CHAPTER ONE

Why Changing Exposure to Trade Should Affect Political Cleavages

The Stolper-Samuelson Theorem

In 1941, Wolfgang Stolper and Paul Samuelson solved conclusively the old riddle of gains and losses from protection (or, for that matter, from free trade).[1] In almost[2] any society, they showed, protection benefits (and liberalization of trade harms) owners of factors in which, relative to the rest of the world, that society is *poorly* endowed, as well as producers who use that scarce factor intensively.[3] Conversely, protection harms (and liberalization benefits) those factors that—again, relative to the rest of the world—the given society holds *abundantly,* and the producers who use those locally abundant factors intensively.[4] Thus, in a society rich in labor but poor in capital, protection benefits capital and harms labor; and liberalization of trade benefits labor and harms capital.[5]

So far, the theorem is what it is usually perceived to be, merely a statement, albeit an important and sweeping one,[6] about the effects of tariff policy. The picture is altered, however, when one realizes that *exogenous* changes can have exactly the same effects as increases or decreases in protection. A cheapening of transport costs, for example, is indistinguishable in its impact from an across-the-board decrease in every affected state's tariffs;[7] so is any change in the international regime that decreases the risks or the transaction costs of trade. The converse is of course equally true: when a nation's external transport becomes dearer or its trade less secure, it is affected exactly as if it had imposed a higher tariff.

The point is of more than academic interest because we know, historically, that major changes in the risks and costs of international trade have occurred: notoriously, the railroads and steamships of the nineteenth century brought drastically cheaper transportation; so, in their day, did the improvements in shipbuilding and navigation of the fifteenth and sixteenth centuries; and so, in our own generation, have supertankers, cheap oil, and containerization.[8] According to the familiar argument of Kindleberger (1973) and others, international hegemony decreases both the risks and the transaction costs of international trade; and the decline of hegemonic power makes trade more expensive, perhaps—as, some have argued, in the 1930s—prohibitively so. Analyzing a much earlier period, the Belgian historian Henri Pirenne (1939) attributed much of the final decline of the Roman Empire to the growing insecurity of interregional, and especially of Mediterranean, trade after A.D. 600.[9]

Global changes of these kinds, it follows, should have had global consequences. The "transportation revolutions" of the sixteenth, the nineteenth, and scarcely less of the mid-twentieth century must have benefited in each affected country owners and intensive employers of locally abundant factors and must have harmed owners and intensive employers of locally scarce factors. The events of the 1930s should have had exactly the opposite effect. What, however, will have been the *political* consequences of those shifts of wealth and income? To answer that question, we require a rudimentary model of the political process and a somewhat more definite one of the economy.

Simple Models of the Polity and the Economy

Concerning domestic political processes, I shall make only three assumptions: that the beneficiaries of a change will try to continue and accelerate it, while the victims of the same change will endeavor to retard or halt it; that those who enjoy a sudden increase in wealth and income will thereby be enabled to expand their political influence as well (cf. Becker 1983); and that, as the desire and the means for a particular political preference increase, the likelihood grows that political entrepreneurs will devise mechanisms that can surmount the obstacles to collective action.[10]

For our present concerns, the first assumption implies that the beneficiaries of safer or cheaper trade will support yet greater openness, while gainers from dearer or riskier trade will pursue even greater self-sufficiency. Conversely, those who are harmed by easier trade will demand protection or imperialism;[11] and the victims of exogenously induced constrictions of trade will seek offsetting reductions in barriers. More important, the second assumption implies that the beneficiaries, potential or actual, of any such exogenous change will be strengthened politically (although they may still lose); the economic losers will be weakened politically as well. The third assumption gives us reason to think that the resultant pressures will not remain invisible but will actually be brought to bear in the political arena.

The issue of potential benefits is an important one, and a familiar example may help to illuminate it. In both great wars of this century, belligerent governments have faced an intensified demand for industrial labor and, because of the military's need for manpower, a reduced supply. That situation has positioned workers—and, in the U.S. case, such traditionally disadvantaged workers as blacks and women—to demand greatly increased compensation: these groups, in short, have had large *potential* gains. Naturally, governments and employers have endeavored to deny them those gains; but in many cases—Germany in World War I, the United States in World War II, Britain in both world wars—the lure of sharing in the potential gains has induced trade union leaders, and workers themselves, to organize and demand more.[12] Similarly, when transportation costs fall, governments may at first partially offset the effect by imposing protection. Owners of abundant factors nonetheless still have substantial *potential* gains from trade, which they may mortgage, or on which others may speculate, to pressure policy toward lower levels of protection.

FIGURE 1.1
Four Main Types of Factor Endowments

	Land-Labor Ratio: High	Land-Labor Ratio: Low
Economy Advanced	ABUNDANT: Capital, Land SCARCE: Labor	ABUNDANT: Capital, Labor SCARCE: Land
Economy Backward	ABUNDANT: Land SCARCE: Capital, Labor	ABUNDANT: Labor SCARCE: Capital, Land

So much for politics. As regards the economic aspect, I propose to adopt with minor refinements the traditional three-factor model—land, labor, and capital—and to assume, for now, that the land-labor ratio informs us fully about any country's endowment of those two factors. (I shall presently relax this assumption, but it is useful at this stage of the exposition.) No country, in other words, can be rich in both land and labor: a high land-labor ratio implies abundance of land and scarcity of labor; a low ratio signifies the opposite. Finally, I shall simply define an *advanced* economy as one in which capital[13] is abundant.

This model of factor endowments inevitably oversimplifies reality and will require amendment. Its present starkness, however, permits us in theory to place any country's economy into one of four cells (see Figure 1.1), according to whether it is advanced or backward and whether its landlabor ratio is high or low. We recognize, in other words, only economies that are: (1) capital rich, land rich, and labor poor; (2) capital rich, land poor, and labor rich; (3) capital poor, land rich, and labor poor; or (4) capital poor, land poor, and labor rich.

Political Effects of Expanding Trade

The Stolper-Samuelson theorem, applied to our simple model, implies that increasing exposure to trade must result in *urban-rural conflict* in two kinds of economies, and in *class conflict* in the two others. Consider first the upper right-hand cell of Figure 1.1: the advanced (therefore capital-rich) economy endowed abundantly in labor but poorly in land. Expanding trade must benefit both capitalists and workers; it harms only landowners and the pastoral and agricultural enterprises that use land intensively. Both capitalists and workers—which is to say, almost the entire urban sector—should favor free trade; agriculture should on the whole be protectionist.[14] Moreover, we expect the capitalists and the workers to try, very likely in concert, to expand their political influence. Depending on preexisting circumstances, they may seek concretely an extension of the franchise, a reapportionment of seats, a diminution in the powers of an upper house or of a gentry-based political elite, or a violent "bourgeois" revolution.

Urban-rural conflict should also arise in backward, land-rich economies (the lower left-hand cell of Figure 1.1) when trade expands, albeit with a complete reversal of fronts. In such "frontier" societies, both capital and labor are scarce; hence both are harmed by expanding trade and, normally, will seek protection. Only land is abundant, and therefore only agriculture will gain from free trade. Farmers and pastoralists will try to expand their influence in some movement of a "populist" and antiurban stripe.

Conversely, in backward economies with low land-labor ratios (the lower right-hand cell of Figure 1.1), land and capital are scarce and labor is abundant. The model therefore predicts *class conflict:* labor will pursue free trade and expanded political power (including, in some circumstances, a workers' revolution);[15] landowners, capitalists, and capital-intensive industrialists will unite to support protection, imperialism, and a politics of continued exclusion.[16]

FIGURE 1.2
Predicted Effects of Expanding Exposure to Trade

	Land-Labor Ratio: High	Land-Labor Ratio: Low
Economy Advanced	Class cleavage: Land and Capital free-trading, assertive; Labor defensive, protectionist	Urban-rural cleavage: Capital and Labor free-trading, assertive; Land defensive, protectionist **Radicalism**
Economy Backward	Urban-rural cleavage: Land free-trading, assertive; Labor and Capital defensive, protectionist **U.S. Populism**	Class cleavage: Labor free-trading, assertive; Labor and Capital defensive, protectionist **Socialism**

The reverse form of class conflict is expected to arise in the final case, that of the advanced but land-rich economy (the upper left-hand cell of Figure 1.1) under increasing exposure to trade. Because both capital and land are abundant, capitalists, capital-intensive industries, and agriculture will all benefit from, and will endorse, free trade; labor being scarce, workers and labor-intensive industries will resist, normally embracing protection and (if need be) imperialism. The benefited sectors will seek to expand their political power, if not by disfranchisement then by curtailment of workers' economic prerogatives and suppression of their organizations.

These implications of the theory of international trade (summarized in Figure 1.2) seem clear, but do they in any way describe reality? Obviously I shall try to address that question more fully in subsequent chapters, but for now it is worth observing how closely the experience of three major countries—Germany, Britain, and the United States[17]—conforms to this analysis in the period of rapidly expanding trade in the last third of the nineteenth century; and how far it can go to explain otherwise puzzling disparities in those states' patterns of political evolution.

Germany and the United States were both relatively backward (i.e., capital-poor) societies: both imported considerable amounts of capital in this period, and neither had until late in the century anything like the per capita industrial capacity of the United Kingdom or Belgium.[18] Germany, however, was rich in labor and poor in land; the United States, of course, was in exactly the opposite position. (Again, we observe that the United States imported, and Germany exported—not least to the United States—workers, which is not surprising since, at midcentury, Prussia's labor-land ratio was fifteen times that of the United States.)[19]

The theory predicts class conflict in Germany, with labor the "revolutionary" and free-trading element, and with land and capital united in support of protection and imperialism. Surely this description will not ring false to any student of German socialism or of Germany's infamous "marriage of iron and rye."[20] For the United States, conversely, the theory predicts—quite accurately, I submit—urban-rural conflict, with the agrarians now assuming the "revolutionary" and free-trading role; capital and labor unite in a protectionist and imperialist coalition. Neither E. E. Schattschneider nor Walter Dean Burnham could have described more succinctly the history of the Populist movement or of the election of 1896.[21]

Britain, on the other hand, was already an advanced economy in the nineteenth century. Its per capita industrial output far exceeded that of any other nation, and it exported capital in vast quantities.[22] That it was also rich in labor is suggested by its extensive exports of that factor to the United States, Canada, Australia, New Zealand, and Africa; in fact, Britain's labor-land ratio then exceeded Japan's by 50 percent and was over thirty times that of the United States.[23] Britain therefore falls into the upper right-hand quadrant of Figure 1.1 and is predicted to exhibit a ruralurban cleavage whose fronts are opposite those found in the United States: capitalists and labor unite in support of free trade and in demands for expanded political power, while landowners and agriculture support protection and imperialism.

Although this picture surely obscures important nuances, it illuminates crucial differences—between, for example, British and German political development in this period. In Britain, capitalists and labor united in the Liberal party and forced an expanded suffrage and curtailment of (still principally land-owning) aristocratic power. In Germany, liberalism shattered,[24] the suffrage at the crucial level of the individual states was actually contracted, and—far from eroding aristocratic power—the bourgeoisie grew more and more *verjunkert* in style and aspirations.

Political Effects of Declining Trade

When rising costs or declining security substantially increases the risks or costs of external trade, the gainers and losers in each situation are simply the reverse of those under increasing exposure to trade. Let us first consider the situation of the highly developed (and therefore by definition capitalrich) economies.

In an advanced economy with a high land-labor ratio (the upper left-hand cell of Figure 1.1), we should expect intense *class conflict* precipitated by a newly aggressive working class. Land and capital are both abundant in such an economy; hence, under declining trade owners of both factors (and producers who use either factor intensively) lose. Moreover, they can resort to no such simple remedy as protection or imperialism. Labor being the only scarce resource, workers and labor-intensive industries are well positioned to reap a significant windfall from the "protection" that dearer or riskier trade affords; and, according to our earlier assumption, like any other benefited class they will soon endeavor to parlay their greater economic power into greater political power. Capitalists and landowners, even if they were previously at odds, will unite to oppose labor's demands.

Quite to the contrary, declining trade in an advanced economy that is labor rich and land poor (the upper right-hand cell of Figure 1.1) will entail renewed *urban-rural* conflict. Capital and labor are both abundant, and both are harmed by the contraction of external trade. Agriculture, as the intense exploiter of the only scarce factor, gains significantly and quickly tries to translate its gain into greater political control.

Urban-rural conflict is also predicted for backward, land-rich countries under declining trade; but here agriculture is on the defensive. Labor and capital being both scarce, both benefit from the contraction of trade; land, as the only locally abundant factor, is threatened. The urban sectors unite, in a parallel to the "radical" coalition of labor-rich developed countries under expanding trade discussed previously, to demand an increased voice in the state.

Finally, in backward economies rich in labor rather than land, class conflict resumes, with labor this time on the defensive. Capital and land, as the locally scarce factors, gain from declining trade; labor, locally abundant, suffers economic reverses and is soon threatened politically.

Observe again, as a first test of the plausibility of these results—summarized in Figure 1.3—how they appear to account for some prominent disparities of political response to the last precipitous decline of international trade, the depression of the 1930s.[25] The U.S. New Deal represented a sharp turn to the left and occasioned a significant increase in organized labor's political power. In Germany, a depression of similar depth (gauged by unemployment rates and declines in industrial production)[26] brought to power first Hindenburg's and then Hitler's dictatorship. Landowners exercised markedly greater influence than they had under Weimar;[27] and indeed a credible case can be made that the rural sector was the principal early beneficiary of the early Nazi regime.[28] Yet this is exactly the broad difference that the model would lead us to anticipate, if we accept that by 1930 both countries were economically advanced—although Germany, after physical reparations and cessions of industrial regions, was surely less rich in capital than the United States—but the United States held land abundantly, which in Germany was scarce (respectively, the left- and right-hand cells of the upper half of Figure 1.3). Only an obtuse observer would claim that such factors as cultural inheritance and recent defeat in war played no role; but surely it is also important to recognize the sectoral impact of declining trade in the two societies.[29]

FIGURE 1.3
Predicted Effects of Declining Exposure to Trade

	Land-Labor Ratio: High	Land-Labor Ratio: Low
Economy Advanced	CLASS CLEAVAGE: Labor assertive, Land and Capital defensive U.S. New Deal	URBAN-RURAL CLEAVAGE: Land assertive, Labor and Capital defensive W. European Fascism
Economy Backward	URBAN-RURAL CLEAVAGE: Labor and Capital assertive, Land defensive South American Populism	CLASS CLEAVAGE: Land and Capital assertive, Labor defensive Asian & East European Fascism

As regards the less developed economies of the time, it may be profitable to contrast the depression's impact on such South American cases as Argentina and Brazil with its effects in the leading Asian country, Japan. In Argentina and Brazil, it is usually asserted, the depression gave rise to, or at the least strengthened, "populist" coalitions that united labor and the urban middle classes in opposition to traditional, landowning elites.[30] In Japan, growing military influence suppressed representative institutions and nascent workers' organizations, ruling in the immediate interest—if hardly under the domination—of landowners and capitalists.[31] (Similar suppressions of labor occurred in China and Vietnam.)[32] In considering these contrasting responses, should we not take into account that Argentina and Brazil were rich in land and poor in labor, while in Japan (and, with local exceptions, in Asia generally) labor was abundant and land was scarce?[33]

Red-Green Coalitions

Let us now relax the assumption that the land-labor ratio informs us completely about the relative abundance of these two factors and admit that a country may be rich or poor in *both* land and labor. Four new cases arise, in theory if (as I suspect) rarely in practice (see Figure 1.4): economies may be, as before, advanced or backward (i.e., capital rich or capital poor), but they may now be rich in both land and labor, or poorly endowed in both factors.

Two cases, that of the advanced economy that is rich in both factors and of the backward one that is poor in both, are theoretically improbable[34] and politically uninteresting: if all factors were (temporarily) abundant relative to the rest of the world, the society would unanimously embrace free trade; if all were scarce, it would agree on protection. Let us consider, then, the remaining two possibilities.

In an advanced economy where both land and labor are scarce, expanding trade will benefit only capital. Agriculture and labor—"Green" and "Red"—can be expected to unite. Only capitalists will unreservedly embrace free trade; to the extent that such policies are objectively possible, farmers and workers will support protection and, if need be, imperialism. Either a "progressive" capitalist dictatorship, pursuing trade and development, or an economically retrograde but more participatory regime may ensue.[35] When trade contracts in such a case, the scarce factors of land and labor gain economically at capital's expense; and the alliance of Red and Green, likely demanding expanded mass participation in politics and a radical curtailment of capitalist power, grows markedly more assertive.

FIGURE 1.4
Predicted Effects on Economies That Are Rich, or Poor, in Both Land and Labor

	Land and Labor Both Abundant	Land and Labor Both Scarce
Economy Advanced	$\emptyset$	EXPANDING TRADE: Capital assertive, free-trading; Land and Labor protectionist, defensive DECLINING TRADE: Land and Labor assertive; Capital "internationalist," defensive
Economy Backward	EXPANDING TRADE: Land and Labor free-trading, assertive; Capital defensive, protectionist DECLINING TRADE: Capital assertive; Land and Labor "internationalist," defensive	$\emptyset$

In a backward economy with abundant land and labor, change in exposure to trade again mobilizes a coalition of Red and Green, but with diametrically opposed positions. Expanding trade now *benefits* farmers and workers but harms capitalists; and the mass coalition—or, where agriculture is dominated by a few large landowners, a coalition of gentry and labor—pursues a wider franchise, free trade, and a general disempowerment of capital. Contracting trade, in such an economy, benefits only the owners of capital and injures both workers and farmers; again intense conflict between capital and both other sectors is predicted, ending in either a capitalist dictatorship or an anticapitalist revolution.

Can either situation arise in reality? Myint has argued cogently that the backward economy with abundant land and labor may not be rare.[36] Primitive economies are often thinly populated, with vast reserves of untilled land; at the same time, as Lewis (1954) argued in a seminal essay, they are frequently so plagued by underemployment (e.g., in peasant families and in servile or clientelistic relationships) that, for immediate purposes, labor in them can be regarded as unlimited in supply.[37] More precisely, labor can be withdrawn from its present use with almost no marginal loss of productivity.[38]

Although it has been less widely noticed, Myint has also suggested that an "artificial" *scarcity* of labor may arise in densely populated societies.[39] Where, far from there being any hidden unemployment, people have "had to devote the whole of their time and resources to obtain a minimum subsistence," any turn to alternative enterprise or employment carries substantial risks and costs. To plant an export crop, or to work in the new mill, is inevitably to forgo some part of subsistence production. And what if the crop fails, export prices collapse, or the mill closes in midseason?

Myint's point, I believe, can be taken further. If in some traditional landabundant economies there is hidden unemployment and much leisure, in some traditional land-scarce societies there is equally *over*employment and a hidden *taste* for leisure. The phenomenon of the "self-exploiting" family enterprise, either as small farm or as small business, is well known. Such circumstances may create an additional barrier to the recruitment of labor, for family members often conceive, with reason, that the comparative laxity of factory or large-farm discipline will "ruin" the wage earner for the rigors of work on the homestead.

We expect, then, that a simultaneous scarcity of labor and land is likeliest to be encountered precisely in those densely populated societies whose pretrade economy is most characterized by small, extremely marginal, self-exploiting family enterprises.

Again, only to suggest the plausibility of applying these categories to actual cases,[40] we may ask to what extent the Red-Green coalitions of Sweden and Norway in the 1930s[41] were a predictable response to trade contraction of (by then) capital-rich but land- and labor-poor economies; and, analogously, in what measure the anticapitalist alliance of peasants and workers in Russia in the later nineteenth and early twentieth centuries derived from the growing exposure to trade of a backward but land- and labor-rich economy.

Possible Objections

Several objections can plausibly be raised to the whole line of analysis that I have advanced here.

1. Most fundamentally, one can question the empirical accuracy of the Stolper-Samuelson theorem, or of the Heckscher-Ohlin-Vanek (HOV) model that underlies it. That was attempted chiefly by Leontieff in two seminal papers (Leontieff 1953 and 1956); his survey of the evidence was updated by Baldwin (1971). In essence, Leontieff purported to show that the United States exported labor-intensive goods and imported capital-intensive ones; Baldwin obtained the same result for later and more complete data. Because the United States was almost universally accounted to be abundant in capital and scarce in labor, this finding was the opposite of what the theory would predict; and Leontieff went on to observe that the conventional Stolper-Samuelson conclusion about the effects of protection must also be wrong: rather, "protectionist policies are bound to weaken the bargaining position of American labor and correspondingly strengthen that of capital."[42]

The "Leontieff paradox" is widely known. Less familiar, unfortunately, is Learner's (1980) conclusive demonstration that Leontieff's entire mode of analysis was erroneous, and that Leontieff's own data show the United States as "revealed by its trade to be relatively well-endowed in capital compared with labor."[43] Moreover, a wider investigation of recent patterns of international trade (Learner 1984) demonstrates the HOV model to be surprisingly accurate.

2. It may be argued that the effects sketched out here will not obtain in countries that depend only slightly on trade. A Belgium, where external trade (taken as the sum of exports and imports) roughly equals gross domestic product (GDP),[44] can indeed be affected profoundly by changes in the risks or costs of international commerce; but a state like the United States in the 1960s, where trade amounted to scarcely a tenth of GDP, will have remained largely immune.

This view, while superficially plausible, is incorrect. The Stolper-Samuelson result obtains at any margin; and in fact holders of scarce factors have been quite as devastated by expanding trade in almost autarkic economies—one need think only of the weavers of India or of Silesia, exposed in the nineteenth century to the competition of Lancashire mills—as in ones previously more dependent on trade.[45]

3. Given that comparative advantage always assures gains from trade, it may be objected that the cleavages described here need not arise at all: the gainers from trade can always compensate the losers and have something left over; trade remains the Pareto-superior outcome. As Stolper and Samuelson readily conceded in their original essay,[46] this is perfectly true. To the student of politics, however, and with even greater urgency to those who are losing from trade in concrete historical situations, it remains unobvious that such compensation will in fact occur. Rather, the natural tendency is for gainers to husband their winnings and to stop their ears to the cries of the afflicted. Perhaps only unusually strong and trustworthy states, or political cultures that especially value compassion and honesty, can credibly assure the requisite compensation (for the case of Sweden in the 1930s, see chapter 3)[47] and even in those cases, substantial conflict over the nature and level of compensation will usually precede the ultimate agreement.

4. Equally, one can ask why the cleavages indicated here should persist. In a world of perfectly mobile factors and rational behavior, people would quickly disinvest from losing factors and enterprises (e.g., farming in Britain after 1880) and move to sectors whose auspices were more favorable. Markets should swiftly clear; and a new, if different, political equilibrium should be achieved.

To this two answers may be given. First, in some cases trade expands or contracts so rapidly and surprisingly as to frustrate rational expectations. Especially in countries that experience a steady series of such exogenous shocks—the case in Europe, I would contend, from 1840 to the present day—divisions based on factor endowments (which ordinarily change only gradually)[48] will be repeatedly revived. Second, not infrequently some factors' privileged access to political influence makes the extraction of rents and subsidies seem cheaper than adaptation: Prussian *Junker,* familiarly, sought (and easily won) protection rather than adjustment.[49] In such circumstances, adaptation may be long delayed, sometimes with ultimately disastrous consequences.

At the same time, it should be conceded that, as improved technology makes factors more mobile (see the subsequent discussion) and anticipation easier, the theory advanced here will likely apply less well. Indeed, this entire analysis may be a historically conditioned one, whose usefulness will be found to have entered a rapid decline sometime after 1960.[50]

5. Exactly to the contrary, it can be asserted that some factors are less mobile within nations than the Stolper-Samuelson model assumes; this is the crux of the so-called specific factors model of tariff effects.[51] In essence, it can be shown, a factor trapped in a specific sector and not readily put to other uses may lose in the short run from policies that will benefit it over the longer term, and vice-versa. Thus capitalists in America, where capital is abundant, will benefit from free trade in the long run; but capital that is invested in a labor-intensive sector and that cannot readily be redeployed may be harmed over the near term. Some have accepted this approach as explaining apparent anomalies in groups' positions on trade issues.[52]

Three points deserve emphasis. First, as Mussa (1974) made clear in his seminal essay, no one doubts that the Stolper-Samuelson theorem holds for the long run; at most, the specific-factors model describes a short-term exception, or lag, in the operation of the Stolper-Samuelson predictions.[53] Second, much would suggest a priori that this "short run," or lag, should be growing steadily shorter. Surely capital has become more mobile within nations over time; so, one suspects in light of more frequent migrations and career changes, has labor; even land is more readily shifted among uses, as improved transportation and communication have permitted the siting of factories and headquarters in areas that once would have seemed too remote. Third, as Magee (1978) rightly emphasized, the question is an empirical one, which is appropriately addressed by the evidence of historical coalition formation on issues of trade. The central chapters of this volume advance a much broader array of such evidence than did Magee's essay, which confined itself to a single country (the United States) in a single year (1973). I submit that, on balance, that evidence speaks unambiguously in favor of the Stolper-Samuelson position and against the specificfactors model.

6. This analysis, some may contend, reifies such categories as "capital," "labor," and "land," assuming a unanimity of preference that most countries' evidence belies. In fact, a kind of shorthand and a testable hypothesis are involved: a term like "capital" is the convenient abbreviation of "those who draw their income principally from investments, plus the most capitalintensive producers"; and I indeed hypothesize that individuals' political positions will vary with their derivation of income—or, more precisely, of present value of all anticipated future income—from particular factors.

A worker, for example, who derives 90 percent of her income from wages and 10 percent from investments will conform more to the theory's expectation of "labor" 's political behavior than one who depends half on investments and half on wages.[54] An extremely labor-intensive manufacturer will behave less like a "capitalist" than a more capital-intensive one.[55] And a peasant (as noted previously) who depends chiefly on inputs of his own labor will resemble a "worker," whereas a more land-intensive neighbor will behave as a "landowner."

7. Finally, it may be objected that I have said nothing about the outcome of these conflicts. I have not done so for the simple reason that I cannot: history makes it all too plain, as in the cases of nineteenth-century Germany and America, that the economic losers from trade may win politically over more than the short run. What I have advanced here is a speculation about *cleavages*, not about outcomes.[56] I have asserted only that those who gain from fluctuations in trade will be strengthened and emboldened politically; nothing guarantees that they will win. Victory or defeat depends, so far as I can see, both on the relative size of the various groups and on those institutional and cultural factors that this perspective so resolutely ignores.

Conclusion

It is essential to recall what I am *not* claiming to do in this volume. I do not contend that changes in countries' exposure to trade explain all, or even most, of their varying patterns of political cleavage. It would be foolish to ignore the importance of ancient cultural and religious loyalties, of wars and migrations, or of such historical memories as the French Revolution and the *Kulturkampf*. Other cleavages antedate, and persist through, the ones I discuss here, shaping, crosscutting, complicating, and indeed sometimes dominating their political resolution.

Neither will I be able to offer, despite the detail of the remaining chapters, anything like a conclusive empirical demonstration of the hypotheses that this chapter has advanced. At most, the empirical regularities that I shall note may serve to suggest the plausibility of the model and the value of further refinement and testing of it.

In the main, I am presenting here a theoretical puzzle, a kind of socialscientific "thought experiment" in Hempel's (1965, chap. 7) original sense: a teasing out of unexpected, and sometimes counterintuitive, implications of theories already widely accepted. For the Stolper-Samuelson theorem *is* generally, indeed almost universally, embraced; yet, coupled with a stark and unexceptionable model of the political realm, it plainly implies that changes in exposure to trade must profoundly affect nations' internal political cleavages. Do they do so? If they do not, what conclusions shall we draw, either about our theories of international trade, or about our understanding of politics?

[1] I briefly discuss two partially dissenting perspectives, conventionally labeled the "specificfactors model" and the "Leontieff paradox," later in this chapter.

[2] The principal exceptions are economies that specialize to the extent of abandoning, instead of merely reducing, production of goods in which they lack comparative advantage (Stolper and Samuelson 1941, 70–71). An example would be a society that ceased all agricultural production.

[3] In fact, the effect flows backward from products and is an extension of the Heckscher-Ohlin theorem: under free trade, countries export those products

whose manufacture uses intensively their abundant factors, and import ones that employ intensively factors in which they are poorly endowed. Stolper and Samuelson 1941, 65–66; cf. Learner 1984, esp. 8–10.

[4] Admittedly, these results depend on simplifying assumptions that are never achieved in the real world, among them perfect mobility of factors within national boundaries and a world of only two factors (Stolper and Samuelson 1941, 72). Still, as an approximation to reality, they remain highly serviceable. On the specific issue of extension of the theorem to cases of more than two factors—where, in essence, it continues to hold as a correlation rather than a certainty—see Ethier 1984, esp. 63–64 and 181.

[5] To dispel a misunderstanding that occasionally arises: these effects befall both the country that imposes protection *and* its trading partners—i.e., they flow simply from the constriction of trade. Hence any retaliatory tariffs from other countries will only magnify the benefit to scarce, and the harm to abundant, factors. Cf. Magee 1978, 149.

[6] Especially for those of us who may have received from our textbooks a more restrictive impression of the theorem's import, it is essential to emphasize how sweeping the original statement was—and, indeed, to reread the original essay. It does not describe only the effect of particular kinds of protection (e.g., of industrial goods), but of blanket protection of precisely the kind that is analogous to a shift in the costs or risks of trade.

[7] See, e.g., Mundell 1957, 330.

[8] Landes 1969, 153–54, 196, and 201–2; Hobsbawm 1975, chap. 3; Cipolla 1965; Rosecrance 1986, 142.

[9] Later historians have of course largely rejected Pirenne's attribution of this insecurity to the rise of Islam and its alleged blockade of Mediterranean commerce (Havighurst 1958). It can hardly be doubted, however, that the decline of Roman power by itself rendered interregional trade far less secure. See chapter 5.

[10] Olson 1968; Frohlich, Oppenheimer, and Young 1971.

[11] Countries that lack essential resources can only beggar themselves by protection. Ultimately, those threatened by trade in such a society must advocate conquest of the missing resources, as indeed occurred in Japan and Germany in the 1930s. It should be self-evident, however, that not all imperialisms originate in this way: those of ancient Rome, and of nineteenth-century Britain, aimed to expand trade. Doyle 1986, chaps. 4 and 11.

[12] In the United States and Britain, union membership as a share of total work force increased dramatically in wartime; in Germany, unions simply asserted and won a larger share in the formulation of policy. In general, strike rates rose after an initial decline. Bain and Price 1980, 37–88; Stein 1980, 47–51; Feldman 1966, esp. 116–35.

[13] The capital may be either human or physical, but—as political scientists must sometimes be reminded—it must be distinguished from mere wealth. Capital is productive investment, not cash. For example, Kuwait has the per capita income and wealth but not the endowments of physical or human capital of European or North American economies.

[14] Trade may, however, not emerge as the dominant issue, or even as an explicit one. To take only two examples: in small states, protection may seem so suicidal, and imperialism so ludicrous, that neither gains serious advocates (Katzenstein, 1985); or the parasitism of traditional elites may appear as the immediate obstacle, even while expanding trade has made rebellion desirable and possible.

[15] In such an economy, much of the labor may well be rural; and its aims will often include a land reform—i.e., a change of ownership structure—that can institute a more efficient (more labor-intensive) mix of factors and a more export-oriented production. The case of land reform and olive cultivation in ancient Greece (chapter 5) is startlingly instructive. The larger issues of ownership and property rights are discussed later in the present chapter.

[16] Lest the picture of a popular rising in support of freer markets seem too improbable a priori, I observe at once its general conformity with Popkin's

(1979) astute interpretation of the Vietnamese revolution.

[17] A fuller treatment of these cases is presented in chapter two.

[18] Feis 1965, 24–25 and chap. 3. Nowadays, of course, governments' fiscal and monetary policies can drastically affect flows of capital: the United States' massive imports of capital under Reagan do not imply—not yet, at least—that capital has become scarce in America. In the nineteenth century, when almost all governments adhered to the gold standard, these flows tended much more to reflect real disparities of endowment. For evidence on per capita levels of industrialization, see chapter 2.

[19] Between 1871 and 1890, just under two million Germans emigrated to points outside Europe; over the same period, some seven million immigrants entered the United States. For labor-land ratios at midcentury, see Table 2.4. Migration may of course occur for reasons quite other than local scarcity or abundance, notably to escape political persecution; yet in these years the economic motive seems to have predominated. See for example Hobsbawm 1979, chap. 11.

[20] The Stolper-Samuelson analysis also helps to clear up what had seemed even to the perspicacious Gerschenkron (1943, 26–27) an insoluble riddle: why the *smallholding* German peasants had quickly become as protectionist as the *Junker.* Not only landowners, we now see, but all enterprises that *used land intensively*, will have been harmed by free trade. On the other hand—and later the distinction will become crucial—agricultural *wage-labor* should have been free-trading. See further discussion in chapter 2.

[21] Schattschneider 1960, 78–85; Burnham 1970, esp. 53–54. That the farmers of the Great Plains were hardly prospering is no refutation of the analysis advanced here. Their *potential* gains were great (as noted previously), and their suffering could plausibly be attributed not to expanded trade but to the obstacles or exploitation laid upon that trade by other sectors. As in Marxist analysis, the older relations of production and of rule could be seen as "fetters."

[22] Feis 1965, chap. 1; and my discussion in chapter 2.

[23] Emigrants from the United Kingdom to areas outside Europe totaled 5.1 million between 1871 and 1890 (Mitchell 1978, table A-5). For labor-land ratios, see my Table 2.4.

[24] Sheehan 1978.

[25] This discussion prefigures the more complete one of chapter 3.

[26] Landes 1969, 391.

[27] Gessner 1977; Abraham 1981, 85–115 and chap. 4.

[28] See, inter alia, Holt 1936, 173–74 and 194ff.; Gerschenkron 1943, 154–63; Schoen-baum 1967, 156–63; and Gies 1968. Certainly peasants and landowners had been among National Socialism's earliest and strongest supporters: virtually every study of late Weimar voting patterns (e.g., Lipset 1960, 138–48, and sources there cited; Brown 1982; Childers 1983) has found a large rural-urban difference, controlling for such other variables as religion and class, in support for National Socialism.

[29] Some historians have recognized the sectoral impact of declining trade in Weimar's final convulsions; the controversial essay of Abraham (1981) is only the best-known example. They may, however, have exaggerated agriculture's woes: see Holt 1936 and Rogowski 1982.

[30] Skidmore and Smith 1984, 59–60; Sunkel with Paz, 1973, 352–54; Cardoso and Faletto 1979, 124–26 and chap. 5. In Argentina, of course, the populist regime of Perón did not assume full power until 1946; but the cleavage (and the growing strength of the laborbourgeois forces) was evident from the early 1930s.

[31] Reischauer 1974, 186–87 and 195–99; Kato 1974.

[32] Clubb 1972, 135–40; Popkin 1979, xix and 215.

[33] For precise labor-land ratios, see Tables 3.1 and 3.2.

[34] Surprisingly enough, both are possible under one widely employed definition of abundance and scarcity in the multifactor case. If we say (as does for example Learner 1984, 15) that a country is abundant in a factor to the extent that its share of world endowment in that factor exceeds its share of total world consumption, then a country would abound in all three of our factors if and only if all of the following inequalities held:

$K_i/K > GNP/WP$

$T_i/T > GNP/WP$

$L_i/L > GNP/WP$,

where *K*, *T*, and *L* are respectively world endowments of capital, land, and labor; the analogous indexed terms are the *i*th country's endowments of those same factors; *WP* is the sum of all nations' GNPs; and the *GNP* is that of country *i*. It should be evident that, for any given endowments of country *i*, a low enough GNP—i.e., a low enough level of consumption and production—will insure the satisfaction of all three inequalities. (Analogously, of course, a country can be "scarce" in all factors if only its GNP is high enough.) Such universal abundance or scarcity, however, is inconsistent with balanced trade and implies simultaneous inefficiency (or, in the case of scarcity, efficiency) in the use of all factors. Hence such a situation is initially improbable and inevitably transitory. Cf. Learner 1984, 8–10.

[35] A third possibility, of course, is that capitalists may buy the acquiescence of one or both other groups.

[36] Myint 1958, 323; Myint 1980 (originally published 1964), esp. chap. 3.

[37] Barber (1961), Hopkins (1973), and other students of Africa have suggested a third source of hidden unemployment in the simple paucity of available goods, which causes people to value leisure more. See chapter 2.

[38] For this reason the Myint-Lewis model is often described, borrowing a phrase from Adam Smith, as one that regards exports as a "vent for surplus."

[39] Myint 1980, 38.

[40] These cases are treated in greater detail in chapters 2 and 3.

[41] Hancock 1972, 30–31; Rokkan 1966, 84.

[42] Leontieff 1953, 349.

[43] Learner 1980, 502. Learner (502n.) concedes, however that Baldwin's findings "cannot be explained away so easily." Even if closer analysis should sustain the "paradox," it would mean little. As Baldwin's (1971, 127–32) extensive discussion of the intervening literature indicates, economic opinion holds almost universally that the "paradox," if it exists, must be an artifact of some excluded variable; human capital or natural resources, both possibilities mentioned even by Leontieff (1953, 344 and 348), are among the most frequently mentioned candidates.

[44] For figures for all its member states, see the Organization for Economic Co-operation and Development 1982, 62–63.

[45] Cf. Thomson 1962, 163–64, on the vast dislocations that even slight exposure to trade occasioned in many previously isolated areas of nineteenth-century Europe.

[46] Stolper and Samuelson 1941, 73.

[47] As trade comes to have more devastating and destabilizing effects, however, states' incentives to develop credible systems of compensation increase; and, to the extent that they succeed, the analysis pursued here may be made obsolete. See chapter 6.

[48] The chief exception to this rule arises from extensions of trade to wholly new areas with quite different factor endowments. In 1860, for example, Prussia was abundant in land relative to its trading partners; as soon as the North American plains and the Argentine *pampas* were opened, it ceased to

be so. Cf. chapter 2. (I am grateful to my colleague Arthur Stein for having pointed this out.)

[49] I remain unpersuaded by the hypothesis of Hardach 1967, that the Junker supported halfheartedly, or actually opposed, protection. See the more conventional account of Lambi 1963.

[50] I owe this suggestion to an anonymous referee.

[51] Mussa 1974.

[52] See particularly Magee 1978.

[53] Mussa 1974, 1192.

[54] An interesting subsidiary hypothesis is this: as a worker approaches retirement, and as more of his anticipated future income stream derives from pension-plan investments and less from wages, he will behave politically more and more as a capitalist. Has the growing conservatism of American workers been adequately explored in relation to the aging of the post-baby-boom American work force?

[55] The intensity of factors in production is ascertained by their relative contribution to value added. Hence a manufacturer may own little capital himself but may, through equity or debt, raise much capital and use it intensively in his processes of production.

[56] On the other hand, particularly clear-cut outcomes can reveal something about cleavages. The near-unanimity with which nineteenth-century Britain eventually embraced free trade tells us much about the strength and solidity of the labor-capitalist alliance that originated and sustained that policy. See chapter 2.