Trade opening transformed Indian industries

When India started opening its markets to international trade in the 1990s, what impact did it have on manufacturing and labor's share of income? The answer lies in an analysis of plant-level data, which requires classifying industries as labor, human capital resource, or technology intensive. But first, what pushed India to open its doors?

Let's hear from Matthias Helble, co-chair for research at the Asian Development Bank Institute:

> **Until 1991, India's domestic industry was mostly insulated from world markets by a high wall of tariffs and nontariff barriers, and the public sector had a central role. But the results were not what had been hoped for. Instead of stimulating domestic industries, insulation stifled them because the economy became dominated by rent-seekers.**

In 1991, the economy reeled from external economic shocks and the government approached the International Monetary Fund and the World Bank for support. Both agreed to help India but with conditions: the economy had to be restructured and opened to international trade. The government agreed and began opening up the markets gradually, first for intermediate goods and capital goods. Tariff rates declined substantially in the 1990s, but it was not until the 2000s that the government decided to remove a large number of nontariff restrictions. At the same time, the market for consumer goods was opened, leading to a sharp rise in imports.

Domestic producers faced significant competition as tariffs fell in India's most important industries. The decline was most dramatic in the apparel industry, which employed roughly a quarter of all manufacturing workers. India's trade with the rest of the world surged from the early 2000s.

A study by the Asian Development Bank Institute focuses on how India's integration into the world economy changed manufacturing in the country. The study builds on assessments of the impact of trade opening on jobs and labor share, one of which showed that trade reforms led to reduced labor share—the share of labor's income in firm's output or sales—because workers' bargaining power weakened.

Helble talks about the work he did with Prachi Gupta, a researcher at ADBI when the study was published:

> Using data from 1998 to 2008, we show that a decline in output tariffs led to a rise in labor share. This suggests that increased foreign competition led to gains for workers. However, a fall in input tariffs resulted in declining labor shares. Although the exact cause for this is difficult to pinpoint, one explanation could be that firms had better access to inputs, including machinery, and therefore used them more intensively at the expense of labor.

More precisely, a 10% decline in output tariffs led to a 0.21% rise in labor share of income, while a 10% decrease in input tariffs led to a 0.14% decline in labor share of income for large manufacturing plants. Overall, a decline in trade protection—measured by reduced tariff rates—led to a rise in labor share of income in manufacturing.

Helble continues:

> To draw a more nuanced picture of the effects of trade opening on India's economy, industries can be classified as low-skilled labor, human capital, and technology intensive. A decline in both input and output tariffs led to an increase in labor share in labor-intensive industries. In contrast, a decline in both kinds of tariffs brought about a decrease in labor share in human-capital–and technology-intensive sectors.

Further classification into low- and mid-low–technology industries shows that as output tariffs fall, labor share rises in low-tech industries, while a decline in input tariffs leads to a rise in the labor share in mid-low-tech industries. Labor share falls as technology intensity rises, suggesting that as industries become more technology intensive, tariff liberalization leads to a decline in the labor share of income.

How India's states implement labor laws also makes a difference. Helble explains:

State governments can amend the Industrial Dispute Acts, which govern industrial relations. As a consequence, states have more or less flexible labor laws. Our study shows that in states with inflexible labor laws—that is, states that are not employer friendly—a decline in input and output tariffs led to a decline in the labor share of income. The reason was plants decided to adopt production methods using less labor.

This episode was based on research by Prachi Gupta, a research associate at the Asian Development Bank Institute at the time the work was published, and Matthias Helble, senior economist and co-head of research at ADBI.

Listen to podcast

- https://soundcloud.com/adbinstitute/trade-opening-transformed-indian-industries/

Read the working paper

- https://www.adb.org/publications/adjustment-trade-opening-labor-share-india-manufacturing-industry

Know more about ADBI's work

- https://bit.ly/2JUjwsC
- https://bit.ly/2LF86y8