Introduction

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1 Learning Objectives

1. Understand that there are both challenges and opportunities for citizens whose countries allow them to participate in the global economy.

2. Understand the problematic nature of the concept of a change in economic circumstances being "good for the nation" when not every member of the nation benefits.

3. Understand what is meant by the economist's "way of thinking"–use of starkly simple assumptions about human behavior, use of obviously "too simple" models to illustrate particular possibilities, use of different, question-specific, non-nested models instead of a global, unified model, and use of "chains of deductive reasoning in conjunction with simplified models."

4. Identify and understand what are the two great themes of international trade in goods and services.

5. Understand the similarities and differences between interregional and international economic relationships.

6. Understand the distinction between the subject areas "international trade" and "open-economy macroeconomics."

7. Understand the basic generic reason for trade between distinct regions or nations.

2 Opportunities, challenges, "gains from trade," and the pattern of trade

For a number of years, central bankers, policy makers, and leading academic and business economists have been meeting in late summer at a resort in Jackson Hole, Wyoming. They meet to discuss current economic issues. In the summer of 2000, the theme of this symposium was "the challenges and opportunities of global economic integration." Meeting shortly after massive protests of various disgruntled interest groups at the 1999 meeting of the World Trade Organization (an international organization dedicated to promoting the dismantling of trade barriers, i.e. dedicated to promoting "freer" trade), and shortly before anticipated protests at a soon-to-be-held meeting of the International Monetary Fund (another international organization dedicated to the smooth functioning of an integrated world economy), the tone of the participants was perhaps, to non-economists, striking: No one questioned the implicit assumption of the symposium that more global economic integration of trade in goods and services was good.

Consider, for example, the following excerpt from remarks by Michael Moore, who at that time was Director-General of the World Trade Organization: "It's good to be speaking to a group that understands the values, virtues and victories of globalization." Other participants expressed similar sentiments. What was being taken for granted by virtually all speakers at the symposium was the existence of a consensus held by the mainstream of the economics profession about the benefits of free trade in goods and services.

This consensus is widespread. If, in the spring of 2000, you happened to be surfing the late-night cable television offerings, you could have stumbled upon a panel discussion concerned with pending U.S. legislation that would bestow upon China "permanent normal trade relations." One member of the panel, Noble Laureate economist Robert Solow, was asked by another participant to describe the effects of this legislation. He responded that the potential effects were a classic example of what economists call “the gains from trade.” These effects, he asserted, would be large losses in income for some U.S. residents, most of whom are members of the textile or apparel industry or are people whose livelihood depends on the economic health of these industries. He also noted that those people that would be hurt are primarily located in a few states such as North and South Carolina. After pointing all this out, he noted that other U.S. residents would gain from the lower prices of textiles and apparel that would follow adoption of this legislation. He then concluded with the assertion that the overall effects would be “good for the nation as a whole.”

Or perhaps, in early 2002, you heard a National Public Radio (NPR) program about the incipient imposition of higher tariffs on imports of the kind of

steel that is produced in the U.S. by so-called "Big Steel," the older, larger, unionized steel producers. Such higher tariffs would act as a tax on these types of steel imports, reducing the quantity imported and raising the domestic price. In that NPR program, a spokesman for the steelworkers' union argued that thousands of jobs in U.S. steel mills would be lost unless these higher tariffs were imposed. An economist, Gary Huffbauer, was then interviewed. He pointed out that U.S.-based producers of manufactured goods that use steel as an intermediate product would shrink their production in the face of higher steel prices, thus eliminating jobs. Huffbauer concluded that the issue shouldn't really be about jobs: "Big Steel" would save some, but other producers would lose some. The net change would be about zero. The issue, he claimed, was "efficiency": the higher tariffs would make the U.S. less "efficient."

Or, in 2008, you might have read a column in the New York Times in which one prominent economist wrote:

> "No issue divides economists and mere Muggles more than the debate over globalization and international trade. Where the high priests of the dismal science see opportunity through the magic of the market's invisible hand, Joe Sixpack sees a threat to his livelihood."

This was written by one of those high priests, Harvard University's Gregory Mankiw, and it accurately reflects the views of most economists.

Moore's, Solow's, Huffbauer's and Mankiw's remarks are representative and reflective of what one might describe as one aspect of the perspective of the majority of the economics profession on the opportunities and problems that arise for citizens of nations because of their participation in the international economy. For someone not knowledgeable about this perspective, these remarks might raise a few questions.

First, what is one to make of Solow's remark that something is good for the nation as a whole, even when, as Solow illustrated with his reference to textile workers in the Carolinas, some members of that nation are hurt? Could Solow have meant that because only a relatively small number of people would be hurt and a large number would be helped, this could be classified as "good for the nation?" If that is what he meant, would he have had a different conclusion for a hypothetical circumstance where removal of trade barriers hurt and helped equal numbers of people? Or would he have had a different conclusion for a hypothetical circumstance where a small number were helped a lot but a large number were hurt a little? Or, for Solow and economists in general, is being able to recognize what is "good for the nation" akin to Justice Potter Stewart of the Supreme Court being able to recognize pornography: one can't define it, but one knows it when one sees it?

In fact, economists are playing fast and loose with language when they say that something is "good for the nation as a whole" when some members of the nation are hurt and some are helped. Economic analysis can't give anyone the priestly knowledge to make those kind of Solomon-like decisions. What it can

do is spell out the trade-offs a society faces when it contemplates policies such as promoting freer trade. But for many economists, knowledge of these trade-offs makes them think that if citizens better understood the trade-offs, they would, like the economists, embrace freer trade.

Second, what sorts of benefits was Solow implicitly referring to when he talked about normalization of trade relations being good for the nation? While Solow wasn't specific, he undoubdtedly had in mind a variety of tangible benefits that he knew must accrue to some U.S. residents from increased trade with China. For one, he might have been referring to the effects of lower clothing prices that would come from larger imports from China. For some U.S. consumers of clothing, these lower prices might be good for them. Or he might have had in mind the benefits to U.S. producers of machinery, or cotton, or any of a myriad group of products likely to be exported to China if trade relations were normalized.[1]

Third, what did Huffbauer mean by "efficient?"[2] A non-economist might believe that an "efficient" economy is one that produces more of everything with the same amount of inputs. Huffbauer clearly meant something else, as he acknowledged that the higher tariffs would lead to more production of one thing, namely steel, and less of something else, namely some of those goods that use steel as an intermediate product. Huffbauer was referring to the economist's technical meaning of "efficiency" in his remarks, a meaning that refers to using resources to produce the "right" mix of output. This concept, closely related to Solow's notion of what is "good for the nation," can only be understood with a good deal of background knowledge about economics. What might surprise non–economists is that this concept of efficiency even applies to economies where there are no choices to be made about production–economies, for example, where goods and services are provided as "manna from heaven."

These questions emphasize that the concept of what is "good for the nation" when not everyone in that nation is helped is not obvious. Because of these conceptual difficulties, understanding how and why economists by and large view the opportunities as in some fashion "outweighing" the costs comprises a significant portion of any study of international economics. This portion is one of the great themes of the study of international trade and is referred to by the shorthand expression **gains from trade**.[3]

gains from trade: the increase in the "size of the pie" to be divided among members of a country that results from free trade among nations.

In addition, though, economists also have something more detailed to say about the challenges. The challenges arise because, as evidenced in the above discussions, in most circumstances "gains from trade" for the nation are accompanied by significant losses for some members of the nation. What, if anything,

[1] A point often missed in discussions of "lower import prices" brought about by trade is that trade also entails "higher prices" for goods exported. This is good for the producers of these goods, but, for those domestic consumers who buy these goods, it might be bad.

[2] And why, one might ask, have we put quotation marks around "efficiency?" The quotation marks emphasize that the meaning of the term comes in this case from the technical jargon of the economics profession.

[3] The use of quotation marks in the above paragraph around "outweighing" and "good for the nation" is meant to highlight again that such terms are inherently problematic, though commonly used.

should a nation do in response to these trade-induced changes in the distribution of economic benefits?

In instances such as the one alluded to by Solow during the panel discussion about whether or not the United States should establish permanent normal trade relations with China, the challenges are often brought to the nation's attention by a vigorous political response. For example, on March 23, 2002, an Associated Press newspaper story reported that the three governors of North Carolina, South Carolina, and Georgia had released a public letter to President Bush calling on him to help the textile industry. The story reported that at the gathering of about 350 political and industry leaders at which the governors had made public their letter, the claim was made that cheap foreign imports had led to the loss of over 100,000 U.S. textile jobs and the closing of more than 100 U.S. mills in just the preceding year. Governor Barnes of Georgia was quoted as saying that "more must be done to restore fairness in global trade." Governor Hodges of South Carolina remarked: "There are many small communities that grew up around these textile mills that are seeing their entire way of life changing."

For economists, identification of the losers associated with increased textile imports would be known even without the publicity associated with a vigorous political response. Remember, Solow identified these groups without benefit of the governors' remarks. His knowledge reflected the consensus of the economics profession about the second major theme of international economics: what can be said systematically about why some countries, in the absence of trade impediments, export certain goods and import others. This theme is usually referred to as an understanding of the **pattern of trade**.

pattern of trade: the description of which nations import and export which goods to which countries.

Solow's remarks anticipated that with unfettered U.S.-China trade relations, the U.S. would import more textiles from China. What characteristics of China, the United States, and the textile industry let Solow be so confident in his prediction? Of equal interest, though, is the question of what implications this predicted pattern of trade has for the interests of identifiable groups both within the United States and around the world.

What do the models of economists predict about the pattern of trade? This question has engaged most of the best and the brightest of the economics profession throughout its existence. The answers to this question prepare the ground for grappling with some of the most interesting and provocative issues of current affairs. Does the pattern of trade lead to systematic exploitation or immiserization for developing nations? Should governments subsidize or protect certain industries? And finally, what does the pattern of trade imply for the distribution of income among identifiable subgroups in the economy, such as unskilled labor and owners of capital?

All of the above issues can be subsumed under the category of distributional challenges: participation in the international economy usually creates both winners and losers. The economics profession has much to say about what fundamental characteristics of economies determine which groups win and which groups lose. These distributional issues are the challenges about which the economics profession has a deep and widespread understanding.

2.1 Opportunities and challenges from a broader perspective

Participation in the international economy also generates opportunities and challenges about which economists have less definitive things to say. The political scientist Bruce Moon, in his book *Dilemmas of International Trade*, classifies other challenges as either challenges to values or to national security. The question of appropriate trade relationships with China at the start of the twenty-first century again provides a good illustrates of how trade creates opportunities as well as challenges concerning values and national security.

First consider the challenges and opportunities associated with questions about values. As of the beginning of the 21st century, many United States residents believe the Chinese government does not respect the human rights of its citizens. Some of these U.S. residents also believe that the "gains to trade" that China would reap from permanent normal trade relations would strengthen the existing, dictatorial Chinese government, further impinging on basic human rights. For these U.S. residents, participation by the United states in trade with China tramples on fundamental human values.

On the other hand, some of those U.S. residents that believe the Chinese government does not respect the human rights of its citizens believe that trade will expose the Chinese to more democratic traditions and hasten the demise of dictatorial government. They view increased trade with China as an opportunity to expand the numbers of people who share their fundamental human values about democracy.

Which of these groups is correct? Economists might have their own individual views on this question, but *as economists* have little claim to authoritative knowledge on the subject.

Now consider national security. Some United States residents view China as a political rival with whom the U.S. may eventually find itself in armed conflict. For some of these individuals, trade with China is seen as strengthening the relative military power of China vis-a-vis the U.S., and hence should be minimized. They view trade as interfering with the more important value of national security.

In contrast, some U.S. residents view increased trade as enhancing national security. They believe that the gains from trade that China will enjoy are not something they would jeopardize by engaging in armed conflict with the U.S.

Again, which of these groups is correct? Political scientists have studied this type of question, and by and large view trade as one leg of a three-legged stool that supports peace instead of war. That is, they find evidence that when trade, democracy, and international organizations all exist together, pairs of nations are unlikely to engage in warfare. Economists, though, are generally not experts about this subject, and tend to defer to the opinions of political scientists.

Many international trade issues besides the China question have the characteristic of impinging on these challenges to values and national security (and even global security). For example, many people believe that international trade

hurts the environment, or that it leads to abuses of child labor, or that trade liberalization should be "linked" to "progress" in promotion of other worthwhile values. While economists have much less to say about these issues, their methodology and perspective frequently give rise to arguments about these issues that are not noticed and appreciated by non-economists. A serious study of international economics will make people more aware of these alternative perspectives that grow out of the economist's way of thinking.

3 The purview of international economics

3.1 Two great themes and an important dichotomy

The preceding sections introduced the two great themes of international economics: the "gains from trade" and the "pattern of trade." The examples used to illustrate these themes dealt with trade of **goods and services** among economic entities that resided in different sovereign nations , i.e., trade of "real" products such as automobiles, cheese, steel, clothing and the like, and trade of "real" services such as insurance, business consulting, and shipping. Analyses that deal with trade of goods and services are usually denoted as the study of "international trade," or equivalently, the study of the "real" part of international economics. These analyses generally use the tools of *microeconomics*, and form one part of an important dichotomy in economic thinking.

dichotomy: a partition of a set of things into two subsets.

The quotation marks around "international trade" and the modifier "real" in the preceding paragraph are used to indicate that the counterpart to this type of analysis is not concerned with non-international trade or with imaginary subjects, but rather with subjects that have financial or monetary aspects. The analysis of interactions between economic entities of different countries that don't fall into the "real" category is part of the subject matter of the other part of the dichotomy of economic thinking, namely *macroeconomics*.

While we will have more to say about this dichotomy later, an introduction to the dimensions of this distinction can be launched by contemplation of a question: What are the other economic interactions among the economic entities of different sovereign nations that don't involve trade in goods and services? Among others, such interactions would include exchanges that involve financial assets, e.g., money, bonds, equities. For example, a large corporation with operations in many countries will routinely buy and sell different currencies and financial assets denominated in different currencies. A tourist will almost certainly exchange the currency of her home country for the foreign currency used in the land which she visits. And citizens, businesses and governments all trade consumption in the present for consumption by borrowing and lending.

Such exchanges lead to a different set of issues for analysis than the "real" exchanges of international trade. For example, the United Kingdom must decide whether or not to join the European Monetary Union and abandon an independent monetary system. Such an issue is surely as important as issues about trade in goods and services, and in fact is related to them. These types

of issues require analysis of such questions as: what determines the **nominal** exchange rate; what are the differences between maintaining a **fixed** or a **flexible** exchange rate system; and what are the costs and benefits of sovereign governments engagement in macroeconomic coordination and cooperation.

As noted, this distinction between the real and macro parts of economic analysis is so important that we will investigate it in detail later. We note here, though, that there are two threads of analysis that tend to run through macroeconomics more so than through microeconomics. First, much of macroeconomics concerns itself with dynamic phenomena: aspects of the economy that are linked through time. This focus on dynamics arises in part because of an interest in questions about **intertemporal decisions**, that is, decisions about the allocation of scarce resources across time.

intertemporal decisions: decisions about the allocation of scarce resources across time.

Second, and in part because of the emphasis on intertemporal aspects of economic phenomena, macroeconomic analysis tends to focus on the importance of *expectations*. When, for example, we try to understand why an international speculator such as the legendary George Soros purchased or sold one currency vis-a-vis another in anticipation of capital gain, we must have ideas about what he thought was going to happen in the future.

We need to emphasize that the distinction between "real" international economics and open-economy macroeconomics is one made for convenience in understanding fundamental principles. In reality, international economic issues frequently span both parts of the study of international economics. For example, in the summer of 2003, the U.S. Secretary of the Treasury, John Snow, pushed to have China let its currency "rise" against the U.S. dollar. That is, he argued that it took too few dollars to purchase one Renmimbi , the Chinese unit of currency (translated roughly as "the people's currency", and also referred to as the "Yuan."). Because this subject concerns currencies, it is considered a macroeconomic topic.

But the reason given by Secretary Snow for his concern was that the lower price of the Renmimbi made imported textiles and clothing produced in China cheaper relative to the price of those same goods produced in the U.S. That is, for a particular Renmembi price charged in China for these products, the dollar cost to a U.S. importer is lower the lower is the dollar price of Renmimbis[4]. This in turn, Snow believed, would increase imports of these goods from China and hurt the U.S. textile and clothing production sector. Analysis of these changes in the "real" output of the clothing and textile sector is a topic for international trade, or, in equivalent wording, a topic for the real part of international economics.

Clearly, this illustrates that real-world phenomenon don't always fall neatly into a "real" or "macro" category. Our understanding of such problems, though, proceeds by artificially separating the problem into real and macroeconomic components, and then reassembling the parts for a final analysis.

[4]For example, if a shirt costs ten (10) yuan, and a yuan costs one (1) dollar, the shirt would cost ten (10) dollars. If the dollar price of a yuan was only, say, one-half ($\frac{1}{2}$) dollars, though, the dollar price of a ten-yuan shirt would be five (5) dollars.

Two further questions arise out of this brief introduction. First, what is special about trade among the residents of different sovereign nations as opposed to trade among the residents of different regions? Surely we could analyze trade between Tennessee and Ohio, or London and Edinburgh, for example, and some of the same issues that we introduced above would arise. Why has economics carved out a sub-discipline that takes nations, and not regions, as the central unit of analysis?

An old answer to this question is that national boundaries tend to coincide with or to create impediments to the free movement of **factors of production** such as labor and capital. Different languages and customs, and the pull of family and community (and the possibility that the state could exercise its power to close borders), keep people from moving across national borders but not from moving across regions. For capital, a similar restraint on movement across national borders arises from the knowledge that sovereign nations can (and have a history of) appropriating foreign capital. In terms of this answer, the distinction between interregional and international economics thus hinges on a distinction between the relative mobility of goods and services compared to the mobility of factors of production.

Another related answer emphasizes that sovereign nations have the ability to make policy in ways that regions don't. In the United States, for example, individual states are barred by the Constitution from imposing barriers to interstate trade. In contrast, sovereign nations can, as noted, confiscate foreign property and close borders, and can also impose tariffs, quotas, and differential rules for the legal treatment of foreign-owned businesses.

Sovereign nations also can enforce restrictions on the money that can be used within their borders. This allows sovereign nations to engage in monetary policy and to affect the value of their exchange rates–the prices of one sovereign nation's currency in terms of another country's currency–vis a vis other countries' currencies.

None of this addresses the underlying question of why the world is carved up into sovereign nations in the first place. While a few ideas have been investigated about this large question–for example, some research has argued that nations are groups of people with a common taste in "public goods"–we will simply treat the existence of sovereign nations as a given feature of the world that has the aforementioned implications for our basic unit of analysis.

4 A basic paradigm

Is there a generic explanation for trade? The basic rationale for existence of trade among residents of different locations is perhaps best understood by way of a description of the workings of a World War II Prisoner of War (POW) camp. In an article titled "The Economic Organization of a Prisoner of War Camp," R.A. Radford described the workings of a prison camp. As he noted, a POW camp "provides a living example of a simple economy ... and its simplicity renders the demonstration of certain economic hypotheses ... instructive." The

generic: characteristic of a whole group or class.

POW society, he noted, was "small and simple enough to prevent detail from obscuring the basic pattern and ... from obscuring the working of the system." The most interesting part of his description for our purposes concerns the development of trade between compounds composed of different nationalities that were housed in separate parts of the camp.

In particular, Radford noted there was a British and a French compound. He recounted (from his position as a British POW):

> "The people who first visited the highly organised French trading centre, with its stalls and known prices found coffee extract—relatively cheap among the tea-drinking English—commanding a fancy price in biscuits or cigarettes, and some enterprising people made small fortunes that way."

This description of trade between the British and the French captures the fundamental reason for trade among different countries: prices in the absence of trade differ among the distinct locations. These differences in prices create *incentives* for individuals to buy a good in the location where it is relatively cheap–in this case, coffee in the English compound–and sell it in the location where it is relatively expensive–in this case the French compound. That is, the different prices that prevail in the absence of trade create incentives for people to *export* products from the low-price location and *import* products to the high-priced location.

A number of questions arise from this brief description of the generic reason for trade. First, what caused prices to differ across locations? In Radford's example, the fundamental reason was the differences in tastes between the "tea-drinking English" and the coffee-drinking French. But a reasonable question is: What are the other major reasons that prices might differ across location in the absence of trade? Much of the analysis of the great theme of providing an understanding of the pattern of trade is devoted to answering this question. As we will see, a short list of these reasons would include, along with differences in tastes: differences across locations in *resources*, such as differing ratios of capital to labor or differing amounts of natural resources; differences across locations in *technology*; differences across locations in *policies*; and differences across locations in *institutions*.

A second question that arises is: what happens to the prices in the two locations *after* trade? Before trade, they differed: this gave people the incentive to export from low-price locations and import to high-priced locations. But this process means demand increases in the low-price location and supply increases in the high-price location. Prices in the two locations can thus be expected to change, increasing in the low-price location and decreasing in the high-price location.

This effect is important because changes in prices affect different individuals differently. For example, imagine you were a member of Radford's POW compound, and furthermore imagine that you were the odd Englishman who liked coffee better than tea. According to the logic just developed, trade between

your compound and the French compound would increase the price of coffee for you, making you worse off than you were before.

Of course, the more typical English POW, who preferred tea to coffee, would most likely benefit because he would be selling coffee in exchange for tea. The higher price of coffee means he gets more tea in exchange for his coffee.

These distributional effects of trade lead us to the second great theme of international trade: in what sense are the English *as a group* better off after trade than they were before trade? As noted, this idea of the *group* being better or worse off is problematic when not all members of a group are affected in the same way, as is the case in this hypothetical example. Much of the analysis that will follow will be devoted to an explanation of what economists mean when they describe a group as being better off even when some members are made better off and some are hurt.

And finally, what barriers kept the two camps separate in the first place? These barriers gave people the opportunity to make "small fortunes" by buying goods in the cheaper location and selling them in the more expensive location. Broadly speaking, these barriers can be thought of as two kinds: those imposed by policy makers, and those imposed by the technology of transportation. A policy barrier in the POW camps might have been restrictions imposed by the camp commandant on POW movements between compounds. A transportation barrier might have been the time and effort involved in carrying goods from one location to another. The real-world counterpart to these policy barriers would be policy restrictions such as tariffs and quotas imposed by governments. The real-world counterpart to transportation technology barriers would be shipping costs.

The POW camp may strike you as being so much simpler than the complex economies of the various nations of the world that the explanations for trade illustrated by its workings does not generalize. In fact, though, the key insight from this example informs all of the analysis that follows, and remains valid as a generic explanation for trade as observed any where and any time.

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