

AP Macroeconomics Series: **Appreciation, Depreciation and Trade**

Martha Rush

January 9 5 pm EST/4 pm CST



Intro

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About me....

- married 25+ years, two sons, two dogs
- 25 years at Mounds View High School
- *Beat Boredom (2018)*
- NeverBore consulting, blog (MarthaRush.org)
- AP reader since 2007 (Macro & Micro) and consultant since 2016
- CEE contributor (HS Econ, EconEdLink)
- National Econ Challenge coach
- Hobbies: Travel, reading, tennis, swimming, craft beer



Topic: The effects of exchange rates on X_n and GDP

Post your questions to the Jamboard

A Currency Story

In 1999, 70 Icelandic Króna bought 1 USD. The Króna was so strong that Icelanders found it worth their while to fly to Minneapolis, stay for a week, and do all their Christmas shopping at the Mall of America. In 2000, IcelandAir started nonstop flights to meet this demand.

In 2022, it cost 145 Icelandic Króna to buy the same USD. So we see headlines like this.



A Currency Story, continued

It's virtually invisible if you don't travel and don't work in a global industry, but exchange rates have a dramatic impact on trade and tourism.

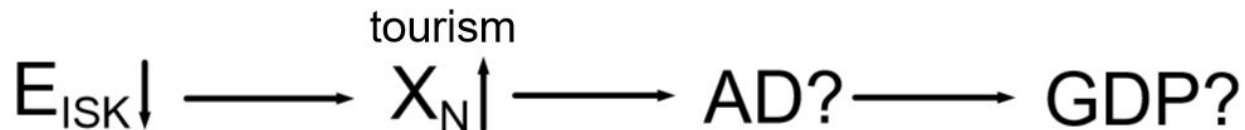
In **1996**, **200,000** tourists visited Iceland

By **2016**, there were **1.6M** annual visitors

About 1/4 are Americans

A Currency Story, continued

Let's model that story using links and logic:

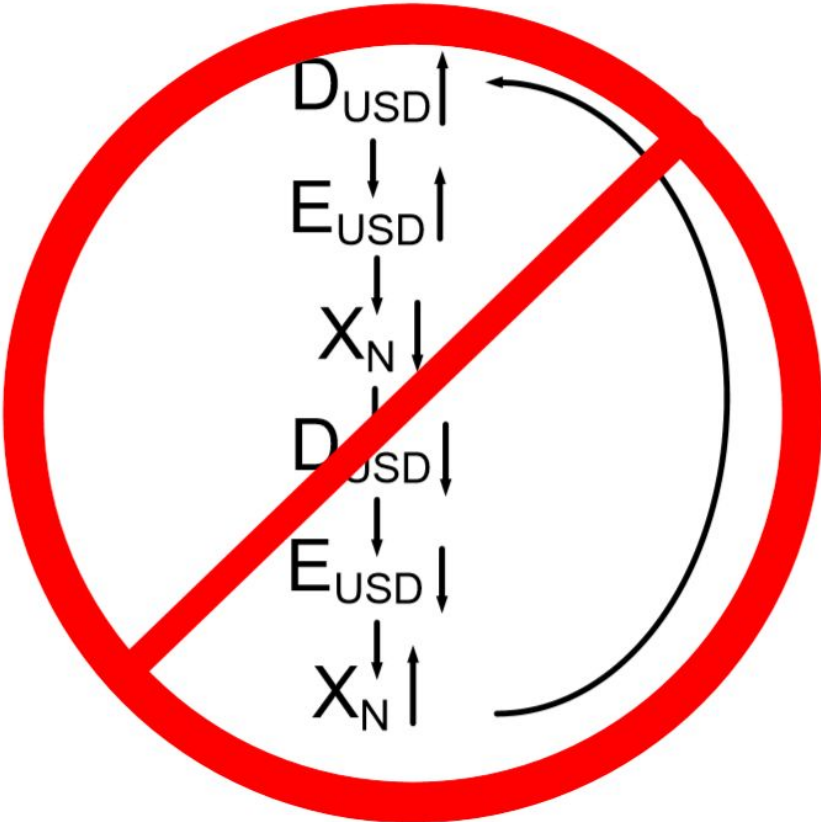


Changes in the For-Ex Market and Net Exports (Macro 6.5)

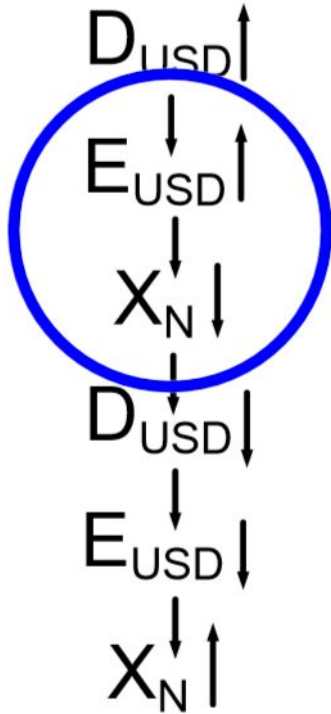
The Big Picture

- A variety of factors can cause currency to appreciate or depreciate, including macro policies*
- Any change in currency value will, in turn, impact imports and exports, which will impact GDP
- It's important to follow the breadcrumbs and not get lost in an infinite loop

Don't do this:



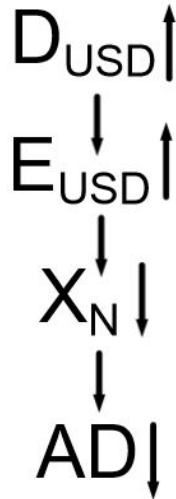
Do this:



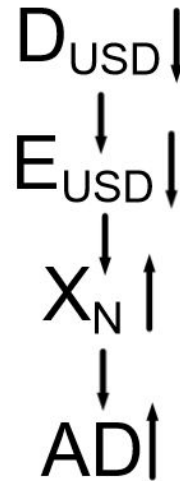
**Focus on one cause
& its effect**

Two typical scenarios

1. Something causes
increased D_{currency}



2. Something causes
decreased D_{currency}



Example

Country X's government increases its spending without raising taxes. Which of the following is true about the effect on Country X's real interest rates and its subsequent effect on Country X's net exports?

- (A) Real interest rates increase and net exports increase
- (B) Real interest rates increase and net exports decrease
- (C) Real interest rates increase with no change in net exports
- (D) Real interest rates decrease and net exports increase
- (E) Real interest rates decrease and net exports decrease

Socratic Activity

From *CEE Workbook*, pp. 241-244

www.socratic.com

RUSH240

Current Examples

The New York Times

<https://www.nytimes.com/2022/10/04/business/asia-currency-dollar.html>

Businesses Brace for Currency Chaos in Asia, a Region With a History of Crisis

A 1997 financial catastrophe casts a long shadow in countries that are seeing the value of their money plunge to record lows.



By **Daisuke Wakabayashi** and **Ben Dooley**

Daisuke Wakabayashi reported from Seoul, and Ben Dooley from Tokyo.

Published Oct. 4, 2022 Updated Oct. 6, 2022

Tigun Wibisana and Sandra Kok, who own a cafe in Malaysia, are facing an excruciating decision that could make or break their business of 14 years: Can they increase prices to cover rising expenses without driving customers into the arms of their bigger rivals?

The cost of the coffee beans that the couple, who are married, buy is spiraling because they are traded globally in U.S. dollars, and the Malaysian ringgit has fallen to a 24-year low. Compound that with an inflationary spike in prices for butter and flour, essential ingredients for its pastries, and the shop's profits have plunged more than 25 percent this year.

“Eventually we may have to raise prices to survive, but I don’t have the guts to do it now,” said Mr. Wibisana, 65, who roasts the beans and makes the baked goods.

Their cafe, SiTigun on Penang Island, is one of many businesses in Asia that are being squeezed by the strength of the dollar, which has soared to record levels this year. America’s currency is used extensively to buy and sell goods around the world, and its hypervalue is exacerbating the pain of surging prices for energy and other imports caused by the war in Ukraine and the pandemic.

Current Examples

What does it mean that coffee beans are "traded in U.S. dollars"?

What other items are traded in U.S. dollars?

Does the strong dollar help producers?

BONUS: How does the strong dollar affect countries who owe debt in US dollars?

BONUS: What effect will current monetary policy have on this situation?

Challenges

- many chains of cause and effect
- winners and losers are hard to identify



<https://www.youtube.com/watch?v=t6bZARAvMPo>



Your Questions?

FRQs: Graphing and Explaining

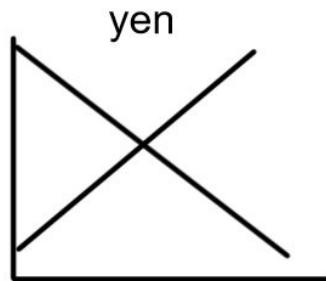
AP Macro 2022 #3 *discussed Dec. 12

Italy and Japan are trading partners and have flexible exchange rates. The Italian currency is the euro, and the Japanese currency is the yen.

a) Suppose that the exchange rate between the euro and the yen is 1 euro = 100 yen. **What is** the price of an Italian coat in yen if the coat costs 120 euros in Italy?

b) Assume that real interest rates increase in Japan. **Identify** what will happen to net financial capital flows between Italy and Japan.

c) **Draw** a correctly labeled graph of the foreign exchange market for the yen and **show** the effect of the increase in real interest rates in Japan on the value of the yen.



d) Based solely on the change in the exchange rate identified in part (c), **what will happen** to Italy's exports to Japan? **Explain.**

FRQs: Chief Reader Report

a) Suppose that the exchange rate between the euro and the yen is 1 euro = 100 yen. **What is** the price of an Italian coat in yen if the coat costs 120 euros in Italy?

89% correct

b) Assume that real interest rates increase in Japan. **Identify** what will happen to net financial capital flows between Italy and Japan.

42% correct

c) ~~Draw a correctly labeled graph of the foreign exchange market for the yen and show the effect of the increase in real interest rates in Japan on the value of the yen.~~

43% correct

39% correct

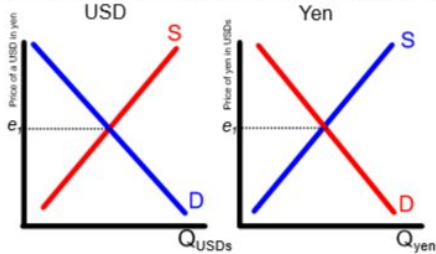
d) Based solely on the change in the exchange rate identified in part (c), **what will happen** to Italy's exports to Japan? **Explain**

16% correct

FRQ: AP Classroom

Assume that Japan and France are trading partners and have flexible exchange rates. The currency of Japan is the yen, and the currency of France is the euro.

(a) Assume that investors expect an increase in returns on Japanese stocks. Draw a correctly labeled graph of the foreign exchange market for the yen, and show how the investors' expectations of increasing returns on Japanese stocks will affect the value of the yen.



(b) Given the change in the value of the yen shown in part (a), how will each of the following be affected?

(i) Japan's net exports. Explain.

(ii) Japan's balance of payments. Explain.

(c) If the central bank of Japan wants to offset the change in the value of the yen shown in part (a), will it buy or will it sell yen in the foreign exchange market?

Review **Jamboard Questions**

Next Week: We'll break down Unit 6 FRQs