Adjusting to Trade Liberalization: Reallocation and Labor Market Policies

by Kerem Cosar

Discussion by Cecilia Fieler
University of Pennsylvania
Cosar presents an open economy model to study labor reallocation dynamics following trade liberalization. The model aims to capture three features of the data:

1. Slow net absorption of labor into comparative advantage sectors.
2. Workers who move sectors have longer unemployment spells and higher wage losses.
3. Older workers face a higher risk of not finding reemployment after displacement.

The paper well organized. The model is parsimonious and clearly presented.
Trade Liberalization

- Trade liberalization decreases the domestic price of the comparative disadvantage sector: \( p_d = (p_1, p_2(1 + \tau)) \).
- It decreases the profitability of sector 2, i.e., it increases threshold \( \bar{z}_2t(h, g) \).
- Existing partnerships are broken in sector 2, and fewer firms post vacancies in sector 2.
- This decreases workers outside option, which in turn increases threshold \( \bar{z}_2t(h, g) \).
- More firms post vacancies in sector 1, and more partnerships are formed.
- Young and old are differently affected
  - Partnerships with the young in sector 2 are more likely to be broken because they have low \( h_2 \).
  - Old workers who switch from sector 2 to 1 are more likely to experience larger wage losses because the difference between \( h_2 \) and \( h_1 \) tends to be larger for the old.
Young agents face a probability \( \delta_a \) of becoming old, and the old face a probability \( \delta_m \) of dying.

Young agents have less experience (endogenous) a lower probability of death (exogenous), a higher probability of involuntary job destruction (exogenous, calibration).

These three features give the young have more incentives to move across sectors after a trade liberalization.

They have higher job destruction rates, and the lower probability of death increases their willingness to learn in the new “hot” sector.
Cosar calibrates the model to the Brazilian data, and looks at the transition dynamics in exports, unemployment and output.

He performs counterfactual simulations, and concludes that Brazil would have done better with a targeted unemployment policy.

In 1990, under the Collor administration, Brazil removed all its non-tariff barriers to trade. Between 1987 and 1995 tariff barriers decreased from 63% to 11%. Decreases were concentrated in the Collor administration (1990-1992).
My plan

- Other reforms: Policies aimed at curbing inflation.
- Evidence on reallocation within and across sectors using trade data.
Exports/GDP and real exchange rates

Graph showing trends in exports/GDP and real exchange rate over years.
Menezes Filho and Muendler (2007) find that sector differences in tariffs are associated with transitions to the informal sector.
Note: The model predicts an initial sharp drop in GDP.
Other changes: Inflation combating policies
Other changes: Inflation combating policies

Note: The correlation between inflation and unemployment is -0.45 (0.03), and of exports/GDP and unemployment is 0.44 (0.04).
Within versus across product reallocation
The distribution of imports and exports is more concentrated in 1987 than in 2000. (The figure excludes oil)
Sectors with increases in exports
Manufacturing sectors with increases in exports

Manufacturing only

\[ \text{ln(exports2000 - exports1987)} \]

\[ \text{sign()} \cdot \text{ln(|imports2000 - imports1987|)} \]
Manufacturing sectors with increases in imports