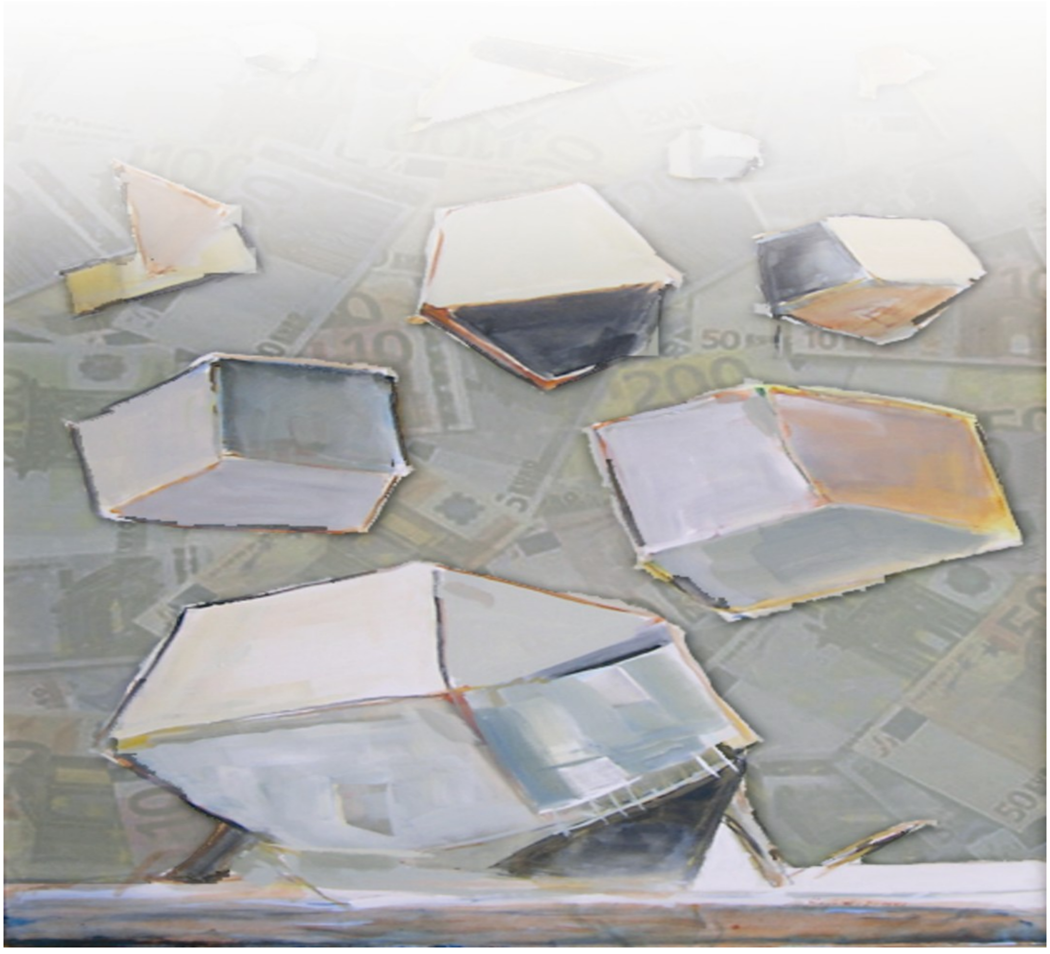
A novel about the global economy

THE ECONOMICS OF EGO SURPLUS

A Teacher's Guide



A Teacher's Guide to:

The Economics of Ego Surplus:

A novel about the global economy

Introduction

Economics can be a notoriously difficult subject to get students interested in. The novel *The Economics of Ego Surplus* lets students learn economics in the context of a dramatic story. The story also provides a fictional "real-world" context in which textbook economic concepts can be seen at work. Some of the difficulty of learning economics lies in the fact that the concepts are often presented in a piecemeal fashion, disconnected from wider real-world context. The result is that students may finish the course unable to see the forest for the trees.

This teacher's guide is intended to be a bridge between the novel and a more precise and thorough classroom treatment of the subject. Ideas presented in a common-sense way in the story are given a more formal explanation in the pages that follow.

Teachers may wish to use the material in this guide to develop lectures to deliver as the students read through the novel. Alternatively, the students could read the material in the guide themselves as they progress through the novel. A PDF file of this guide is freely available at http://starvinganalyst.com/tees.

The novel is organized into short, episodic sections, each with its own title. This guide follows a similar format. Not every section from the novel has a corresponding section in this teacher's guide. For the ones that do, a fuller treatment of the concepts brought up in that section of the novel is presented, followed by sample questions that could be assigned to students on homework or tests.

It is hoped that this guide helps teachers more effectively engage students in the subject of economics, a working understanding of which is increasingly important to modern life.

Creation Story (pp.3-5)

This section offers a short biography of Adam Smith (1723-1790), considered by many to be the father of modern economic thought. Smith is primarily remembered today for his book *An Inquiry into the Nature and Causes of the Wealth of Nations*. It was published in 1776, the same year the United States declared independence.

Smith's impact on economic thought can perhaps best be understood through two concepts he helped pioneer, division of labor and the Invisible Hand.

Division of labor: Smith lived in a time when small factories were appearing across the British countryside. He observed how these operated, paying special attention to a particular pin factory which he describes closely in his book. Duties were divided up and workers given very specific jobs. For instance, one man did nothing but straighten pins. Another did nothing but cut pins. Another did nothing but sharpen them, and so on. This *specialization* by workers, also called *division of labor*, allowed all sorts of products to be made much more efficiently than ever before. The result was that nations such as Great Britain and the United States, where this was happening, were becoming wealthier, as were the people who lived there.

The increasing wealth also led Smith to speculate that one day there might be universal opulence, in which all people in society possessed great material wealth. While this idea may sound fey to us, it is the case that increasing production of goods and services over time has led to a marked increase in the standard of living of the average person. For instance, people who are classified as poor in the U.S. today often own products like air conditioners and televisions that even the wealthiest person in Smith's time would not have been able to imagine.

The Invisible Hand: Smith realized that an economy based on voluntary buying and selling of goods in markets brought great advantages. It led businesses to compete with each other for consumers' dollars. A restaurant owner, for instance, may work very hard to create food that is tasty, fresh and affordable. The owner may well do this only because he or she wants to have a successful business and earn a profit. But the result is that people in the society are provided with good food.

As another example, consider a rock band that works very hard to make good music. They may do this for purely self-interested reasons, that they might one day gain wealth and fame by selling albums, concert tickets and band merchandise. But the result is that people in the society are provided with entertaining music.

In both cases, the invisible hand converts the self interest of individuals into the collective good of consumers. This activity is what makes an economy based on voluntary exchange in free markets so powerful. We will learn more about this in coming sections.

Questions for students:

1) Has Smith's vision of universal opulence been achieved in the United States economy? Why or why not?

2) What effect did increasing specialization have on the U.S. and British economies in Adam Smith's time?

3) Explain how the invisible hand might work in a farmer's market where fresh fruits and vegetables are sold.

The Meaning of Economics (pp. 11-17)

In this section, while waiting for his lunch Kyle helps a college student who is cramming for his final exam in "macro." This means macroeconomics. The study of economics is often divided between *macroeconomics* and *microeconomics.* Macroeconomics studies big-picture questions of the economy, such as why the national unemployment rate is what it is. *Microeconomics* studies small-picture questions, such as why a particular industry, say the automotive industry, makes a certain level of profit, or why a particular company might have to lay off workers.

Kyle points out that economics is the study of how societies use the limited resources at their disposal to produce goods and services. He uses the example of French fries, but could have chosen any number of products. Anything an economy produces is produced with resources. Take cars, for example. They are produced with resources such as iron, rubber and the labor of factory workers.

Economic resources are often divided into four types and called the *factors of production*:

- Land – These are natural resources such as land, timber, water and minerals.
- Labor – These are human resources such as the mental and physical labor that is critical to production of almost anything of economic value.
- Capital – These are goods and services that are used to produce other goods and services. For example, a tractor is a product that a farmer uses to help produce another product, food.
- Entrepreneurship – This is the taking on of risk by a business person in order to create and bring a product to market.

The supply of all of these resources is limited, so the supply of goods and services we can produce from them is also limited. At the same time, people's desire for goods and services is virtually unlimited. This leads to the *economic problem*, which is that limited resources cannot fully satisfy unlimited wants. The result is that there is *scarcity*, not enough goods and services to give people everything they would like to have. Therefore, choices must be made. A society must have a system for answering the *economic questions* of what goods and services will be produced with society's limited resources, how much will be produced, how it will be produced and who will get what is produced. This system is called an economy. The study of it is called economics.

Economies can be classified into four different types:

- **Traditional Economy** – Economic questions are decided by longstanding traditions. For example, the Comanche, an American Plains Indian tribe, once organized their economy around the hunting of buffalo. This system was maintained for centuries, by tradition.
- **Market Economy** – Sometimes called a free market, free enterprise or capitalist system, economic questions are decided by voluntary exchanges between individuals and firms in markets.
- **Command Economy** – Economic questions are decided by a centralized authority, such as the government.
- **Mixed Economy** – This type of economy uses a mix of the above kinds. Most real world economic systems fall into this category. For instance, while the U.S. economy is primarily a market economy, the government provides some goods and services – such as postal service, roadways and a police force – as in a command economy.

Questions for students:

1) What would life be like if we lived in a world with no factors of production?
2) Give one real-world example of each of the four factors of production.
3) Pick a product that you buy and describe some specific resources that might be used to produce it.
4) Briefly describe the economic problem.
5) Which of the four types of economies do you imagine would work best and why?

<u>International Tirade (pp. 32-41)</u>

In this section, Kyle gets into a heated argument at a dinner party over the topic of international trade. The economist mentioned in the argument, David Ricardo (1772-1823), believed that free trade between nations was good. His idea was an extension of those of Adam

Smith. In the same way that factory workers could produce more when each person specialized in doing one thing, Ricardo showed that nations could have greater wealth when each specialized in producing what they were best at and then traded with each other.

This idea was very controversial in Ricardo’s time. But in the years since Ricardo lived, nations have indeed specialized and traded with each other more and more. Today, many products, such as consumer electronics, are produced almost exclusively in certain parts of the world, such as Asia. So in order to get many types of consumer electronics, the U.S. must trade with the nations that make them.

International trade is made up of exports and imports

- Exports – Domestic goods and services sold to foreign markets
- Imports – Goods and services purchased from foreign markets

While international trade does open up the possibility for greater wealth by giving consumers access to a wider variety of products at lower prices, it can also cause problems. For instance, many factory workers in the U.S. have lost jobs as the U.S. has imported more foreign manufactured goods.

Those opposed to international trade seek to limit it through legal barriers such as tariffs and quotas. Tariffs are taxes placed on imports. Quotas are numerical limits placed on imports. Those who favor international trade seek to remove such restrictions, often through free trade agreements such as the fictional one mentioned in the story, the Middle Eastern Free Trade Agreement.

So is international trade good or bad? This remains a matter of opinion, but most modern economists believe free international trade to be on balance good, as it leads to lower prices for consumers and a wider choice of products. It also brings the nations of the world closer together.

Questions for students:

1) How are David Ricardo’s ideas related to Adam Smith’s ideas?
2) What is the difference between exports and imports?
3) Explain two ways to limit international trade.
4) List five things you have bought that were made in a foreign country.
5) List one good thing and one bad thing about international trade.

Getting Recruited (pp.56-60)

In this section, Kyle is offered a part-time consulting job with the FBI. In making the choice of whether to accept the job, he shows that he understands economic thinking, since he considers the benefit, or what he will get from the job, and also the cost, what he will have to give up. The concept at work here is opportunity cost. It is an important one in economics because it is related to the concept of scarcity.

Imagine you have only $20 to spend and decide to buy a pair of jeans. If you buy them, you will have to give up the chance to spend that $20 on something else, say a new book for school. That book is the *opportunity cost* of buying those jeans. It is the next best alternative – what you gave up to get the jeans.

When something is scarce, there will be an opportunity cost to using it. For instance, time is scarce. There is only a limited amount of it. So if you spend an hour sleeping you will not be able to spend that hour doing something else, like studying. So an hour of studying becomes the opportunity cost of an hour of sleeping. In order to get more of one thing, you give up, or tradeoff, some of the other.

A related idea is that there is no free lunch. Say the government decides to provide free lunch to kids at a local school. While the lunch may be free to the kids, someone (such as taxpayers) must still pay for it because a lunch cannot be produced for free. A farmer has to raise the food. A cook has to prepare it. Someone has to serve it. We cannot expect people to do these things for free. The opportunity cost of the free lunch program is what could have been done with those resources in the absence of the program.

This is not to say that a free lunch program is a bad thing. It may be a very good thing, but everyone involved should understand that providing a "free" lunch means that someone, somewhere, at some time has to pay the cost. Deciding whether it is a good thing or bad thing requires comparing that cost with the benefits of the program (healthier kids, etc.). That's just sound economic thinking.

Questions for students:

1) Think of something you purchased recently and explain your opportunity cost of purchasing it.

2) Think of something you did recently (study for a test, take a trip, etc.) and explain the opportunity cost of doing it.

3) Imagine a friend in another country tells you his family gets free health care from their government. Is the health care truly free? Why or why not?

The Source of Suffering (pp. 61-64)

This section finds Kyle driving across town to talk with his Professor. Along the way he notices how much poverty exists in some parts of Dallas and how much wealth in others. Economists are very interested in understanding why some places, and the people in them, are poor and others rich. One theory has to do with the idea of *human capital*.

Imagine a person born into a very poor family in a very poor country. The family may struggle just to survive. The child may receive very little education. When he or she is grown, they will probably lack the knowledge and skills needed to get a job and earn money.

Now imagine a person born into a rich family in a rich country. This child may receive a good education, as well as learning effective social etiquette and other things that will help them succeed in life. All of these skills and knowledge are like investments that pay returns when the child grows up and is able to get a high paying job. Such skills and knowledge are called *human capital*.

As Kyle mentions, one should not expect wealth to solve all problems. But it is the case that problems such as crime can be related to poverty. And one of the best ways a young person can avoid poverty and improve their life prospects is by making investments in their own human capital through education and training. With the availability of books and other information on the internet, it is easier than ever for people of all ages to improve their human capital outside of formal school settings.

Questions for students:
i) Think of a job you would like to have one day and list some human capital that you will need to acquire in order to get hired for such a job.

Human Behavior (pp. 68-74)

Kyle visits a Federal Reserve Bank in this section. The Federal Reserve System or “Fed” is the central bank of the U.S. While it is technically owned by private U.S. banks, it is run by the government, through a seven-member board of governors that is appointed by the U.S. President. One member is appointed to be Chairman of the Federal Reserve. This is one of the most powerful economic posts in the world. It is currently held by Ben Bernanke. The congressional act which created the Federal Reserve also divided the country into twelve regions. Each region has its own branch bank of the Federal Reserve to oversee matters within that region.

The story covers the Fed's actions of buying and selling bonds in some detail. The Fed calls this *open-market operations*. It is one of three ways that the Fed can adjust the supply of money in the economy to try to keep the economy healthy.

The Fed also acts as a "banker's bank." A private commercial bank can get a loan from the Federal Reserve if needed. The interest rate the Fed charges is called the *discount rate*. Changing this rate is the second way the Fed can adjust the supply of money in the economy. Lowering the rate encourages more commercial banks to borrow money, which they can then loan out to customers, increasing the money supply circulating in the economy. Raising the rate discourages commercial banks from borrowing money and thereby decreases the money circulating in the economy.

The third way that the Fed can adjust the money supply is by changing the *reserve requirement*. This is the proportion of their customer's deposits that commercial banks must keep on hand (not loan out) in case depositors want to make a withdrawal. By lowering it, the Fed allows commercial banks to keep less money on hand and loan more out. This increases the supply of money in circulation. By raising it, the Fed forces commercial banks to keep more money on hand and loan less out. This reduces the supply of money in circulation.

The Fed's adjustment of the money supply using these three tools is called *monetary policy*.

Questions for students:

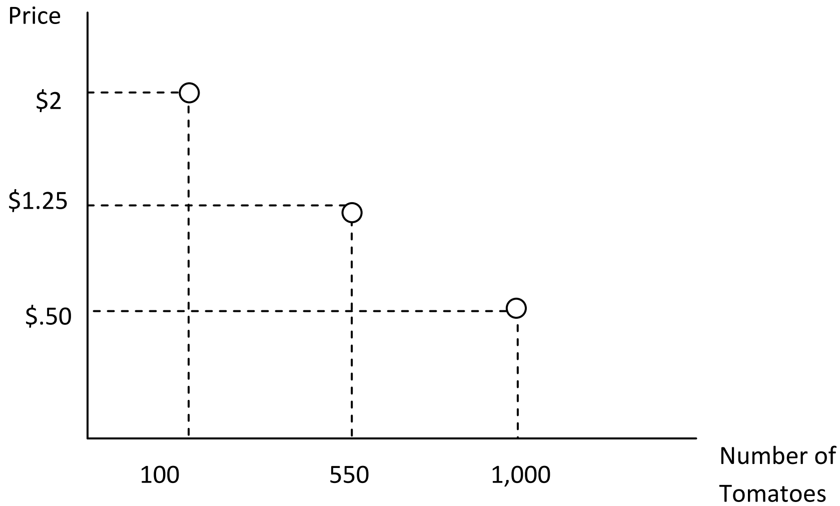
1) Briefly explain what the Federal Reserve System is and how it is organized.
2) What happens when the Federal Reserve buys bonds in open-market operations?
3) What happens when the Federal Reserve sells bonds in open-market operations?
4) Name three different ways the Fed can adjust the money supply in the U.S. economy.
5) Briefly explain what the reserve requirement is.

A Tree Grows in Manhattan (pp. 84-92)

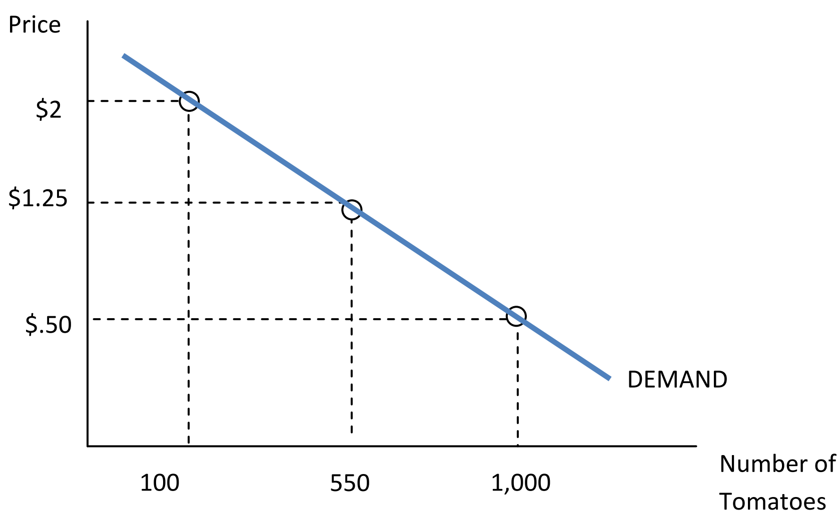
In this section Kyle travels to New York City to discuss the economic crisis, and the possibility it is being caused by terrorists. Saul Turowitz, an economist at the New York Stock Exchange, gives a short overview of the forces of supply and demand. These are the fundamental drivers behind any free market, from the largest stock exchange to the smallest lemonade stand.

A market exists whenever buyers and sellers interact. A market could be a physical place, like a grocery store, or a virtual place, like an online auction.

Imagine a market where people meet to buy and sell tomatoes. When the price of tomatoes is low, say $.50 per tomato, people want to buy a lot of them, say 1,000. If the price is higher, say $1.25, people don't want to buy as many, say 550. If the price is higher still, say $2, people in the market want to buy fewer still, say 100. We can plot these three possibilities as points on a graph.

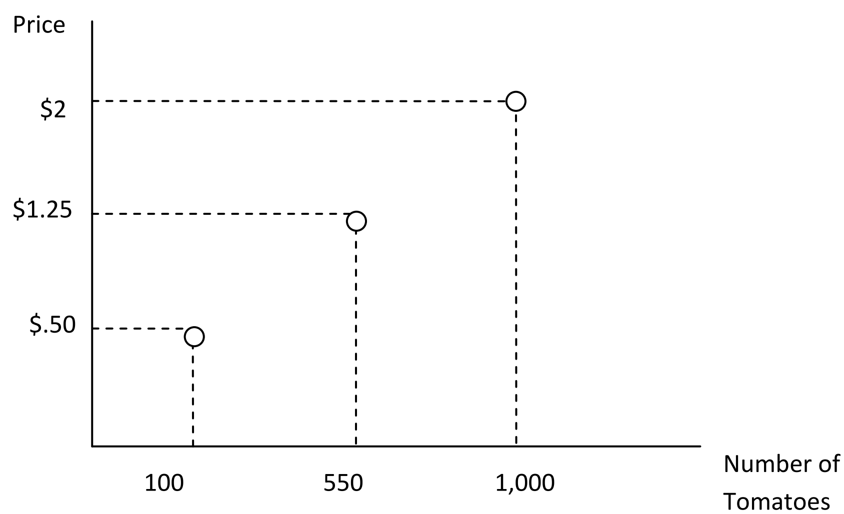


Connecting the points gives us a *demand curve*. It shows the number of tomatoes that people in this market want to buy at various prices.

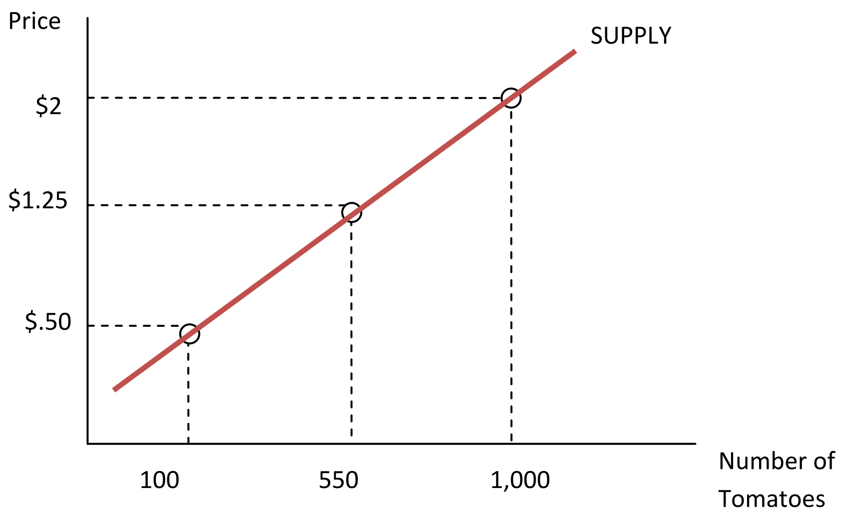


The demand curve slopes down from left to right because as the price of a good or service falls, the quantity of it demanded by buyers increases. This is the *Law of Demand*.

Now consider the people who sell tomatoes in this market. When the price is low, $.50, let's say sellers will put 100 tomatoes up for sale. When the price is higher, say $1.25, More sellers are likely to come from further away, attracted by the higher price. Let's say the total number of tomatoes put up for sale at $1.25 would be 550. At a still higher price, $2, let's say the total number of tomatoes put up for sale in the market would be 1,000. We can plot these three possibilities on a graph:

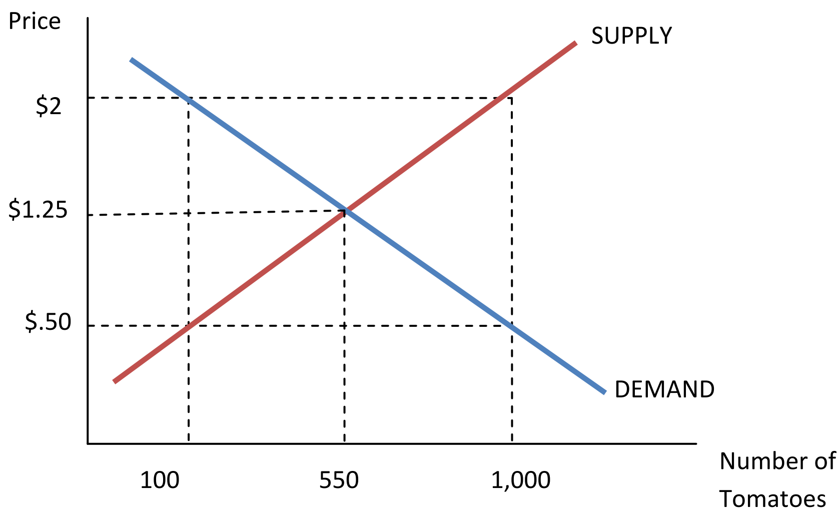


By connecting the points, we create a *supply curve*.



The supply curve slopes upward from left to right, the opposite of the demand curve. Supply slopes upward because at higher prices, sellers are anxious to offer a higher quantity of a good or service for sale, because it is more profitable. This is called the *law of supply*.

Now that we have both a supply and demand curve, we can put them on the same graph:



Now let's think about what happens in this market when the price of a tomato is $2. As we have said, and as the graph above shows, at $2 buyers in this market want to buy 100 tomatoes. Sellers, however, want to sell 1,000 at that price. This is a free market, with no one forced to buy or sell anything they don't want to. Since exchanges are voluntary, if an exchange is made it must be because both sides see it as beneficial to them.

Given this fact, what will happen at a price of $2 per tomato?

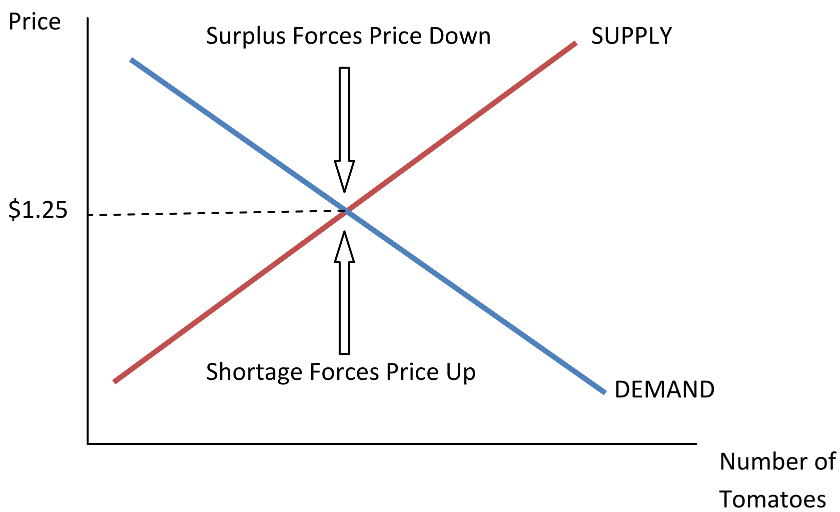
Since only 100 are bought at that price, sellers will be left with unsold tomatoes on their shelves. This is called a *surplus*. The sellers will lower their price in order to move the surplus of tomatoes before they rot. So at a price of $2, a surplus of tomatoes will cause the market price to fall.

Now think about what happens when the price is $.50. At this price, buyers want to buy 1,000 tomatoes, but sellers only put 100 up for sale. This situation, in which some buyers are not able to get the product they want, is called a shortage. When sellers realize the situation, that the quantity of their product being demanded by buyers is greater than the quantity supplied, they will raise their prices. So at a price of $.50, a shortage of tomatoes will cause the market price to rise.

To summarize, when the price of tomatoes is $2, a surplus of unsold tomatoes develops and price will fall. When the price is $.50, a shortage of tomatoes develops and price will rise. But where will price finally end up?

The supply and demand curves cross each other at a price of $1.25. At that price, and only that price, the quantity of tomatoes buyers want to buy (550) is equal to the quantity of tomatoes sellers want to sell (550). This is called the *equilibrium price*, and it is the price at which a free market will eventually settle.

That is how a free market works. Price is pushed toward the equilibrium where the quantity demanded is equal to the quantity supplied. On a graph it always corresponds to the point where the demand and supply curves intersect:



This all ties back in to Adam Smith's idea of an invisible hand. For price to work its magic in making shortages and surpluses disappear, it needs to be allowed to move freely up or down in response to market conditions. No government control or planning is needed.

Imagine all the goods and services critical to modern life in the U.S., from food to clothing to cell phones to automobiles. As consumers we trust that these things will be produced by someone and made available to us. Yet there is no public planning board or government agency that meets to decide how many shirts will be needed by U.S. consumers this year, how many blue jeans, how much food, etc. No central authority makes a plan for how many of these products will be produced from available resources. Buyers and sellers are simply allowed to pursue their own self-interest in free markets for goods and services, buyers seeking a bargain and sellers seeking a profit. As price then varies up and down with conditions of shortage and surplus, it sends signals to buyers and sellers.

Take the market for gasoline. When the price rises, it is like a signal to oil firms telling them that this product is becoming more profitable. A rising price tells them to go out and find more of it to turn into gasoline and offer to buyers. Meanwhile, the rising price sends an opposite signal to buyers, telling them to use less, perhaps by driving fewer miles or getting a more efficient car. In this way, as prices move up and down in the myriad markets that make up the American economy, the behavior of buyers and sellers is coordinated in such a way that the economic questions are answered.

Questions for students:

1) What is the law of demand?
2) Why does a supply curve slope upward from left to right?
3) Why does a demand curve slope downward from left to right?
4) Create a table showing different amounts of some product you would buy over the course of a week at three different prices.
5) From the table you created in the question above, draw a demand curve.
6) Briefly explain what happens in a free market when there is a shortage.
7) Briefly explain what happens in a free market when there is a surplus.

Press Conference (pp. 97-102)

In this section, President Lyman announces that he has a plan to stabilize the U.S. stock market, which has lost 37% of its value in just three days. The plan involves the government investing up to $250 billion of taxpayer funds into the stock market. The first question the President takes from the press corps challenges him on whether this is a good idea.

The proper role of government in the U.S. economy has always been a controversial topic. Some believe that government should stay out of the economy, letting free markets work on their own. In the story, prices in the stock market are falling because the supply of stocks for sale is outstripping the demand for stocks, creating a surplus of unsold stocks and forcing price to fall to clear the market.

What the President is proposing is that the government step in with taxpayer money and act as a buyer in the stock market. He hopes this boost in demand will shore up stock prices and quell the spreading economic panic.

Questions for students:

1) Assume President Lyman goes ahead with his plan for the government to buy $250 billion worth of stocks to stabilize the market. If the government suddenly sells those stocks a week later, what would you expect would then happen to stock prices and why?

The Hammering Men (pp. 102-106)

This section finds Kyle meeting Smith for lunch at Dallas' NorthPark Center mall. Inside, he observes the variety of objects for sale in the various stores, and muses on all the work it took from a multitude of people to create and bring to market all the products on display.

Kyle also muses on the fact that in a free market, products may or may not sell well, depending on whether buyers like them. When buyers do not like a product, the company behind it may lose money and even go bankrupt. This leads to the idea of *creative destruction*. Say that a company makes a new kind of T-shirt with removable sleeves. If no one likes it, and the company goes out of business, then those resources being used to produce that product can go toward some other use, hopefully one that people will like better. What is destroyed is a certain use of resources that turned out to be unpopular with consumers.

Creative destruction also works over time as technology changes. As the personal computer was introduced to the market and became popular, people had less use for old-fashioned typewriters. Companies that produced typewriters were forced to either adapt to the new reality or go out of business. While creative destruction can be a brutal process, it is also what gives consumers the products they desire the most.

An important role in this entire process is that of the entrepreneur, the business person who takes on the financial risk of bringing new goods and services to market. In the market, consumers "vote" on the goods and services with their dollars, in a sort of financial popularity contest. If a product proves to be popular with buyers, the entrepreneur will generally make a profit and be encouraged to bring more of that product to market.

So in an economy based on free markets, entrepreneurs create products that compete with each other for consumer approval. Through the process of creative destruction, more resources get directed toward the production of products that consumers like, and away from products consumers do not like. This situation is called *consumer sovereignty*. The desires of consumers are what ultimately rules the market and decides what gets produced with the society's scarce resources. The entrepreneurs are motivated by their own self interest, but the result is that consumers get what they demand. It is an example of the invisible hand guiding free markets from individual incentive to collective good.

Questions for students:

1) Briefly explain the concept of creative destruction.
2) What is an entrepreneur?
3) What does the term consumer sovereignty mean?

Evolution (pp. 112-113)

This section comprises a short history of how money developed into what it is today. When actual goods such as cattle, rice and salt are used as money it is called *commodity money*. Its value comes from the value of the good itself. Paper money that is backed by precious metal held in storage somewhere is called *representative money*. Its value comes from the metal that it represents. Modern U.S. currency (and most other modern currencies), is only backed by government decree. It is called *fiat money*. Fiat is Latin for "let it be done." Its value comes from the government decree, rather than something tangible like gold or silver.

A potential problem with fiat currency is that it can be created by the government in any amount desired. For instance, imagine the U.S. government printing and giving out enough money so all Americans would be millionaires. The problem is that this would not necessarily increase the goods and services available in the economy. The result, too much money chasing too few goods, is *inflation* – a general rise in prices.

The three functions of money:

- **Medium of exchange:** This means money can be exchanged for goods and services. In this way money circumvents the need for barter – the direct trading of one good for another.
- **Store of Value:** Money functions as a store of value when you save it rather than spend it. The purchasing power will last and allow you to use it in the future. You might say that money stays "fresh" and can be spent next year as easily as today.
- **Unit of Account:** Money can also be used simply as a uniform measure of value. For instance, a person may appreciate knowing that a family heirloom is valued at $10,000, even if they have no interest in selling it.

The end result is that while everyone might be millionaires, a million dollars might not buy you any more goods and services than you had before the new money was printed.

The opposite situation to inflation is when prices are generally falling. It is called *deflation*.

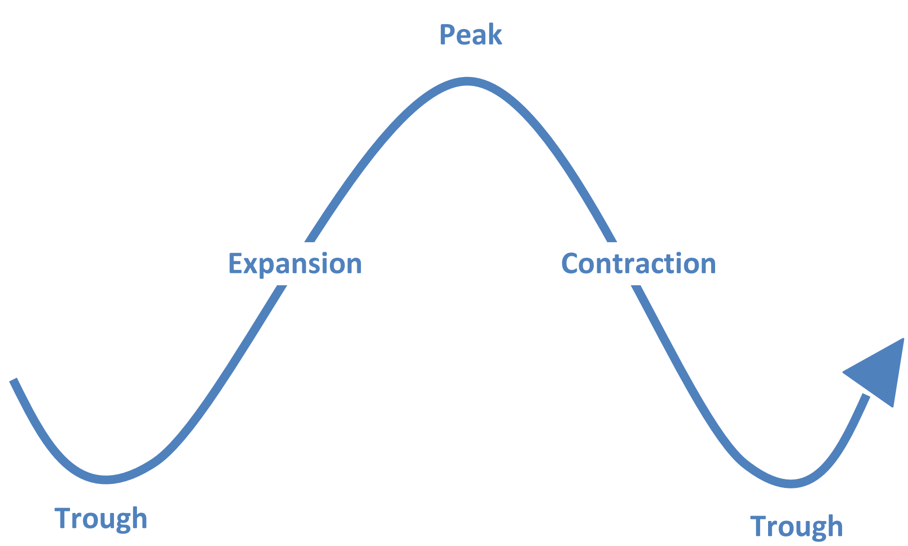
> ***Hyperinflation*** means extraordinarily high inflation. To be considered hyperinflation, prices generally must be rising more than 50% per month. There have been a number of cases of hyperinflation in history, such as in Germany between World Wars I and II. Hyperinflation often leads to economic collapse and social upheaval. In Germany it played a role in the Nazis coming to power.

Questions for students:

1) What is the difference between commodity money, representative money and fiat money?
2) Briefly describe times when you have used each of money's three functions in your life.
3) What is the difference between inflation and hyperinflation?
4) Research an episode of hyperinflation in history and write a paragraph about it.
5) What is deflation?

Animal Spirits (pp. 124-127)

With a short bio of the economist John Maynard Keynes, this section introduces the concept of the *business cycle*. This is a repeating cycle that economies based on free markets seem to follow over time, depicted below:



The business cycle has four phases, as labeled in the diagram. It starts with a period of economic growth or the *expansion* phase*.* This is sometimes called a boom. During this time, most businesses are making money and most people who want a job can find one pretty easily. Then the economy reaches a *peak* of growth, after which something goes wrong. The economy falls into a period of *contraction*, which is also called a recession or sometimes a bust. A very bad contraction may also be called a depression. During the contraction, economic growth stalls. Businesses lose money and lay off workers. It becomes hard to find a job and the *unemployment rate*, the percentage of people in the economy who are looking for a job but cannot find one, increases. Generally, after the recession has lasted awhile the economy reaches a low point or *trough*. From there the economy recovers into a new expansion, starting the cycle all over again.

In the Great Depression of the 1930's, a period of recession continued in the U.S. and worldwide for many years without recovery. The unemployment rate in the U.S. reached 25%, meaning one out of four people who wanted work could not find it. Economists, who mostly expected the economy to recover on its own, were baffled.

Keynes notion of animal spirits led him to believe that the problem was too little *aggregate demand* in the economy. Aggregate demand simply means the sum of all the demand for all the different goods and services an economy produces. Since people were not spending money, Keynes' solution was for the government itself to begin spending money in the economy, boosting aggregate demand for goods and services and hopefully spurring the business cycle into a new expansion.

Instead of spending money, government could also have simply lowered the tax rates it charges people. This would theoretically allow consumers to spend more money and boost aggregate demand in the economy.

Together, these two actions that the government can take, changing its own spending levels and/or changing tax rates, are called *fiscal policy*. Combined with monetary policy, which we covered in Human Behavior, they are the two primary ways the government seeks to stabilize the economy.

Keynes idea of the government coming to the rescue of the economy in a recession was a controversial one at the time, and remains so today. Then and now, there is much disagreement over the appropriate level of government involvement in an economy organized around free markets. Some believe in very little government involvement beyond enforcing ownership and property rights through a legal system, which is necessary for markets to function. Others, such as Keynes, believe that while free markets work well, they occasionally need government help in order to work best.

Deficits and Debt

One concern when the government uses fiscal policy is how it will impact the government budget. The government buys many goods and services, from bricks for public schools to paper clips for the Pentagon. It pays for these with the money it collects in taxes. When the government spends more than it takes in, it creates a *budget deficit*. Generally, the U.S. government makes up the deficit by borrowing money through the sale of government bonds.

When the government runs budget deficits in multiple years, it accumulates into a *national debt*. For instance, if the government has a $100 deficit for five straight years, the accumulated national debt would be $500 ($100 x 5 years).

Questions for students:

1) How is an expansion different from a contraction?
2) Which phase of the business cycle would you rather look for a job in and why?
3) Research and find out the current U.S. unemployment rate. Explain what it means.
4) What is aggregate demand?
5) Define fiscal policy.
6) Research and find out the most recent year's U.S. budget deficit or surplus and explain what it means.
7) If a country has a budget deficit of $300 the first year, a surplus of $100 the next year, and a balanced budget for the third year, what is the national debt?

Briefing (pp. 146-152)

In this section, with the economic crisis spreading from the U.S. to other nations, Kyle watches a television report illustrating how interconnected the world economy is today. This is because goods, services and money are increasingly moving between nations through the process of international trade. This is called *globalization*. One result of it is that what happens in one economy has an effect on other economies. For instance, the U.S. imports many products from China. So if the U.S. goes into a recession, and Americans stop spending as much money, the profits of Chinese companies may well decline, which could lead the Chinese economy to also drop into recession.

Questions for students:
1) Find and explain a news story that illustrates something about globalization.

A Different View of Capitalism (pp. 153-155)

This section presents a short bio of Karl Marx. Marx and his followers developed a type of command economy variously called Marxism, socialism or communism. This was an economy that allowed little individual economic decision making. A central authority would decide the questions of what to produce with society's resources, how much would be produced and who would receive it.

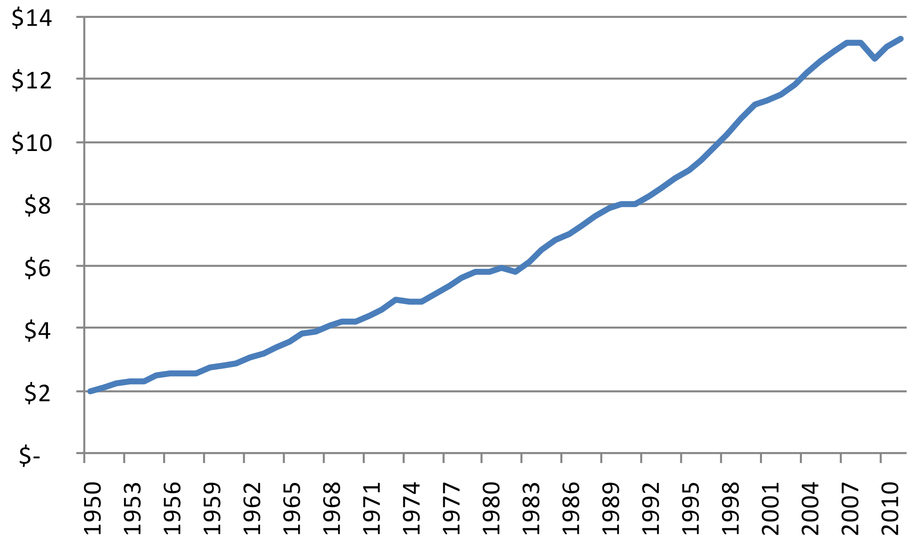
Some nations, such as Russia's Soviet Union of the twentieth century, have actually implemented this type of economy, with disastrous results. Without the consumer sovereignty of free markets, productive resources have proved very unresponsive to consumer desires. This has helped fuel civil unrest in Marxist societies. Furthermore, individual freedom to make economic and other life decisions has to be harshly repressed for the system to function as designed. These and other problems led to the sudden collapse of the Soviet Union in the late twentieth century.

Questions for students:
1) Research the collapse of the Soviet Union and write a report on one of its causes.

In the Shadow (pp.155-162)

In this section, the term gross domestic product (GDP) is defined. This is the market value of all the goods and services produced by a nation's economy, generally over the course of a year. GDP is like a vital sign of the economy, which economists can look at to determine the economy's health. For instance, when GDP grows, that is an indication that the economy is in the expansion phase of the business cycle. A falling GDP would indicate the economy being in the contraction phase.

Comparing GDP across years can indicate how much the economy is growing over the long run. For instance, the chart below shows how U.S. GDP, after correcting for inflation, has grown since 1950 (source: U.S. Department of Commerce, Bureau of Economic Analysis):



In 1950 U.S. GDP was about $2 trillion. In 2011 it was over $13 trillion. What this means to U.S. consumers is that many more goods and services were available to them in 2011 than in 1950.

Dividing U.S. GDP by the U.S. population gives you *GDP per capita*, which means GDP per person. It is a measure of the average standard of living of people in the U.S.

Questions for students:

1) Define gross domestic product.
2) If GDP is falling, what phase of the business cycle is the economy in?
3) Assuming the current U.S. GDP is $13 trillion and the U.S. population is 312 million, what is GDP per capita?
4) Explain what the figure you calculated in question 3 represents.

Faith Restored & Faith Lost and Leaving Dallas (pp. 227-233)

These sections see the American economy finally return to normal, and the crisis end, when faith or confidence in the economy is restored. Why is confidence so important?

A free market economy is powered by the decentralized, individual decision making of many, many people. These include consumers deciding to buy products, entrepreneurs deciding to bring new products to market, businesses deciding to expand and hire, and banks deciding to loan money out. When people lack confidence in the economy, they become hesitant. Consumers stop buying, entrepreneurs stop bringing products to market, businesses stop hiring and banks stop lending. These actions create the conditions for recession.

It is like a *self-fulfilling prophecy*. When consumers and business people worry about the economy being weak, it makes them behave in a way that causes the economy to actually become weak. That is why confidence is so important to the economy, and why statistics such as consumer confidence surveys are so closely tracked these days.

In the end, economics is about human behavior, how people act in their economic lives. As Kyle muses when he leaves Dallas, human behavior doesn't always make perfect sense. But that doesn't stop economists from trying to understand it better. Despite centuries of study since Adam Smith came on the scene, the economy still holds many secrets. As more of them are discovered it will be exciting to see how the story of economics continues to develop.

Questions for students:

1) From the story, explain what you think Kyle means when he says "The economy began to right itself. Or, more correctly, people began to right the economy."