Yale Economics Department

International and Finale
December 6, 2001
Review of the Troops for International Macroeconomics

I. The Empire of the Dollar
II. The Balance of Payments
III. Different Exchange Rate Systems
IV. Output in an Open Economy
V. Final Reflections
Highlights to remember

The Balance of Payments

Trade flows determined by prices and outputs
Financial flows determined by relative yields on assets in different countries
Current Acct + Financial Acct. = 0

Different Exchange Rate Systems

Currency union
Fixed exchange rates
Floating rate systems
Recall total domestic output and income

\[ Q = C + I + G + X - M \]

Short-Run Output Determination in an Open Economy.

- *Fixed exchange rates*: standard output determination mechanism
- *Flexible exchange rates*: have new route for policy through exchange rate
Exports, imports, and the multiplier model

Add NX to the C+I+G in 45° diagram [in class]
Decrease in net exports lowers output and employment in short run
- Recession abroad is lowering US GDP, while US recession is hurting especially Mexico and Canada

Open-economy multiplier smaller than closed-economy multiplier
Trade shocks can have big effect on output and employment
Mobile Financial Capital Flows with Fixed Exchange Rates

Meaning of (financial) capital mobility:
- free flow of funds among countries
- Investors therefore compare domestic and foreign interest rates ($i, i^F$)

Small countries therefore lose control of monetary policy
Hence back in C+I+G+NX world
- no crowding out
- no independent monetary policy
European Monetary Union

Essentials of EMU
- created a common currency in 1999
- managed by European Central Bank
- policy driven by inflation target

Potential problems in EMU:
- macro: lack of internal mobility and high rigidities
- countries lose control over macro policies
- so far, major disappointment is major depreciation of the Euro
  … although that has been good for European economy
Output Determination with Flexible Rates

- Flexible exchange rates with mobile financial capital introduces new element to macroeconomic adjustment
- Because of its effects on exchange rate, monetary policy now affects trade flows as well as domestic investment
- Tight money reduces both domestic investment and net exports
  - a double whammy on output.
Effects of monetary tightening with flexible rates and mobile capital

Fed tightens money
  ... raising $ interest rates (i ↑)
Higher interest rates attract funds into $ assets
  ... increasing demand for $
  ... and appreciating $ exchange rate (e ↑)
Appreciation raises export prices, lowers import prices
  ... reducing U.S. net exports (NX ↓)
Contracts AD and output
  ... raising U and lowering inflation (Q ↓, U ↑)
Example of 1979-86: from $i$ to $e$

The graph illustrates the nominal exchange rate and the 3-month Treasury bill rate from 1976 to 1994. The exchange rate and Treasury bill rate show fluctuations over this period, with notable peaks and troughs. The exchange rate has a general trend of increase and decrease, while the Treasury bill rate shows a more volatile pattern, with sharp spikes and declines.
From $e$ to $NX$
Changing the Monetary-Fiscal Mix: The Twin Deficits

![Graph showing the relationship between Net exports/GDP and Federal surplus/GDP over the years from 1978 to 1990. The graph indicates a downward trend in both Net exports/GDP and Federal surplus/GDP.]
Application of the Theory: Why is the U.S. the World Largest Deficit Country?
Reason for the trade deficit is a really big misconception

Not due to

- stupidity, cupidity, fallibility, gullibility, rapacity
- inflation, big government, welfare state
- evil trade practices, keiretsu or superhuman qualities of Japanese
- cheap labor in Mexico, prison labor in China, or child labor in India
- sweatshops in Africa or Mexico
- the evil empire between 15th St and 19th St in Washington
Okay, smartie, what is it then?

Due to the saving-investment imbalance
Recall identity: \( NX = NFI = S_g + S_p - I \)
At full employment, lower \( S \) or higher \( I \) tend to lower \( NX \).

Examples:
- The twin deficits after 1980 in the U.S. due to low saving and high productivity of investment.
- Case of Japan is the opposite of U.S.
- Why did Germany become a deficit country after 1990? The need to rebuild East.
Summary

1. Global economy affects U.S. through both current account and financial account.

2. With flexible exchange rates, monetary policy has two effects:
   - interest rate → I → Q
   - interest rate → e → NX → Q  (NEW!!)
   - trade effect reinforces the domestic I effect

3. Trade flows are counterparts of domestic S, I.

4. Lower saving or higher investment opportunities → higher trade deficit
5. As countries become more and more integrated (a.k.a. globalization), domestic business conditions increasingly affected externally.

6. In globalized economy, we see more crises originating in the global economy:
   - oil shocks (1973, 1979)
   - debt crisis (1982-86)
   - German unification (1990)
   - terrorism (2001)
   - Argentina (2001?)
   - …