

PubPol/Econ 541

Class 5

Exchange Rates

by

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2023

Quiz Results

	Q1	Q2
Mean	7.80	6.79
Median	8	6.5
Max	10	10
Min	1	4
S.D.	2.19	1.84

Pause for News

Planned Middle East transport corridors



Source: FT research
© FT

Outline

- Exchange markets: What they are
- Supply and Demand
- Two Simple Theories
- Pegged Exchange Rates

Exchange Market

- Exchange rate is
 - Price of one currency in terms of another
 - E.g., \$/£ or £/\$

Representative Exchange Rates for Selected Currencies

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Last update: September 15, 2023, 12:20:38 ET

[Exchange Rate Archives](#)

Representative Exchange Rates		
Currency	Note	Value as of September 15, 2023
Chinese yuan		7.26730000
Euro	(1)	1.06580000
Japanese yen		147.50000000
U.K. pound	(1)	1.24125000
U.S. dollar		1.00000000

Notes:

These representative exchange rates, which are reported to the Fund by the issuing central bank, are expressed in terms of currency units per U.S. dollar, except for those indicated by

(1) which are in terms of U.S. dollars per currency unit.

Pause for Discussion

Questions on KOM, Ch 14

- Is an exchange rate the price of one country's goods in terms of another's, or the price of one country's assets in terms of another's?
- On what transactions are reported rates based?
- What hours of the day are the exchange markets open?

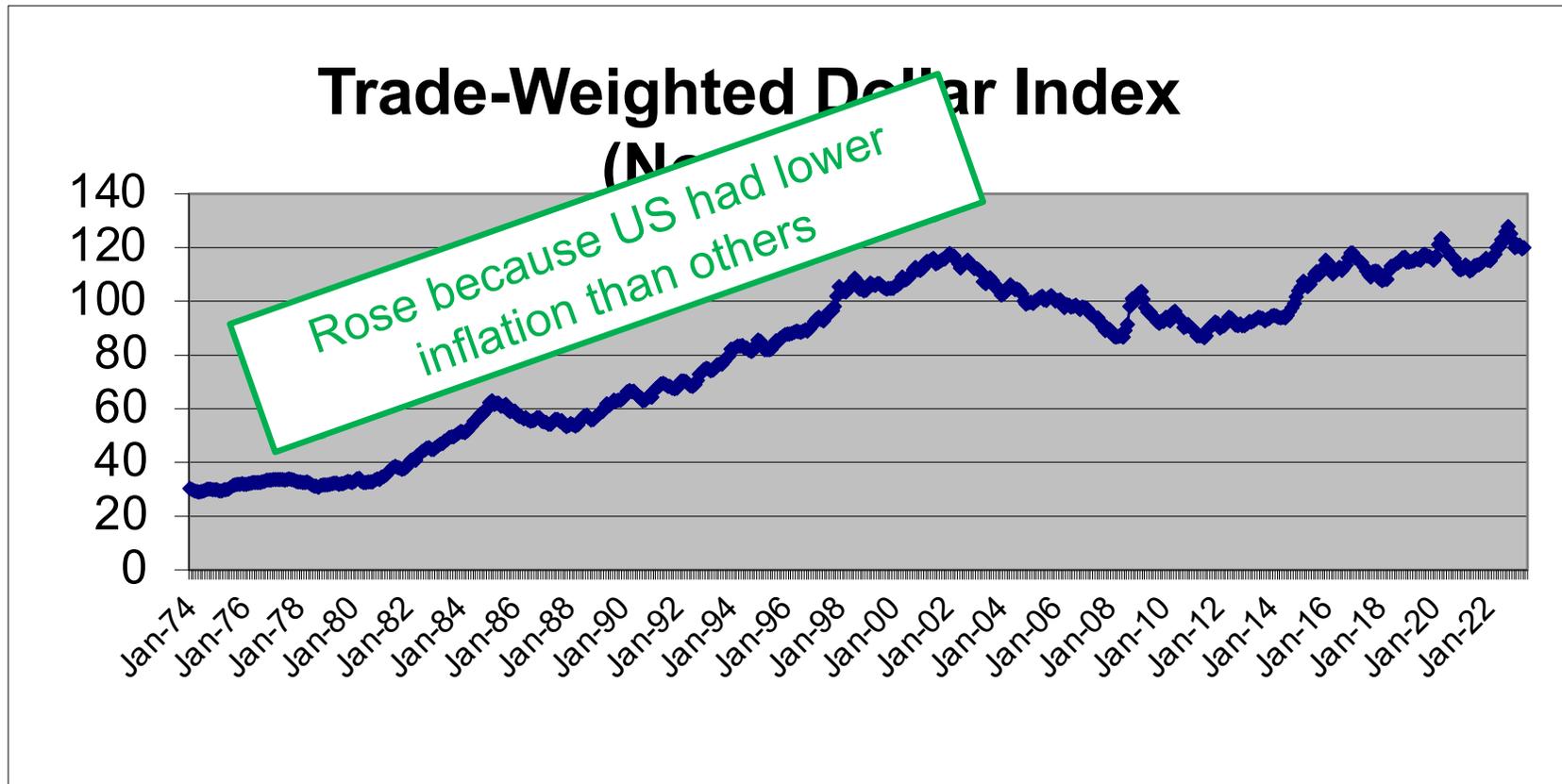
Exchange Market

- Types of exchange rate
 - Spot
 - For exchange of currencies today
 - Forward
 - Contracts for exchange of currencies 30, 60, 90 etc. days from the present
 - Both payment and receipt happen then, not now
 - Futures –
 - Like forward market, but for specific calendar dates in future

Exchange Market

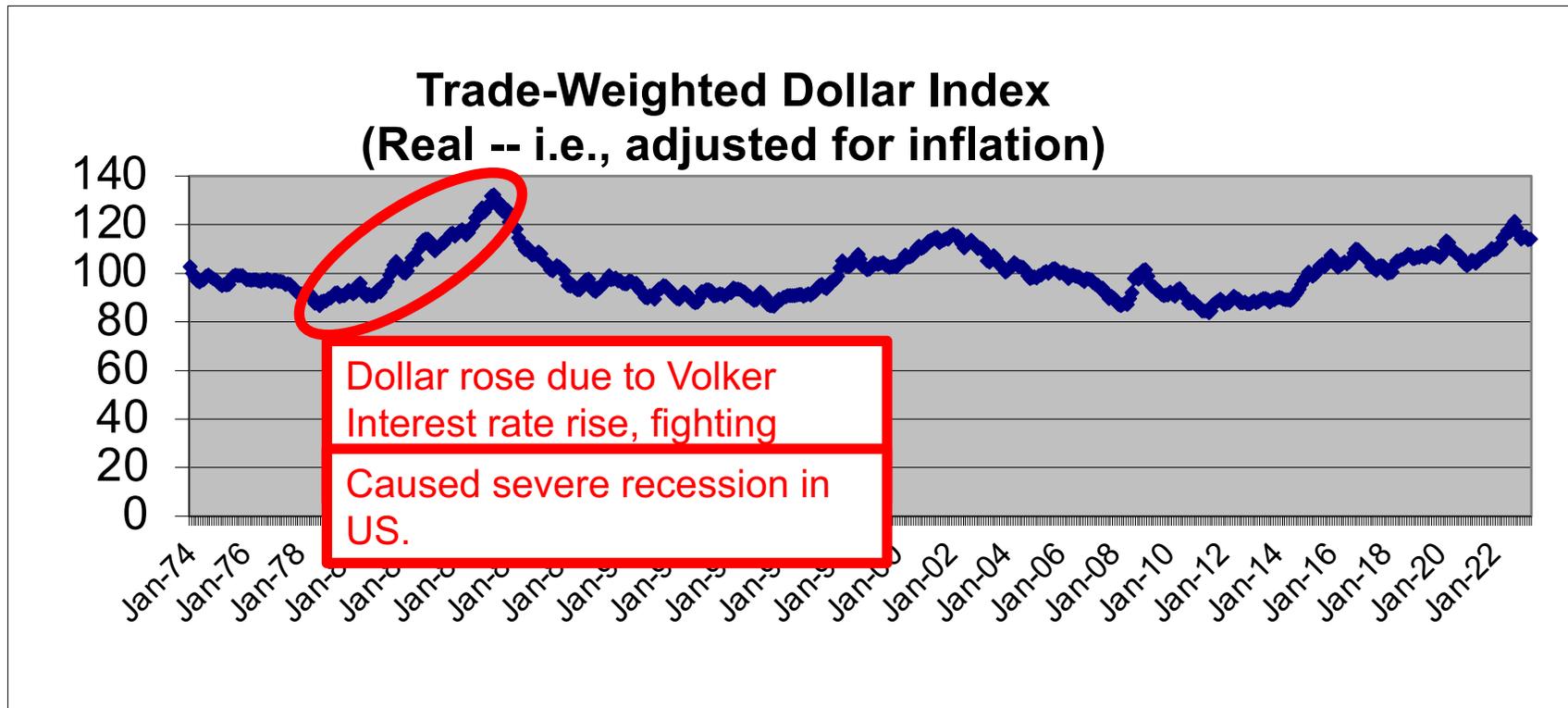
- Types of exchange rate, continued
 - Bilateral
 - For exchange of 2 currencies
 - Trade weighted
 - For one currency relative to multiple others
 - An average, or index
 - Real
 - Adjusted for inflation, both at home and abroad

Exchange Rate



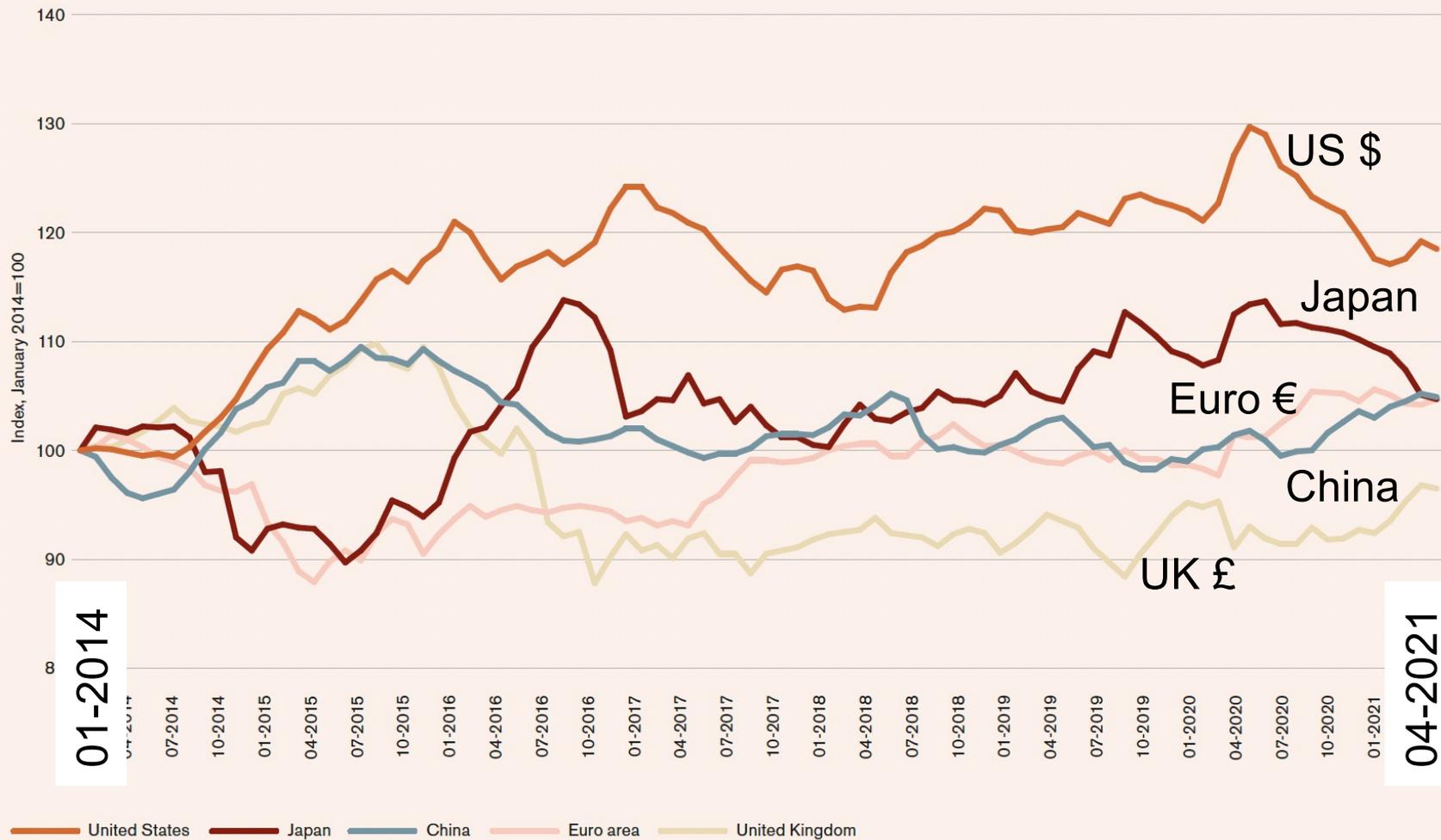
Source:
Federal
Reserve

Exchange Rate



Source:
Federal
Reserve

Chart 3.6
Exchange rate indices for selected economies, January 2014 – May 2021 ^a
 (Index, January 2014=100)



^a Nominal effective exchange rate indices against a broad basket of currencies.
 Source: Bank for International Settlements (BIS).

Exchange Market

- Who uses the exchange market
 - Traders in both goods and services
 - Also travelers (but that's trade)
 - International borrowing, lending, and asset trade
 - Speculators
 - Buyers or sellers who hope to profit from future exchange-rate change
 - Hedgers
 - Arbitragers

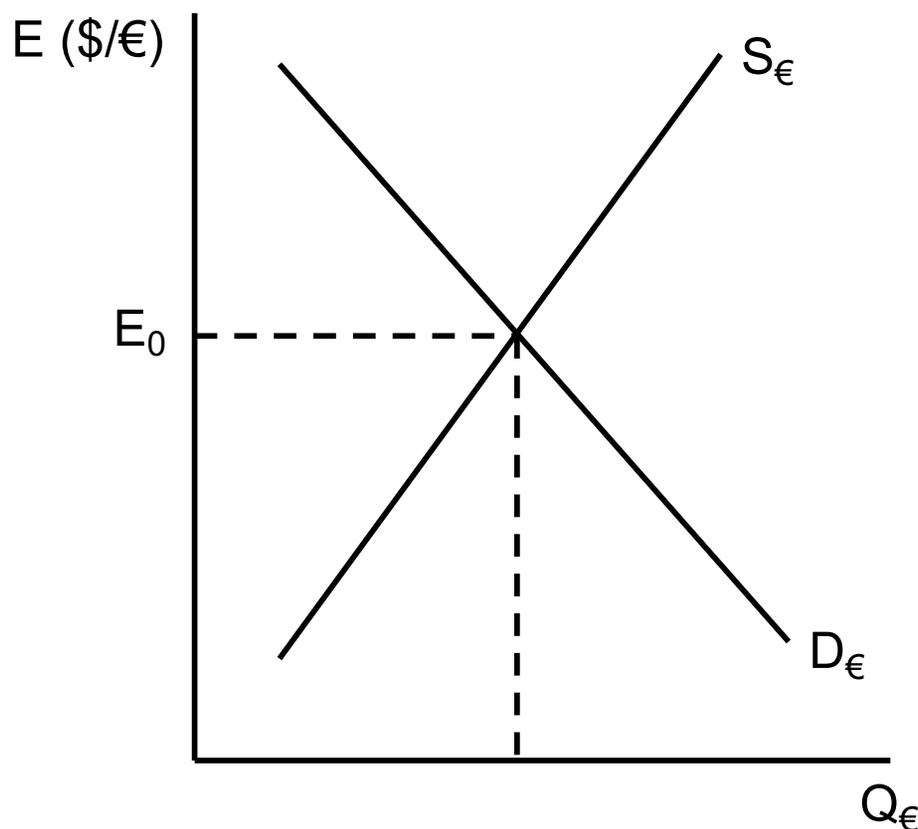
Pause for Discussion

More Questions from KOM

- What is “arbitrage” in the foreign exchange market?
- What is “hedging” in the foreign exchange market?
- What role does the US dollar play in international finance?

Supply and Demand for Foreign Exchange

- Market Model:



Questions:

- Who demands ϵ ?
- Who supplies ϵ ?

Exchange Market

- Traders respond to
 - Prices of goods
 - Rise in home prices causes currency to fall
- Capital movements respond to
 - Interest rates
 - Rise in home interest rate causes currency to rise
 - Expectations
 - Expectation of any change causes that change

Two Simple Theories

- Asset Theory
 - Simple: E is whatever it is expected to be
 - If it were not, its expected change would drive capital flows that would swamp the market
 - Works best in short run (but not useful)
- PPP = Purchasing Power Parity
 - Exchange rate reflects the prices of goods
 - See Big Mac Index
 - Works best in long run

The Big Mac index

Local currency under(-)/over(+) valuation against the dollar, selected currencies, %



*At market exchange rates (July 20th 2021) †Subject to "enhanced engagement" with US Treasury ‡Average of four cities §Weighted average of member countries **Average of five cities ††Maharaja Mac ‡‡Unofficial exchange rate

Sources: McDonald's; *The Economist*

Explore the full, interactive version of our Big Mac index at economist.com/BigMac

Pause for Discussion

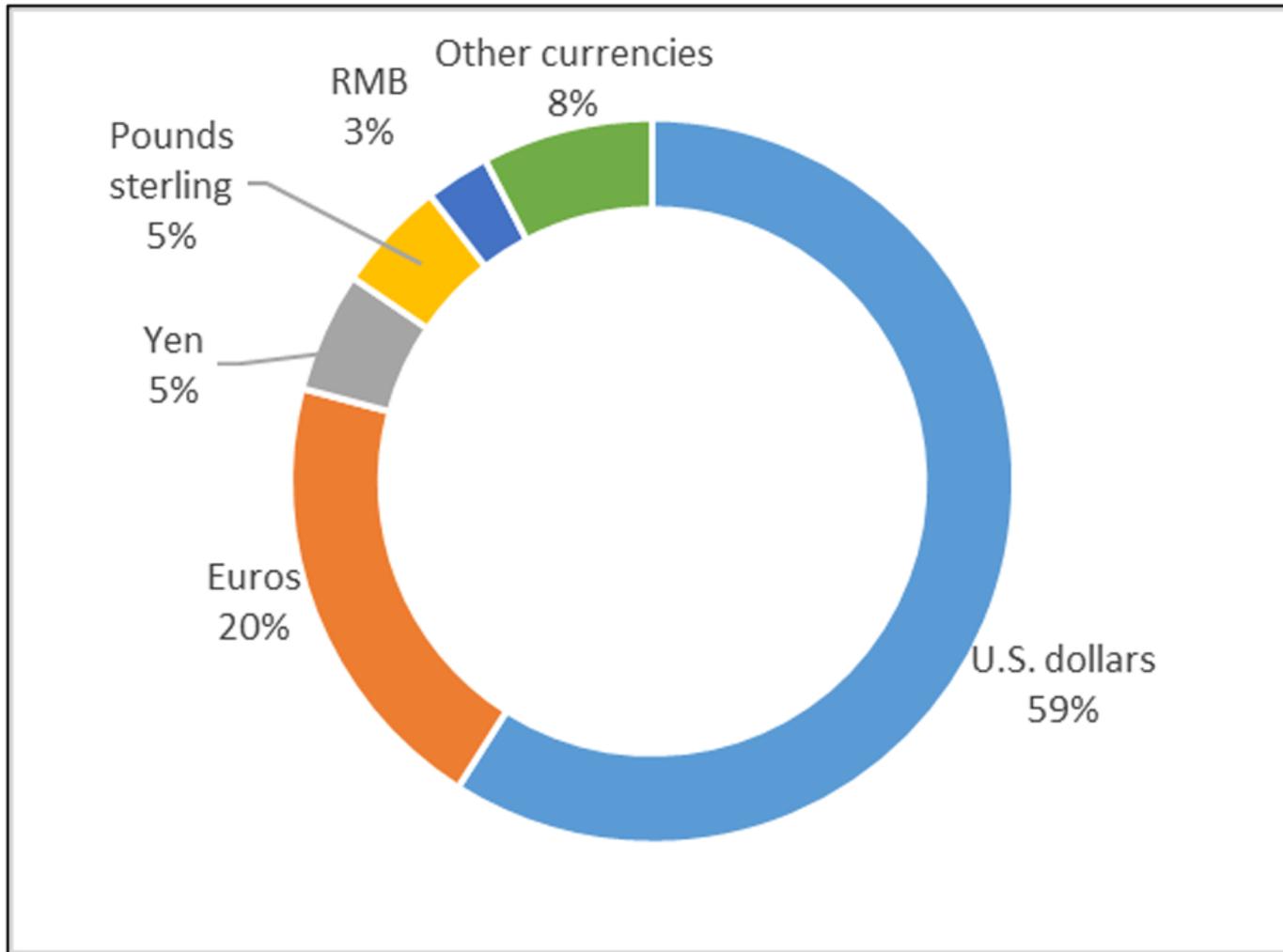
Questions on Economist, “Big Mac index”

- On what basis does this article rank countries?
- Why does this article focus on the Vietnamese currency, the dong?
- What criteria does the US Treasury use to identify an undervalued currency?
- Is Vietnam’s poverty relevant to this?

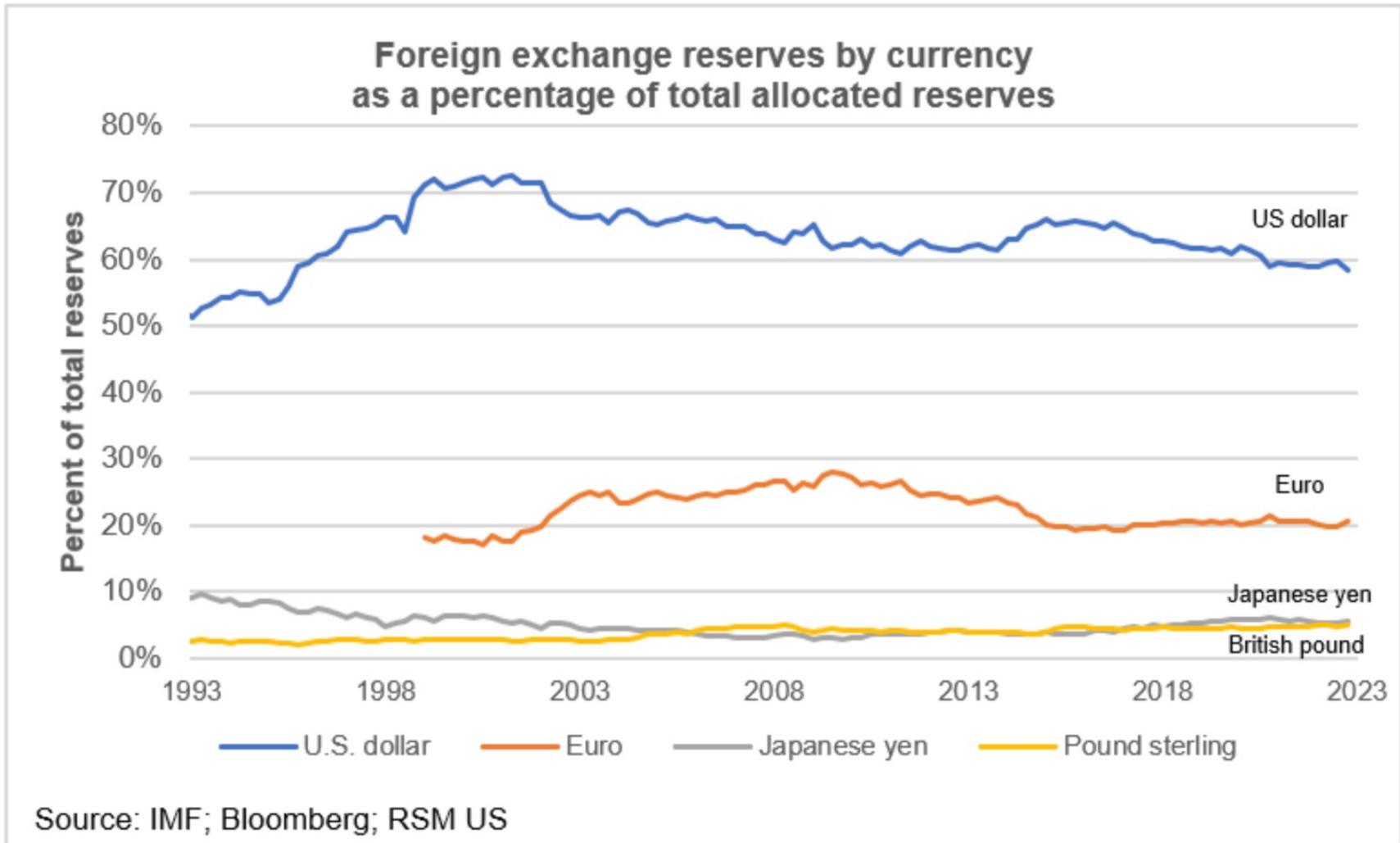
Pegged Exchange Rates

- Bretton-Woods System
 - Successor to the Gold Standard
 - Most currencies pegged to US \$
- How to peg
 - Need “reserves” of foreign currency
 - Use them to buy or sell own currency as needed
- Does it work? Yes and no

Figure 1. Central Bank Reserves, Q2 2022



Source: International Monetary Fund. **Notes:** 149 reporting countries.



Pause for Discussion

Questions on Economist, “...Bretton Woods...”

- What names and characteristics describe the three international monetary regimes that the *Economist* article describes, the last of which may be coming to an end?
- Why did the world not shift to using dollars, euros, and renminbi more equally for transactions and reserves?
- Why is currency stability so hard to achieve?

Questions on McDougall, “US Dollar to Maintain...”

- Why do central banks hold foreign-currency reserves?
- Has holding of US dollar reserves by central banks declined over time, and what is expected in the near and farther future?
- Who is mentioned as wanting reduced reliance on the dollar?
- What currency is most likely to expand being held?

Some Recent Exchange Rate Movements

- Most from X-rates.com
- Most are US \$ per country currency
- Showing
 - Major currencies last year and this
 - This year only for currencies of current students in the course
- If you have comments on yours, I'd welcome them

Recent Rate Movements: Euro

Last Year:



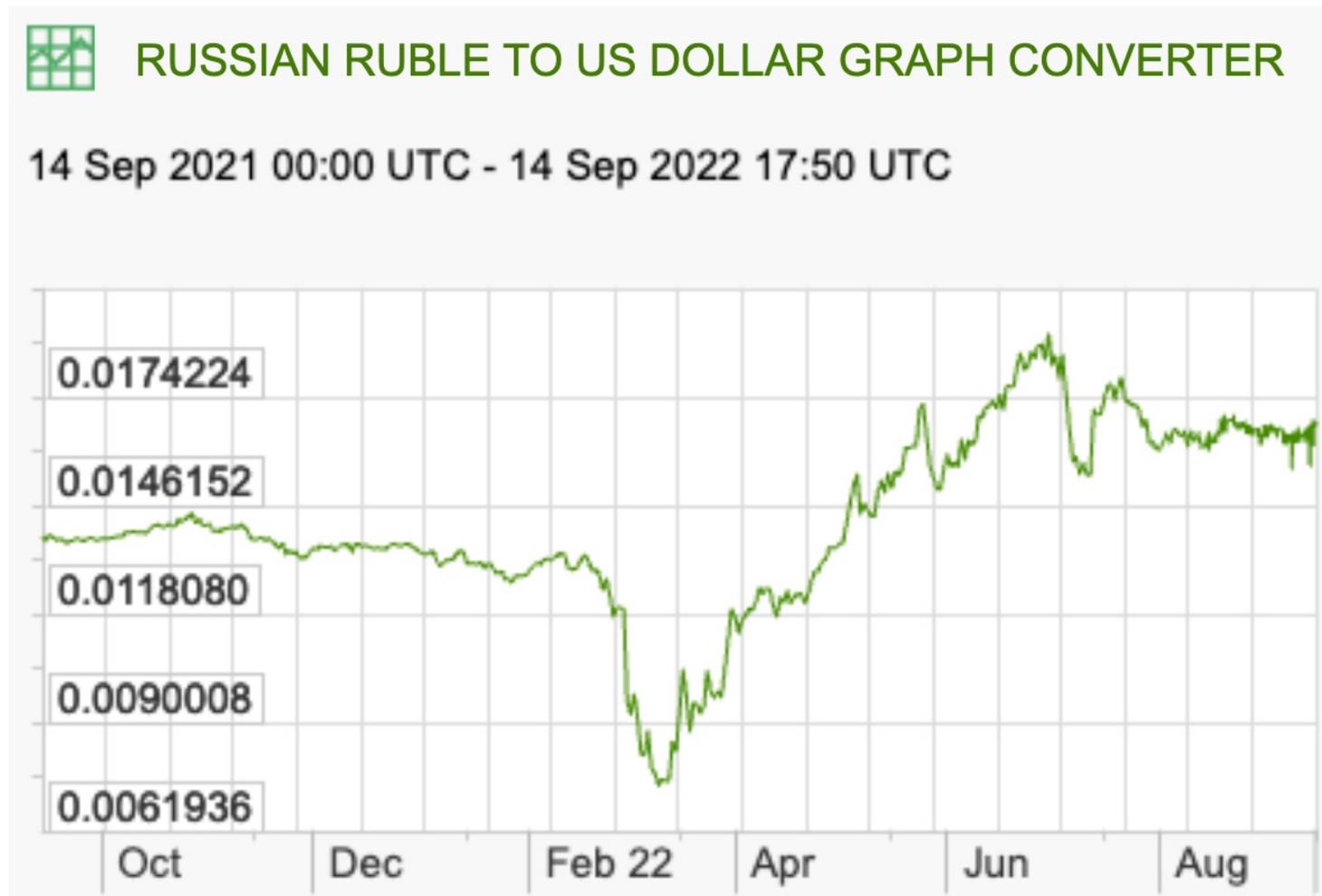
Recent Rate Movements: Euro

This Year:



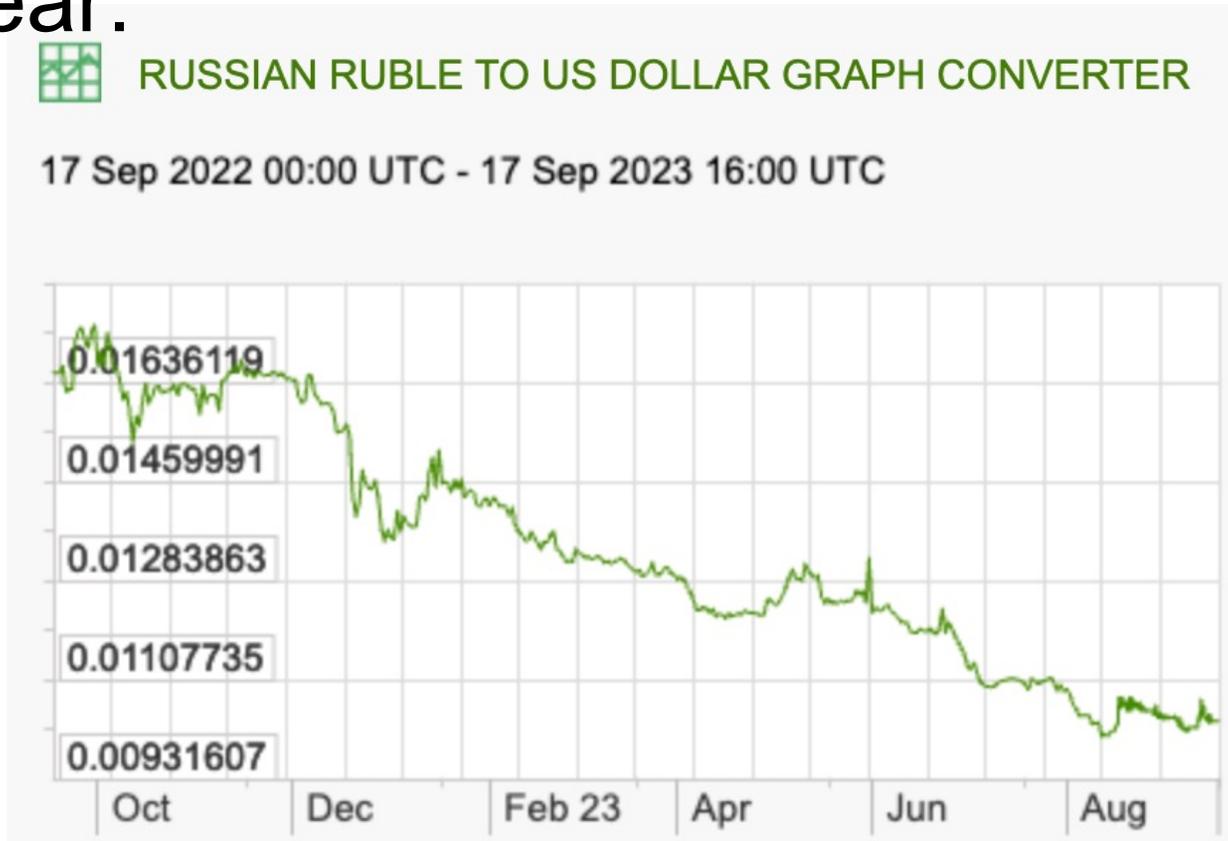
Recent Rate Movements: Russia

Last Year:



Recent Rate Movements: Russia

This Year:



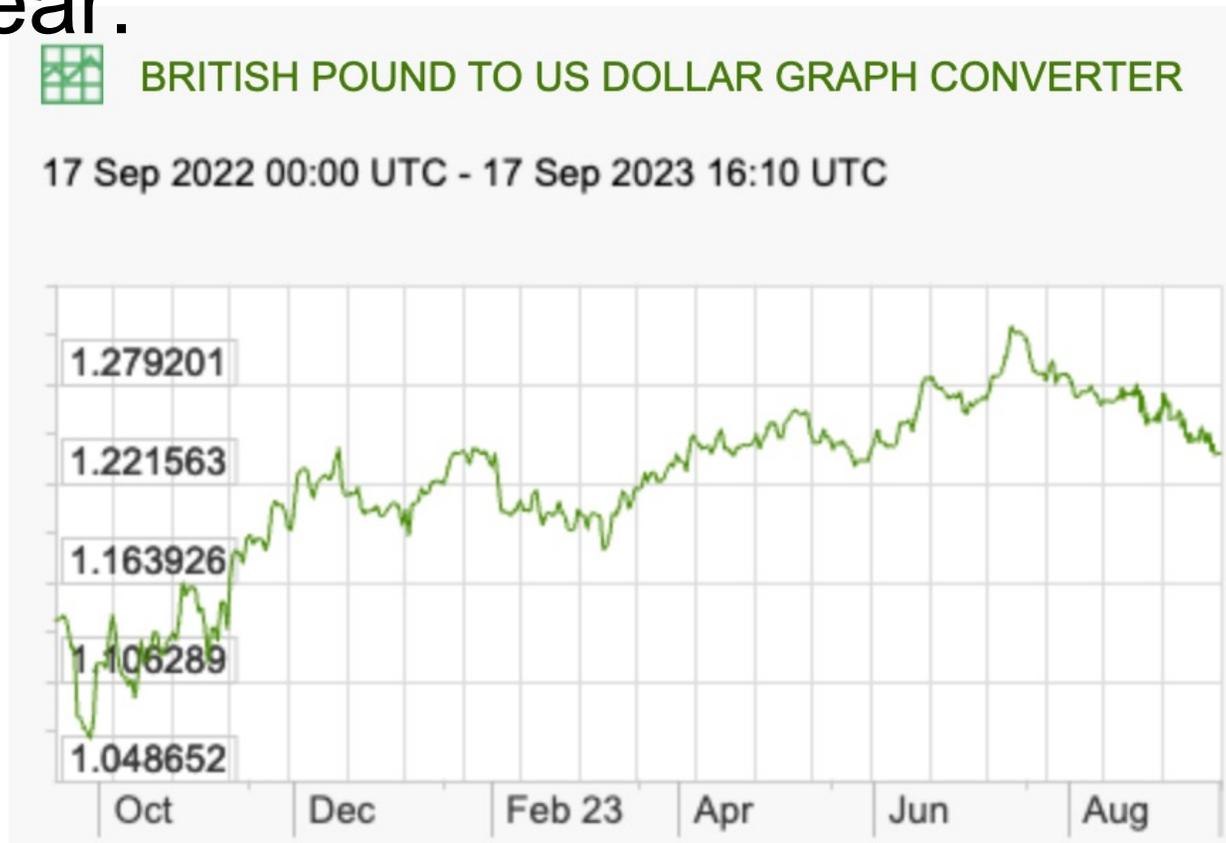
Recent Rate Movements: UK

Last Year:



Recent Rate Movements: UK

This Year:



Recent Rate Movements: China

Last Year:

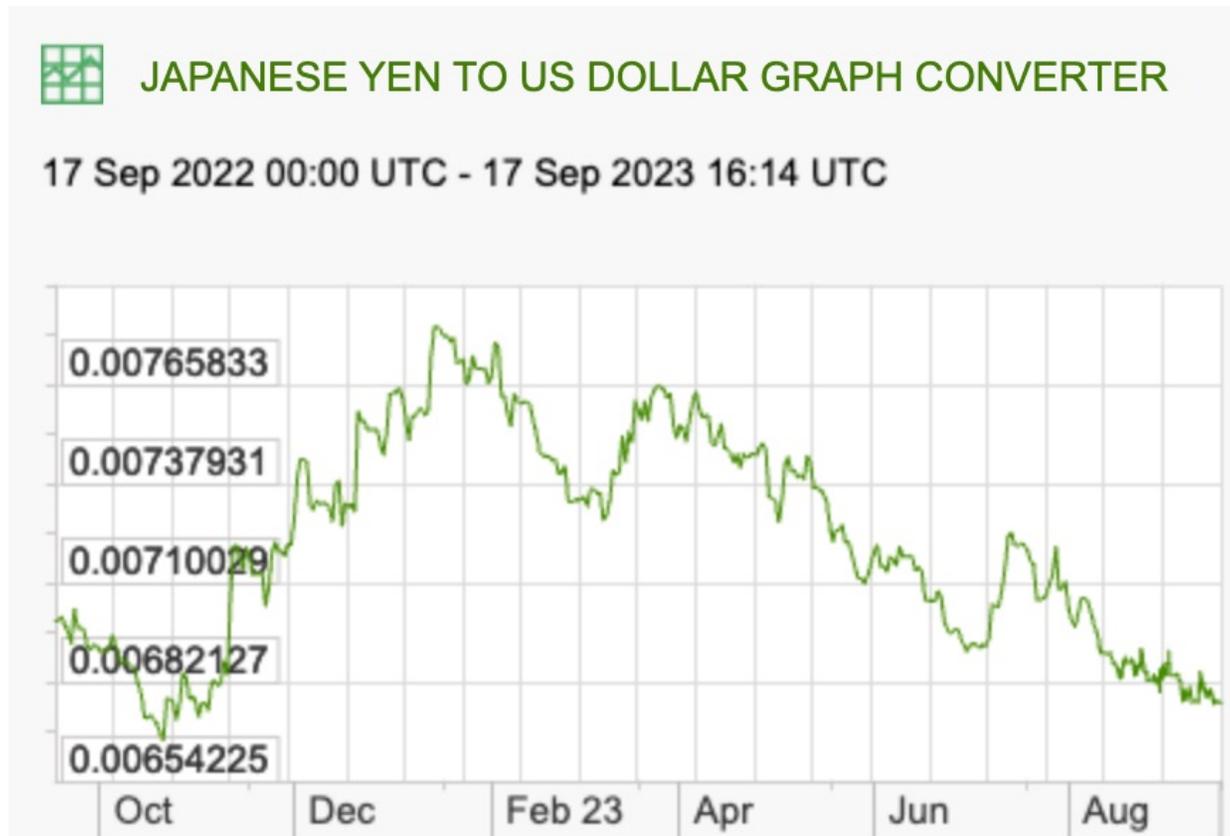


Recent Rate Movements: China

This Year:



Recent Rate Movements: Japan



Recent Rate Movements: Mexico



Recent Rate Movements: Colombia



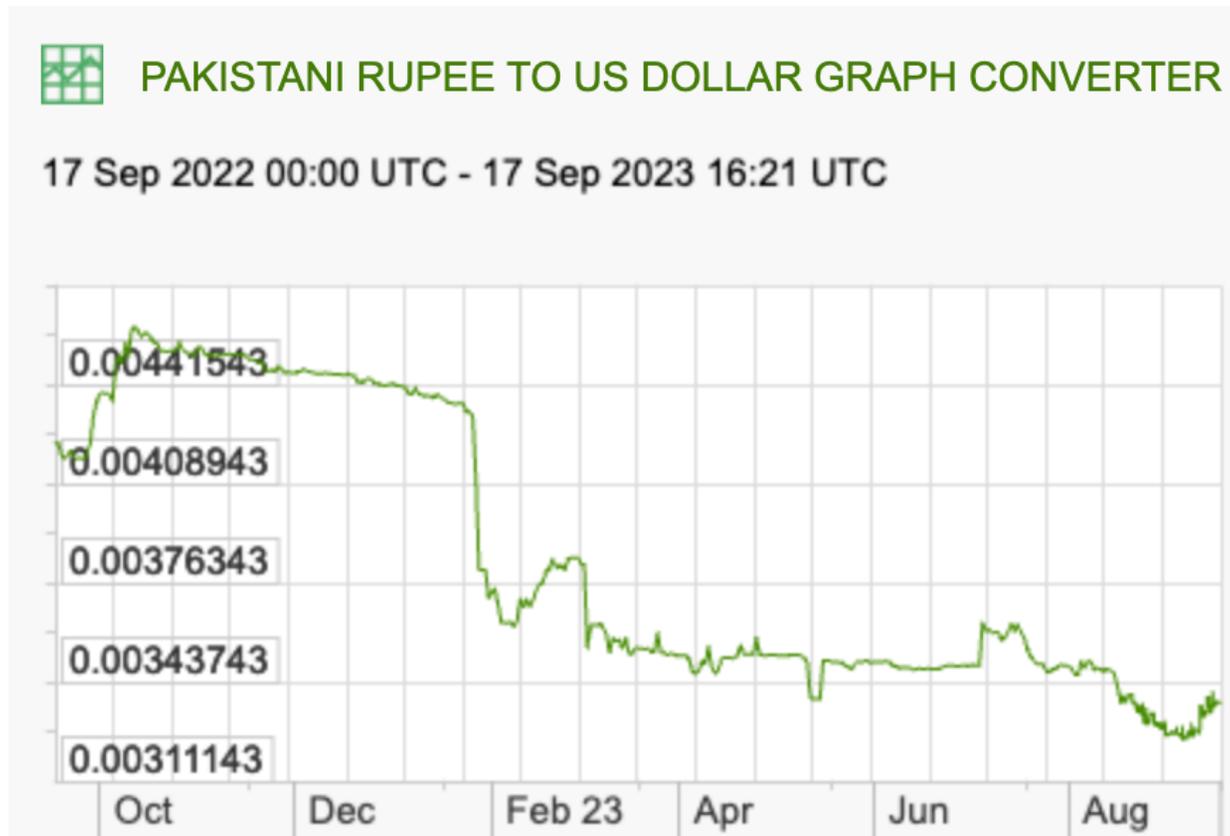
Recent Rate Movements: Guatemala



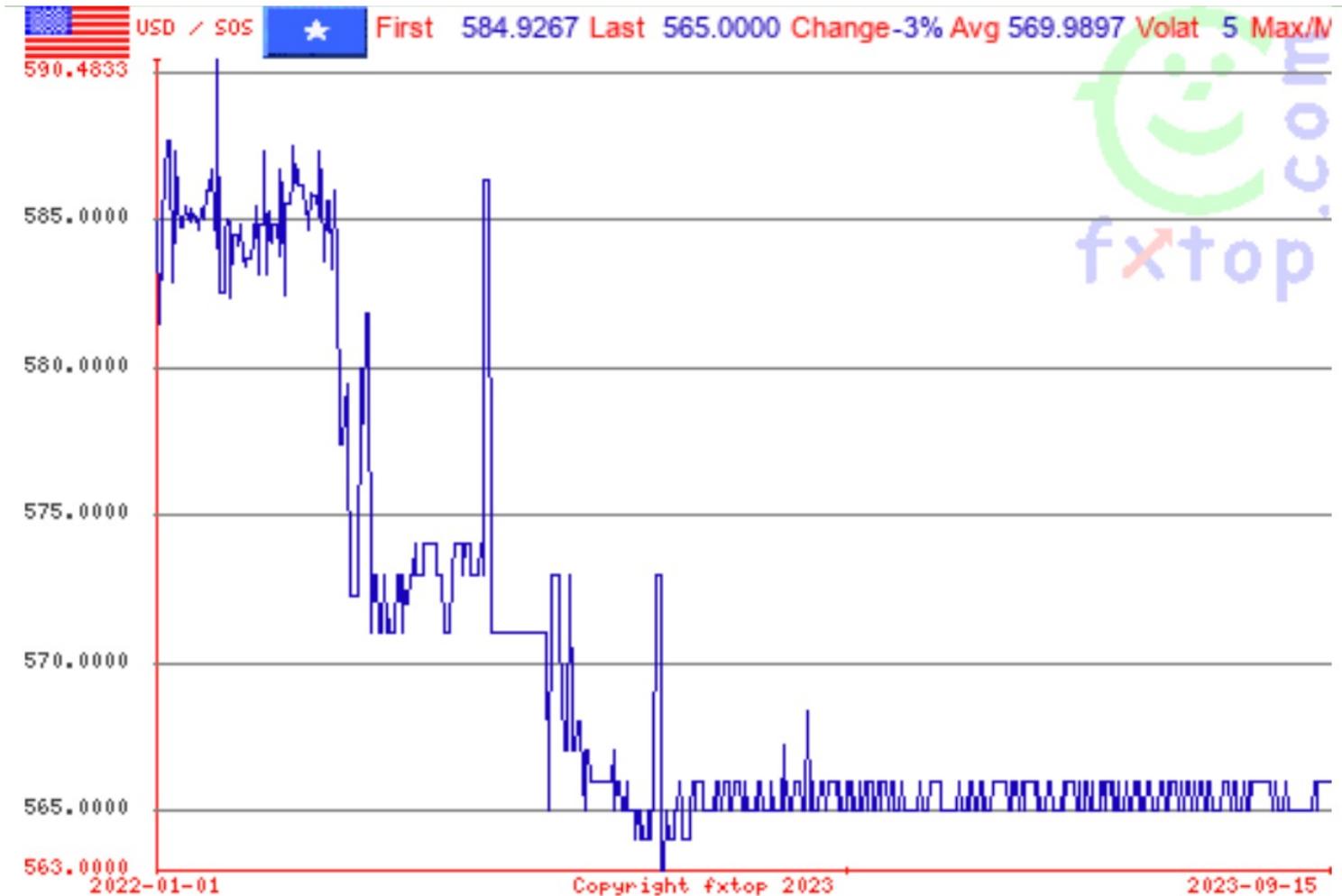
This is quetzals per dollar, not dollars per quetzal

Source: TradingEconomics.com

Recent Rate Movements: Pakistan



Recent Rate Movements: Somalia



This is Somali shillings per dollar, not dollars per Somali shillings

Source: fxtop.com