

OUTLINE — November 4, 2019

- International Trade
 - Determinants of EX & IM
- International Finance: Exchange Rates
 - Demand & Supply of Foreign Currency
- Interest Rates in an Open Economy

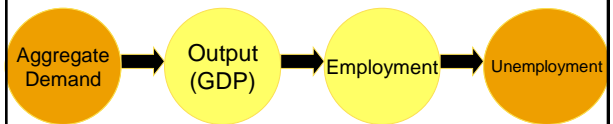
Today's material is not on MT2 (outage adjustment)

Midterm 2 on Wed., Nov 6, 7-8:30 pm
 Rooms posted on Piazza
 Same rules as MT1

Review

Question: Unemployment depends on?

Answer: Ultimately, aggregate demand
 ▪ $AD = C + I + G + (EX - IM)$



Review Determinants of EX & IM Exchange Rates Interest Rates, Exchange Rates, & NX

Determinants of Aggregate Demand

- Consumption spending by households (C)
 - YD, wealth, credit availability, ? i ?, expectations
 - YD changes when TA or TR change
- Investment spending by businesses (I)
 - Interest rates, expected rates of return, credit availability
- Government spending (G, Nov. 6)
 - Direct fiscal policy (G)
- Net exports (EX & IM) – *today!*
 - Exchange rates, health of world economy

Review Determinants of EX & IM Exchange Rates Interest Rates, Exchange Rates, & NX

Organizing today's info

- Three take-aways
 1. Using model of D&S to understand exchange rates
 2. Interest rates affect exchange rates
 3. Exchange rates affect IM & EX
- And of course remember . . . And then there are multiplier effects

Review Determinants of EX & IM Exchange Rates Interest Rates, Exchange Rates, & NX

International Trade

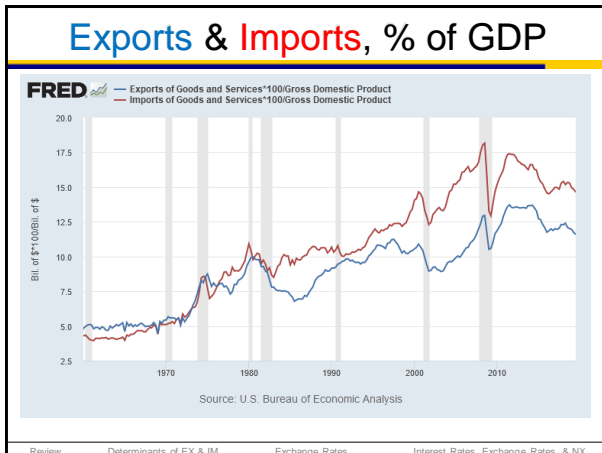
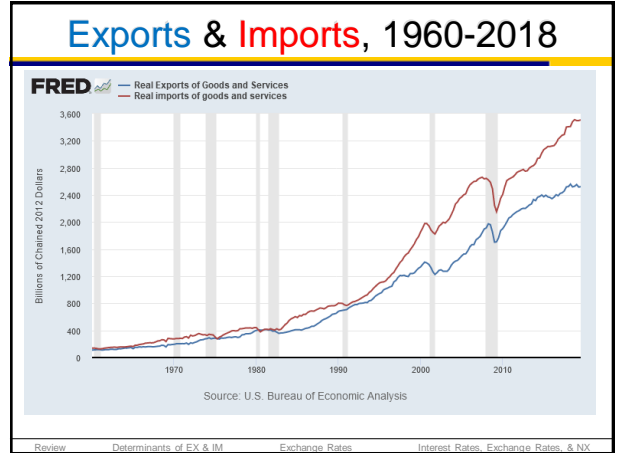
- Exports (EX)

- EX depends on

- Imports (IM)

- IM depends on

Review
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Price of foreign currency (P_{FX}) is a price

P_{FX} = U.S. \$ price of 1 unit of foreign currency

- 108.2 Japanese ¥ for 1 \$ so $P_{¥} =$

- 0.90 € for 1 \$ so $P_{€} =$

- 19.11 Mexican peso for 1 \$ so $P_{peso} =$

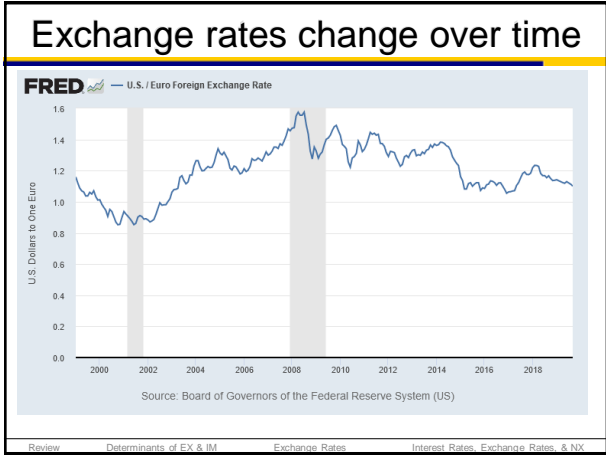
Review
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International Finance

- Exchange Rates (price of foreign currency) affect EX & IM

- Cost of Imported Good to U.S. Buyer ?
 Cost of Good = 20 €
 Exchange rate = \$1.12 for each €

Review Determinants of EX & IM **Exchange Rates** Interest Rates, Exchange Rates, & NX



Determining exchange rates

- Demand and Supply

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Effect of Changing D or S

↑ Demand of FX


↑ Supply of FX

Review Determinants of EX & IM **Exchange Rates** Interest Rates, Exchange Rates, & NX

Terminology	
$\uparrow P_{FX}$	$\downarrow P_{FX}$
<small>Review</small> <small>Determinants of EX & IM</small> Exchange Rates <small>Interest Rates, Exchange Rates, & NX</small>	

Demand & Supply of Foreign Currency (FX)	
<ul style="list-style-type: none"> ▪ D_{FX} ▪ D_{FX} depends on 	<ul style="list-style-type: none"> ▪ S_{FX} ▪ S_{FX} depends on
<small>Review</small> <small>Determinants of EX & IM</small> Exchange Rates <small>Interest Rates, Exchange Rates, & NX</small>	

Interest Rates & Wealth Allocation
<ul style="list-style-type: none"> ▪ Put yourself in shoes of lenders (wealth-holders) when thinking about interest rates & exchange rates ▪ Interest rates <ul style="list-style-type: none"> ▪ For borrower: cost of borrowing ▪ For lender: return from lending ▪ Higher interest rates <ul style="list-style-type: none"> ▪ Deter borrowers (more costly borrowing) ▪ Entice lenders (higher return from lending)
<small>Review</small> <small>Determinants of EX & IM</small> <small>Exchange Rates</small> Interest Rates, Exchange Rates, & NX

Interest rates affect P_{FX}
<ul style="list-style-type: none"> ▪ Suppose interest rates rise in the U.S. (but not in Europe)

<small>Review</small> <small>Determinants of EX & IM</small> <small>Exchange Rates</small> Interest Rates, Exchange Rates, & NX

. . .and P_{FX} affect EX & IM

- $\downarrow P_{FX} \Rightarrow$

Review Determinants of EX & IM Exchange Rates **Interest Rates, Exchange Rates, & NX**

Interest Rates in Open Economy

Suppose \downarrow interest rates in U.S.

[Closed economy]: $\uparrow I$

[Open economy]: Also $\uparrow NX$

[1] Effects reinforce each other

[2] You should be able to explain "Why?"

Review Determinants of EX & IM Exchange Rates **Interest Rates, Exchange Rates, & NX**