PubPol 201

Module 3: International Trade Policy

Class 3
Trade Deficits;
Currency Manipulation

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

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

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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

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 ≈ balance of trade.

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

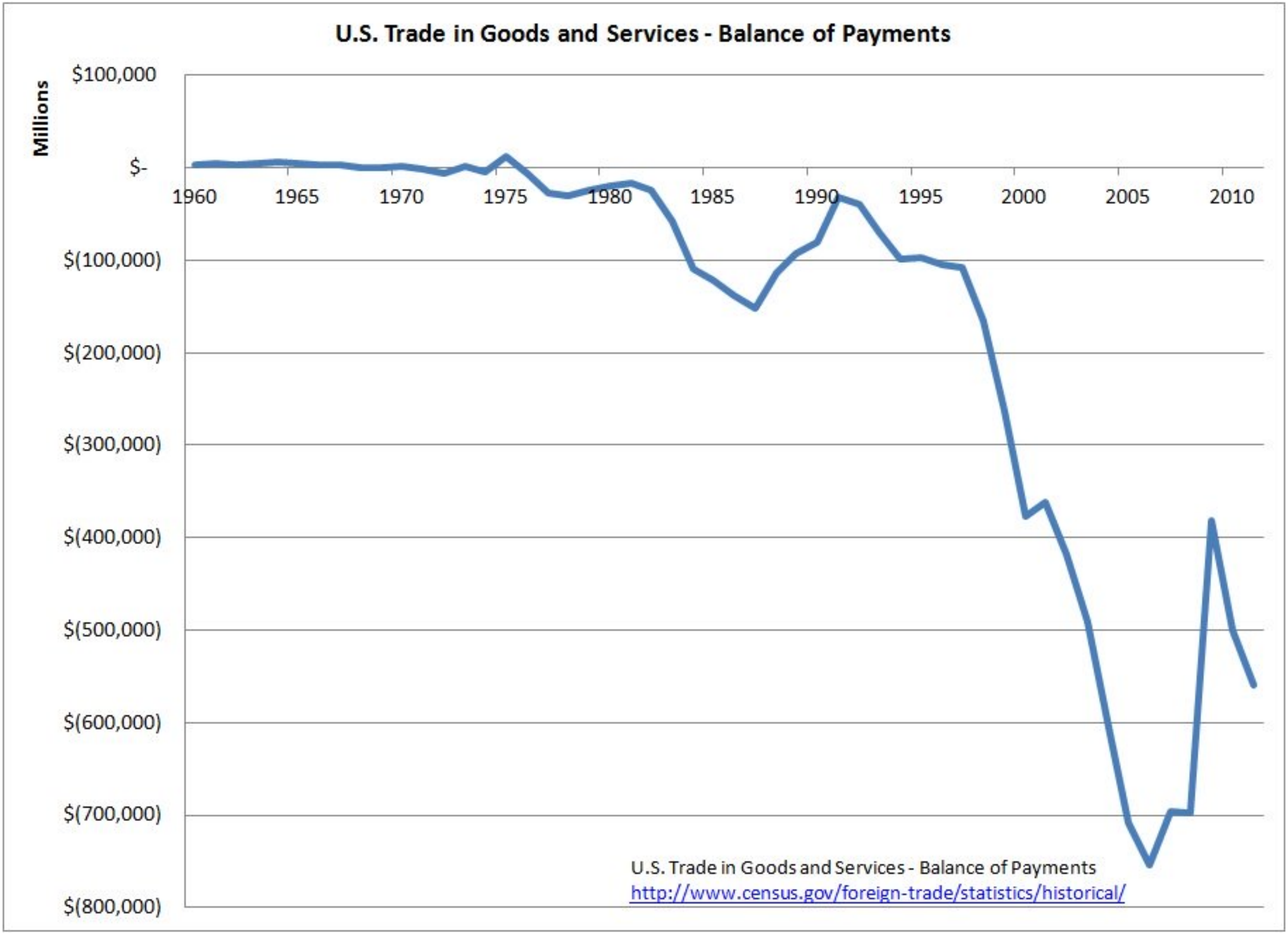
Definitions

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

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

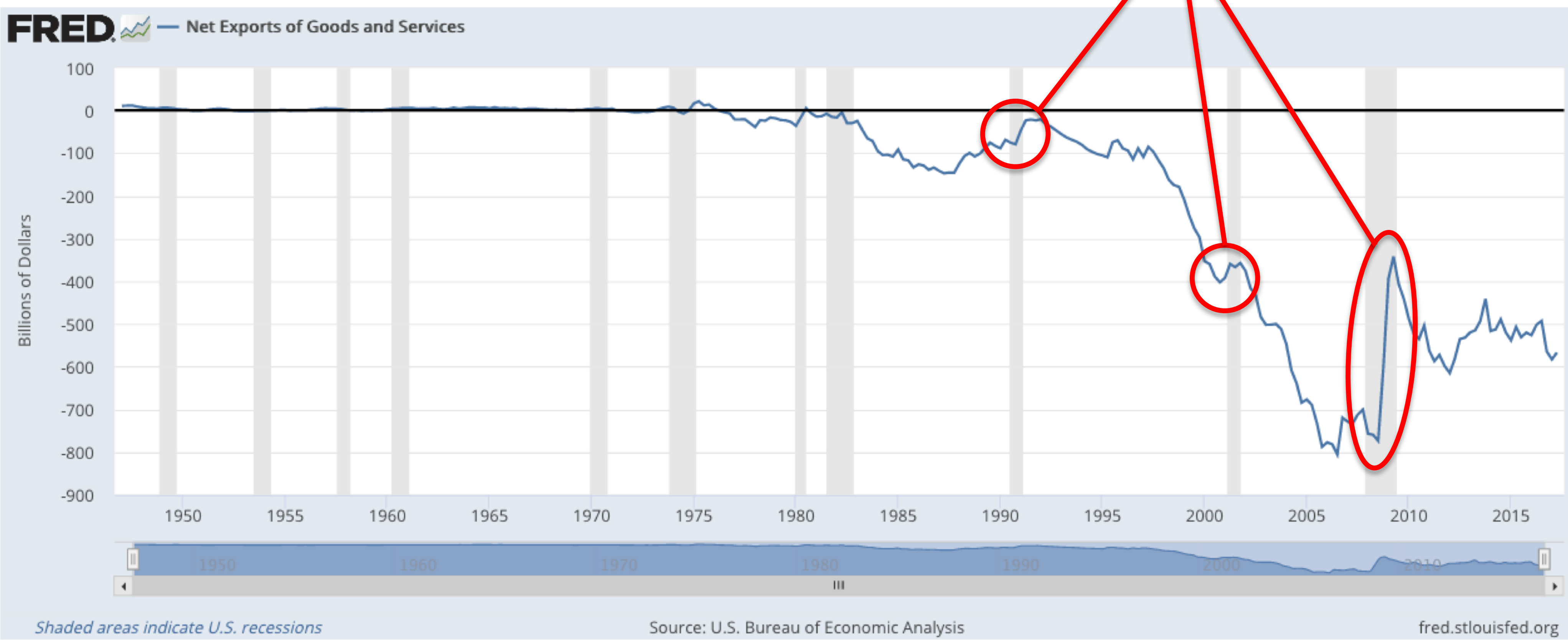
- Thus a financial account surplus could be said to “finance” a current account deficit

US Trade Deficit, in $ million



US Trade Deficit, in $

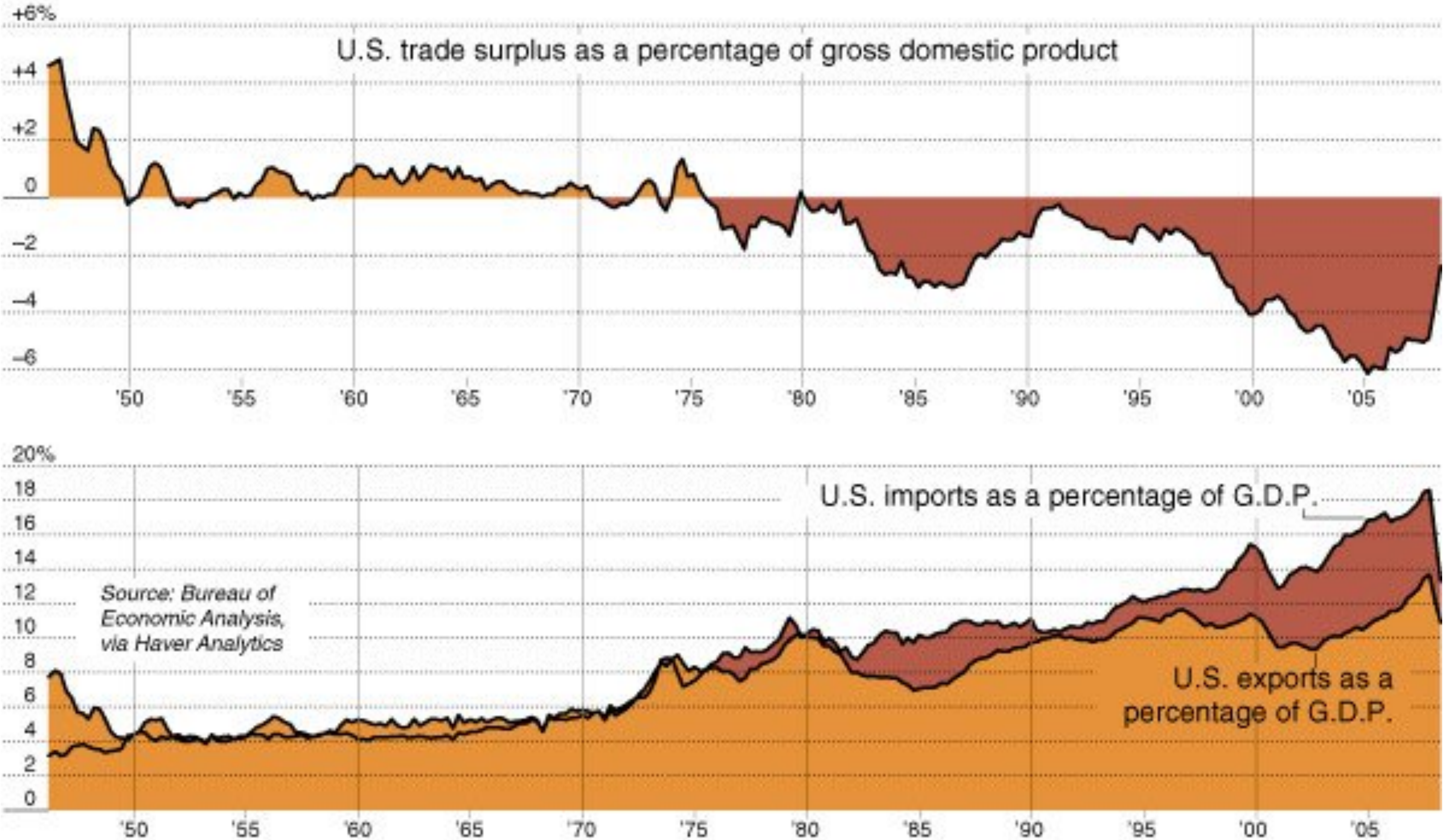
Note that trade deficit shrinks in recessions



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.

US Trade & Trade Deficit, in % of GDP



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

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), <u>and</u>
        - » There were no international capital flows
      - Then imports > exports meant you were spending more gold than you were earning; Gold was <u>flowing out</u>
    - Today there are capital flows
      - A country with imports > exports can
        - » Borrow
        - » Sell assets to foreigners

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 <u>don't</u> produce, and
      - Exports are goods we <u>do</u> produce
    - But whether an increase in imports means a loss of jobs depends on <u>why</u> imports went up
      - Often it is because more people are working, earning income, and buying more from abroad

What the Trade Balance Does **Not** Mean

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

What the Trade Balance Does **Not** Mean

- Common Misinterpretations
  - President Trump sees deficits as meaning that we are being taken advantage of in trade agreements
    - "The United States has an $800 Billion Dollar Yearly Trade Deficit because of our 'very stupid' trade deals and policies," tweeted President Trump in March. As result, he said, "our jobs and wealth are being given to other countries."
    - No

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

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

- 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

What the Trade Balance **Does** Mean

- From National Income Accounting

  (This time <u>with</u> government)

  – Even more simply

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

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

  – implies

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

What the Trade Balance **Does** Mean

- Thus

$$\underbrace{(X - M)}_{\text{Trade Surplus}} = \underbrace{Y}_{\text{Income}} - \underbrace{(C + I + G)}_{\text{Expenditure}}$$

  – So a trade deficit

  $$(X - M) < 0$$

  means that we are spending

  $$(C + I + G)$$

  more than our income Y

What the Trade Balance **Does** Mean

- Therefore, in spite of its name, and it's definition, the trade balance
  - Is not really about trade, which is just the symptom
  - It <u>is</u> 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 <u>must</u> import the difference
    - Thus running a trade deficit

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

Clicker Question

According to Mankiw, how would a large increase in US tariffs affect US exports, and why?

a) There would be no effect, because tariffs apply to imports, not exports

b) Exports would rise, because revenue from tariffs would be used to produce exports

✓ c) Exports would fall, because the US dollar would become worth more

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)
  - <u>Not</u> when it is going into debt just to finance current consumption (like the US)

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.

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

Clicker Question

What prompted this Republican senator to argue in favor of the US trade deficit?

a) The needs of his state, Oklahoma, to increase its imports

✓ b) Trump's NAFTA goal of reducing the trade deficit with Mexico

c) Democrat's policies of added spending that will increase the trade deficit

What about <u>Bilateral</u> imbalances?

- There is no reason why bilateral trade should be balanced
  - Depending on who is exporting and 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

What about <u>Bilateral</u> 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

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
    - In countries with a "floating exchange rate," that's all:
      - 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

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 $)

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

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.”

Exchange Rates

- Currency Manipulation
  - In September 2018, Trump told Reuters: "I think China's manipulating their currency, absolutely. And I think the euro is being manipulated also."
  - In October 2018, the fourth such report under Trump did <u>not</u> label China a currency manipulator

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Exchange Rates

- US criteria for currency manipulation: To be labelled a currency manipulator, a country must
    - (As of April 2016, per Bergsten-Gagnon reading)
  - Have $55 billion or more of annual trade with the United States (to count as a “major trading partner”);
    - (Economist reading omits this)
  - Run a bilateral trade surplus with the United States exceeding $20 billion over the past 12 months;
  - Run a global current account surplus exceeding 3 percent of the country’s GDP over the past 12 months; and
  - Engage repeatedly in net foreign exchange <u>purchases</u> exceeding 2 percent of the country’s GDP over the past 12 months.

Clicker Question

Which of the 4 criteria do Bergsten and Gagnon say should be dropped?

a) $55 billion or more of annual trade with the United States

✓ b) bilateral trade surplus with the United States exceeding $20 billion

c) global current account surplus exceeding 3 percent of GDP

d) net foreign exchange purchases exceeding 2 percent of GDP

Because bilateral trade balance means nothing about currencies

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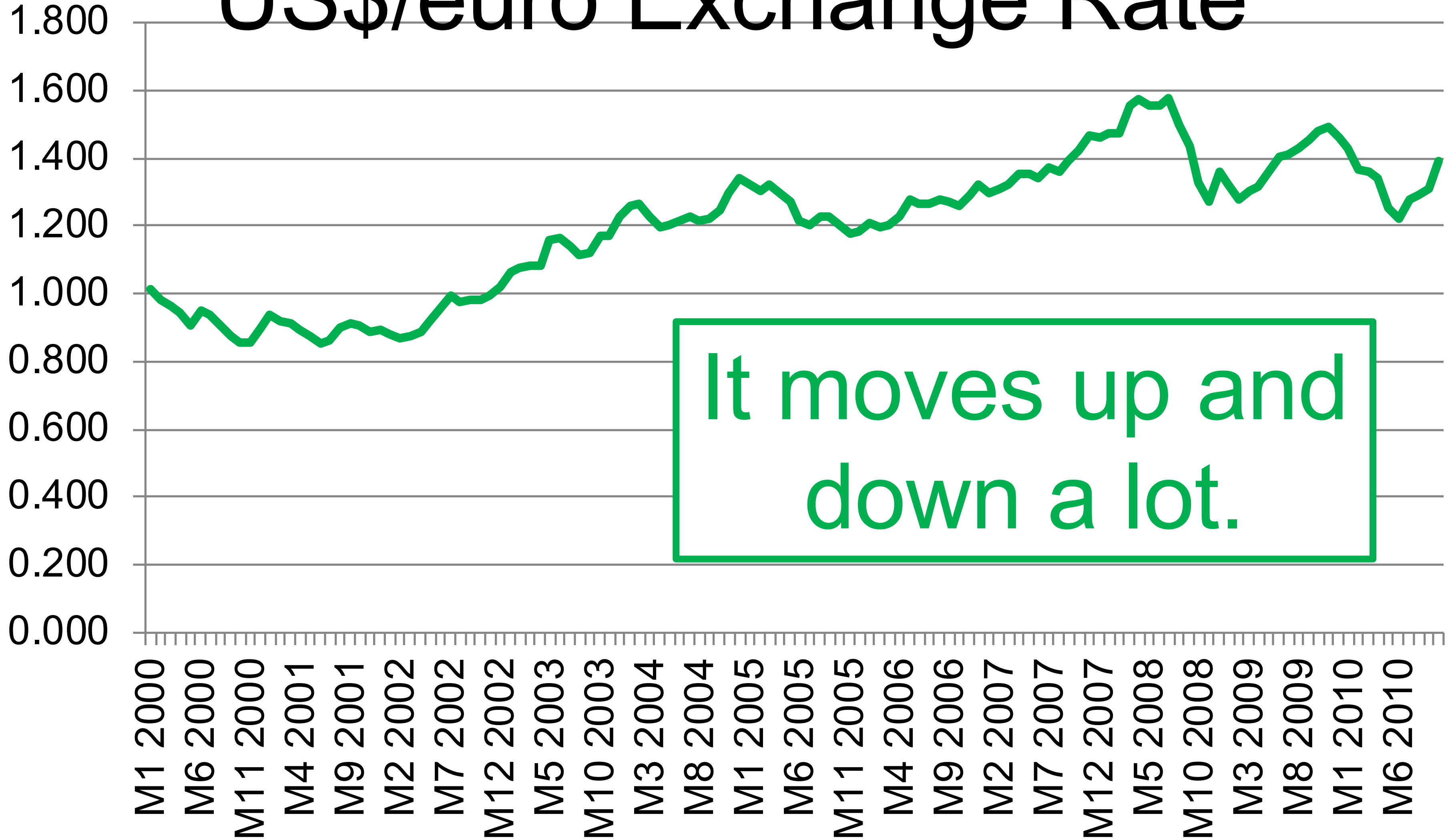
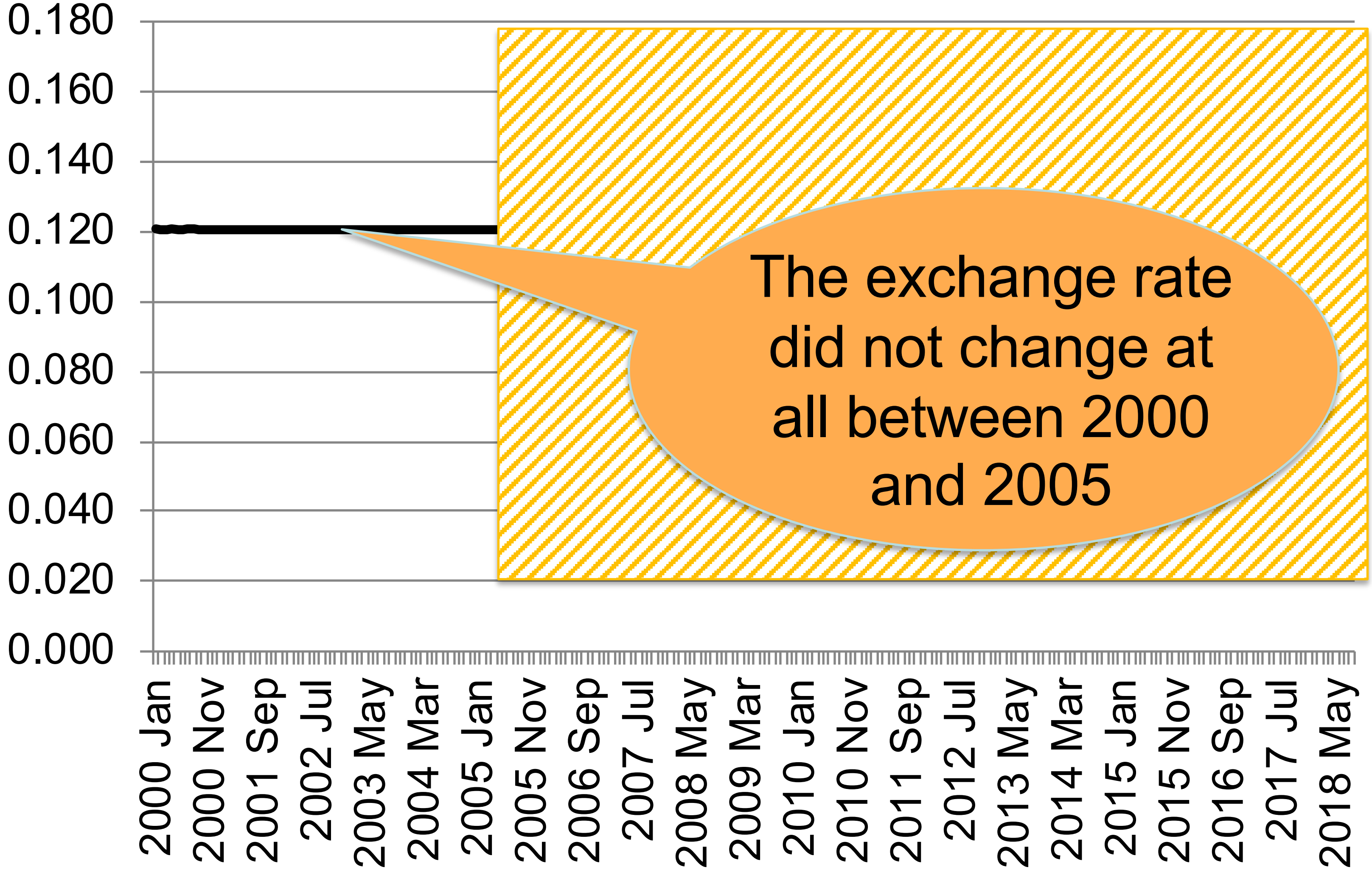
Exchange controls
Currency-manipulation score*
Selected countries, higher score=more manipulation
20
15
10
5
+
0
–
5
Switzerland
Taiwan
Germany
South Korea
China
2007
08
09
10
11
12
13
14
15
16
Source: The Economist
*Based on current-account balances and foreign-asset purchases relative to GDP

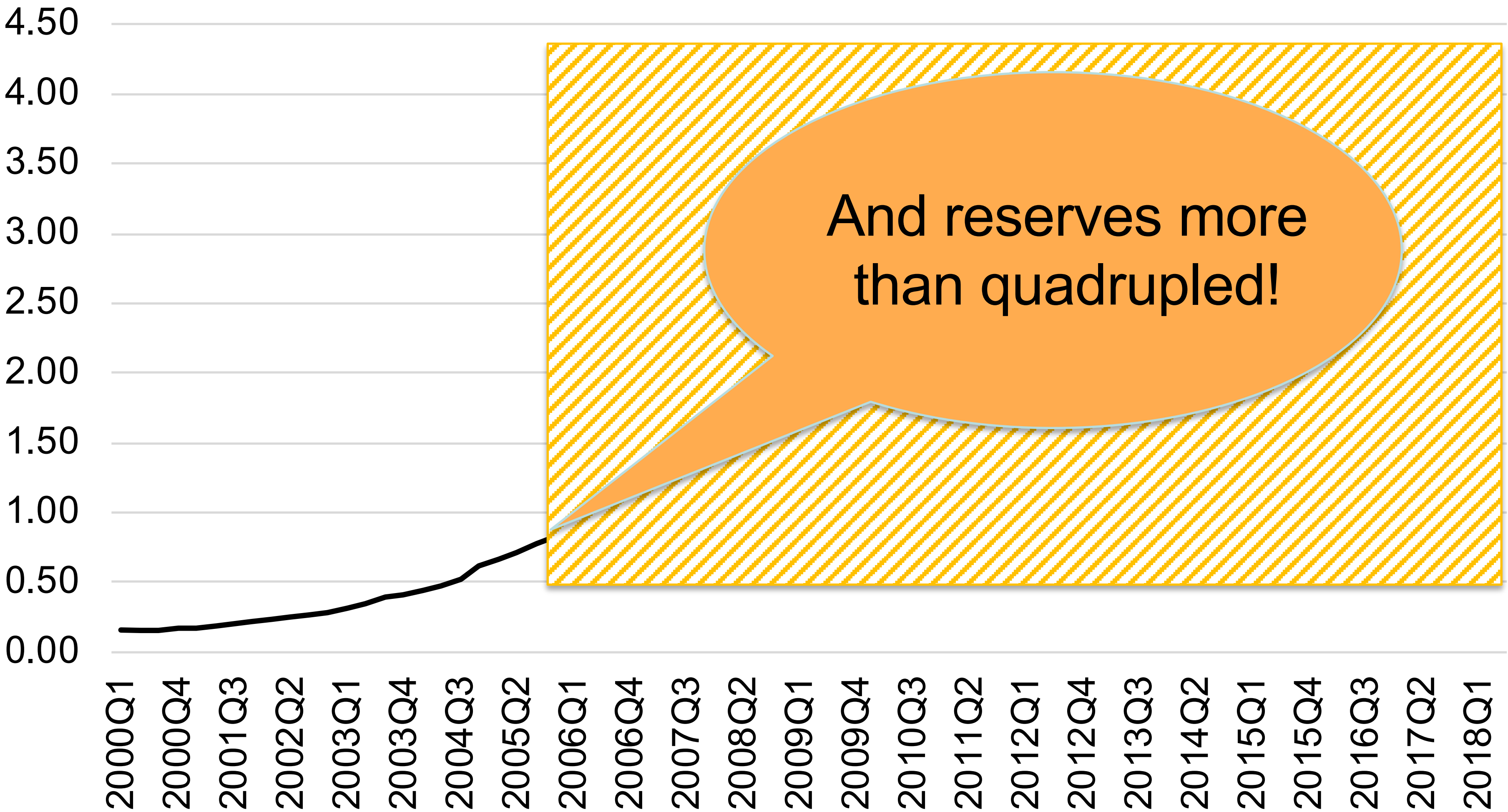
How a Floating Exchange Rate Behaves
US$/euro Exchange Rate



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



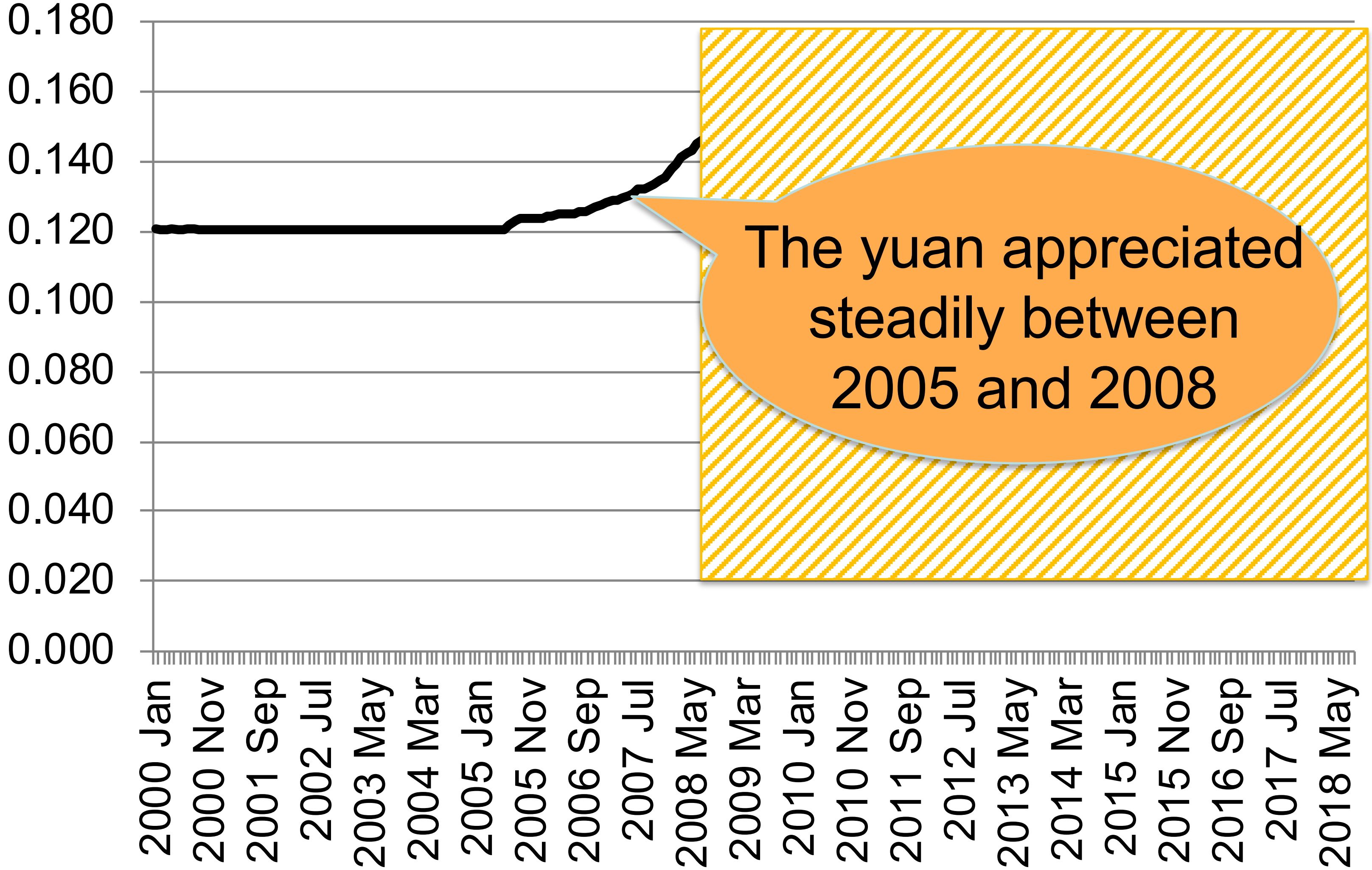
China's Reserves, $ trillions, 2000-2018



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

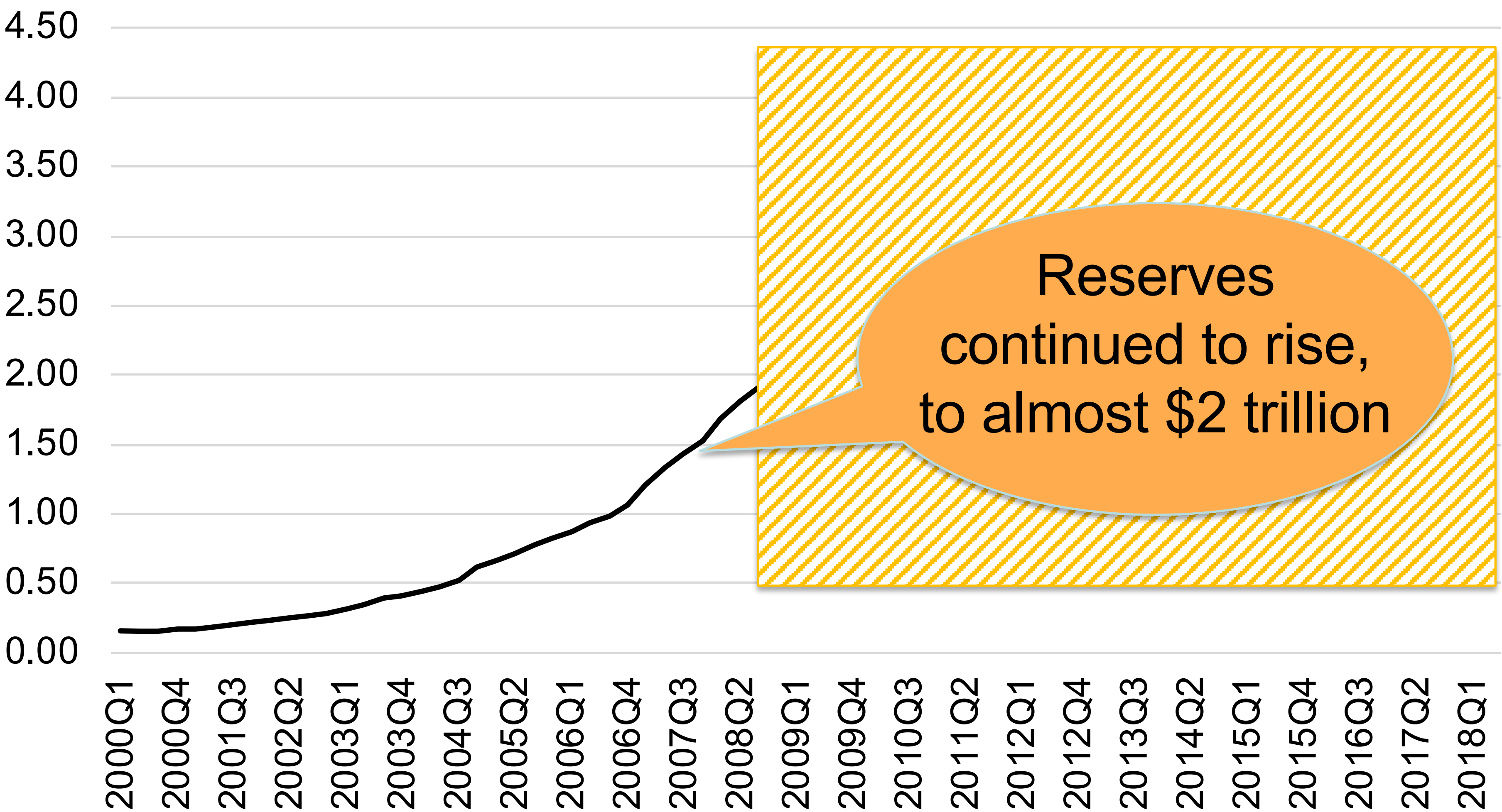
China's Exchange Rate, US$/Yuan, 2000-2018



Currency Manipulation

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

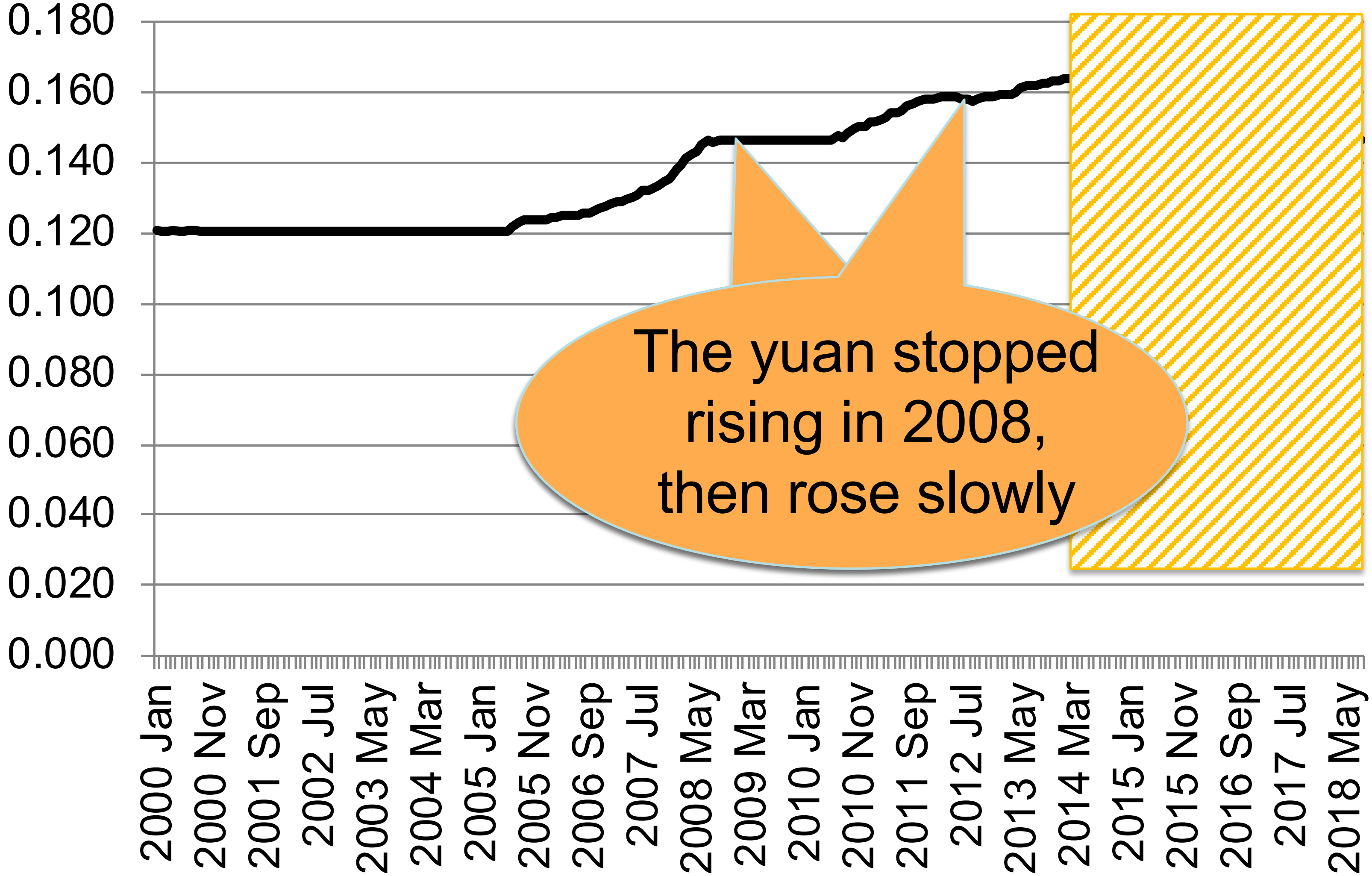
China's Reserves, $ trillions, 2000-2018



Currency Manipulation

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

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



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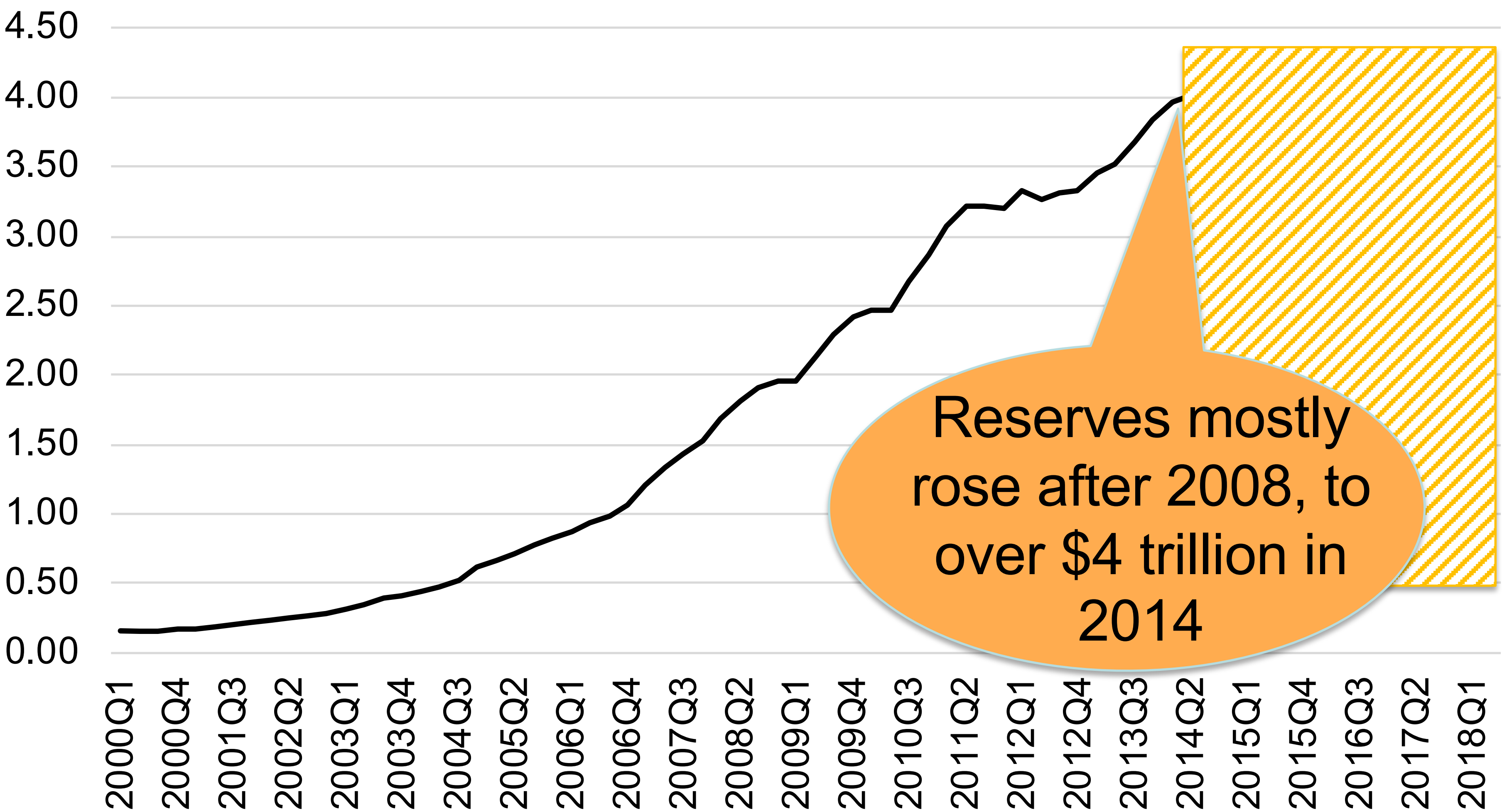
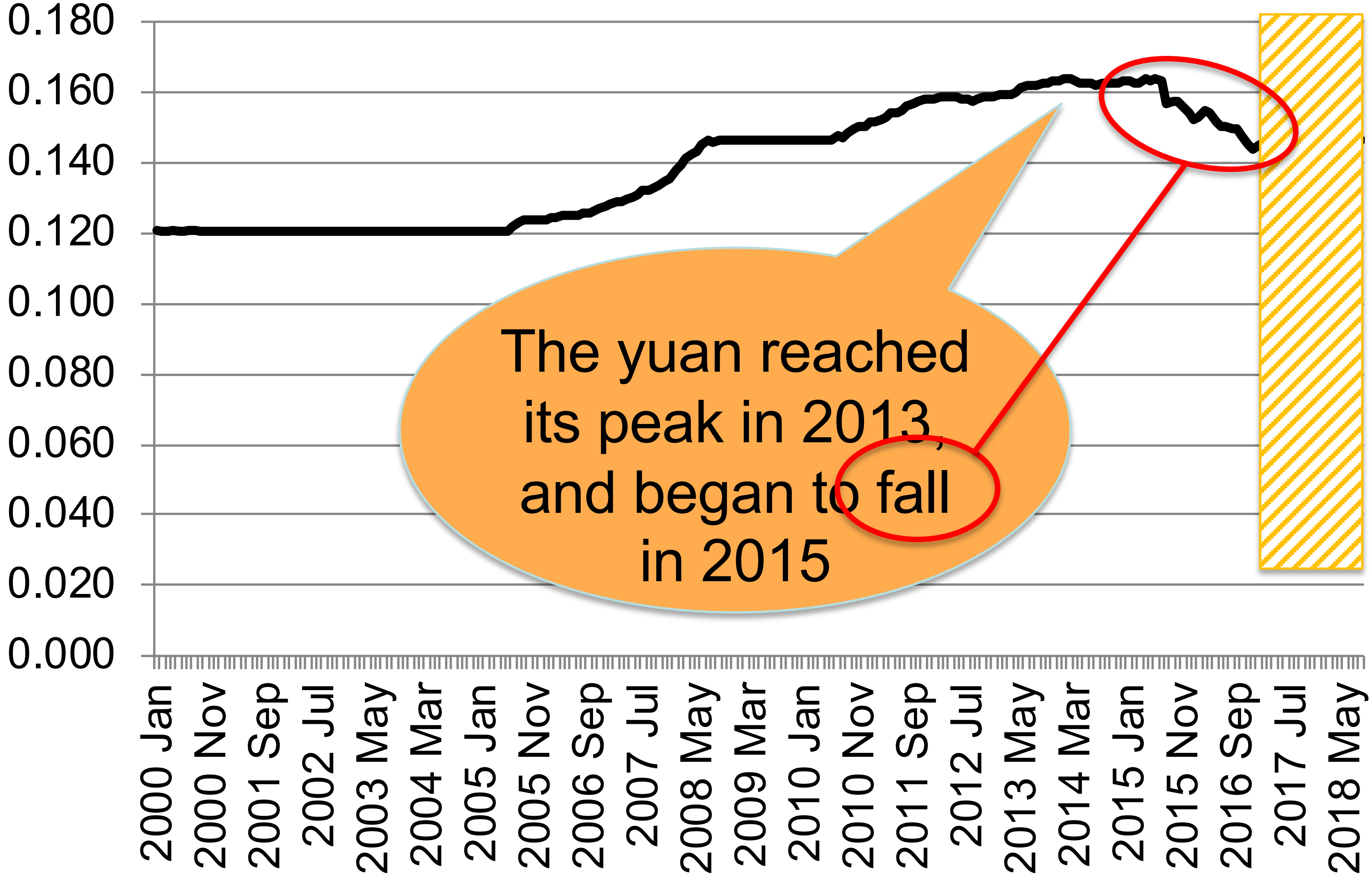


Currency Manipulation

- 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

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



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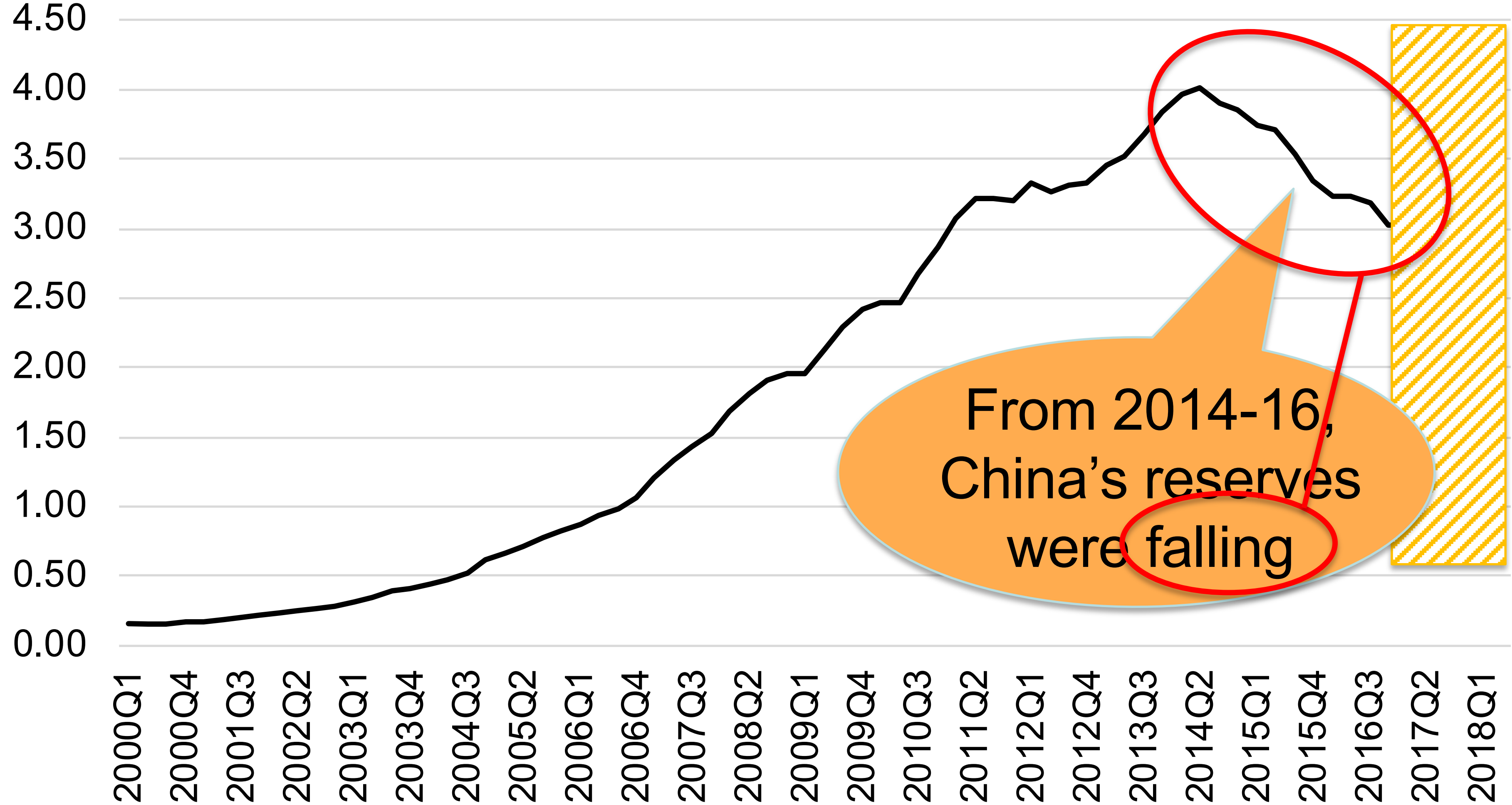
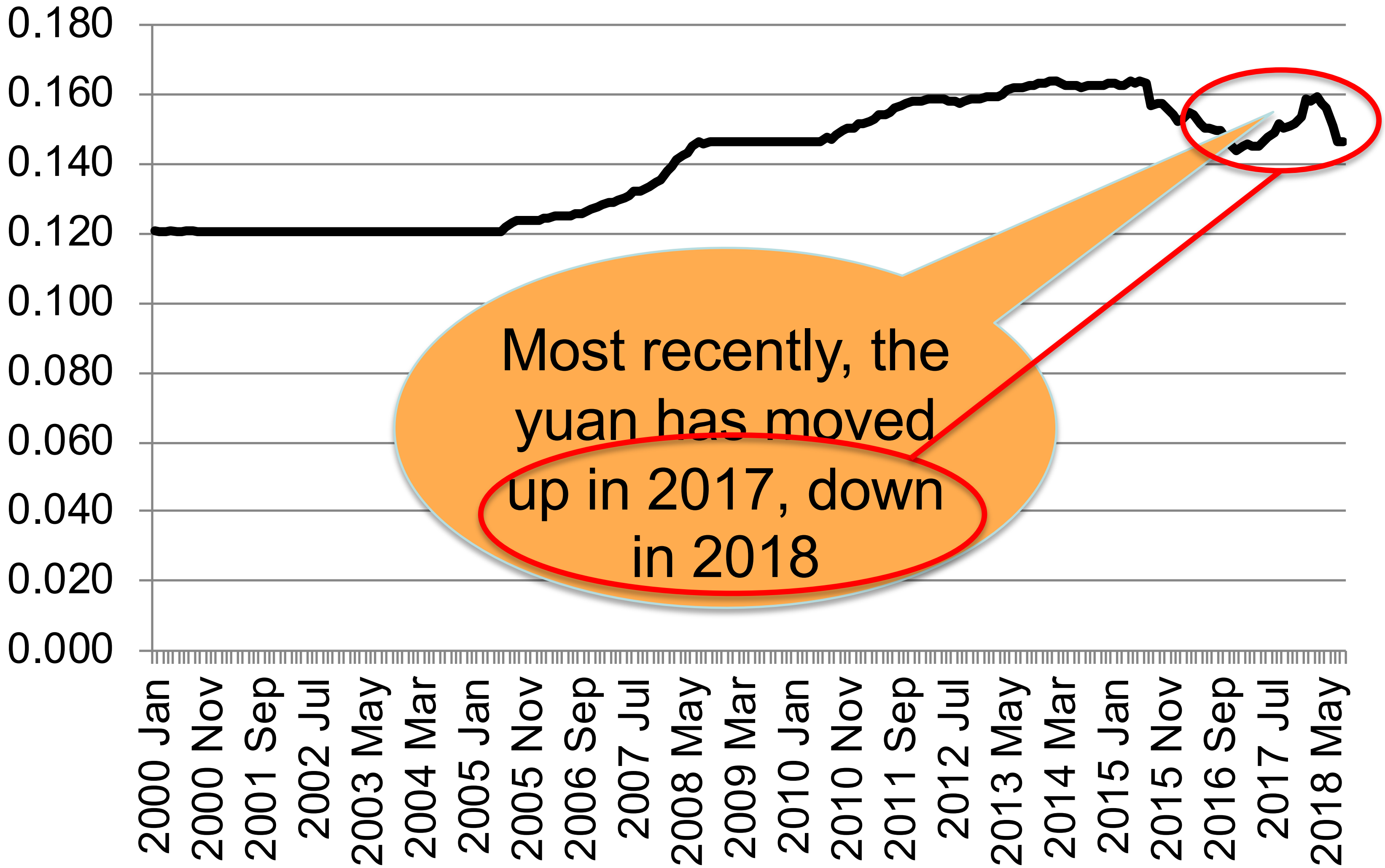


Currency Manipulation

- 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 <u>not</u> to push its currency down

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



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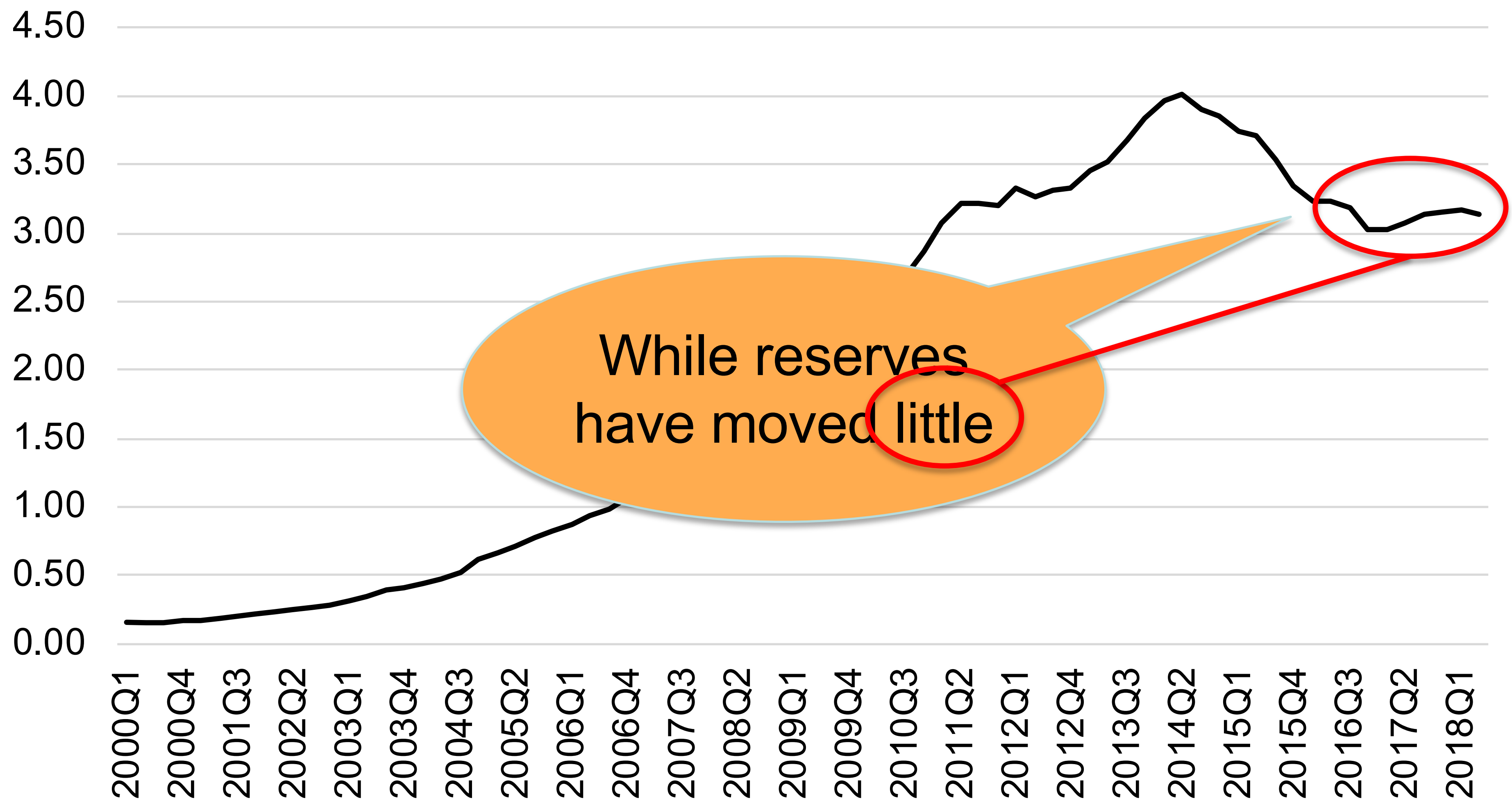
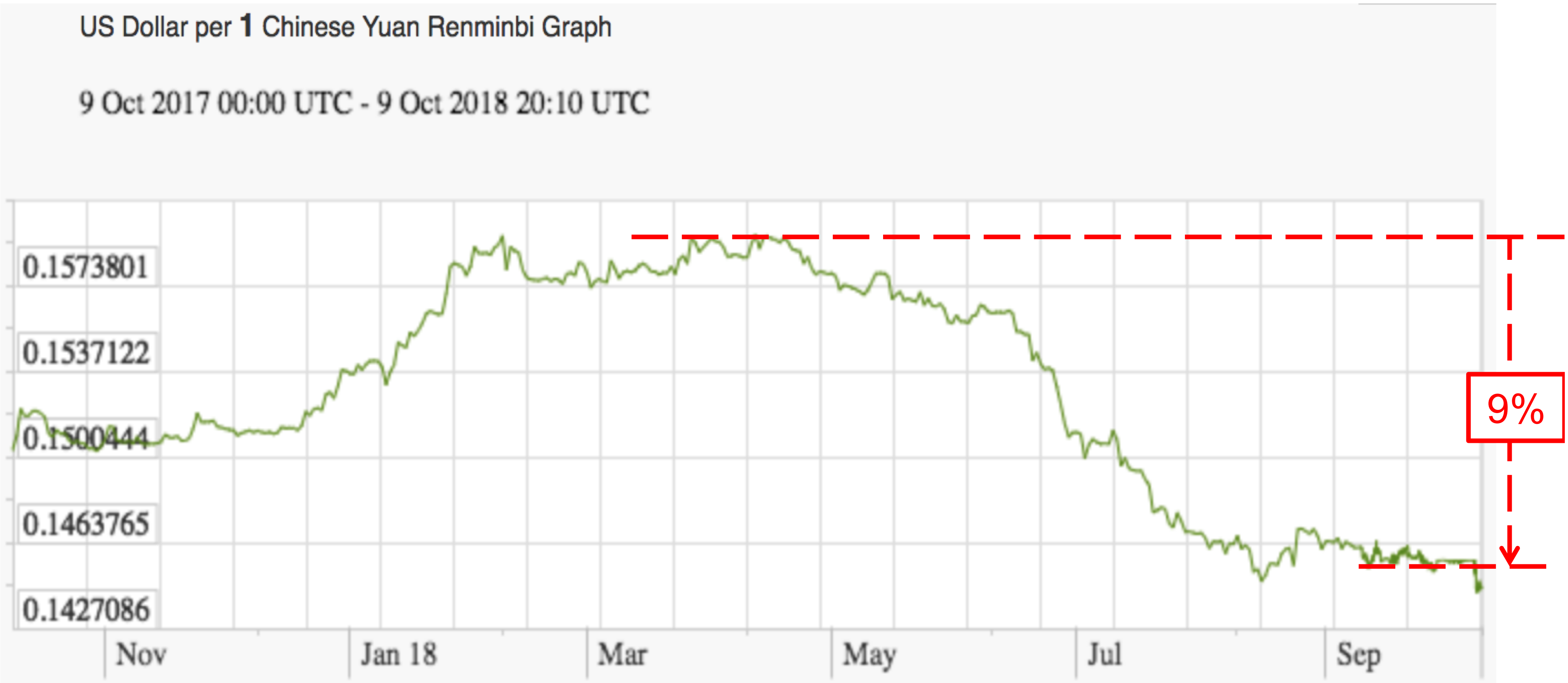


Currency Manipulation

Recent movements of the Chinese currency



Clicker Question

Over the last 20 years, how many countries have been named as currency manipulators in the semi-annual Treasury reports?

✓ a) 0

b) 1

c) 2

d) 3

e) 4

Clicker Question

Which of the following countries is <u>not</u> mentioned as being on the Treasury Department's monitoring list for currency manipulation?

a) Germany
b) Japan
✓ c) Mexico
d) South Korea
e) Switzerland

See reading by Talley for the others

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?