

PubPol/Econ 541

Class 6

International Transactions and the Trade Balance

by

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Announcements

- Papers
 - Monday was the drop/add deadline, so I'll be doing the paper assignments soon
 - Group assignments will be in Canvas: Files / Paper Assignments
 - Assignments will also be there, and on website under Paper Assignments
 - First paper is due Wed, Oct 4, 8:30 AM in Canvas
 - The groups will be set in Canvas; turn in once per group

Announcements

- Office hour tomorrow: I have a meeting at 10:30, so if you want to see me, come between 10 and 10:25.

Outline

- A Bit of Macroeconomics
- The Balance of Payments Accounts
- Surpluses and Deficits
- They Add to Zero
- What a Deficit Means
- The Assumption of Balanced Trade

A Bit of Macroeconomics

- From KOM:

$$Y = C + I + G + (X - M)$$

– Where

- $Y = \text{GDP} = \text{Gross Domestic Product}$
- $C = \text{Consumption}$
- $I = \text{Investment}$
- $G = \text{Government purchases}$
- $X = \text{Exports}$
- $M = \text{Imports}$

A Bit of Macroeconomics

- GDP measures
 - The economy's output of goods and services
 - Essentially the same as National Income
 - Wages, salaries, interest, rent, and profits
 - =GDP since production generates income
 - GDP is positively related to, but not the same as
 - Employment
 - Welfare
 - Happiness
 - And there are problems even with measuring output. E.g., it misses all that we produce in our homes

The Balance of Payments Accounts

- Recording International Transactions
 - Credits versus debits
 - Credits correspond to payments that would flow into the country
 - Exports
 - Borrowing from foreigners
 - Collection of interest and dividends from foreigners
 - Debits correspond to payments that would flow out of the country
 - Imports, etc.

This use of the words “credit” and “debit” is specific to the international accounts. It is **NOT** the same as their use in accounting or in other contexts.

The Balance of Payments Accounts

- Recording International Transactions
 - Current versus Financial Accounts
 - Financial account is (only) changes in holding of assets by one country in another
 - Current account all other international transactions:
 - Trade (both goods and services)
 - Income payments (wages, interest, & dividends)
 - Transfers (Gifts, remittances, and foreign aid)

Table 13.2 U.S. Balance of Payments Accounts for 2019 (Billions of Dollars) (1 of 2)

Current Account			
(1)	Credits	Exports and current transfer receipts	3,805.94
		Of which:	
		Goods	1,652.44
		Services	875.83
		Income receipts (primary income)	1,135.69
		Current transfer receipts (secondary income)	141.98
(2)	Debits	Imports and current transfer payments	4,286.16
		Of which:	
		Goods	2,516.77
		Services	588.36
		Income receipts (primary income)	899.35
		Current transfer receipts (secondary income)	281.69
		Balance on current account [(1)–(2)]	–480.22
(3)		Capital Account	–6.24

Source: U.S. Department of Commerce, Bureau of Economic Analysis, June 196, 2020, release. Totals may differ from sums because of rounding.

?

Table 13.2 U.S. Balance of Payments Accounts for 2019 (Billions of Dollars) (2 of 2)

Financial Account		
(4)	Net U.S. acquisition of financial assets, excluding financial derivatives	440.75
	Of which:	
	Official reserve assets	4.66
	Other assets	436.09
(5)	Net U.S. incurrence of liabilities, excluding financial derivatives	797.96
	Of which:	
	Official reserve assets	61.63
	Other assets	736.33
(6)	Financial derivatives, other than reserves, net	-38.34
	Net financial flows [(4)-(5)-(6)]	-395.54
	Statistical Discrepancy	90.92
	[Net financial flows less sum of current and capital accounts]	

Debits

Credits

These are both changes from end of last year to end of this year.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, June 196, 2020, release. Totals may differ from sums because of rounding.

Pause for Discussion

Questions on KOM

- What's the difference between GNP and GDP?
- Why does GNP (or GDP) only include consumption of final goods, not firms' purchases of intermediate inputs?
- Why are imports subtracted from $C+I+G+X-M$ in calculating GDP? Is it because imports cause unemployment?

More Questions on KOM

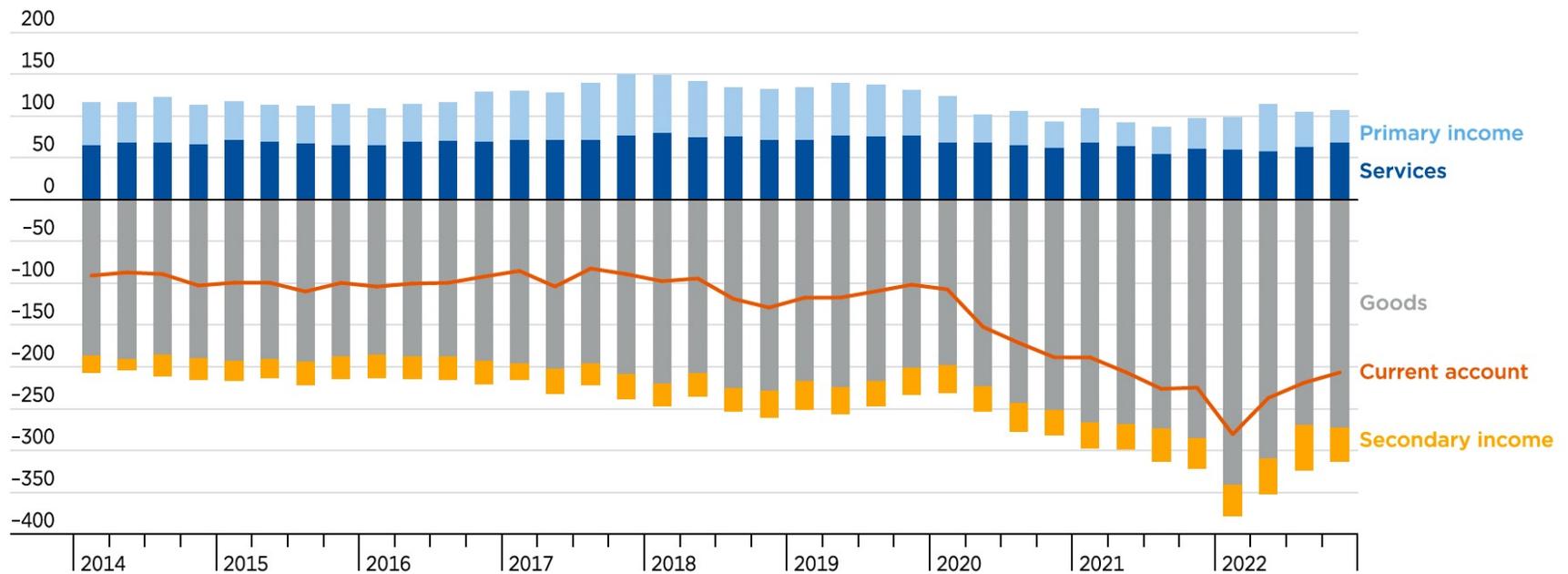
- What distinguishes credits and debits in the balance of payments?
- What distinguishes the current account from the financial account?
- For which categories of transactions did credits exceed debits for the United States in 2019 (the year reported in KOM)?
 - Trade in goods
 - Trade in services
 - Investment (i.e., “primary income”)
 - Transfer payments (i.e., “secondary income”)
 - Changes in asset holdings

The Balance of Payments Accounts

Accounts		Credits	Debits
Current Account			
	Exports	+	
	Goods		
	Services (including investment income rcvd)		
	Imports		-
	Goods		
	Services (including investment income paid)		
	Transfers	+ (in)	- (out)
Balance on Current Account:		Credits minus Debits	
Financial Account			
	<u>Change in</u> US assets held abroad		-
	<u>Change in</u> foreign holdings of assets in US	+	
Balance on Financial Account:		Credits minus Debits	

Chart 1. U.S. Current-Account Balance and Its Components

Billions of dollars, seasonally adjusted



U.S. Bureau of Economic Analysis

Table A. U.S. International Transactions

Note that Bal on CA is $-280,783 = 1,023,8868 - 1,304,650$

These are all debits and therefore negative.

Ignore this. It's small. These are also debits and therefore negative.

Really, errors and omissions

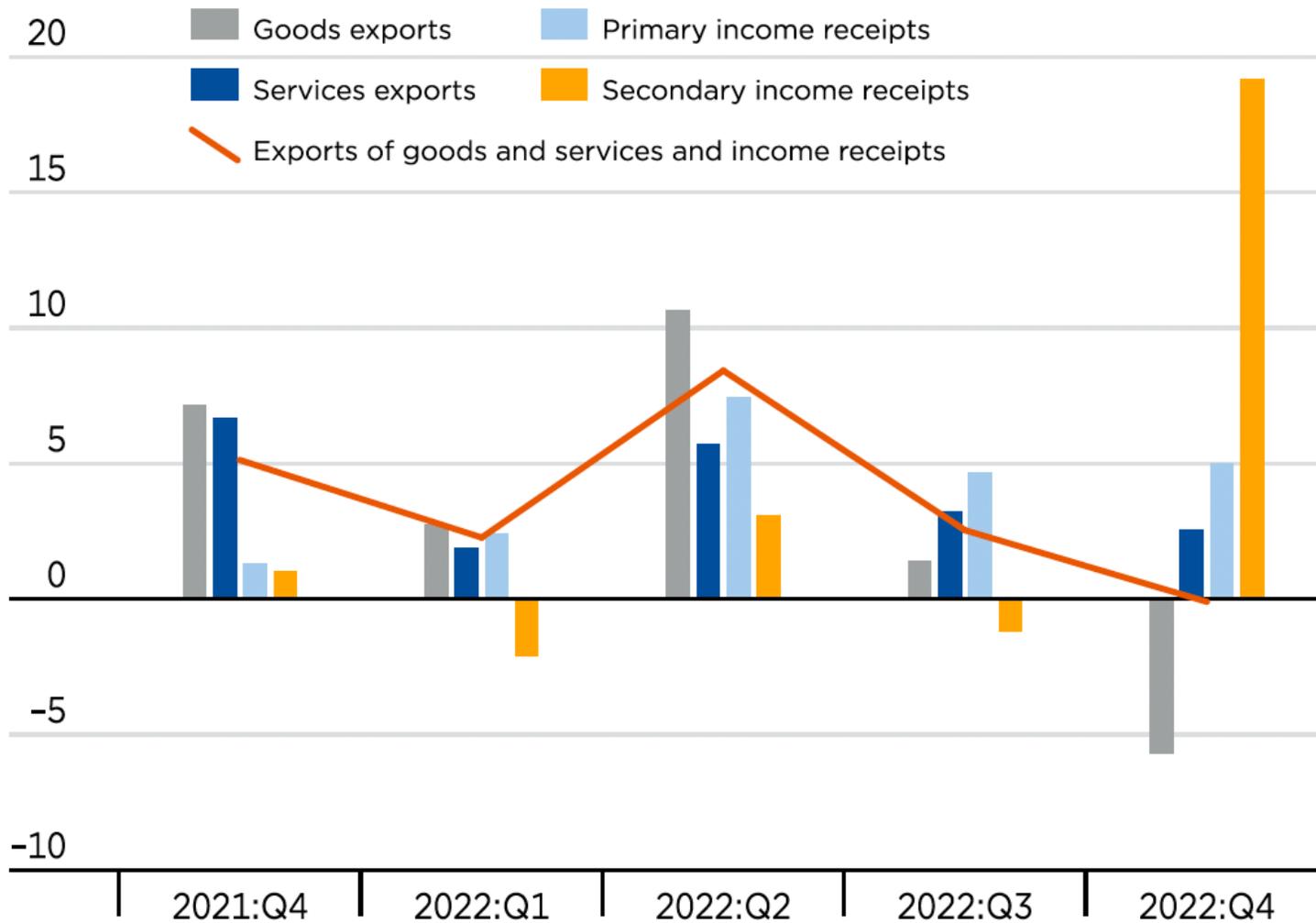
	Q1 ^r	Q2 ^r	Q3 ^r	Q4 ^p	Change 2022:Q3 to 2022:Q4
Current account					
Exports of goods and services and income receipts (credits)	1,023,868	1,110,155	1,138,312	1,137,202	-1,110
Exports of goods and services	703,589	767,882	782,688	757,697	-24,991
Goods	486,575	538,468	545,943	514,862	-31,081
Services	217,014	229,413	236,745	242,835	6,090
Primary income receipts	278,008	298,701	312,570	328,199	15,629
Secondary income (current transfer) receipts	42,271	43,572	43,054	51,306	8,252
Imports of goods and services and income payments (debits)	1,304,650	1,317,362	1,357,313	1,344,007	-13,306
Imports of goods and services	984,732	1,020,076	989,652	962,713	-26,939
Goods	826,666	847,759	815,238	787,213	-28,025
Services	158,066	172,317	174,415	175,500	1,085
Primary income payments	239,071	241,408	270,759	288,869	18,110
Secondary income (current transfer) payments	80,847	85,878	96,902	92,425	-4,477
Capital account					
Capital transfer receipts and other credits	28	6	9,078	8	-9,070
Capital transfer payments and other debits	1,916	3,821	3,880	4,143	263
Financial account					
Net U.S. acquisition of financial assets excluding financial derivatives (net increase in assets / financial outflow (+))	427,010	418,373	338,994	-264,613	-603,607
Direct investment assets	146,434	108,144	81,469	99,783	18,314
Portfolio investment assets	227,966	276,714	275,495	-342,363	-617,858
Other investment assets	51,678	32,334	-18,767	-24,937	-6,170
Reserve assets	932	1,181	797	2,903	2,106
Net U.S. incurrence of liabilities excluding financial derivatives (net increase in liabilities / financial inflow (+))	656,262	516,335	487,283	-144,083	-631,366
Direct investment liabilities	125,860	71,089	114,080	40,536	-73,544
Portfolio investment liabilities	246,077	443,379	240,849	-173,515	-414,364
Other investment liabilities	284,325	1,867	132,354	-11,104	-143,458
Financial derivatives other than reserves, net transactions	5,762	-45,911	-33,940	-6,949	26,991
Statistical discrepancy					
Statistical discrepancy ¹	59,180	97,149	31,575	83,462	51,887
Balances					
Balance on current account	-280,782	-217,207	-219,002	-206,805	12,197
Balance on goods and services	-281,115	-252,195	-206,964	-205,017	1,947
Balance on goods	-340,092	-309,291	-269,295	-272,351	-3,056
Balance on services	58,948	57,096	62,331	67,334	5,003
Balance on primary income	38,937	57,293	41,811	39,330	-2,481
Balance on secondary income	-38,576	-42,305	-53,848	-41,119	12,729
Balance on capital account	-1,888	-3,815	5,197	-4,135	-9,332
Net lending (+) or net borrowing (-) from current- and capital-account transactions ²	-282,670	-241,022	-213,804	-210,940	2,864
Net lending (+) or net borrowing (-) from financial-account transactions ³	-223,490	-143,873	-182,229	-127,479	54,750

Chart 2. Current-Account Transactions



Chart 3. Percent Change in Exports of Goods and Services and Income Receipts

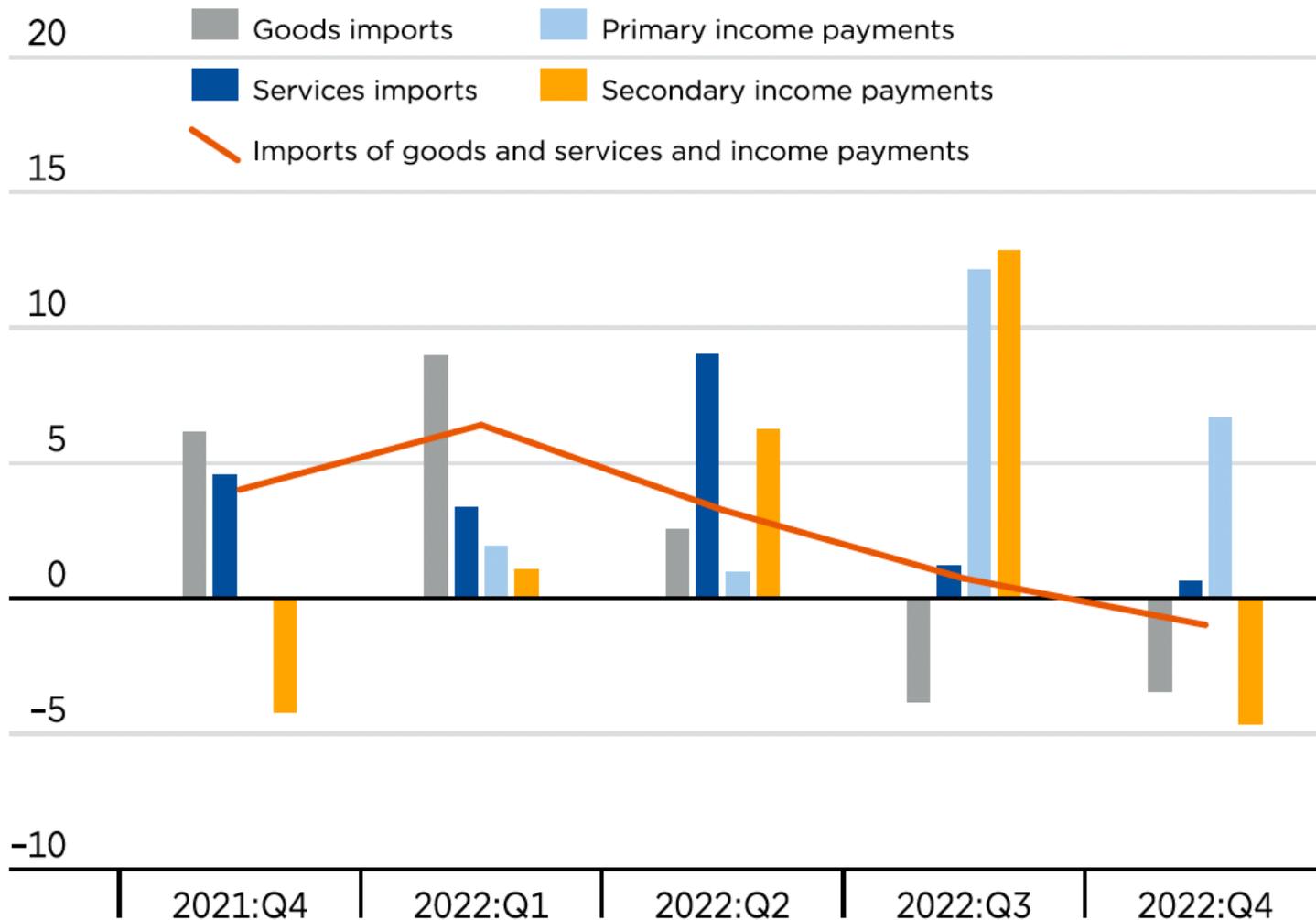
Percent change from the preceding quarter, seasonally adjusted



U.S. Bureau of Economic Analysis

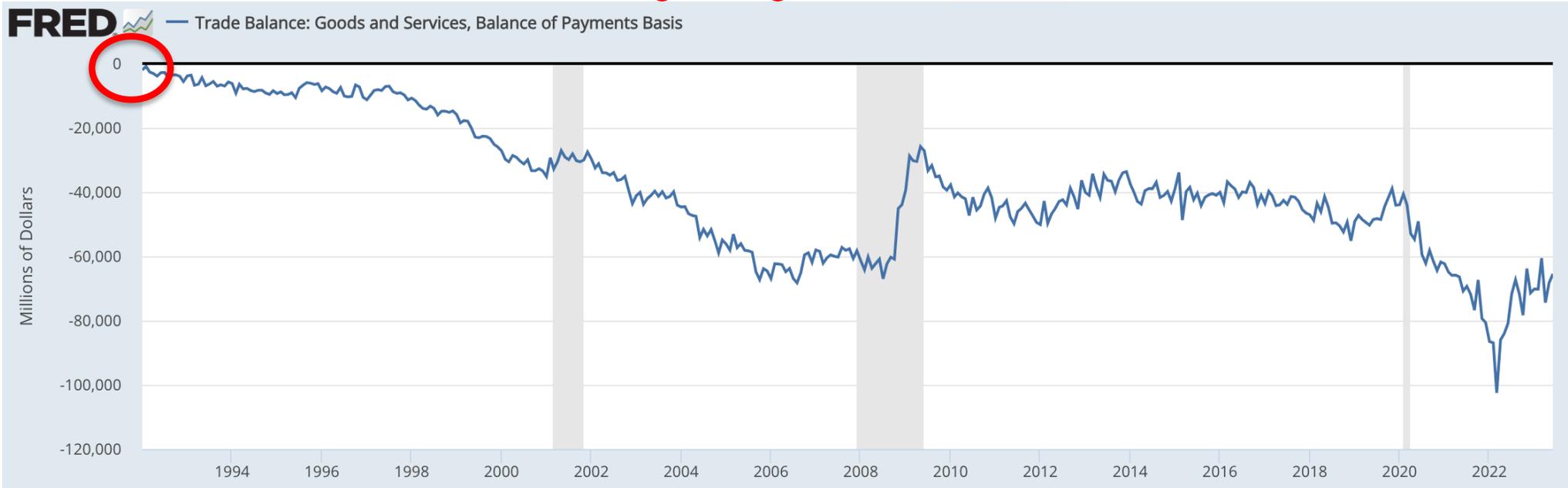
Chart 4. Percent Change in Imports of Goods and Services and Income Payments

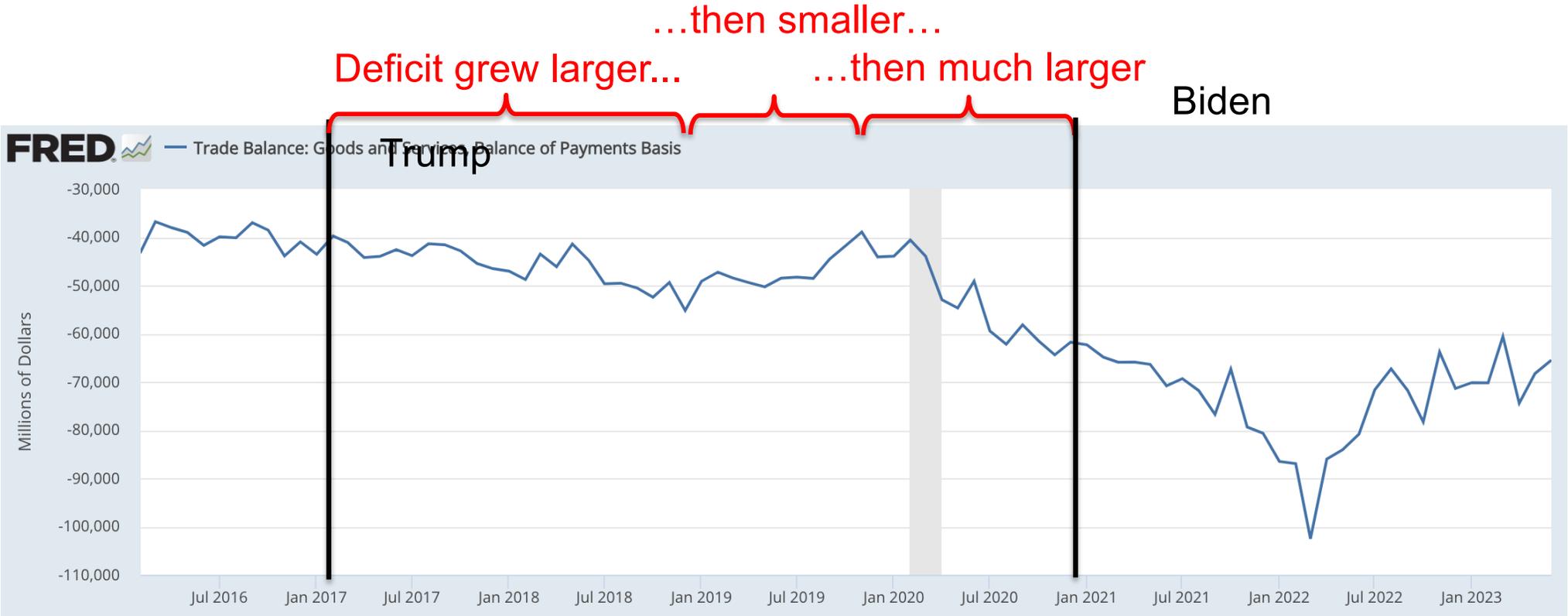
Percent change from the preceding quarter, seasonally adjusted



U.S. Bureau of Economic Analysis

Note the zero. This whole thing is negative – a deficit!





The US Trade Deficit

- Grew from about \$2 billion in 1992 to almost \$70 billion in 2006
- Shrank in the recessions of 2001 & 2008, but not 2020
- Grew for Trump's first two years, then fell until 2020
- Grew past the 2006 level in 2020
- And even more in 2021 and early 2022
- Has declined since early 2022

Pause for Discussion

Questions on Berg, Survey of Current Business

- What mostly happened to current account transactions in Q4 of 2022 compared to Q3? (the most recent change in the BEA table, in its far-right column)
- What happened to financial transactions?

Questions on Swanson, “America’s Trade Deficit ...”

- Why does this show the US trade deficit most recently growing when the Berg reading shows it falling?
- How did inflation contribute to the increase in the deficit?
- How is it possible that the trade deficit grew when “US exports grew more swiftly than imports”?
- This mentions a “reshuffling” of trade away from China. Did the US trade deficit with China fall?

Surpluses and Deficits

- For any subset of transactions
 - “Surplus” is credits $>$ debits
 - “Deficit” is debits $>$ credits
- Common “balances”:
 - Balance of Merchandise Trade (i.e., goods)
 - Balance on Goods and Services
 - Balance on Current Account
 - Balance on Financial Account
 - = Financial inflows minus financial outflows

They Add to Zero

- If all transactions were captured perfectly, then all would add to zero

$$\sum \text{credits} = \sum \text{debits}$$

- Thus

Balance on Current Account

+

Balance on Financial Account

= 0

- (If they don't, there must be errors, hence "statistical discrepancy")

They Add to Zero

- Why?
 - Every actual transaction has two parts, and these cancel each other
 - Example: I buy a book for \$10 from the UK
 - That's a US debit of \$10
 - If the seller does nothing (keeps the \$10 cash), it's an increase in that foreigner's holdings of US assets (the \$10 bill), a US credit
 - The seller may instead do many other things with the \$10, but each of them would result in either a \$10 US credit or reversing a \$10 US debit

Zero

Examples:

1. Buy a US export (US credit in trade account)
2. Pay interest on debt to US (US credit in primary income)
3. Give to US charity (US credit in secondary income)
4. Deposit in US bank (US credit in financial account)
5. Borrow less from NY bank (reverse US debit in financial account)
6. Sell for £ to someone who uses \$10 for one of above

as two parts, and

\$10 from the UK

- If the seller does something (keeps the \$10 cash), it's an increase in that receiver's holdings of US assets (the \$10 bill), a US credit
- The seller may instead do many other things with the \$10, but each of them would result in either a \$10 US credit or reversing a \$10 US debit

They Add to Zero

- Implication
 - A trade (or current account) deficit must be accompanied by
 - Financial account surplus
 - Thus net capital inflow
- How does it happen?
 - Credits correspond to supply of foreign exchange
 - Debits correspond to demand for foreign exchange
 - So exchange-market equilibrium
 - Implies supply = demand
 - Implies credits = debits

What a Deficit Means

- Recall (from macroeconomics) the definition of GDP

- $GDP = Y = C + I + G + (X - M)$

- $(C + I + G)$ equals expenditure, E
- $(X - M)$ equals trade surplus

- So:

$$X - M = Y - E$$

- Trade surplus equals

Income minus expenditure

What a Deficit Means

- Interpretations of a trade deficit
 - (as the US has had for decades)
 - We are spending more than our income
 - We are consuming (and investing in) more goods that we are producing
 - We are borrowing from (or selling assets to) foreigners

What a Deficit Means

- Another Interpretation

- With T = net taxes, then $Y - T$ is “disposable income”
- Rearrange: $Y = C + I + G + (X - M)$
- $Y - C - G - I = (X - M)$
- $(Y - T - C) + (T - G) - I = (X - M)$
- Private savings + Government saving $- I = (X - M)$
- Total Saving $- Investment = (X - M)$
- Thus

$$X - M = S - I$$

What a Deficit **Does Not** Mean

- That foreign trade barriers are hurting our exports
- That other countries are engaged in unfair trade
- That our firms are not competitive
- That we are losing jobs to other countries
- That we need to restrict trade
- (But note: many disagree, including Trump and two of the optional readings: Scott and Mokhiber, and Buffet)

Pause for Discussion

More Questions on KOM

- Why must credits and debits exactly offset if measured accurately?
- KOM defines a country's current account surplus as its exports minus its imports. Why is this also said to equal "net foreign investment"?
- What are, and what are not, the implications of a trade deficit? Jobs? Debt? Trade barriers? Competitiveness?

What a Deficit Means

- Is a trade (or current account) deficit good or bad?
 - It depends

Pause for Discussion

Questions from Obstfeld

- Is a country with a trade deficit losing from trade?
- What determines a country's bilateral deficits and surpluses?
- Why does the fact that the US was at full employment matter for the discussion in Obstfeld?

What a Deficit Means

- Many trade sceptics, such as Scott, associate trade deficits with lost jobs.
 - In other work (not assigned) Scott "measures" the lost jobs by comparing
 - The jobs producing US exports
to
 - The jobs the US would need to produce US imports here
 - By this measure, "jobs lost" are sometimes more than the unemployed

Questions from ~Scott

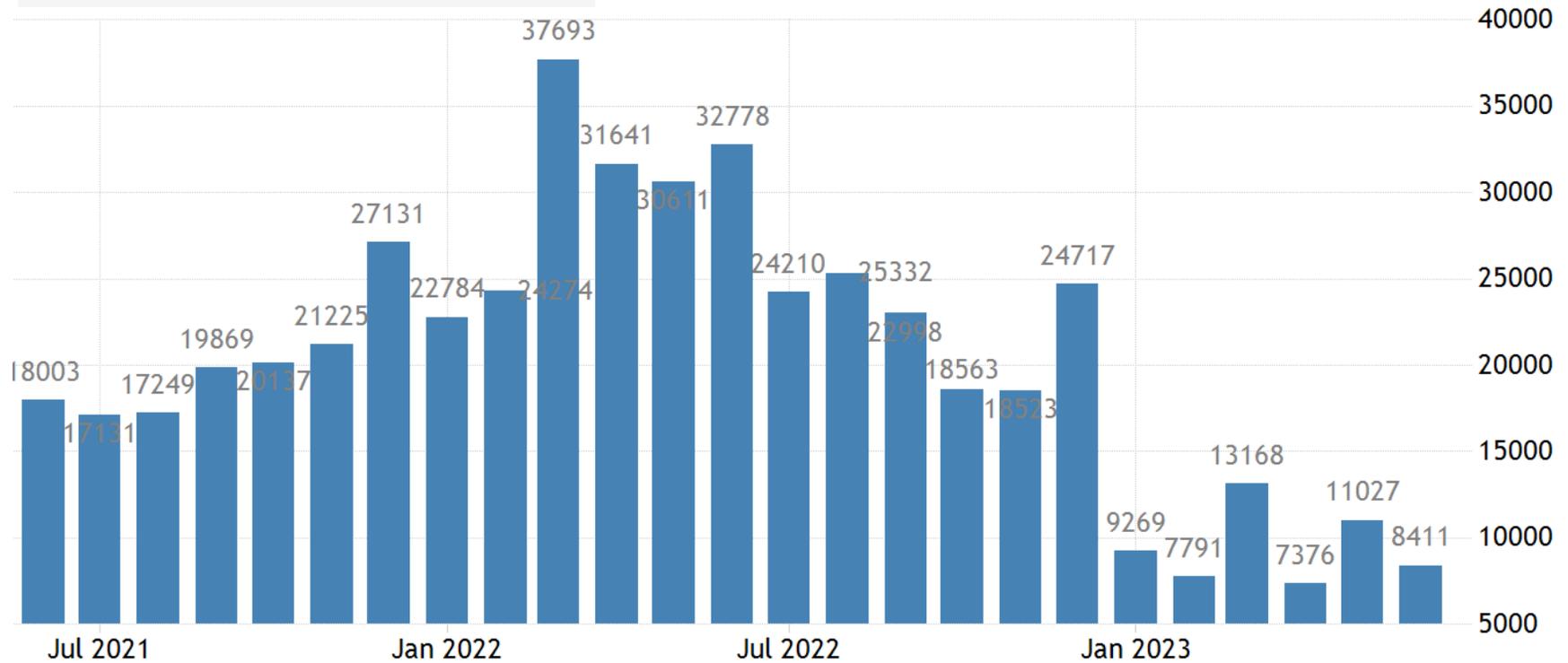
- Which has risen most, the US trade deficit in goods or in manufacturing? Why is this important, according to Scott?
- What does Scott blame for the high and rising US trade deficits?
- What US policy changes does he call for?

Balanced Trade

- In this course we will assume either
 - Trade is balanced, or
 - The trade imbalance does not change
- Why?
 - Because the trade imbalance depends
 - On macroeconomic factors, such as monetary and fiscal policies
 - Not on the trade policies will are studying

Russia Balance of Trade

\$ million



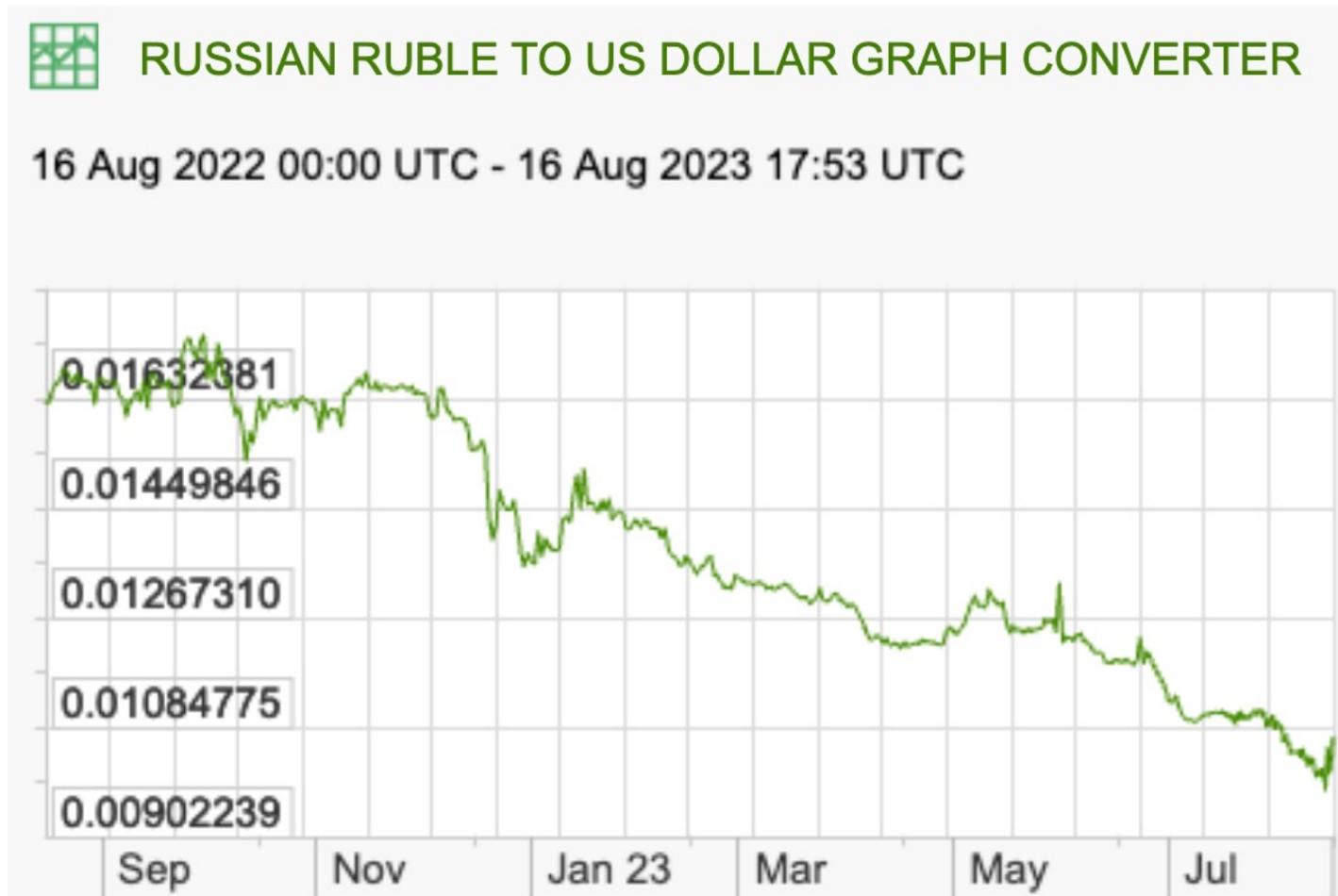
Recent Rate Movements: Russia

Last Year:



Recent Rate Movements: Russia

This Year:



Russian ruble's slide against the U.S. dollar



Note: How many rubles \$1 buys. Y-axis is inverted to show the ruble's decline against the dollar.

Source: Tullett Prebon

TRADING ECONOMICS

China Balance of Trade

\$ billion



Why do you suppose China's surplus is smallest in February?

Recent Rate Movements: China

Last Year:



Recent Rate Movements: China

This Year:



Questions from Krugman

- What does Krugman say is the source of Russia's trade surplus?
- What does he say is the source of China's trade surplus?
- Why does he say that the surpluses are good for other countries?
- Why (according to him) are dictators more likely to have these problems?