Basic Economics

A Citizen's guide to the Economy

By

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Economics is the study of the use of scarce resources, which have alternative uses.

When a military medical team arrives on a battlefield where soldiers have a variety of wounds, they are confronted with the classic economic problem of allocating scarce resources, which have alternative uses. Unless their time and medications are allocated efficiently, some wounded will die needlessly.

The inherent reality is that there are not nearly enough beachfront homes to go around and prices are just a way of conveying that underlying reality. When people bid for a relatively few homes, these homes become very expensive because of supply and demand. But it is NOT the prices that cause the scarcity. Even if Congress were to declare that beachfront homes were a basic right of all Americans, it still would not change the realities of the situation.

Prices act as a guide for consumers and producers. A free market economic system is sometimes called a profit system, when it fact it is a profit and loss system. And the losses are equally important for the efficiency of the economy, because they tell the manufacturer what to stop producing.

Resources tend to flow to their most valued uses. From the standpoint of society as a whole, the COST of anything is the value that it has as in alternative uses. The real cost of building a bridge are the other things that could have been built with that same labor and material. There is also a scarcity of time to consider and the alternative uses of that, as well. The cost of watching a television sitcom or soap opera is the value of the other things that could have been done in that same time.

In a price-coordinated economy, any producer who uses ingredients that are more valuable elsewhere is likely to discover that the costs of those ingredients cannot be repaid from what the consumers are willing to pay for the product. There will be no choice but to discontinue making that product with those ingredients.

Prices

There are all kinds of prices. The prices of consumer goods are the most obvious examples but labor also has prices called wages or salaries, and borrowed money has a price called interest.

Price changes in response to supply and demand. These changes in price then direct resources to where they are most in demand and direct people to where their desires can be satisfied most fully by the existing supply.

A sudden and widespread destruction in housing in a given area means that there may not be nearly enough hotel rooms for displaced people to get the kinds of accommodations they would like. If prices remained at their previous levels before the disaster, a family of four might well rent two room – one for parents and one for kids. But when the hotel shot the price up, all four family members will crowd into one room, to save money, leaving the other room for other people who likewise lost their homes and are equally in need of shelter.

In short, prices force people to share, whether or not they are aware of sharing.

Prices rise in the first place because the amount demanded exceeds the amount supplied at existing prices. Prices fall because the amount supplied exceeds the amount demanded at existing prices. The first case is called a "shortage" and the second is called a "surplus" – but both depend on existing prices.

Economics is a study of consequences of various ways of allocating scarce resources which have alternative uses. It is not a study of our hopes and values.

While scarcity is inherent, shortages are not. Scarcity simply means that there is not enough to satisfy everyone's desires. Right now that scarcity is money based on poor cash flow. With nothing, or very little coming in, every company is looking to stop the bleeding by drastically reducing their spending. This includes wages, inventory, power, and whatever else it takes to survive this. A shortage, however, means that there are people willing to pay the price of the good but are unable to find it.

In a price coordinated economic system that shares its resources, those who want to use wood to produce furniture, for example, must bid against those who want to use it to produce houses, paper or baseball bats. Those who want to use milk to produce cheese must bid against those who want to use it to produce yogurt or ice cream.

For example, whenever the price of oranges goes up, some people switch to tangerines. If a vacation on the beach becomes too expensive, people may take a cruise instead. This is incremental substitution. Not everyone stops eating oranges when they become too pricey. Some continue to eat the same number they always ate. Others cut back, while others stop entirely and/or switch to another fruit. In spite of the fact that the orange is still the same, the value of the orange that each individual attaches to it differs greatly. **This is where we are now.** We have some pricey "oranges" and too many customers are either switching to another fruit, or just not eating fruit.

When the price of oranges goes up, it means the demand for oranges has exceeded the availability. But when the price of oranges comes down, it means the supply of oranges has exceeded the demand for them.

A Quick Study of The Rise and Fall of Businesses

A&P was once the largest retail chain in any field, any wherein the world, with sales greater than the combined sales of leading contemporary retail giants Sears, Penney and Montgomery Ward.

The fact that A&P has shrunk to a fraction of its former size, and is now virtually unknown, suggest that industry and commerce are not static things, but dynamic processes, in which individual companies and whole industries rise and fall, as a result of relentless competition under changing conditions. Half the companies on the Fortune 500 list of the biggest businesses in 1980 were on longer on that list a decade later.

During the '20s, A&P was making phenomenal rate of profit on its investment – never less than 20% per year. But in the '50s it began to change when they lost \$50MM in one 52 week period. A few years later it lost \$175MM over the same time span.

When A&P was prospering up until 1950, it did so by charging LOWER prices than competing grocery stores. It could do this because it kept its costs lower and the resulting lower prices attracted vast numbers of customers. When it began to lose customers to other grocery chains, this was because the latter could now sell for lower prices than A&P. Changing conditions in the surrounding society brought this about – together with differences in the speed with which different companies spotted the changes and realized their implications.

What appeared on the scene were shopping malls. As the ownership of automobiles, refrigerators and freezers became more widespread, this completely changed the economics of the grocery industry. With a car, shoppers could now buy far more groceries at one time than they could have carried home in their arms from an urban neighborhood store before the war. Refrigerators and freezers now made it possible to stock up on perishable items like meat and dairy products. This all added up to fewer trips to the grocery store with larger purchases each time.

The grocery stores were experiencing large volume of sales at each given location. High volume meant savings in delivery costs from the producer to the supermarket. It also meant savings in the cost of selling. It did not take tens time as long to check out one customer buying \$50 worth of groceries as it did to check out ten customers buying \$5 worth of groceries each at a neighborhood store.

A&P lingered in the central cities longer and did not follow the shifts of population to California and other sunbelt areas. After years of being the low price provider, A&P suddenly found itself being undersold by rivals with even lower costs of doing business.

While A&P succeeded in one era and failed in another, what is more important is that the economy as a whole succeeded in both eras in getting its groceries at the lowest prices possible at the time – from whichever company happened to have the lowest prices.

Profits and Losses

"An enterprise system is a profit and loss system, and the loss part may be even more important than the profit part. The crucial difference is in what ventures are continued

and which are abandoned. The crucial requirement for maintaining growth and progress is that successful experiments be continued and unsuccessful experiments be terminated."

Milton Friedman

Keeping track of the money coming in and the money going out can make the difference between profit and loss. It is the hope for profits and the threat of losses that force a business owner in a capitalist economy to produce at the lowest cost and sell what the customers are willing to pay for it. In the absence of these pressures, owners in a socialistic environment have far less incentive to be as efficient as possible under given conditions, much less to keep up with changing conditions and respond to them quickly, as capitalist enterprises must do if they expect to survive.

Under a capitalist economy, even the most profitable business can lose its market if it doesn't' keep innovating, in order to avoid being overtaken by competitors. The fact that most goods are available more cheaply in a capitalist economy implies that profit is less costly than inefficiency. Or, Profit is a Price Paid for Efficiency. The greater efficiency must outweigh the profit or else socialism in practice would have lower prices and greater prosperity, which has never happened.

Profit is the owner's legal claim to whatever residual is left over after the costs have been paid out of the money received from customers. That residual can turn out to be positive, negative or zero. The <u>ONLY</u> person whose payment is contingent upon how well the business is doing is the owner of that business.

Return on Investment & Return on Sales

A store that sells pianos undoubtedly makes a higher percentage profit on each sale than a supermarket makes selling bread. But a piano sits in the store for a much longer time waiting to be sold than a loaf of bread does. Bread would go stale waiting for as long as a piano to be sold.

When a supermarket chain buys \$10,000.00 worth of bread, it gets its money back much faster than when a piano dealer buys \$10,000.00 worth of pianos. The piano dealer must charge a higher percentage markup on the sale of each piano than a supermarket charges on each loaf of bread, if the piano maker is to make the same annual percentage rate of return on a \$10,000.00 investment. When the supermarket gets its money back in a shorter period of time, it can turn right around and re-invest it, buying more bread or other grocery items. In the course of a year, the same money turns over many times in a supermarket, earning a profit each time, so that a penny of profit on a dollar can produce a total profit for the year on the initial investment equal to what a piano dealer makes charging a much higher percentage markup on an investment that turns over much more slowly.

Making a profit of only a few cents on the dollar on sales but with the inventory turning over nearly 30 times a year, A&P's profit rate on investment soared. This low price and high volume strategy set a pattern that spread to other grocery chains and to other kinds

of enterprises as well. In a later era, huge supermarkets were able to shave profit margin on sales still thinner, because of even higher volumes, enabling them to displace A&P from industry leadership by charging still lower prices.

Since profits are the difference between what consumers pay and what the products cost to produce and distribute, it is important to be very clear about these costs.

There is no such thing as "the" cost of producing a given product or service. Henry Ford proved long ago that the cost of producing an automobile was very different when you produced 100 cars a year than when you produced 100,000 cars per year. It is estimated that the minimum amount of automobile production required to achieve efficient production levels today runs into the hundreds of thousands. What is our most efficient rate of production?

It does not cost as much to deliver 100 cartons of milk to one supermarket as it does to deliver ten cartons of milk to each of ten different neighborhood stores. When building a beer brewery, construction costs are about one-third less per barrel of beer when the brewery's capacity is 4.5 million barrels per year than when its capacity is 1.5 million barrels. Although A-B spends millions of dollars advertising Budweiser and its other beers, its huge volume of sales means that its advertising costs per barrel of beer are about \$2.00 less than that of its competitors, Coors or Miller.

In short, the cost of producing a given product or service varies with the volume being produced. This is what economists call "economies of scale."

But, there comes a point, in every industry, beyond which the cost of producing a unit of output no longer declines as the amount of production increases. In fact, costs per unit actually rise after an enterprise becomes so huge that it is difficult to monitor and control, when the right hand doesn't know what the left hand is doing. The coordination of knowledge within the organization is a big a problem as it is in the economy.

When AT&T was the world's largest corporation, its own CEO said, "AT&T is so big, that when you give it a kick in the behind today, it takes two years before the head says, 'Ouch!'"

While there are economies of scale, there are also diseconomies of scale. There may be things that companies could do better if it were larger and other things it could better if it were smaller. Eventually, diseconomies of scale begin to outweigh the economies, so it does not pay a firm to expand beyond that point. This why industries usually consist of many firms, instead of one giant, super-efficient monopoly. (But, economics, like nature, has a way of cleaning house every once in awhile. Like now, for instance.)

Running a restaurant or a manufacturing company.

A well run restaurant usually requires the presence of an owner with sufficient incentives to continuously monitor all the things necessary for successful operation, in a field where

failures are all too common. Not only must the food be prepared to suit the tastes of the restaurant's clientele, the waiter and waitresses must do their jobs in a way that encourages people to come back for another pleasant experience and the furnishings of the restaurant must also be such as to meet the desires of the particular clientele that it serves.

Food suppliers must be continuously monitored to see that they are still sending the kind and quality of produce, fish, meats, and other ingredients needed to satisfy the customers. Cooks and chefs must also be monitored to see that they are continuing to meet existing standards. As well as adding to their repertoires, as new foods and drinks become popular and old ones are ordered less often by the customers.

The normal turnover by employees also requires the owner to be able to select, train and monitor new people on an on-going basis. Moreover, changes outside the restaurant, in the kind of neighborhood around it for example, can make or break its business. All these factors and more must be kept in mind and weighed by the owner, and continually adjusted to, if the business is to survive, much less be profitable.

Now take all of the above and apply it to manufacturing.

Eliminating the Middleman

Everyone always wants to eliminate the middleman but they can't because of economic reality.

Beyond some point, there are "middlemen" in the channel of getting your goods to the end customer who can perform the next step in the sequence more efficiently and more effectively than you can. At that point, it pays a firm to sell what it has produced to some other channel that can carry on the next part of the operation more efficiently.

Oil companies discovered they can make more money by selling gasoline to local filling station operators. When they did, they no longer had the burden of getting their product to the public. It was out of their hands and not their problem.

When a product becomes more valuable in the hands of somebody else, that somebody else will bid more for the product than it is worth to its current owner.

Go back to the oil companies. The filling station operators see the product to be more valuable to them than it does to the oil companies because the oil companies are in the business of producing oil. The operators are in the business of dispensing it. The owner then sells, not for the sake of the economy, but for his own sake. However, the end result is a more efficient economy, where goods move to those who value them most.

Middlemen continue to exist because they can do their phase of the operation more efficiently than others. It should hardly be surprising that people who specialize in one phase can do that phase better than others.

Monopolies

Fact: Most big businesses are not monopolies and not all monopolies are big business.

Take cranberry juice. How do we know that the price being charged is not far above their costs of production? We don't. We actually have no idea of how much it costs to produce a bottle or can of cranberry juice.

Competition makes it unnecessary for us to know. If the price of apple juice is higher than necessary to compensate for the costs incurred in producing it, the result is a high rate of profit. Only, this is never done in a vacuum. Word gets out that there is a lot of money to be made in cranberry juice. This automatically attracts more investment into the cranberry juice industry creating more competition. Eventually, these additional competitors will drive prices down to a level that compensates the costs with the same average rate of return on similar investment available elsewhere. When that happens, the in-flow of investments from other sectors of the economy stop. The incentive of a high rate of profit has evaporated and it doesn't make sense to these investors to put any more money into it. They will now put there money in other high rate of profit opportunities until those, too come back to reality

Let's say there was a monopoly in the production of cranberry juice. One company had all the cranberries. The entire process would not take place.

What adversely affects the total wealth in the economy as a whole is the effect of a monopoly on the allocation of scarce resources which have alternative uses.

When a monopoly charges a higher price than it could charge if it had competition, consumers tend to buy less of the product than they would at a lower competitive price. In short, a monopolist produces less output than a competitive industry would produce with the same available resources, technology and cost conditions. The monopolist stops short at a point where consumers are still willing to pay enough to cover the cost of production (including a normal profit) of more output because the monopolist is charging more than the usual profit.

Monopolies result in the economy's resources being used inefficiently, because these resources would be transferred from <u>more valued</u> uses to <u>less valued</u> uses.

Similar principles apply to a cartel – that is, a group of businesses, which agree among themselves to charge higher prices or otherwise avoid competing with one another. In practice, individual members of the cartel tend to cheat on one another secretly – lowering the cartel price to some customers in order to take business away from other members of the cartel. When this becomes widespread, the cartel becomes irrelevant. (OPEC is a perfect example.)

Because cartels were once known as "trusts", legislation designed to outlaw monopolies and cartels became known as "anti-trust" laws. Hence the Sherman Anti-Trust Act of 1890.

Where a monopoly or cartel maintains prices that produce higher than normal profits, other businesses are attracted to the industry. This additional competition then tends to force prices and profits down. (No different than the cranberry juice producers.)

When railroads were first built in the 19th Century, the Interstate Commerce Commission had to be created to regulate them. The same was true for the Federal Communications Commission regarding the telephone companies.

The intent was to have a regulatory commission set prices where they would have been if there were a competitive marketplace. The reality of the situation is that there is no way to know what those prices would be. Only the actual functioning of a market itself could reveal such prices, resulting in the less efficient firms being eliminated by bankruptcy and only the most efficient surviving.

The most that a regulatory agency can do is accept what appear to be reasonable production costs and allow the monopoly to make what seems to be a reasonable profit over and above such costs.

The most important thing about competition is that it is a condition of the marketplace. This condition cannot be measured by the number of competitors existing in a given industry at a given time, though politicians, lawyers and assorted others have confused the existence of competition with the number of surviving competitors. But, competition as a condition is precisely what eliminates many competitors.

Back when A&P grocery chain was the largest retail chain in the world, it still <u>sold less</u> than one-fifth of the groceries in this country. Yet, the Justice Department brought an anti-trust action against it, using the company's low prices, as evidence of unfair competition against competitors.

What has been lost sight of is the efficiency of the economy as a whole. Both delivery costs and selling costs are less per unit of product when the product is bought and sold in large enough amounts to fill a railroad boxcar.

Production costs are also lower when the producer has a large enough order to be able to schedule production far ahead, instead of finding himself forced to pay overtime to fill many small and unexpected orders that happen to arrive at the same time.

Despite such economies of scale, the government took action against the Morton Salt Company in the 1940's for giving discounts to buyers who bought carload lots of their product. Businesses that bought less than a carload lot were charged \$1.50 a case, and those who bought 50,000 cases or more a year, were charged \$1.35. Because there were

relatively few companies that could afford to buy so much salt and many more that could not, "the competitive opportunities of certain merchants were injured," according to the Supreme Court, which upheld the Federal Trade Commission's actions against Morton Salt.

Another example is when the Supreme Court in 1966 broke up a merger between two shoe companies that would have given the new combined company less than 7% of the shoe sales in the United States. It likewise that same year, broke up a merger of two local supermarket chains, which, put together, sold 7.5% of the groceries in the Los Angeles area.

Defunct companies as Graflex and Pan American "controlled" a substantial share of their respective markets, when in fact the passage of time showed that they controlled nothing, or else they would never have allowed themselves to be forced out of business. The severe shrinkage in size of such former giants as A&P and Smith-Corona likewise suggests that the rhetoric of "control" bears little relationship to reality.

During the decades when the Aluminum Company of America (Alcoa) was the only producer of virgin ingot aluminum in the United States, its annual profit rate on its investment was about 10% after taxes. Moreover, the price of aluminum went down to a fraction of what it had been before Alcoa was formed. Yet Alcoa was prosecuted under the anti-trust laws and lost. Why were aluminum prices going down under a monopoly, when in theory they should have been going up? Despite of its "control", Alcoa was well aware that it could not jack up prices at will, without risking the substitution of other materials.

Judge Alex Kozinski of the 9th District pointed out that the key to monopoly is not market share – even when it is 100% - but the ability to keep others out. A company, which cannot keep competitors out, is not a monopoly, no matter what percentage of the market it may have at a given moment.

An anti-trust case against A&P ended in 1949, just three years before A&P lost \$150 Million and began a long and catastrophic economic decline. The "control", "power," and "dominance" of A&P, which the government lawyers depicted so convincingly in court, proved to be of little consequence in the marketplace, when other supermarket chains were able to provide better service at lower prices.

An Overview

If the economy is to achieve the most efficient use of its scarce resources, there must be some way of weeding out those business owners or managers who do not get the most from those resources.

Losses accomplish that. Before reaching that point, however, losses can force a firm to make internal reassessments of its policies and personnel.

From the '20's into the '50's, White Castle was the dominant hamburger chain in the country. People walked to White Castle stands, which meant they were located in places with high population densities, so as to generate a large volume of pedestrian traffic. They were selling to a large number of people all of whom came from a limited distance from the store. Therefore, they were all located near factories, or in crowded working class neighborhoods in central cities. And they stayed open around the clock.

White Castle did not have franchises. The company owned each restaurant and built new ones only when it had the money on hand to pay cash to do so. This enabled them to ride out the Great Depression of the '30's.

As middle-class and working class people became more prosperous, they began migrating out to suburbia. The rising crime and violence of the central cities in the 60's was more of a problem for White Castle than any other hamburger chain who were located either on the highways or in suburban shopping malls. Staying open all night in a low-income urban neighborhood was no longer safe, financially or otherwise.

At the heart of the changed environment for fast food chains was the automobile. As automobile ownership and sub-urbanization spread across the country, so did McDonald's. Drive through restaurants in general require far less land per customer served than does a sit down restaurant. By 1966, White Castle's sales were just one percent of McDonald's.

Neither individuals nor companies are successful forever. Death alone guarantees turnover in management.

In the case of A&P: "The simple fact is that A&P had only one major management problem – the company was unable to replace Mr. John," the name long used inside the company for John Hartford, the last member of the founding family to run A&P. His successors were unprepared to deal with the changes taking place in the retail grocery business and with society itself. What was needed was the same kind of foresight, dedication and imagination that had raised A&P to its pinnacle in the first place – and such talents are not readily available, certainly not continuously and indefinitely in any one company.

Efficiency and Its Implications

Production costs are reduced when the fixed overhead costs can be spread out over a large volume of output, adding little to the cost of each individual item. Scheduling also affects production costs. When a high-volume retailer signs a contract for a large order from a given manufacturer, that manufacturer can then schedule the work evenly throughout the year. This avoids the additional costs that go with ups and downs in the

orders that come in unpredictably from the market, leaving the manufacturer's workforce idle during some weeks.

The fact that profits are contingent upon efficiency in producing what your customers want, at a price that customers are willing to pay – and that losses are an ever present threat if a business fails to provide that – explains much of the economic prosperity found in economics that operate under free market competition. Profits as a realized end-result are crucial to the individual business, but it is the Prospect of Profits – and the threat of losses – that is crucial to the functioning of the economy as a whole.

Efficiency is the difference between having the necessities, comforts and amenities of high-income countries and suffering the hunger and deprivations too often found in poorer countries.

Market Vs Non-Market Economies, Capitalism Vs Government and Capitalism Vs Socialism

Economics, in reality is the study of how a whole society uses scarce resources that have alternative uses. Economics is about how a society economizes and how individuals share, without even being aware of sharing.

There are many other possible ways of allocating resources, and many of these alternatives are particularly attractive to those with political power. However, none of these alternative ways of organizing an economy has matched the track record of economies where prices direct what resources go where and in what quantities.

Thus, when a hurricane, flood or other natural disaster strikes an area, emergency aid usually becomes both from FEMA and from private insurance companies whose customers' homes and property have been damaged. Allstate cannot afford to be slower in getting money into the hands of its policy-holders than State Farm is in getting money into the hands of its policy holders.

A government agency, however, faces no such pressure. There is no government rival agency that these people can turn to for the same service.

Henry Ford continued producing the same standard model car year after year, all painted black. GM began changing body styles and painting them different colors. Ford began losing customers. GM soon replaced Ford as the number one automaker.

While some businesses can and do cut corners on quality in a free-market, they do so at the risk of their own survival. The great financial success stories in American industry have often involved companies almost fanatical about maintaining the reputation of their products, even when these products have been quite inexpensive.

A business is NOT just selling a physical product, but also the reputation which surrounds that product.

Winners & Losers

Whatever the merits or demerits of various political proposal, what must be kept in mind when evaluating them is that the good fortunes and misfortunes of different sectors of the economy may be closely related as cause and effect - and that preventing bad effects may prevent good effects. It was not accidental that Smith Corona was losing millions of dollars on its typewriters while Dell was making millions on its computers. It was not accidental that Safeway surged to the top of the grocery business while A&P fell from its peak to virtual oblivion.

The efficient allocation of scarce resources, which have alternative uses, means that some must lose their ability to use those resources in order that others can gain the ability to use them.

Typewriters were no longer what the public wanted after they had the option to achieve the same end result and more with computers.

Scarcity implies that resources must be taken from some places, in order to go to other places.

PART III Work & Pay

Productivity and Pay

Most Americans earn a living by renting their time and talents and live much better than most people in many other countries as a result of it. But, what determines how much people get paid for their work? The answer is Supply and Demand.

The term productivity is sometimes used loosely to describe an employee's contribution to a company's earnings. A worker using the latest modern equipment can produce more output than the very same worker employed in another firm whose equipment is not quite as up to date or whose management does not have things organized as well.

Whatever the source of a given individual's productivity, that productivity determines the upper limit of how far an employer will go in bidding for that person's services.

In short it is the combination of supply and demand, which determines pay, as it determines the prices of goods and services in general.

Forms of Payment

When we think of people being paid for their work, we look at time and effort.

A shoeshine boy gets paid every time they shine a shoe. Doctors get paid every time a patient visits their office. Farmers get paid when they sell their crops. Business owners get paid from whatever is left over from their sales after they have paid their employees, taxes, overhead, etc.

These and other ways of compensating people's efforts can be broken down into two broad categories – fixed guarantees of payment and variable chances of payment. Wages and salaries are usually fixed guarantees. By and large, those with guarantees receive less money than those who take their chances.

Pay Differences

Wages and salaries serve the same economic purposes as other prices – that is, they guide the utilization of scarce resources, which have alternative uses. Yet because these scarce resources are human beings, we tend to look on wages and salaries differently.

When two people in one household today earn the same total amount of money that three people were earning in that household in the past, that is a 50% increase in income per person – even when household income remains the same.

An Overview

The economic reality is that the main reason most Americans have prospered is that the pie itself has gotten much bigger, not because this group or that group changed a few percentage points in its share. The changing allocation of scarce resources which makes continuing prosperity possible may change these percentages back and forth over time as changing pay and employment prospects direct individuals where their productivity would be higher and away from where it is lower.

Saving Jobs – whether from displacement by technological advances at home, or from imports from other countries – means forcing other people to have a lower standard of living than what is available with the existing resources and technology.

Pay differentials are likewise typically reflections of productivity differences and are apart of the process of allocating scarce labor resources, which have alternative uses.

Part IV Time & Risk

When people insist on specializing in a field for which there is little demand, their investment of time has been a waste of scarce resources (time, money, energy, effort) that could have produced something that others wanted.

Putting things away after you use them is an investment of time in the present to reduce the time required to find them in the future. (Tell this to your kids.)

Economic activities, like all activities, take place over varying spans of time and with varying risks. Time alone is a cost.

Because these returns are in the future, risk is an inherent part of investment. As a result, the returns must be higher when the risks are higher, or else people will refuse to part with their money. Moreover, these risks are constantly changing, as is our knowledge of particular risks. That is why the stock market is constantly fluctuating. As investors acquire more information about the condition of the companies they have invested in, or the condition of other companies, or other industries which look like a better place to put their money, the money moves and stocks rise and fall accordingly.

What is being saved and invested in the present are not the goods and services that will be used in the future, but the capacity to produce those things in the future. That capacity may consist of machine tools that will produce an automobile five years from now or accumulating experience that will allow an artist to make a sketch worth \$100,000 twenty years from now.

When economic actions taken at one time bare fruit at a later date, risk is introduced or increased. Knowledge is never perfect, and the longer the time between a decision and its consequences, the wider the gray area of uncertainty. One of the ways of dealing with this uncertainty is to prepare alternative courses of action.

In short, inventory is a substitute for knowledge. If a soldier going into battle knew that he would fire exactly 36 bullets in combat, he would not need to weigh himself down with more bullets than that or with a variety of first aid and other items he would never use. His lack of knowledge forces him to bring these things with him.

Speculation

When an American wheat farmer in Idaho is getting ready to plant his crop, he has no way of knowing what the price of wheat will be when the crop is harvested.

Speculation is often misunderstood as being the same as gambling, when in fact it is the opposite of gambling. What gambling involves, whether in games of chance or in actions

like playing Russian roulette, is creating risk that would otherwise not exist, in order either to profit or to exhibit one's skill or lack of fear. What economic speculation involves is coping with an inherent risk in such a way as to minimize it and to leave it to be borne by whoever is best equipped to bear it.

A futures contract guarantees the seller a specified price in advance.

Each speculator must of course bid against other speculators, as each farmer must compete with other farmers, whether in making futures contracts or in selling at harvest time.

Neither the speculator nor the farmer knows what the prices will be when the crop is harvested. But the speculator happens to have more knowledge of markets and of economic and statistical analysis than the farmer, just as the farmer has more knowledge of how to grow the crop.

Inventories

Inventory is a substitute for knowledge. Since you don't always know just how much inventory you are actually going to need and since inventory costs money, a business enterprise must try to limit how much inventory it has on hand.

Those businesses, which have the greatest amount of knowledge and come closest to the optimal size of inventory, will have their profit prospects enhanced.

Just as prices in general affect the allocation of resources from one place to another at a given time, so returns on investment affect the allocation of resources from one time period to another. A high rate of return provides incentives for people to save and invest more than they would at a lower rate of return. — A higher rate of return encourages people to consume less in the present so that they may consume more in the future. It allocates resources over time.

The present value of an asset is in fact nothing more than its anticipated future returns, added up and discounted for the fact that they are delayed.

Conversely, if the city announces that it is going to begin building a sewage treatment plant next year, on a piece of land next to your home, the value of your home will decline immediately, before the adjoining land has been touched.

The present value of an asset reflects its futures benefits or detriments, so that anything, which is expected to enhance or reduce those benefits or detriments will immediately affect the price at which the asset can be sold today.

It makes sense for a 90 year old man to begin planting fruit trees that will take 20 years before they reach their maturity, because his land will immediately be worth more as a result of those trees. He can sell the land six months later and go live in the Bahamas if

he wishes. Part of the value of his wealth today consists of the value of food that has not yet been grown – and which will be eaten by children who have not yet been born.

Just as prices cause us to share scare resources and their products with others at a time, present value causes us to share those resources over time with future generations — without even being aware that we are sharing. It is of course also possible to share politically, by having the government assume control of natural resources, as it can assume control of other assets, or in fact of the whole economy.

With an interest rate of 5% being available in the economy as a whole, it would not pay you to bid more than \$9,523.81 for a \$10,000 bond that matures a year from now. By investing that same amount of money somewhere else today at 5%, you could get back \$10,000 in a year. Therefore, there is no reason for you to bid more than \$9,523.81 for a \$10,000 bond.

What if the interest rate in the economy as a whole had been 12%, rather than 5%? Then it would not pay you to bid more than \$8,928.57 for a \$10,000 bond that matures in a year. What people will bid for bonds depends on how much they could get for the same money by putting it somewhere else. That is why bond prices go down when the interest rates go up and vice versa.

What this also says is that, when the interest rate is 5%, \$9,523.81 in the year 2003 is the same as \$10K in the year 2004. This raises the questions about taxation of capital gains. If some one buys a bond for the former price and sells it a year later for the latter price, the government will of course want to tax the \$476.19 difference. What if there has been a one percent inflation, so that the \$10k received back would not have been enough to compensate for waiting, if the investor had expected inflation to reduce the value of the bond?

What if there had been a 5% inflation, so that the amount received back was worth no more than the amount originally lent, with no reward at all for waiting?

Imagine that someone is raising money to go into a business where 1.) the chances are 50:50 that he will go bankrupt and 2.) if he does survive financially, his initial investment will increase ten-fold. Perhaps he is drilling for oil or speculating in foreign currencies. What if he wants you to contribute \$5,000 to this venture? If you can afford the risk, would you be better off buying \$5,000 worth of stock in this enterprise or \$5,000 worth of this company's bonds?

If you buy bonds, your chances are only 50:50 of getting your money back at all. And if this enterprise prospers, you are only entitled to whatever rate of return was specified in the bond at the outset, no matter how many millions of dollars the entrepreneur makes with your money. Buying bonds in such a venture does not seem like a good deal. Buying stocks, on the other hand, might make sense. If the business goes bankrupt, your stock could be worthless, while a bond would have some value, based on whatever assets remain to be sold, even if that only pays the bondholders and other creditors pennies on

the dollar. On the other hand, if the business succeeds and its assets increase ten-fold, then the value of your stock increases ten fold.

The main point is that safety and risk depend upon the time period involved, as well as on the kind of asset. To take an extreme example, while a dollar invested in bonds in 1801 would be worth nearly a thousand dollars by 1998, a dollar invested in stocks that same year would be worth more than half a million dollars. All this is in real terms, taking inflation into account. Meanwhile, a dollar invested in gold in 1801 would by 1998, be worth just 78cents. The phrase, "as good as gold" can be misleading as the phrase "money in the bank", when talking about the long run. There have been many short-run periods when bonds and gold held their value while stock prices plummeted. The relative safety of these different kinds of investments varies greatly with how long a time period you have in mind.

The relative safety and profitability of various kinds of investments also depends on your knowledge.

Insurance

If everyone were known in advance to die at age 70, there would be no point in life insurance, because there would be no risk involved.

Buying life insurance at age 30 would be the same as buying a 40 year-old bond and buying life insurance at age 40 would be the same as buying a 30 year-old bond.

What makes life insurance different from a bond is that neither the individual nor the insurance company knows when that particular individual will die.

Insurance companies do not simply save the premiums they receive and later pay them out when the time comes. They invest these premiums, so that they will have more money available than if they had let the money gather dust in a vault.

Social Security

Another form of government program that has been analogized to insurance, and is in fact called insurance in the Federal Insurance Contribution Act is Social Security. The FICA premiums deducted from paychecks for social security are immediately spent upon their arrival in Washington – either to pay for any of the many government activities, from fighting wars to paying the travel expenses of members of Congress on junkets.

The reason the crisis atmosphere surrounding many discussions of how to "save" Social Security comes from the fact that FICA premiums are not invested, like insurance premiums, but are actually spent. Therefore, future pensions for those currently paying FICA premiums will not be paid out of those premiums, but out of Future FICA premiums paid by people who are working in the future – and from future general taxes, if and when future FICA premiums are insufficient.

That is why there is such worry in Washington about the size of the next generation. So long as each successive generation was larger than the previous one, Social Security operated successfully like a pyramid scheme in its early phases, where enough new people are joining that their payments in can provide a good return on the investment made by earlier members.

Part V: The NATIONAL ECONOMY

During the Great Depression of the '30s, as many as one fourth of all workers were unemployed and American corporations as a whole operated at a loss for two years in a row. GM's stock, which peaked at 72 3/4 in 1929, hit bottom at 7 5/8 in 1932. US Steel stock went from 261 3/4 to 21 1/4 and GE fell from 396 1/4 to 70 1/4. For the entire decade of the 30s, unemployment averaged more than 18%. It was the greatest economic catastrophe in the history the United States. The fears, policies, and institutions it generated were still evident more than half a century later.

In thinking about the national economy, the most fundamental challenge is to avoid what philosophers call "the fallacy of composition" – the mistaken assumption that what applies to a part applies to the whole.

What was true of the various sectors of the economy that made news in the media was not true of the economy as a whole.

The fallacy of composition is not peculiar to economics. In a sports stadium, any given individual can see the game better by standing up, but, if everybody stands up, everybody will not see better. In a burning building, any given individual can get out faster by running than by walking. But, if everybody runs, the stampede is likely to create bottlenecks at doors, trampled people, etc.

Any given firm or industry can always be saved by a sufficiently large government intervention, whether in the form of subsidies, purchase of the firm's or industry's products by government agencies, or by other such means.

We need only imagine what would have happened if the government decided to "save jobs" in the typewriter industry when personal computers first began to appear and started taking customers away from typewriters.

Measuring National Output

A country's total wealth includes everything it has left from the past plus everything currently being produced.

National output during a year can be measured in a number of ways. The most common measure today is the Gross Domestic Product, which is the sum total of everything produced within a nation's borders.

During WWII, for example, American production of automobiles stopped, so that factories which normally produced cars could instead produce tanks, planes and other military equipment. This meant that existing cars simply deteriorated, as did most refrigerators, apartment buildings and other parts of the national stock of wealth. Wartime government posters said:

Use it up,
Wear it out,
Make it do,
Or do without.

After the war was over, there was a tremendous increase in the production of cars, refrigerators, housing and other parts of the nation's accumulated stock of wealth, which had been allowed to wear down or wear out while production was being devoted to urgent wartime purposes.

Just as national income does not refer to money or other paper assets, so national wealth does not consist of these pieces of paper either, but of the real goods and services that such things can buy. Otherwise, any country could get rich immediately just by printing more money.

The Composition of Output

The real goods and services, which make up the national output also change. The cars of 1950 are not the same as the cars of the year 2003. The older cars did not have air-conditioning, seat belts, anti-lock brakes, or many other features that have been added over the years. So when we try to measure how much the production of automobiles has increased in real terms, a mere count of how many cars there were in both time periods misses a huge qualitative difference in what we are defining as being the same thing – cars. The same is true of housing as well.

At the beginning of the 20th century, the national output did not include any airplanes, television sets, computers, or nuclear power plants. At the end of the century, national output did not include many typewriters, slide rules, or a host of equipment and supplies once widely used in connection with horses that formerly provided the basic transportation of the country.

What then does it mean to say the GDP was x percent larger in the year 2000 than in 1900, when it consisted of very different things?

The longer the time span involved, the more such statistics approach meaninglessness.

The average American's annual income could buy everything the average Japanese annual income buys and still have thousands of dollars left over. Therefore the average American has a higher standard of living than the average Japanese.

Many trends reported in the media or proclaimed in politics depend entirely on which year has been chosen as the beginning of the trend. Crime has been going up if you measure from 1960 to the present, but down if you measure from 1990 to the present. It has been claimed that automobile fatality rates have declined since the federal government began imposing various safety regulations. This is true – but it is also true that automobile fatality rates were declining continuously for decades before the federal government imposed safety regulations.

Money & the Banking System

The Role of Money

Everyone wants money, but there have been particular times in particular countries when no one wanted money, because they considered it worthless. When you can't buy anything with money, it becomes just useless pieces of paper or useless metal disks.

Money is equivalent to wealth for an individual only because other individuals will supply him with the real goods and services that he wants in exchange for his money. But, from the standpoint of the national economy as a whole, money is not wealth. It is just a way to transfer wealth or to give people incentives to produce wealth.

Whatever the money consists of, more of it in the national economy means higher prices.

Many countries have preferred using gold, silver or some other material that is inherently limited in supply, as money. It is a way of depriving governments of the power to expand the money supply to inflationary levels.

Gold has long been considered ideal for this purpose, since there is a limited supply of gold in the world. When paper money is convertible into gold whenever the individual chooses to do so, then the money is said to be "backed up" by gold. This expression is misleading only if we imagine that the value of the gold is somehow transferred to the paper money, when in fact the gold simply limits the amount of paper money that can be issued.

To give some idea of the cumulative effects of inflation, a one hundred dollar bill in 1998 would buy less than a \$20 bought in 1960. Among other things, this means that people who saved money in the '60s had four-fifths of its value silently stolen from them over the next three decades.

Gold continues to be preferred to many national currencies, even though gold earns no interest, while money in the bank does. The fluctuating price of gold reflects not only the changing demands for it for making jewelry or in some industrial uses but also, and more fundamentally, the degree of worry about the possibility of inflation that could erode the value of the official currencies.

That is why a major political or military crisis can send the price of gold shooting up, as people dump their holdings of the currencies that might be affected and begin bidding against each other to buy gold, as a more reliable way to hold their existing wealth, even if it does not earn any interest or dividends.

If fighting a major war requires half the country's annual output, then rather than raise tax rates to 50% of everyone's earnings in order to pay for it, the government may choose to create more money for itself and spend that money buying war materiel. With half the country's resources being used to produce military equipment and supplies, civilian goods will become scarcer just as money becomes more plentiful. This changed ratio of money to civilian goods will lead to inflation as more money is bid for fewer goods and prices rise as a result.

An increase in the amount of money, without a corresponding increase in the supply of real goods means that prices rise – which is to say, inflation. (Conversely, when output increased during Britain's industrial revolution in the 19th century, its prices declined because its money supply did not increase correspondingly.)

Perhaps the most famous inflation of the 20th century occurred in Germany during the 1920s when 40 marks were worth one dollar in July 1920 but it took more than 4 trillion marks to be worth one dollar by November 1923. People discovered that their life savings were not enough to buy a pack of cigarettes. The German government had, in effect, stolen virtually everything they owned by the simple process of keeping more than 1700 printing presses running day and night, printing money.

During the worst of the inflation, in October 1923, prices rose 41% per day! Workers were paid twice a day and some were allowed time off in the middle of the day to enable them to rush off to the stores to buy things before prices rose yet again. In other cases, wives showed up at work at lunchtime to take their husband's pay and rush off to spend it before it lost too much value. Some have blamed the economic chaos of this era for setting the stage for the rise of Adolf Hitler and the Nazis.

Deflation

The money supply in the United States declined by one third from 1929 to 1932, making it impossible for Americans to buy as many goods and services as before at the old prices. Prices did come down, but some prices could not change because there were legal contracts involved.

Mortgages on homes, farms, stores and office buildings all specified monthly mortgage payments in money terms. These terms might have been quite reasonable and easy to meet when the total amount of money in the economy was substantially larger, but now it was the same as if these payments had been arbitrarily raised – as in fact they were raised in real purchasing power terms. Many homeowners, farmers, businesses simply could not pay after the national money supply contracted – and therefore lost the places that housed them.

Those with wages and salaries specified in contracts – whether unionized workers or baseball players – were now legally entitled to more real purchasing power than when these contracts were originally signed. But, while deflation benefited these particular groups If They Kept Their Jobs, the difficulty of paying them meant that many would lose their jobs. Similarly, banks that owned the mortgages, which many people were struggling to pay were benefited by receiving mortgage payments worth more purchasing power than expected – if they received the payments at all. But so many people were unable to pay their debts that many banks began to fail – more than 900 in 1930 alone. Other creditors likewise lost money when debtors simply could not pay them.

The Banking System

One of the most important roles a bank plays is in serving as intermediaries to transfer savings from some people to others who need to borrow. Modern banks do more than simply transfer cash. It creates credits, which in effect add to the money supply through what is called "fractional" reserve banking.

Goldsmith's have for centuries had to have some safe place to store the precious metal that they used to make jewelry and other items. Once they had established a vault, or other secure storage place, other people often stored their own gold with the goldsmith, rather than take on the cost of creating their own secure storage facility.

Goldsmiths gave out receipts entitling the owners to reclaim their gold whenever they wished to. Since the receipts were redeemable in gold, they were in effect, "as good as gold" and circulated as if they were money, buying goods and services as they were passed on from one person to the next.

From experience, goldsmiths learned that they seldom had to redeem all the gold that was stored with them at any given time. If a goldsmith felt confident that he would never have to redeem more than one third of the gold that he held for other people at any given time, then he could lend out the other two-thirds and earn interest on it. Since the receipts for gold and two thirds of the gold itself were both in circulation at the same time, the goldsmiths were, in effect, adding to the total money supply.

In this way, there arose <u>two of the major features of modern banking</u>. 1. Holding only a fraction of the reserves needed to cover deposits. 2. Adding to the total money supply.

One of the reasons this system worked and has worked is that the whole banking system has never been called upon to actually supply cash to cover all the checks written by depositors. Instead, if Acme Bank receives a million dollars worth of checks written by depositors whose accounts are with Zebra Bank, it does not ask the Zebra Bank for the million dollars, but balances off against whatever checks were written by Acme Bank depositors and ended up in the hands of the Zebra Bank.

For example, if its own depositors had written \$1.2MM worth of checks to people who then deposited those checks in the Zebra Bank, then Acme Bank would just pay the difference, using \$200k to settle more than \$2Million worth of checks that had been written on accounts in the two banks.

This system, called "fractional reserve banking", worked fine in normal times. But it was very vulnerable in times when many depositors wanted hard cash at the same time.

The Federal Reserve is a central bank run by the government to control all the private banks. It has the power to tell the banks what fraction of their deposits must be kept in reserve, with only the remainder of the money being allowed to be lent out. It also lends money to banks, which the banks can then re-lend to the general public.

Because the Federal Reserve Chairman has such power, and one misconstrued word could literally set off a panic, Fed Chairmen over the years have learned to speak in highly guarded and Delphic terms that leave listeners puzzled as what they really mean.

The Federal Reserve system was established in 1914 as a result of fears of such economic consequences as deflation and bank failures. Yet, the worst bank failures in the country's history occurred after the Federal Reserve was established.

THE ROLE OF GOVERNMENT

"It is not enough to show that a situation is bad; it is also necessary to be reasonably certain that the problem has been properly described, fairly certain that the proposed remedy will improve it, and virtually certain it will not make it worse."

Robert Conquest

Under rent control, for example, property rights can be reduced to worthlessness or even become negative. That is why owners of many apartment buildings in NYC have simply abandoned their buildings and fled the scene, when the costs of the legally mandated services they are required to provide exceed the rents that they are allowed to collect. Since abandonment of the buildings is illegal, these owners go underground when the value of their property right becomes negative. Under these conditions, selling the

building is out of the question, since it has become an economic liability, rather than an asset, and finding a buyer may be impossible.

Property rights matter economically because of the incentives they create and the consequences of those incentives for people's behavior.

In the Soviet Union, a country without property rights, or with the food being owned "by the people", there was no given individual with sufficient incentives to ensure that this food did not spoil needlessly before it reached the consumer.

Widespread corruption and inefficiency found even under Stalinist totalitarianism suggests the limitations of official monitoring, as compared to automatic self-monitoring by property owners.

Property rights create self-monitoring, which tends to be both more effective and less costly than third party monitoring. (It also points out why employee ownership can truly make a difference.)

The only animals threatened with extinction are animals not owned by anybody. Colonel Sanders is not about to let chickens become extinct. Nor will McDonald's stand idly by and let cows become extinct. It is things not owned by anybody (air and water, for example), which are polluted. In centuries past, sheep were allowed to graze on unowned land – "the commons" as it was called – with the net result that land on the commons was so heavily grazed that it had little left but patchy ground and the shepherds had hungry and scrawny sheep. But privately owned land adjacent to the common was usually in far better condition.

The empirical question of how the existence or non-existence of property rights affects the economic well being of society as a whole which provides the strongest evidence for the social benefits of property rights.

While strict adherence to property rights would allow landlords to evict tenants at will, the economic incentives are for them to do just the opposite – to try to keep their apartments as fully rented and as continuously occupied as possible, so long as the tenants pay their rent and behave themselves.

Under rent control and tenants rights laws, landlords have been known to try to harass tenants into leaving, whether in New York or in Hong Kong.

Under stringent rent control and tenants rights laws in Hong Kong, landlords were known to sneak into their own buildings late at night and vandalize the premises, in order to make them less attractive or even unlivable, so that tenants would move out and the empty building could then be torn down legally, to be replaced by something more lucrative as commercial or industrial property.

Social Order

Honesty is more than a moral issue. It is a large economic influence as well.

To tie a country together with railroads would be vastly more costly if a train from San Francisco could reach Chicago only if there happened to be rails of the same width covering the entire distance. To do this when rails were of different widths would have required far more railroads to be built, many with tracks running parallel to tracks of different widths, to reach the same places. Governmentally imposed standards for the distance between rails eliminated this vastly expensive problem.

Failure to look ahead is extremely common in government policy making. Another way of saying the same thing is that political time horizons tend to be much shorter than economic time horizons. Before the full economic consequences of the wage and price control policies became widely apparent, Nixon had been re-elected with a landslide victory at the polls.

Government intervention includes such things as hypothetical dangers to hypothetical children. Government mandate air bags in automobiles, introduced to save lives in car crashes, have themselves killed small children.

An Overview

A national economy involves as many complex interactions among millions of individuals, businesses and other organizations, what is true for some of them need not be true for the economy as a whole. Saving jobs in the steel industry by restricting imports of steel from other countries does not mean that the economy as a whole will have more jobs. When American made steel becomes more expensive than imported steel, that additional cost translates into more expensive American made cars, refrigerators, and other products made with steel. All of which have to compete with imported products made with less expensive steel overseas. More expensive steel products mean fewer sales of these products than there would have been at lower prices, and that in turn means lower production and employment in all those industries.

Workers became displaced from agricultures as farming methods became more efficient. One of the key factors in the growth of industrial output has been the ever-growing availability of workers displaced from agriculture. How else could American industries have gotten all the millions of workers needed to fill the factories except by taking them from the farmers?

Nothing is easier for the media or for politicians than to present "human interest" stories about someone whose family has been farming for generations and who has now been forced out of the kind of life they knew and loved by the impersonal economic forces of the marketplace. What is forgotten is that these impersonal forces represent benefits to consumers who are just as much persons as the producers who have been arbitrarily

selected as the focus of the discussion. The temptation is always there to try to solve the problem of those whose plight has been singled out for attention, without regard for the effects elsewhere.

The tragic bungling of economic policy by presidents of both political parties, as well as by officials of the Federal Reserve System, during the Great Depression of the 30s has sobering implications for those who regard government as a force to save the economy from the imperfections of the marketplace. Markets are indeed imperfect. But market failure is not a magic phrase that automatically justifies government intervention, because the government can also fail – or even make things worse. ("Hi. I'm from the Federal Government and I'm here to help you." Ronald Reagan in his push for less government.)

Presidents Hoover and Roosevelt both tried to use the powers of the federal government to restore the economy. However good their intentions, economists and other scholars who have studied that era in depth have increasingly concluded that they made matters worse.

If the average car today costs X percent more than it used to, does that mean that there has been X percent inflation or that most of that change has represented higher prices paid for higher quality? No one calls it inflation when someone who has been buying Chevrolets begins to buy Cadillacs and pays more money. Why then call it inflation when a Chevrolet begins to have features that were once reserved for Cadillacs and its costs rise to levels once charged for Cadillacs?

Everything cannot be included in an index, both because of the enormous time and money this would require and because everything itself changes overtime with the creation of new products and the disappearance of old ones. Instead the prices of a collection of commonly purchased items are followed over the years, measuring how much those particular prices rise or fall.

The problem with this is that what is commonly used depends on prices. Within living memory, television sets were so expensive that only rich people had one. So were air conditioned cars and portable computers. At that time, no one would have dreamed of including such rare luxuries as in a price index to measure the cost of living of the average American. Only after their prices fell to a fraction of what they once were did such items become commonplace possessions. What this means is that the price indexes missed all the fulfilling prices of such things in the years before they became widely used, while counting all the rising prices of other things that were already widely used. In short, these indexes were based upwards in their estimates of inflation.

Social Security recipients for example, received billions of dollars in cost of living increases in their pension checks because of an inflation that was in part a statistical artifact, rather than a real increase in prices of buying what they had always bought.

PART VI:

The International Economy

International Trade

Before NAFTA was passed, Congressman David Bonior of Michigan warned: "If the agreement with Mexico receives congressional approval, Michigan's auto industry will eventually vanish." But what actually happened was that employment in the automobile industry increased by more than 100,000 jobs over the next six years.

What happens when a given country, in isolation, becomes more prosperous? It tends to buy more because it has more to buy with. And what happens when it buys more? There are more jobs created making the additional goods and services that are now in greater demand.

Make that two countries and the principle remains the same. There is no fixed number of jobs that the two countries must fight over. If they both become more prosperous, they are both likely to create more jobs. The only question is whether international trade tends to make both countries more prosperous.

What it comes down to is the fact that the only reason international trade takes place in the first place is because both parties expect to benefit. If it is not a win/win, then don't trade.

The Basis for International Trade

The reasons why countries gain from international trade are usually grouped together by economists under three labels: Absolute Advantage, Comparative Advantage, and Economics of Scale.

Absolute Advantage

It is much cheaper to grow bananas in the tropics than in places where greenhouses and other artificial means of maintaining warmth would be necessary. In tropical countries, nature provides free the warmth that people have to provide by costly means in cooler climates.

This is just one example of what economists call "absolute advantage"—one country, for any of a number of reasons, can produce some things cheaper than another. These reasons may be due to climate, geography, or the mixture of skills in their respective populations.

Comparative Advantage

Let's suppose that one country is so efficient that it is capable of producing anything more cheaply than another country. Should the two countries trade?

Yes.

Why?

Because even in an extreme case, where one country can produce anything more cheaply than another country, it may do so to varying degrees. For example, it may be twice as efficient at producing chairs but ten times as efficient at producing television sets. In this case, the total number of chairs and television sets produced in the two countries combined would be greater if one country produced all the chairs and the other produced all the television sets. Then they could trade with one another and each end up with more chairs and more television sets than if they each produced both products for themselves.

As economists would say, country A has an "absolute advantage" in producing both products but, country B has a "comparative advantage" in producing chairs while A has a "comparative advantage" in producing television sets.

Let's look at this on a small, human scale. Imagine that you are an eye surgeon and that you paid your way through college by washing cars. Now that you have a car of your own, should you wash it yourself or should you hire someone else to wash it—even if your previous experience allows you to do the job more efficiently than the person you hire?

-- Even though you have an "absolute advantage" in both activities, your comparative advantage in treating eye diseases is far greater.

The surgeon has only 24 hours in the day, like everyone else. Time that he is spending doing one thing cannot be spent doing something else. The same is true of countries.

Although country A may be capable, in the abstract, of producing anything more cheaply than country B, it cannot in reality produce everything more cheaply because the time it spends producing one thing comes at the expense of the time that could have been spent producing other things.

While Country A can produce either product more efficiently, the time it spends producing chairs would pay off much bigger in producing television sets, some of which it can trade for chairs from Country B, ending up with more of both products than if it produced both for itself.

Assume for the sake of argument that the United States can produce 75 shirts per manhour, while Canada produces only 30 and that the United States produces 25 shoes per manhour, while Canada produces only 20.

	American	American	Canadian	Canadian
Products	Man-Hours	Output	Man-Hours	Output
Shirts	300	22,500	300	9,000
Shoes	200	5,000	200	4,000

With both countries producing both products, their combined output would come to a grand total of 31,500 shirts and 9,000 shoes from a grand total of 1,000 man-hours of work.

If they engage in international trade, with each country specializing in producing the product in which it has a comparative advantage, the table below illustrates the output under these conditions and with the same individual productivity as before:

American		American	Canadian Canad	lian
Products	Man-Hours	Output	Man-Hours	Output
Shirts	500	37,500	0	0
Shoes	0	0	500	10,000

Even though output per man-hour remains the same in each country as before, now their combined total of 1,000 man-hours produces 37,500 shirts and 10,000 shoes, instead of 31,500 shirts and 9,000 shoes as before. By utilizing their comparative advantages, the two countries can produce 6,000 more shirts and 1,000 more shoes than before, with no more resources than before and with no technological change.

It has been more than a century since Great Britain produced enough food to feed itself. Britons have been producing those things in which it has been a comparative advantage, such as manufacturing, shipping, and financial services—and using the proceeds to buy food from other countries.

British consumers end up better fed and with more manufactured goods than if the country grew enough of its own food to feed itself. Furthermore, it would cost the British too much industry to put enough efforts into agriculture to become self-sufficient in food.

Economies of Scale

Sometimes a particular product requires such huge investment in machinery and in developing a skilled labor force that the resulting output can be sold at a low enough price to be competitive only when some enormous amount of output is produced, because of what economists call "economies of scale."

If General Motors produced only a hundred Chevrolets, the cost per car would be astronomical, since all the expensive machinery and all the engineering research and development that went into creating the automobile would have to be recovered from the sale of just 100 vehicles.

It has been estimated that the minimum output of automobiles needed to achieve an efficient cost per car is somewhere between 200,00 to 400,000 automobiles per year.

Producing in such huge quantities is not a serious problem in a country of the size and wealth of the United States. But, in a country with a much smaller population—Australia, for example—there is no way to sell enough cars within the country to be able to develop and produce automobiles from scratch to sell at prices that would compete with automobiles produced in much larger quantities overseas.

If you take small countries like South Korea and Taiwan, they have to depend on international trade to be able to produce on a scale far exceeding what can be sold domestically.

International trade is necessary for many countries to achieve economies of scale that will enable them to sell at competitive prices. For some products requiring huge investments in machinery and research, only a very few large and prosperous countries could reach the levels of output needed to repay all these costs from domestic sales alone. International trade creates greater efficiency by allowing more economies of scale, as well as by taking advantage of each country's absolute or comparative advantages.

Labor is one of innumerable scarce resources that have alternative uses. The computer software industry in the United States could not have expanded so much and so successfully if all American computer engineers were tied down with the production of machines that could have been just as easily produced in some other country. Since the same American labor cannot be in two places at one time, it can move to where its comparative advantage is greatest only if the country "loses jobs" where it has no comparative advantage.

But if Americans in general were losing higher-paid jobs and being forced to take lower-paid jobs, how then could the American standard of living have continued to rise, as all data show? In reality, when the shifting of low-skill jobs to other countries enables an American company to become more profitable, it can then afford to hire American labor for higher-skilled jobs. It is not a zero-sum game when there are more total resources available after the shift.

When the number of jobs in the American steel industry was cut from 340,000 to 125,000 during the decade of the 1980's, it had a devastating impact and was big economic and political news. It also led to a variety of laws and regulations designed to reduce the amount of steel imported into the country to compete with domestically produced steel. Of course, this reduction in supply led to higher steel prices within the United States and therefore higher costs for all American industries producing objects made of steel, ranging from automobiles to oil.

It has been estimated that the gain in domestic American steel production due to import restrictions led to a net loss in the production of domestic American steel products as a whole. In order words, American industry as a whole was worse off, on net balance, as a result of the import restrictions. While such steel import restrictions made no sense economically, it made sense politically to those in Washington responsible for creating these restrictions.

In many cases, laws are passed by Congress restricting international trade for the benefit of some concentrated and vocal constituency, even though these restrictions may cause far more losses of jobs nationwide.

Then you have imports of things in which other countries have a comparative advantage, that create losses of profits and jobs in the corresponding domestic industry.

Despite offsetting economic gains that typically far outweigh the losses, politically it is almost inevitable that there will be loud calls for government protection from foreign competition through various restrictions against imports.

The High-Wage Fallacy

In a prosperous country such as the United States, a fallacy that sounds very plausible is that American goods cannot compete with goods produced by low-wage workers in poorer countries. Both history and economics refute it. High-wage countries have been exporting to low-wage countries for centuries.

The key flaw in the high-wage argument is that it confuses wage rates with labor costs—and labor costs with total costs.

When workers in a prosperous country receive twice the wage rate as workers in a poorer country and produce three times the output per man-hour, then it is the high-wage country that has the lower labor costs. It is cheaper to get a given amount of work done in the more prosperous country simply because it takes less labor, even though individual workers are paid more. The higher-paid workers may be more efficiently organized and managed, or have far more or better machinery to work with.

A prosperous country usually has a greater abundance of capital and, because of supply and demand, capital tends to be cheaper than in poorer countries where capital is scarcer and earns a correspondingly higher rate of return.

That "giant sucking sound" we were forewarned about fearing that American jobs would go to Mexico in the wake of the North American Free Trade Agreement of 1993 turned out to be completely wrong. The number of American jobs increased and the unemployment rate in the United States fell to record lows. This did not come at the expense of Mexico, however. Both countries gained for the same reasons that countries have gained from international trade for centuries—absolute advantage and comparative advantage.

Just as free trade provides economic benefits to all countries simultaneously, so trade restrictions reduce the efficiency of all countries simultaneously, lowering standards of living, without producing the increased employment that was hoped for.

A protective tariff for other import restrictions may provide immediate relief to a particular industry and thus gain the financial and political support of corporations and labor unions in that industry. But, like many political benefits, it comes at the expense of others who may not be as organized as visible, or as vocal.

International Transfers of Wealth

The great Supreme Court Justice Oliver Wendell Holmes said: "Think things, not words." Nowhere is that more important than when discussing international trade, where there are so many misleading and emotional words used to describe and confuse things that are not difficult to understand in themselves. The terminology used to describe an export surplus as a "favorable" balance of trade goes back for centuries.

As early as 1776, Adam Smith's classic *The Wealth of Nations* argued that the real wealth of a nation consists of its goods and services, not its supply of gold.

If the goods and services available to the American people are greater as a result of international trade, then Americans are wealthier, not poorer, regardless of whether there is a "deficit" or a "surplus" in the international balance of trade.

If Americans buy more Chinese goods than the Chinese buy American goods, then China gets American dollars to cover the difference. Since China is not just going to collect these dollars as souvenirs, it usually turns around and invests them in the American economy. In most cases, the money never leaves the United States. The Chinese simply buy investment goods—Rockefeller Center, for example—rather than consumer goods. American dollars are worthless to the Chinese if they do not spend them on something. In growth terms, international trade has to balance, in order to make any economic sense. But it so happens that the conventions of international accounting count imports and exports in the "balance of trade," but not things which don't move at all, like Rockefeller Center.

What do the makers of Hondas and Toyotas do with all that American money? One of the things they do is build factories in the United States, employing thousands of American workers to manufacture their cars closer to their customers, so that Honda and Toyota do not have to pay the cost of shipping cars across the Pacific Ocean. Their American employees have been paid sufficiently high wages that they have repeatedly voted against joining labor unions in secret ballot elections.

What alarms people are the words and the accounting rules that produce numbers to fit those words. A country's total output consists of both goods and services—houses and haircuts, sausage and surgery—but the international trade balance consists only of physical goods that move. The American economy produces more services than goods, so it is not surprising that we import more goods than we export—and export more services than we import.

American know-how and American technology are used by other countries around the world and these countries of course pay us for these services. For example, most of the computers in the world run on operating systems created by Microsoft. But their payments to Microsoft and other American companies for their services are not counted in the international balance of trade, since trade includes only goods. Yet the American "balance of trade" is reported in the media as if this partial picture were the whole picture and the emotionally explosive world "deficit" sets off alarm.

When you count all the money and resources moving in and out of a country for all sorts of reasons, then you are talking about the international "balance of payments"—regardless of whether payments were made for goods or services.

According to the accounting rules, when people in other countries invest in the United States, that makes us a "debtor" to those people, because we owe them the money that they put here.

Foreigners invested \$12 billion in American businesses in 1980 and this rose over the years until they were investing more than \$200 billion annually by 1998. Looked at in terms of things, there is nothing wrong with this. It creates more jobs for American workers and creates more goods for American consumers. Looked at in terms of words, however, this is a growing debt to foreigners. Contrary to popular fears that Japan was

buying up America, the largest share of foreign direct investment in the United States in 1998 was Great Britain's 19 percent, compared to Japan's 16 percent. Britain was also the largest recipient of American direct investment abroad, receiving 18 percent of such investments, with Canada being next at 11 percent.

The more prosperous and secure the American economy is, the more foreigners are likely to want to send their money here and the higher our annual balance of payment "deficits" and accumulated international "debt" rises. Hence it is not at all surprising that the long prosperity of the U.S. economy in the 1990's was accompanied by record levels of international deficits and debts. The United States was where the action was and this was where many foreigners wanted their money to be, in order to get in on the action.

The late, distinguished economist Herbert Stein and a fellow economist co-author put it best: "If all transactions are accounted for, there can be no deficit in the balance of payments." Money does not disappear into thin air, nor do foreign recipients of American dollars let the money sit idle—and they know that the best place to put American dollars is in the United States. However, because accounting conventions count some kinds of cash flows, but not others, there can be "deficits" and "surpluses." When flows of foreign investments into the United States are not counted, then the United States can have a deficit and run up "debts"—according to accounting conventions.

Every time you deposit a hundred dollars in a bank, that bank goes a hundred dollars deeper in debt, because it is still your money and they owe it to you.

Some people might become alarmed if they were told that the bank in which they keep their life's savings was going deeper and deeper into debt every year. But such worries would be completely uncalled for, since the bank's growing debt means only that many other people are also depositing money in that same bank.

For most of its history, the United States has been a debtor nation—and has likewise had the highest standard of living in the world. One of the things that helped develop the American economy and changed the United States from a small agriculture nation to an industrial giant was an inflow of capital from Western Europe in general and from Great Britain in particular. These vast resources enabled the United States to build canals, factories and transcontinental railroads to tie the country together economically.

Obviously, foreign investors would never have sent their money here unless they expected to get it back with interest and dividends. Equally obvious, American entrepreneurs would never have agreed to pay this interest and these dividends to them unless they expected these investments to produce big enough returns to cover these payments and still leave a profit for the American enterprises.

Only as a result of lending money to European governments during the First World War did the United States become a creditor nation. Since then we have been both, at one time or another.

Neither the domestic economy nor the international economy is a zero-sum game, where some must lose what others win. Everyone can win when investments create a growing economy.

The massive infusion of foreign capital contributed to making the United States the leading industrial nation by 1913, when it produced more than one-third of all the manufactured goods in the world.

In these poorer countries, when exports will not cover the costs of imports and there is no high-tech know-how to export, the government must borrow money from some other country or from some international agency, in order to cover the difference. These are genuine debts and causes for genuine concern.

Through it all, the American standard of living has remained the highest in the world, unaffected by whether it was a creditor or a debtor nation.

In the late twentieth century, there were so many emigrants working in so many countries abroad, and sending money home, that their remittances exceeded all the foreign aid from all the government agencies in the world combined. Most of Pakistan's international trade deficit was covered by remittances from Pakistanis working abroad and Jordan received more money from Jordanians living overseas than it did from all it exports.

Imperialism

Genuine plunder of one nation or people by another has been all too common throughout human history.

During the era before the First World War, when Germany had colonies in Africa, only 4 of its 22 enterprises with cocoa plantations there paid dividends, as did only 8 of 58 rubber plantations and only 3 out of 49 diamond mining companies.

At the height of the British Empire in the early twentieth century, the British invested more in the United States than in all of Asia and Africa put together. Quite simply, there was more wealth to be made from rich countries than from poor countries. For similar reasons, throughout most of the twentieth century the United States invested more in Canada than in Asia and Africa put together. Only the rise of prosperous Asian industrial nations in the latter part of the twentieth century attracted more American investors in that part of the world.

Perhaps the strongest evidence against the economic significance of colonies in the modern world is that Germany and Japan lost all their colonies and conquered lands as a

result of their defeat in the Second World War—and both countries reached unprecedented levels of prosperity thereafter.

Wealthy individuals in poor countries often invest in richer countries, where their money is safer from political upheavals and confiscations.

What we call "foreign aid" are transfers of wealth from foreign governmental organizations to the governments of poorer countries. The term "aid" assumes a priori that such transfers will in fact aid the poorer countries' economies to develop.

Because it is a transfer of wealth to governments, as distinguished from investments in the private sector, foreign aid has encouraged many countries to set up government run enterprises that have failed.

The vast sums of money dispensed by foreign aid agencies such as the International Monetary Fund and the world Bank give the officials of these agencies enormous influence on the governments of poorer countries -- regardless of the success or failure of the programs they suggest or impose as preconditions for receiving the money.

Sometimes a richer country takes over a whole poorer society and heavily subsidizes it, as the United States did in Micronesia. So much American aid poured in that many Micronesians abandoned economic activities on which they had supported themselves before, such as fishing and farming. If and when the Americans decide to end such aid, it is not at all certain that the skills and experience that Micronesians once had will remain sufficiently widespread to allow them to become self-sufficient again.

One of the leading development economists of his time, Professor Peter Bauer of the London School of Economics, has argued that, on the whole, "official aid is more likely to retard development than to promote it."

The International Monetary System

Wealth may be transferred from country to country in the form of goods and services, but by far the greatest transfers are made in the form of money. Just as a stable monetary unit facilitates economic activity within a country, so international economic activity is facilitated when there are stable relationships between one country's currency and another's. It is not simply a question of the ease or difficulty of translating dollars in yen, francs or yuans. It is a far more important question of knowing whether an investment made in the United States, Japan, China or France today will be repaid a decade or more

from now in money of the same value – whether measured in purchasing power or in the currency originally invested.

Various attempts at stabilizing international currencies against one another have followed the disappearance of the gold standard. Some nations have made their currencies equivalent to a fixed number of dollars, for example. Various European nations have created their own international currency, the Euro and the yen has been another stable currency widely accepted in international financial transactions.

With the spread of electronic transfers of money, reactions to any national currency's change in reliability can be virtually instantaneous. Any government that is tempted toward inflation knows that money can flee from their economy literally in a moment. The discipline this imposes is different from that one imposed by a gold standard, but whether it is equally effective will only be known when future economic pressures put the international monetary system to a real test.

An Overview

Most American's lives are not likely to be changed in any obvious and fundamental way by international trade or international financial activities. While there are many imported products in the American economy, these are typically products that Americans also make today or have made in the past and could make in the future, if there were no international trade.

There are, however, some important consequences of international economic events that may not be obvious. As already noted, the severe tariff restrictions put in place early in the Great Depression of the 1930's have been regarded by many economists as needlessly worsening and extending the worldwide depression. The last thing needed when the national income is going down is a policy that makes it go down faster, by denying consumers the benefits of being able to buy what they want at the lowest price available.

Just as trade restrictions such as the Hawley-Smoot tariffs of the 1930s damaged the already ailing economy of the Great Depression, the North American Free Trade Agreement of 1993 helped enhance the prosperity of the 1900s, creating more jobs and reducing unemployment to record low levels, despite the cries of protectionists that NAFTA would lead to a massive flight of jobs from America to low-wage countries elsewhere.

Whatever the complications of international economic activities, the fundamental fact in international markets is the same as that in domestic markets: Exchanges continue to take place only to the extent that both parties benefit. Opponents of free trade try to depict it as harmful and to appeal to a sense of "us" against "them" as if other countries are in some way making Americans worse off by selling them things that they want to buy.

Sometimes this approach is buttressed by claims that this or that foreign country is being "unfair" in its restrictions on imports from the United States. But, the sad fact is that all countries impose "unfair" restrictions on imports, usually in response to some internal special interests.

International trade is not a favor we bestow on other nations, despite laws about giving or withholding "most favored nation" treatment to this or that country in its trade with the United States. International trade is not a contest, despite talk about who "wins" or "loses" in this trade. Anybody who loses stops trading. The real losses occur when the public allows this kind of rhetoric to lead them astray from the basic fundamentals of economics.

If investments with a given degree of risk are paying off at a higher rate in Taiwan than in Sweden, then American or British or German capital will flow to Taiwan and not to Sweden, thereby raising the level of productivity in the world as a whole and raising standards of living internationally. Money and the resources it represents become, as it were, citizens of the world.

While comparative advantages and free trade allow all nations to share in the world prosperity promoted by free movements of resources, not all industries in all nations prosper. Those sectors of particular economies that are unable to match the competition in efficiency stand to lose money and jobs, and may even be threatened with bankruptcy. Seldom will they go quietly.

Part VII POPULAR ECONOMIC FALLACIES

Non-Economic Values

Economics is not a value in and of itself. It is only a way of weighing one value against another. Economics does not say that you should make the most money possible. Anyone with knowledge of firearms could probably make more money working as a hit man for organized crime. But economics does not urge you toward such choices.

What lofty talk about "non-economic values" usually boils down to is that some people do not want their particular values weighed against anything. If they are for saving Mono Lake or preserving some historic building, then they do not want that weighed against the cost – which is to say, ultimately, against all the other things that might be done instead with the same resources. For instance, how many Third World children could be vaccinated against fatal diseases with the money that is spent saving Mono Lake or preserving a historic building? We should vaccinate those children and save Mono Lake and preserve the historic building—as well as doing innumerable other good things, according to this way of looking at the world.

Just another reminder that economics is the study of the use of scarce resources that have alternatives.

Even if we refuse to make a choice, circumstances will make choices for us, as we run out of many important things that we could have had, if only we had taken the trouble to weigh alternatives.

Saving Lives

Few things have saved as many lives as the simple growth of wealth. An earthquake powerful enough to kill a dozen people in California will kill hundreds of people in some less affluent country and thousands in a Third World nation. Greater wealth enables California buildings, bridges, and other structures to be built to withstand far greater stresses than similar structures can withstand in poorer countries. Those injured in an earthquake in California can be rushed more quickly to far more elaborately equipped hospitals with larger numbers of more highly trained medical personnel.

This is just one of innumerable ways in which wealth saves lives.

The Market

What distinguishes "the market" as economists use the term are (1) individual free choice and (2) the guidance provided by prices which result from millions of people interacting with one another as they exercise that free choice. To say "the market decides" is only to say that these millions of people decide.

It is people making their own choices.

Unmet Needs

If economics is the study of the use of scarce resources which have alternative uses, then it follows that there will always be unmet needs.

Merely demonstrating an unmet need is not sufficient to say that it should be met—not when resources are scarce and have alternative uses.

By its very nature, as a study of the use of scarce resources that have alternative uses, economics is about incremental trade-offs—not about "needs" or "solutions."

What is Waste?

Even an apparently scientific question like the efficiency of an automobile engine rests ultimately on what you want the car to do. Otherwise, all automobile engines are 100 percent efficient, in the sense that all the energy they get from fuel is used, whether in moving the car forward, overcoming internal friction in the engine, shaking the car body randomly, generating heat that is radiated out into the air, etc. It is only after you define what you want as moving the car forward that the efficiency of different engines can be compared in terms of what percentage of their power is used for that particular purpose.

It is not wasteful to increase one's use of resources that have become more abundant. That is precisely what is supposed to happen in a price-coordinated economy because that is the most efficient behavior, with efficiency defined as the most effective way of satisfying people's desires.

Some consider it a "waste" not to recycle aluminum cans or newspapers, but studies have shown that recycling uses up more resources than it saves.

If there were a genuine threat of running out of aluminum, its price today would reflect that future scarcity through the mechanisms of "present value" discussed in Chapter 12, and people would automatically find it financially worthwhile to recycle aluminum cans.

Prices and Purchasing Power

Different Prices for the Same Thing

Physically identical things are often sold for different prices, usually because of accompanying conditions that are quite different.

If a camera store sells a particular make and model of camera for \$300 and the discount house sells it for \$280, it may still pay to go to the camera store where another make and model of camera is available for \$250 that does what you want to do just as well or better.

If the camera store's larger selection and more knowledgeable sales staff enables you to buy only what meets your own needs, there may be financial savings there, as well as better advice on operating the camera, even if the discount house charges a lower price for each particular camera that both stores carry.

The point here is not to claim that it is generally better or generally worse to buy cameras at a camera store or at a discount house. Instead, the point is that what is being sold in the two places is not the same, even when the cameras themselves are physically identical. The stores are charging different prices because they are supplying different things that have different costs to the seller, as well as to the buyer.

Brand Names

Brand names are another way of economizing on scarce knowledge.

Brand names are not guarantees. But they do reduce the range of uncertainty. If a hotel sign says Hyatt Regency, chances are you will not have to worry about whether the bed sheets in your room were changed since the last person slept there.

Like everything else in the economy, brand names have both benefits and costs. A hotel with a Hyatt Regency sign out front is likely to charge you more for the same size and quality of room, and accompanying service, than you would pay for the same things in some locally—run independent hotel if you knew where to look.

Both Kodak and Fuji film have to be better than they would have to be if boxes simply said "film," without any reference to the manufacturer.

McDonald's not only has to meet the standards set by the government, it has to meet the standards set by the competition of Wendy's and Burger King. If Campbell's soup were identified on the label only as "soup" (or "Tomato Soup," "clam chowder," etc), the pressures on all canned soup producers to maintain both safety and quality would be less.

One of the reasons for the great success of McDonald's in Moscow—the largest in the world, with lines of people waiting to get into it—is that it was being compared to the previous band quality of service in Soviet restaurants, not to Wendy's or burger King.

Volitional Pricing

It doesn't matter what we charge, unless others to agree to pay it.

Virtually everyone would prefer to get a higher price for what he sells and pay a lower price for what he buys.

The history of most great American fortunes—Ford, Rockefeller, Carnegie, etc.—suggests that the way to amass vast amounts of wealth is to figure out some way to provide goods and services at lower prices, not higher prices.

When Richard Sears tried to overtake Montgomery Ward, he did it, not because he did not have enough money to live on, but because he wanted more. If that is our definition of "greed," then he was greedy.

Realistically speaking, do keep in mind that when prices go up, it is far more likely to be due to supply and demand than to greed.

Predatory Pricing

A popular fallacy that has become part of the tradition of anti-trust law is Predatory Pricing. This where a big company that is out to eliminate its smaller competitors and

take over their share of the market will lower its prices to a level that dooms the competitor to unsustainable losses and forces it out of business.

A remarkable thing about this theory is that those who advocate it seldom provide concrete examples of when it actually happened.

A company that sustains losses by selling below cost to drive out a competitor is following a very risky strategy.

Even if our would-be predator manages somehow to overcome these problems, it is by no means clear that eliminating existing competitors will mean eliminating competition.

Even when a rival firm has been forced into bankruptcy, its physical equipment and the skills of the people who once made it viable do not vanish into thin air. A new entrepreneur can come along and acquire both.

Bankruptcy can eliminate particular owners and managers, but it does not eliminate competition in the form of new people, who may either take over an existing bankrupt enterprise or start their own new business from scratch in the same industry.

Purchasing Power

Money that is saved does not vanish into thin air. It is lent out by banks and other financial institutions, being spent by different people for different purposes, but still remaining just as much a part of purchasing power as if it had never been saved.

According to Say's Law—supply creates its own demand.

What a group of French economists known as Physiocrats showed in the late eighteenth century was that the production of goods and services automatically generates the purchasing power needed to buy those goods and services. When the economy creates another hundred million dollars worth of output, that is also another hundred million dollars worth of wealth that can be used to buy this or other output. Production is ultimately bought with other production, using money as a convenience to facilitate the transactions.

During the Great Depression of the 1930s, for example, there was a massive increase of unemployment, along with business losses for the economy as a whole. The greatly reduced money supply of 1932 was incapable of buying the amount of output that had been produced during the boom years that ended in 1929. More precisely, the 1932 money supply was incapable of buying the 1929 level of output at 1929 prices. Prices began declining as a result of unsold goods, but prices did not fall fast enough or far enough to restore immediately the full production needed to create a full employment.

Major malfunctions of the monetary system, including both massive bank failures and counterproductive policies by the Federal Reserve Board, as well as restrictive tariffs that disrupted international trade, and amateurish tinkering with the economy by both the Hoover and Roosevelt administrations, turned a problem catastrophe.

John Maynard Keynes argued that government spending could put more money back into circulation and restore the economy to full employment faster than by waiting for prices to fall into balance with the reduced amount of money in circulation. But Keynes never claimed that the economy had just produced too much.

President Herbert Hoover and then Franklin D. Roosevelt both tried to keep wage rates from falling, as a means of maintaining the purchasing power of workers, as well as for humanitarian reasons. But there was no way to keep employing the same number of workers as before, at the same wage rates as before, when the money supply was one-third smaller.

Prices had to come down in the economy as a whole if everything was to be purchased with a smaller money supply.

Some economists, including Nobel Prize winner Milton Friedman, have argued that it was precisely government policies that kept the economy from recovering as quickly as it had before, when left alone.

Business and Labor

In his 900-page classic, **The Wealth of Nations.** Smith warned against "the clamour and sophistry of merchants and manufacturers," whom he characterized as people "who seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices."

David Ricardo, spoke of businessmen as "notoriously ignorant of the most obvious principles." Knowing how to run a business is not the same as understanding the larger and very different issues involved in understanding how the economy as a whole affects the population as a whole.

Free market competition has often been opposed by the business community, from Adam Smith's time to our own. It was business interests which promoted the pervasive policies of government intervention known as "mercantilism" in the centuries before Smith and others made the case for ending such intervention and establishing free markets.

Business leaders are not wedded to a free market philosophy or any other philosophy. They promote their own self-interest any way they can, like other special interest groups.

The efficient uses of scarce resources by the economy as a whole depends on a system that features both profits and losses. Businesses are interested only in the profit half. If

they can avoid losses by getting government subsidies, tariffs and restrictions against imports, or domestic laws that stifle competition in various agricultural products, they will do so. Losses, however, are essential to the process that shifts resources to those who are providing what consumers want at the lowest prices—and away from those who are not.

Take the airline industry. Between the last year of federal regulation in 1977 and twenty years later in 1997, the average air fare dropped by 40 percent and the average percentage of seats filled on planes rose from 56 percent to 69 percent, while more passengers than ever were carried more safely than ever. Meanwhile, whole airlines went bankrupt. That was the cost of greater efficiency.

Even people who understand the need for competition, and for both profits and losses, nevertheless often insist that it should be "fair" competition.

It means artificially keeping prices higher than they would be in the absence of government intervention, so that companies with higher costs of doing business can survive.

The greatest contribution that a business makes to the economy and the society is in producing the most goods with the least resources, including labor. But nothing will get a corporation denounced more widely than laying off workers. On the other hand, nothing gets more public praise than business' giving away the stockholders' money to fashionable causes, many of which undermine the free market and the free society on which business itself depends.

Some people consider it a valid criticism of corporations that they are "just in business to make profits." By this kind of reasoning, workers are just working to earn their pay. In the process, however, they produce all the things that give their fellow Americans the highest standard of living in the world. What matters is not the motivation but the results. In the case of business, the real question is: What are the preconditions for earning a profit?

One precondition is that profit-seeking corporations cannot squander scarce resources the way Soviet enterprises did. Corporations operating in a market economy have to pay for all their inputs—whether labor, raw materials, or electricity—and they have to pay as much as others are willing to bid for them. Then they have to sell their own end product—at a price as low as their competitors are charging. If they fail to do this, they fail to make a profit. And if they keep on failing to make a profit, either the management will be replaced or the whole business will be replaced by some competitors who is more efficient.

Sometimes the charge is made that profits are short-run gains, with the implication that they come at the expense of longer-term considerations. But future values are reflected in the present value of a business' assets. A factory that runs full blast to make a profit today, while neglecting the maintenance and repair of its machinery will immediately see

a decline in the value of its property and of its stockholders' stock. It is in the absence of a profit-and-loss economy that there are few incentives to maintain the long-run productivity of an industrial enterprise or a collective farm, as in the Soviet Union.

The case for a free market is not that it benefits business, but that it benefits consumers.

The Mystique of Labor

The first sentence of Smith's classic **The Wealth of Nations** says: "The annual labour of every nation is the fund which originally supplies it with all the necessaries and conveniences of life which it annually consumes, and which consists always either in the immediate produce of that labour, or in what is purchased with that produce from other nations."

By the late nineteenth century, however, economists had given up the notion that it is primarily labor which determines the value of goods, since capital, management and natural resources all contribute to output and must be paid for from the price of that output. More fundamentally, labor, like all other sources of production costs, was no longer seen as a source of value. On the contrary, it was the value of the goods to the consumers which made it worthwhile to produce those goods—provided that the consumer was willing to pay enough to cover their production costs. This new understanding marked a revolution in the development of economics.

If labor were in fact the crucial source of output and prosperity, then we should expect to see countries where great masses of people toil long hours richer than countries where most people work shorter hours, in a more leisurely fashion, and under more pleasant conditions, often including air-conditioning, for example. In reality, we find just the opposite. Third World farmers may toil away under a hot sun and in difficult conditions that were once common in Western nations which have long since gotten soft and prosperous under industrial capitalism.

Put differently, the growth and development of such non-labor inputs as science, engineering and sophisticated investment and management policies, as well as the institutional benefits of a price-coordinated economy, have made the difference and given hundreds of millions of people higher standards of living.

Official government statistics are still cast in such terms as "unearned income" and "productivity" is defined as output divided by the labor that went into it.

In reality, high-wage countries have been competing successfully with low-wage countries for centuries, precisely because of advantages in capital, technology and organization.

What can be seen physically is always more vivid than what cannot be. Those who watch a factory in operation can see the workers creating a product before their eyes.

They cannot see the investment that made that factory possible in the first place, much less the thinking that went into assessing whether the market for the product was sufficient to justify the expense, or the thinking and trial-and-error experience that made possible the technology with which the workers are working or the massive amounts of knowledge required to deal with ever-changing markets in an ever-changing economy and society.

Even among those who are conventionally called workers or laborers, much of what they contribute to the economy is not labor but capital—"human capital," as economists call it. It is not so much physical exertion as job skills that constitute the contribution of a machinist, or entertainer. Most American workers today do not contribute merely work but skills, which is why their incomes increase substantially over their lifetimes. If it were their physical exertions that matter, their capabilities would be greatest in their youth and so would their incomes. But, where it is human capital that is being rewarded, then it is this is far more consistent with their incomes rising with age. As their human capital grows, the profit they receive on that capital grows, even though it is called wages.

A failure to understand the importance of human capital contributed to the defeat of Germany and Japan in World War II. Experienced and battle-hardened fighter pilots represented a very large investment of human capital. Yet the Germans and the Japanese did not systematically take their experienced pilots out of combat missions to safeguard their human capital and have them become instructors who could spread some of their human capital to new and inexperienced pilots being trained for combat. Both followed policies described by the Germans as "fly till you die."

The net result was that, while German and Japanese fighter pilots were very formidable opponents to the British and American pilots who fought against them early in the war, the balance of skills swung in favor of the British and American pilots later in the war, after much of the German and Japanese human capital in the air was lost when their top fighter pilots were eventually shot down and replaced by inexperienced pilots who had to learn everything the hard way in aerial combat, where small mistakes can be fatal. Economic concepts apply even when no money is changing hands.

Those individuals who can contribute only their labor have increasing difficulties finding jobs in a high-tech world, where skills are highly rewarded and there are few jobs left where "a strong back and a weak mind" are sufficient. Machines have increasingly replaced strong backs, even in traditionally arduous occupations such as mining.

People's work has been sufficiently central to their lives to help define who they are, as reflected in the great number of family names which are based on occupations—Smith, Shepherd, Weaver, Taylor, dyer, Carpenter, Wright, Miller, Brewer, Cook, butler, and

Steward, for example, not to mention such foreign names as Kaufman (merchant) or Bauer (farmer.