

Notes for Lectures 12 and 13
Globalization, Inequality, and Poverty
Economics 181
International Trade

I. Documenting the increase in wage inequality and stagnation in average wages:

* Although average real wages in the US doubled between the end of World War II and the early 1970s, real compensation was only 6 percent higher in 1991 than in 1973.

* Furthermore, real wages only increased for highly educated workers--since 1973, real wages for blue collar workers have actually fallen.

* Between 1979 and 1990 the weekly earnings of college graduates increased 2 percent a year. Between 1979 and 1993, real wages of high school graduates fell by 20 percent.

* This rise in inequality stands in sharp contrast to the dramatic fall in inequality during the 1940s and relative stability of wage inequality during the 1950s and 1960s.

Table 1 traces the changes in wages and employment by decade, from the poorest (bottom percentiles) to the richest (top percentiles). What does it show?

- (1) Increasing inequality in wages (men).
- (2) Increasing inequality in employment opportunities (men).
- (3) Increasing inequality in employment opportunities for wives of these men.

All three trends above contribute to greater inequality in family income in the US.

In Europe, although wage inequality increased less dramatically, the trend took the shape primarily of declining employment opportunities for the less skilled. In 1973 the rate of OECD-Europe unemployment was 2.9 percent. Between 1983 and 1991 it averaged 9.3 percent.

In a number of developing countries, wage inequality also rose (see data on Mexico).

Remainder of class will mostly focus on USA.

II. "Supply-side" explanations: Supply of skilled workers and immigration.

What if the supply of skilled workers fell, while the supply of unskilled workers rose? It turns out that this explanation is not valid:

A. Supply of skilled versus unskilled. Table 2 shows that explanations based on labor supply cannot explain the observed increase in inequality.

B. Globalization of the local labor force: immigration. There was a huge increase in immigration during the 1980s, particularly immigration of less-skilled workers. In 1980, only 13 percent of workers with less than a high school education were foreign-born; by 1990, nearly 25 percent of those without a high school degree were immigrants.

Immigrants have affected the US wage structure in two distinct ways:

- (1) Since more recent immigrants are less skilled than earlier waves, this has affected the relative wage structure. Chart 1.

(2) Immigrants also affect inequality by affecting the earnings of similarly skilled US workers (ie the competition may drive down wages of natives). What is the evidence on the extent to which immigration drives down wages of less educated workers? The evidence is in fact contradictory:

(a) Some studies look at the local labor market effects of large influxes of migrants. These kinds of studies find very small effects.

One study examined what happened when in April 1980 Castro declared that Cuban nationals could freely leave from the port of Mariel. Almost no change in wages and employment in Miami.

(b) Testing for economy-wide effects: some other studies, examining the entire economy, do find a bigger effect--immigration may explain a third of the 10 percentage point decline in the wages of high school drop-outs during the 1980s. So it is likely that immigration has had some impact.

III. "Demand-side" explanations.

Trade flows

A. Why might trade flows provide the explanation?

Preliminary evidence would seem to indicate that trade could be the culprit in explaining increasing income inequality:

- Trade between low and high income countries increased in the 1980s and 1990s.
- Chart 2 shows that the wage differential between educated and uneducated workers has moved very much in line with the US trade deficit (as a percent of GDP).
- Ed Leamer points out that if you disaggregate the data enough, you see falling prices for unskill-intensive goods—consistent with HO theorems linking trade with inequality.

B. Evidence Against Globalization as the cause:

- If S-S effects were present in developing countries, we would expect inequality there to fall. It's not falling—suggesting a more general skill biased technical change.
- The HO framework says the following: a country which is relatively well endowed in skilled labor exports skilled-labor intensive goods, leading it to shift production towards skill-intensive sectors. This in turn raises the demand for skilled workers and lowers it for unskilled workers, leading to greater wage inequality. But the higher wages of skilled workers will in fact reduce the skilled to unskilled wage ratio across all industries. So if our HO theories do explain increasing wage inequality, we would expect the following:

(a) an increase in the employment share of skill-intensive industries.

(b) The ratio of skilled to unskilled employment declining across all industries.

BUT we do not see this. In particular, the ratio of skilled to unskilled employment is increasing across the board--despite the relative wage increase for skilled workers (FROM Previous class handout). This suggests that other factors--such as technological change--are responsible for the increasing wage gap.

- Paul Krugman and Robert Lawrence argue that:

Although the major share of trade is in manufactured goods, the trade balance in manufactures cannot explain the declining share of manufacturing in GDP. As Chart 3 indicates, the share of manufacturing in GDP has declined by 6.6 percentage points since 1970, while the trade balance in manufactures only deteriorated by 1.6 percentage points of GDP. In other words: small increase in trade deficit can't drive large fall in manufacturing employment (Krugman: "tail can't wag the dog").

So Why the deterioration in manufacturing shares?

Even if the effect so far has been small, it will be bigger in the future as large labor-intensive countries join the world trading system.

Focus on Foreign Investment

In part drawn by low labor costs and standards, multinational corporations (MNCs) are perceived to have relocated towards low-wage countries, contributing to the decline in blue collar wages at home. This international outsourcing could possibly explain both the decline in blue-collar wages and the fall in the ratio of blue to white collar workers.

If outsourcing is important, the decline in blue-collar intensity in the US should be associated with an increase in blue-collar intensity abroad. We can use the evidence to distinguish between two competing hypotheses:

- (1) FDI IS THE CULPRIT
- (2) TECHNOLOGY IS THE CULPRIT

What does Table 3 show?

BOTTOM LINE: although trade and foreign investment may play an important role, hard to prove it one way or the other...Nevertheless, trade effects are likely to be even more important in the future as large labor-intensive countries such as India and China become more integrated into the world trading system. Globalization probably accounts for 10 to 20 percent of the observed increase in inequality, more than Kline's conservative estimate (see attached) but not most of the story.

IV. Policy Implications: What should be done?

(1) Protection. No economists are advocating this, NOT even the authors (such as Adrian Wood, in your reading), who actually believe that trade is a major explanation for increasing inequality. So among economists, those who believe that trade policy caused inequality to increase and those who don't actually agree on the policy recommendations, which makes the debate over causes somewhat silly from a policy viewpoint. So what do the economists advocate?

(2) Believe in the market and do nothing. If market forces truly work, then the increasing returns to college education and collapsing market for lower skilled workers should lead more workers to go to college, reducing the pool of unskilled workers.

(3) With credit market constraints and uneven educational opportunities across regions (schooling quality is a function of local conditions, not uniform), the market is very unlikely to correct the problem.

As the income of current unskilled workers falls, particularly in the face of imperfect credit markets, then borrowing against future earnings may be difficult--making it impossible to finance the additional education necessary to escape the lower wage ranks. This problem is compounded by the fact that primary and secondary education is largely locally financed, making it harder for the unskilled or their children to acquire an education in the early years.

One solution: reducing credit market imperfections to allow people to borrow against future earnings--ie increase opportunities to borrow for college.

(4) Worker training.

Chart 5 shows that both German and Japanese firms provide much more worker training than do US firms. As a result, these firms can treat college-educated and non-college-educated workers as much closer substitutes in production than US firms. Another difference is that in the US, worker training is concentrated among the most skilled workers--exacerbating the wage and skill gaps. To what extent should we expand training opportunities for workers, and what should the government's role be?

(5) While the impact of trade on the overall wage gap may be quite modest, it is clear that increasing international competition has had an impact on the wages of workers in specific sectors such as textiles, apparel, autos and steel. Increased worker training in these industries could take two forms.

- (a) Enhanced skills training to increase productivity could allow workers and firms to continue competing by differentiating their production and substituting skilled labor and capital for unskilled labor:
 - * In autos, this has occurred through a shift to just-in-time production and greater employee involvement in quality control and decision making. This change requires extensive cross-training of workers, enhanced communication, and problem-solving skills.
 - * In steel, where going for a market niche strategy has worked for mini-mills, workers need to be able to adjust to shorter production runs with much greater variation. Again, this involves increased cross-training.

(b) A second form of training would be targeted at displaced workers.

(6) The experiences of other countries suggest that effective workplace training programs are characterized by three factors:

- (a) coinvestment: both workers and firms invest in training.
- (b) certification: a national system which recognizes the value of training through testing and has an accreditation program for general skills acquired in the workplace would encourage workers to accept lower wages during training because they would know that they can document their investment. This is important because it would enable employers to share the costs of training and make them more willing to invest in general training--which can be lost when workers move on to other enterprises.
- (c) Codetermination: training programs should be jointly designed by workers and employers, to guarantee that workplace training is not too narrow in content, or too firm-specific.

Despite the promise of worker training, evidence to date on the returns to firms from such investments is not large. In general, on-the-job training to enhance skills of existing workers seems to work better than retraining programs to move laid-off workers back into the labor force.

I. Why should we care about poverty, rather than inequality?

In policy circles, focus shifting away from emphasis on inequality towards emphasis on poverty. Back to the Pareto principle: if change makes someone (ie a rich person) better off without making anyone else worse off (ie a poor person) it should be a good thing, not a bad thing. Inequality should only be bad if it is driven by falling incomes for poor, rather than rising incomes of rich. So we should be focusing on bottom 10 or 20 percent of income distribution.

II. Evidence presented in Dollar and Kraay

A. Globalizers grew faster

- Define globalizers as top 1/3 of developing countries as defined by increase in trade/GDP
- Turns out they also had big reductions in tariffs
- Point is that the globalizers grew faster relative to the non-globalizers. What does this have to do with poverty?

B. Growth is good for the poor

- What happens to welfare of the poorest versus the richest when countries grow?
- IE is growth biased towards one group or another?
- Dollar and Kraay finds the answer is no: percentage changes in incomes of the poor on average are equal to percentage changes in average incomes. So growth appears to be neutral vis-a-vis inequality. When country grows, poor benefit too

C. If growth is good for the poor, then what are the links between globalization (defined as the growth in the trade share of GDP) and poverty?

Could be two:

- (1) globalization leads to growth which leads to poverty reduction
- (2) globalization directly affects poverty.

Authors find no evidence of any direct link (Figure 5, regression results) but argue that there is an indirect link (Figure 8) through the positive impact of trade on growth

D. How should we measure globalization? Dollar and Kraay focus on trade volumes, not tariffs.

E. Two important countries: China and India

- If look at global changes in poverty and inequality, China and India key. Excluding those two, inequality is rising and so is poverty.
- Including those two, inequality is now falling and so is poverty. Driven by success of China and India in recent years. Dollar and Kraay argue that two country's recent positive experiences associated with opening up to global markets.

III. Rodrik's critique

A. Who are the globalizers?

Rodrik argues that the author's choice of globalizers is completely arbitrary. The pictures I showed earlier on the growth rate of globalizers versus non-globalizers based on top 1/3 of country growth in trade in GDP. Rodrik changes the definition slightly: take top forty countries between 1980-84 and 1995-97, either in terms of increase in imports/GDP OR reduction in tariffs, and then make the

globalizers those who are the intersection of the two. Get the unimpressive growth record in Chart 1. OR look at ten countries with biggest percentage reductions in tariffs since early 1980s. Then get even less impressive growth record as indicated by Chart 2.

So...impressive record is not robust with respect to picking globalizers....

B. The right way to measure globalization isn't by using trade shares in GDP. Dollar and Kraay argued that outcome measures better—only a weak correlation between tariffs and trade. Rodrik argues the opposite: need to use tariffs, not outcomes. He shows a strong negative correlation, as expected, between M/GDP and tariffs....so the authors used the wrong measure of globalization.....

C. Back to the case of India and China

- In India and China, the main trade reforms took place about a decade after the onset of higher growth. Moreover, these countries' trade restrictions remain among the highest in the world.
- The Chinese Case is known well enough. Increase in growth started in late 1970s with the introduction of the household responsibility system in agriculture and two-tier pricing. Trade liberalization did not start in earnest until much later, during the second half of the 1980s and especially during the 1990s, once the trend growth rate had already increased substantially.
- The case of India is shown in Chart 3. As the chart makes clear, India's trend growth rate increased substantially in the early 1980s. Meanwhile, serious trade reform did not start until 1991-1993. The tariff averages displayed in the chart show that tariffs were actually higher in the rising growth period for the 1980s than in the low-growth 1980s.
- Of course, both India and China did participate in international trade and by that measure they are both globalizers. But the relevant policy question for policy makers is not whether trade per se is good or bad, but what the correct sequencing of policies is and how much priority deep trade liberalization should receive early on in the reform process. The experiences of India and China are suggestive of the benefits of a gradual, sequenced approach.

IV. Concluding Comments

- Poverty is certainly as important to consider as inequality in examining the impact of globalization
- True that a better measure of globalization is tariffs rather than trade shares; but tariffs also imperfect. I would look at both.
- No obvious direct linkages between poverty and globalization.
- What about indirect linkages? Does trade lead to growth, which in turn reduces poverty?
- Yes, growth associated with a reduction in poverty

- Evidence on growth and trade linkages are unclear. Although we can criticize dollar and kraay, no one has yet found convincing evidence that globalizers grow less quickly...
- Rodrik is right in one respect: those who have used globalization to their advantage, like the US, China, Japan, have not done so in conventional sense of wholly embracing free trade. A peculiar form of globalization.