

Unit 2: Why Trade?

Introduction

The first thing we want to know about economic liberalization is “Why trade in the first place?” This unit provides a brief history and modern day interpretations of international trade theory and its implications.

Tip Box: A term that gets used throughout this chapter is “economic liberalization,” often used interchangeably with “globalization.” Do not confuse this term with “political liberalism.” In the United States, those who support unfettered free trade or economic liberalization tend to be political conservatives who believe the open market will take care of problems on its own. Political liberals are more inclined to support capitalism, and prefer trade be regulated through government oversight.

Part 1: Mercantilism

We begin with a basic question: Why would nations trade to begin with? The answer isn't as obvious as it might seem, as international trade has never been without its skeptics, nor without its problems.

Indeed, early in the modern era, international trade was mercantilist in nature. According to mercantilist theory, the main purpose of trade was to enrich one's own nation by keeping exports at a maximum and imports to a minimum. Mercantilists believed that promoting exports would help a nation achieve a favorable balance of trade: if a country exported more than it imported, then it would be receiving more in payments (for the goods it exported) than it paid (for ones it imported). Since international payments in this period were all made in gold, that meant that the countries with export surpluses accumulated a lot of gold. Mercantilist doctrine implied a zero-sum (win-lose) exchange.

WEBSITE: To learn more about mercantilism, click here:

Mercantilism

<http://www.econlib.org/library/Enc/further>

In practice, however, mercantilism was not just the pursuit of national wealth in gold. It was about local wealth—mainly of national mercantile classes—and political power. In return for paying high taxes to support the national armies and navies, the merchant classes got economic protection from the state. The states, for example, established monopolies in their colonial outposts: English colonial settlers were forbidden from buying manufactured goods from French or Dutch companies, even if the latter could produce at better prices. The states often established quotas or tariffs on imported goods if those goods competed with those of local producers. They also subsidized purchases of capital equipment and established pensions for merchants. All of this, while not spelled out in mercantilist theory, was the practical result of mercantilist belief in the primacy of export-led economics.

In the hindsight of 200 years of free-trade economics, it's easy to see the flaws in mercantilist theory. But it's not as if the mercantile era was without growth. In fact, the mercantile era exhibited astounding growth, due in part to the virtuous (or vicious) cycle of development that mercantilism fostered. In quest of colonial markets, states had to have bigger armies and navies, for which they had to have more taxes, for which they had to have more monopoly markets for merchants, for which they required more colonial markets, for which they had to have better armies and navies, and so on.

However, such growth distorted patterns of trade that might have emerged in the absence of mercantilist doctrine and colonial practice. These distortions were evident in two areas: first, in the lopsided accumulation of wealth in the merchant classes and the government, and, second, in the distorted balance of payments of the metropolitan centers of trade.

The second of these problems was the starting point for a famous critique of mercantilism by the philosopher David Hume, which we explore next.

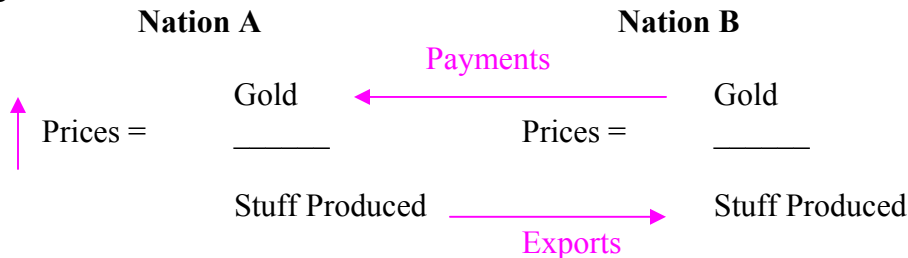
Unit 2 PDF_Why Trade?.doc
Tuesday, August 17, 2004

VIDEO: Mercantilism—A Win-Lose Game

Part 2: David Hume's Mercantilist Critique

David Hume developed what became known as the “price-specie-flow” model of international capital and trade. (“Specie” in this context refers to any precious metal used as money.) According to Hume, in a world in which trade was free, nations that had large export surpluses (beloved of mercantilists) and that accumulated large reserves of gold as payment for exports would also see the domestic price of goods rise, all else being equal. The accumulated precious metal surpluses, in other words, would drive the value of those monies down. So the domestic price of goods in gold or silver (or a currency backed by gold or silver) would rise. This rise in prices would make the export-surplus nation's goods more expensive on the international market and, Hume thought, cause this same nation to be unable to maintain an export surplus for very long. In fact, Hume thought that the adjustment mechanism was efficient enough to ensure that trading nations wouldn't really have to worry about trade or payments imbalances. This would also have the effect of making the international division of labor more efficient. The only way that mercantilist nations could continually run export surpluses, then, was to coerce their colonial outposts into buying too-expensive goods, and by doing so to put off a calamitous day of reckoning in the international payments system.

Diagram:



Prices are essentially determined by a nation's money supply (amount of gold) relative to its output (stuff produced) – for example, if a nation had 10 units of gold and five units of stuff, then the price of each unit of stuff, on average, would be 2 units of gold.

As Nation A exports stuff they receive money from Nation B. As money accumulates in Nation A they experience higher prices which makes it increasingly difficult for them to continue exporting their stuff to Nation B.

WEBSITE: To learn more about David Hume, click here:

David Hume

<http://www.econlib.org/library/Enc/bios/Hume.html>

The relationship between trade accounts and currency valuation. Hume's theory is still useful to us today, as it gives us a fairly accurate way to understand the relationship between trade accounts and currency valuation. The United States, for example, has been running enormous trade deficits for the past 20 years. During the 1990s, foreign investment was pouring into US financial markets and keeping the dollar strong, although on account of the US trade position, the dollar ought to have been weakening

(depreciating in value). Without the huge inflows of investment, which slowed with the burst of the tech bubble in 2001, the dollar has lost 40% of its value against the Euro, quite in keeping with Hume's theory.

South East Asian financial crisis. Or, take the example of the Southeast Asian financial crisis of 1998. In that case, countries like Korea and Thailand, which depended upon exports for growth, had previously guaranteed the value of their currencies against the US dollar as a strategy to attract foreign investment into their nations. But when the value of the US dollar began to rise due to the tech boom in the US in the mid-1990s their export growth strategies became a bust: they had overvalued currencies and trade deficits (excess imports). So the governments of South East Asian nations abandoned their currencies' links to the dollar. At that point, quite in keeping with Hume's theory, their currencies' values fell, which in turn led a rapid rush for the exits on the part of investors and the implosion of the regional financial architecture.

Of course, we no longer live in a world where money is backed by precious metal. This does change the theory of international prices and payments substantially, as we learn later in the course, but it doesn't change Hume's basic insight, which can help us understand international trade even today.

Indeed, before we move on to the first distortion wrought by mercantilist theory and practice, it's worth mentioning that a critique of mercantilism not unlike Hume's still circulates today. The criticism has been leveled against some Asian economies that have adopted export-led growth strategies that are focused, as the mercantilists were, on accumulating currency reserves. Today these reserves are held (mostly) in dollars rather than gold or silver, and the point is not just national wealth measured in such currency. Rather, by buying up dollars (the world's benchmark currency) or dollar-denominated bonds, China, Japan, South Korea and other Asian nations keep their own currencies from appreciating in value. (Recall that an appreciating currency makes export-driven growth harder.) This has the welcome effect of keeping domestic industries employed in producing low-priced export goods, and makes imports relatively more expensive. So long as the central banks of these economies can continue to manage their currencies in this way, their export-led strategies—and the critiques that have issued from the US and Europe—will probably continue.

WEBSITE: A detailed analysis of this critique can be found in the *Economist Magazine* article, "Oriental Mercantilists," September 2003. To access this article, use the name: STUDENT and the password: MALS620; if that doesn't work, try ECO300.

[*Oriental Mercantilists*](#)

VIDEO: Hume's Price-Specie-Flow Doctrine

Part 3: Adam Smith's Paradigm Shift

Perhaps the most cited critique of mercantilism was written by Adam Smith in *An Inquiry into the Nature And Causes of the Wealth of Nations*, 1776. Smith pointed out that the mercantile system worked by coercion and political means, and so the gains from mercantile trade mostly wound up benefiting a small part of the public—namely, those who either had political power or access to it. In contrast, Smith imagined a world in which people freely pursued economic activity because of the incentives drawn by the market. As he imagined it, people's enlightened self-interest would attract them to profitable activities, and the market would aggregate all such people to benefit the community as a whole. The baker would be free to trade bread for meat, shoes, fabric, and whatever else her needs were; likewise for the farmer, the butcher, and the shoemaker. If each person did what they do most profitably, according to Smith, everyone would be wealthier. Mercantilism, by failing to deliver the liberty to engage in market activity, failed on this count.

WEBSITE: For more on Adam Smith, read:

Adam Smith

<http://www.econlib.org/library/Enc/bios/Smith.html>

The contrast between Smith's idea and the mercantilists' ideas could not be clearer. For the mercantilists, the economic pie was more or less finite, like the amount of gold that could be accumulated by running export surpluses. So coerced trade, as in the colonial outposts of Europe, and politically-driven economies, such as those in the metropolises themselves, made sense.

For Smith, on the other hand, people at liberty to follow the incentives of the market made the economic pie *bigger* by virtue of specialization and the division of labor. For example, the baker, who is really good at baking but not nearly so good at making shoes, might make either four loaves of bread or one pair of shoes in an hour. On the other hand, the shoemaker might make two pairs of shoes or two loaves of bread in an hour. In *The Wealth of Nations, Book Four: Of Systems of Political Economy. Chapter II*, Smith argues that each worker has an absolute production advantage in his or her chosen occupation, and this advantage should be exploited through trade for the good of all.

How absolute production advantage works. For example, suppose the baker gave up trying to make her own shoes for an hour and concentrated on making bread, while the shoemaker left the kitchen for an hour and spent that time in the shop, and then they traded. What would happen? Well, the baker's hour in the kitchen would make four loaves of bread, but she would no longer have that time available to make one pair of shoes; likewise, for the shoemaker, that time in the shop would make two pairs of shoes, but two loaves of bread would be lost. By trading, however, they would both get back more than they lost. For the baker's extra hour spent baking bread she would receive two pairs of shoes—double the single pair she could have made had she spent that hour making her own shoes. And in exchange for trading two pairs of shoes, the shoemaker would get four loaves of bread—double the two he could have made had he spent his

hour in the kitchen. In fact, with the same amount of time spent working, the baker and the shoemaker essentially double their joint production (and consumption!). Clearly, so long as the baker and the shoemaker each want what the other produces, specialization and trade makes both better off.

WEBSITE: To learn more about Adam Smith and his theories, click:

[*The Wealth of Nations, Book Four: Of Systems of Political Economy. Chapter II*](#) **The advantage of Smith's theory.** Such was Smith's argument about international trade. Nations, like individuals, should specialize in the things they do most productively. By doing so, they make the entire community of trading nations wealthier. His argument, so seemingly simple today, was so profound at the time that it literally changed how people viewed the world. No longer was trade about "stealing" someone else's slice of the economic pie, but rather about **making the whole pie bigger**, so that everyone could enjoy a more fulfilling life. Smith's insights literally created a paradigm shift in how people, and nations, perceived the economic interactions of the world in which they lived.

Absolute Advantage Table: What Producers Should Spend Their Time Doing

	Shoemaker Output/Hr.	Baker Output/Hr.
Shoes	2 <i>Absolute Advantage</i>	1
OR		
Bread	2	4 <i>Absolute Advantage</i>

VIDEO: Adam Smith's Paradigm Shift

-OR-

VIDEO: Adam Smith's Wealth of Nations and Absolute Advantage

Part 4: David Ricardo Refines Smith's Theory

Smith did not consider a more difficult question, however: What if one country is more efficient at producing everything? How can developing countries, who have no absolute productivity advantage over developed ones, be included in the gains from trade?

David Ricardo answered this question in his *On The Principles of Political Economy and Taxation, 1817*. In "Chapter 7: On Foreign Trade," Ricardo argues that it isn't absolute productivity that drives the gains from trade, but rather the relative, or comparative advantage.

WEBSITES: For more information on David Ricardo and his ideas, check out:

David Ricardo

<http://www.econlib.org/library/Enc/bios/Ricardo.html>

Chapter 7: On Foreign Trade

http://www.systemics.com/docs/ricardo/Chapter_7

Ricardo's Theory of Competitive Advantage. To illustrate Ricardo's theory of comparative advantage, let's reconsider our previous example, but with a particularly skilled baker capable of producing three pairs of shoes or six loaves of bread in an hour, giving her the absolute advantage in the production of both goods. Ricardo's insight was to explore what each worker, or nation, gave-up (in terms of goods) in order to make more of another. In economics jargon, we call this the **opportunity cost**, or **relative cost**, of doing one thing instead of another. So, for the baker the opportunity cost, or relative cost, of producing six loaves of bread is giving up the opportunity to produce three pairs of shoes (or, one loaf of bread costs half a pair of shoes). If the baker chose instead to produce shoes, then the opportunity cost of three pairs of shoes would be six loaves of bread (or, one pair of shoes costs two loaves of bread).

For the shoemaker, on the other hand, the opportunity cost of making two pairs of shoes is two loaves of bread (or, one pair of shoes cost one loaf of bread). If the shoemaker chose instead to make bread, then the opportunity cost of making two loaves of bread is two pairs of shoes (or, one loaf of bread costs one pair of shoes). Clearly, the baker gives up relatively fewer pairs of shoes to make bread and the shoemaker gives up relatively fewer loaves of bread to make shoes. In other words, the baker has a comparative, or relative cost, advantage in making bread and the shoemaker in making shoes—and these comparative advantages can, and should, be exploited.

For the baker to gain from trade, she would need to receive more shoes from trade than she gave up to make the bread. For the shoemaker to gain from trade, he would need to give up fewer shoes in trade than the shoes it would cost him to make his own bread. The cost to make a loaf of bread for the baker is half a pair of shoes, so she'd need to get more than half a pair of shoes to be willing to trade her loaf of bread. And the cost of making a loaf of bread for the shoemaker is one pair of shoes, so he'd need to give up less than one pair of shoes for a loaf of bread. In other words, as long as the baker gets more than half a pair of shoes and the shoemaker pays less than one pair of shoes for a loaf of bread,

they'd both benefit from trade. If the baker and the shoemaker agreed to trade one loaf of bread for three-fourths of a pair of shoes, for example, the baker would end up with one-quarter of pair of shoes more than it cost her to bake the bread and the shoemaker would give up one-quarter of a pair of shoes less than it would have cost to bake the bread himself.

[INSERT IMAGE AND CAPTION: as shown below]

Comparative Advantage Table

	Shoemaker Output/Hr.	Opportunity Cost	Baker Output/Hr.	Opportunity Cost
Shoes	2	1 Comparative Advantage	3	2
OR				
Bread	2	1	6	1/2 Comparataive Advantage

In the above example, it's not the absolute time cost of making bread or pairs of shoes that matters, but their cost relative to each other—and that's the true basis on which trade occurs. According to this theory, no matter the total productivity advantage of one nation over another, **there will always be an exploitable relative cost difference for developed and developing nations which will allow each to gain from trade with the other.**

If Ricardo's insights into relative cost are actually the story behind mutual gains from trade, this leaves us with the question of whether Smith got it wrong. Well, we must remember that Smith's theory, although not quite on target in a most general application, clearly showed for the first time that trade could be win-win. This insight set the stage for all who followed. Additionally, Smith's theory was the first to explain that what fundamentally determines a nation's wealth is its labor's productivity, not its ability to accumulate gold. Using our example, although though both the baker and shoemaker can benefit from trade, it is the baker who will be the wealthier of the two—or she will be able to buy more shoes with her time than the shoemaker will be able to buy bread with his.

VIDEO: Empirical Test for Evidence of Comparative Advantage

Part 5: A Modern Day Interpretation: The Factor-Price Equalization Theorem

When we say that nations should specialize in one good over another, however, we don't mean that they should produce only that good. Rather, there is a kind of window of specialization that proves efficient for each country and the world in general. According to more recent work in trade theory, such as that by Paul Samuelson, this window is largely dependent on the relative prices of the factors of production—land, labor, and capital—in different locales. And the prices of these factors of production are largely determined by their availability and use.

WEBSITE: For a bio of Paul Samuelson, check out:

<http://www.econlib.org/library/Enc/bios/further>

US computers vs. Mexican t-shirts. For example, suppose initially that the US can produce two computers or 200 hundred t-shirts in one hour, and Mexico can produce one computer or 150 t-shirts in an hour. Then the US has an absolute advantage in everything and a comparative advantage in producing computers (one computer costs only 100 t-shirts in the US, while one computer costs 150 t-shirts in Mexico). So the US should specialize in computers and Mexico in t-shirts.

However, **they will only specialize in each of these goods so long as they continue to have lower relative costs**, which are subject to change as each nation's production of computers and t-shirts changes. The reason for this is quite simple: the price of a computer or a t-shirt is determined largely by the cost of the land, labor, and capital that was used to make it; and the cost of that land, labor, and capital is determined by its initial scarcity and its use. Since Mexico has a relative abundance of lower skilled workers compared to the US, such workers will be paid lower wages in Mexico. And if producing t-shirts requires lower skilled workers, then t-shirts will cost less in Mexico too.

Diamond-water paradox. The logic of this argument is essentially the same as the famous diamond-water paradox: how can diamonds be more expensive than water when they are an unnecessary luxury and water is necessary to sustain your life? It's all about their relative scarcity.

Now, let's suppose that Mexico and the US begin to trade. What will happen to Mexico's t-shirt prices if they begin to specialize in t-shirts? They will go up. Why? Because as Mexico produces more and more t-shirts, this will increase their need for lower skilled workers—making them more scarce (and more expensive). At the same time, as the US specializes in computers (which require higher skilled workers), the demand for lower skilled workers will go down and their wages will fall.

This implies that when nations begin to trade, it puts pressure on wages for similar skills (and prices of similar goods) to equalize around the world. This theory of wage (price) equalization goes a long way toward explaining why labor unions in the US comprised of workers with lower levels of education are likely to lobby very hard against trade liberalization. Sure, their t-shirts might be cheaper, but those cheap t-shirt might cost

them a lot more in lower wages. On the other hand, as the US specializes in computers, the demand for skilled workers with advanced training will go up, resulting in higher wages for them, and of course, cheaper t-shirts as well. One criticism of free trade in America that this theory supports is that even though trade may increase living standards on “average,” its relative effects are disproportional, resulting in a widening income gap between those with technically advanced skills and those without.

VIDEO: Impact of Specialization on Wages in the US and Mexico

VIDEO: Levi’s Factor Price Equalization Story

WEBSITE: For an additional summary on the effects of free trade on prices, wages and jobs, please read the article “Free Trade” by Alan S. Blinder of Princeton University:

Free Trade

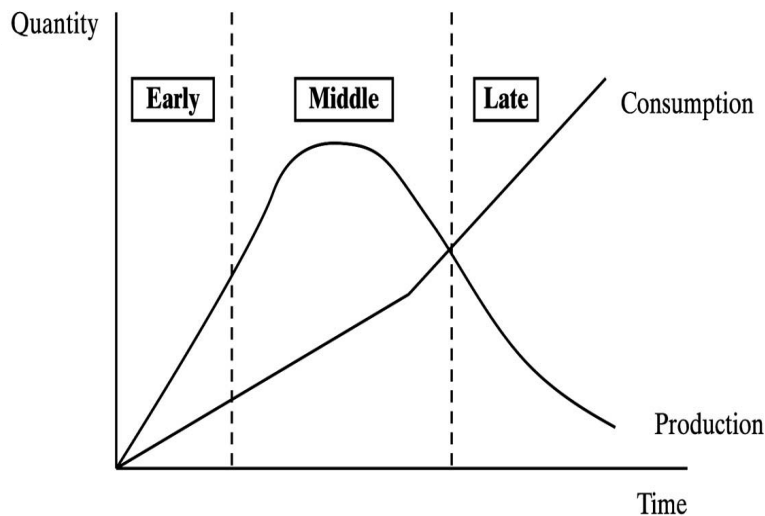
<http://www.econlib.org/library/Enc/FreeTrade.html>

Part 6: Dynamic Comparative Advantage

A further implication of Samuelson's theory of factor-price equalization is that comparative advantage is a dynamic process.

Product life cycles. In particular, trade specialization is driven by product life cycles. Even if it is good for the US, a technological leader, to specialize in computer production today, it might not be good ten years from now, because ten years from now, the relative value of the technology needed to make computers may have fallen. As scientific discovery progresses over the next ten years, the cutting edge skills required to make computers today may spread to developing nations and become commonplace by tomorrow. The workers using such technology in the US will consequently become relatively less scarce and their wages will fall (quite consistently with the factor-price equalization story of the previous section).

Letting go to get on. So while it might be good for the US to make computers now, in the long run, when computers are no longer cutting-edge technology, the US might benefit from moving on to other cutting-edge industries like genetic engineering and biotechnology. All of this implies that for a nation like the US to maintain its relatively high living standards, we must continually develop and export the newest, latest, and greatest cutting-edge products. But to obtain the resources necessary for this, we must also be willing to let go of products whose technological value is in decline (to the point of becoming an importer of that product).



Part 7: Economies of Scale-Driven Trade

Economies of scale also drive trade specialization. An economy of scale occurs whenever “bigger is better” (or at least cheaper). That is to say, if a factory or an entire industry can lower the average cost of producing their products by producing more of them, then they are operating within an economy of scale.

In general, two kinds of economies of scale influence patterns of trade: internal economies of scale, which result from the quantity produced inside the factory; and external economies of scale, which result from the size of an entire industry located in a particular place.

Internal economies of scale. We will first explore the role of internal economies of scale on trade by considering, for example, two types of automobiles: SUVs and sports sedans. The factories that produce these automobiles have huge research-and-development and assembly-line design costs associated with producing each type of vehicle. Such factories exhibit great potential for internal economies of scale because larger production volumes of a given type of automobile will spread out these “fixed” costs, resulting in lower average costs per unit.

Now, let’s initially assume that the US and Germany have identical factors of production—land, labor, and capital—and that the two nations also have the same preference for SUVs and sports sedans. According to our analysis in the previous sections, and the fact that similar preferences would result in similar quantities of production, both the US and Germany should have the exact same production costs (and no potential to gain from trade).

But what would happen if the relative preference for SUVs and sport sedans were not the same? What if Americans like SUVs because of the US’s low speed limits and big parking lots, while Germans preferred the thrill (and safety) of driving sport sedans on their no-speed-limit autobahns? The German factory would make a few more sport sedans and a few less SUVs, while the opposite would happen in the US; this would make sports sedans cheaper to produce in Germany and SUVs cheaper to produce in the US because of the economies of scale being (or not being) realized.

To further exploit this cost saving, the US should just specialize in what the majority of Americans want (SUVs) and use the excess production of SUVs to trade for what the minority of Americans want (sport sedans). Doing this would reduce the development and assembly line set-up costs and allow the citizens of both nations to buy automobiles for less.

External Economies of Scale. An external economy of scale is a cost advantage for an industry in a nation that can more or less materialize by chance, but nonetheless influences patterns of trade. For example, in the American mid-west, an external economy of scale resulted from the fact it just happened to be where Henry Ford’s first “assembly line” auto plant was built. Once built, other manufacturers, parts suppliers, laborers, transportation grids, and such, also sprang up there. This agglomeration of like-

minded interests led to competition and cost savings, which allowed Ford and the other automobiles factories located there to produce cars at lower costs than anywhere else. So, sometimes the reason a country trades one thing instead of another is simply a matter of historical happenstance.

Part 8: Industrial Policy-Driven Trade

Trade sometimes results from national industrial policies (laws and regulations) that produce different effects on the cost of making products in different nations. For example, if the US has strict environmental standards, then industries with toxic byproducts will find it expensive to comply and will look for nations with lesser standards in which to manufacture their products. On the other hand, a nation may offer free land or tax incentives to attract an industry that will provide training to its workers so that they can acquire the skills necessary for future economic growth. In either example, the specific industrial policy of one nation relative to another will influence which industries locate where and who will trade what with whom.

Industrial policy-driven trade is often targeted by its opponents as being unfair trade, not free trade. And as such, there are no net gains because policies, not relative productivity advantages, are driving it. Clearly, such trade cannot be what Smith and Ricardo had in mind when they talked of specialization resulting in mutually beneficial gains. Or could it? This is a very difficult question to answer. Why? Because even though American jobs are lost in these industries because of such policies, American consumers will now pay lower prices for these products (possibly by more than the dollar cost of the jobs lost). Plus, some American consumers might take the money they now have to spend and use it to buy a computer made in the US (which will create American jobs!).

As for the other nation, they may not have the luxury to care about the environment in the way a wealthy nation does. (They're probably a lot more concerned with earning enough to buy food to get through this coming winter.) Plus, the skills learned today will translate into higher living standards tomorrow (and maybe then they will care about the environment). Actually, such an argument can even be used to explain the development of America over the last 250 years or so.

WEBLINK: To learn more about industrial policy driven-trade, a webcast of a talk given by Jagdish Bhagwati of Columbia University can be viewed by visiting the link below, CATO Institute Book Forum, Thursday, October 10, 2002:

[Free Trade Today.....and Tomorrow](#)

Two new books from Jagdish Bhagwati, one of the world's leading trade economists, illuminate the trade debate today and point toward freer trade in the future. In *Free Trade Today*, Bhagwati defends free trade against the "American virus" of so-called fair trade and the related threat of sanctions against poor countries that fail to meet Western labor and environmental standards. He then offers a road map to a more open global economy. And in a new edited volume, *Going Alone: The Case for Relaxed Reciprocity in Freeing Trade*, with comments by Robert Litan, Brookings Institution, Bhagwati and other contributors make the case, from history and theory, that unilateral free trade at home can encourage freer trade abroad.

Weblinks

During your reading of Unit 2, the following weblinks were presented. Read them now if you have not already done so.

- [Mercantilists](#)
- [David Hume](#)
- [*Oriental Mercantilists*](#) ID: Student; Password: MALS620; if that doesn't work, try ECO300
- [Adam Smith](#)
- [*The Wealth of Nations, Book Four: Of Systems of Political Economy. Chapter II*](#)
- [David Ricardo](#)
- [*Chapter 7: On Foreign Trade*](#)
- [Paul Samuelson](#)
- [*Free Trade*](#)
- [*Free Trade Today.....and Tomorrow*](#)