Analyzing the interplay of macro and food policies

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Outline

- Basic concepts
- Possible links between macro and food policy
- Application
  - Exercises
- Group discussion
Basic concepts (1)

- **Import parity**: Cost of importing a ton of maize to domestic market (for deficit country)

\[ \text{Import parity} = W_p \times \text{ex} + \text{shipping costs} + \text{Other costs} \]

- World price matters
- Exchange rates matters
- World fuel price matters
- Trade policies matter
- Domestic road matters

Basic concepts (2)

- **Export parity**: Minimum domestic price at which a commodity is exportable

\[ \text{Export parity} = D_p / \text{ex} + \text{transport costs} + \text{Other costs} \]

- Domestic price matters
- Exchange rates matters
- World fuel price matters
- Policies matter
- Domestic road matters
Basic concepts (3)

- **How do export and import parity affect food trade?**
  - If domestic price is higher than import parity, there will be import, which in turn will drive domestic prices down to import parity.
  - If domestic prices are lower than export parity, there will be export, which will drive the price up to the export parity.
  - If domestic price remain between import and export parity, commodity are non-tradable (i.e., neither exportable nor importable).

Some more concepts

- **Exchange rates and trade**
  - When currency is undervalued → Export becomes cheaper.
  - When currency is overvalued → Import becomes cheaper.

- **Trade balance** (Value of exports – value of import)

- **Foreign exchange rationing** (foreign exchange is not easily available)

\[
\text{Elasticity} = \frac{\% \Delta \text{ in Qty}}{\% \Delta \text{ in Price}}
\]
What does the figure tell us?

- Keeping domestic price low despite rise in world price → a subsidy = the orange area
- What would have been the price if domestic prices were allowed to adjust?
  - New equilibrium price = Pe; new equilibrium quantity = Qe
  - Subsidy bills = 0
Subsidy, trade deficit, and exchange rate

What does the figure tell us?

- Holding domestic prices low $\rightarrow$ decline forex supply (previous figure)
- Holding exchange rates fixed $\rightarrow$ excess demand for foreign exchange $\rightarrow$ black market for forex $\rightarrow$ export declines $\rightarrow$ further decline in forex $\rightarrow$ further leftward shift in supply

IT IS A VICIOUS CYCLE!!!!
An example from Ethiopia

- In 2008-09, domestic price of wheat in Ethiopia went $200 above the import parity
- This defies the very logic of international trade
- It happened mainly because of macro policy
- What????????????????

Discussions about Ethiopia example

- Why do you think domestic price in Ethiopia went above import parity and stayed above for so long?
- There are a number of reasons why this had happened. I have answer but let’s guess a few—
  - Ethiopia kept domestic price of petroleum unchanged when world price sky-rocketed → Shortage in forex → rationing → even though domestic price was high, there was no import because importers couldn’t obtain Forex!!!
Discussions about Ethiopia example

- What impact did continued high domestic price have for consumers in Ethiopia?

- Ethiopia consumes about 300 thousand tons of wheat a month; domestic price was US$200 above import parity for 12 months
  - Ethiopia kept domestic price of petroleum unchanged when world price sky-rocketed → Shortage in forex → rationing → even though domestic price was high, there was no import because importers couldn’t obtain Forex!!!