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 2, 8:30 AM in Canvas
  - The groups will be set in Canvas; turn in once per group

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 = GDP = Gross Domestic Product
    - C = Consumption
    - I = Investment
    - G = Government purchases
    - X = Exports
    - M = 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 <u>not</u> 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 is 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)	[illegible]
		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 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)	Debits	Net U.S. acquisition of financial assets, excluding financial derivatives Of which:	**440.75**
		Official reserve assets	4.66
		Other assets	436.09
(5)	Credits	Net U.S. incurrence of liabilities, excluding financial derivatives Of which:	**797.96**
		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]	

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		
Change in US assets held abroad		–
Change in foreign holdings of assets in US	+	
Balance on Financial Account:	Credits minus Debits	

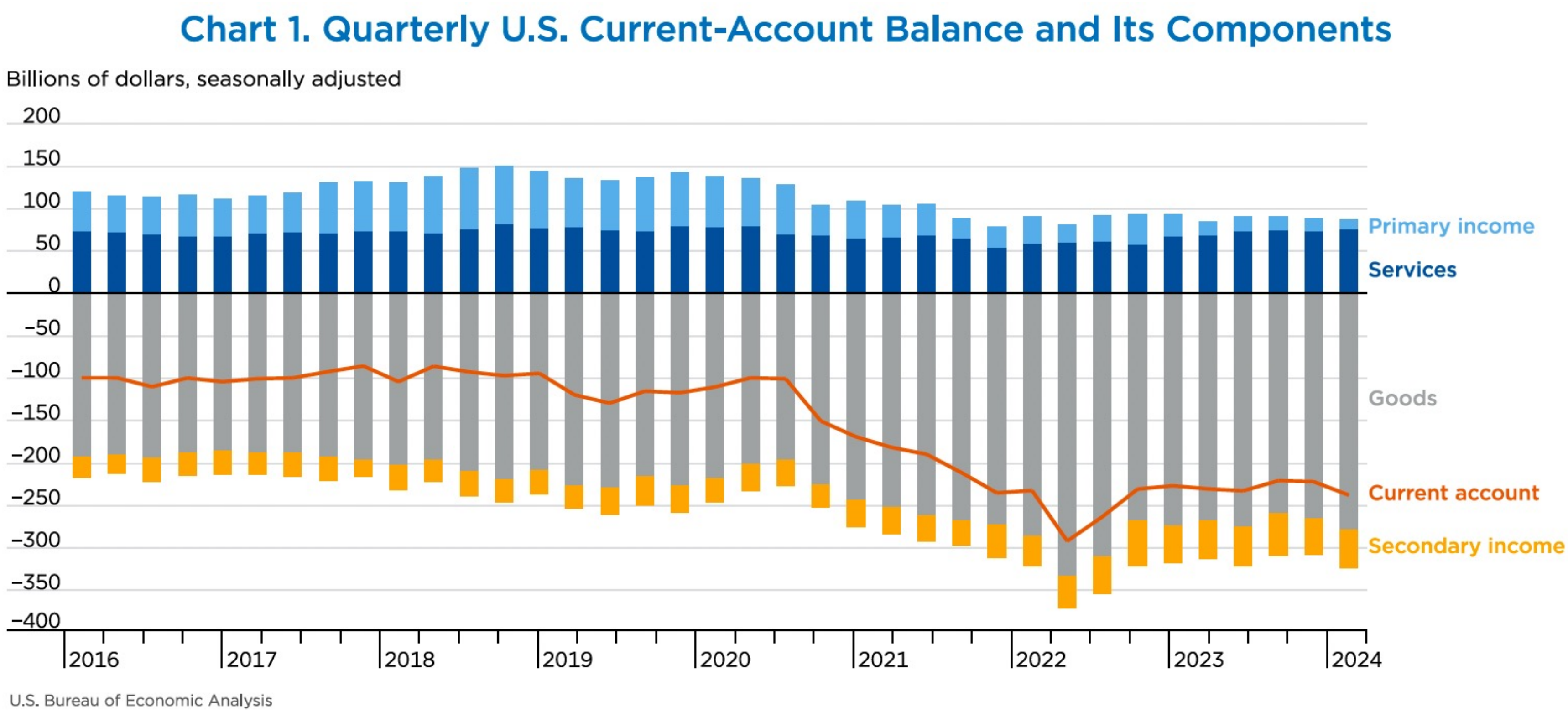


Chart 1. Quarterly U.S. Current-Account Balance and Its Components
Billions of dollars, seasonally adjusted
200
150
100
50
0
−50
−100
−150
−200
−250
−300
−350
−400
2016
2017
2018
2019
2020
2021
2022
2023
2024
Primary income
Services
Goods
Current account
Secondary income
U.S. Bureau of Economic Analysis

Note that Bal on CA is –230,330 = 1,142,911 – 1,373,241

Table A. U.S. International Transactions

[illegible] usted]

	2023				2024	Change 2023:Q4 to 2024:Q1
	[illegible]	[illegible]	Q3[r]	Q4[r]	Q1[p]	
Current account						
Exports of goods and services and income receipts (credits)	**1,142,911**	**1,140,821**	**1,177,040**	**1,184,412**	**1,201,456**	**17,044**
Exports of goods and services	767,632	752,913	774,070	777,201	787,178	9,977
Goods	518,316	497,038	515,998	513,869	516,144	2,275
Services	249,316	255,875	258,072	263,332	271,034	7,702
Primary income receipts	328,098	338,467	355,262	354,894	364,615	9,721
Secondary income (current transfer) receipts	47,181	49,441	47,707	52,317	49,663	−2,654
Imports of goods and services and income payments (debits)	**1,373,241**	**1,3[illegible]3,424**	**1,397,698**	**1,406,196**	**1,439,101**	**32,905**
Imports of goods and services	968,433	956,541	960,531	971,202	991,695	20,493
Goods	785,166	771,030	773,827	778,485	793,871	15,386
Services	183,267	185,511	186,703	192,717	197,824	5,107
Primary income payments	311,356	320,540	338,382	339,413	352,287	12,874
Secondary income (current transfer) payments	93,452	96,342	98,786	95,581	95,119	−462
Capital account						
Capital transfer receipts and other credits	**43**	**7**	**17**	**15**	**44**	**29**
Capital transfer payments and other debits	**2,563**	**1,068**	**1,011**	**1,760**	**1,881**	**121**
Financial account						
Net U.S. acquisition of financial assets excluding financial derivatives (net increase in assets / financial outflow (+))	**199,533**	**209,246**	**270,003**	**299,822**	**321,182**	**21,360**
Direct investment assets	89,192	78,657	119,890	166,346	118,344	−48,002
Portfolio investment assets	18,614	53,042	48,595	−38,689	164,075	202,764
Other investment assets	90,948	77,276	101,118	173,574	36,253	−137,321
Reserve assets	778	272	400	−1,408	2,509	3,917
Net U.S. incurrence of liabilities excluding financial derivatives (net increase in liabilities / financial inflow (+))	**585,035**	**309,433**	**467,099**	**525,518**	**515,595**	**−9,923**
Direct investment liabilities	93,218	88,890	66,740	99,936	81,203	−18,733
Portfolio investment liabilities	349,775	392,385	261,558	227,358	389,473	162,115
Other investment liabilities	142,042	−171,842	138,801	198,223	44,919	−153,304
Financial derivatives other than reserves, net transactions	**−1,727**	**−4,741**	**1,068**	**−10,242**	**−2,865**	**7,377**
Statistical discrepancy						
Statistical discrepancy[1]	**−154,379**	**128,736**	**25,624**	**−12,408**	**42,204**	**54,612**
Balances						
Balance on current account	**−230,330**	**−23[illegible],603**	**−220,659**	**−221,784**	**−237,645**	**−15,861**
Balance on goods and services	[illegible]	−203,628	−186,461	−194,001	−204,516	−10,515
Balance on goods	−266,851	−273,992	−257,829	−264,616	−277,727	−13,111
Balance on services	66,049	70,364	71,369	70,616	73,210	2,594
Balance on primary income	16,742	17,926	16,880	15,481	12,327	−3,154
Balance on secondary income	−46,271	−46,901	−51,078	−43,264	−45,456	−2,192
Balance on capital account	**−2,520**	**−1,061**	**−994**	**−1,745**	**−1,837**	**−92**
Net lending (+) or net borrowing (-) from current- and capital-account transactions[2]	**−232,850**	**−233,664**	**−221,653**	**−223,529**	**−239,482**	**−15,953**
Net lending (+) or net borrowing (-) from financial-account transactions[3]	**−387,229**	**−104,928**	**−196,028**	**−235,937**	**−197,278**	**38,659**

These are all debits and therefore negative.

Ignore this. It's small.

These are also debits and therefore negative.

Really, errors and omissions

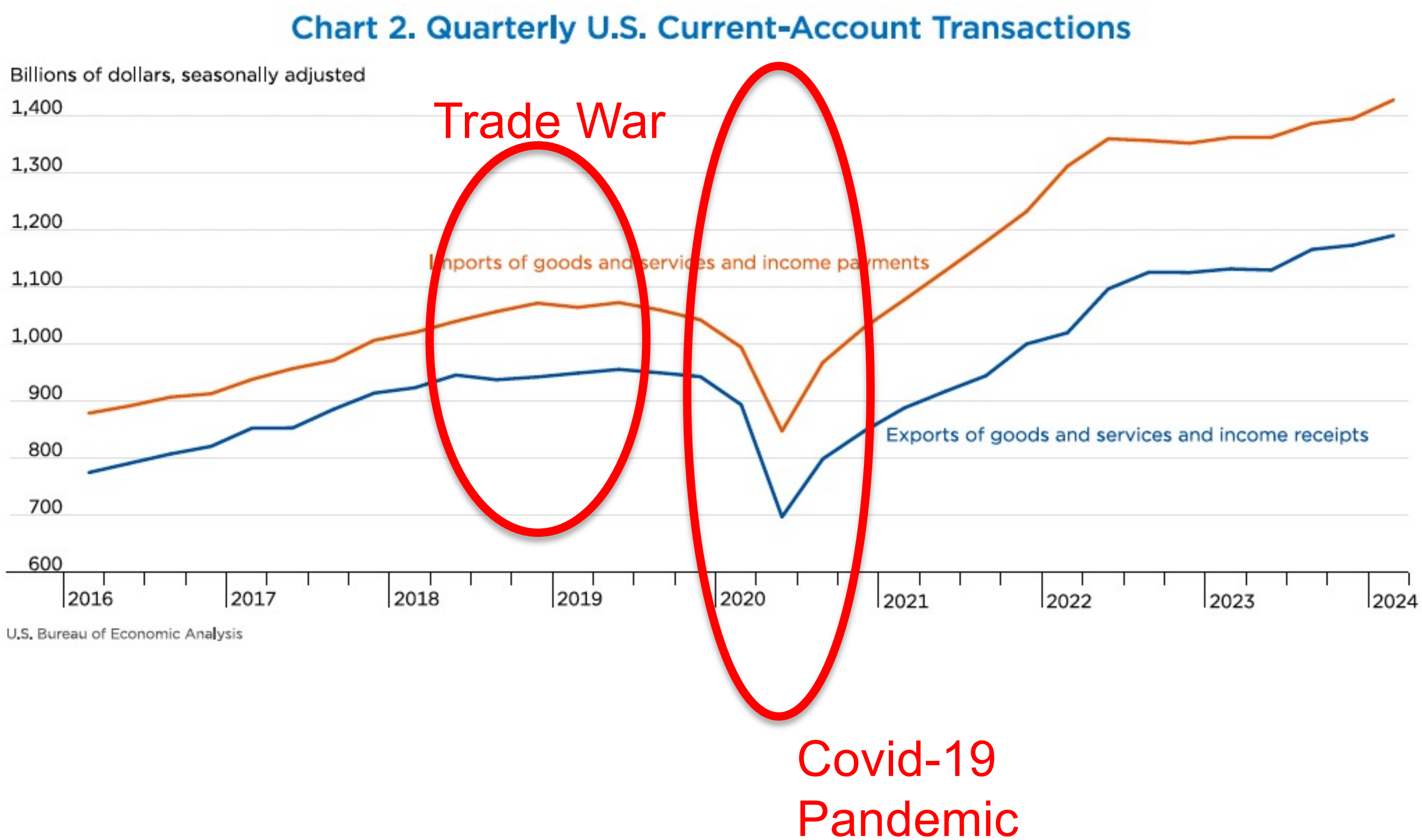


Chart 2. Quarterly U.S. Current-Account Transactions
Billions of dollars, seasonally adjusted
1,400
1,300
1,200
1,100
1,000
900
800
700
600
2016
2017
2018
2019
2020
2021
2022
2023
2024
Imports of goods and services and income payments
Exports of goods and services and income receipts
U.S. Bureau of Economic Analysis
Trade War
Covid-19
Pandemic

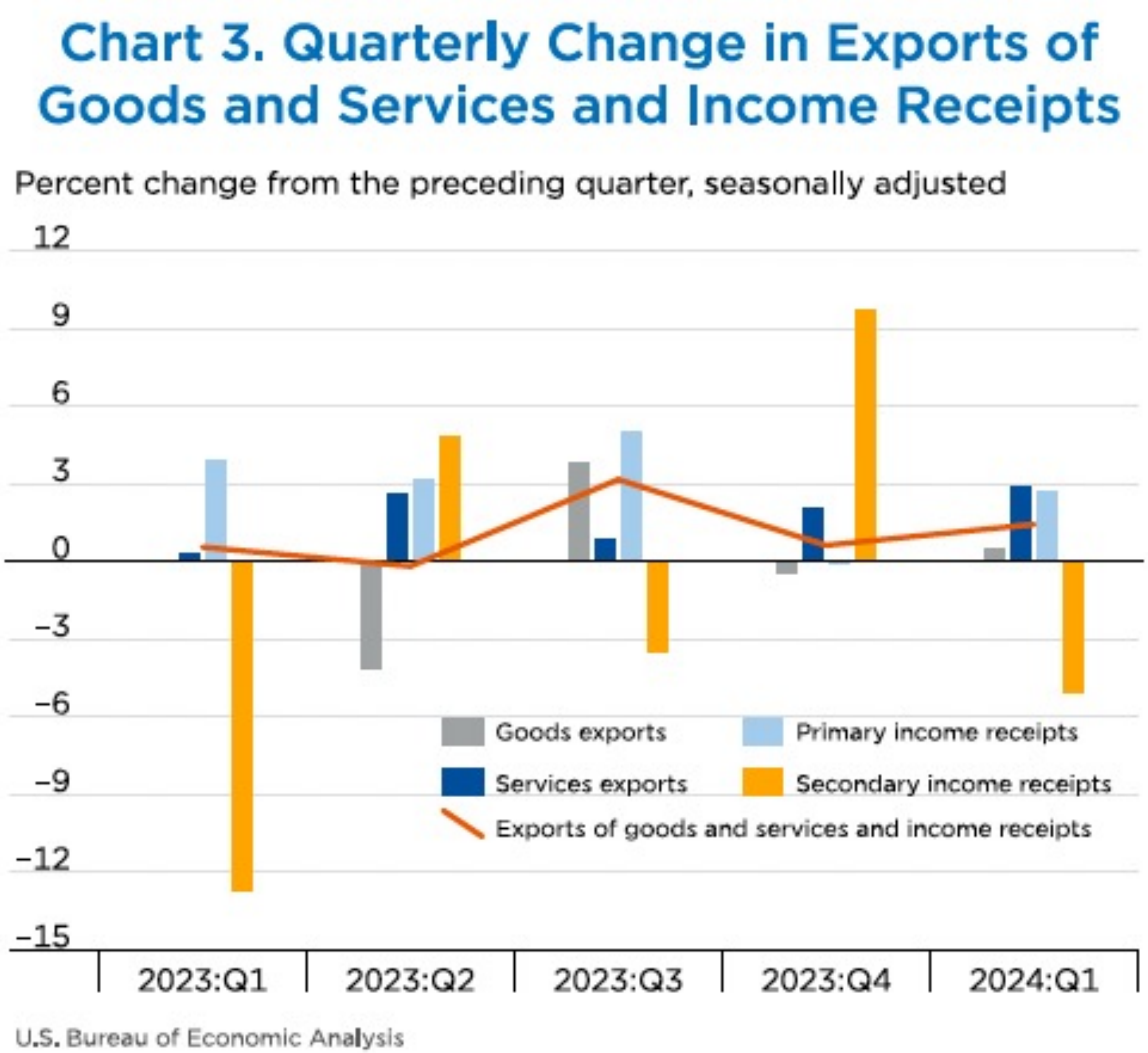


Chart 3. Quarterly Change in Exports of Goods and Services and Income Receipts
Percent change from the preceding quarter, seasonally adjusted
12
9
6
3
0
−3
−6
−9
−12
−15
Goods exports
Primary income receipts
Services exports
Secondary income receipts
Exports of goods and services and income receipts
2023:Q1
2023:Q2
2023:Q3
2023:Q4
2024:Q1
U.S. Bureau of Economic Analysis

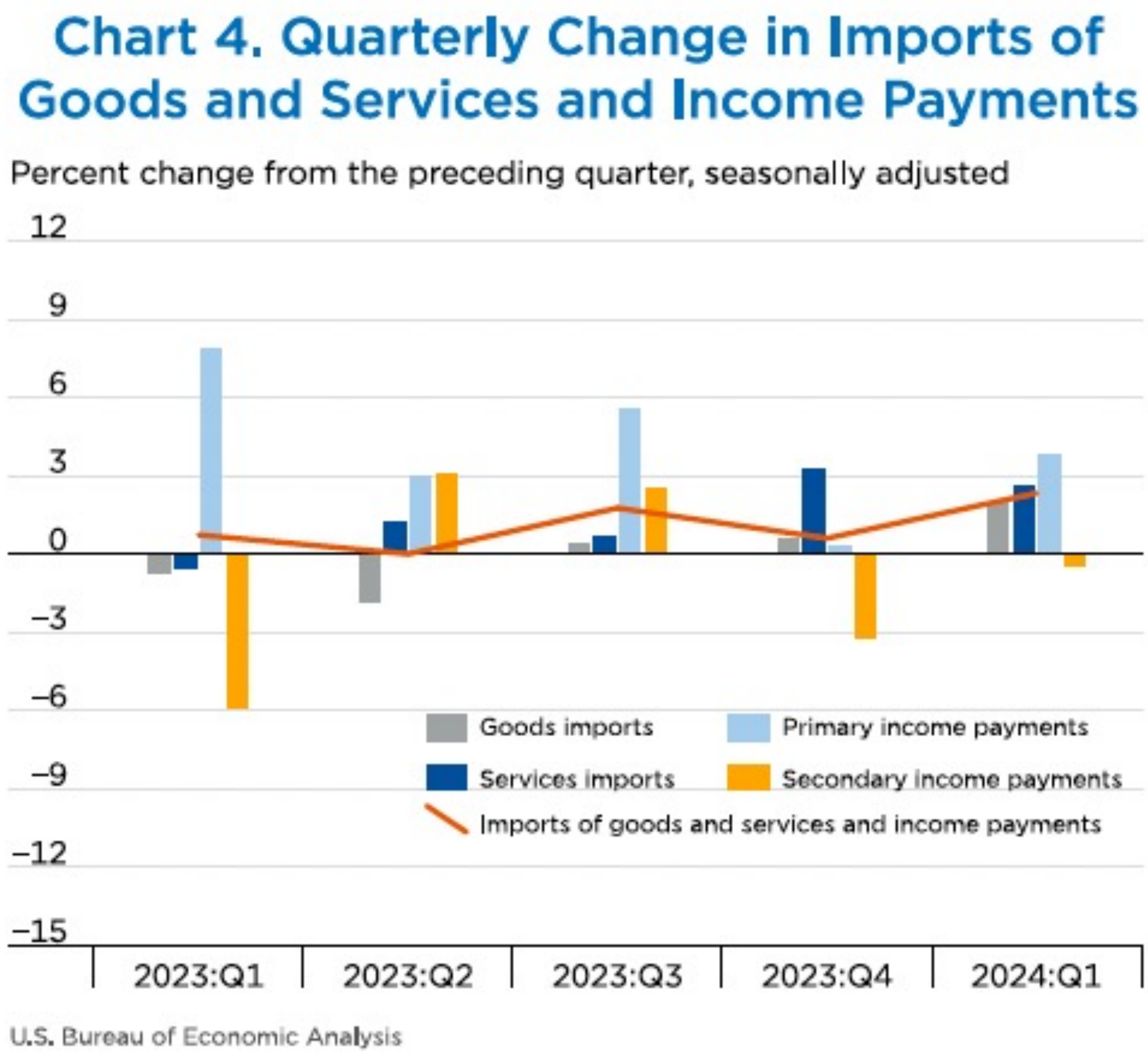
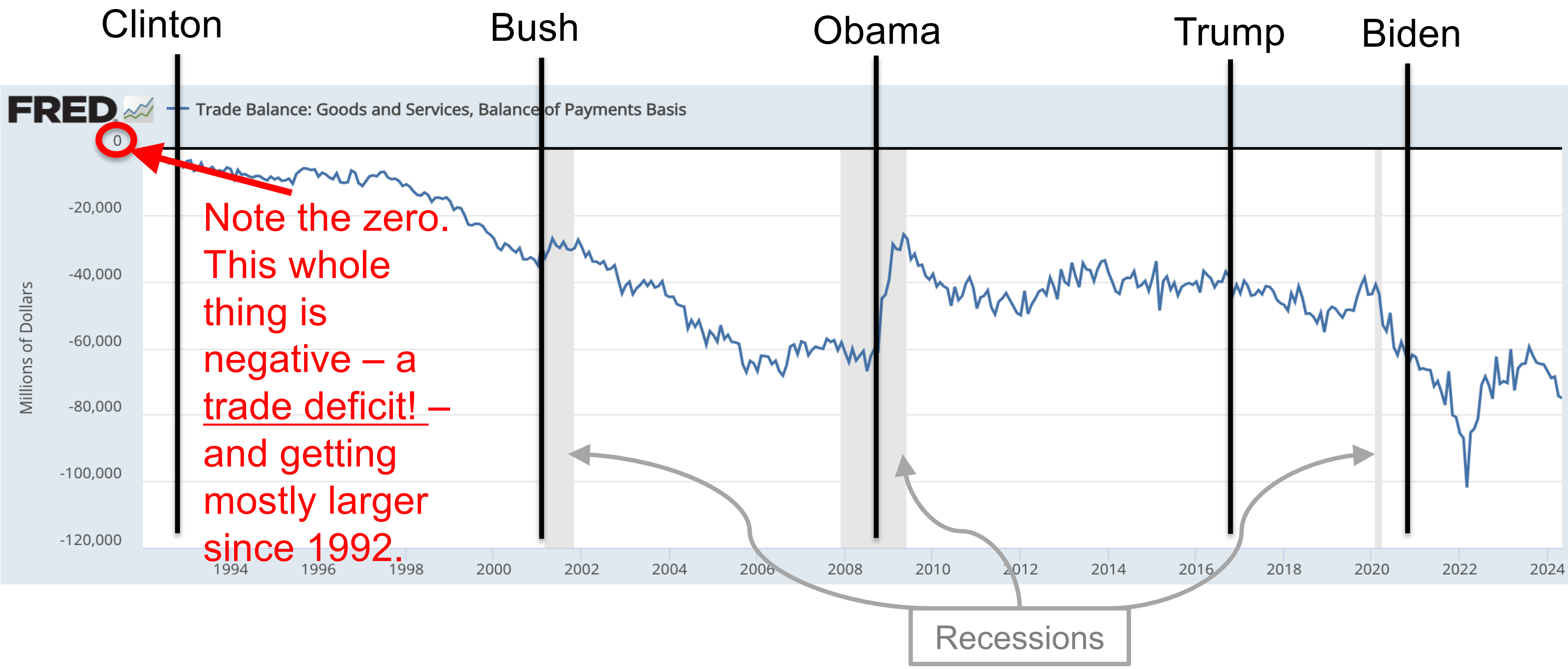


Chart 4. Quarterly Change in Imports of Goods and Services and Income Payments
Percent change from the preceding quarter, seasonally adjusted
12
9
6
3
0
−3
−6
−9
−12
−15
Goods imports
Primary income payments
Services imports
Secondary income payments
Imports of goods and services and income payments
2023:Q1
2023:Q2
2023:Q3
2023:Q4
2024:Q1
U.S. Bureau of Economic Analysis

Trade Balance = Exports minus Imports



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, then rose even more
- Under Biden, it grew to record levels, then fell back

Pause for Discussion

Questions on Berg, Survey of Current Business

- What mostly happened to current account transactions in the first quarter of 2024 compared to the quarter before? (The most recent change in the BEA table, is in its far-right column.)
- What happened to financial transactions?

Surpluses and Deficits

- For any <u>subset</u> 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 transaction 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

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

Zero

as two parts, and

10 from the UK

- If the seller d… …ng (keeps the $10 cash), it's an increase in that f… …er'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:

$$\boxed{X - M = Y - E}$$

  - 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

$$\boxed{X - M = S - I}$$

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 the two 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? For 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

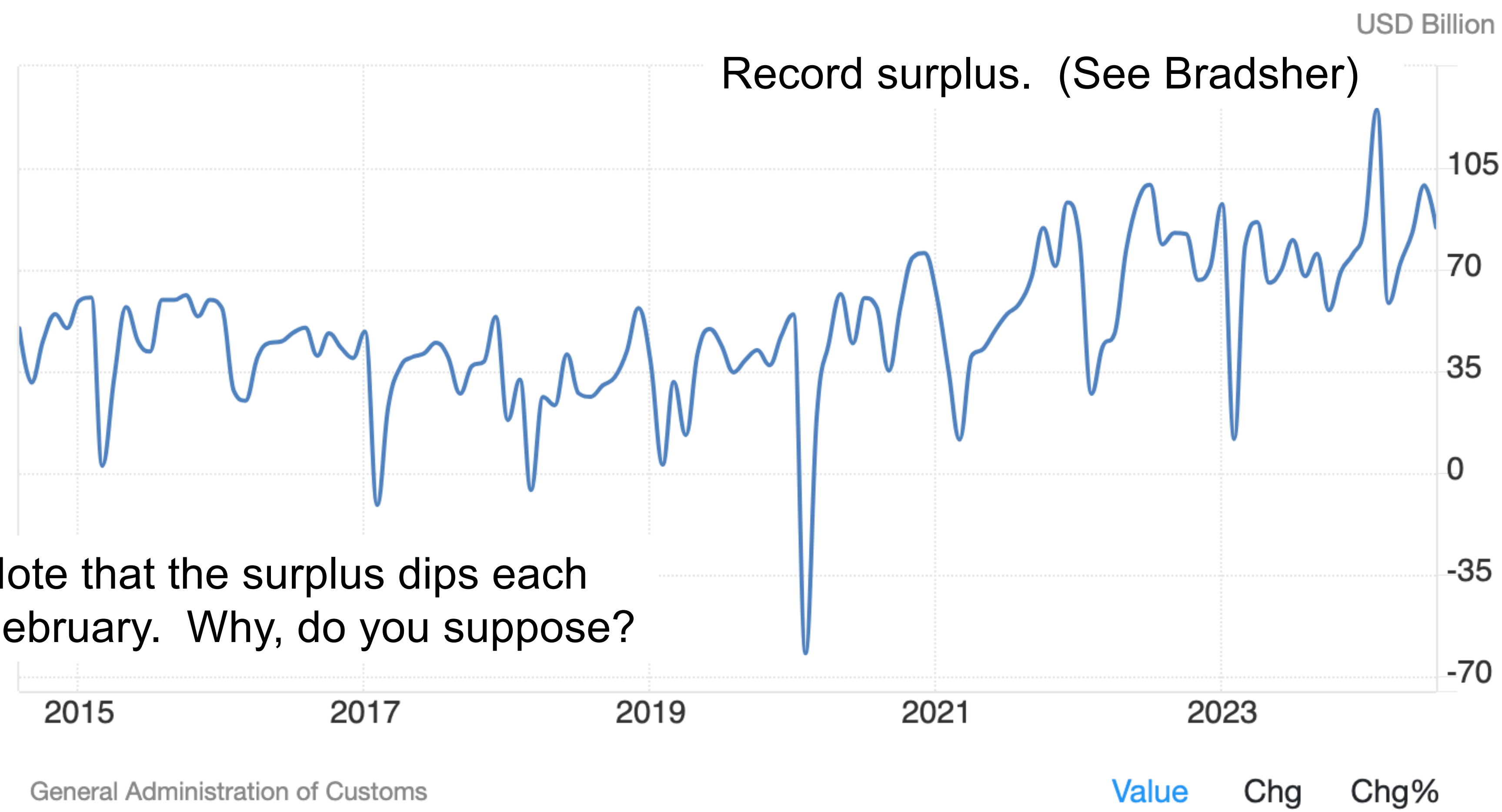
Balanced Trade

- 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
    - <u>Not</u> on the trade policies will are studying

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?

China’s Trade Surplus



Record surplus. (See Bradsher)

Note that the surplus dips each February. Why, do you suppose?

Questions from Pettis. “No, trade surpluses aren’t…”

- According to this, what is needed for trade in accordance with comparative advantage to be beneficial to both countries?
- In his 2-good example, why is Germany able to export both goods?
- What, according to him, is the reason for China’s trade surplus?
- Does China say that it wants to keep wages and incomes low?

Questions from Bradsher. “China Record Trade Surplus…”

- Did both exports and imports rise in China, producing this record surplus?
- Is China exporting more because other countries are reducing their tariffs on China?
- What has happened in China to account for this change?
- Is it only the US that is concerned about this?
- Why do other countries object to this, if they are getting cheap imports from China?