

PubPol 201

Module 3: International Trade Policy

Class 3 Trade Deficits; Currency Manipulation

Class 3 Outline

Trade Deficits; Currency Manipulation

- Trade deficits
 - Definitions
 - What they **do** and **do not** mean
 - Are they a problem?
- Currency manipulation
 - How it can be done
 - Criteria for naming it
 - China's currency

Lecture 3: Deficits

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Definitions

- Balance of trade = Exports minus Imports
 - “Surplus” if positive
 - “Deficit” if negative
- Reported in 2 forms
 - Balance of trade in goods (aka “merchandise”)
 - Balance of trade in goods and services

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Definitions

- Current Account Balance
 - Also includes
 - Income from abroad minus income paid to abroad
 - Transfer payments into country minus transfer payments out of country
 - Thus equals
 - Exports minus imports of goods and services plus net income from abroad and net transfer inflows
- For most high-income countries, current account balance \approx balance of trade.

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Definitions

- Financial Account Balance
 - This represents changes in financial stocks
 - Net increase in foreign holding of assets here
 - Minus
 - Net increase in domestic holdings of assets abroad
 - Thus it is approximately our country's net borrowing from abroad

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Definitions

- How the balances fit together
- It must be true (if measured perfectly) that

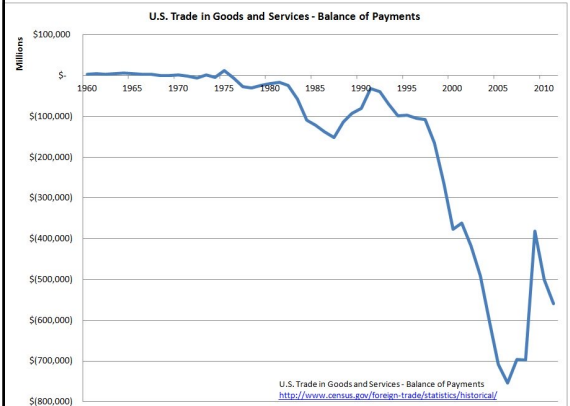
$$\begin{array}{c} \text{Current Account Balance} \\ + \\ \text{Financial Account Balance} \\ = 0 \end{array}$$

- Thus a financial account surplus could be said to “finance” a current account deficit

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US Trade Deficit, in \$ million



US Trade Deficit, in \$



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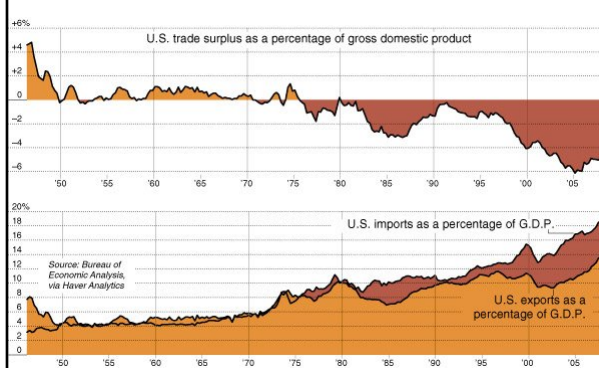
Trade Deficits and GDP/Unemployment

- As noted above, trade deficits
 - Tend to decline in recessions,
 - And be largest in booms
- Does this mean deficits either
 - Cause booms, or
 - Cause recessions?
- Some say yes, but this is an example of what Professor Hall calls “causal confusion”
 - See below.

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US Trade & Trade Deficit, in % of GDP



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US Bilateral Trade

Trade in goods, 2017, \$ millions

US Bilateral Deficits, Largest

| Country | Exports | Imports | Total | Deficit |
|---------|---------|---------|---------|----------|
| China | 129,894 | 505,470 | 635,364 | -375,576 |
| EU | 283,269 | 434,633 | 717,902 | -151,363 |
| Mexico | 243,314 | 314,267 | 557,581 | -70,953 |
| Japan | 67,605 | 136,481 | 204,086 | -68,876 |
| Germany | 53,897 | 117,575 | 171,472 | -63,678 |

US Bilateral Surpluses, Largest

| Country | Exports | Imports | Total | Deficit |
|-------------|---------|---------|--------|---------|
| Hong Kong | 39,939 | 7,376 | 47,315 | +32,563 |
| Netherlands | 41,510 | 17,785 | 59,295 | +23,725 |
| U.A.E. | 20,020 | 4,269 | 24,289 | +15,751 |
| Belgium | 29,924 | 14,997 | 44,921 | +14,927 |
| Australia | 24,527 | 10,045 | 34,572 | +14,482 |

Country balances overall (not bilateral) \$

Current account balances, 2017, \$ billions

Deficits, Largest

| Country | Deficit |
|---------|---------|
| US | -466.2 |
| UK | -106.7 |
| India | -51.2 |
| Canada | -49.3 |
| Turkey | -47.1 |

Surpluses, Largest

| Country | Deficit |
|-------------|---------|
| EU | +404.9 |
| Germany | +296.6 |
| Japan | +195.4 |
| China | +164.9 |
| Netherlands | +80.9 |

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Country balances overall (not bilateral) %GDP

Current account balances, 2016, & rank of 74

Deficits, Selected Largest

| Country | Rank | Deficit |
|-----------|------|---------|
| Bhutan | 1 | -27.7 |
| UK | 14 | -4.4 |
| Canada | 23 | -3.3 |
| Australia | 28 | -2.7 |
| US | 31 | -2.6 |

Surpluses, Selected Largest

| Country | Rank | Deficit |
|-------------|------|---------|
| Singapore | 1 | +19.0 |
| Switzerland | 2 | +10.7 |
| Germany | 4 | +8.3 |
| Japan | 17 | +3.8 |
| China | 22 | +1.8 |

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What the Trade Balance Does **Not** Mean

- Common Misinterpretations
 - That a deficit means we are “losing money”
 - This was sort of true
 - When
 - » All money was gold (the Gold Standard), and
 - » There were no international capital flows
 - Then imports > exports meant you were spending more gold than you were earning; Gold was flowing out
 - Today there are capital flows
 - A country with imports > exports can
 - » Borrow
 - » Sell assets to foreigners

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What the Trade Balance Does **Not** Mean

- Common Misinterpretations
 - That a deficit means we are “losing jobs”
 - It is true that
 - Imports are goods we don't produce, and
 - Exports are goods we do produce
 - But whether an increase in imports means a loss of jobs depends on why imports went up
 - Often it is because more people are working, earning income, and buying more from abroad

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What the Trade Balance Does **Not** Mean

- Common Misinterpretations
 - That a deficit means other countries are misbehaving, by restricting imports or subsidizing exports
 - No

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What the Trade Balance Does Mean

- From National Income Accounting

(I'll do this first without government)

– Recall from Econ 102 (if you've had it)

GDP = Output = Income = Y

– Output:

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

– Income:

$$Y = C + S$$

– Therefore

$$X - M = S - I$$

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- Where
 - C = Consumption
 - I = Investment
 - X = Exports
 - M = Imports
 - S = Savings

What the Trade Balance Does Mean

- From National Income Accounting

– Thus, since $X - M = S - I$

- Trade surplus \Rightarrow savings > investment

- Trade deficit \Rightarrow savings < investment

– If we are not saving enough to finance investment, how do we pay for it?

- By borrowing from abroad, or

- By selling assets

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What the Trade Balance Does Mean

- From National Income Accounting

(This time with government)

– Even more simply

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

• Where

- G = Government purchases of goods & services (not transfer payments)

– implies

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

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What the Trade Balance Does Mean

- Thus

$$\text{Trade Surplus} \rightarrow (X - M) = Y - (C + I + G) \leftarrow \text{Expenditure}$$

Income

– So a trade deficit

$$(X - M) < 0$$

means that we are spending

$$(C + I + G)$$

more than our income Y

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What the Trade Balance Does Mean

- Therefore, in spite of its name, and its definition, the trade balance

– Is not really about trade, which is just the symptom

– It is about whether we are living within our means

- If we are spending more than our income

– Then we are buying more than we are producing

– And we must import the difference

- Thus running a trade deficit

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Trade Deficits and GDP/Unemployment

- Do deficits either

– Cause booms, or

– Cause recessions?

- No. Causation is the other direction

– When income rises in a boom, so does spending, and trade deficit grows

– When income falls in a recession, so does spending and the trade deficit shrinks

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Are Trade Deficits a Problem?

- Mankiw reading
 - Mankiw is a Harvard professor.
 - He was also Chair of Council of Economic Advisors under George W. Bush
 - And later advisor to Mitt Romney
 - He makes several points:
 - Money that flows out for imports comes back for exports and capital inflows
 - Deficit was largest when unemployment was lowest, because high income causes high imports
 - Trump's intended policies (e.g., tax cuts, infrastructure spending) will increase the trade deficit

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Are Trade Deficits a Problem?

- When is a trade deficit good?
 - When the country (like a young person) is investing for the future (like a successfully developing country)
 - Not when it is going into debt just to finance current consumption (like the US)

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Are Trade Deficits a Problem?

- Lankford reading
 - Note that the author of this opinion piece is a Republican senator (from Oklahoma)
 - He makes two points:
 - That our trade deficit with Mexico is due to our much higher income. We can afford to buy more than they can, and hence we do.
 - The deficit also reflects the fact the foreigners want to invest in the US and when they do, that money flowing in for investment requires that money flow out in a trade deficit. But foreign investment into the US benefits ~~us~~.

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Are Trade Deficits a Problem?

- Lankford reading
 - His first point is suspect.
 - US per capita income is higher
 - But that doesn't mean that our consumption can exceed our income by more, as a deficit implies
 - Unless, perhaps, it means we have better credit and can borrow
 - His second point is good
 - Foreigners' investments here are inflows in the Financial Account
 - They must be matched by outflows in the current account

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What about Bilateral imbalances?

- There is no reason why bilateral trade should be balanced
 - Depending on who is exporting importing what, it may make sense for a country to
 - Mainly buy (import) from one country, and
 - Mainly sell (export) to another country
- Example
 - China has lots of labor but few natural resources
 - So it imports resources from Australia, and
 - Exports manufactures to the US

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What about Bilateral imbalances?

- Can tariffs change bilateral imbalances?
 - Yes
 - Tariffs on one country won't change how much we import overall, but they can change from whom we import
 - The tariff on imports from China should
 - Reduce our bilateral deficit with China
 - Increase our deficit with other countries, as we import the goods from them instead of from China

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Discussion Question

Why do President Trump and others see trade deficits of the US, both overall and bilateral, as bad?

Do they see them as signs of bad US policies or of bad policies of other countries?

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Exchange Rates

- How are they determined?
 - By markets – supply and demand
 - That's all, in countries with a "floating exchange rate"
 - US, EU, Canada, Mexico, and others
 - By governments intervening in markets
 - Selling their own currency and buying others to push their currency down
 - Buying their own currency and selling others to push their currency up

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Exchange Rates

- Exchange-market intervention
 - Is done, if at all, by the Central Bank (CB)
 - Requires "International Reserves"
 - Of foreign currencies (usually the US dollar), or
 - Of foreign assets denominated in foreign currency
 - Reserves
 - Rise when intervention pushes down the domestic currency (since CB buys \$)
 - Fall when intervention pushes up the domestic currency (since CB sells \$)

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Exchange Rates

- Currency Manipulation
 - Usually defined as intervention intended to reduce the value of a country's own currency
 - In order to make its exports more competitive, and
 - Discourage imports
 - Other countries object to it, because it reduces their exports
 - Congress requires the US Treasury Department to report twice a year on currency manipulation

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Exchange Rates

- Currency Manipulation
 - Many have accused China, especially, of currency manipulation over the years
 - Trump promised, during the campaign, to label China a currency manipulator “on his first day in office.” He did not.
 - Had he done so, according to the FT reading, it
 - would have authorized “the US to do nothing except negotiate with Beijing over the renminbi, which it is already doing.”
 - In April 2018, the third such report under Trump did not label China a currency manipulator

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Exchange Rates

- US criteria for currency manipulation
 - As of April 2016, per Bergsten-Gagnon reading
 - has \$55 billion or more of annual trade with the United States (to count as a “major trading partner”);
 - (Economist reading omits this)
 - runs a bilateral trade surplus with the United States exceeding \$20 billion over the past 12 months;
 - runs global current account surplus exceeding 3 percent of the country’s GDP over the past 12 months; and
 - engages repeated net foreign exchange purchases exceeding 2 percent of the country’s GDP over the past 12 months.

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“When a flow becomes a flood”
Jan 22nd 2009 (*The Economist* print edition)



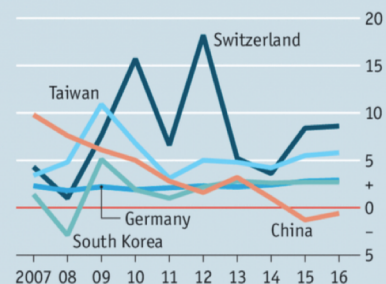
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Exchange controls

Currency-manipulation score*

Selected countries, higher score=more manipulation

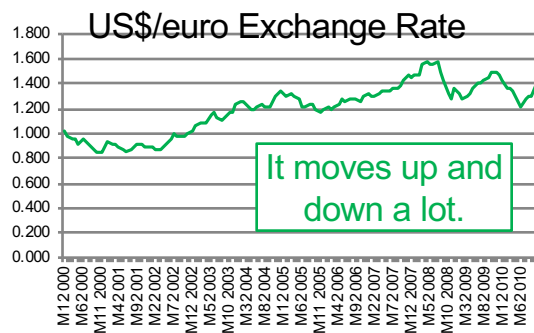


Source:
The Economist

*Based on current-account balances and foreign-asset purchases relative to GDP

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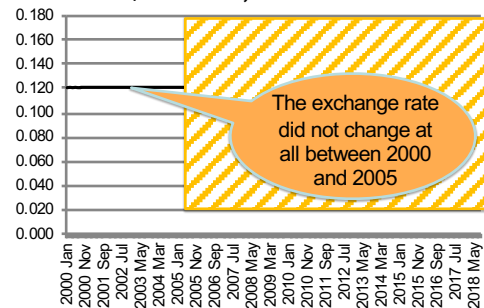
How a Floating Exchange Rate Behaves



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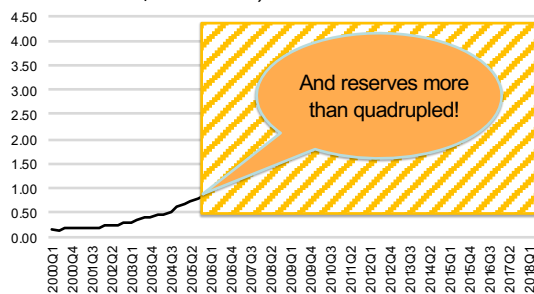
China's Exchange Rate, US\$/Yuan, 2000-2018



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China's Reserves, \$ trillions, 2000-2018



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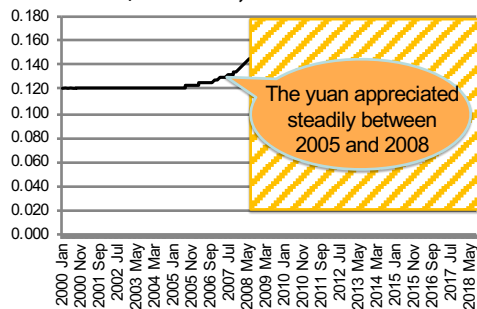
Currency Manipulation

- The US Dollar vs Chinese Renminbi
 - It is clear from the two graphs that
 - China was pegging their currency to the US dollar in 2000-2005
 - To do so they were buying dollars and thus accumulating almost \$1 trillion of reserves
 - This led policy makers in the US to complain, and in 2005 China let its currency rise

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China's Exchange Rate, US\$/Yuan, 2000-2018



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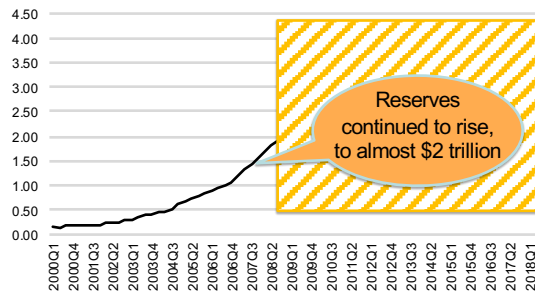
Currency Manipulation

- But China's reserves continued to rise, indicating that it was still buying dollars.

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China's Reserves, \$ trillions, 2000-2018



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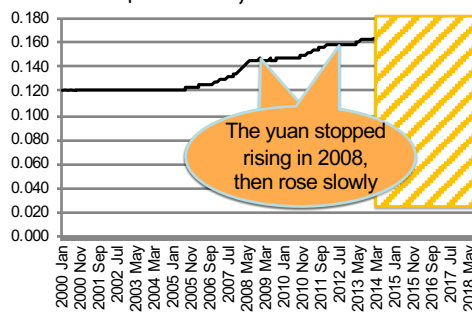
Currency Manipulation

- The financial crisis of 2008 slowed down both
 - The appreciation of the renminbi, and
 - The growth of reserves

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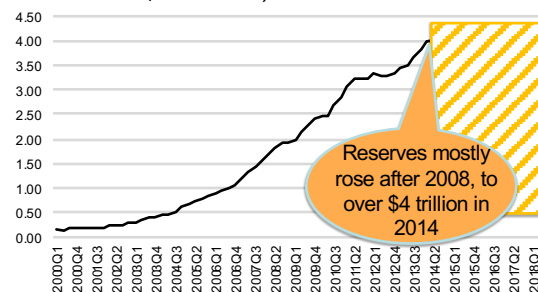
China's Exchange Rate, US\$/Yuan, 2000-2018



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China's Reserves, \$ trillions, 2000-2018



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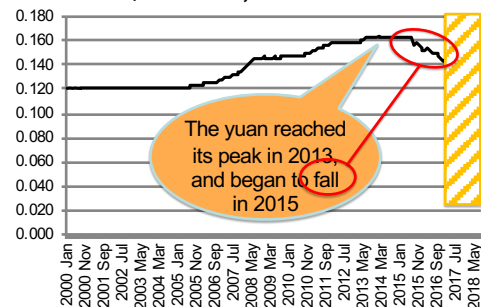
Currency Manipulation

- The financial crisis of 2008
 - Slowed down the appreciation of the renminbi, off and on
 - But reserves continued to grow rapidly in most periods until 2014
 - China's purchases of US dollars were still holding down the yuan's value, or slowing its rise
- But all that changed in 2014

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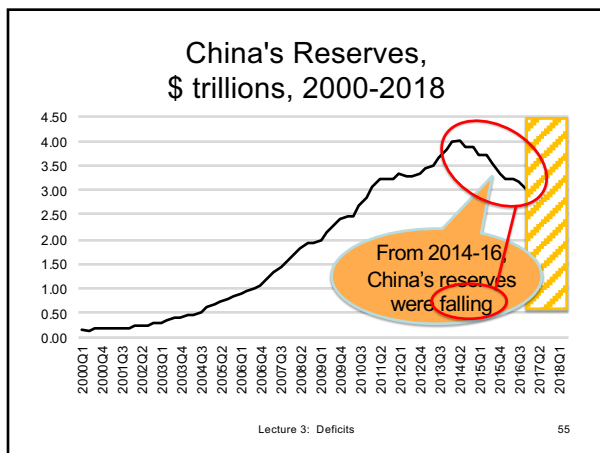
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China's Exchange Rate, US\$/Yuan, 2000-2018



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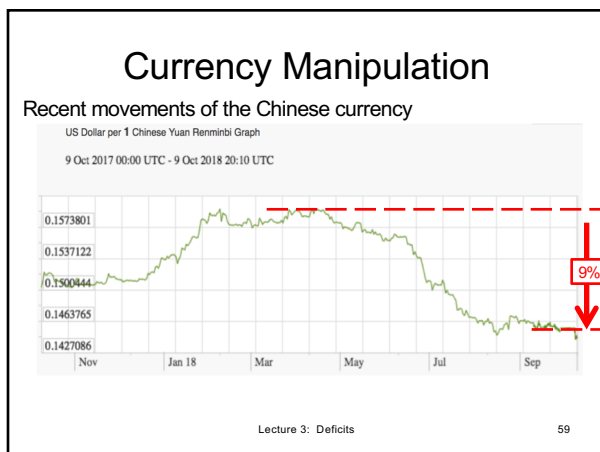
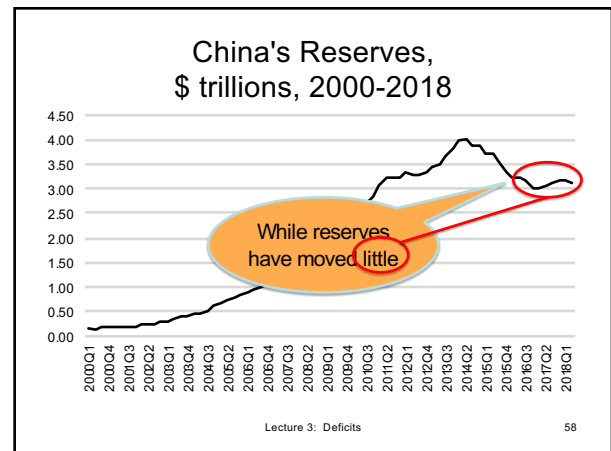
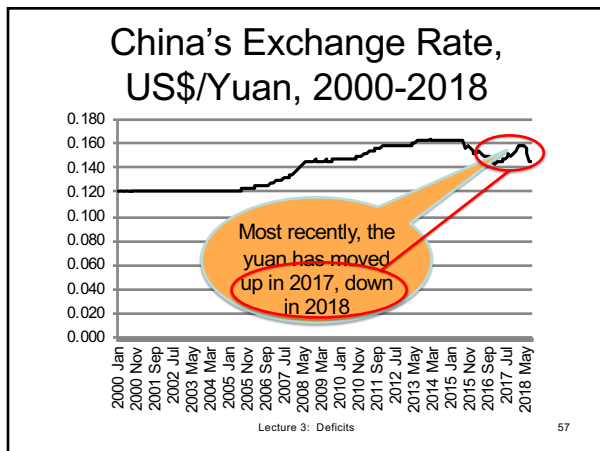
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Currency Manipulation

- Starting in 2014
 - The renminbi fell against the US dollar
 - Chinese reserves declined, by almost \$1 trillion
 - This means that China's CB was
 - Selling dollars, not buying them
 - Thus pushing the dollar down, not up
 - And the renminbi up, not down.
 - So China WAS intervening
 - But not to push its currency down

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Discussion Question

In 2008, responding to the financial crisis and global recession, the US Fed used a new method to push down US interest rates. This caused the US dollar to depreciate, and other countries complained that this was making it harder for them to compete and deal with their own recessions.

Was the US engaged in currency manipulation?
Were the complaints justified?

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