Discussion: Blanchard et al "Effective Protection with Global Value Chains""

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What the paper does

- Redefines Effective Rate of Protection (ERP) as value-added tax/subsidy equivalent that replicates the tariff structure's effect.
- Embeds in a multi-country, input-output framework.
- Application: Trumpian tariffs.
- Clear contribution, theory-consistent measurement, lots of potential applications.

Definition

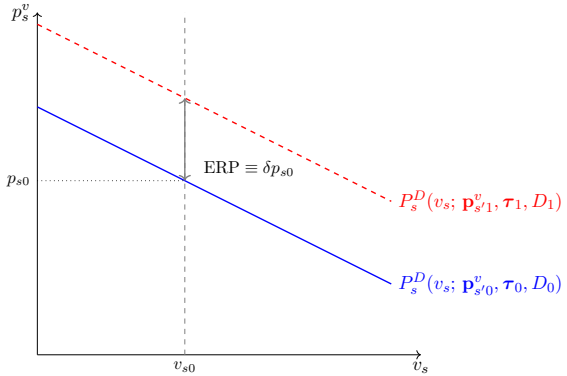

Figure 1: Tariff-induced upward shift in inverse demand for value added in sector s

ERP logic: implicit ad-valorem subsidy to buyers of value added from sector s.
Captures directional resource pull, not welfare or incidence.

Definition

- After lots of matrix algebra:

$$ERP(s) = \Omega(s) + \frac{1}{\sigma(s,s)}\left[R_{V1}(s)\,\hat{\tau}_C + R_{V2}(s)\,\hat{\tau}_M\right]$$

- Final goods tariffs τ_C
  - Protection for producers and upstream suppliers (backward linkage) (+)

- Input tariffs τ_M
  - Protection for input producers and upstream suppliers (backward linkage) (+)
  - Substitution inputs->domestic VA (+)
  - Imported input cost shock channel in direct and downstream customers (forward linkage) (-)
    - ⋆ Similar to standard ERP

Benchmarking

- Benchmark diagnostic for how tariffs redirect global value added.
- Compare to standard ERP (Corden) calculations.

Linear vs. exact ERP

- Discussion: Pros/cons approximate vs exact ERP
  - Pros: Linear index replicates exact results (corr > 0.96) (with moderate tariffs).
- Show when linearization breaks down (large tariffs, hub sectors).
  - E.g., 150% US–China scenario.
- Include a deviation plot—exact vs linear by sector / tariff change.
- Data / parameter requirements
- Helps readers know when the approximation is safe to use for policy work.

Linear vs. exact ERP : ToT efx

- Terms of trade effects excluded in linear version but included in exact version.
- Possible that ERP overstates true change in domestic VA (for large country such as the U.S).
  - Linear version gives upper bound on ERP.
  - If world prices decline, domestic value added will increase by less.
- Textbook case: ToT efx large when high import demand elasticity or low export supply elasticity
  - What determines the ToT efx in the exact model ($\alpha(s)$, θ, η)

Interpretation of results

- Claim: Upstream bias in trade policy
  - "recent tariff changes may be directing U.S. economic activity away from downstream sectors like machinery and shipbuilding, toward upstream sectors like metals."
  - Degree of tariff escalation (the gap between final and input tariffs) was largely preserved by Trumpian tariffs
- But 2025 tariff hikes much higher for metals.
- How much is economics vs policy design? Mechanical or something about IO structure etc?
- Provide more sensitivity - trade elasticities etc.

Interpretation of results II

- Finding: Mexico/Canada gain ERP from U.S. tariffs.
- Interesting but mechanism not decomposed.
- Decompose gains into
  - Preference-margin effects (USMCA).
  - Backward linkages from U.S. producers.
  - Third-country tariff propagation (Mexico replaces China as supplier?).

Validation / model fit

- Compare ERP to changes in U.S. sectoral output
  - Recent tariffs or
  - Historical evidence on resource pull?