Tufts University: Trading Down: Unemployment, Inequality and Other Risks of the Trans-Pacific Partnership Agreement

Capaldo, Izurieta and Sundaram

Key points

- Capaldo, Izurieta and Sundaram, use the United Nations Global Policy Model, an inappropriate model for assessing the economic effects of trade or a trade agreement (UN agencies do not use this model when analysing changes in trade policy). Almost all trade models "shock" the model by changing trade barriers, and relative prices of imported and domestic goods, and then allowing the economy to adjust with movement of labour, land and capital.
- Capaldo et al instead shock their model by introducing a change in exports (with the export values taken from Petri et al estimates of the TPP – modelling criticized by Capaldo et al). They assume that labour and capital doesn't respond to the change in exports. As a sector declines for example, people previously employed in that sector stay unemployed rather than taking employment in growing sectors. New competition from trade liberalisation therefore lowers wages and causes unemployment.
- Capaldo's model suggests that employment declines around the world due to the TPP. In other words Capaldo estimates that TPP will cause a global recession.
- There is a considerable amount of empirical evidence showing the exact opposite. For example, in New Zealand as the wool sector declined new jobs were created producing dairy products, kiwifruit and wine. Generally exports tend to increase when barriers to trade are lowered, and evidence shows that wages are higher in export-intensive industries.
- Capaldo used the same model and approach to estimate changes to GDP, employment and inequality from the Transatlantic Trade and Investment Partnership, with similar results. Economists from the European Center for International Political Economy (ECIPC) studied Capaldo's methodology, the model used and data, and concluded that:

  > "The Capaldo study is associated with such serious flaws that its results should neither be regarded reliable nor realistic. It fundamentally contradicts all other existing studies of the effects of FTA's and the reality of what liberalised trade actually brings about."

- The ECIPC economists point out that:
  - The model is ill-suited to analysing trade reforms.
  - Model deficiencies are covered up with unrealistic assumptions.
  - Capaldo's thesis is not supported by history.
  - Capaldo's results conflict with the United Nations global rebalancing assessments based on the same model.

  - Economists are denied access to the model to try to replicate Capaldo's findings.

- Other criticizers of Capaldo modelling include Noble Prize-winning Paul Krugman.
- Capaldo et al have two key criticisms of Petri, Plummer and Zhai, both of which are misleading. One is the use of pre-2007 data that doesn't reflect the world post the GFC, the other is the assumption of full employment:

  1. More recently reported Petri and other modelling has post GFC data and produces similar results as their earlier analysis:
     - Petri et al use 2011 trade data, updated to 2015, as reported on in January 2016 (with similar results – see relevant section).
     - The World Bank use 2015 GDP and similar data, and 2011 trade data updated for new trade agreements, with similar results as Petri et al
  2. Earlier Petri et al modelling doesn't claim that TPP will create full employment; rather their model doesn't capture how TPP influences employment. Petri and Plummer in a 2016 Peterson Institute working paper 2016

Background

In January 2016 Capaldo, Izurieta and Sundaram released Global Development and Environment Institute working paper 16-01 criticising Petri, Plummer and Zhai's modelling, and reporting their own estimated TPP outcomes based on a very unusual approach to trade modelling. Rather than model how economies may adjust to lower barriers to trade, the authors used Petri's estimates of changes to exports from TPP as input to a model, and then estimate how economies adjust to the estimated change in exports. Their results rely on unrealistic assumptions. The model and report gives the impression that either the authors don't understand economics, or are purposely trying to mislead the reader.

Capaldo et al report on employment and equality outcomes. They suggest that TPP will decrease employment in all TPP countries including New Zealand (a decline of either 5,000 or 6,000 for New Zealand - 5,000 is reported in the text and 6,000 in a table). Their model suggests that employment in the rest of the world will also decline due to TPP. Capaldo et al report that labour share of income will decline in all TPP countries, and that inequality will increase.

Central to the Capaldo et al argument and results is that liberalising trade creates competition which leads to lower wages. Few economists would argue against the claim that freer trade encourages competition. However, claiming competition reduces wages is disingenuous. Trade liberalisation and competition tends to encourage labour and other resources into more productive and better paying sectors and companies. Inefficient companies are forced to improve productivity or shut their doors. Trade encourages specialisation which in turn encourages productivity gains. In the United States export-intensive industries pay about 16% more on average than domestically focused industries. Similar results have been found in New Zealand data.

It appears that the Capaldo et al assumption of declining wages introduces deflation into their model. This add on effectively creates recessions in TPP economies, hence the across the board reduction in TPP countries' GDP. In other words Capaldo's model estimates that TPP will cause a global recession.

Other weaknesses in Capaldo et al include: aggregation of countries (Brunei, Malaysia, Singapore and Vietnam are analysed as a group rather than individual countries, as are Chile and Peru) and; aggregation of sectors (four only: energy, primary commodities, manufacturing and services). These flaws in the analysis pale into insignificance relative to their assumed adjustment process however, and the use of a model not designed to analyse trade agreements.