

Teaching Outlines Chapter 2 Trade-Offs, Comparative Advantage, and the Market System

Last chapter we introduced the concept of **Trade-offs**, and discussed how they were the result of having to deal with the issue of scarcity.

Trade-offs – producing more of a given good/service means producing less of another given good. This is the result of another economic term **Scarcity** (unlimited wants exceeding limited resources).

Trade-Off Examples:

- If you study one more hour for your economics exam you have one less hour to study for another exam.
- If you go out and party you have less brain cells available for use in school
- If you arrive to class late, you have less time to hit on that boy or girl you have been crushing on.

*you get the picture, **every decision you make**, you face a trade-off.

One of the Economic Models we will use to exemplify trade-offs will be **Production Possibilities Frontiers**, also known as PPFs, and will be referred to as such from this point forward.

PPF – A curve showing the maximum attainable combinations of two products that may be produced with available resources and technology. Used to help visualize tradeoffs between two goods/services.

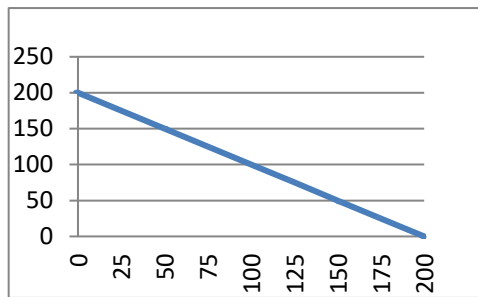
Example of PPF

You are the proud parent of little Johnny. You have decided to create a college fund for him so he does not have to face paying back student loans upon his graduation. However, you also love to travel the world and it is your personal goal to visit every country before you die, so you have also created a Travel Fund.

You have added these two funds to your weekly budget, and you have decided to allocate \$200 between the two funds. Think about the tradeoff between the two funds. Each additional dollar allocated to Little Johnny's College Fund is on less dollar that can be allocated to the Travel Fund, and vice versa.

The PPF between the two funds will illustrate all of the different possible production combinations. For example, you may decide to allocate all \$200 to the Travel Fund and \$0 for Johnny, all \$200 to Johnny and \$0 for your Travel Fund, an even split between the two funds (\$100 to Travel Fund and \$100 to Johnny College Fund), etc. The PPF will encompass ALL possible combinations.

Sample PPF:



Johnny's College Fund (Y)	Your Travel the World Fund (X)
200	0
175	25
150	50
125	75
100	100
75	125
50	150
25	175
0	200

Turning above Data into Information:

- The y-intercept identifies the resource allocation that would result in \$200 for Johnny and \$0 for Travel. In other words, all resources and technology were allocated to the good/service on the y-axis.
- The x-intercept represents the resource allocation that would result in \$0 for Johnny and \$200 for Travel. In other words, all resources and technology were allocated to the good/service on the x-axis.
- An **Efficient Outcome** results when ALL of the available resources and technology are being used. Any production combination that falls directly on a PPF represents an **Efficient Outcome**. This includes the X and Y intercepts.
 - If an individual, firm, or country has to decrease the production of one good/service in order to increase the production of the other good/service then an **Efficient Outcome** is the current result.
- An **Inefficient Outcome** results when NOT ALL of the available resources and technology are being used. Any production combination that falls inside of the PPF represents an **Inefficient Outcome**.
 - If an individual, firm, or country is able to increase the production of one good/service without decreasing the production of the other good/service then an **Inefficient Outcome** is the current result.
- Both **Efficient and Inefficient Outcomes** are **Attainable**.
- A production combination that results in the plot point falling outside of the PPF is **Unattainable**. Any combination that falls outside of the PPF is considered unattainable because there are not enough resources and technology available to produce that combination.
- In order to produce at a point beyond the original PPF an increase in resources or technology must occur. These increases in resources, and/or technology would create a new PPF.

PPFs are economic tools used to visualize different production combinations of two goods/services that can be achieved with a given set of resources and technology. They help provide a visual representation of trade-offs between two goods/services.

Tradeoffs will not always be one for one, sometimes they could be two for one, or three for one, etc. If the tradeoff between the two goods is **CONSTANT** at all production levels then a linear PPF will result. In this class, we will primarily work with linear PPFs to keep things simple.

When using PPFs, the goods/services under review represent the single highest valued alternative for the other. Meaning each good represents the opportunity cost of the other.

Without knowing the **DEMAND** of the two goods/services under review one cannot identify the optimal production bundle to produce with the given resources and technology. One can only determine if the production bundle is **Efficient**, **Inefficient**, or **Unattainable**. In order to identify the optimal bundle of production one would need to know the demand of two goods/services under review.

Non-Linear PPFs (Real-world PPFs)

Real-world PPFs are not linear, but bowed in shape. This indicates that the tradeoff/opportunity cost between the two goods/services is no longer constant.

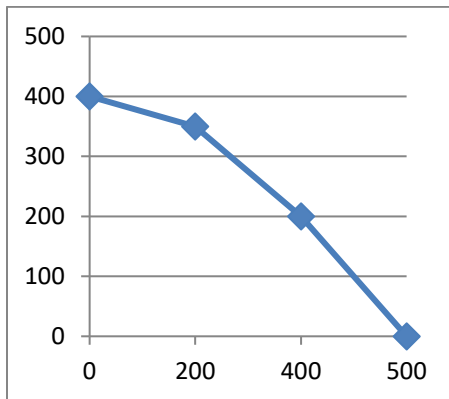
Same criteria makes production combinations **Efficient**, **Inefficient**, and **Unattainable** as the previous section.

The economic term for this phenomenon is **Increasing Marginal Opportunity Cost**.

Increasing Marginal Opportunity Cost – as the production of one good/service increase, the opportunity cost to produce that additional unit is greater than the previous unit produced.

Example: the opportunity cost of the second unit will be greater than that of the first unit. The opportunity cost of the third unit will be greater than that of the second unit. And so forth.

Example:



Airplanes	Ships
400	0
350	200
200	400
0	500

Example: Currently a country is producing 400 airplanes and 0 ships. If they wish to produce 200 ships they must give up, or tradeoff, 50 airplanes. If they decide to produce an additional 200 ships, meaning they are now making 400 ships, they must tradeoff an additional 150 airplanes to make those additional two hundred ships.

Therefore, the first 200 ships “costs” the country 50 airplanes, and the second 200 ships “costs” them 150 airplanes. The cost to produce one more ship, in terms of airplanes, has risen from the first batch of 200 to the second.

Why?

Why is the opportunity cost of ships increasing as the number of ships produced increases?

Are some tools and resources better suited to build airplanes than ships?

Increasing marginal opportunity costs exist because some machinery, workers, and resources are better suited to make one product over the other.

Regardless if PPF is linear or non-linear, Economic Growth and Contraction will look the same.

Economic Growth – Economic growth occurs when an economy produces more goods/services in the current period than the last.

Results when there is an increase in resource availability and/or positive technological change(s).

Visually can be seen as a shift or pivot away from the origin.

Economic Contraction - Economic contraction occurs when an economy produces less goods/services in the current period than the last.

Results when there is a decrease in resource availability and/or negative technological change(s).

Visually can be seen as a shift or pivot towards the origin.

Using PPfs to analyze the benefits of trade.

PPfs can also be used to visualize the benefits of trade.

Trade - the act of buying or selling, a **VOLUNTARY** exchange of resources.

To help deal with the issue of scarcity everyday individuals, households, and countries participate in trade. Participating in trade allows those involved to procure more of their unlimited wants with the limited resources they have available than they otherwise could.

- Engaging in trade allows those involved to increase their **Standard of Living** by allowing them to have more of their unlimited wants than they otherwise would.
- Trade will only occur if all parties are willing and able to participate.
- Trade always increases the standard of living for all those involved because if it did not, they would not participate.
- Trade will only be accepted if each party involved receives a good/service for cheaper than if they were to produce it themselves.

There are two types of trade:

Direct Trade – good for good, good for service, etc. Direct trade represents the **minority** of trades because this makes trade much more difficult. Direct trade is also referred to as the bartering system. How can one obtain a good/service if they do not have what the other party wants? Think about how a salary negotiation would work.

Ex: trading sports cards, trading barbies, trading eggs for milk, trading painting services for beer.

Indirect Trade – trading time (profession) for a medium of exchange (currency), and then trading the medium of exchange for the goods/services desired. Indirect trade represents the **majority** of trade because it makes trade much simpler. You will trade your services, whatever it is you do for your occupation, for money and then use that money to purchase desired goods and services.

Trade leads to the aggregate increase in production and consumption. It allows for those involved to be able to CONSUME (not produce) beyond their individual PPfs.

Absolute Advantage Example:

Absolute Advantage (A.A) – the ability of an individual, firm, or country, to produce more of one good or service than competitors, using the same amount of resources. Absolute Advantage is **NOT** the basis for trade.

Resource: 480 Minutes

Level of Technology:

Fred: Takes 40 minutes to vacuum
Takes 20 minutes to wash dishes

Wilma: Takes 20 minutes to vacuum
Takes 40 minutes to wash dishes

Completing the PPF Table in order to construct each individual's PPF.

Fred	
Vacuum	Dishes
0	24
3	18
6	?
9	6
12	0

Wilma	
Vacuum	Dishes
0	?
6	9
?	6
18	3
24	0

Since Wilma can complete one vacuuming using less of her resources than Fred uses to complete the same task, Wilma has the Absolute Advantage in Vacuuming.

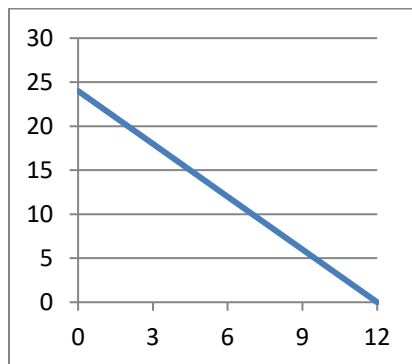
Since Fred can produce one load of dishes using less of his resources than Wilma uses to complete the same task, Fred has the Absolute Advantage in washing dishes.

In this scenario, it is obvious who should be performing what task. Wilma should handle the vacuuming duties and Fred should handle the dish washing duties; their respective Absolute Advantages.

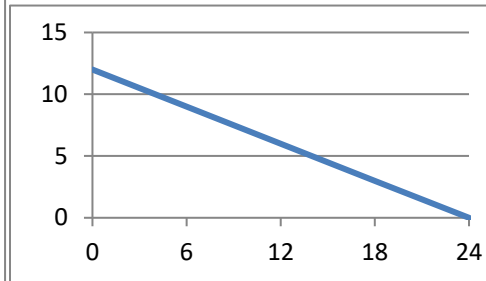
Each party should then **specialize**, use all of their available resources and technology, to produce the good/service that they have the absolute advantage in, and then trade for the good/service that they are no longer producing.

Graph PPFs. Dishes on the y-axis and vacuums on the x-axis.

Fred



Wilma



After each specializes in their absolute advantage, each will have the following:

Fred: 0 vacuums, and 24 Dishes

Wilma: 24 vacuums, and 0 dishes

Now they need to execute a trade in order to obtain the other good/service.

For our example, the proposed trade will be $\frac{1}{2}$ Fred's output (Q) for $\frac{1}{2}$ Wilma's output (Q). Trade scenarios are not always $\frac{1}{2}$ for $\frac{1}{2}$.

After the trade is executed, each will have the following:

Fred: 12 vacuums, and 12 dishes

Wilma: 12 vacuums, and 12 dishes

Where do these plot points fall on their respective PPFs?

If after trade, each participating party's consumption bundle is beyond their own original PPF, then both parties win and the trade will go through. As a result of trade they are able to consume beyond their PPF. They still cannot produce beyond their PPF, but because of trade they are now able to consume beyond their PPF; beyond their own production possibility.

Final step:

1.) Before specialization and trade (GIVEN): production levels in isolation.

Fred: 6 vacuums, and 12 dishes

Wilma: 12 vacuums, and 6 dishes

Combined: 18 vacuums, and 18 dishes

2.) Each specialize in their respective absolute advantage:

Fred: 0 vacuums, and 24 dishes

Wilma: 24 vacuums, and 0 vacuums

Combined: 24 vacuums, and 24 dishes

3.) Trade: $\frac{1}{2}$ for $\frac{1}{2}$

4.) After trade production and consumption bundles:

Fred: 12 vacuums, and 12 dishes.

Wilma: 12 vacuums, and 12 dishes

5.) Gains from trade (difference between after trade and specialization and before specialization and trade):

Fred: +6 vacuums, and +0 dishes

Wilma: +0 vacuums, and +6 dishes

Combined: +6 vacuums, and +6 dishes

As we have proved, through specialization and trade, parties can consume beyond their own individual capabilities.

If Fred and Wilma do not need that many vacuums and/or dishes, they could take the freed up resources and invest them elsewhere to procure more of their unlimited wants.

Comparative Advantage:

What if the situation arose where one party has an absolute advantage in the production of both goods/services being analyzed? Should the individual with the absolute advantage produce both goods/services? Could both still benefit through specialization and trade?

If one party has the absolute advantage in the production of both goods/services being analyzed both parties can still benefit through specialization and trade because **the basis for trade is comparative advantage, and not absolute advantage**

Comparative Advantage: The ability of an individual, a firm, or a country to produce a good or service at a lower opportunity cost than competitors. Comparative Advantage is the basis for trade.

When using the PPF model it is assumed that the two goods/services being analyzed are each other's single highest valued alternative. In other words, each good represents the other's opportunity cost.

There are two ways that opportunity cost can be calculated in two different ways, via the output method or the input method. **When calculating opportunity cost you are finding the cost of one good/service in terms of the other.**

Output Method – this method uses outputs to calculate the opportunity cost. Using this method the max possible production level for both goods/services will be used. When calculating the opportunity cost the max output for the good/service you are finding the opportunity cost for will go in the denominator and the max output of the other good/service will go in the numerator. The equation can be found below.

Opportunity Cost for good A = $(\max Q_B)/(\max Q_A)$

Input Method – this method uses inputs required to produce one unit to calculate the opportunity cost. Using this method the amount of inputs required to produce a single unit will be used for each of the goods/services being analyzed. When calculating the opportunity cost using this method the input required to produce a single unit of the good/service you are finding the opportunity cost for will go in numerator and the input required to produce a single unit of the other good/service will go in the denominator. The equation can be found below.

Opportunity Cost Good A = $(\text{input required for a single unit of A})/(\text{input required for a single unit of B})$

Each method will provide the same answer, so doing it both ways is a good way to check your work.

Comparative Advantage Example:

Resource: 480 Minutes

Level of Technology:

Fred: Takes 30 minutes to vacuum
Takes 60 minutes to wash dishes

Wilma: Takes 10 minutes to vacuum
Takes 40 minutes to wash dishes

It is clear here that Wilma has the absolute advantage in both vacuuming and washing dishes because she has to invest fewer resources to perform each task than does Fred. However, this DOES NOT mean that Wilma should perform both duties. Both can benefit from specialization and trade if they each specialize in the good/service that they have the comparative advantage in and then trade for the other.

Completing the PPF Table in order to construct each individual's PPF.

Fred	
Vacuum	Dishes
0	8
4	6
8	?
12	2
16	0

Wilma	
Vacuum	Dishes
0	?
?	8
32	4
48	0

Calculate the Opportunity Cost of each good for each participant.

Fred opp cost vacuum = $8/16 = 0.5$ dishes

Fred opp cost dishes = $16/8 = 2$ vacuums

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Wilma opp cost vacuum = $12/48 = 0.25$ dishes

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Wilma opp cost dishes = $48/12 = 4$ vacuums

It costs Fred 0.5 dishes to get 1 vacuum.

It costs Wilma 0.25 dishes to get 1 vacuum.

Therefore, **Wilma** has the **comparative advantage** in **vacuums** because she has to give up fewer dishes than does Fred.

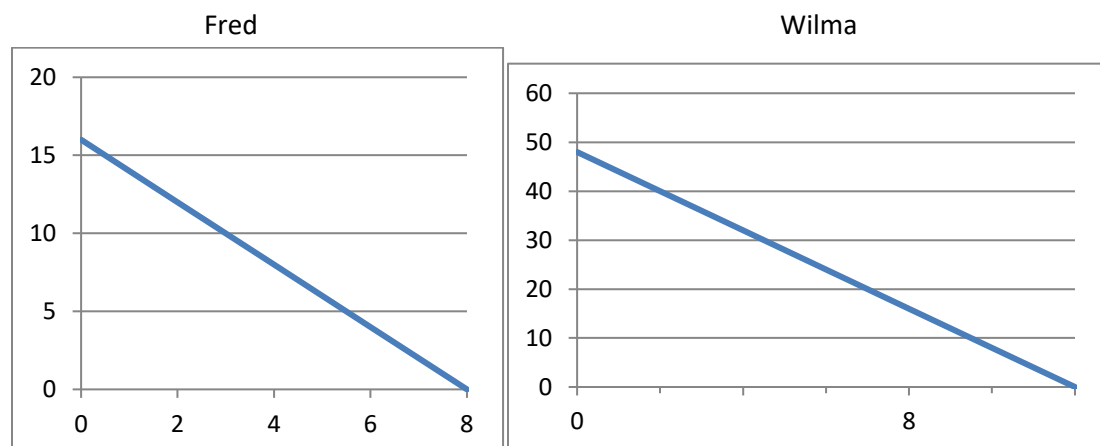
It costs Fred 2 vacuums to get 1 dish.

It costs Wilma 4 vacuums to get 1 dish.

Therefore, **Fred** has the **comparative advantage** in **dishes** because he has to give up fewer vacuums than does Wilma.

Each party should now specialize, use all of their available resources and technology, to produce the good/service that they have the comparative advantage in, and then trade for the other good/service they are no longer producing.

Graph PPFs. Dishes on the y - axis and vacuums on the x - axis.



After each specializes in their comparative advantage, each will have the following.

Fred: 0 vacuums, and 8 dishes

Wilma: 48 vacuums, and 0 dishes

Now they need to execute a trade to obtain the other good/service.

For our example, the proposed trade will be 15 vacuums for 5 dishes.

After the trade, each will have the following:

Fred: 15 vacuums, and 3 dishes

Wilma: 33 vacuums, and 5 dishes

Where do these plot points fall on their respective PPFs?

If after trade, each participating party's consumption bundle is beyond their own original PPF, then both parties win and the trade will go through. As a result of trade they are able to consume beyond their PPF. They still cannot produce beyond their PPF, but because of trade they are now able to consume beyond their PPF; beyond their own production possibility.

Final Step:

1.) Before specialization and trade (GIVEN): production levels in isolation

Fred: 12 vacuums, and 2 dishes

Wilma: 32 vacuums, and 4 dishes

Combined: 44 vacuums, and 6 dishes

2.) Each specialize in their respective comparative advantage:

Fred: 0 vacuums, and 8 dishes

Wilma: 48 vacuums, and 0 dishes

Combined: 48 vacuums, and 8 dishes

3.) Trade: 15 vacuums for 5 dishes

4.) After trade production and consumption bundles

Fred: 15 vacuums, and 3 dishes

Wilma: 33 vacuums, and 5 dishes

5.) Gains from trade (difference between after trade and specialization and before specialization and trade):

Fred: +3 vacuums, and +1 dish

Wilma: +1 vacuum, and +1 dish

Combined: +4 vacuums, and +2 dishes

As we have proved, through specialization and trade, parties can consume beyond their own individual capabilities.

If Fred and Wilma do not need that many vacuums and/or dishes, they could take the freed up resources and invest them elsewhere to procure more of their unlimited wants.

Next we will look at how and where these individuals trade.

The Market System

Many of the examples we have done so far have been rather simple ... we have just been using either two individual firms or companies that are only making two select products.

The question is. Is this how the world really works? Are there only two firms do those two firms only make two that are the exact same as one another?

The answer is obviously NO! There are millions of different firms that make millions of different products in today's world.

These millions of individuals and firms make decisions on what they want to consume and then decide how they can consume it as cheap as possible. That is where trade comes in. **Trade allows individuals and firms to obtain the goods and services they are seeking for a cheaper price than if they were to make it themselves.**

The main question for today's lecture is how do these millions of individuals and firms coordinate to make trade possible? How are they able to communicate with one another to obtain what they want?

In the United States, and the majority of other countries, trade is possible because of the existence of markets. **Markets make trade possible, they allow trade to occur.**

So, what exactly is a market?

Markets – A group of buyers and sellers of a good or service and the institution or arrangement by which they come together to trade. Markets determine the answers to the three fundamental questions we covered in the first week of classes.

Markets answer ...

- What will be produced?
- How will it be produced?
- Who will get what is produced?

Markets have many forms ...

- They can be physical places (your local beer distributor or the NYSE)
- They can also be virtual places (amazon.com or half.com) where many of you may have purchased some of your text books. I know not this one because they made it specially ordered, but many of the other texts for your other classes.

In these markets ...

- The buyers are the demanders of goods and services. (Ex: you wanting a new car)
- The sellers are the suppliers of the goods and services. (Ex: GMC providing you options for your new car)

Individuals and firms interact in two types of markets; *Product Markets* and *Factor Markets*:

- **Product Markets** – are markets for goods, such as hot dogs and hamburgers, and services, such as, the education you are receiving right now. In product markets individuals are the demanders and firms are the suppliers.
 - Individuals are the demanders and the firms are the suppliers.

Then there is the Factor Markets.

- **Factor Markets** – are markets for the factors of production. Factors of production are the inputs used to make the goods and services. There are four broad categories for *factors of production* ... (**Factors of production are the inputs used in making goods and services**).
 - **Labor** – includes all types of work from part-time labor provided by many high school and college students, to CEOs and VPs of major corporations.
 - **Capital** – refers to any physical capital used in production, such as, computers, machines, and tools.
 - **Natural Resources** – Include land, water, oil, iron ore, or other “gifts of nature” that are used in the production of goods and services.
 - **Entrepreneur** – someone who operates a business. *Entrepreneurial Activity* is the ability to bring together the other factors of production to successfully produce and sell goods and services.

As mentioned previously markets are comprised of two key participants; Individuals and Firms.

*The word Individuals is interchangeable with Households. Your book, I believe, uses households, but I prefer to use individuals, so just be aware of this when you are doing homework, quizzes, and your exams.

H.H./Individuals – Supply the factors of production – particularly labor – and firms are the demanders of the factors of production. Individuals use the income they receive from selling their factors of production to purchase goods and services that are supplied by firms.

*Use income they receive for supplying their factors of production to buy goods/services that are produced by firms.

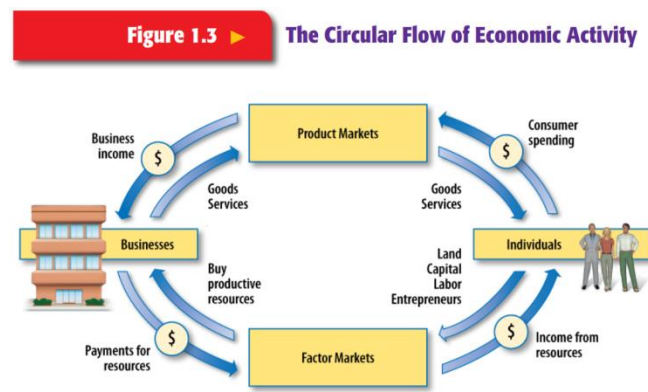
Firms – Supply the goods and services. Firms use the income they receive from selling goods and services to buy the factors of production needed to make the goods and services.

If you haven't noticed yet "it's a circle" (I now Pronounce you Chuck and Larry).

Individuals spend income on consumption and then firms spend income on factors of production in order to supply the individuals. Income goes from the individuals, to the firms, back to the individuals, and then back to the firms. This continuously occurs.

To give you visualization we can an economic model, the Circular Flow Diagram.

Circular Flow Diagram – A model that shows how participants in markets are linked.



As with all models the circular flow diagram is simplified. Circular Flow Diagram does not include -

- Government buying goods, or their re-allocation of resources (Medicaid)
- The roles banks play in lending and borrowing
- The roles the stock and bond markets play
- Does not include products and services that were produced by foreign markets for the consumption of the domestic market.

Even though the circular flow diagram does not include these, it still manages to get the point across of how things flow throughout the two markets, and between Individuals and Firms.

The freer a market is, the more successful it can be.

Free Market – A market with few government restrictions on how a good or service can be produced or sold or on how a factor of production can be employed.

Most governments in today's world lean towards the free market, but as we already learned there is no longer a true free market left.

Some of the more free markets include:

- Singapore
- U.S.
- Canada
- Western Europe
- Hong Kong
- Estonia

The closer a country is to the free market system the more successful they are in terms of economic growth, and the per capita income of its citizens.

In order for the free market mechanism to work **prices must be flexible. Meaning they must have the ability to fluctuate up and down.**

This is the case because when prices are flexible it allows signals to be sent to the consumer and supplier of what is and is not wanted/needed in the market.

Prices send signals to the individuals and the firms; what to produce (firms), what to buy (individuals).

When the government is not restrictive it allows the prices of products to change in accordance to supply and demand, which makes the market system more efficient than a more centrally planned system. The market system allows for gains that would otherwise be unattainable in a centrally planned economy.

Government restriction leads to prices not being allowed to fluctuate, thus making the market less efficient.

Example: When the first flat screen T.V.'s came out prices were extremely high, this signaled to suppliers that they should devote more resources to the production of these things in order to increase their profits. As a result, Flat Screen T.V. manufacturers made more flat screen T.V.s.

Another example in the opposite direction: After iPods were introduced the prices of CDs began to fall off rather fast. This signaled to the suppliers that people no longer wanted CDs, the demand for them began to fall, and they realized that they should begin to shift resources away from CDs and begin investing in other things like websites that people could download music from.

In the U.S it is estimated that 10 to 20 percent of goods and services are regulated, which does not allow the price to fluctuate freely.

Markets are steered by something called the “invisible hand” and do not need the government to tell it what to produce, how much to produce, how to produce, and who should receive what is produced. People acting in their own best interest will answer the three basic economic questions most efficiently, that is the invisible hand; a phrase developed by the famous economist Adam Smith.

Entrepreneurs are essential to the working of the free market. These individuals first must determine what the consumer wants, and then they must decide how to produce it with the most profitability using the available factors of production.

An entrepreneur is ...

Entrepreneur – someone who operates a business, bringing together factors of production – labor, capital, and natural resources – to produce goods and services.

*Entrepreneurs figure out what the consumer wants before the consumer realizes that they want it.

Ex: Henry Ford and the Model T. He made the automobile accessible to the masses via the combustible engine and the assembly line. He is quoted as saying “if I would have asked my consumers what they wanted they would have said a faster horse”; probably one that doesn’t poop and has built in shock absorbers.

He didn’t deliver a faster horse, he delivered a new product that accomplished the same objective as a horse in a better way.

Many entrepreneurs fail before they succeed, but without them economic growth would be much slower.

Therefore, government policies that encourage entrepreneurial activity will spur economic growth and increase the standard of living. Taxes do just the opposite of this.

In order for there to be a successful market in which entrepreneurs can succeed, the proper legal framework must be in place and this is where we are heading now.

Before now we have mentioned that government needs to stay out of the market and let it work freely in order for it to be as efficient as it can be. This is true, but there is a role for government in the free market.

Government must protect private property. Government protection of private property provides the incentive for people to take risks because their product(s) will be protected from others.

For a free market system to work well, individuals must be willing to take risks. If there is no protection from someone coming in and stealing what is rightfully theirs then there are no incentive to take risks.

Governments must establish laws that will protect investors from the government, military, gangs, or individuals that might try to seize the business or demand payments for the business (extortion) for not destroying the business.

This provides incentives for entrepreneurs to invest their capital into a business, and the more investment there is the faster the economy will grow.

In countries like the U.S. there are property rights that provide this incentive.

Property Rights – the rights individuals or firms have to the exclusive use of their property, including the right to buy or sell it.

- These rights can be tangible (land) or intangible (the rights to an idea, intellectual property). Think of copyrights and patents.

In the U.S the 5th and 14th amendment protect individual's property. Look them up if you don't know what they are.

5th Amendment - protects against abuse of government authority in a legal procedure. Grand Jury. No double jeopardy.

14th Amendment - Its Due Process Clause prohibits state and local governments from depriving persons of life, liberty, or property without certain steps being taken to ensure fairness. This clause has been used to make most of the Bill of Rights applicable to the states, as well as to recognize substantive and procedural rights.

There are similar laws in many other developed, high-income countries; however in many poor countries laws like these do not exist or are poorly enforced.

Another area where governments must be involved in the free market is the enforcement of contracts.

- Example: When you sign a contract stating you will repay a loan. When you take a loan out to purchase a car or pay for your tuition; you must sign a promissory note stating that you are obligated to repay those funds borrowed.
- If this was not enforced people would not be incentivized to lend you any money because they do not have any legal protection protecting them from your default or failure to repay those funds borrowed.

- When a party fails to follow through on the contract that party can be taken to court, where the court will enforce the contract and the funds are forced to be repaid.

Many developed countries have these laws in place, and many of the poorer countries do not.

Is it coincidence that wealthy countries have these laws in place and are enforced, and poorer countries do not have these types of laws or if they have them they are not enforced? I think not.

These two types of protection allow individuals to have confidence and the incentive to take risks. Notice how the prosperous countries have these types of laws, and those countries that are less so do not; it is not a coincidence.

If these laws do not exist or not enforced, economic efficiency is reduced and the economy will be operating inside of their PPF.