Economics: Core Concepts Part I

When everybody else is better off, they can buy more, they strengthen demand, strengthen the market, strengthen the country.
-Carlos Slim Helu

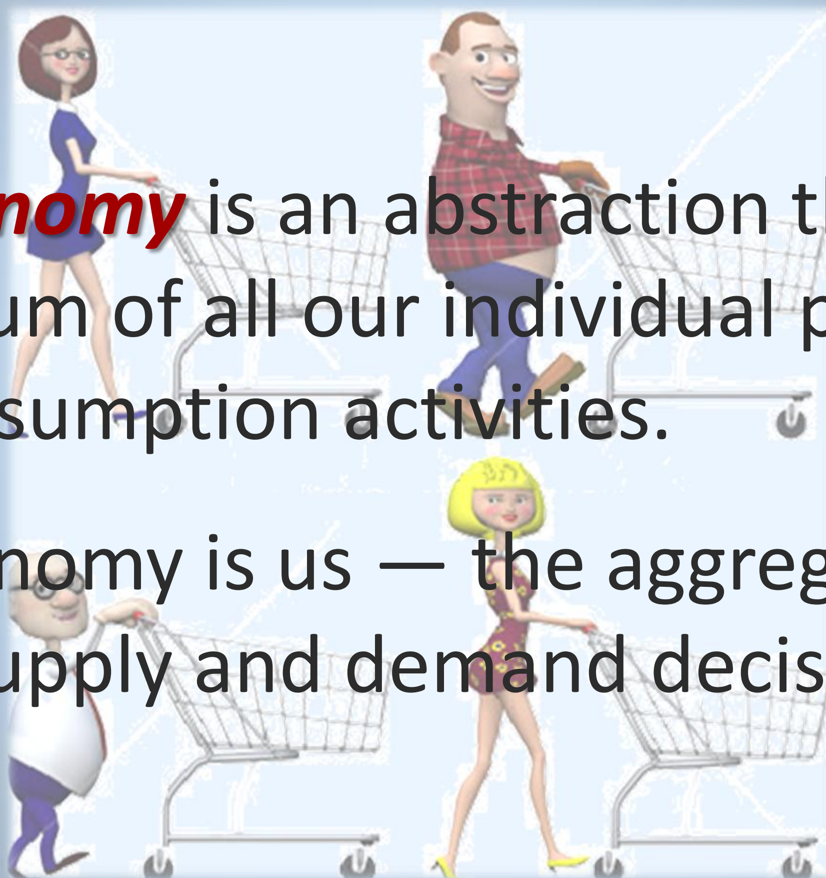
Economics

Economics is the study of how best to allocate scarce resources among competing uses.

What Economics Is All About

- The basic purpose of studying economics is understanding how economies function.
  - how they are organized
  - how they behave
  - how successfully they achieve their basic objectives

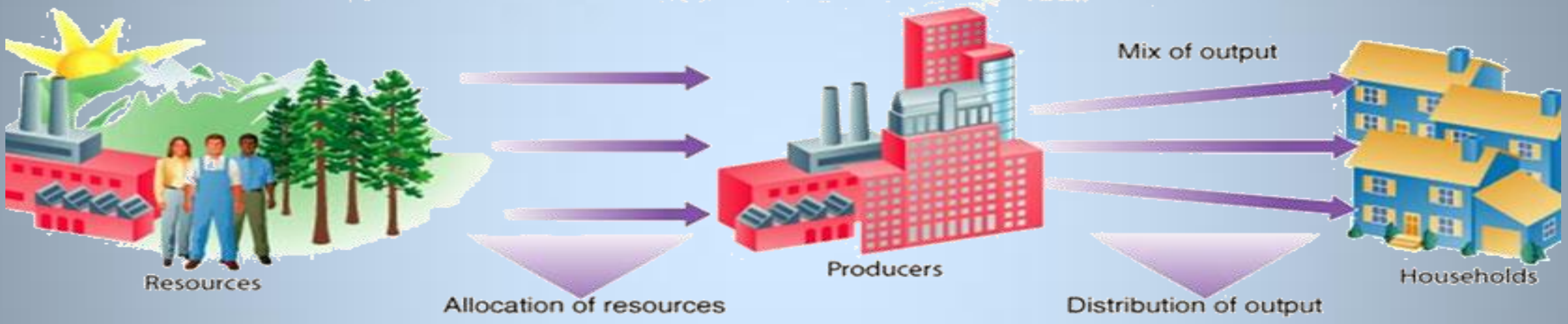
The Economy Is Us



- The ***economy*** is an abstraction that refers to the sum of all our individual production and consumption activities.
- The economy is us — the aggregation of all of our supply and demand decisions.

Macro Versus Micro

- ***Macroeconomics*** is the study of aggregate economic behavior, of the economy as a whole.



- ***Microeconomics*** is the study of individual behavior in the economy … the components of the larger economy - the individual, the business firm, a single market.

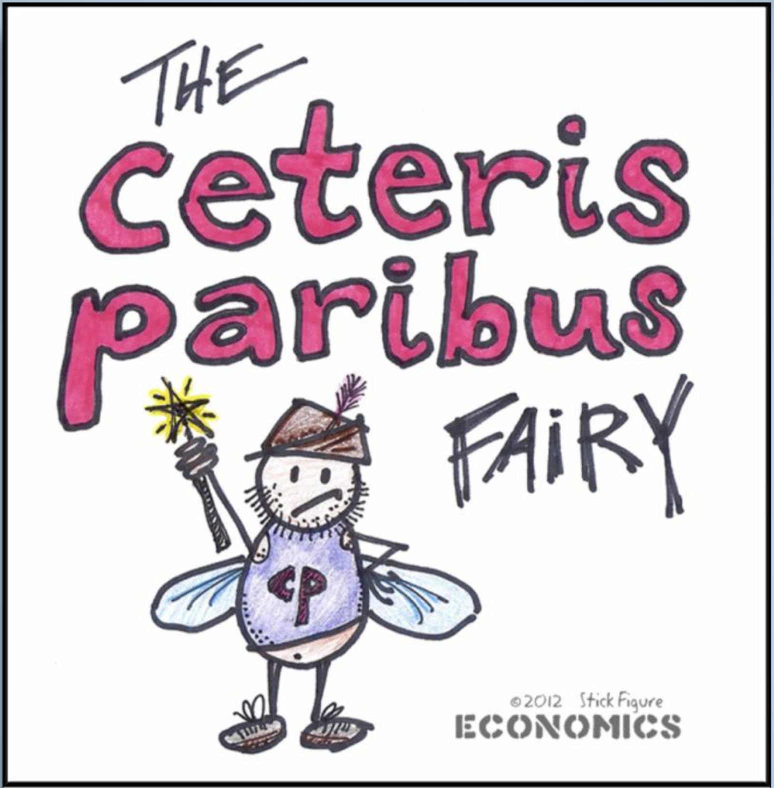
Theory Versus Reality

- The economy is much too vast and complex to describe and explain in one course (or one lifetime).
- Economists use theories, or *models*, of economic behavior to understand and predict the relationships between variables.

Theory Versus Reality

- The purpose of an economic model is to *forecast* or *predict* the results of various changes in variables.
- In these models, we typically ignore the possibility that many things can change at one time.
- ***Ceteris paribus*** is the assumption that all other things remain unchanged
    - For example, if the price of new Ford cars decreases and everything else stays the same, consumers will buy more Fords. If other variables change, we can’t make a prediction.

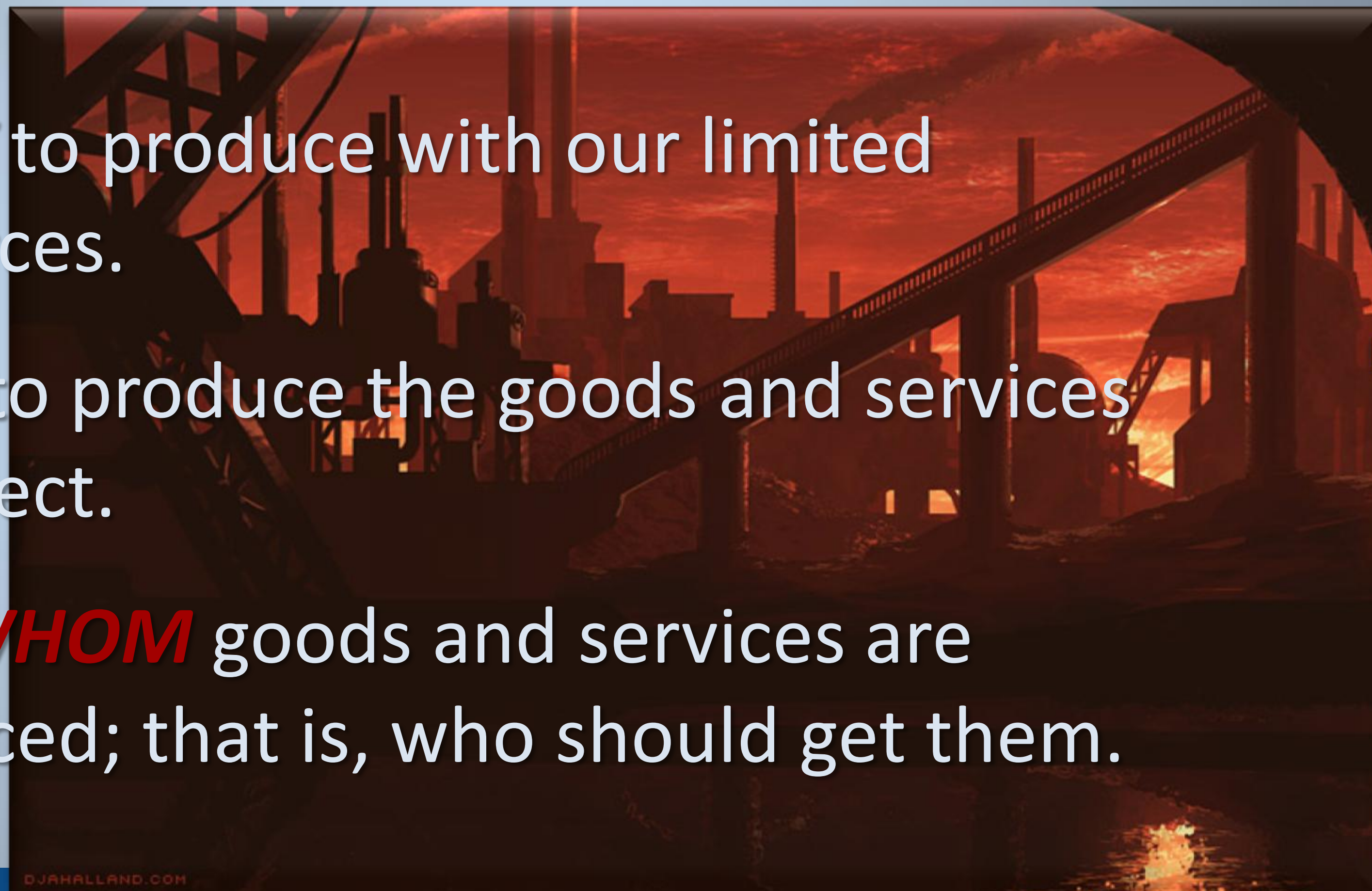
Click the illustration!



If the link above doesn't work, try

http://stickfigureeconomics.blogspot.com/2012/05/ceteris-paribus-fairy.html

Every economy makes three basic decisions.



- ***WHAT*** to produce with our limited resources.
- ***HOW*** to produce the goods and services we select.
- ***FOR WHOM*** goods and services are produced; that is, who should get them.

Economic Goals

Societies answer the three economic questions based on their values.

Economic efficiency	Making the most of resources
Economic freedom	Freedom from government intervention in the production & distribution of goods and services
Economic security & predictability	Assurance that goods & services will be available, payments will be made on time & a safety net will protect individuals in times of economic disaster
Economic equity	Fair distribution of wealth
Economic growth & innovation	Innovation leads to economic growth & economic growth leads to a higher standard of living.
Other goals	Societies pursue additional goals, such as environmental protection.

Economic Goals

- Growth – jobs, businesses, factories, markets, increase in production capacity, GDP annual growth rate of 3-4%
- Efficiency – “more for your buck,” best use of resources with least amount of costs
- Full Employment – does not mean 100%, ensures everyone who wants to work can find a job, an unemployment rate of 5%
- Price Stability – prices do not fluctuate too much and little or no inflation

Socioeconomic Goals

- Environmental Protection – preserving resources
- Economic Security – examples are welfare, subsidies, tax breaks, low interest loans … People make laws that protect them in the market.
- Economic Equity – people are given fair chances in the market
- Economic Freedom – people are allowed to have choices and preferences in the market, the power of the government and interest groups is constrained

Economic Concept #1: People are rational.

- There is a predictable element in human behavior.
- People are rational and self-interested.
- Given a choice, people will always choose what is best for them.
- That predictability is a fundamental assumption of economic analysis, known as the ***economic man assumption***.

Economic Man Assumption

- If you know that doing something will make someone better off, is that a good – not certain, but good – reason to expect him/her to do it?
- If the answer is *yes*, are you willing to generalize? To expect the same of police, judges, legislators, robbers, muggers, terrorists and victims?
- If the answer is still *yes*, then you agree with a fundamental assumption on which economic theory is built.

At the Margin

- Rational people think at the margin.
- ***Marginal changes*** are small, incremental adjustments to an existing plan of action.
- People make decisions by comparing costs and benefits at the margin.

Marginal Thinking

In economics, marginal thinking requires decision-makers to evaluate whether the benefit of one more unit of something is greater than its cost. This can be quite challenging, but understanding how to analyze decisions at the margin is essential to becoming a good economist.

Thinking at the Margin

When you decide how much more or less to do, you are thinking at the margin.

Options	Benefit	Opportunity Cost
1st hour of extra study time	Grade of C on test	1 hour of sleep
2nd hour of extra study time	Grade of B on test	2 hours of sleep
3rd hour of extra study time	Grade of B+ on test	3 hours of sleep

Economic Concept #2:
People respond to incentives.

- **Marginal changes** in costs or benefits motivate people to respond.
- The decision to choose one alternative over another occurs when that alternative's marginal benefits exceed its marginal costs.

People respond to incentives in predictable ways.

- ***Incentives*** are actions or rewards that encourage people to act in a certain way. **Incentives** can be positive or negative. When **incentives** change, people's behavior changes in predictable ways.
- If you want to change behavior, change the **incentive**.
- The decisions people make can be based on three types of **incentives**.
  - Financial – What is it worth to me?
  - Moral – Is it the right thing to do?
  - Social – Will society react badly if I do this thing?

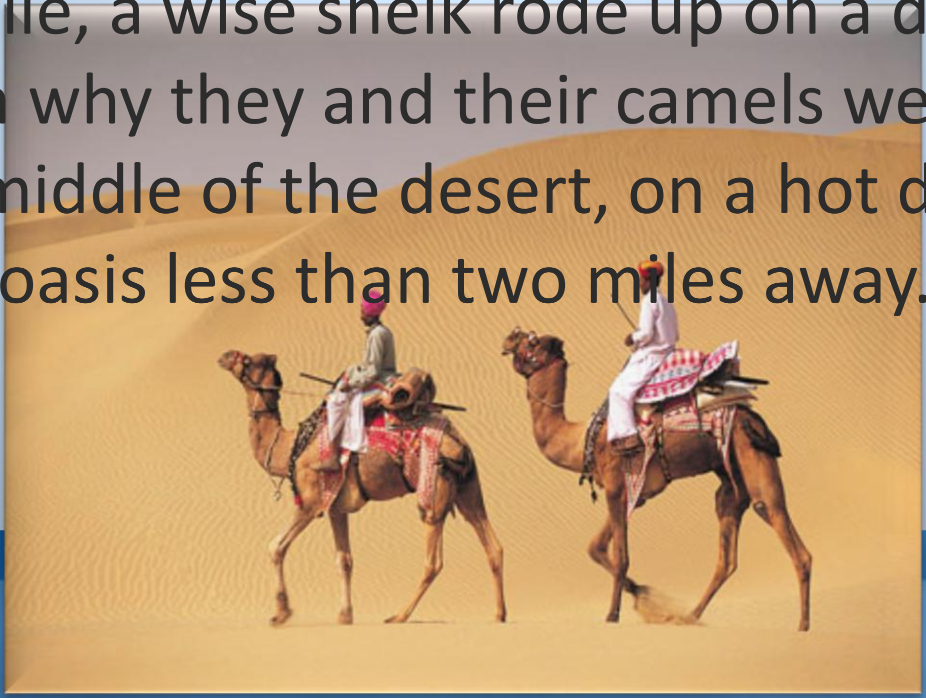
The Camel Race

Two Bedouins met in the desert and fell into an argument over their camels, each claiming that his was the slowest, most stubborn, most useless camel in the desert. The argument ended in a bet. They agreed to race to the oasis, two miles away. The camel that arrived last would be proven slowest and his owner would win ten dirham from the other.

The Camel Race continued

They got on their camels and set off slowly toward the oasis. It soon became clear that since each man was trying to win the bet, they were never going to make it to the oasis.

After a while, a wise sheik rode up on a donkey and asked them why they and their camels were standing still, in the middle of the desert, on a hot day, with the oasis less than two miles away.



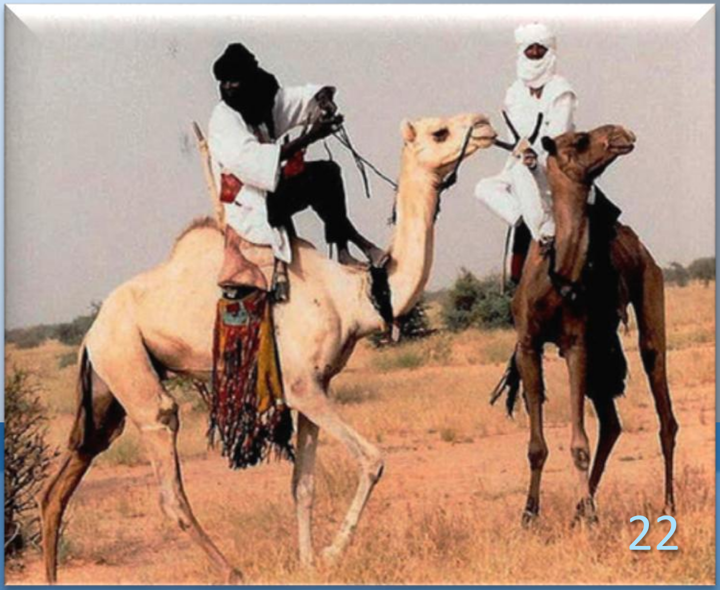
The Camel Race continued

They got off their camels and all three sat down in the shade of a rock while the two Bedouins explained about their bet. The wise sheik whispered two words to them. The men immediately jumped on the camels and rode off as fast as they could toward the oasis.

What were the two words?

SWITCH CAMELS!

People respond to **incentives** causing ***intended consequences*** and ***unintended consequences*** which can offset the intended benefits



Soviets Respond to Incentives

- Soviet geologists had a mysterious propensity for drilling many shallow oil wells rather than a few deep oil wells. Soviet geological expeditions in Kazakhstan went years without discovering a valuable oil deposit.
- Yet, surprisingly, they were considered successful. The geologists and ministers were paid handsomely for their efforts. Everyone went out and got drunk. No one cared that the whole exercise had been an extraordinary waste of time.
- Why?
  - Soviet geologists were very well-educated.
  - The deeper the hole is, the slower you have to drill.
  - Soviet geologists were paid based on the number of wells they drilled, not on whether they found oil.
- People respond to **incentives** which sometimes cause **unintended consequences** that offset the intended benefits.

The King and the Economists

Once upon a time, Tanstaafl was made king of all the lands. His first act was to call his economic advisers and tell them to write down all the economic knowledge society possessed.

After years of work, they presented their monumental effort: 25 volumes, each about 400 pages long.

But in the interim, king Tanstaafl had become a very busy man, what with running a kingdom and everything. Looking at the lengthy volumes, he told his advisers to summarize their findings in one volume.

The King and the Economists cont.

Despondently, the economists returned to their desks, wondering how they could summarize what they'd been so careful to spell out. But, after many more years of rewriting, they were finally satisfied with their one-volume effort and tried to make an appointment to see the king.

Unfortunately, affairs of state had become even more pressing than before and the king couldn't take the time to see them. Instead he sent word to them that he couldn't be bothered with a whole volume and ordered them, under the threat of death (for he had become a tyrant), to reduce their work to one sentence.

The King and the Economists cont.

The economists returned to their desks, shivering in their sandals and pondering the impossible task. Thinking about their fate if they were not successful, they decided to send out for a last meal.

Unfortunately, when they started collecting money to pay for the meal, they discovered they were broke. The disgusted delivery man took the meal back to the cook and the economists started down the path to the beheading station. As they walked, the delivery man's parting words echoed in their ears.

The King and the Economists cont.

They stopped, looked at each other and suddenly they realized the truth.

“That's it! We're saved!" they cried out. “That's economic knowledge in one sentence!”

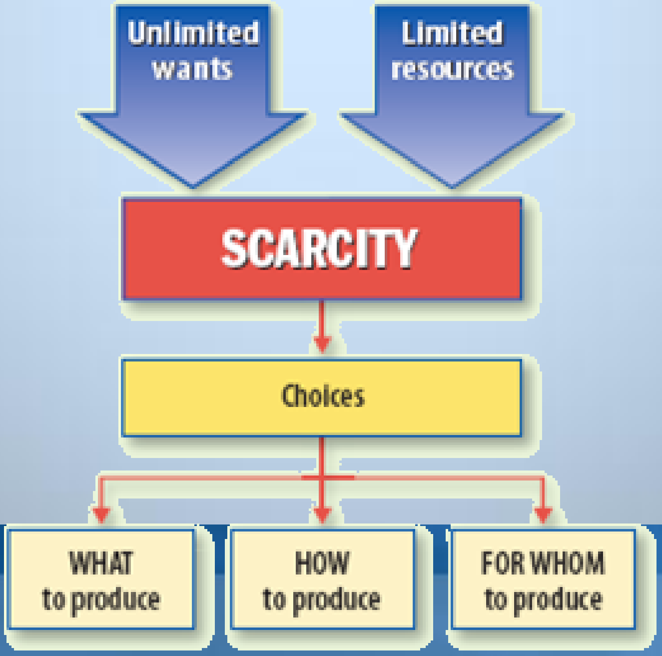
They wrote the sentence down, presenting it to the king, who thereafter fully understood all economic problems. (He also gave them a good meal.)

"There's no such thing as a free lunch." (or, Economic Concept #3)

- In a world of wants and needs and limited resources there is scarcity. This is the key to understanding economics.
- Scarcity forces us to make choices and those choices have costs.

Scarcity

Scarcity is the lack of enough resources to satisfy all desired uses of those resources.



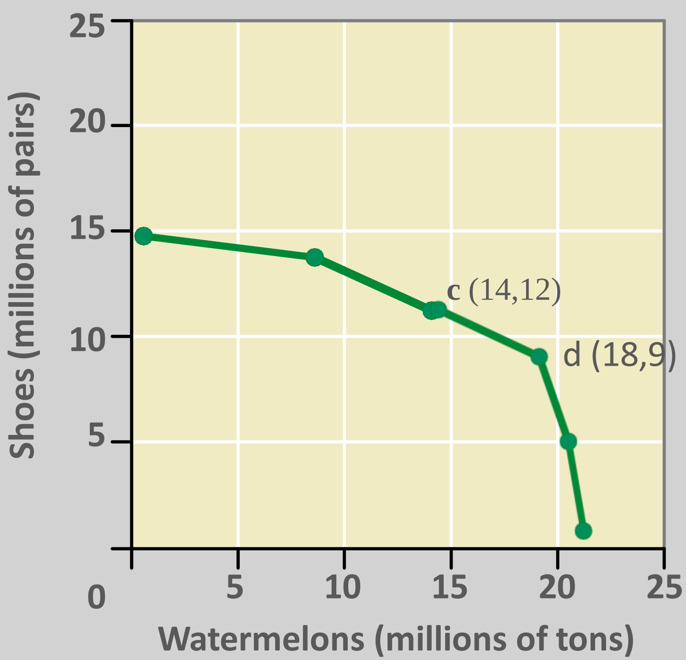
Cost

- The ***cost*** of something is what you give up to get it.
- Decisions require comparing the **costs** and benefits of the alternatives.
  - whether to go to college or to work
  - whether to study or go out on a date
  - whether to go to class or sleep in
- **Costs** don't necessarily involve money.
- "Choosing is refusing."

Cost

A **production possibilities graph** shows the **cost** of producing more of one item. To move from point c to point d on this graph has a cost of 3 million pairs of shoes.

Watermelons (millions of tons)	Shoes (millions of pairs)
0	15
8	14
14	12
18	9
20	5
21	0



Opportunity Costs

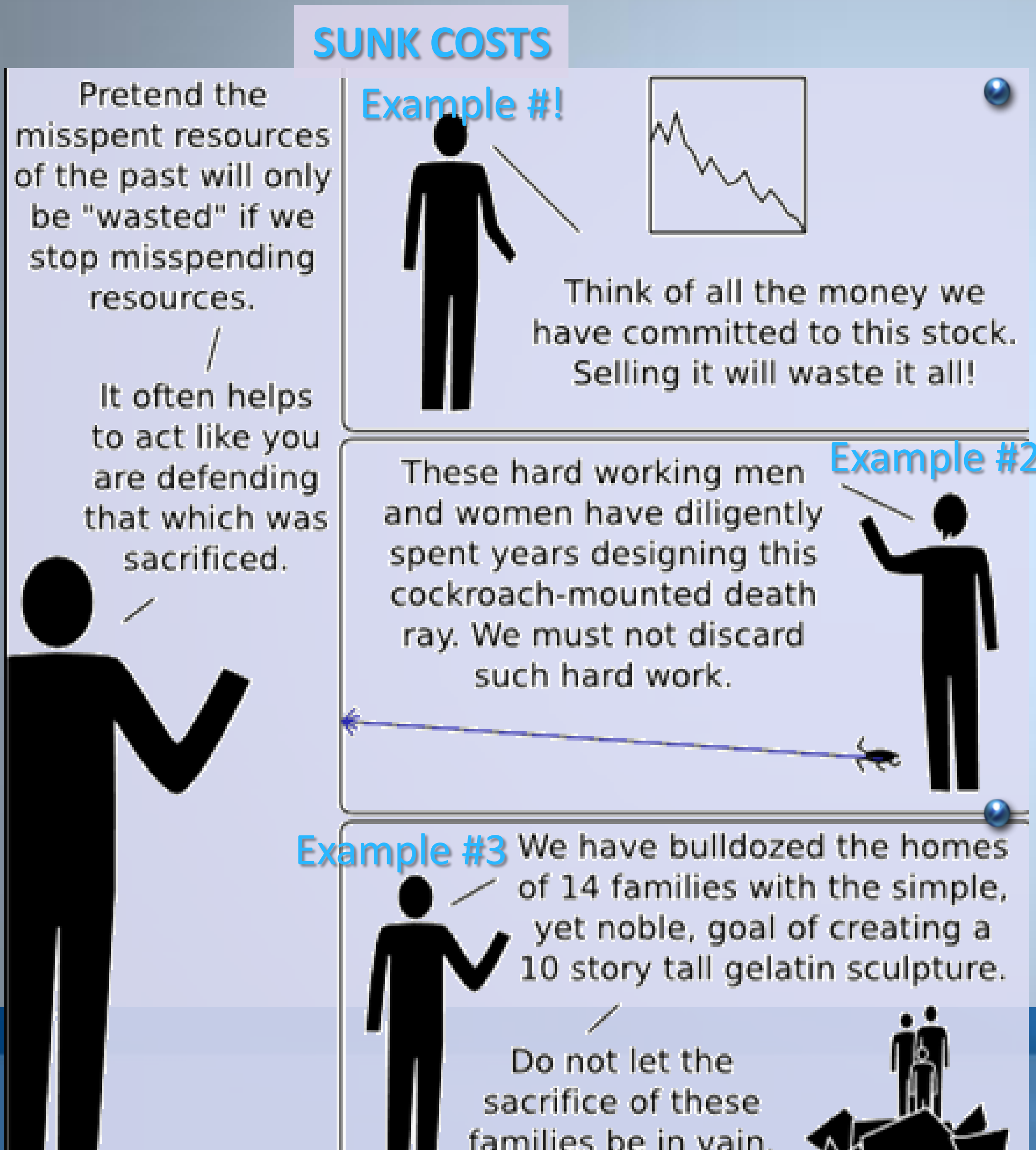
- ***Trade-offs*** are all the alternatives we give up whenever we choose one course of action over others.
- The most desirable alternative given up as a result of a decision is known as the ***opportunity cost***.
- It is what is given up in order to get something else … the next best thing.

Every Choice Involves Cost

Common Errors in Determining Cost

- Failure to ignore *irrelevant* costs
- Failure to include all *relevant* opportunity costs

Failure to Ignore Irrelevant Costs



Sunk Costs

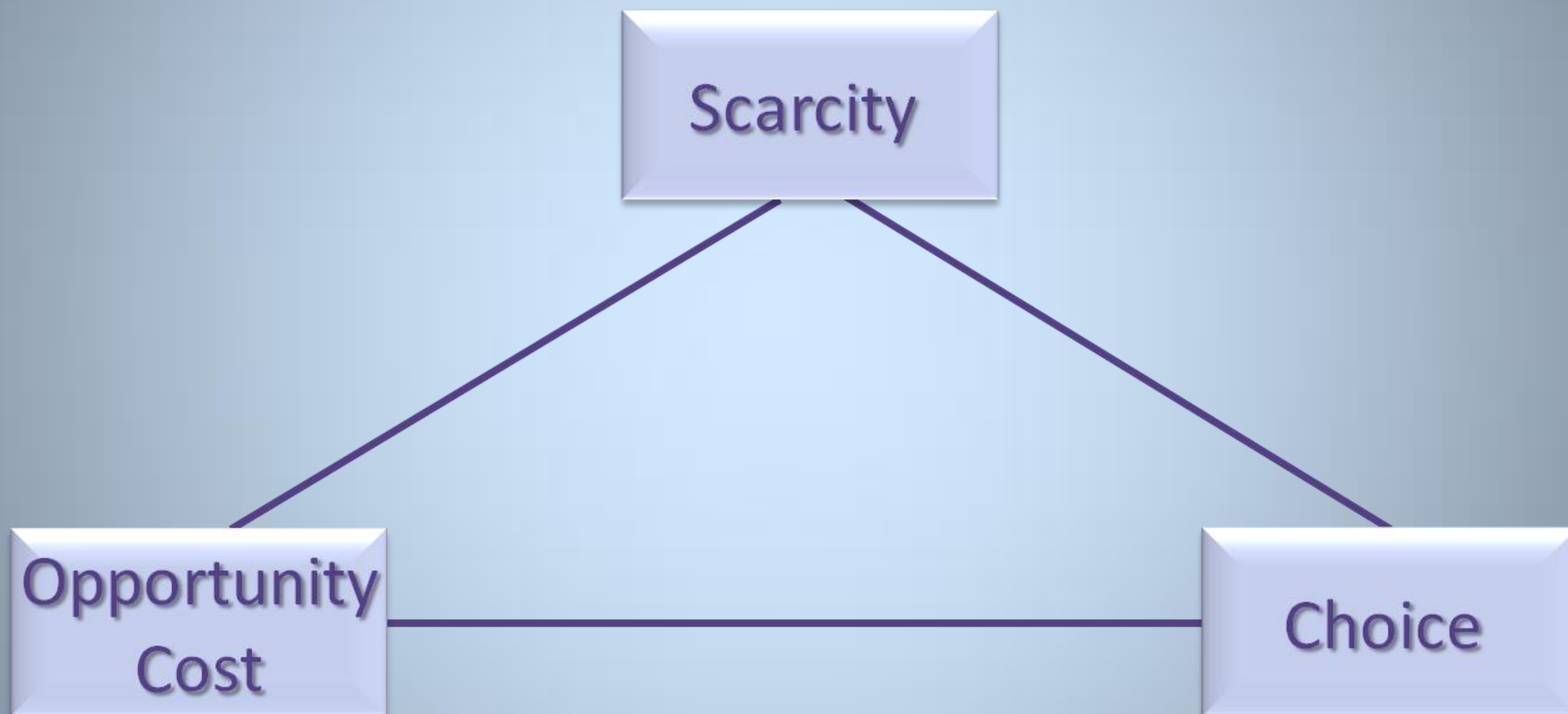
- *Sunk costs don't change* with the choice being considered. You have to pay them no matter what you choose.
- Sunk costs *should* be ignored.

Marginal costs are those costs that *do change* with choice and *should not* be ignored.

Failure to Include All Relevant Costs

- College Costs
  - ***Explicit costs*** – You write a check for tuition, fees, books, parking, etc.
  - *Implicit costs* – foregone wages (a check you didn't receive!)
- Implicit costs – foregone opportunities – We should include them when we make a decision, but we often forget them.

Remember:
The Economic Trilogy



Factors of Production

- ***Factors of production*** are the resource inputs we use to produce all goods and services.
  - ***Land*** refers to all natural resources such as crude oil, water, air and minerals. (Don't think of *land* as only referring to land.)
  - ***Labor*** refers to the skills and abilities to produce goods and services.
  - ***Capital*** includes the final goods produced for use in the production of other goods, e.g., equipment, buildings, etc.
  - ***Entrepreneurship*** is the assembling of resources to produce new or improved products and technologies.

The Factors of Popcorn Production

Land	Labor	Capital
Popping Corn	Human effort required to pop corn	Corn-Popping Device
Vegetable Oil		

Limits to Output

- No matter how an economy is organized there is a limit to how fast it can grow.
- The most evident limit is the amount of resources available for producing goods and services.
- **Scarcity** — the imbalance between our unlimited wants and our limited available resources — forces us to make economic choices.

Production Possibilities Model

- ***Production possibilities*** are the alternative combination of final goods and services that could be produced in a given period of time with all available resources and technology.
- Each point on the **production possibilities frontier curve** depicts an alternative mix of output.

Continued in *Economics: Core Concepts Part II*