

Essential Components for an Eleven Week One-Semester Economics Class

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Areas of Study

Foundations
Micro
Macro
Global
Personal Finance

The Basics of Any Economic Course

1. Family Tree of Economics- The Foundations
2. 6 Core Economic Principles
3. Economics- The Science of Decision-making
- PACE model
4. Dissecting a market (Demand & Supply)
- Demand
- Supply
- The Price System and Markets
- Derived Demand
- Market distortions
- Price Elasticity
5. Circular Flow of Economic Activity

The Future Considerations

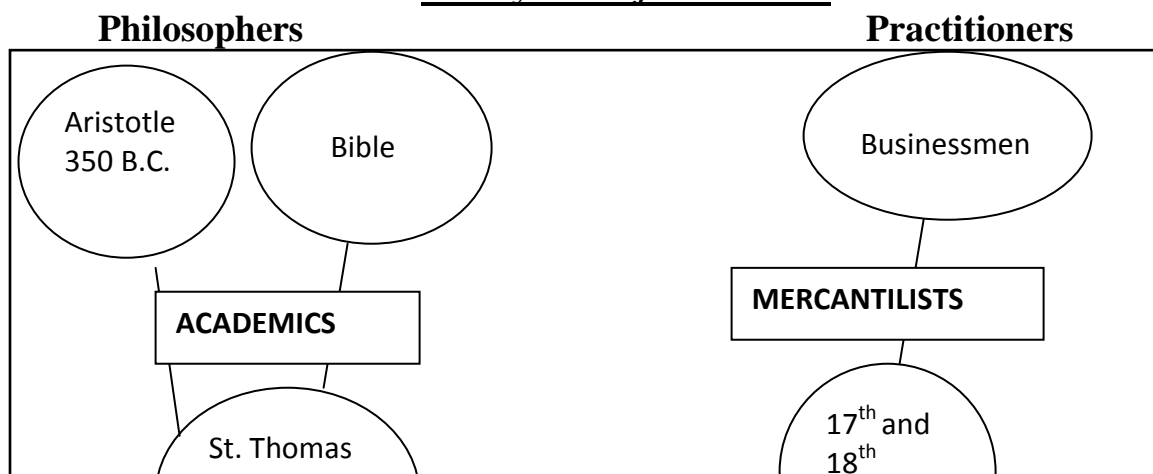
Common Core State Standards Initiative
Partnership for 21st Century Skills
Michigan Course Content Expectations
National Assessment for Educational Performance (NAEP)

ECONOMIC CONCEPTS for an 11 Week Economics Course

(from the Michigan Social Studies Content Expectations for High School)

- 1.1.1 Scarcity, Choice, or Opportunity Cost
- 1.2.2 Analyze how prices are signals provide signals to buyers and sellers in a competitive market
- 1.3.1 Law of Supply
- 1.3.2 Law of Demand
- 1.3.3 Price, Equilibrium, or Elasticity
- 1.4.4 Explain functions of government in a market economy including providing public goods, services, creation of currency, establish property rights, the enforcement of contracts, correcting externalities, or market failures.
- 2.1.2 Circular flow and national economy
- 2.1.3 Money supply, Inflation, or Recession
- 2.1.7 Economic Indicators
- 2.2.1 Federal Government and Macroeconomic goals-Stable prices, low unemployment, economic growth
- 2.2.3 Fiscal policy
- 2.2.4 Federal Reserve or Monetary Policy
- 3.1.1 Major Economic Systems, Command, Market, Traditional, Mixed
- 3.2.1 Absolute or Comparative Advantage
- 3.2.2 Trade Organizations or Trade Agreements
- 3.2.3 Exchange Rates
- 4.1.2 Marginal Benefit and Cost

Family Tree of Economics



The 6 Core Economic Principles



1 People Choose

We always **want** more than we can get and **productive resources** (**human, natural, capital**) are always limited. Therefore, because of this major economic problem of **scarcity**, we usually choose the alternative that provides the most **benefits** with the least **cost**.



2 All Choices Involve Costs

The **opportunity cost** is the next best alternative you give up when you make a **choice**. When we choose one thing, we refuse something else at the same time.



3 People Respond to Incentives in Predictable Ways

Incentives are actions, awards, or rewards that determine the **choices** people make. Incentives can be **positive** or **negative**. When incentives change, people change their behaviors in predictable ways.



4 Economic Systems Influence Individual Choices and Incentives

People cooperate and govern their actions through both written and unwritten **rules** that determine methods of **allocating** scarce **resources**. These **rules** determine **what** is produced, **how** it is produced, and **for whom** it is produced. As the rules change, so do individual **choices**, **incentives**, and behavior.



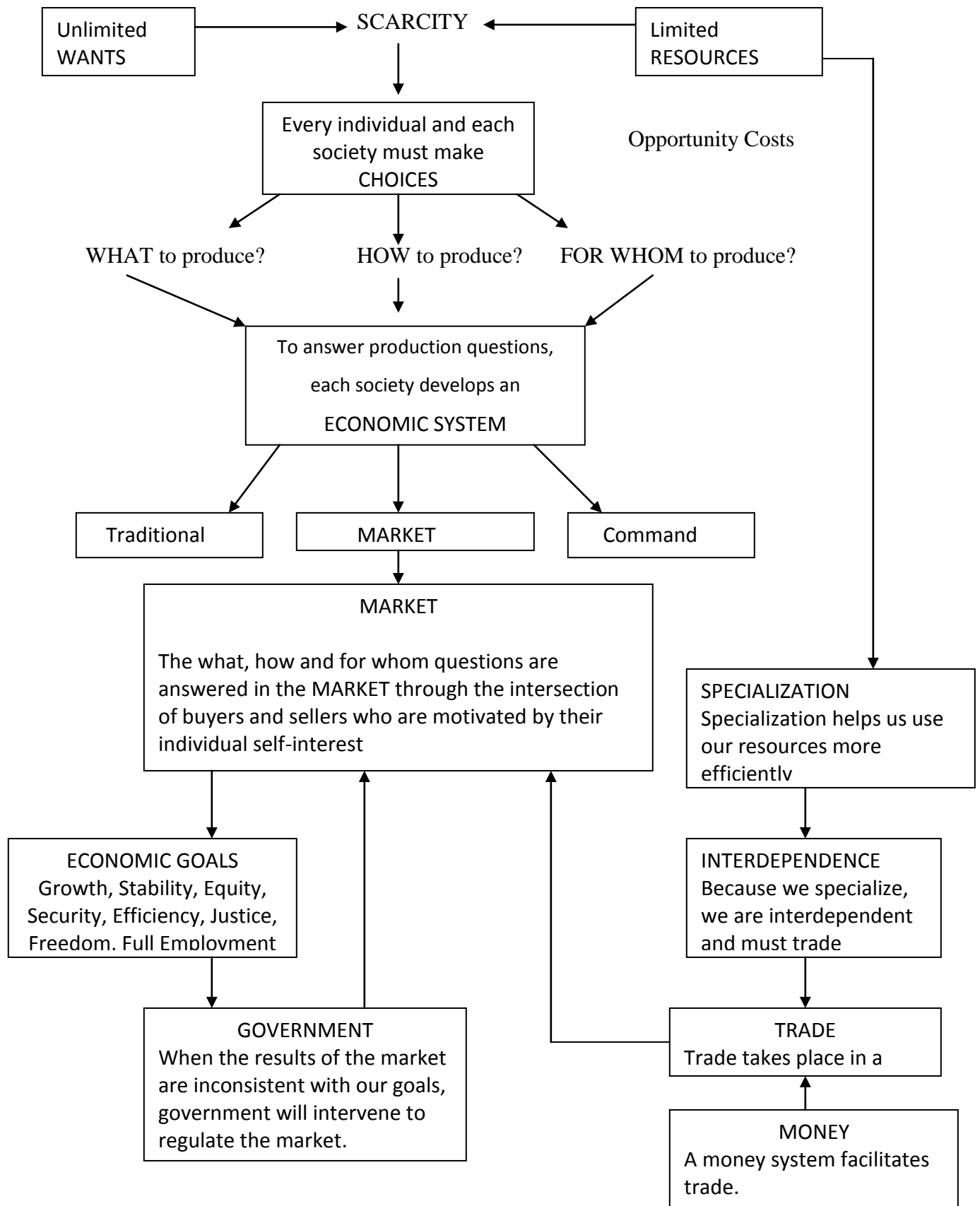
5 Voluntary Trade Creates Wealth

People **specialize** in the **production** of certain **goods** and **services** because they expect to gain from it. People **trade** what they produce with other people when they think they can gain something from the **exchange**. Some **benefits** of voluntary **trade** include higher **standards of living** and broader choices of **goods** and **services**.



6 The Consequences of Choices Lie in the Future

Economists believe that the **costs** and **benefits** of **decision making** appear in the future, since it is only the future that we can influence. Sometimes our choices can lead to **unintended consequences**.



PACED Decision Making Model

Decision-making's goal is the desire to make good choices with low opportunity costs at every level of our life. **The goal of every decision-making activity is essentially the same regardless of who (or what) is deciding. The decision making process applies to individuals, communities, schools, families, state and national governments and international; in our economic, social, and political aspects of life.**

Regardless of "who is" making the decision, or the magnitude of the decision, every decision is made within the context of a model or process. The following is a basic five-step decision making process, each step addressed with each choice, major or minor, we make.

5 STEP "PACED" DECISION MAKING MODEL

1. Define the Problem

It's hard to solve a problem if one doesn't know the problem. The first, and arguably the most important, step is to accurately and clearly define precisely the problem to be solved.

2. Identify all the Alternatives to solving the problem

Once the problem has been accurately defined, one must ask what ALL the alternatives are that could solve the problem. It is important to remember here to not make any value judgments, or dismiss any alternatives at this juncture just because they don't sound like "answers" at the time. Identify them all! And remember, "DO NOTHING" is always an alternative.

3. List the important Criteria or Goals

Next, it is necessary to determine WHAT is important to the outcome. It may be time, location, fairness, price, cost measured by time, or any number of other criteria that each alternative should be measured.

4. Evaluate each alternative as to its ability to achieve the criteria

Now its time to measure each alternative against each of the criteria. This process can be as simple as a "/" where applicable, to a complex quantitative measuring scale.

5. Make the Decision

When each of the previous four steps has been carefully implemented, you are ready to make a decision based on reasoning and judgment, not emotion or social pressure.

How many times have you heard someone ask, “Have we looked at all the options?” Or, “Is that really important to our problem?” In each case, the person asking the question is really asking, “Have we covered each step in the decision making process?”

I once had a senior economist of a global company once tell me that if one stripped away all the titles, fancy furniture and board rooms, and thousand page studies, the main responsibility of his position was to make sure before the Board of Directors made any decision that would impact the company they were comfortable they had thoroughly addressed each of the five steps of the decision making process. The impact of their decisions couldn’t be left to chance or emotion, miss studying an alternative, or not consider what was truly important to answering the problem. Neither should we.

So, you see, it doesn’t matter the size of the problem. The five-step decision making model is valid for you, me, and leaders of all shapes, sizes, and responsibilities.

The PACED Decision-making Grid¹

Using this grid can enhance the efforts of this five-step approach:

	GOALS OR CRITERIA			
	Goal or Criterion 1	Goal or Criterion 2	Goal or Criterion 3	Goal or Criterion 4
ALTERNATIVES				
Alternative 1				
Alternative 2				
Alternative 3				

¹ Source: A Framework For Teaching Basic Economic Concepts. National Council on Economic Education, 2000.

How Markets Work- Demand, Supply, Elasticity

THE LAW OF DEMAND

- Demand Schedule

–A schedule showing how much of a good or service people will purchase at any price during a specified time period, other things being constant

- Law of Demand

–Quantity demanded is inversely related to price, holding other factors constant.

Determinants of Demand

- Taste and Preference

- Income

–Inferior Goods

–Normal Goods

- Number of Consumers

- Price of Related Goods

–Substitutes

–Compliments

- Price Expectations

Normal and Inferior Goods

- Normal Goods

–Goods for which demand rises as income rises, most goods are normal goods

- Inferior Goods

–Goods for which demand falls as income rises

Shifts in Demand

The Determinants of Demand Income: Normal Good

Decrease in income decreases demand

Increase in income increases demand

Shifts in Demand

THE LAW OF SUPPLY

- Supply Schedule

–Schedule showing relationship between price and quantity supplied for a specified time period, other things being equal

- Law of Supply

–The amount of a product or service that firms are willing to sell at alternative prices

–The price of a product or service and the quantity supplied are directly related.

Determinants of Supply

- Number of Suppliers

- Resource Prices

- Price Expectations

- Anticipated Level of Demand

- Number of consumers Number of suppliers

- Changes in tastes/preferences

- Resource prices
- Price expectations
- Prices of related products
- Demand projections
- Price expectations
- Income

THE PRICE SYSTEM AND MARKETS

Markets –Emphasize voluntary exchange

- Determine the terms of exchange
- Facilitate exchange

Voluntary Exchange acts of trading between individuals that make both parties to the trade subjectively better off

Terms of Exchange are the prices we pay for the desired items

- Transaction Costs
 - The costs associated with exchange
 - Examples
 - Price shopping
 - Determining quality
 - Determining reliability
 - Service availability
 - Cost of contracting

Putting Demand and Supply Together

- Equilibrium (Market Clearing) Price
 - The price that clears the market
 - The price at which quantity demanded equals quantity supplied
 - The price where the demand curve intersects the supply curve

Simultaneous Changes in Supply and Demand

When both demand and supply increase or both decrease

- Change in price (P) is indeterminate
- Quantity (Q) will increase or decrease with the direction of supply and demand

When supply and demand go in opposite directions Price (P) will follow demand (D) Change in Quantity (Q) is indeterminate

DERIVED DEMAND

- The demand for a resource is dependent upon (derived from) the demand for the goods / services the resource produces.

MARKET DISTORTIONS

- Price Floors
- Price Ceilings

Price Discrimination

The Policies of Government Imposed Price Controls

- Price Controls
 - Government-mandated minimum or maximum prices
- Price Ceiling
 - A legal maximum price
- Price Floor
 - A legal minimum price

The Policy of Controlling Rents; a Price Ceiling

Rent controls and construction controls discourage construction

- With a 16% vacancy rate and no controls, Dallas recently built 11,000 new rental units.
- With a 1.6% vacancy rate and controls, San Francisco recently built 2,000 new rental units.

The Policy of Price Subsidies in Agriculture; a Price Floor

Price supports are governmentally established price floors associated with agricultural products

Minimum Wage in the Labor Market; a Price Floor

A wage floor, legislated by government, setting the lowest hourly wage rate that firms may legally pay their workers

Coping with a Growing Global Demand for Fresh Water

- Today, about 2.5 billion people have safe drinking water; nearly 4 billion do not, resulting in 2 million deaths annually.
- Price controls make a scarce resource, such as water, harder to obtain.
- What rationing method do you think can best ensure greater access to safe drinking water?

ELASTICITY

PRICE

How purchases change as prices change

INCOME

How purchases change as income changes

CROSS

How purchases change as prices of related goods change

What makes demand more ELASTIC?

- The more substitutes for a product, the higher the price elasticity of demand.
- The greater the percentage of the consumer's total budget, the higher the price elasticity of demand.
- The longer the time period under consideration, the higher the price elasticity of demand. Everything's elastic in the long run!

PRICE ELASTICITY

Coefficient of price elasticity

$\% \text{ change in Quantity demanded} / \% \text{ change in Price}$

Coefficient >1 = Elastic

Coefficient $=1$ = Unitary elastic

Coefficient < 1 = Inelastic

INCOME ELASTICITY

Change in Q_d for a Product Category based on change in income

Normal Good

Inferior Good

CROSS ELASTICITY OF DEMAND

Change in P of product (a) impact on the change in Q_d of product (b)

Substitutes

Complements

Why Have Gasoline Prices Increased?

- One factor—an increase in demand, shown by a rightward shift in the demand curve
- Another factor—a reduction in supply, shown by a leftward shift in the supply curve
- As a result, the market clearing price of gasoline increased.

Theory of the Firm: Market Structures

	Perfect Competition	Monopolistic	Oligopoly Competition	Monopoly
# of Sellers	many	many	few	one
Barriers to entry	none	few	significant	total
Product differentiation	perfect substitution (homogeneous)	some	significant substitutes	no close
Buyer and seller access to information	full	full	some	very little
Market control (personality of firm)	dependence	independence	interdependence	absolute control

In the Know with the Flow
(The Circular Flow of Economic Activity)²
By-
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Introduction

Macroeconomics is the world of the “big picture”. It is the world of global leaders, our nation’s public policy makers, and the Federal Reserve. It is the world where all things economic come together. Multiple, simultaneous economic actions and interactions make the Circular Flow of Economic Activity a beautiful piece of economic art. The Circular Flow of Economic Activity is the mosaic of macroeconomics.

The Circular Flow reveals through its illustration how money, goods and services, scarce resources, exports, imports, loans and interest move from one sector to the other including households (individuals), businesses (entrepreneurs), government, financial institutions, and companies in foreign countries. From it, most of life’s macro-market mysteries can be explained.

The Circular Flow of Economic Activity works very much like a board game. As a game has a game board and players, the circular flow has four main **fields of play** (Markets); the “Product Market” where Goods and Services are bought and sold; the “Resources Market” where natural resources, human resources, and capital resources are bought and sold; “Financial Markets” where money flows and is managed; and “Foreign Markets” consisting of the exports and imports of goods and services between countries. The **players** include households (individuals), businesses (including entrepreneurs), government, financial institutions, and foreign companies.

To envision the circular flow, let’s use one more analogy. The circular flow is like a stereo system (in today’s world of iPods and MP3s stereos are quickly becoming museum relics). In a stereo system, the two basic components are a tuner and speakers; the non- negotiables.

Without those two entities we have no reception, no sound, no stereo. Later, we can add a DVD, CD player, additional speakers, etc., etc., etc. Developing the circular flow model begins with the same process, a few non-negotiables. Identifying and defining them is a good place to start—so let's start.

Money vs. Barter

Think of an item you collect. For me, it was baseball cards. There were two ways for me to add to my collection; purchase the baseball cards at the store or trade with another collector. Purchasing took money. Trading took another collector having the exact item I wanted, and them having the exact item I wanted. Then and only then were both of us willing to trade. Which process was easier, purchasing or trade? Which process was more efficient, purchasing or trade?

If your trading experiences are like mine, it is much easier to go to the store and purchase the new collectible item. The other collector always seemed to want the card I was not willing to give up! Or, they weren't willing to give up the card I wanted at my "fair" trade price. It was easier, and more efficient, to go the store and buy a new pack of baseball cards.

Money made my accumulating baseball cards a much easier and efficient proposition. In a similar way, money makes our economic system function in more efficiently. Money, representing the value of our productive resources, allows us to pursue our economic wants (goods and services) in the product market easier and more efficiently than barter (trade). The use of money in our circular flow (economic system) gives an economy the additional ability to grow.

Without money, we would be left to barter for our economic wants. Like trading for baseball cards, barter would be our only outlet to increase goods and services. Acquiring baseball cards was totally dependent on the "needs" of another trader. Likewise, without money, the accumulation of goods and services becomes dependent of the "needs" of others in the

Product Market. The result is an economic system lacking in both efficiency and growth potential. Without money as a medium of exchange, our circular flow is not a “flow”.

PRODUCT MARKET and Goods & Services

Economic Wants are defined as the “Goods and Services” of a Product Market.

Entrepreneurs and businesses (Producers) produce and provide the Product Market literally thousands of goods and services. It is up to the households and individuals (Consumers) to determine whether each good and/or service in the Product Market has value for them. Through this Producer and Consumer interaction in the Product Market, it is determined what goods and services are produced and succeed, and which ones fail and don’t stay in the Product Market. Entrepreneurs succeed or fail on their ability and talent to “judge” consumer action in the Product Market.

In the Product Market the Consumer and Producer each have a different objective. For the consumer, the objective is obtaining the goods and services they are willing and able to consume. The goal of the producer is to get a return on their production efforts of goods and services.

RESOURCE MARKET and Productive Resources

Natural, human, and capital resources are the resources used to produce all the goods and services by businesses that find their way to the Product Market. Businesses buy them from Households in the Resource Market.

Natural Resources are the productive resources that come from land, air, or water. Human Resources are those productive resources which involve the skills, talents, and education, in any human element used to produce goods or services. That includes entrepreneurship whose talent is the creation of the idea and willingness to enter the good or service in the market, the skilled laborer and manager who brought the good or service to market. Capital Resources are the buildings, machines, pens, paper, and pencils needed to produce the good or service.

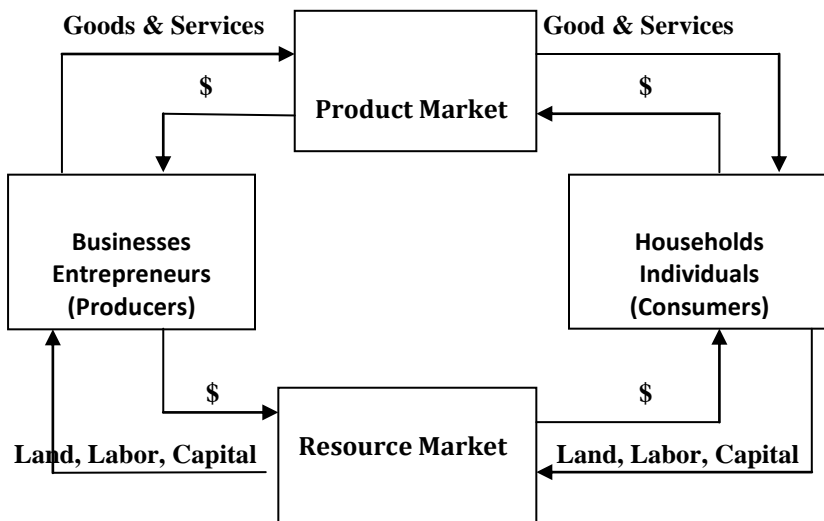
As you will see these three sets of resources are for sale in the Resource Market. Every good and service on the face of this good earth comes from one of these three resources, or a combination of them. Let me repeat that one more time: Every good and service comes from one of these resources, or a combination of them. If you ever discover a good or service that does not- CALL ME FIRST! Businesses need these resources to produce goods and services for the product market. However, in a private property market economy, businesses do not own them- they buy them! In modern economies, they buy them in the form of wages, profits, and rents.

As you will see, every Circular Flow Level has several playing fields (markets). These are non-negotiables of the circular flow. The players can not compete unless they have a field to play. In an fully developed economy, the key economic activities occur in four fields (markets); the Product Market, Resource Market, Financial Market, and Foreign Market. In every economy, there are always at least two players; households (consumers) and entrepreneurs and/or businesses (producers).

The Circular Flow of Economic Activity- Let the Game Begin!

CIRCULAR FLOW- LEVEL 1

Level 1 is the level of non-negotiables. Every market and component of Level 1 is essential for an economy to function. As discussed earlier, one may argue money (\$) is not essential, it provides potential for improved efficiency and growth potential of any economy.

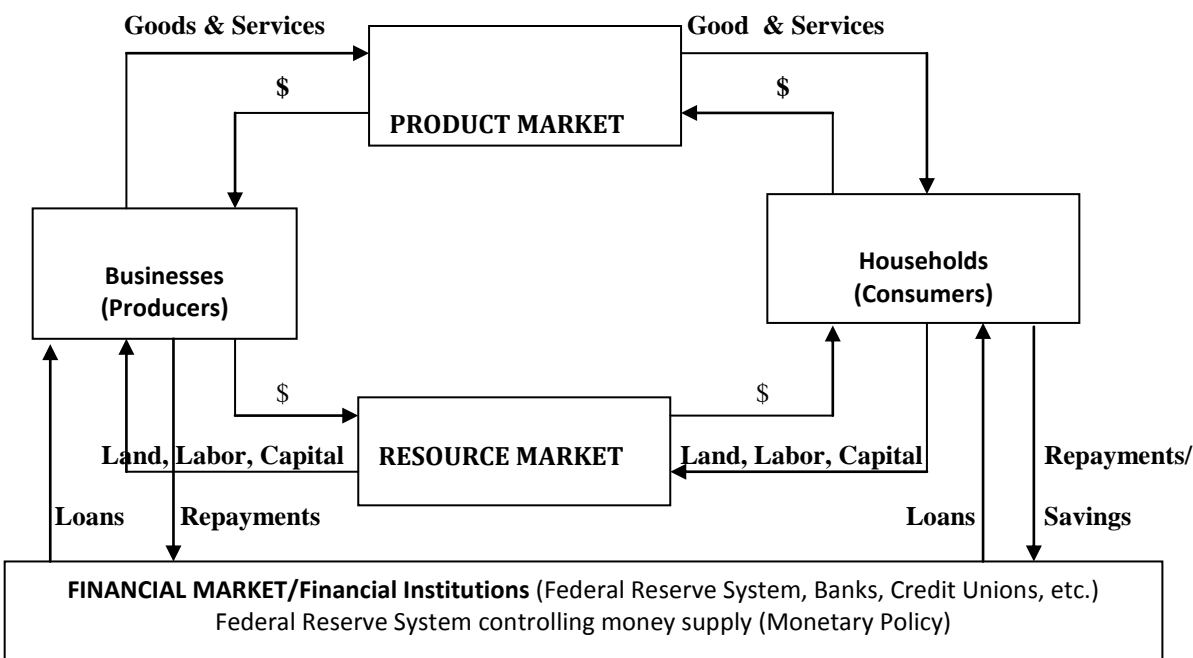


CIRCULAR FLOW- LEVEL 2 ADD FINANCIAL MARKET and Financial institutions

(Federal Reserve System, Banks, Credit Unions, etc.)

The first market to add is the FINANCIAL MARKET. The Financial Market's "product" is the supply of money in the circular flow. The first of the additional "players" to be added are financial institutions. Financial institutions, through the Financial Market, make loans to businesses and households for everything from homes and cars, new machinery and equipment, to a college education. In return, the businesses and households repay the borrowed money with interest. Likewise, when businesses and households "loan" their money to financial institutions through deposits, they are rewarded by receiving interest on their deposited money.

Through loans, financial institutions redistribute money into the circular flow. This is accomplished through loans to both households and businesses. Loans are made to businesses for buying new capital equipment such as lathes and drills, for purchasing real estate, and other expansion and start up functions. In return, banking institutions receive repayments in the form of interest from the households and businesses it loans money. That's their incentive to be in business. The net result is an increase in goods and services (economic growth).



(entitlements, public goods, contracts)

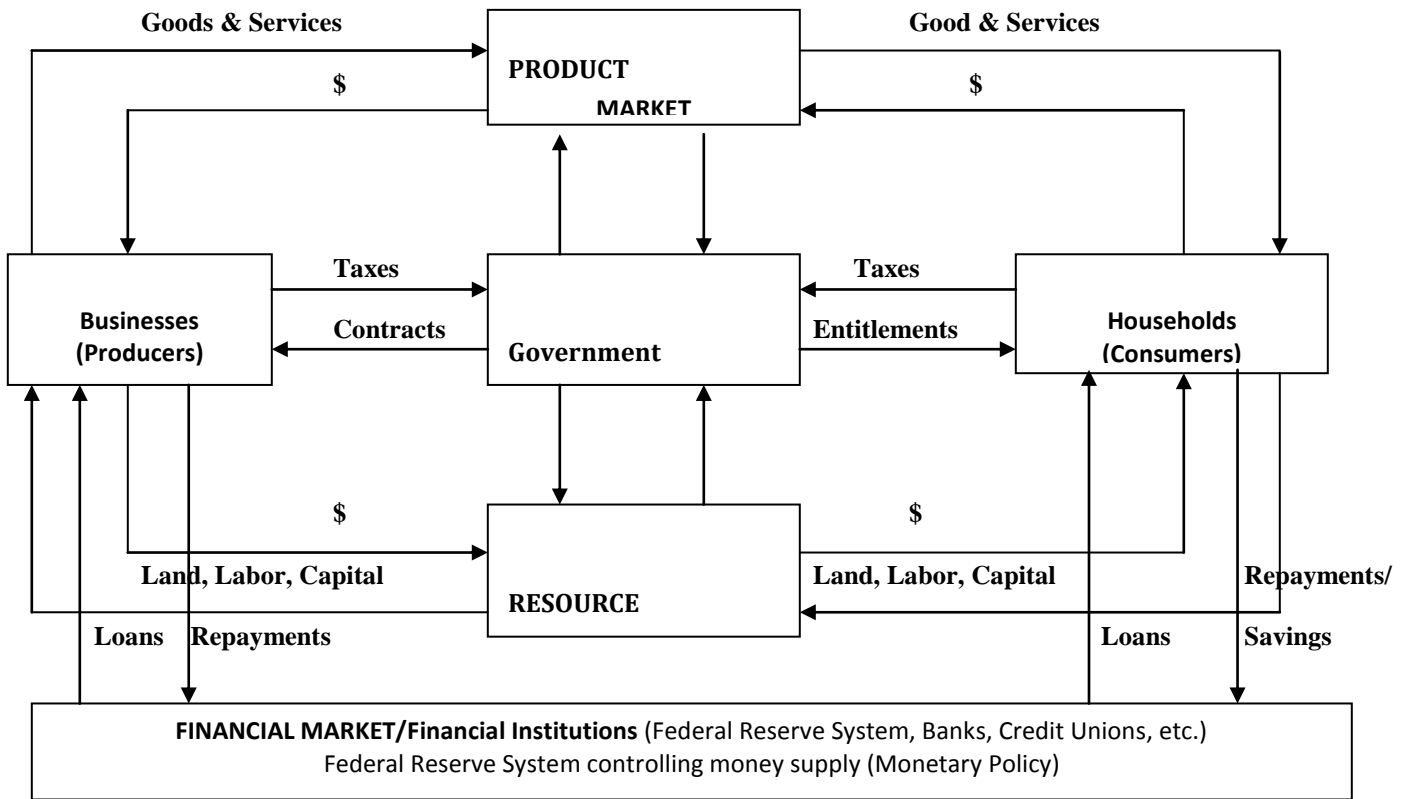
Another player is Government. Government interacts with the other players more than being a player itself. It is a player in the Resource Market using human and capital resources. It participates through contracts, loans, and subsidies to private businesses to provide goods and services. To households, government provides entitlements and loans to increase their participation in the Product Market. Government at all levels (local, state, and national) is also a major participant directly in the Product Market as a purchaser of goods and services such as pens, paper, computers, et.al. to conduct its operations.

“Entitlements” and “public goods” highlight government’s role in the economy. “Entitlements” are those payments from government to Households such as unemployment payments, housing subsidies for low income, food stamps, Medicare, Medicaid, and Social Security to name a few examples.

“Public goods” are those goods society has deemed necessary for all citizens, not just those who are willing and able to pay for them. Examples of “Public Goods” would include fire and police protection, national military, public education (K-12 and higher education), roads and highways (unless you live in Chicago, then you pay your tolls!), and parks. Some goods deemed public can also be provided as private goods such as higher education.

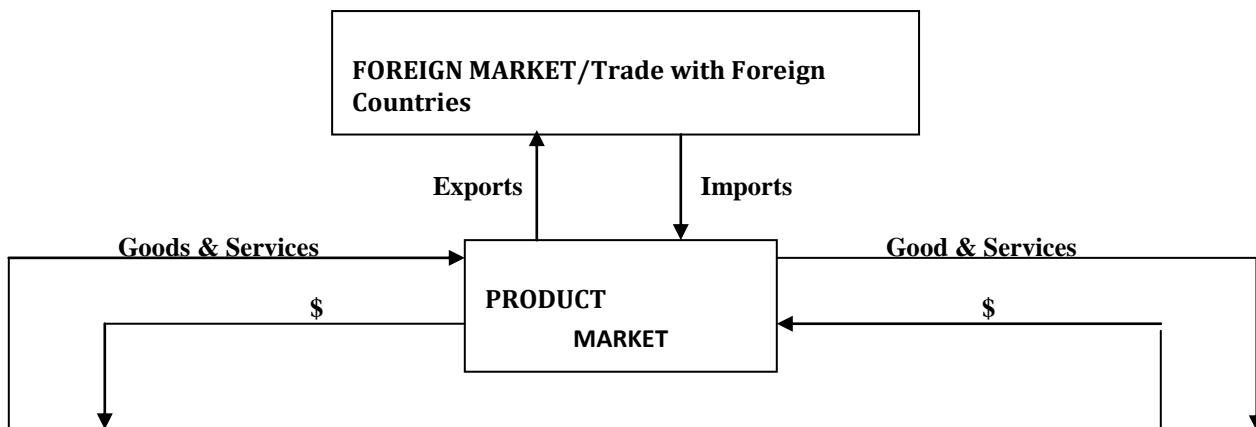
“Contracts” is the practice of government “hiring” private businesses to do jobs in the public sector. Privatization is contracts between government and private businesses for the purpose of providing goods and services to the public as if they were public goods. Government/business contracts include building military planes, tanks, and armaments, constructing public schools, roads, and of course buying the operational “pen and paper” necessities for governments to function.

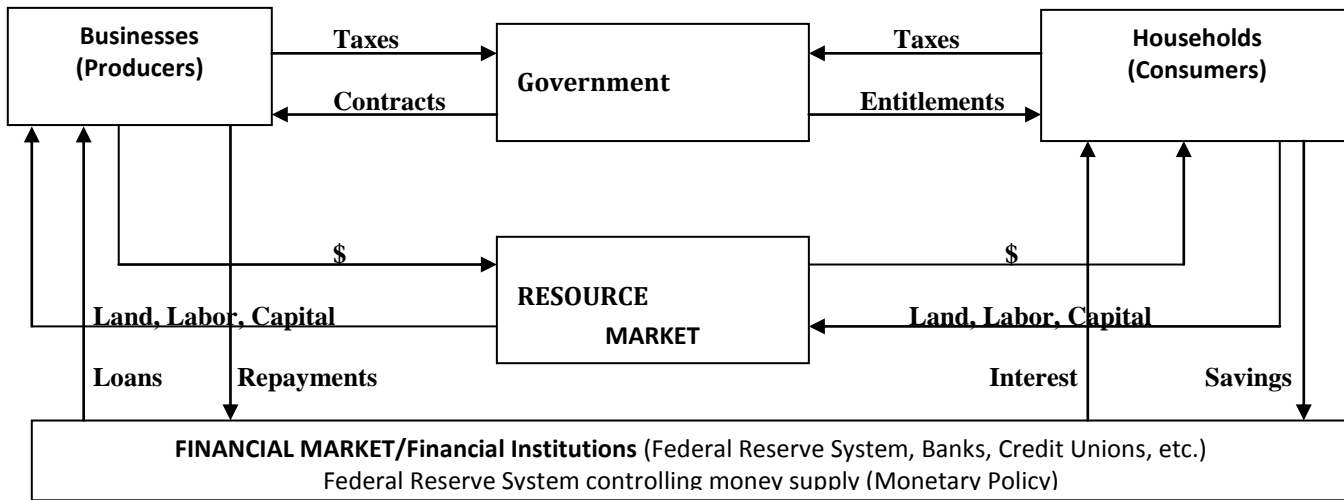
The extent of government's role in our economic model will determine the set of rules of the economic sphere. The size of government's role in the circular flow is a discussion for another day.



imports)

The last market to complete the Circular Flow is the FOREIGN MARKET. The Foreign Market player to be added to our circular flow is foreign countries through exports and imports (Foreign Market). There are also many financial flows between countries occurring in today's global economy. The circular flow focuses on the foreign importance of adding foreign goods and services to our Product Market (imports) and sending US goods and services to other countries (exports)





Two Key Concepts to Understand the Circular Flow

Finally, there are two key fundamentals for every market economy. One key is the productive resources (land, labor, capital) is owned privately by individuals. **Private ownership** of the productive resources by individuals (households) is a must.

The second important concept is the presence of **incentives** to improve and do better. Incentives affect the quantity and quality of the exchange of resources from households to businesses for money (wages, rents, profits, interest).

Summary

When the “players” are better off- everyone wins! Households (Consumers) have obtained the goods and services they desire, and entrepreneurs and businesses (Producers) have reaped the benefits of good decisions by efficiently and effectively using productive resources they purchased in the resource market. Or, they have suffered the consequences of bad decisions. Either way, society improves for everyone.

TEN MAJOR ECONOMIC INDICATORS

1. Real Gross Domestic Product	Dept. of Commerce; Bureau of Economic Analysis
2. Consumer Price Index	Dept. of Labor; Bureau of Labor Statistics
3. Producer Price Index	Department of Labor, Bureau of Labor Statistics
4. Civilian Unemployment Rate	Department of Labor, Bureau of Labor Statistics
5. Payroll Employment	Department of Labor, Bureau of Labor Statistics
6. Consumer Confidence	The Conference Board
7. Capacity Utilization	Board of Governors, Federal Reserve System
8. Federal Funds Rate	Federal Reserve System
9. Yield on 30-Yr. Treasury Bond	Federal Reserve System and other sources
10. Index of Leading Indicators	The Conference Board
Other Indicators include-	
Housing starts	Sales of existing homes
Auto production	Sales of durable goods

A Few Economic Education Websites

Research for Economic Data

Bureau of Labor Statistics (BLS) (www.bls.gov)

Bureau of Economic Analysis (BEA) (www.bea.gov)

Congressional Budget Office (www.cbo.gov)

Economic Report to the President (www.gpoaccess.gov/eop)

Federal Reserve System (www.federalreserve.gov)

Federal Reserve System's 12 Regional Banks (each bank has its own website and research links)

National Bureau of Economic Research (www.nber.org)

U.S. Census Bureau (www.census.gov/)

U.S. Department of Commerce (www.commerce.gov)

U.S. Debt Clock (www.usdebtclock.org)

U. S. Treasury (www.treasury.gov)

For global economics

International Monetary Fund (www.imf.org)

CIA World Factbook (<https://www.cia.gov/library/publications/the-world-factbook/geos/us.html>)

United Nations (www.un.org/en/)

World Bank (www.worldbank.org)

World Bank ; "Countries and Regions"-
(web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/0,,pagePK:180619~theSitePK:136917,00.html)

News, Commentaries, Analysis

Wall Street Journal (www.online.wsj.com/home-page)

Bloomberg News (www.bloomberg.com/)

Thomson Reuters (www.thomsonreuters.com/)

New York Times (www.nytimes.com/)

Financial Times (www.ft.com/home/uk)

Aljazeera (www.english.aljazeera.net/)

The Economist (www.economist.com/)

CNBC (www.cnbc.com/)

Professional Development Programs

Common Sense Economics (www.commonseconomics.com)

Foundation for Teaching Economics (www.fte.org)

Michigan Council on Economic Education (www.mceeonline.org)

MCEE Network of Centers for Economic Education

TED (www.ted.com)

Programs for the Classroom

Gen I Revolution (www.genirevolution.net)

Investor's Practice Track (www.kcee.org/ipt)

Everfi.com (www.everfi.com)

SPROUTS (www.kcee.org/sprouts)

Stock Market Game (www.smgww.org)

The YOU in Entrepreneurship (www.kcee.org/entre)

Organizations with Programs

Investor Protection Trust (www.investorprotection.org/)

Kentucky Council on Economic Education (www.kcee.org)

Michigan Council on Economic Education (www.mceeonline.org)

NEFE (www.nefe.org/)

Property and Environment Research Center (PERC) (www.perc.org)

VISA; Practical Money Skills (www.practicalmoneyskills.com/)

Other

Fraser Institute (www.fraserinstitute.org)

Virtual Economics 4.0 (VE4)

NASDAQ (<http://www.nasdaq.com/>)

New York Stock Exchange (<http://www.nyse.com/>)

YouTube – There are many choices and offerings in Economics- (one series I recommend- (www.youtube.com/user/mjmfoodie)