## PubPol/Econ 541

#### Class 6

# International Transactions and the Trade Balance

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## Announcements

#### Papers

- Group assignments in Canvas: Files / Paper Assignments
- Assignments are also there, and on website under Paper Assignments
- First paper is due Thu, Oct 7, 8:30 AM on Canvas
- These groups are set in Canvas; turn in once per group

#### Questions

 At a request from a student last year, I've now put answers to the questions on the readings in Canvas. I doafter the class where they may have been used.

## **Quiz Scores**

	Q1	Q2
Mean	8.97	7.22
Median	9	7.75
Max	10	9.5
Min	6.5	4
S.D.	1.09	1.75

## 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
  - 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

## 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 2015 (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

- 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) <u>changes</u> in holding of assets by one country in another
    - Current account is everything else
      - Trade (both goods and services)
      - Income payments (wages, interest, & dividends)
      - Transfers (Gifts, remittances, and foreign aid)

## 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 min	nus Debit			
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. U.S. Current-Account Balance and Its Components

#### Billions of dollars, seasonally adjusted

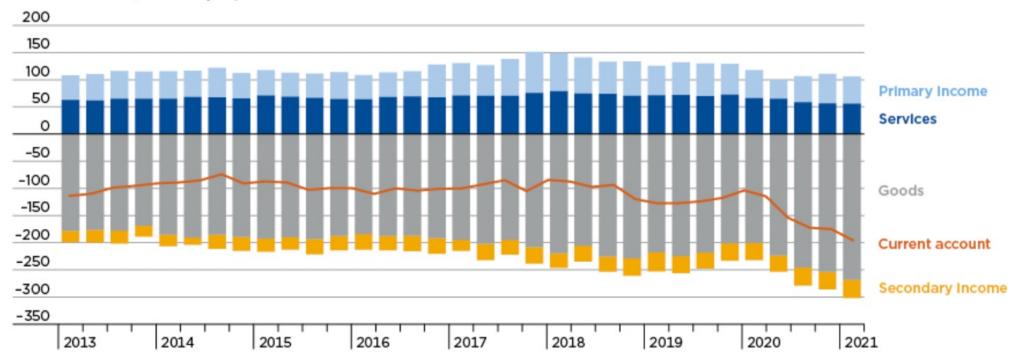


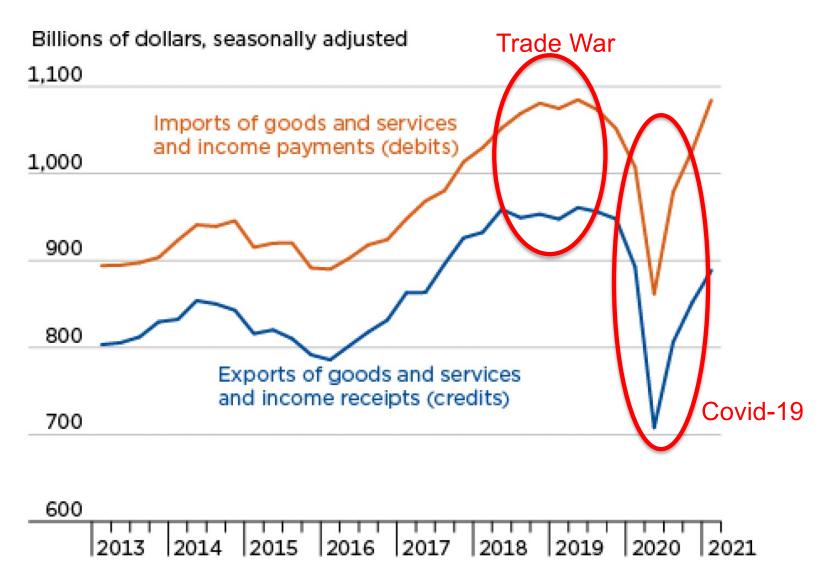
Table 13.2 U.S. Balance of Payments Accounts for 2015 (billions of dollars)

Current Account	
(1) Exports	3,044.08
Of which:	
Goods	1,510.30
Services	750.86
Income receipts (primary income)	782.92
(2) Imports	3,362.06
Of which:	
Goods	2,272.87
Services	488.66
Income payments (primary income)	600.53
(3) Net unilateral transfers (secondary income)	-144.99
Balance on current account	-462.97
[(1) - (2) + (3)]	
Capital Account	
(4)	-0.04
Financial Account	
(5) Net U.S. acquisition of financial assets, excluding financial derivatives Of which:	225.40
Official reserve assets	-6.29
Other assets	231.69
(6) Net U.S. incurrence of liabilities, excluding financial derivatives Of which:	395.23
Official reserve assets	-98.10
Other assets	493.33
(7) Financial derivatives, net	-25.39
Net financial flows	-195.23
[(5) - (6) + (7)]	
Statistical Discrepancy	267.78
[Net financial flows less sum of current and capital accounts]	

**Source:** U.S. Department of Commerce, Bureau of Economic Analysis, June 16, 2016, release. Totals may differ from sums because of rounding.

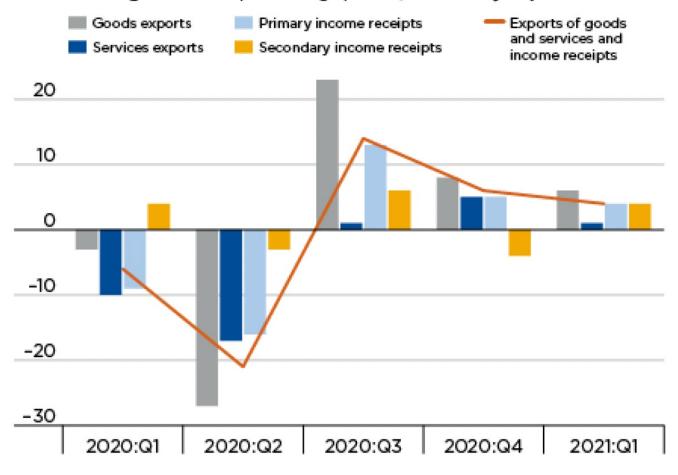
Note that Bal on CA is -153,866 = 707,716 - 861,582			2021	Change 2020:Q4	
	Q2 *	Q <sub>3</sub> r	Q <sub>4</sub> <sup>r</sup>	Q <sub>T</sub> P	to 2021:Q1
Current account		Y			
Exports of goods and services and income receipts (credits	707,716	306,445	851,907	888,746	36,839
Exports of goods and services	454,987	523,259	558,795	584,450	25,655
Goods	289,779	356,826	384,050	408,579	24,529
Services	165,208	166,433	174,745	175,871	1,126
Primary income receipts	212,111	240,265	252,040	261,650	9,610
Secondary income (current transfer) receipts	40,618	42,921	41,072	42,645	1,573
Imports of goods and services and income payments (debits)	861,582	78,807	1,026,986	1,084,485	57,499
Imports of goods: These are all debits	613,536	710,359	755,582	797,209	41,627
Goods	513,050	602,196	637,175	677,037	39,862
Services and therefore <u>negative</u>	100,485	108,163	118,406	120,172	1,766
Primary income parameter	177,587	192,008	197,824	211,366	13,542
Secondary income (current transfer) payments Ignore th	70,459	76,440	73,580	75,910	2,330
Capital account					
Capital transfer receipts and other credits t'S SMA	4	348	9	25	16
Capital transfer payments and other debits	951	898	1,133	2,764	1,631
Financial account		-			
Net U.S. acquisition of financial assets excluding financial derivatives (net increase in assets / financial outflow (+))	-253,779	29,307	228,289	382,022	153,733
Direct investment a	63,839	122,349	96,702	64,039	-32,663
Portfolio investmen These are also debits	-10,340	121,217	53,940	304,691	250,751
Other investment a	-312,239	-216,078	75,209	15,391	-59,818
Reserve assets and therefore negative	4,960	1,820	2,438	-2,100	-4,538
Net U.S. incurrence or nammes excluding imaneral derivatives (net increase in liabilities / financial inflow (+)).	-181,226	201,141	502,122	554,904	52,782
Direct investment liabilities	-46,832	111,589	101,824	64,540	-37,284
Portfolio investment liabilities	272,485	114,935	350,675	326,494	-24,181
Other investment liabilities	-406,879	-25,383	49,623	163,869	114,246
Financial derivatives other than reserves, net transactions	-11,702	28,425	2,633	-2,344	-4,977
Statistical discrepancy					
Statistical discrepancy <sup>1</sup>	70,556	29,504	-94,997	23,253	118,250
Balances Really, errors					
Balance on current account	-153,866		-175,079	-195,739	-20,660
Balance on goods and services and omission:	5 -1,0,049	0	-196,787	-212,759	-15,972
Balance on goods	-223,271	-245,370	-253,125	-268,457	-15,332
Balance on services	64,723	58,270	56,339	55,699	-640
Balance on primary income	34,524	48,257	54,216	50,284	-3,932
Balance on secondary income	-29,841	-33,519	-32,508	-33,264	-756
Balance on capital account	-946	-550	-1,124	-2,740	-1,616
Net lending (+) or net borrowing (-) from current- and capital-account transactions <sup>2</sup>	-154,812	-172,912	-176,203	-198,479	-22,276
Net lending (+) or net borrowing (-) from financial-account transactions <sup>3</sup>	-8 <sub>4,255</sub>	-143,408	-271,199	-175,226	95,973

#### Chart 2. Current-Account Transactions



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

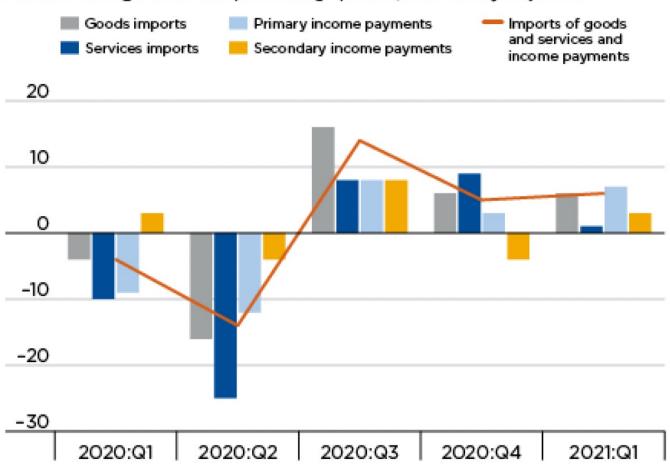
Percent change from the preceding quarter, seasonally adjusted



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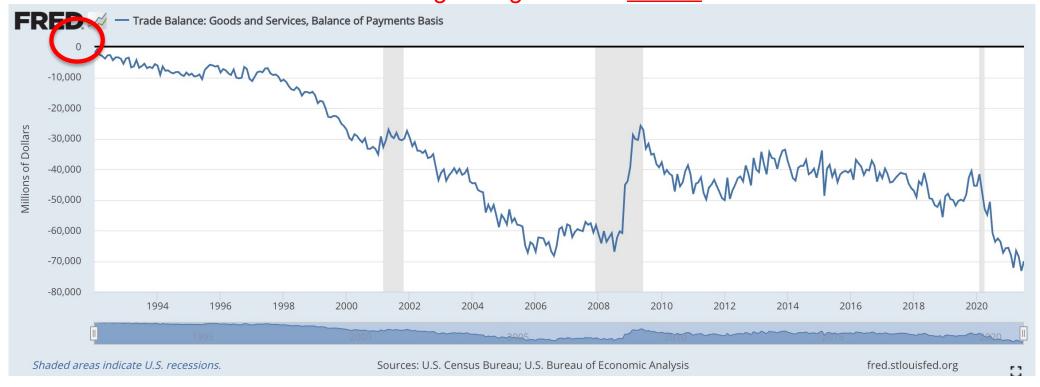
#### Chart 4. Percent Change in Imports of Goods and Services and Income Payments

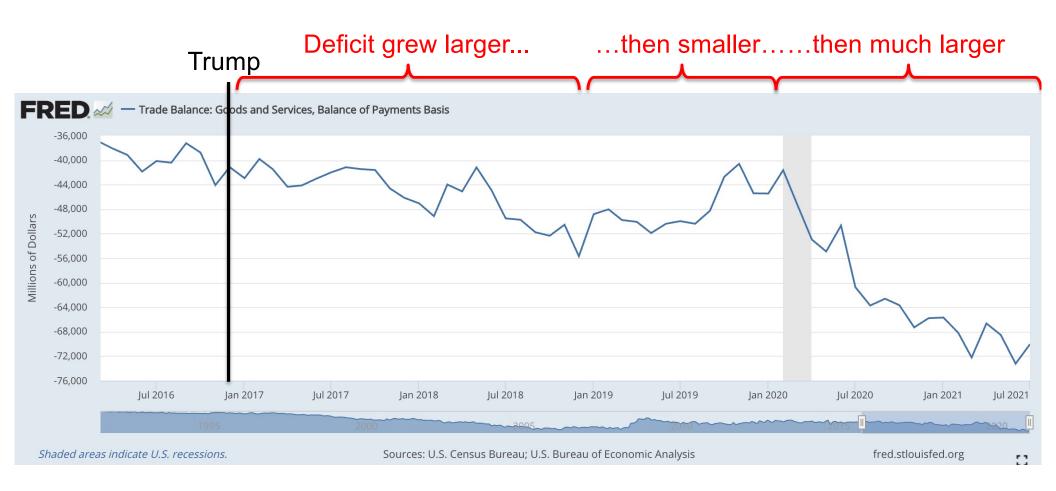
Percent change from the preceding quarter, seasonally adjusted



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#### Note the zero. This whole thing is negative – a <u>deficit!</u>





## 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
- Has grown to past the 2006 level in 2020

## Pause for Discussion

## Questions

- What mostly happened to current account transactions in Q1 of 2021 compared to Q4 of 2020? (the most recent change in the BEA table, 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
    - =Capital inflows minus capital outflows

## They Add to Zero

 If all transaction were captured perfectly, then all would add to zero

$$\sum$$
 credits =  $\sum$  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 0f \$10
    - If the seller keeps the \$10 cash, it's an increase in that foreigner's holdings of US assets (the \$10 bill), a US credit
    - They may 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

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

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

#### 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 that many disagree, including Trump and two of the optional readings: Scott and Mokhiber, and Buffet)

## Pause for Discussion

## Questions

- 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?

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- 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?

- 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 does Scott mean by "tariff circumvention"?

### **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