

# Four Economic Ideas Contributing to the Wealth of Nations

by Steven Suranovic

## Learning Objectives

1. Learn about Adam Smith and the Wealth of Nations
2. Learn the importance of self-interest, the division of labor, mutually voluntary exchange and the invisible hand to the functioning of a capitalistic economy.

The indisputable father of modern economics was a Scottish moral philosopher who lived during the time of the American revolution. His name was [Adam Smith](#) (1723-1790). During his life he wrote two influential books that are read and studied even today. His most famous book was first published in 1776 and was titled *An Inquiry into the Nature and Causes of the Wealth of Nations*, or, just *The Wealth of Nations* for short. In this Inquiry he set out to explain why people lived as well as they did in the 18th century. What could explain the wealth that many had accumulated and the high standard of living thereby obtained? We will consider several of these ideas in this chapter. His second influential book was the earlier one published ... in 1759. It was titled the *Theory of Moral Sentiments*. This book looked into the reasons for human morality and its effects on human society. This textbook will maintain the spirit of Smith's earliest writings by introducing considerations of ethics into the discussion of economic theory.

## 1. Self-Interest and the Profit Motive

### Learning Objectives

1. Learn Adam Smith's quotes about self-interest
2. Learn why economists believe self-interest is an important motivation for economic activity

"It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantages." *Adam Smith, Wealth of Nations, Book 1, Chapter 2.*

In this famous passage from the *Wealth of Nations*, Adam Smith highlights the importance of self-interest in the operation of a market. He states that it is not out of kindness or benevolence that merchants work to produce meat, beer and bread, but rather because of what they themselves get from it. When a customer enters the store to acquire these products, he does not ask for kindness from the merchant, but rather suggests what he can do for the merchant. In other words, he will offer to give the merchant money in exchange for the meat, beer and bread. That money is what the butcher, baker and brewer will use to buy goods and services for themselves and their families. The money they receive in

payment will satisfy their own self interest and is the underlying motivating force for markets according to Smith.

In contrast, if altruism were the behavioral motivation in markets, then the merchants would produce because they felt sympathy for others in their community who were hungry and thirsty. They would give these supplies away freely and expect nothing in return. Consumers of these products in this case would address themselves to the humanity of the producers and lament how malnourished and thirsty they were.

Adam Smith understood the sentiment of altruism and he wrote at length about the sympathy that people feel for others in the *Theory of Moral Sentiments*. However, he recognized that while altruism is an important moral sentiment, it is not the primary motivating factor behind market activity.

The simple idea that self interest motivates market activity has inspired countless discussions and debates in the ensuing centuries. Critics worried that the pursuit of self-interest would become voracious as greedy merchants sought greater and greater profit for themselves alone. The evidence for this fear was seen in the industrial revolution, which gathered momentum shortly after Adam Smith's time. During the 19th century in industrializing countries, markets and trade expanded at a unprecedented rate. Merchants of industry were able to acquire fortunes of enormous size while at the same time the average citizen became little more than a cog in an industrial engine working long hours in dangerous conditions only to eek out a meager existence. Income became wildly unequal and it seemed as though self-interest and greed promoted a world with a few haves and many have-nots.

Reaction to the growing inequality in the mid 19th century resulted in proposals for an alternative economic system. Karl Marx and Friedrich Engels, in the *Communist Manifesto* (1849), argued that the owners of capital equipment in the early industrial age (the bourgeoisie) satisfied their greed and earned profit via the exploitation of the workers (the proletariat). They argued that this class struggle was a feature of human history. They predicted that the capitalist system at the time would only be temporary. Eventually the proletariat would revolt and overthrow the bourgeoisie in a great workers' revolution. The system that would supplant capitalism was called socialism. In a socialist economy the capital equipment, or the "means of production," would be owned by the State rather than by individuals. As such, the economy would be managed by the State in a way that better satisfied the needs of all people. Class distinctions would begin to disappear and income and wealth would become more equalized. Eventually this system would evolve even further into a system called communism, whereupon the State itself would disappear and production and allocation would conform with the popular communist dictum, "from each according to his ability; to each according to his need."

Marx and Engels' predictions never came true exactly. However, their ideas inspired many political upheavals in the following century including the Russian Revolution that brought the Bolsheviks to power under Vladimir Lenin in 1917, and the Chinese Revolution that brought the communist party to power under Mao Zedong in 1949. Their writings also

inspired contentious centuries-long debates about the appropriate motivations for individuals in society (self-interest vs. altruism) and the appropriate economic system (capitalism vs. socialism vs. communism vs. many other variants).

Later in this text we will explore the reasons why self-interest and profit seeking is an important component of an economic system. However, we will also discuss why self-interest must be constrained for markets to work effectively. Debates about economic systems often seem to suggest that we must choose whether to live in a greedy, selfish world or in a compassionate, caring world. However self-interest and altruism are not mutually exclusive. Altruism can operate in a compassionate society even while self-interest simultaneously greases the wheels of exchange.

### **Key Takeaway**

1. Adam Smith's passage in the *Wealth of Nations* about the butcher, brewer and baker, highlights the self-interest motive of producers in a market.
2. Adam Smith wrote about people's altruistic sympathies in the *Theory of Moral Sentiments*.
3. The industrial revolution resulted in great inequalities of wealth and income between owners of capital and workers.
4. Karl Marx and Friedrich Engels published the *Communist Manifesto* in 1848 in which they predicted capitalism downfall and the rise of socialist and communist systems.
5. Marx and Engels writings inspired the Russian revolution in 1917 and the Chinese Communist revolution in 1949.

## **2. The Division of Labor, Productivity and Living Standards**

### **Learning Objectives**

1. To understand that higher living standards around the world are caused in part by higher productivity induced by dividing labor into specialized tasks.
2. To learn that the items we consume in a modern economy require the cooperative efforts of millions of people to produce.

### **The Story of the Pinmaker:**

“.... (consider) the trade of the pin-maker; a workman not educated to this business ... could scarce, perhaps, with his utmost industry, make one pin in a day, and certainly could not make twenty. But in the way in which this business is now carried on, not only the whole work is a peculiar trade, but it is divided into a number of branches, of which the greater part are likewise peculiar trades. One man draws out the wire, another straightens it, a third cuts it, a fourth points it, a fifth grinds it at the top for receiving the head; to make the head requires two or three distinct operations; to put it on is a peculiar business, to whiten the pins is another; it is even a trade by itself to put them into the paper; and the important business of making a pin is, in this manner, divided into about eighteen distinct operations, .... I have seen a small manufactory of this kind where ten men only were employed, and where ... they

could, when they exerted themselves, make among them about twelve pounds (or about four thousand eight hundred) pins in a day. ... But if they had all wrought separately and independently, and without any of them having been educated to this peculiar business, they certainly could not each of them have made twenty, perhaps not one pin in a day;" - *Adam Smith Wealth of Nations, Chapter 1.*

This long passage in the first chapter of the *Wealth of Nations* explains how the division of labor into smaller self-contained tasks enabled a manufacturer to expand production of pins by a remarkable extent. It highlights one of the most important reasons why standards of living have risen to such a great extent; because of the expansion of production achievable by dividing labor.

Today young people don't aspire to become a jack-of-all-trades. Instead they will specialize in a specific discipline: law or medicine or business. Once in the field they will focus even further on intellectual property law, or cardiology, or accounting. Once they begin practicing they may specialize even further on patents law, or electrophysiology, or corporate tax accounting. Each person will become a specialist in a very narrow segment of the production process. In the meantime they will lose, or at least never acquire, a broader set of knowledge about how to do simple and sometimes vital things, like grow their own food. The effect of this extreme specialization is seen all around us today. It allows many in the world access to foods from every continent, clothing of every style, refrigerators, microwaves, coffee makers, cell phones, computers, automobiles and much much more. None of these could be produced by a single person today. Everyone relies on others for everything from their daily bread to their high tech music system.

To understand fully how reliant we are on others we need only watch a few episodes of reality survival shows on cable TV. Shows like *Survivorman*, *Dual Survival*, and *Naked and Afraid* put wilderness experts into the wild to fend for themselves for an extended period of time, often weeks. They need to make their own shelters and find their own food and usually they have very few items from the modern world to assist them. One easy takeaway that is relevant to our discussion here is that these individuals do not live well when they must do everything for themselves. Indeed, sometimes the question is whether they will survive at all especially when they are put into inhospitable climates. Finding edible food is usually very difficult and most of the participants eat very poorly for several weeks. Making fire to keep warm, boil water and cook food is also very difficult and sometimes impossible. And this is for people who have some expertise and training in wilderness survival.

Quickly turn one's attention to oneself and ask how many things that you consume today do you actually know how to make for yourself. The astonishing answer may well be "nothing." You may argue that you have grown tomatoes and cucumbers in the family garden before but if it is winter that skill won't help you now. Even still, it is quite likely that you purchased seeds for those plants and other accessories at the local home and garden shop and you wouldn't have been able to get started without it. Turn your attention to the simple pencil in your hand and it is worth noting that no one person in the world even knows how to make it. Don't believe it? Watch the TED-Ed talk "[I, Pencil, The Movie](#)" and see if you change your mind.

Also consider your cell phone, computer and home theater system; no one would even know how to begin to produce those for oneself. Our reliance on others has reached a point that no one but a few naturalists would even think of striking out on their own in the wilderness.

The value of this system should be obvious. Because we have divided labor to an extreme degree especially since the dawn of the industrial revolution, humankind is now able to convert their effort in one specialized work area into an enormous array of goods and services. With the money one earns in the market one can buy food from around the world, the latest styles of clothes, and the most advanced technologies. Specialization and the subsequent reliance on each other has been good for everyone.

The points raised here are exemplified in another TED talk by designer [Thomas Thwaites](#) called the Toaster Project. This project is motivated from a line in the Hitchhiker's Guide to the Galaxy by Douglas Adams where the main character finds himself alone on a planet with primitive people and he at first believes he will become the emperor with his superior technological knowledge from Earth. However, upon reflection, he realizes he can barely make a sandwich, let alone a toaster. Thwaites sets out to try to make a toaster from scratch. The video shows the results. Take note of the price of his toaster in the final presentation.

### [The Toaster Project](#)

## **Key Takeaway**

1. Adam Smith's pinmaker story demonstrates that by dividing up the production tasks, allowing workers to specialize in just one of the tasks, and arranging production along an assembly line, more pins can be produced per worker per day.
2. The division of labor contributes to the increase in productivity that in turn contributes to the world's higher standard of living.
3. Individually, we cannot secure a very high living standard on the basis of our own effort.
- 4.

## **3. Facilitating the Gains from Trade**

### **Learning Objectives**

1. Learn the origin of trade by humans; the process of exchanging one thing for another.
2. Learn that trade is cooperative and mutually beneficial.
3. Recognize that a community of traders may require a system of ethics together with religious and government institutions. to facilitate cooperation.

Nobody ever saw a dog make a fair and deliberate exchange of one bone for another with another dog. Nobody ever saw one animal by its gestures and natural cries signify to another, this is mine, that yours; I am willing to give this for that. When an animal wants to obtain something either of a man or of another animal, it has no other means of persuasion but to gain the favour of those whose service it requires. (Smith WoN, : B.I, Ch.2, Of the Principle which gives Occasion to the Division of Labour in paragraph I.2.2)

In this passage from the Wealth of Nations, Adam Smith highlights a key feature that makes humans different from all the other animals: they trade. No other animal on earth exchanges one thing for another mutually voluntarily. No other animal cooperates with each other in this way. Animal nature is more prone to the use of power and force, not one of deliberation and cooperation.

As we will explore below, this central feature of human existence, trade, is another important contributor to the standards of living humans have attained. While the division of labor contributes to the vast increase in production of goods and services, without trade afterwards, no one would be able to take advantage of that increase. Once we divide up labor into specializations, each individual produces much more of their one specialty output than they could ever use themselves. The baker who produces bread can produce much more than he and his family would ever wish to consume. However, by selling the surplus bread in a market, by exchanging for something else, the baker can expand the types of goods and services consumed and become much better off. The increased production can only be shared by the whole community with specialization AND trade.

Prior to the start of the agricultural revolution, around 10,000 years ago, humans were hunter-gatherers. They formed small communities or bands, hunted for wild game, and gathered wild seeds, plants and fruits. Most of the food that was gathered and killed was consumed almost immediately as there were no techniques yet developed for preservation and storage. They developed some tools for hunting, food preparation and other tasks. They also created pottery for storage and cooking.

These hunter gatherer tribes would likely have interacted with each other from time to time. Humans may have claimed the territory on which they temporarily lived by use of aggression and force. Encroaching tribes might be raided and wars may have occurred especially when food supplies became scarce, or for purposes of mating. In times of abundance one tribe encountering another may have simply moved to another unpopulated area. Trade would almost surely have been quite limited if only because the items to trade would have been scarce and because just like other animals humans would have adapted to taking things they wanted by force. Of course, this is highly speculative because there is no historical written record.

Trade amongst humans probably had its origin around the time of the neolithic revolution 10,000 years ago when humans first learned to plant seed intentionally and first domesticated animals such as sheep and goats. Agricultural production had several important effects. Firstly, it would commit roving tribes to fixed locations. Although initially humans may have planted seeds in a location and returned to it later to harvest, eventually they would recognize the need to tend to the crop to increase its output and to

protect the crop from other roving tribes. Secondly, as production capabilities improved it would take less time to procure the same amount of food leaving more time for some members to do other things. In this way specialties in producing tools, or healing the sick, or caring for the animals may have allowed for the increase in the output of other items. Eventually surplus production in at least several different items would set the stage for trade. And with trade as a possibility, it would inspire production of even greater surpluses.

Through specialization and trade communities of people could support more members. Villages and towns surrounded by farms would develop in a fixed location as long as the land remained fertile and the domesticated animals could be fed. These stationary communities would become richer relative to roving hunter gatherer tribes that would have continued to exist simultaneously.

But this situation would also create new problems. One is the increase in diseases as a larger number of people lived in close proximity. The second was a tendency for rising wealth to attract the attention and attack by external groups. After all, if you are in a roving hunter-gatherer tribe and you come across a thriving farm community with an abundance of grain and livestock, it might seem natural to attack the village to acquire your food rather than to gather wild berries and hunt for wild game.

This point is missed in Adam Smith's passage above. Adam Smith said that when an animal wants something from another, it has no choice but to gain the favor of those whose service it requires. Dogs will surely do that when they want something from their owner. But there is an alternative that Smith fails to mention in the passage; an animal or a human can get what they want by using force.

It is out of these conditions in the Neolithic era that we can trace the origins of community, of economic activity, of ethical and moral behavior, of religion and of government. Communities developed as humans turned to agricultural, began to specialize and trade, increased in population due to surpluses and needed to remain in near proximity to each other to accomplish it. Ethical and moral behavior developed from the need to protect the property (crops and livestock) of early farmers from those who would steal it away either surreptitiously or by force. Religion may have grown as a mechanism to instill moral and ethical behaviors on members of the community. And government may have arisen from the need to protect property rights and provide personal protections from both internal (community theft and violence) and external (roving bandits) violations.

## **Key Takeaway**

1. Humans are unique compared to other animal species because they trade with one another.
2. The neolithic era, or agricultural revolution, resulted in the surplus production and may have been the inspiration for trade.

3. Surplus production may also inspire theft and the desire to protect oneself from theft.
4. Private property protections, moral codes, religious teachings and government may have developed during the early stages of surplus production and trade.

## 4. The Invisible Hand

### Learning Objectives

1. Learn the concept of Adam Smith's invisible hand.
2. Learn contrasting views about the invisible hand from two Nobel prize winning economists.

“THIS division of labour, from which so many advantages are derived, is not originally the effect of any human wisdom, which foresees and intends that general opulence to which it gives occasion. It is the necessary, though very slow and gradual consequence of a certain propensity in human nature which has in view no such extensive utility; the propensity to truck, barter, and exchange one thing for another.” Adam Smith, *Wealth of Nations*, Chapter 2, Book 1.

This passage contains one of the best descriptions of what has come to be known as the invisible hand. [Friedrich Hayek](#), the 1974 Nobel prize recipient, referred to the same idea as the “spontaneous economic order.” Both Smith and Hayek are referring to what is also known as the free market mechanism; the process by which individuals or groups of individuals produce goods and services and bring them to sale in markets. This happened without any central planner or designer. There is no inventor of markets which is why Hayek can say they arose spontaneously. Smith suggests that markets arose out of a natural human propensity to truck, barter and exchange one thing for another. By this he means first, move a product that has been produced or acquired to the marketplace (truck it), second, negotiate with others about a terms of trade (barter), and third, trade one thing for another (exchange).

The possibility that one can trade goods in a market inspires the surplus production of products. By surplus I mean a quantity of goods that are in excess of what one can reasonably use in one's own household. A family can only eat so much corn before they either exhaust their own caloric needs or become tired of eating only corn. The chance to trade surplus corn for other items both eliminates the need to produce those other items for oneself and enables one to specialize and develop an expertise in producing only one product. As labor specializes and trades its surplus a remarkable thing occurs; everyone participating similarly in the system becomes wealthier. The quantity of goods and services produced increases, even though the labor inputs used in production remain the same.



What Adam Smith is marveling at in the above passage is that no one person participating in this system needs to understand that specialization and trade is making the whole community better off. No one goes to the market intending to do good for the entire community. Instead each person need only be motivated by his or her own desire, one's own self interest. One's own interest is what motivates trade and it is the potential to trade that further motivates both specialization and innovation. And no one person thought up or conceived of this system that could lead to the betterment of entire communities. Instead the process arose naturally, .... spontaneously, ... as if by an invisible hand!

### **Contrasting Views**

Proponents of free markets frequently refer to the power of the invisible hand, sometimes suggesting that free markets work much more effectively than intervention or direction by government. Other groups often decry the idea of the invisible hand and argue that free markets do not work well without government regulation and control. Again, this is a central distinction between capitalism and socialism (or its more modern variant, democratic socialism). Proponents of capitalism usually have great faith in the working of the invisible hand whereas proponents of socialism, or its modern variants, tend to distrust the invisible hand.

Consider below the remarks of two Nobel laureates: [Milton Friedman](#) and [Joseph Stiglitz](#). Milton Friedman won the Nobel Prize in 1976 and was regarded as one of the most forceful proponents of free markets and limited government in the 20th century (along with Friedrich Hayek). Joseph Stiglitz won the Nobel Prize in 2002 and in contrast to Friedman, has been much more critical of free markets since much of his work has focused on so-called market imperfections or failures (see Chapter 20).

[Milton Friedman on the Invisible Hand](#)

[Joseph Stiglitz: Smith's "Invisible Hand" a Myth?](#)

These two videos seem to present diametrically opposed views with Milton Friedman saying that we have more reason today than ever before to believe in Adam Smith's invisible hand while Joseph Stiglitz proclaims that one reason the invisible hand seems to be invisible is because it isn't there. For most listeners these two videos suggests sharp differences of opinion within the economics profession and may lead a newcomer to the discipline on a search to discover which Nobel laureate is correct. I'll offer an answer at the end of this microeconomics text, but the answer will surprise you. Both are correct!!

To understand why this is so, students will need to learn both when the invisible hand works well and when it doesn't work well. Friedman's comments are emphasizing the former case while Stiglitz is emphasizing the latter. Further, both Friedman and Stiglitz are quite likely to agree with each other's assessments.

## Key Takeaway

1. According to Adam Smith, human nature gives everyone a desire to truck, barter and exchange one thing for another.
2. Adam Smith's invisible hand refers to the unplanned, and uninvented, organization of production and trade in a community. resulting in benefits for all even when people are solely motivated by self-interest.
3. Friedrich Hayek refers to the invisible hand process as the "spontaneous economic order."
4. Milton Friedman contends that we have more reason to believe in the invisible hand than ever before.
5. Joseph Stiglitz says that the invisible hand seems invisible because it is not there.
6. Later in the course I will argue that both Friedman and Stiglitz are correct!

### Footnotes

[1] A terms of trade is an exchange ratio. It is the bargain traders reach. For example, I'll give your three chickens if you give me 5 bags of corn. Or, I'll give you this large bag of peanuts if you give me one silver coin.