A Macro Perspective on Border Taxes

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Uniform Border Taxes

1. Import Tariff + Export Subsidy
   - Keynes (1931)

2. VAT ↑ + Payroll tax ↓
   - Farhi, Gopinath, Itskhoki (2014)

3. Border Adjustment Tax
   - Auerbach, Devereux, Keen, Vella (2017)
   - Cannot deduct imported inputs costs
   - Export revenue not taxed
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Barbiero, Farhi, Gopinath, Itskhoki (2017)
When Are Border Taxes Neutral?

• Lerner (1936): Neutrality under,
  • Flexible prices & wages and Balanced trade
  • Relative wages rise & real exchange rate appreciates to offset BAT
When Are Border Taxes *Neutral*?

- Lerner (1936): Neutrality under,
  - Flexible prices & wages and Balanced trade
    - Relative wages rise & real exchange rate appreciates to offset BAT
  - If monetary policy targets constant prices $\rightarrow$ nominal ER appreciates
What if prices/wages *not* flexible and trade *not* balanced?

1. Sticky Prices/Wages: *Symmetry* in the pass-through of exchange rates and taxes into prices faced by buyers preserves neutrality

   - **Producer currency pricing (Mundell-Fleming)**
     
     \[ p'_{FH} = \frac{\bar{P}_{FH} \epsilon'}{1 - \tau} \quad \quad p^*_{HF} = \frac{(1 - \tau) \bar{P}_{HH}}{\epsilon'} \]

   - 100% passthrough of taxes and ER
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- **Local currency pricing**

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   - **Local currency pricing**
     \[
     p'_{FH} = \bar{P}_{FH} \quad p^*_{HF} = \bar{P}^*_{HF}
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     - 0% passthrough of taxes and ER
   
   - **Dollar Pricing** (Asymmetric)
     \[
     p'_{FH} = \frac{\bar{P}^b_{FH}}{(1 - \tau)} \quad p^*_{HF} = \frac{\bar{P}^b_{HF}}{E}
     \]
     - 100% passthrough of taxes and 0% of ER
     - Sizeable decline in imports and exports
What if prices/wages *not* flexible and trade *not* balanced?

2. International Saving/Borrowing:
   - All should be in foreign currency
   - BAT implementation is one-time and unanticipated
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   - If *local currency* BAT leads to transfers to foreign equivalent to dollar appreciation (no neutrality)
     - US: Loss of 13% of GDP
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   • Respond only to output gap and CPI inflation
   • Not target the exchange rate
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No easy formula for ER change in the absence of neutrality