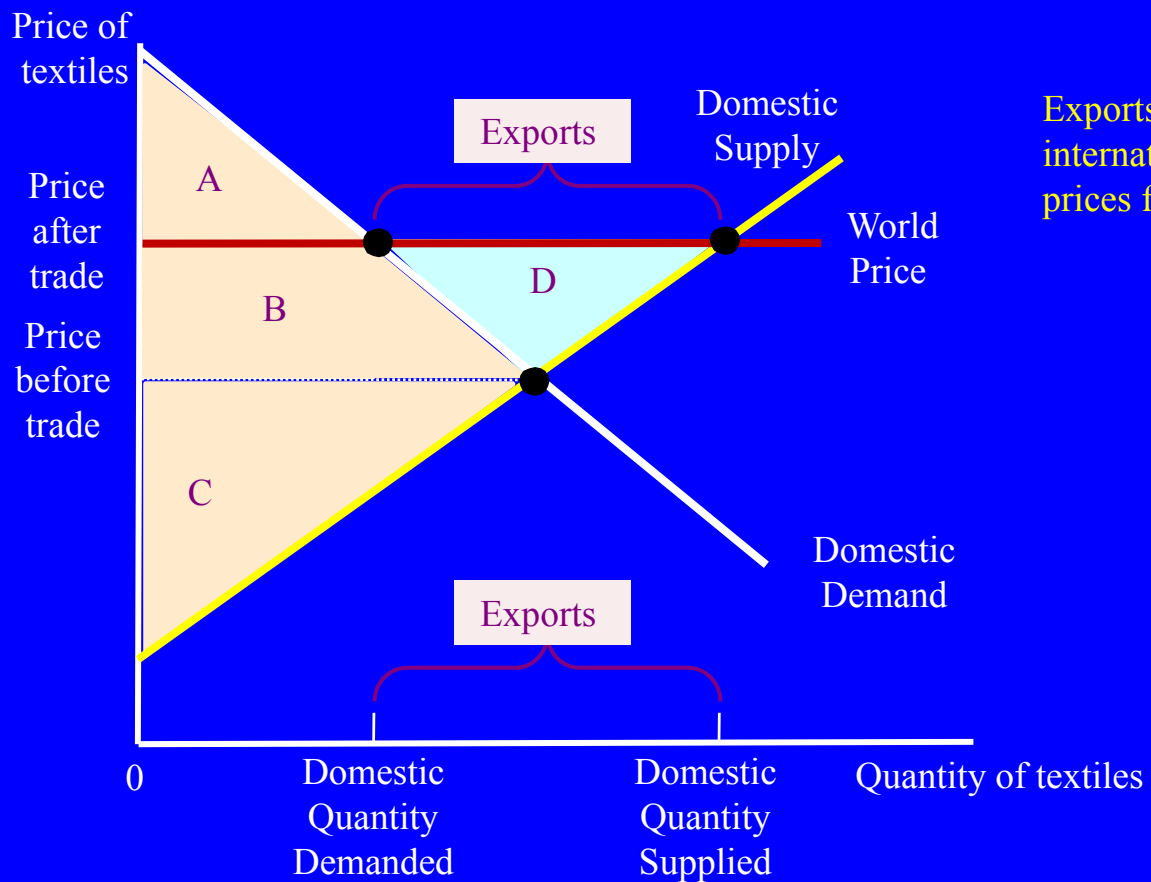α = Supply, if $P = 0$

β = change in Q_s because of one unit change in P .

Market and Equilibrium

- The intersection of supply & demand curves ($Q_d = Q_s$) shows equilibrium quantity and equilibrium price in the market

Price

10

5

Supply curve
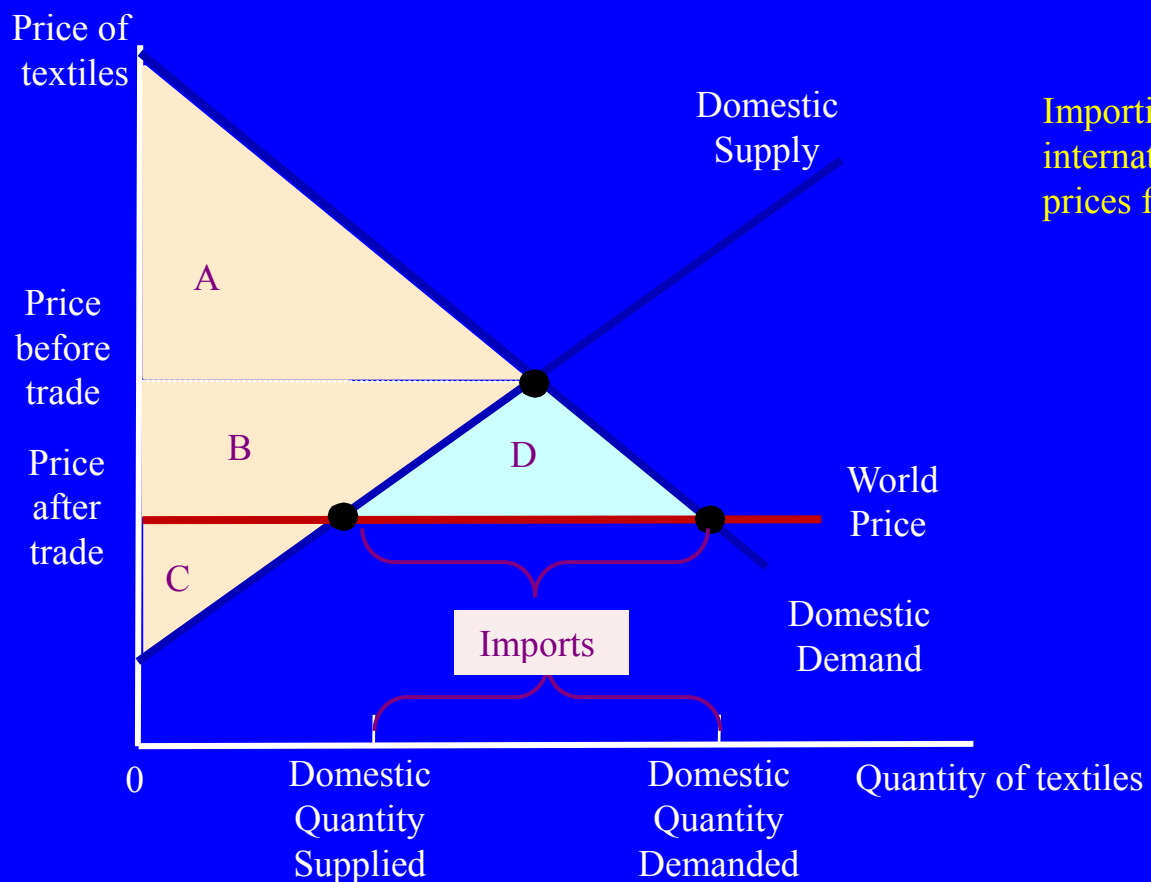
Demand curve

100   300

Quantity

International trade: Exporting from Armenia

Exports from Armenia takes place because the international prices are higher than the Armenian prices for the same goods.

Price of textiles

Price after trade

Price before trade

Domestic Supply

Exports

World Price

A

B

C

D

Domestic Demand

Exports

0

Domestic Quantity Demanded

Domestic Quantity Supplied

Quantity of textiles

	Before trade	After trade	Change
Consumer Surplus	A+B	A	-B
Producer Surplus	C	B+C+D	+(B+D)
Total Surplus	A+B+C	A+B+C+D	+D

International trade: Exporting from Armenia

Price of textiles

Price before trade

Price after trade

Domestic Supply

A

B

D

C

World Price

Imports

Domestic Demand

0

Domestic Quantity Supplied

Domestic Quantity Demanded

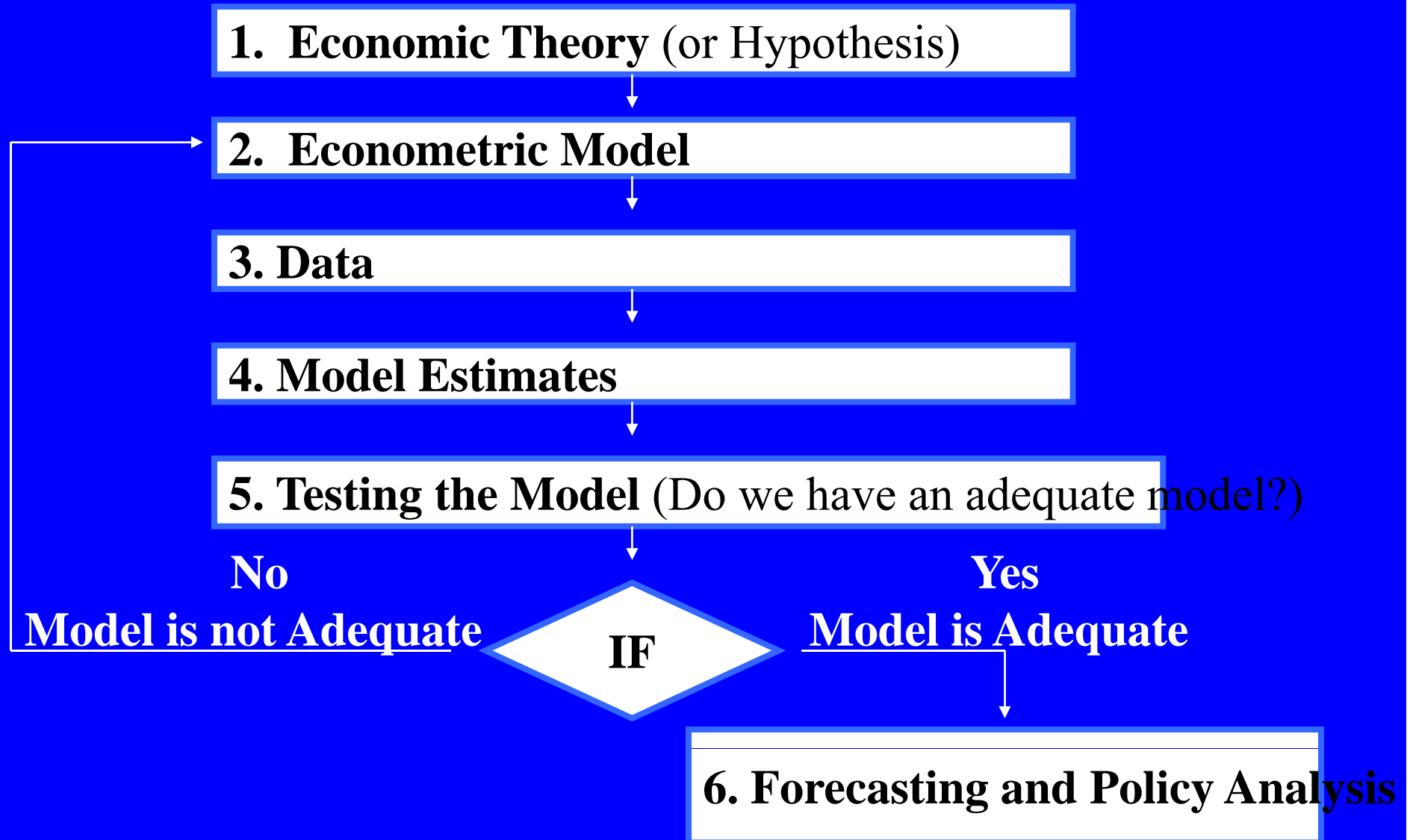Quantity of textiles

Importing to Armenia takes place because the international prices are lower than the Armenian prices for the same goods.

	Before trade	After trade	Change
Consumer Surplus	A	A+B+D	+(B+D)
Producer Surplus	B+C	C	-B
Total Surplus	A+B+C	A+B+C+D	+D

Model Building Methodology

1. **Economic Theory** (or Hypothesis)

2. **Econometric Model**

3. **Data**

4. **Model Estimates**

5. **Testing the Model** (Do we have an adequate model?)

No
Model is not Adequate

IF

Yes
Model is Adequate

6. **Forecasting and Policy Analysis**

Summary

- Economics is a science because it uses scientific method for tackling the questions.

- Economic theories, models, and data could be used to analyze the economy and make predictions.

- Two major subfields of Economics is microeconomics and macroeconomics.

- Econometricians create methods for modeling and analyzing data