

Economics 10: Personal Financial Literacy

April 6 - April 10

Time Allotment: 20 minutes per day

Student Name:

Teacher Name:



Date	Objective(s)	Page Number
Monday, April 6	 Explain Adam Smith's arguments regarding the benefits of Division of Labor Explain Adam Smith's arguments regarding why 	3
Tuesday, April 7	people trade Explain difference between comparative advantage and absolute advantage	6
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Thursday, April 9	Use a PPF in exploring the difference between comparative advantage and absolute advantage ***Quiz***	13
Friday, April 10	***Scheduled Day Off***	15

Packet Overview

Additional Notes: We pick back up with where we left off before Spring Break. We started studying the rise of Capitalism, with arguably the most influential writer on economics, Adam Smith. This week, we will continue our study of Adam Smith and also study another famous economist, David Ricardo, whose writings and insights on international trade still dominate today. As you will, <u>I am supplementing the daily readings and questions with videos to provide greater background and context to some of the concepts we are studying. They are relatively brief, but will help with the lesson and hopefully serve as a means for further exploration.</u>

And starting this week we will now have "Office Hours" via Zoom! The full schedule is below but since Economics was during Period 6, <u>on Tuesday and Thursday from 1-1:50 you can</u> <u>connect with me via Zoom</u> to ask questions, discuss concepts etc... More details to follow on specific links, access codes and etiquette. Note, however, you can email at any time! Please continue to ask questions! E-mail: <u>Patrick.Franzese@greatheartsnorthernoaks.org</u>.

	Monday	Tuesday	Wednesday	Thursday
10-10:50	Period 1	Period 4	Period 1	Period 4
11-11:50	Period 2	Period 5	Period 2	Period 5
11:50-1	Break			
1-1:50	Period 3	Period 6	Period 3	Period 6

<u>Please note that the quiz on Thursday will include material from before the break!</u> Monday's lesson will review the Adam Smith reading from before the break. However, you should also review: (a) the factors that led to the rise of Capitalism; (b) the definition of Capitalism; and (c) the key tenets of Mercantilism.

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I do hope that you are continuing to read about the economic impact this crisis is having. Related to this week's lessons of international trade, look for articles that discuss the following: how has international trade contributed to the current pandemic; how has international trade helped the world respond to the current pandemic; how has international trade (i.e., think supply chains) enabled or hindered the United States response; and how should international trade be limited or changed in the future as a result of what we are experiencing now.

Again, each day's lesson is designed to take no more than 20 minutes. If you have spent more than 20 minutes on a lesson and/or you do not have access to a computer or the internet, then have your parent sign the page next to the "student expectation" section under each lesson and you will receive full credit for the assignment.

Academic Honesty

I certify that I completed this assignment independently in accordance with the GHNO Academy Honor Code.

Student signature:

I certify that my student completed this assignment independently in accordance with the GHNO Academy Honor Code.

Parent signature:



Monday, April 6 - Lesson: Self-Interest

Objective: Be able to do this by the end of this lesson.

- 1. Explain Adam Smith's arguments regarding the benefits of Division of Labor
- 2. Explain Adam Smith's arguments regarding why people trade

Student Expectations: Annotate the reading segments and answer the questions at the end.

Introduction to Lesson

This lesson briefly reviews the Intro and Book I, Chap 1 of Adam Smith's *Wealth of Nations,* highlighted by his arguments for the benefits of division of labor. We read this before Spring Break, but the refresher is important. Next, we delves into Adam Smith's arguments as to why people trade.

Intro and Book 1, Chapter 1 (Division of Labor) - Review

Below is a brief outline of the Intro and Book 1, Chap 1. You may also consult your annotated reader as well!

- I. Wealth of Nations Introduction
 - The <u>necessaries</u> and <u>conveniences</u> of a nation consist in what is produced by labor at home or what is purchased from labor abroad
 - Wealth is the proportion of things produced with the number who are to consume it (created value/population, i.e. GDP per Capita)
 - Proportion determined by two factors:
 - Skill, dexterity, and judgment of the workers (most important)
 - Proportion of those employed for useful production vs those unemployed
 - Comparisons between Savage and Civilized nations:
 - Savages
 - All employed in useful labor
 - Live in extreme poverty, to the point at which the fragile are discarded
 - Civilization
 - Not all employed in useful labor
 - Even the poorest live better than the savage.
 - Observations on Introduction:
 - Smith interested in *national* well-being
 - Value is in that which is made through labor; the natural resources of the country are not factors in the wealth of a country

II. Wealth of Nations - Book 1, Chapter 1: The Division of Labor

- Division of labor is the cause of increased skill, dexterity, and judgement
 - Extent of Division of labor proportional to demand in nation
- Pin maker example:
 - 1 alone could maybe make 1 pin/day
 - 10 together, specializing in specific operations, could make 4800/per person/day
- What determines the degree of divided labor?

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- *Kind* of work involved: agriculture does not allow for the same kind of divided labor
- o Development of Industry in nation
- Remarkable productivity due to factors resulting from division of labor:
 - Dexterity: improvement skill in doing the same simple operation over and over again
 - Time: no transition between operations saves times and more readily focuses the worker
 - Machinery: inventions often due to workers seeking to save labor
- Surplus in production enables even the lowliest worker to own more than an African king

It is interesting to note that while Smith appears to stress the benefits of the division of labour within these chapters. However, consider the following passage from much later in the book on the Education of Youth (emphasis mine): "In the progress of the division of labour, the employment of the far greater part of those who live by labour, that is, of the great body of the people, comes to be confined to a few very simple operations; frequently one or two. But the understandings of the greater part of men are necessarily formed by their ordinary employments. The man whose whole life is spent in performing a few simple operations, of which the effects too are, perhaps, always the same, or very nearly the same, has no occasion to exert his understanding, or to exercise his invention in finding out expedients for removing difficulties which never occur. He naturally loses, therefore, the habit of such exertion, and generally becomes as stupid and ignorant as it is possible for a human creature to become. The torpor of his mind renders him, not only incapable of relishing or bearing a part in any rational conversation, but of conceiving any generous, noble, or tender sentiment, and consequently of forming any just judgment concerning many even of the ordinary duties of private life. ... His dexterity at his own particular trade seems, in this manner, to be acquired at the expence of his intellectual, social, and martial virtues. But in every improved and civilized society this is the state into which the labouring poor, that is, the great body of the people, must necessarily fall, unless government takes some pains to prevent it."

In other words, Smith was concerned about the division of labor essentially dehumanizing a person by turning them into essentially a automaton. His answer to this problem...education!

Optional Videos

Wealth of Nations, Intro (1:29) - <u>https://www.youtube.com/watch?v=UntLPb0OMzc&list=PL-uRhZ_p-BM7HAyfYSjjRJJXwr8S7c9_Y&index=27</u>

Wealth of Nations, Book I, Chapter I (3:24) https://www.youtube.com/watch?v=5OckEiJB7Ps&list=PL-uRhZ_p-BM7HAyfYSjjRJJXwr8S7c9_Y&index=28

Book I, Chapter II

<u>Read and Annotate pgs 104-106 of your reader</u> if not previously done and answer the question on next page. Note optional video: Wealth of Nations, Book I, Chapter II (2:45) -<u>https://www.youtube.com/watch?v=wIU0sDPrDIg&list=PL-uRhZ_p-</u> <u>BM7HAyfYSjjRJJXwr8S7c9 Y&index=29</u>



1) Smith begins Chapter II with the following: "This division of labour, …and exchange one thing for another." Later, "It is common to all men, and to be found in no other race of animals, which seem to know neither this nor any other species of contract." What is the point behind the comparisons to the dogs not trading bones and to "almost every other race of animals"?

2) Smith writes—in what is one of the most famous economics quotes in history--"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." What does he mean?

3) Smith is arguing that the division of labor is caused by an individual's desire to trade. In order to trade, one must then produce something that others want. Therefore, when people work they are doing so out of their own self-interest.

a) Is it wrong for someone to act in their own self-interest? Why or why not?

b) Can acting out of one's own self-interest benefit others? How so or why?

c) Is there a difference between acting in self-interest and being selfish? If yes, what is the difference?

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Concluding Thought

It is hard to understate the significance of Smith's insight that people work out of self-interest not selfishness. (Smith's writing in of his other books, *The Theory of Moral Sentiments*, underpins this insight.) As important, when people do work in their own self-interest, everyone benefits. We can see this today where millions of Americans are working tirelessly to ensure food is made, produced, shipped, stocked and delivered. They are not acting out of charity, but rather out of self-interest. Their lives will be made better...by making your life better. Consider also the hundreds of thousands of individuals who are thinking of way to provide goods and services to individuals during this pandemic. Why? Because they see a way to make their life better...by making your life better. Consider the wealthiest people in America such as Jeff Bezos, Bill Gates and Mark Zuckerberg. Some like to call them greedy. But the truth is, they acquired their great wealth by improving the lives of billions of people.

Summary Questions

1) What are the three benefits of division of labor?

2) What causes the division of labor?

3) What is the difference between being selfish and acting in one's self-interest?

Tuesday, April 7 - Lesson: Trade

Objective: Be able to do this by the end of this lesson.

1. Explain difference between comparative advantage and absolute advantage

Introduction to Lesson

This lesson builds upon the idea that trade is natural part of human activity by looking at international trade. The key to international trade is specialization. Even though one country may have an absolute advantage over another country in producing all concerned products it can still be beneficial for both countries to specialize and trade.

Economics 10: Rise of Capitalism April 6 – April 10

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International Trade:

Adam Smith writes in the Wealth of Nations:

What is prudence in the conduct of every private family, can scarce be folly In that of a great kingdom. If a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it of them with some part of the produce of our own industry, employed in a way in which we have some advantage....In every country it always is, and must be, the interest of the great body of the people, to buy whatever they want of those who sell it cheapest. The proposition is so very manifest, that it seems ridiculous to take any pains to prove it; nor could it ever have been called in question, had not the interested sophistry of merchants and manufacturers confounded the common sense of mankind. Their interest is, in this respect, directly opposite to that of the great body of the people.

If you recall we explored, and established, the idea that when two people engage in a voluntary exchange involving the goods/services they own that both people will benefit. Smith looks at the concept and argues if this holds true between any two individuals, it must hold true between any two individual regardless of what country they live in and, as important, it must hold true between any two countries. (Note: The later part of the quote raises the issue of tariffs or other regulations, something we will explore in a couple of lessons.)

Does Every Country Have Something to Offer?

When looking at what each country can produce, it becomes clear that a country can have an "Absolute Advantage" in a specific product. Meaning that country is able to efficiently produce more of a given product than can another country.

There are a number of factors that allow each country to have an absolute advantage. It could be its climate, geography, natural resources, mixture of skill-set, number of workers etc... For example, generally speaking and putting aside such factors as taste preferences, Colombia has an absolute advantage in making coffee due to certain soil and days of rainfall/sunlight. Another example is that India and the US have an absolute advantage in 24-hour computer support due to the skill-set of each population combined with their geography, so when it is daytime in one country it is nighttime in the other. This does not mean that other countries cannot produce coffee or provide computer support, only that these countries have an absolute advantage.

Many people, including Adam Smith, believed that countries should focus on only those goods and services that they have an absolute advantage in. For example, consider two countries England and Portugal. England can produce X amount of cloth in one year using 100 people and it can produce Y amount of wine in one year using 120. Comparatively, Portugal can produce X amount of cloth in one year using 90 people and it can produce Y amount of wine in one year using 80. Thus, we can see that Portugal has the absolute advantage for both cloth and wine; it could produce more of each more cheaply/efficiently.

The prevailing thought was that Spain had nothing to gain by trading wine or cloth with England since it has the absolute advantage for each good. Is this correct?!?

Read and Annotate David Ricardo, pgs 109-110 of your reader.

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Absolute Advantage versus Comparative Advantage

Ricardo's insight has become known as the law of comparative advantage. Simply stated, Comparative Advantage is a country's ability to produce a given product relatively more efficiently than another country – or – production at a lower opportunity cost.

Why does the law of comparative advantage work? Because being able to produce ANYTHING more cheaply is not the same as being able to produce EVERYTHING more cheaply. When there are scarce resources which have alternate uses, producing more of one product means producing less of some other product. Time/labor/resources spent doing one thing is time/labor/resources taken away from doing something else.

You might be asking yourself what do people in poorer countries have to trade with people in rich countries...if anything. As mentioned above, each country will have unique natural resources, skill-sets or geography that they can capitalize on. Moreover, for developing countries, they have a larger quantity of individuals who are willing to provide manual labor for wages which Americans would describe as "lower" but which those in developing countries would describe as "higher" than what they currently earn. In short, comparative advantage means there is a place under the free-trade sun for every nation, no matter how poor, because people of every nation can produce products relatively more efficiently than they produce other produce.

Optional but highly recommended video on comparative advantage (7:14): https://www.youtube.com/watch?v=4rUfoU04QJM

Why Nations Trade

There are four key reasons why nation trade with each other:

- 1) Trade maintains and improves relations between countries.
- 2) Trade allows countries to acquire goods and services, often natural resources or raw materials, that it does not have available to them.
- 3) Trade allows countries to obtain products that other countries may produce more efficiently and therefore are less costly.
- 4) Trade creates economies of scale that allows development of local industries (i.e., if it takes billions of dollars to create the infrastructure to make certain goods—think factories for cars/planes—countries with smaller populations need more buyers to make a profit!)

Summary Questions

Define the following:

- 1) Imports _____
- 2) Exports –
- 3) Absolute Advantage -_____
- 4) Comparative Advantage _____



Wednesday, April 8 - Lesson: Production Possibility Frontier

Objective: Be able to do this by the end of this lesson.

Use a Production Possibility Frontier (PPF) in exploring the difference between comparative advantage and absolute advantage

Lesson Student Expectations: Watch the video and then carefully go through the problem below.

Introduction to Lesson

Many of you have been pleased that the Economics course has so far been relatively free of graphs! However, when exploring the law of comparative advantage using graphs is a must to fully understand how this law works. Were we in class, we would be working through a problem together as well as at least one other problem for homework. Instead, as you will see below, today's lesson will be watching a video and then reading through a problem with the answers provided so you can see how the calculations are made. Then, tomorrow, you will be asked to tackle a problem as well as a quiz! ***Note, the quiz covers material that we learned before Spring Break as well***

Production Possibility Frontier (PPF)

A production–possibility frontier (PPF) or production possibility curve (PPC) is a curve which shows various combinations of the amounts of two goods which can be produced within the given resources and technology. It is a graphical representation showing all the possible options of output for two products that can be produced using all factors of production, where the given resources are fully and efficiently utilized per unit time. A PPF illustrates several economic concepts, such as allocative efficiency, economies of scale, opportunity cost (or marginal rate of transformation), productive efficiency, and scarcity of resources (the fundamental economic problem that all societies face)

So, let us look at how we can use a PPF to help. Please view the following video on Comparative Advantage produced by Khan Academy (it is just not for math!!): <u>https://www.youtube.com/watch?v=xx9xNJIPOJo</u>

Now, please carefully review the following problem to ensure you understand how the law of comparative advantage works and can be shown using a PPF.



The Production Possibilities Frontier¹

<u>Part I:</u> Once upon a time, there was a farmer who could spend his time producing either potatoes or meat. If he poured all his resources (time, labor, equipment, etc.) into growing potatoes, he could produce 32 ounces of potatoes in one 8-hour workday. If he poured all his resources into raising livestock, he could produce 8 ounces of meat in one 8-hour workday.

Fill in chart (a) to determine the farmer's rate of production for both meat and potatoes. Then, fill in chart (b) with 5 possible combinations of meat and potatoes the farmer could produce in a given workday. Then, graph your chart in part (b) below.



Farmer's Production Possibilities Frontier



Name two efficient, two inefficient, and two impossible production possibilities for the farmer. efficient: (16, 4), (4, 7) inefficient: (5, 5), (20, 2) impossible: (20, 5), (10, 6)

¹ Examples in this packet were inspired and modified from *Principles of Economics, 6th Edition* by G. Mankiw.

1



The Production Possibilities Frontier¹

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Fill in chart (a) to determine the farmer's rate of production for both meat and potatoes. Then, fill in chart (b) with 5 possible combinations of meat and potatoes the farmer could produce in a given workday. Then, graph your chart in part (b) below.





Name two efficient, two inefficient, and two impossible production possibilities for the farmer. efficient: (16, 4), (4, 7) inefficient: (5, 5), (20, 2) impossible: (20, 5), (10, 6)

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Who has the absolute advantage in producing meat? Who has the absolute advantage in producing potatoes? Explain. The rancher has the absolute advantage in producing both meat and potatoes because she can produce them at a lower cost. (look at actual production)

Who has the comparative advantage in producing meat? Who has the comparative advantage in producing potatoes? Explain. The cancher has a comparative advantage in meat because she has a cover opportunity cost compared with the farmer. We farmer has a comparative advantage in potatoes because he has a lower opportunity cost compared to the cancher. (look at opportunity cost) After years of consuming meat and potatoes along their production possibilities frontiers, the rancher goes to the farmer with a proposition. She suggests that he produce only potatoes, she produce only meat, and then they will be able to trade 15 ounces of potatoes for 5 ounces of meat. If the farmer agrees, how many ounces of meat and potatoes will each of them be able to consume?

	Potatoes (ounces)	Meat (ounces)	
Farmer	32-15 = 17	0+5=5	
Rancher	0+15=15	24-5=19	

Graph this new possibility on both graphs. What do you notice?! The new possibility is beyond the PPF from before trade!

Summary Questions

1) What does PPF stand for?

2) When determining which country as the comparative advantage in producing a certain good/service, you must compare the country's ______ when producing that good/service.

3) What are the four reasons countries trade? (Review from yesterday's lesson, but helpful for tomorrow's quiz!)





Thursday, April 9 - Lesson 9

Objective: Be able to do this by the end of this lesson.

Use a Production Possibility Frontier (PPF) in exploring the difference between comparative advantage and absolute advantage

Student Expectations: Complete the problem below as well <u>as take the quiz on page 16 of the</u> <u>packet</u>. It does not matter which order you do it in. ***Reminder, the quiz covers material that we learned before Spring Break as well***

Problem

- 1. Countries should produce items they can make for higher/lower cost (circle one).
- 2. American and Japanese workers can each produce 5 cars a year. An American worker can produce 10 tons of grain per year, whereas a Japanese worker can produce 5 tons of grain per year. To simplify the situation, assume that each country has 100 million workers.
 - a. Based on the situation above, complete the following tables with quantities per worker:

(a)			(b)		
	Cars	Grain (tons)		Cars	Grain (tons)
USA time			United States	0	
per unit			United States		0
(years)			Japan	0	
Japan's time			Japan		0
per unit					
(years)					

b. Graph the production possibilities frontiers for both the United States and Japan on the same graph. Label each country's line with their name.





c. What is the opportunity cost of a car for the United States? Japan? What is the opportunity cost of a ton of grain for the United States? Japan? Fill in the following table with your answers.

	Орр	ortunity Cost of:	Written as Unit Ratio:
	1 car:	1 ton of grain:	
United			
States:			
Japan:			

- d. Which country has the *absolute advantage* in producing cars? Which country has the *absolute advantage* in producing grain?
- e. Which country has the *comparative advantage* in producing cars? Which country has the *comparative advantage* in producing grain?
- f. Without trade, half of each county's workers produce cars and half produce grain. What quantities of cars and grain does each country produce? (For the sake of simplicity, let's think about this comparison *per worker*.)

	Amount of Grain (tons)	Amount of Cars
United States		
Japan		

g. Give a specific example of a trade that would make both countries better off, assuming they each specialize in their comparative advantage. Add these points to your graph <u>in red</u>.



Friday, April 10: ***Scheduled Day Off***

Congratulations! Today and Monday are both scheduled days off! I want to wish those of you who are celebrating the religious holiday a very Happy Easter.

As I look forward to the four-day weekend, I am hoping to get caught up on some extra reading. So, I thought I would take some time to share with you some of the books I have on my reading list.

Currently Reading:

1) *Free to Choose* by Milton and Rose Friedman. This book builds off Friedman's previous book *Capitalism and Freedom* (of which we will be reading a Chapter in a few weeks) as well as his famour TV Series "Free to Choose." I highly recommend reading his books and any videos you find of him on YouTube.

2) *The Myth of the Robber Barons* by Burton Folsom.

Next Up to Read:

1) *Great Society: A New History* by Amity Shlaes. I also highly recommend her other books as well!

2) *The End of Work* by John Tamny. He has written a couple of economics book that are easy to read and provide good explanation of economic principles with modern examples.

While not currently reading any of his works, I highly, highly recommend reading Thomas Sowell. He has written a number of books, most prominently *Basic Economics*, the first chapter of which we used to start this course. He is gifted in being able to explain complex economic ideas in a very clear and easy to understand way—he doesn't use a single graph in *Basic Economics*!

Also, if you are looking for good websites that contain articles and research on current (and enduring!) economic issues, I would recommend The Foundation for Economic Education (https://fee.org); The Library of Economics and Liberty (<u>https://www.econlib.org</u>); and George Mason University's Mercatus Center (<u>https://www.mercatus.org</u>).

Finally, if you are looking for a podcast, I recommend Russ Robert's EconTalk.



Rise of Capitalism – Quiz #1 (Complete without looking at your notes or packet!)

- 1. Capitalism views ______ as the key to economic growth while mercantilism believes that economic prosperity can be achieved through ______.
 - a. Wealth Distribution...Wealth Creation
 - b. Wealth Creation...Wealth Distribution
 - c. Wealth Extraction...Wealth Creation
 - d. Wealth Distribution...Wealth Extraction
 - e. Wealth Creation...Wealth Extraction
- 2. According to Adam Smith, a Nation's wealth is determined by both (a) the skill, dexterity, and judgment of the workers and (b) the proportion of those employed for useful production versus those unemployed. Which is more important?
 - a. The skill, dexterity, and judgment of the workers
 - b. The proportion of those employed for useful production versus those unemployed.
- 3. According to Adam Smith, what are the three advantage of the Division of Labor
 - a. Specialization, Saves Time, Promotes Innovation
 - b. Products Are Readily Available, Promotes Innovation, Specialization
 - c. Aligns Work with Natural Talents, Saves Times, Specialization
 - d. Products Are Readily Available, Saves Times, Specialization
- 4. According to Adam Smith, "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 _____."
 - a. Greed
 - b. Interest
 - c. Self-Preservation
 - d. Money
- 5. Define Capitalism:
- 6. List three factors that contributed to the rise of Capitalism:
 - a. ______ b. ______ c. _____
- 7. List two reasons why countries trade:
 - a. ______b. _____



10th Grade Economics Study Guide

Key Points from the Following Authors/Readings:

- 1. *Adam Smith:* Why are some nations wealthier than others? What are the reasons for division of labor? How do they contrast to Plato's? What impact does the division of labor have on society? Is there a difference between acting in one's self-interest and being selfish? What is meant by the "invisible hand"? When are tariffs appropriate?
- 2. David Ricardo: Why do nations trade with each other?

Key Points from Class Lectures/Exercises:

- 1. Factors that contributed to the rise of Capitalism and why they were important
- 2. Why nations trade with each other (other than what Ricardo offered)
- 3. How government can restrict or encourage international trade
- 4. Definitions of the following terms:
 - a. Absolute Advantage
 - b. Comparative Advantage
 - c. Exports
 - d. Imports
 - e. Capitalism
 - f. Mercantilism (be able to list key tenets)
- 5. How do you graph and interpret a Production Possibility Frontier curve? How can it be used to demonstrate comparative advantage and absolute advantage? How can it show gains from trade?