

# Trade and Wages: Choosing Among Alternative Explanations

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*Jagdish Bhagwati\**

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**T**he decline in unskilled workers' real wages during the 1980s in the United States and the increase in their unemployment in Europe (due to the comparative inflexibility of European labor markets vis-à-vis those in the United States)<sup>1</sup> have prompted a search for possible explanations. This search has become more acute with the evidence that the adverse trend for the unskilled has not been mitigated during the 1990s to date.

A favored explanation, indeed the haunting fear, of the unions and of many policymakers is that international trade is a principal source of the pressures that translate into wage decline and/or unemployment of the unskilled. As Bhagwati and Dehejia (1994) put it: Is Marx striking again?

I have examined the question of trade explanations at great length in Bhagwati and Dehejia (1994), and the

issue has been extensively treated in Bhagwati and Koster (1994). My conclusion is that the trade explanation is exceptionally weak for the 1980s, that there are good theoretical and empirical reasons why trade did not cause the adverse impact one might fear, and that the case therefore for the overwhelming role of technical change (biased against the use of unskilled labor) in explaining the misfortune of the unskilled is very strong, indirectly and directly as well.

Here, I recapitulate and evaluate the main linkages that have now been advanced between trade and real wages, extending the argumentation beyond that in Bhagwati and Dehejia (1994), originally finished in mid-1993, in light of further research that has emerged since then. I also take the opportunity to speculate about the future instead of confining myself to the 1980s experience and its explanation.

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\*Jagdish Bhagwati is Arthur Lehman Professor of Economics and Professor of Political Science, Columbia University.

NORTH-SOUTH TRADE AND THE FALL OF  
UNSKILLED WORKERS' WAGES:  
A STANDARD EXPLANATION

Most economists' favorite explanation has been that trade with the unskilled-labor-abundant South (that is, poor countries), as a result of their entry into world markets and the freeing of trade barriers against them, has led to the fall in the real wages of unskilled workers.

This argument requires, in general equilibrium, that the prices of the goods using unskilled labor should have fallen too—as I noted in 1991 when encountering the Borjas-Freeman-Katz paper (1991) asserting that trade was the cause of the decline in real wages without mentioning, leave aside examining, the behavior of goods prices (see the detailed critique in Bhagwati 1991a and 1991b, and subsequently in Bhagwati and Dehejia 1994 and Bhagwati 1994). I conjectured (1991a) that the goods prices had actually gone the other way from that required by the assertion.

The detailed empirical investigation by Lawrence and Slaughter (1993), reported again by Lawrence in his paper for this conference, confirms my conjecture for the United States. The subsequent attempt by Sachs and Schatz (1994) to overturn the Lawrence-Slaughter findings will not hold water. It relies on removing from the data set the prices of computers, a procedure that can be debated. Even then, the new data set yields a coefficient of the required sign that is both extremely small and statistically insignificant. Some newspaper accounts (for example, the recent survey in the *Economist* of North-South issues and a recent *Financial Times* column by Sir Sam Brittan) have reported this “finding” without realizing that, while Noam Chomsky correctly argues that two negatives make a positive in every human language (while two positives do not make a negative in any), the two negatives of a small coefficient, and a statistically insignificant one to boot, do not add up to positive support for the assertion at issue!

Lawrence (this conference and 1994) notes this and also reports that the goods price behavior in Germany and Japan, with and without computers, does not support the trade explanation either. Besides, the shifts in factor ratios also do not support the explanation for the U.S. data.

In short, the necessary empirical evidence for the absolutely critical element in this particular trade explanation is, at worst, absent and, at best, exceptionally weak. The news is not good then for the proponents of the trade explanation along these North-South lines.

Besides, as noted in Bhagwati and Dehejia (1994), even if the goods prices were behaving as required, the conclusion that the result would be a decline in the real wages of unskilled labor requires added assumptions familiar to the students of the Stolper-Samuelson theorem, many of which can be violated without difficulty in the real world. We cite, in particular, a computable-model-based study by Deardorff et al. of Mexico after the North American Free Trade Agreement, which managed to show even a rise in real wages of unskilled labor in the United States by relaxing one particular assumption of the Stolper-Samuelson analysis: the assumption of perfect competition.

Three further comments are in order:

(1) Why have goods prices of labor-intensive goods not fallen during the 1980s? I suspect that in the case of traded goods, at least one major explanation is that the VERs (voluntary export restrictions) on textiles, shoes, and the like, as well as the antidumping actions against several other products that broke out in the early 1980s, may have led to restraints on exports that would translate into a (countervailing) rise in U.S. import prices, and hence in U.S. domestic prices. Ed Leamer has reminded us that the Asian competition in textiles and apparel broke out seriously toward the end of the 1970s, suggesting that the decline in real wages in the 1980s was a lagged response to that. But this explanation will not work: the swift response of the industry to the increased competition from Asia was precisely to tighten the Multi-Fiber Agreement's restrictiveness to offset the potential price fall, leading to the anti-Stolper-Samuelson-explanation price behavior that Lawrence has observed for several countries. The restrictiveness of trade barriers is therefore likely to have increased as required. Such elasticity and also selectivity are in fact characteristics of the “administered” protection as embodied in antidumping actions and VERs and make them both a preferred instrument of protection by industry and also a serious hazard to free trade.

(2) Can we then be sanguine about future prospects for this trade explanation? I believe that we can. Let me explain.

The typical worry is, What happens when China or India comes on board with the trade liberalization that is occurring in many countries? But this concern presupposes that the resulting trade expansion will typically be in the exchange of unskilled-labor-intensive for unskilled-labor-unintensive goods. But there is a great continuum of goods, and considerable trade takes place in differentiated products among “similarly endowed” countries at all levels of per capita income. One could then accommodate huge increases in trade without the prices of unskilled-labor-intensive goods falling.

Just suppose, however, that they will tend to do so. Then there may well be an asymmetry with the 1980s. If the Uruguay Round is ratified, there will now be restraints on VERs—only one will be allowed eventually per contracting party—and the Multi-Fiber Agreement will be phased out in ten years. The ability to offset potential price competition from the South, in the way we did in the 1980s, may no longer be possible.

But even if prices did fall in the end for imported unskilled-labor-intensive goods in the next decade, recall that it is by no means inevitable that this will translate into a fall, rather than a rise, in the real wages of the unskilled in the OECD countries. Bhagwati and Dehejia (1994) have noted several reasons why, as Stolper and Samuelson themselves have observed, all factors of production can gain from the fall in import prices and the associated trade expansion that trade with the South may bring. And these reasons are not at all unrealistic, as I have already indicated. It is, then, simply a fallacy to think that the hand of the Stolper-Samuelson theorem is an iron fist aimed at our unskilled workers.

(3) But whether one is, in my view, an unnecessary pessimist or an optimist on the issue, one policy option follows: we ought to support, not oppose, policy programs to limit the growth of population (and hence unskilled workers) in the South. The optimists will support such programs because they are surely desirable for the large countries such as India and China. This is the considered

view of these countries’ policymakers, as evident from the Cairo Conference on population this summer. The pessimists should support them in our own interest as well. Let me explain why.

If immigration, which directly brings these aliens into our midst, cannot be totally controlled by us and borders often tend to get beyond control because our political traditions prevent us from shooting at illegal immigrants coming across borders, and if trade is also feared to be simply an indirect way of letting in such alien labor, both phenomena then amounting to pressure on the wages of our unskilled, then the situation is fairly grim. This is especially true if the decline of the ability to redistribute prevents us from compensating the decline in real wages of our unskilled. In that case, we can only hope for lower pressures from the unskilled abroad. This implies our assistance in accelerating their capital accumulation, on the one hand, and in effectively controlling their population growth, on the other.

The shift from the Bush administration’s more complacent attitudes on population control, prompted largely by the religious right, to the Clinton administration’s energetic support of effective population policies at Cairo, prompted partly by liberal views of women’s rights, can then also be explained as a response to the fears of the adverse effect of trade with the South on the real wages of our unskilled.

#### “KALEIDOSCOPIC” COMPARATIVE ADVANTAGE AND HIGHER LABOR TURNOVER: AN ALTERNATIVE EXPLANATION

Bhagwati and Dehejia suggest an alternative trade explanation for real wage decline. The explanation has essentially four parts:

- Greater internationalization of markets—rising trade-to-GNP ratios, greater role of transnational corporations in globalizing production—together with the diffusion of production know-how (à la Baumol et al.) within OECD countries and the increased integration of world capital markets (à la Jeff Frankel) has narrowed the margin of comparative advantage enjoyed by many industries in any major OECD country. There are, therefore, more footloose indus-

tries now than ever, leading to greater volatility in comparative advantage, that is, more “knife-edge” and hence kaleidoscopic comparative advantage, between countries.

- This will lead to higher labor turnover between industries and hence more frictional unemployment.
- Increased labor turnover could flatten the growth profile of earnings because of less skill accumulation.
- These three factors could also explain the increasing wage differential, *ceteris paribus*, if skilled workers have greater transferability of workplace-acquired skills than do unskilled workers.

This theory has to be investigated; students of mine at Columbia University are doing this. For example, Eugene Beaulieu is using microeconomic data from the 1988-91 version of the Labor Market Activity Survey in Canada to examine the hypothesis. The survey has a large and rich data base and detailed information on several personal characteristics of workers, which will enable Beaulieu to trace the labor market experience of a sample of workers before and after the Canadian-U.S. Free Trade Agreement. He is also working with alternative measures of comparative advantage and changes therein.

I might add that there is suggestive evidence on elements 3 and 4 of the explanation above in labor studies, as noted in Bhagwati and Dehejia (1994), and also in Lisa Lynch’s paper for this conference.

#### RENTS AND UNIONIZATION

The above arguments are economy-wide trade explanations. But there are industry-specific trade explanations, of course, describing what happens to industries impacted by import competition.

Where these are competitive industries, clearly the earnings of the productive factors within them will be reduced at the outset. When the industry is wiped out, these earnings will go to zero, of course! Nevertheless, the overall final effect on real wages of these factors, including the unskilled, cannot be determined without finding out the general-equilibrium implications of the parametric change, which will take into account, for instance, the absorption of the displaced factors elsewhere in the economy,

which means going back to the economy-wide explanation.

What does the presence of unions, and hence of rents to the unskilled in the unionized sectors, do for our argument? There are indeed models of several kinds of imperfect competition in factor markets in the general-equilibrium analysis of international trade that could be extended to address the question of the overall impact of changing goods prices on real wages, but the answers can be quite unexpected. For example, if unions maintain a wage differential between homogeneous insiders and outsiders, the conventional inferences such as that a fall in the relative price of the unionized sector’s good will lead to a fall in its relative production, and therefore presumably a fall in the unionized factor intensively used in it, will not necessarily hold, undermining the Stolper-Samuelson-type argument (inferring factor reward changes from goods price changes).<sup>2</sup> To my knowledge, no analysis of the effects of price declines in unionized industries such as autos satisfactorily addresses these deeper analytical issues that arise when the effects of unions are considered in an appropriate fashion.

Then again, we know that during the 1980s, the unionized sectors in the United States, especially autos and steel, were politically powerful enough to shield themselves greatly through antidumping actions, VERs, and OMAs (orderly marketing agreements) from the effects of foreign competition (which, incidentally, was overwhelmingly from the North, not the South). Given both the small percentage of the U.S. unskilled labor force in unionized manufacturing sectors and the substantial cushioning of competition through trade restraints in any event, it is highly unlikely that the analysts can demonstrate (through this route) a significant role for trade in affecting real wages in the United States during the 1980s.<sup>3</sup>

#### THE QUESTION OF INTERNATIONAL CAPITAL MOBILITY: GLOBALIZATION AND REAL WAGES

So far, I have considered only the question of a direct link between trade and real wages. But many observers fear that international capital mobility also adversely affects the real wages of the unskilled.

Thus, a major worry of the unions is that the outflow of capital drives down real wages of unskilled workers. However, during the 1980s, more direct foreign investment came into the United States than went out, both during the period and relative to the 1950s and 1960s. Moreover, the United States ran a current account deficit, so that foreign savings came in, if that is the measure one wants to work with instead. The facts are therefore against that hypothesis.

But again, if one uses a bargaining-type of framework, it might be said that the bargaining power of employers has increased vis-à-vis that of employees because employers can increasingly say in a global economy that they will pack up their bags and leave. Therefore, for any given output, its distribution between unskilled-labor income and other income, including profits, may have shifted against unskilled labor.

Perhaps the labor economists at the conference can tell us whether there is persuasive evidence for such a bargaining model as a determinant of relative rewards between factors within any U.S. industry. They might also tell us whether, for such industries, there is evidence that a shift of location elsewhere has altered the distribution against unskilled-labor income.<sup>4</sup> I myself am unaware of any systematic empirical or theoretical work on these questions to date.

At a time when total union membership is down to less than 15 percent of U.S. private employment, however, I doubt if this explanation is likely to be important, unless of course the decline in unionism is itself attributed in a significant measure (as I believe it cannot be) to the loss of bargaining power stemming from firms' threats to exit to other countries.

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## ENDNOTES

1. Note that this contrast between the United States and Europe is just that, and is supposed to explain only the differential impact of technical change and trade on wages in one country and on unemployment in the other. This labor market explanation is almost a cliché by now, having been propounded by virtually every economist who has spoken on the issue in the last several years. Among the more recent writings on the subject are popular pieces by myself, Krugman, and many others.

2. There is, in fact, a considerable literature on this subject, with contributions by Steve Magee, Murray Kemp, Jagdish Bhagwati,

### *Note 2 continued*

T.N.Srinivasan, Ronald Findlay, and Ronald Jones in the 1970s.

3. For a complementary discussion of rents that cites the broader literature on the subject (including efficiency-wage arguments), see Bhagwati and Dehejia (1994).

4. The threat of exit may exist, of course, even if no exit has actually occurred in the industry.

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