
CHAPTER 5

The Political Economy of Trade (Revised)

In Chapter 3, you learned that it was possible for countries to move from autarky to *inter-industry* trading relationships based on patterns of comparative advantage. So, for example, Japan can export motorcycles to Vietnam while importing rice from Vietnam. You also learned that such movements from autarky to trade involve improvements in welfare for the countries involved. In other words, both Japan and Vietnam can experience gains from trade. In point of fact, however, Japan has a long history of restricting imports of rice. This reluctance to import rice has been explained by the Consulate General of Japan in San Francisco:

Rice has been the staple of the Japanese for over 200 years and can be considered the most important element in the evolution of the Japanese culture and social structure. Therefore, a significant segment of the Japanese population express cultural concerns over rice imports. In addition, many Japanese rice producers have historically been strongly opposed to accepting rice imports for both economic security and cultural reasons.

Indeed, during the Uruguay Round of multilateral trade negotiations, the Japanese Diet (Parliament) passed three resolutions opposing the proposed partial liberalization of the Japanese rice market. At the very end of the Uruguay Round negotiations (in 1994), Japan was given “special treatment” to continue to restrict rice imports. To this day, Japan offers significant protection to its domestic rice sector such that the domestic price is approximately twice as high as the world price.¹

Welcome to the political economy of trade policy. In Chapters 2 and 3, we were careful to mention that the improvement in overall welfare in a country that occurs due to the gains from trade does not necessarily imply an improvement in welfare for *every* individual and group in that country. In this chapter, you will learn that it is both possible and likely that, in countries moving from autarky to trade, certain groups actually *lose* from this change. Japanese rice producers are one such politically powerful group. The fact that there are both winners and losers from international trade gives rise to the political economy

¹ See Fukuda, Dyck and Stout (2003), for example.

of trade. This is a realm where the theory of international trade begins to merge somewhat into political science and public policy, a very exciting prospect for many researchers and practitioners.

We will begin in this chapter by revisiting the model of comparative advantage developed in Chapter 3. This will be the initial framework in which we examine the political economy of trade. We will then consider alternative approaches to explaining the political economy of trade, including country-based, factor-based, sector-based and firm-based. We will pay particular attention to the factor- and sector-based approaches. First we will consider the role of factors of production in comparative advantage as described by the **Heckscher-Ohlin model** of trade and take up the associated **Stolper-Samuelson theorem**. Second, we will examine the application of this theorem to the topic of North-South trade. Finally, we will consider the role of sector-specific factors in the political economy of trade. An appendix to the chapter considers a model of **endogenous protection**.

Approaches to the Political Economy of Trade

Research on the political economy of trade provides a framework of a *market for protection* that draws our attention to supply-side and demand-side factors in this market.² The supply of protection is provided by national governments, and we have two country-based approaches in the field of international relations and political science that offer alternative perspectives of this side of the protection markets. As shown in Table 5.1, these are the perspectives of *realism* and *institutionalism*. Realism is a school of thought in international relations that stresses the lack of global government and the consequence that inherently anarchic relations must be addressed via the projection of power by leading countries.³ Realism views trade through the lens of power, emphasizing the security and technology aspects of trade and the need to harness these to promote national “strength.” For example, trade in certain defense-related products can dissipate power and consequently be tightly controlled within established alliances. High technology can be “dual-use,” potentially having defense-related characteristics. It too can be tightly controlled. Protection is often offered by governments in support of these ends, and more generally often view trade relations through a lens of security alliances.

Institutionalism is associated with most branches of the social sciences and focuses on the “rules of the game” within a particular socio-political or socio-economic system. In the realm of the political economy of trade, institutional analysis emphasizes the importance of certain key aspects of national governments in supplying protection.⁴ The distribution of decision-making power within a national government apparatus can be important, as well as the relationship of executive and legislative branches with regard to trade policy. To generalize a bit, the contrast with realism is to view national governments as non-unitary actors rather than as unitary actors in the realm of global power politics. A central insight of institutional analysis is that trade policy changes are

² See, for example, Rodrik (1995) and Milner (1999).

³ For a more thorough treatment of realism, see Donnelly (2000).

⁴ See, for example, Milner (1997). For empirical evidence, see Henisz and Mansfield (2006).

more likely the more centralized is decision-making power within the institutional framework of a government.

Table 5.1. Approaches to the Political Economy of Trade

Focus	Name	Insight
Country-based	Realism	There are security externalities associated with international trade that need to be managed by country governments.
Country-based	Institutionalism	Institutional structures within country governments affect trade policy outcomes.
Factor-based	Heckscher-Ohlin Model Stolper-Samuelson Theorem	Under factor mobility within a country, different factors can win or lose from increased trade.
Sector-based	Specific Factors Model	With sector-specific factors, whether factors win or lose can depend on whether they are specific to an export- or import-oriented sector.
Firm-based	Firm-based	The exposure of firms to trade or international capital mobility can influence the posture of these firms to trade liberalization.

Other approaches to the political economy of trade emphasize the role of demand for protection in the form of what is sometimes referred to as “pressure group models.” It is here that international economists have made their most important contribution to analyzing the political economy of trade, and the rest of this chapter will consider these contributions. One approach is factor-based in that pressure comes from classes composed of one factor of production or another that lose as a result of trade liberalization. Below, we will consider the **Heckscher-Ohlin model** and its **Stolper-Samuelson theorem** as a factor-based theory of the demand for protection. A second approach is that pressure comes from sectors rather than classes (sector interests can cut across classes), and here we encounter what is known as the **specific factors model**. Together, the Stolper-Samuelson theorem and the specific factors model represent economists’ contribution to the political economy of trade.

There is another strand in the analysis of the political economy of trade that focuses on specific firms and their exposure to trade and international capital mobility. This firm-level analysis was inspired by Milner (1988) who argued that firms who are more export oriented and “multinationalized” in their production and/or ownership will tend to be less

protectionist in their lobbying efforts. This is a plausible hypothesis in many circumstances, but might fall short of a general principle.⁵

Table 5.1 reveals that the political economy of trade is not straightforward but is rather subject to a number of influences at the levels of nations, factors, sectors and firms. In the remainder of this chapter, we will focus on factor-based and sector-based explanations, but we should not lose sight of the fact that specific cases could be more complex than suggested by these frameworks.

Comparative Advantage Revisited

In order to begin talking more specifically about the factor and sector approaches to the political economy of trade, it is useful to revisit the model of comparative advantage we developed in Chapter 3. Figure 5.1 reproduces Figure 3.3 from that chapter. Recall that Vietnam has a comparative advantage in the production of rice (denoted R) and Japan has a comparative advantage in the production of motorcycles (denoted M). As these two economies move from autarky to trade, production in each country expands in the direction of the sector in which it has comparative advantage. In the movement from points A to B along the production possibility frontiers in Figure 5.1, rice production expands in Vietnam, and motorcycle production expands in Japan. At an elementary level, then, we can say that trade in this case is “good” for the rice sector in Vietnam and for the motorcycle sector in Japan. However, trade is “harmful” to the motorcycle sector in Vietnam and to the rice sector in Japan, both of which experience a decline in output. The purpose of this chapter is to analyze these simple statements much more carefully.

What determines the pattern of comparative advantage illustrated in Figure 5.1? Recall from Chapters 2 and 3 that there are two broad determinants: technology and factors of production. A factor-based analysis of the political economy of trade policy takes up the latter determinant and examines the implications of the movement from points A to B in Figure 5.1 for factors of production in Vietnam and Japan.

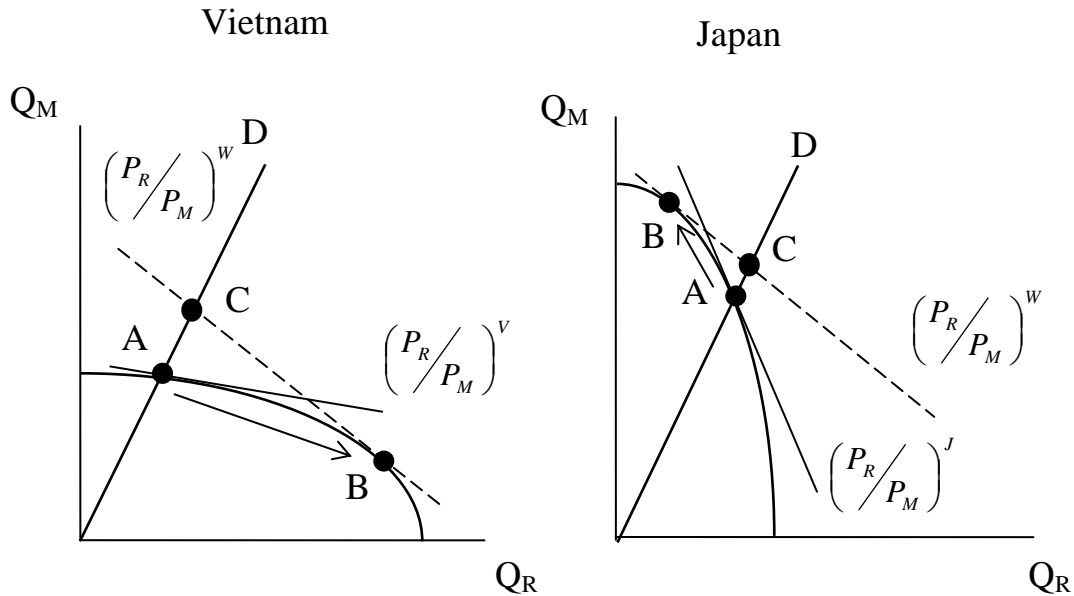
Trade and Factors of Production

Suppose that the pattern of comparative advantage illustrated in Figure 5.1 is based on different *endowments* of factors of production. More specifically, suppose that Vietnam’s comparative advantage in rice reflects the fact that it has a relatively large endowment of land. In the language of international trade theory, Vietnam is relatively *land abundant*. By this, we mean that the ratio of land to physical capital is larger in Vietnam than in Japan. This relative abundance of land gives Vietnam a comparative advantage in producing the *land-intensive* good, rice. Similarly, suppose that Japan’s comparative advantage in motorcycles reflects the fact that it has a relatively large endowment of physical capital. In the language of international trade theory, Japan is relatively *capital abundant*. By this, we mean that the ratio of physical capital to land is larger in Japan than in Vietnam. This

⁵ For a critique of the hypothesized relationship between firms with “multinationalized” ownership and less protectionist orientations, see Hiscox (2004).

relative abundance of capital gives Japan a comparative advantage in producing the *capital-intensive* good, motorcycles.⁶

Figure 5.1. Autarky and Comparative Advantage in Vietnam and Japan



We must pause here for a moment. In the previous paragraph, we associated the term “endowments” with countries (Vietnam, Japan) and the term “intensities” with sectors or goods (rice, motorcycles). It is very easy to forget these associations, so we must keep them firmly in mind. Here is something you can write down on a piece of paper to refer to as you read the remainder of this section:

Factor endowments \Leftrightarrow Countries

Factor intensities \Leftrightarrow Sectors or goods

As mentioned above, the explanation of comparative advantage in terms of factor endowments is associated with the Heckscher-Ohlin model of international trade.⁷ This model is one of the most famous models in trade theory. The logic of the Heckscher-Ohlin model is illustrated in the top six boxes of Figure 5.2. The top two boxes of this figure concern factor endowments. Vietnam is relatively land abundant, and Japan is relatively

⁶ We need to interpret these statements with care. We are saying that Vietnam is relatively land abundant *in comparison* to Japan. In comparison to its own population, land is indeed scarce in Vietnam. See *The Economist* (2002b).

⁷ This model originated in the work of Heckscher (1949) and Ohlin (1933).

capital abundant. The next two boxes concern the pattern of comparative advantage. Vietnam has a comparative advantage in rice (land intensive), and Japan has a comparative advantage in motorcycles (capital intensive). The third level of boxes in Figure 5.2 concerns trade flows. In accordance with the pattern of comparative advantage, Vietnam exports rice to Japan, and Japan exports motorcycles to Vietnam.

More generally, the Heckscher-Ohlin model of international trade gives the following result with regard to trade:

A country exports the good whose production is intensive in its abundant factor. It imports the good whose production is intensive in its scarce factor.

The implication of Figure 5.2 for the political economy of trade policy is addressed in the bottom six boxes. In Vietnam, the comparative advantage in rice causes an increase in the output of rice at the expense of motorcycles. Consequently, there is an increase in demand for land and a decrease in demand for physical capital. These factor demand changes have the result that land owners in Vietnam gain from trade, while Vietnamese capital owners (capitalists) lose from trade.⁸

In Japan, the comparative advantage in motorcycles causes an increase in the output of motorcycles at the expense of rice. Consequently, there is an increase in demand for physical capital and a decrease in demand for land. These changes cause Japanese capital owners to gain from trade and Japanese land owners to lose from trade.

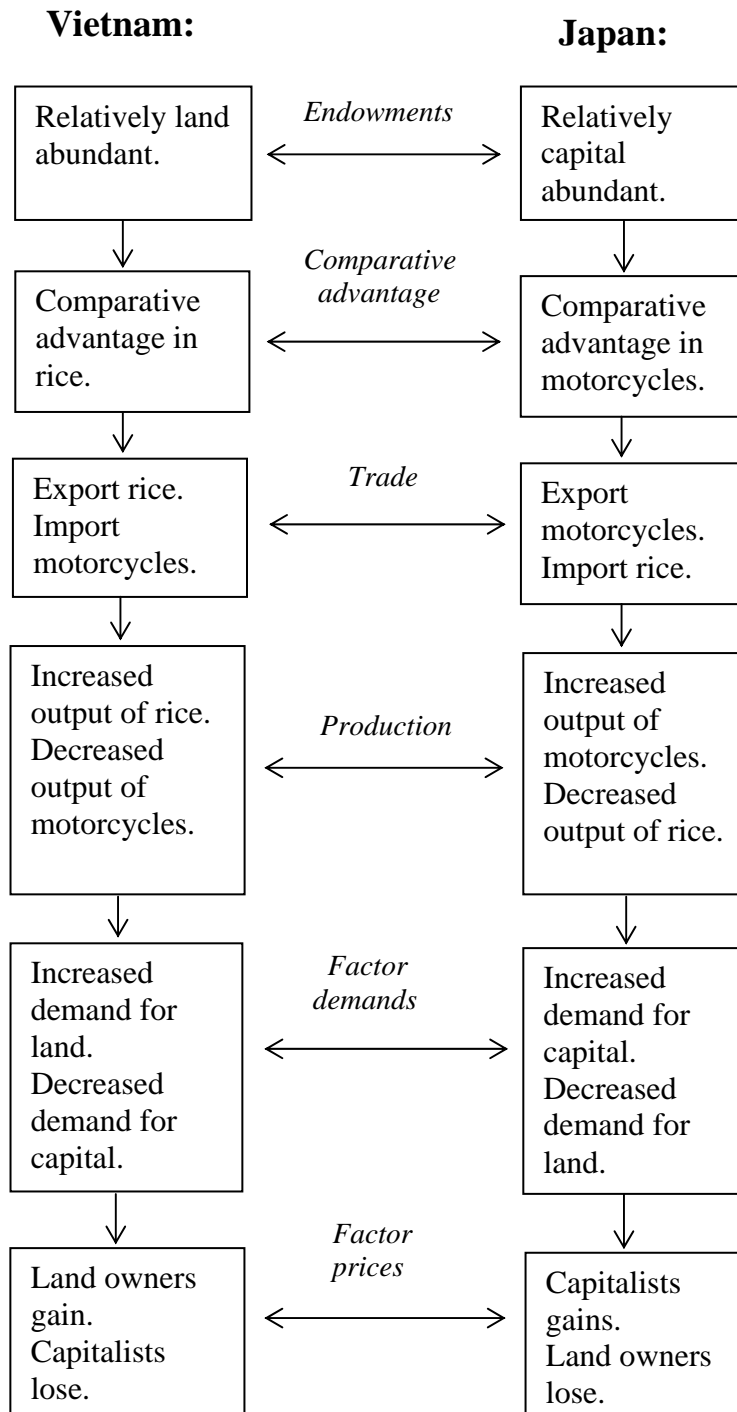
Given the results of Figure 5.2, we would expect that land owners in Vietnam and capital owners in Japan would support trade. Political opposition to trade or demand for protection would come from capital owners in Vietnam and land owners in the Japan. Thus, we can see why the strong and persistent opposition to rice imports in Japan discussed in the introduction to this chapter arises and persists. It is due, at least in part, to the political clout of Japanese land owners. The reason, however, is not “economic security and culture.” Rather, it is income loss.⁹

Let’s summarize the above results in more general terms. In both Vietnam and Japan, the sector intensive in the country’s abundant factor expands, while the sector intensive in the country’s scarce factor contracts. This, in turn, causes an increase in the demand for the abundant factor in each country and a decrease in demand for the scarce factor in each country. These changes in demand, in turn, have implications for the returns to or incomes of the factors in question and hence the demand for protection.

⁸ Given that Vietnam is a socialist country, we need to be careful here. Institutions of ownership can be very different that in fully market-oriented countries.

⁹ The historical relevance of this result can be seen in the work of Anderson and Hayami (1986). Walter and Sen (2009) note that “an electoral system that gives representation to rural districts, as in Japan, can entrench protectionist policies in agriculture” (p. 82).

Figure 5.2 The Heckscher-Ohlin Model and the Stolper-Samuelson Theorem



The Heckscher-Ohlin model thus has an important implication for the political economy of trade, and these implications are summarized in a central result of international trade theory, the **Stolper-Samuelson theorem**.¹⁰ In general terms, this theorem can be stated as follows:

As a country moves from autarky to trade, the country's abundant factor of production (used intensively in the export sector) gains, while the country's scarce factor of production (used intensively in the import sector) loses. Opposition to trade therefore arises from the scarce factor of production.

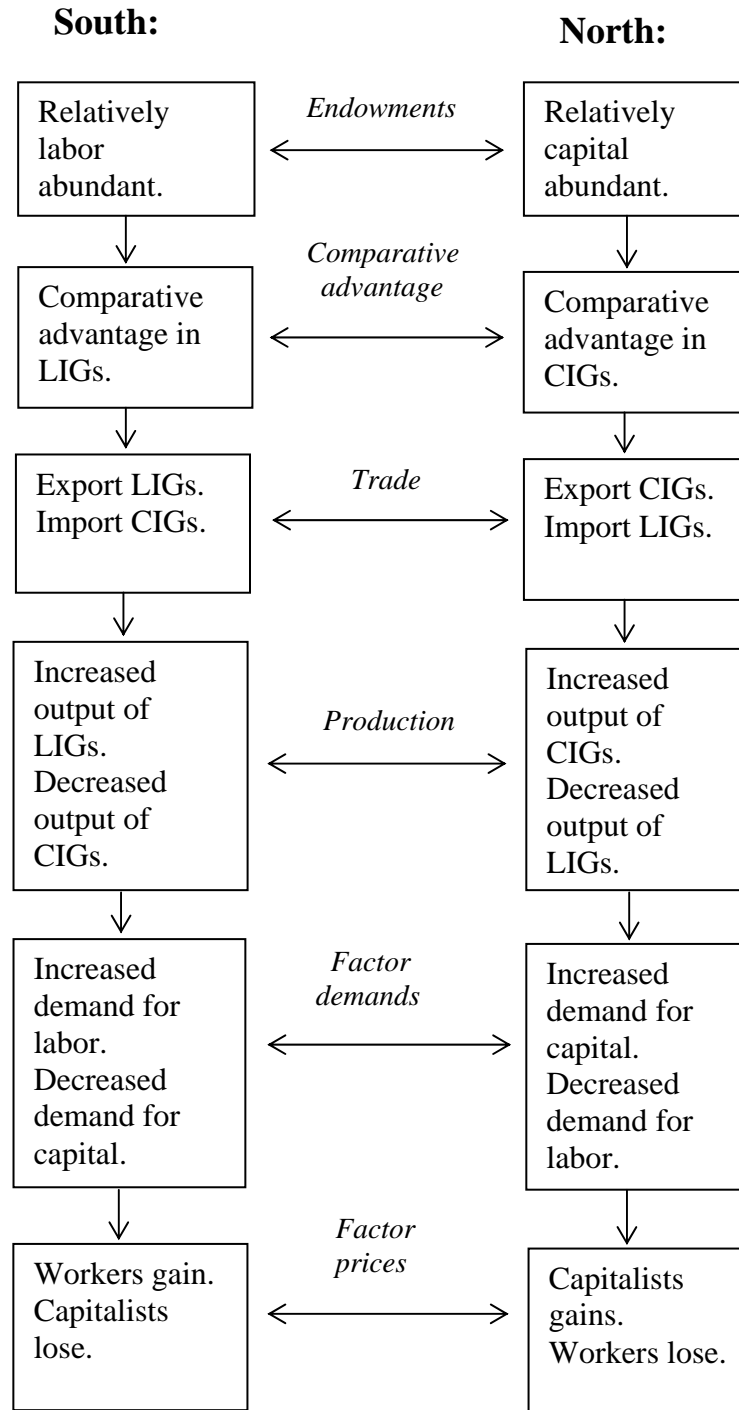
The Stolper-Samuelson theorem thus locates the potential opposition to increased trade (and support for protection) in the scarce factor of production in a country. This key insight composes the lens through which many international economists and policymakers view the political economy of trade. The Stolper-Samuelson theorem cannot be applied blindly, however. It applies only to *inter*-industry trade based on different endowments in factors of production. *Intra*-industry trade and trade based on differences in technology can mitigate the effects described by the theorem. These alternative considerations arise in the application of the theorem to the issue of North-South trade and wages.

North-South Trade and Wages

There is an application of the Stolper-Samuelson theorem that has generated a great deal of recent interest and controversy. This is the question of North-South trade and wages. The term “North” refers to the high-income or “developed” countries of the world, while the terms “South” refers to the low-income or “developing” countries of the world. High-income countries tend to be relatively capital abundant, while low-income countries tend to be relatively labor abundant. The implications of these relative factor endowments are illustrated in Figure 5.3. The Heckscher-Ohlin model of trade would suggest that the North has a comparative advantage in capital-intensive goods (CIGs) and that the South has a comparative advantage in labor-intensive goods (LIGs). This is illustrated in the top six boxes of Figure 5.3. Furthermore, the Stolper-Samuelson theorem would suggest that *labor in the North will lose* as a result of trade. This is illustrated in the bottom six boxes of Figure 5.3. The possibility of Northern labor losing as a result of trade has led labor interests in the North to be, in many instances, opposed to increased trade. For example, the US labor movement opposed both the North American Free Trade Area (NAFTA) and the formation of the World Trade Organization (WTO).

¹⁰ This theorem originated in a famous article by Wolfgang Stolper and Paul Samuelson (1941). In the words of Deardorff (1998), “One might have thought and hoped that the broader gains from trade... might have allowed both abundant and scarce factors to gain from trade.... But alas no, Stolper and Samuelson showed this is not the case” (p. 364). Students and professionals struggling to publish their own work can take some comfort from the fact that the Stolper-Samuelson article was *rejected* by the first journal to which it was submitted.

Figure 5.3 The Stolper-Samuelson Theorem and North-South Trade (LIGs- labor intensive goods, CIGs- capital intensive goods)



While the possibility of Northern labor as a whole losing as a result of increased international trade with the South is in itself of some interest, there is a more subtle issue in the ongoing debate concerning North-South trade and wages that is very much worth emphasizing here. There is evidence that developing countries in the South have comparative advantage in *unskilled*-labor-intensive goods (ULIGs), and that developed countries in the North have comparative advantage in *skilled*-labor-intensive goods (SLIGs). If this is indeed true, then according to the Stolper-Samuelson theorem, the Northern workers who lose as a result of increased North-South trade are actually *unskilled* workers. This possibility, first introduced by Wood (1994), is of a great deal of interest and concern. For example, since the early 1980s in the United States, unskilled workers have seen their wages decline relative to skilled workers, with negative impacts for the overall income distribution. Perhaps increased North-South trade has caused this relative wage decline.¹¹

Since the early 1990s, these concerns have prompted ongoing empirical investigation into the effects of trade on Northern wages (see the box below for the case of Southern wages in the case of Latin America). The number of studies is too large, and the technical issues too detailed, for a review here.¹² However, we can note the important empirical result that there are two (not one) main causes for the decline in relative wages of Northern unskilled workers: trade and technology.

The trade impacts are those suggested by the Stolper-Samuelson theorem, namely, that Northern unskilled workers lose because the North has a comparative advantage in *skilled*-labor-intensive goods. These effects, however, tend to be smaller than the Stolper-Samuelson theorem would suggest. Why is this? First, there is some evidence that export-oriented industries in the North tend to pay higher wages than other industries. Consequently, the labor reallocations caused by increased trade tend to boost average wages.¹³ Second, some North-South trade is based on higher labor productivity (better technology) in the North rather than differences in factor endowments. Third, some North-South trade is *intra*-industry in nature and might therefore offer more adjustment opportunities to Northern workers than *inter*-industry trade.¹⁴ For these reasons, while important, trade is not the only source of the decline in relative wages of Northern unskilled workers. Technology matters as well. Further, intra-industry trade might mitigate the standard Stolper-Samuelson effects.

¹¹ In the case of the United States, the concern was summarized some years ago by Krugman and Lawrence (1996) as follows: “The conventional wisdom holds that foreign competition has eroded the U.S. manufacturing base, washing out the high-paying jobs that a strong manufacturing sector provides.... And because imports increasingly come from Third World countries with their huge reserves of unskilled labor, the heaviest burden of this foreign competition has ostensibly fallen on less educated American workers” (p. 35).

¹² For reviews, see Freeman (1995), Richardson (1995), Deardorff (1998), Wood (2002) and Krugman (2008).

¹³ See Bernard and Jensen (1995).

¹⁴ See Reinert and Roland-Holst (1998) for the example of the North American Free Trade Area.

Let's turn to the technology effects of North-South trade on Northern unskilled workers. There appears to be an ongoing process of technological change in the North that increases demand for skilled workers, and makes these workers more productive, relative to unskilled workers.¹⁵ This is the process we mentioned in Chapter 1 in the box entitled "ICT in the World Economy." Some time ago, Deardorff (1998) aptly summarized the relevance of this process to wage changes:

The computer revolution has made it possible for highly skilled workers, manipulating their environments with electronic devices, to produce far more than equally skilled workers could have previously, also replacing to a large extent the unskilled workers whose tasks are taken over increasingly by intelligent machines. As a result, the productivity and wages of skilled workers rise, while those of unskilled workers do not (p. 368).

There are policy analysts in the North, with well-grounded concerns about the plight of unskilled Northern workers, who call for trade restrictions to address the effects of North-South trade on unskilled wages in the North. For a number of reasons, this is probably not the best policy approach. First, technology appears to be as important a factor as trade, and few policy analysts call for limiting technological change. Second, trade restrictions will suppress overall gains from trade in both the North and South. Third, such restrictions could violate multilateral commitments made in the WTO (see Chapter 7). Fourth, trade restrictions might harm unskilled workers in the South who are in more dire straits than their Northern counterparts. A more long term and productive policy approach would be to offer other forms of support to unskilled Northern workers. These could be income supports (including trade adjustment assistance) or, perhaps more importantly, support to increase human capital assets (education, training). If there is one factor contributing to wage and income inequality in the North, it is the failure to complete secondary (high school) education. Remedying educational failures is an important, and neglected, policy imperative in Northern countries as well as in Southern countries.

Trade and Wages in Latin America

In our discussion above, we suggested that developing countries in the "South" have a comparative advantage in *unskilled-labor-intensive* goods. As suggested by the Heckscher-Ohlin model, this is a result of these countries being abundant in unskilled labor. If this is the case, then according to the Stolper-Samuelson theorem, increased trade would benefit unskilled labor in developing countries, relative to skilled labor. It turns out, however, that in some Latin American countries, the opposite appears to have been the case. For example, trade liberalization in a number of Latin America countries

¹⁵ This appears to be part of the shift towards flexible manufacturing systems and has had the effect of suppressing blue-collar wages. In addition, globally, multinational enterprises often serve as conduits of technological change through their foreign direct investment activities. Therefore, it is possible that MNEs can contribute to changing wage patterns via technology.

has been accompanied by decreases in the relative wages of unskilled workers. Why would the Stolper-Samuelson theorem be wrong?

One reason is trade in physical capital. As some Latin American countries liberalized their trading regimes, firms imported more physical capital (machines) in order to remain competitive. Embodied in these machines was a newer technology level that demanded relatively more skilled workers than the old technology that had been in use. Consequently, as trade was liberalized, the technology effects overpowered the Stolper-Samuelson effects, and the net result was that unskilled workers lost relative to skilled workers as a result of trade.

Here, then, is another important case of the political economy of trade. Given that the majority of workers in Latin America are unskilled and Latin American countries already have severe inequality problems, the above results are of some cause for concern. They indicate that trade can, in some instances, exacerbate existing inequalities and, thereby, contribute to political tensions.

Sources: Wood (1997), Robbins and Gindling (1999) and Gindling and Robbins (2001)

The Role of Specific Factors

As we saw in Table 5.1, a sector-based approach to the political economy of trade is associated with what is called the **specific factors model**. A central assumption of the Heckscher-Ohlin model and its Stolper-Samuelson theorem is that resources or factors of production such as labor, physical capital and land can move effortlessly among different sectors of trading economies. So, for example, Japanese resources are assumed to be able to shift back and forth between rice and motorcycle production. The same is assumed to be true for Vietnam. For some types of analysis, particularly that applying to the *long run*, this “perfect factor mobility” assumption is reasonable. In other instances, the assumption can be at odds with reality. Instead, factors of production can be *sector specific*, and it is this phenomenon that motivates the specific factors model and its approach to the political economy of trade.¹⁶

The presence of specific factors requires a modification of the Stolper-Samuelson theorem. To see this, let’s consider the example of steel production in the United States. The United States is, without a doubt, relatively abundant in physical capital. The Stolper-Samuelson theorem would therefore suggest that capital owners in the United States would *gain* as a result of increased trade. But here is puzzle. In its 2000 annual report the US-based Weirton Steel Corporation drew attention to what it called an “import crisis” and pledged to fight the “import war.” It said it planned to “aggressively seek changes in Washington (DC) to stop the devastation caused by unfair trade.” This hardly sounds like capitalists gaining from trade.

¹⁶ Jones (1971) first emphasized the role of specific factors in models of international trade.

Why would capitalists in a capital abundant country oppose increased trade in violation of the Stolper-Samuelson theorem? As it turns out, the notion of specific factors helps us to address this puzzle. Weirton Steel Corporation, and many other US steel firms, are owners of large amounts of specific factors in the form of steel mills, some of them very large, “integrated” facilities.¹⁷ These facilities cannot move into the production of other products such as semi-conductors. They are *specific* to the production of steel.

A modification of the Stolper-Samuelson theorem in the face of such specific factors is important to understanding the US steel and other similar cases. This modification is as follows:

Factors of production that are specific to import sectors tend to lose as a result of trade, while factors of production specific to export sectors tend to gain as a result of trade.

Thus, Weirton steel’s actions are not difficult to understand. It is a company in an import sector that is characterized by sector-specific physical capital (and perhaps even labor). The owners of Weirton steel therefore stand to lose as a result of increased trade. Consequently, as described in the box below, the firm entered the “import war” to attempt to reduce imports and protect the incomes of its specific factors.

It is not always easy to keep the difference between specific and mobile factors in mind when assessing the political economy of trade. For this reason, we need a box to help us:

Mobile factors of production: The Stolper-Samuelson theorem applies. The abundant factor of production (used intensively in the export sector) gains, while the scarce factor of production (used intensively in the import sector) loses.

Specific factors of production: The Stolper-Samuelson theorem does *not* apply. The factor of production specific to the export sector gains, while the factor of production specific to the import sector loses. The fate of mobile factors is uncertain.

When you come upon a political economy of trade issue, in any country of the trading world, it will be very helpful to your understanding if you were to first pause for a moment and try to identify the mobile or specific factors of production involved. Then glance up at the above box. The political economy of trade issue should be very much clarified by this process. If not, it is probably the case that technology, not factors of production, drives the trade involved.

¹⁷ Blecker (2009) notes that “Steel production, especially in integrated mills, is capital intensive and has large economies of scale, which create a tendency toward the existence of excess capacity (except in times of strong demand)” (p. 1032). In the short run, the large amount of capital in integrated mills constitutes a sector-specific factor.

US Steel Protection

In September 1998, twelve US steel companies, including Weirton Steel mentioned above, filed cases with the US government alleging that the hot-rolled steel exports of Russia, Japan, and Brazil had been unfairly “dumped” or sold at “less than fair value” in US markets. The US International Trade Commission (USITC) found in favor of the US steel industry, and protection to offset the dumping was applied. In June 1999, seven US steel companies, again including Weirton Steel, filed follow-up cases involving cold-rolled steel exports of China, South Africa, Turkey, Brazil, Argentina, Thailand, Russia, Venezuela, Japan, Indonesia, Slovakia, and Taiwan. The USITC found in favor of the US steel industry in the cases of Indonesia, Slovakia, and Taiwan. Next, in October 1999, Weirton steel filed an anti-dumping case against Japan’s exports of tin mill products, and the USITC found in Weirton’s favor.

Despite the above results, capping two decades of special protection, the US steel industry felt that a more comprehensive solution was required to support the incomes of its sector-specific factors. Under the banner “Stand Up for Steel,” US-manufactured steel that is, the industry pressed on with a campaign for further protection. This campaign, in which Weirton played a leading role, included petitions, lobbying, and even motorcycle rallies (“Ride for Steel”). The efforts were most-well organized in Weirton’s home state, West Virginia, a state which helped secure George W. Bush’s position as US President through switches in party loyalties.

In June 2001, President Bush’s administration instructed the USITC to undertake a *global safeguard investigation* of US steel imports. Such an investigation does not require a finding of “unfair” trade or “dumping,” nor is it targeted to specific countries. In December 2001, the USITC found that the US steel industry had been subject to injury as a result of imports and recommended certain remedies. In March 2002, the Bush administration imposed a number of protection measures, including “safeguard” tariffs of up to 30 percent, on US\$30 billion worth of steel imports. The European Union and Japan, both of whom were targets in the protection, appealed to the World Trade Organization (WTO) in Geneva. In 2003, the WTO found against the United States and ruled that the tariffs were incompatible with WTO principles.

Sources: *The Economist* (2002a), Blecker (2009) and Weirton Steel Corporation

Conclusion

Support for trade is not universal, and for protection from trade is common. Country-based explanations of the supply of protection can be found in realism and institutionalism. Explanations of the demand for protection can be found in factor-based and sector-based insights from trade theory. In this chapter, we have seen that the movement from autarky to trade in any country can hurt some groups of people in that country. According to the Stolper-Samuelson theorem of the Heckscher-Ohlin model, this can be as a result of owning a factor of production that is scarce in their country. Alternatively, it can also be a result of

owning a factor specific to an import sector. Suppose that these losing groups become unhappy with the level of trade in their country. What might they do? It is possible that they would lobby their government to intervene in the trade relationship as we saw in the case of the US steel industry. This is demand for protection. It turns out that such trade policy interventions are common. Despite the gains from trade described in Chapters 2, 3, and 4, governments usually intervene in free trade in some way in response to political pressures from constituencies. This is supply of protection. Interactions in the market for protection constitute the political economy of trade.

What are the effects of the protective policies that develop in the market for protection? We will find out in the next chapter.

Review Exercises

1. Consider the trade between Germany and the Dominican Republic. Germany is a capital abundant country, and the Dominican Republic is a labor abundant country. There are two goods, a capital-intensive good chemicals and a labor-intensive good clothing.
 - a. Draw a comparative advantage diagram such as Figure 5.1 for trade between Germany and the Dominican Republic, labeling the trade flows along the axes of your diagrams.
 - b. Using the Stolper-Samuelson theorem, describe who will support and who will oppose trade in these two countries. Use a flow chart diagram like that of Figure 5.2 to help you in your description
2. In the early 1800s in England, a debate arose in Parliament over the Corn Laws, restriction on imports of grain into the country. David Ricardo, the father of the comparative advantage concept, favored the repeal of these import restrictions. Consider the two relevant political groups in England at that time: land owners and capital owners. Who do you think agreed with Ricardo? Why?
3. Use daily papers to identify a political economy of trade issue. Can you also identify the factors or production involved in this issue? Are they mobile factors as in the Heckscher-Ohlin model, or are they specific factors? Alternatively, are there any elements of technology involved?

Further Reading and Web Resources

An excellent review of the subject of this chapter can be found in Chapter 3 of Walter and Sen (2009). Another very useful starting point for the reader interested in the political economy of trade is Baldwin (1989). A volume dedicated to the Stolper-Samuelson theorem has been edited by Deardorff and Stern (1994). For a review of the trade and wages debate, see Marjit and Archaryya (2009). An interesting discussion of fairness in the political economy of trade can be found in Davidson, Matusz and Nelson (2006).

You can follow one aspect of the market for protectionism in the United States via the website for the U.S. International Trade Commission at www.usitc.gov. For the case of the European Union, see ec.europa.eu/trade.

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Appendix: Endogenous Protection

The factor-based approach to the political economy of trade as represented by the Heckscher-Ohlin model can be extended to a concept known as **endogenous protection**. This is a formal explanation of why the demand for and supply of protection interact in such a way as to result in positive levels of protection, particularly but not exclusively in the form of tariffs (see Chapter 6). Suppose that there are 100 individuals in a country described by the Heckscher-Ohlin model and that each of these individuals has one unit of labor (her- or himself). The other factor of production or resource in the Heckscher-Ohlin economy is physical capital. For each individual, the relative endowment of physical capital is the ratio of the individual’s physical capital to labor. Since the labor endowment is just “1,” the ratio is just the amount of physical capital they own. For example, for individual 10:

$$\frac{K_{10}}{L_{10}} = \frac{K_{10}}{1} = K_{10}$$

We then rank our individuals from the lowest amount of physical capital owned to the highest amount as follows:

$$K_1 \leq K_2 \leq K_3 \leq \dots \leq K_{100}$$

We graph these ownership ratios in the upper graph in Figure 5.4. Note that many individuals own no physical capital at all and are therefore at “0” in this graph.

If we place these 100 individuals in the Heckscher-Ohlin framework developed in this chapter, then a significant result emerges. Suppose that this is a capital abundant country that will export the capital intensive good. Then Mayer (1984) showed that losses will occur for those individuals who own less capital and that gains will occur for those individuals who own more capital.¹⁸ We get a gain/loss (G-L) graph something like that in the lower graph of Figure 5.4. All the individuals with “0” capital lose, but so do those with only a little capital. Gains are reserved for those with larger amounts of capital.¹⁹

The presence of losses for the majority of the individuals represents a significant demand for protection due to the Mayer/Stolper/Samuelson effects. But that is not all. There is a basic insight in public choice theory due to Black (1948) that politicians who want to maximize their number of votes will abide by the policy preference of the median voter.²⁰ This is voter or individual “50” in our model, and this individual suffers losses under free trade in this capital abundant country. There is thus a bias in this framework toward protectionism. Supply of protection meets demand.

The model considered here combines a factor-based approach to the demand for protection with an explanation of the supply of protection that is a very particular and narrow example of institutionalist considerations. The model is not universal. Not all economies are best described by the Heckscher-Ohlin model; as we have seen in this chapter, specific factors matter as well. Also, politics is more complicated than that described by Black (1948). Nevertheless, the model illustrates one possibility that is commonly recognized by many trade policy analysts.

¹⁸ The actual measure here is with respect to the overall capital/labor ratio for the economy.

¹⁹ Suppose that instead of 100 individuals, there were only six with relative endowments of 0, 0, 1, 2 and 3. The median individual has an endowment of 1 but the mean endowment is 1.2. Since our median individual has less than the mean endowment he or she would lose as a result of trade as is the case for individual 50 in Figure 5.4.

²⁰ This is referred to as “Black’s Theorem” or the “median voter model.” It is not a perfect model, but it illustrates one possibility.

Figure 5.4. Capital Ownership among 100 Residents

