1993

# Challenges to the Doctrine of Free Trade

Jagdish N. Bhagwati
*Columbia Law School*, jb38@columbia.edu

# CHALLENGES TO THE DOCTRINE OF FREE TRADE*

JAGDISH N. BHAGWATI**

The doctrine of free trade is facing new challenges today. As one surveys the policy arena, questions are raised about free trade by those who worry about Japan (and today this includes many more than the "revisionists") and who argue that free trade with Japan is not gainful. Several environmentalists as well oppose free trade with passion. These concerns relate to what now is called the absence of "level playing fields": "fair trade" as a precondition of free trade is the battle cry.

There is also the fear that free trade, even if efficient, hurts the unskilled and thus immiserizes the proletariat: Marx (who predicted such immiserization unsuccessfully) may be striking again. Indeed, this concern with distributive justice resonates most with the intriguing title of this conference: the Morality of Protectionism.

Paul Samuelson, my old teacher at MIT and the celebrated Nobel laureate in Economics, recalls being asked by the mathematician Stan Ulam which proposition in economics is both true and counterintuitive? He scratched his head for a while and then came up with the law of comparative advantage. Thus, even if I can do both Economics and Law better than you, I should not do both like Marx's complete man. Instead, I should specialize in Economics, leaving Law to you, since my superiority in Economics is comparatively greater than my superiority in Law. That way, we get better Economics and better Law. The implied division of labor is

---

* Author's note: This essay is adapted from a keynote address delivered at the Symposium on The Morality of Protectionism at the New York University School of Law on October 2, 1992. I have developed the ideas here in greater depth, for economists, in the 1993 Harry Johnson Lecture to the Royal Economic Society, delivered at the Society's Annual Conference in York, England. The Johnson Lecture will be published in the *Economic Journal* (forthcoming March 1994).

** Arthur Lehman Professor of Economics and Political Science, Columbia University, and Economic Policy Advisor to the Director-General, GATT, 1991-1993.

at the heart of the case for free trade. Free trade is essentially a policy that sets incentives for domestic production and trade so as to fully exploit such comparative advantage.

This fundamental intuition of Economics has never been plausible to the general public. Indeed, those of us who are wedded to free trade are destined to sleep poorly. What I propose to do today is to discuss how free trade has been challenged through the two centuries since its virtues were extolled by Adam Smith, and then discuss the modern challenges which I noted at the outset.

The earlier, conventional challenges essentially reflect a dissonance between the assumptions that underlie the case for free trade and the reality that one allegedly confronts. The modern, new challenges go outside the framework within which the case for free trade has been developed.

We economists must confront these new challenges head on, to argue afresh that the old case for free trade survives intellectually, instead of asserting its truth by resort to conventional argumentation. The latter is a familiar trap. Another Paul Samuelson anecdote illustrates well its danger. Asked how often Economics changes, he remarked: One funeral at a time!

## I. The Old Challenges

The case for free trade is dependent on the assumption that market prices reflect social costs. Hence the challenges to the doctrine of free trade over the last two centuries have come from theorists who focused on one market imperfection or another. The attendant market failure implies that market prices no longer equal social costs, requiring that the Invisible Hand, now frail and inadequate, be assisted. Hence free trade can be improved by intervention.

Thus, starting from the earliest theoretical arguments in the first half of the nineteenth century for infant industry protection and for a tariff to exploit a country's monopoly power in trade,[1] down to the postwar period when during the 1950s through 1970s economists of my generation ana-

1. For the key historical references to these arguments, see John Stuart Mill, Principles of Political Economy (London, Longman, Greene, and Co. 1848), and Robert Torrens, The Budget: On Commercial and Colonial Policy (London, Smith, Elder 1844).

lyzed *factor* market imperfections, and on to the 1980s when our students analyzed *product* market imperfections, the theorists of commercial policy have continued to reexamine the essential case for free trade and to design appropriate policy intervention in light of the market failure at hand.

It is fair to say that the theoretical arguments for infant industry protection and a tariff to exploit monopoly power in trade remained the only serious intellectual challenges to free trade through the nineteenth century and the early twentieth century.

The first new argument against free trade thereafter, and the most influential for policy, came with the onset of the Great Depression. In a 1951 lecture to the Manchester Statistical Society, John Hicks recounted how the unemployment of those years had seriously undermined the belief in the doctrine of free trade:

> The main thing which caused so much liberal opinion in England to lose its faith in free trade was the helplessness of the older liberalism in the face of massive unemployment, and the possibility of using import restriction as an element in an active programme fighting unemployment. One is, of course, obliged to associate this line of thought with the name of Keynes. It was this, almost alone, which led Keynes to abandon his early belief in Free Trade.[2]

Keynes's apostasy on free trade had been suggested in *A Treatise on Money*[3] and in his testimony before the MacMillan Committee in February 1930, where he offered the view that tariffs, while unwise as a long-term policy, could immediately alleviate the slump.[4] Interestingly, Keynes seems to have anticipated the later objection that the superior intervention to achieve full employment was domestic reflation rather than expenditure-switching protection.

Later theoretical analysis would then show how, under fixed exchange rates, reflation would cause external imbalance and therefore two policies, reflation and devaluation,

---

2. JOHN HICKS, ESSAYS IN WORLD ECONOMICS 48 (1959).
3. JOHN MAYNARD KEYNES, A TREATISE ON MONEY (1930).
4. For a more detailed analysis, see my 1993 Harry Johnson Lecture, *supra* note 1.

would be necessary to attain the two targets of external and internal balance. Tariffs would then appear to be inferior to the optimal combination of devaluation and reflation as the policy solution to unemployment.

But these insights came later. During the 1930s, Keynes's renunciation of the doctrine of free trade remained a potent source of disbelief in the doctrine. Combined with the massive unemployment unleashed by the Great Depression and the lingering aftermath of its distress, this apostasy turned the 1930s into the most deadly episode among the challenges to the doctrine of free trade.

The 1930s also witnessed the emergence of a threat to free trade from an altogether different direction. It came, not from economic circumstance driving revisionism, but entirely from autonomous theoretical progress: and that too in a curiously tangential way.

As the 1920s ended, the economists Edward Chamberlin and Joan Robinson independently came up with important theoretical analyses of imperfect competition, opening up to systematic exploration the middle ground between perfect competition and pure monopoly. The result was to undermine seriously the notion that market prices reflected social costs, calling into question the virtue of laissez-faire broadly, and, more narrowly, the merit of free trade.

The economists of the Chicago school correctly saw this as a threat that would legitimate interventionism. Accordingly, they proceeded to counter the threat by utilizing econometrics to demonstrate that, although markets seemed imperfect to the naked eye, in reality there was "as if" or "working" competition and that the imperfections were not of enough consequence to require policy intervention. Today, we talk not of "as if" competition but of "contestable markets": but, by and large, the key thought is the same. Despite Chicago's riposte, however, the skepticism about prices not reflecting social costs due to imperfect competition remained a potent source of erosion in the belief that free trade was a desirable policy.

The damage that the theory of imperfect competition did to the policy of free trade, however, cannot be argued to have been serious for two reasons. To begin with, the attack on free trade was of the nihilistic variety, hard to tap by specific interest groups. Besides, free trade was already imperilled far more seriously by Keynes's desertion, by the economic circumstance of massive unemployment, and by the new macroeconomic ideas that I have discussed. When economists returned to imperfect competition in the 1980s, the threat would become more serious: economic circumstance would have changed, with more compelling craving for protection by a number of oligopolistic industries. The idiom and substance of the new work on imperfect competition would be ripe for exploitation and capture by protectionist interests.

Let me then turn immediately to the postwar period. The 1950s through 1970s were decades of increasingly freer trade in the developed countries. Successive GATT rounds brought tariffs down to low levels. Trade expansion and income growth interacted to make this era a Golden Age with which the later, more troubled years in the 1970s would contrast unhappily. In this respect, this was again the heyday of free trade.

Increasing trade liberalization of the developed countries, however, contrasted with the turn to import substitution and protectionist policies in much of the underdeveloped world. The newly-independent developing countries were determined to use the "infant industry" argument freely to support nascent industries. Equally, they considered these industries to be necessary features of a modern economy and society, implying what international economists in the 1960s would call a "non-economic" preference. Besides, it was widely believed that the developing countries were characterized by a number of market imperfections, the principal ones being in factor markets: distorting intersectoral wage differentials, sticky wages such that the market wage exceeded the shadow wage, sector-specific minimum wages, and monopsony. All these implied market failure which would seem to require protection.

Interestingly, therefore, since trade theory often responds to reality, the major developments in the theory of commercial policy during this period came not from the developed country liberalization (though the growth of the European Common Market did stimulate the new theory of customs and preferential trade liberalization), but rather from the developing countries' concerns and policies of protection.

The theory of optimal policy intervention in the presence of non-economic objectives was fuelled by these concerns. Moreover, there was an explosion of theoretical developments concerning the optimal, and second-best, policies to remedy the distorting effects of several different factor market imperfections.

These developments, however, led to a most important twist in favor of free trade. Instead of underlining the need for protection to fix these market failures, these analyses led to the conclusion that the best way to address domestic distortions[5] (such as most factor market imperfections) was through domestic policy interventions,[6] and that in these cases protection was a second-best measure.

The net effect of this central insight was to narrow, not widen, the case for protection, since until then it was commonly believed that protection was the appropriate way to handle all kinds of market failure. Protection was seen to be the first-best policy only when the distortion was foreign, not domestic.

This insight applied equally to the important question of non-economic objectives. Symmetrically, the trade theorists showed that only when the non-economic objective was in the foreign sector (e.g., one wanted to reduce imports in the pursuit of "self-sufficiency"), the optimal intervention would be in the shape of protection; in other cases, it required domestic policy intervention.

Thus, the 1960s through 1970s were characterized by contrasting phenomena:

(i) a substantial threat to free trade from the demands for protection from the many developing countries which, in fact, embraced extensive protection as part of their developmental strategy of import substitution; and a reduced threat to free trade from the developed countries which pursued trade liberalization instead; and

(ii) a substantial concern with market failure (in factor

5. i.e., market failure occurring in domestic markets: e.g., labor market failure.

6. i.e., interventions *directly* in the domestic market where the failure occurred.

markets) and non-economic objectives, both stemming from developing country concerns, which implied increased legitimacy for intervention and presumably therefore for trade protection; and a strengthening of the theoretical case for free trade because theoretical analysis, stimulated by these questions, showed that the appropriate intervention required was mostly in domestic markets, *not* in the form of trade protection.

The 1980s shared with the 1950s-1970s the distinction of having the theory of imperfect competition applied to the free trade debate. But whereas the earlier period was concerned with *factor* market imperfections, the latter period was concerned with *product* market imperfections.

In turn, this reflected a shift from a preoccupation with protectionism in the *developing* countries to a preoccupation with protectionism in the *developed* countries. In fact, by the end of the 1970s, the combination of economic writings and extensive research into the costs of import substitution and the benefits of export promotion, and the example provided by the successful export-promoting nations of the Far East, had led to growing trade liberalization among the developing countries.

By contrast, the developed countries had lapsed into resorting to non-tariff barriers (NTBs) in lieu of the reduced tariffs "bound" at the GATT. In fact, the rise of NTBs in the shape of Voluntary Export Restraints and "administered protection" in the shape of the unfair use of fair trade mechanisms such as anti-dumping actions and countervailing duties, got quite out of hand in both the EC and in the United States, beginning in the early 1980s.

The growth of protectionist outcomes reflected increases in both the "demand for," and the "supply of" protection. The demand for protection had escalated to unmanageable levels owing to the Volcker-led recession. In addition, the United States suffered from serious dollar overvaluation during the first Reagan administration. The United States was also succumbing to a return of the "diminished giant syndrome."[7]

Intense competition among the firms of the developed

---

7. *See* Jagdish N. Bhagwati and Douglas A. Irwin, *The Return of the Reciprocitarians: U.S. Trade Policy Today*, 10 WORLD ECON. 109 (1987).

countries, and the desire to protect against inroads by foreign rivals, provided the context within which the theoretical developments, analyzing the interventionist implications of the large-group model of imperfect competition, and more pointedly of the small-group oligopolistic models, were set. They caught the protectionist fancy, met the protectionist needs, and therefore immediately took center stage of the public policy debate.

From the protectionist viewpoint, therefore, the imperfect competition models of the 1950s through 1970s were popular in the developing countries as legitimating (to the uncritical eye) their protectionism. The imperfect competition models of the 1980s were equally popular in the developed countries as legitimating (to the uncritical eye) *their* protectionism.

As for policy, the theorists of imperfect competition in product markets themselves have returned to the fold of free trade in one of two ways:

(i) they have followed the "Chicago school" approach of saying that the market imperfections do not amount to a hill of beans and should therefore be ignored by policymakers. This is the view embraced in varying degrees by economists, such as Gene Grossman, who argue, for instance, that rent-shifting towards oneself by using trade policy in oligopolistic industries, scientifically shown to be a good policy intervention, requires that there be significant rents to shift, but that arguably there are few such rents in reality;[8] or

(ii) they have followed the more conservative "public choice" school approach which essentially argues that the visible hand will strangulate: intervention will produce worse outcomes than the imperfect markets that we seek to fix. This can happen if you have a predatory view of government, which should not be surprising. But it comes from the public choice view that special interest lobbying will distort the outcome. The economist Paul Krugman has taken this view.[9]

---

8. Gene M. Grossman, *Strategic Export Promotion: A Critique*, *in* STRATEGIC TRADE POLICY AND THE NEW INTERNATIONAL ECONOMICS 47 (Paul R. Krugman ed., 1986).

9. Paul R. Krugman, *Is Free Trade Passe?*, J. ECON. PERSP., Fall 1987, at 131.

I should add however that the theoretical developments in the 1980s were not one-sided. The case for free trade was strengthened indirectly by the new interest in political-economy theoretic modelling that has by now become a compelling trend in economic theorizing more generally. In particular, the notion that the cost of protection was low and therefore unworthy of policy attention simply because the deadweight (i.e., efficiency) losses measured conventionally by economists were a small fraction of the national income, was seen as naive when the induced rent-seeking was taken into account.[10] The general theory of DUP (directly unproductive profit-seeking) activities, developed in the last decade, now considers alternative ways in which resource-using but zero-output-producing (and income-earning) activities can result from lobbying for policy change to redistribute income towards oneself (as with tariffs), or through lobbying to share in the rents or revenues from existing policies (as when lobbies compete for rent-fetching import quotas already in place).[11] Such DUP activities could add significantly to the deadweight cost of protection.

Thus the 1980s began by marrying the rising protectionist demand in the developed countries to the theoretical developments in the theory of imperfect competition in product markets. Protectionism did break out, making the period one of high threat to free trade. It ended, however, with the proponents of the theory backing off into free trade, and with the new developments in the political-economy theory of DUP and rent-seeking activities strengthening the case against protection.

## II. The New Challenges

New challenges have arisen, as I noted at the outset, proving the adage that a free trader's life will not suffer from the ennui that follows success. Demands for fair trade and harmonization of domestic policies and institutions in trading nations as preconditions for free trade have multiplied. Equally, there is widespread concern that trade liberalization

---

10. Anne. O. Krueger, *The Political Economy of the Rent-seeking Society*, 64 Am. Econ. Rev. 291 (1974).

11. Jagdish N. Bhagwati, *Directly-unproductive Profit-seeking (DUP) Activities*, 90 J. Pol. Econ. 998 (1982).

with the poor countries will impoverish the workers of the rich countries: a fear articulated eloquently by Ross Perot and Pat Choate in their denunciation of the North American Free Trade Agreement with Mexico as "a drastic and unfair scheme" that "will pit American and Mexican workers in a race to the bottom."[12]

### A. *Fair Trade as a Precondition for Free Trade*

The demands for partial or total harmonization of domestic policies, such as environmental and labor standards, and domestic institutions, such as retail distribution systems and technology policies, have grown recently for a variety of reasons, even though a trade economist would normally consider diversity among trading nations to be good, rather than bad, for mutually-gainful trade.[13]

Perhaps the most potent reason is that protectionist demands are more likely to meet with approval if, instead of saying that you need help because you cannot compete, you claim that the foreigner is gaining because of his resort to unfair trade. The enormous use of even conventional fair trade mechanisms in the 1980s, such as the levying of anti-dumping and countervailing duties (designed to offset foreign subsidies), is to be explained, not in terms of a genuine rise in the phenomena of predatory dumping and foreign subsidization, but as the capture of these mechanisms for protectionist purposes. Ironically, these fair trade institutions have been used unfairly to get protection rather than to maintain free trade.

In my view, however, a major contributory factor has been the globalization of the world economy and the fact that today, with the shares of trade to GNP having risen virtually everywhere in the last two decades, a great number of activities are now subject to international competition. Then

---

12. ROSS PEROT WITH PAT CHOATE, SAVE YOUR JOB, SAVE OUR COUNTRY: WHY NAFTA MUST BE STOPPED NOW! (1993).

13. Of course, harmonizing "standards" is not the same as harmonizing tastes or endowments. The latter will reduce gains from trade by reducing the diversity that produces trade. But getting another country to, say, adopt a minimum wage similar to one's own may increase one's gains from trade by increasing its demand for one's exports at given terms of trade.

again, among the OECD countries there has been considerable convergence of technical knowhow, partly brought about by the global activities of multinationals, so that more industries than ever before are "footloose." The number of industries that are "shiftable" due to someone else gaining a small new advantage has increased substantially.

The result is *kaleidoscopic comparative advantage*, where one day I have comparative advantage in textiles and you in shoes, tomorrow it may be the other way around, and then back again: a sort of musical chairs. Two consequences follow, each relevant to one of the two new challenges to free trade that I have distinguished.

First, in this threatening new world, producers will become very sensitive to the possibility that their foreign competitors are deriving their lethal competitive edge because of some "unfair" advantage that they "should not" have. Each will be looking over the others' shoulders to see if some domestic institution or policy is yielding such an unfair advantage. The fact that they do not have the same environmental regulations, that they do not have to meet the same safety standards, are among the most common complaints today in the countries which have stiffer standards, these being generally the OECD countries.

As the NAFTA "supplemental" agreements on these questions suggest, and since President Salinas of Mexico eventually agreed to raising the minimum wage in Mexico, it is only a short step, if not a slippery slope, to then asking that wages be raised in the poor countries if free trade is to be permitted with them: the infamous "pauper-labor" argument against free trade would be resurrected.

The second consequence is that the volatility of comparative advantage will lead to greater labor turnover and hence could impede the acquisition of skills on the job, thus flattening the growth curve of earnings for labor. A rolling stone gathers no moss and a moving worker gains no skills.[14] We may then have here a rather novel reason why trade may im-

14. *See* Jagdish N. Bhagwati and Vivek Dehejia, Freer Trade and Wages of the Unskilled: Is Marx Striking Again? (paper prepared for the Workshop on Trade and Wages at the American Enterprise Institute, Washington D.C., (Sept. 10, 1993) (on file with the *NYU Journal of International Law and Politics*).

pact adversely on wages, contributing to the second new challenge to free trade that I consider below.

Returning to the question of fair trade, however, it is evident that the belief that harmonization of domestic policies and institutions is generally essential to free trade is based on the erroneous notion that, without such harmonization, trade will cease to be a mutual-gain phenomenon and will instead lead to predation. Economic analysis can readily confirm that this is a false notion, in general. Diversity of domestic policies, institutions, and standards is generally compatible with gainful free trade.

Nonetheless, the popular assumption and demand today are that if your rival abroad has lower environmental and labor standards, that amounts to "social dumping" in your market and therefore you should be permitted to impose countervailing import duties. This notion, gaining ground in the EC and the United States, is based on obvious fallacies which fail to understand the following two propositions:

(i) the differences in standards in the same industries as between countries will reflect legitimately different priorities among nations in their objectives (as when Mexico may prefer to use its budget on prevention of pollution of a lake by chemicals from paper mills rather than to reduce $CO_2$ emissions from lead-containing fuel, whereas the United States prefers it the other way around); and

(ii) the same general standards, such as taxing of $CO_2$ emissions, will generally produce non-neutral effects on comparative advantage (whereas focus on cross-national within-same-industry comparisons of environmental regulations and such "burdens" focuses mistakenly on absolute advantage).

Besides, it is evident that this approach opens a Pandora's box. Once it is admitted, despite lack of economic logic, that cost differences due to differential domestic policies can be countervailed, even if it is originally in the context of "good" causes such as the protection of the environment and labor, it becomes an invitation for protectionists to cite a plethora of other reasons for imposing countervailing duties. This tendency is already manifest in the United States in regard to the highly competitive trade with Japan, as well as the NAFTA negotiations.[15]

### B. *Trade and Wages*

The other, equally potent, challenge to free trade comes from the fear of the income-distributional effects of trade with the South. Indeed, it is curious that there has been a reversal of attitudes among the countries of the North and of the South when trade between them is appraised. During the 1950s and 1960s, much of the South regarded trade with the North as a threat, not as an opportunity. Afraid that without protection they could not industrialize, the countries of the South turned to import substitution just as the countries of the North were opening to trade through extensive liberalization. Today, starting in the late 1980s, there have been fearful voices in the North, dreading trade with the poor South as a recipe for descent into the wages and working conditions of these impoverished nations, whereas many in the South now see trade with the North as an opportunity, not a peril. The contrast between the reaction of the U.S. Congress and its counterpart in Mexico to NAFTA is a stark example of this role reversal.

Interestingly, the major theoretical construct which, implicitly or explicitly, has provided the intellectual support and lent the air of plausibility to the fears in the North of immiserization of the unskilled from freer trade with the South has been the celebrated Factor Price Equalization (FPE) theorem. This theorem shows the adverse impact of free trade on the factor of production that is scarce in the country relative to the country's trading partners, i.e., unskilled labor in the North vis-a-vis unskilled labor in the South, relative to other factors of production such as capital.

It is interesting, of course, that when Paul Samuelson wrote his famous pair of articles on the FPE theorem in *The Economic Journal*,[16] the theorem was considered at first to be implausible and hence possibly wrong, and then to be little

---

15. The full range of analytical issues raised by the demands for harmonization of domestic policies and institutions is addressed in a number of papers being written under a Ford Foundation-financed project on Fair Trade Claims and Gains from Trade, directed by Professor Robert Hudec of the University of Minnesota Law School and myself.

16. Paul A. Samuelson, *International Trade and the Equalisation of Factor*

more than a theoretical curiosity. At the same time, when Wassily Leontief came up with his startling finding that the United States was exporting labor-intensive exports, the search for explanations primarily focused on the reasons the FPE theorem would *not* hold in the real world because one or more of the sufficiency conditions were unrealistic. In short, the approach to the FPE theorem was not that it defined reality; rather it was that the theorem provided the researcher with the necessary clues as to why it did not.

By contrast, the tendency today is to regard FPE as an inescapable destiny, with the (unskilled) proletariat facing an inevitable immiserization or, at minimum, a heavy drag on the rise of its real wages. But it is time to remind ourselves that the original view of the FPE theorem was correct: its assumptions are indeed extraordinarily demanding. It is not therefore a compelling, or adequate, guide to real-world phenomena.

Consider, in particular, just a few reasons why the presumption that real wages in the North will fall in convergence to the real wages in the South as a result of free trade can be considered unrealistic.

(1) Scale economies can cause every productive factor's real wages to rise. The reason is obvious: the redistributive effect which militates against the real wage of unskilled labor can be outweighed by the lifting-all-boats effect of scale economies on the marginal products and hence real wages of both factors.

The first theoretical demonstration of this phenomenon was by Panagariya who modelled scale economies in the old way where they were external to the firm but internal to the industry, thus retaining our ability to work with models of perfect competition.[17] Helpman and Krugman established the same conclusion in the context of scale economies internal to the firm, and hence under imperfect competition. Their analysis was, however, restricted to the special case where the output per firm did not rise with trade so that the added gains from trade were due to variety rather than re-

---

*Prices*, 58 ECON. J. 163 (1948); Samuelson, *International Factor-Price Equalisation Once Again*, 59 ECON. J. 181 (1949).

17. Arvind Panagariya, *Variable Returns to Scale in General Equilibrium Theory Once Again*, 10 J. INT'L ECON. 499 (1980).

duced cost thanks to scale.[18] Brown, Deardorff, and Stern have now produced a more general and illuminating analysis allowing for both these (and other) effects.[19]

(2) The lifting-all-boats effect can also arise if trade means more competition and discipline, causing efficiency effects. Again, this means that all factors can get their real wages improved. The econometric evidence of this hypothesis is hard to find. However, the economist Jim Levinsohn's recent work on the imports-as-competition hypothesis is successful in testing that hypothesis with the use of Turkish industrial data under near-controlled-experiment conditions.[20]

Thus, the heavy hand of the FPE theorem can be lifted: freer trade with the poor countries of the South does not have to impoverish our unskilled. In fact, the general consensus that seems to be building now among the labor and trade economists studying the 1980s experience of wages of the unskilled is that trade is *not* a significant cause of the phenomenon, and that the true culprit is technology and technical change. The new information technology is reinforcing Zvi Griliches's original view that skilled labor is relatively more complementary to capital: a computer can displace several unskilled workers and create a job for one skilled operator.[21] The impact of both sources of growth, capital accumulation and technical change, can then be to reduce, not increase, the real wage of the unskilled.

Nonetheless, the fear of freer trade with the South will continue to pose a challenge that will have to be met with careful theoretical and empirical arguments that admit the

18. ELHANAN HELPMAN AND PAUL KRUGMAN, MARKET STRUCTURE AND FOREIGN TRADE (1985).

19. Drusilla K. Brown, Alan V. Deardorff, and Robert M. Stern, Protection and Real Wages: Old and New Trade Theories and Their Empirical Counterparts (May 27-28, 1993)(paper presented at the CEPR/CESPRI conference on new trade theories, Bocconi University, Milan, on file with the *NYU Journal of International Law and Politics*). The computed effect of NAFTA on the real wages of US unskilled labor, when embodying scale economies, showed them to rise, not fall.

20. James Levinsohn, *Testing the imports-as-market-discipline hypothesis*, 35 J. INT'L ECON. 1 (1993).

21. Zvi Griliches, *Capital-Skill Complementarity*, 51 REV. ECON. STAT. 465 (1969). Also see the evidence in Alan Krueger, *How Computers Have Changed the Wage Structure: Evidence from Microdata, 1984-1989*, 108 Q. J. ECON. 33 (1993).

fear to be reasonable, given the decline in real wages of the unskilled during the 1980s, while allaying that fear by an objective analysis that shows the fear to be unjustified.