

US-China Barometer 2020.5

**Long U.S.-China Institute
University of California, Irvine**

The Long Institute annually publishes the US-China Barometer, a measure of perhaps the most important bilateral relationship in the world. The Barometer provides a multidimensional representation of the relationship based on a compilation of the most pertinent data. Political opinions are eschewed. Indeed, we would hope that objective metrics would influence political decisions rather than vice-versa.

We have also considered developing a summary statistic combining the various measures as a sort of index of the relationship that might be compared over the years. However, this effort is thwarted in two ways: First, the mathematical problem is not trivial – combining the numbers is a bit like comparing apples, oranges, and puppies. Second, important details are lost in a summary statistic. So we deliver the Barometer as a 35-slide power-point presentation with interpretive notes (see below each slide) and with the data sets imbedded (right click then choose “edit data”). Users and viewers are most welcome to adapt the presentation to their own purposes. Just don’t change the data.

We have endeavored to collect and present the data objectively by using mostly third-party sources such as the World Bank. Where both American and Chinese sources exist we have often discovered substantial discrepancies – a good example is in Foreign Direct Investment. In the future we hope to collaborate with our colleagues in China toward determining the best ways to manage such discrepancies.

We expect and seek your criticism so that we might improve the Barometer in future years. Feel free to comment on our choice of metrics and our own biases that we have had trouble seeing. Please send your comments to John L. Graham at jgraham@uci.edu.

John L. Graham & Ben Leffel, August 11, 2020

***To get an accurate picture of the world,
you have to count...we should follow the
trend lines, not the headlines.***

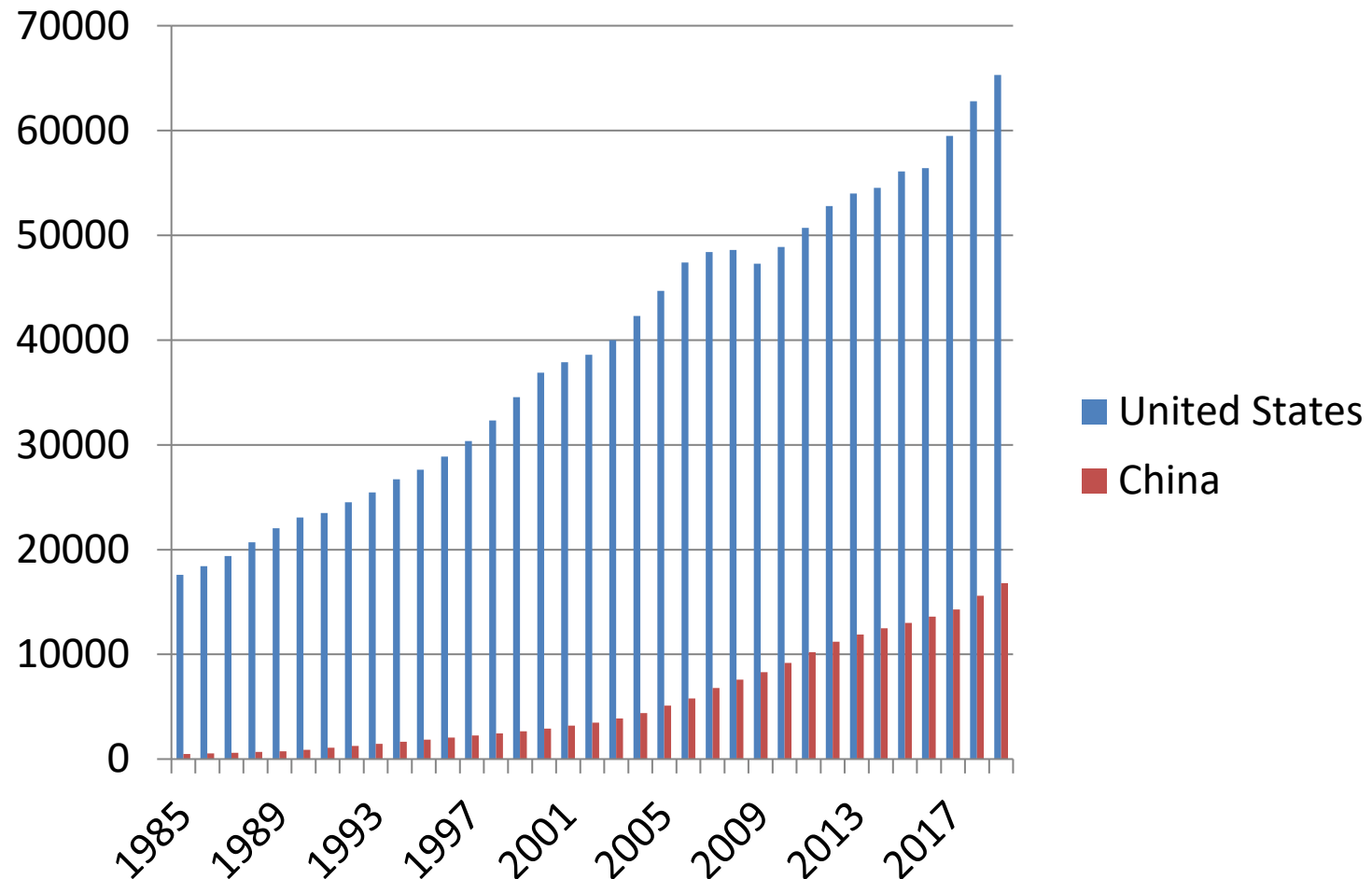
Steven Pinker, 2019

Differences

The presentation is divided into two sections. The first presents important differences across the two countries. The hope is that the differences will subside with the continued economic integration of the U.S. and China. We also look forward to improvements in both countries on all dimensions.

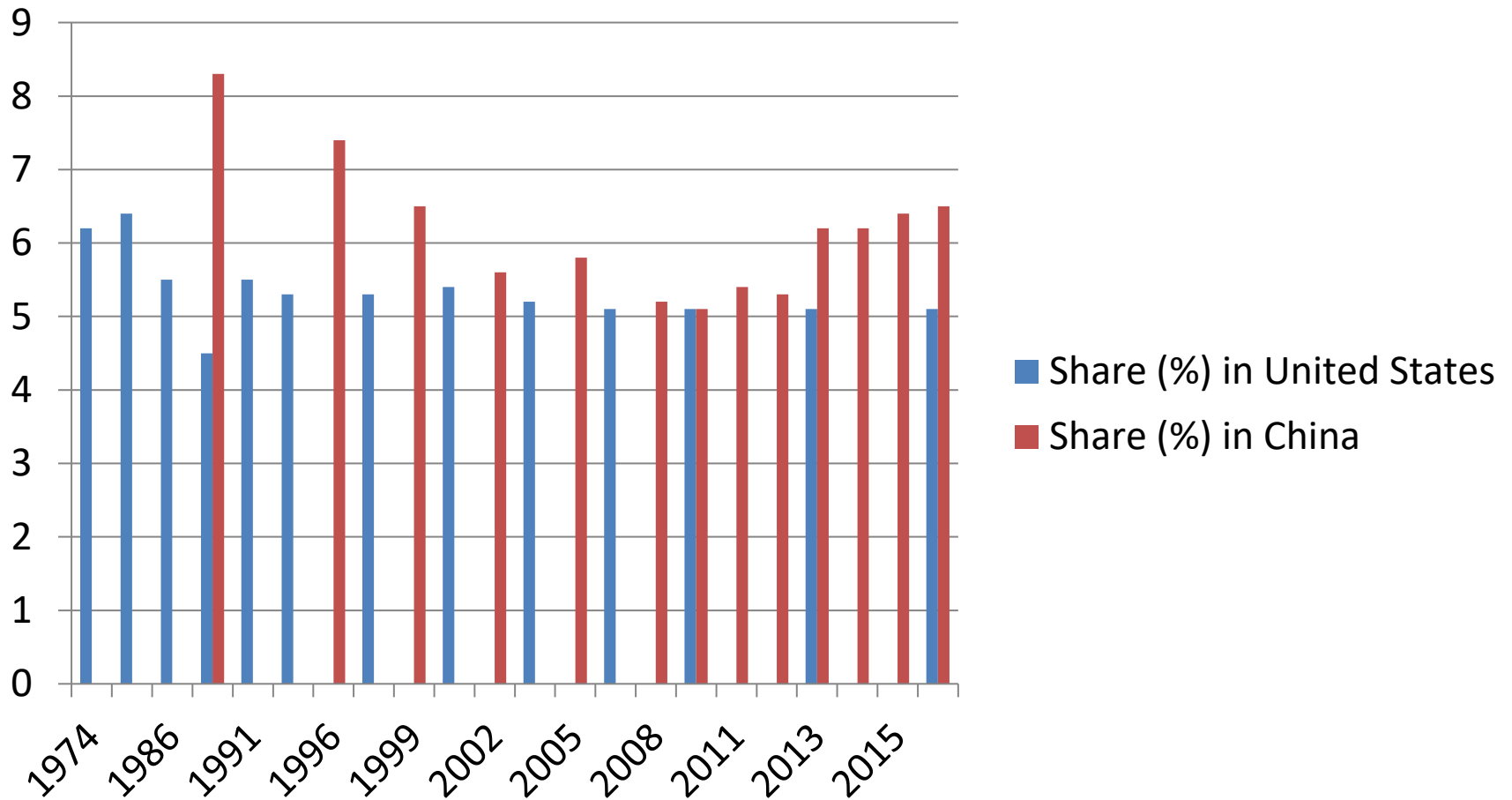


GDP per capita, PPP (current international \$)

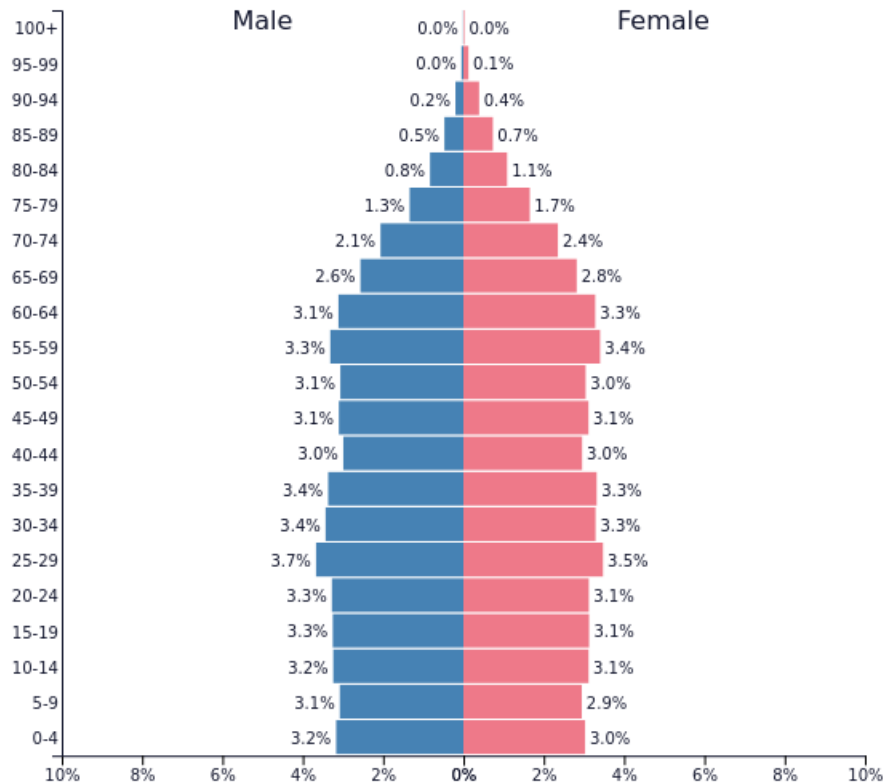




Income distribution to lowest 20% of population

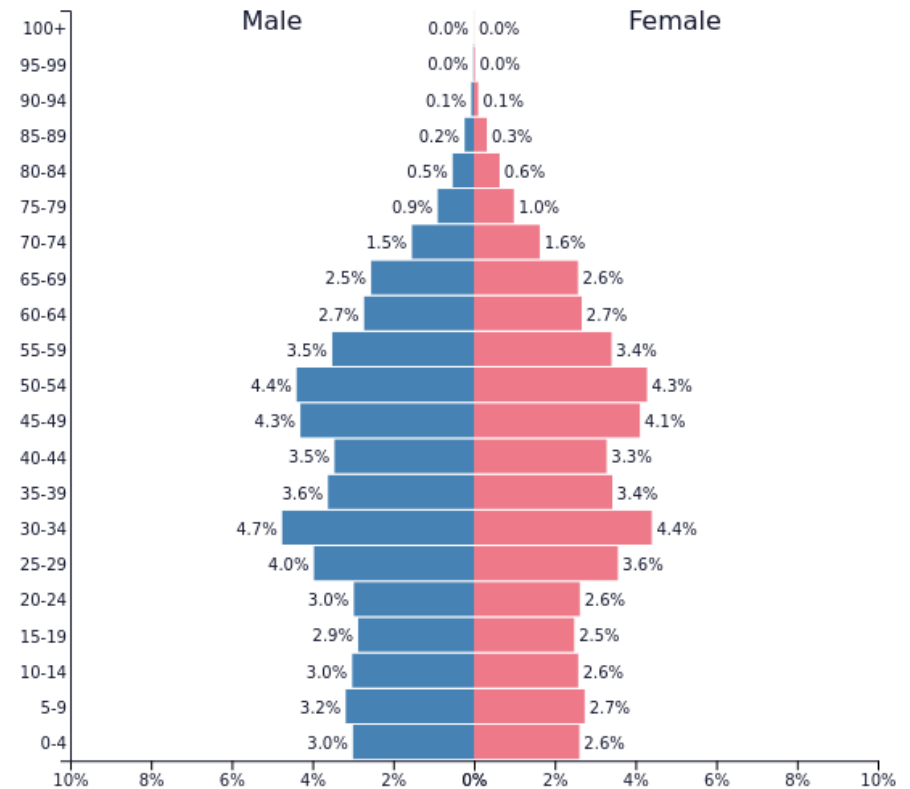


Demographic demons 2020



United States of America - 2020
Population: 333,545,529

PopulationPyramid.net

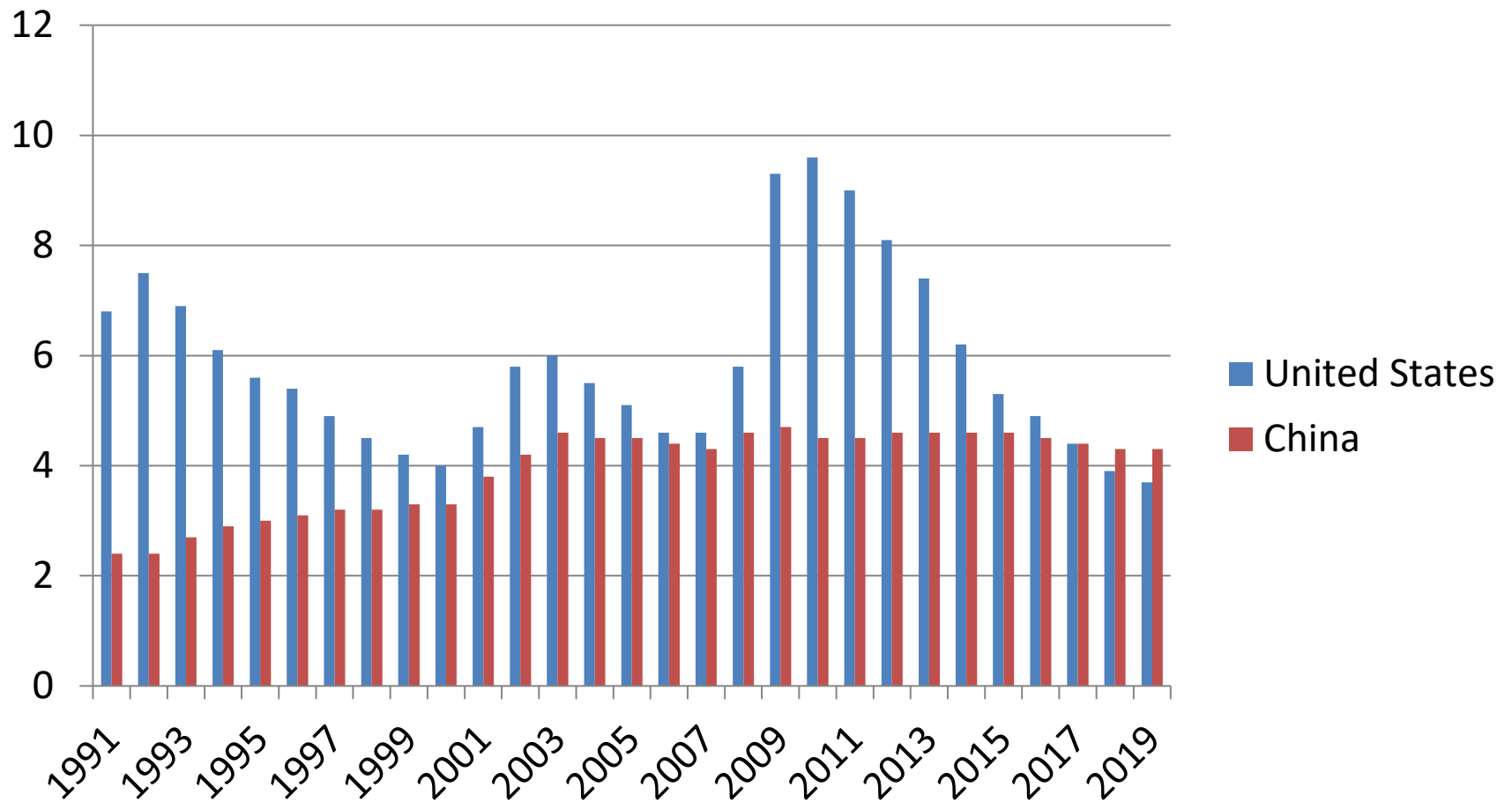


China - 2020
Population: 1,402,847,838

PopulationPyramid.net

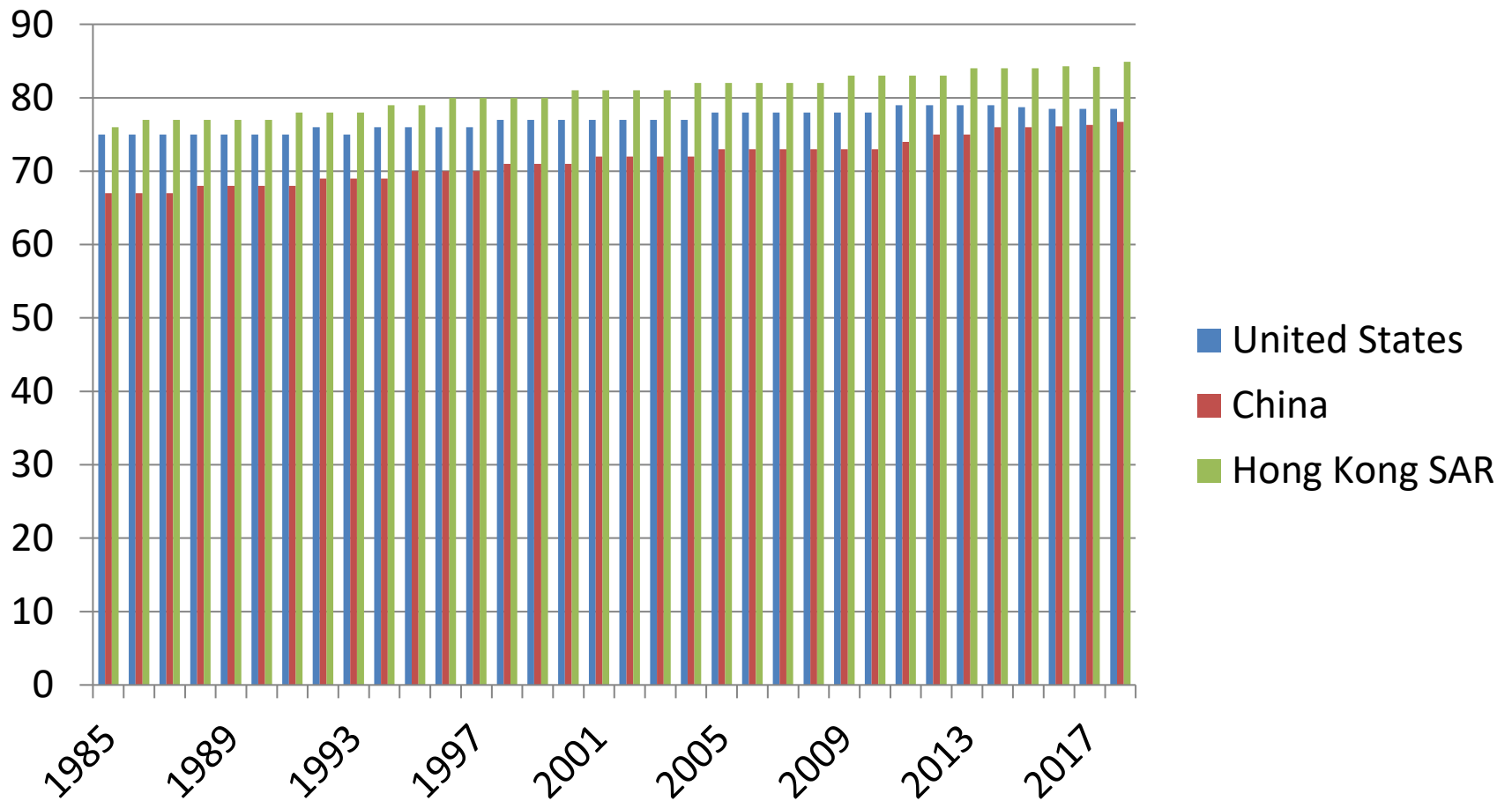


Unemployment rates (%)





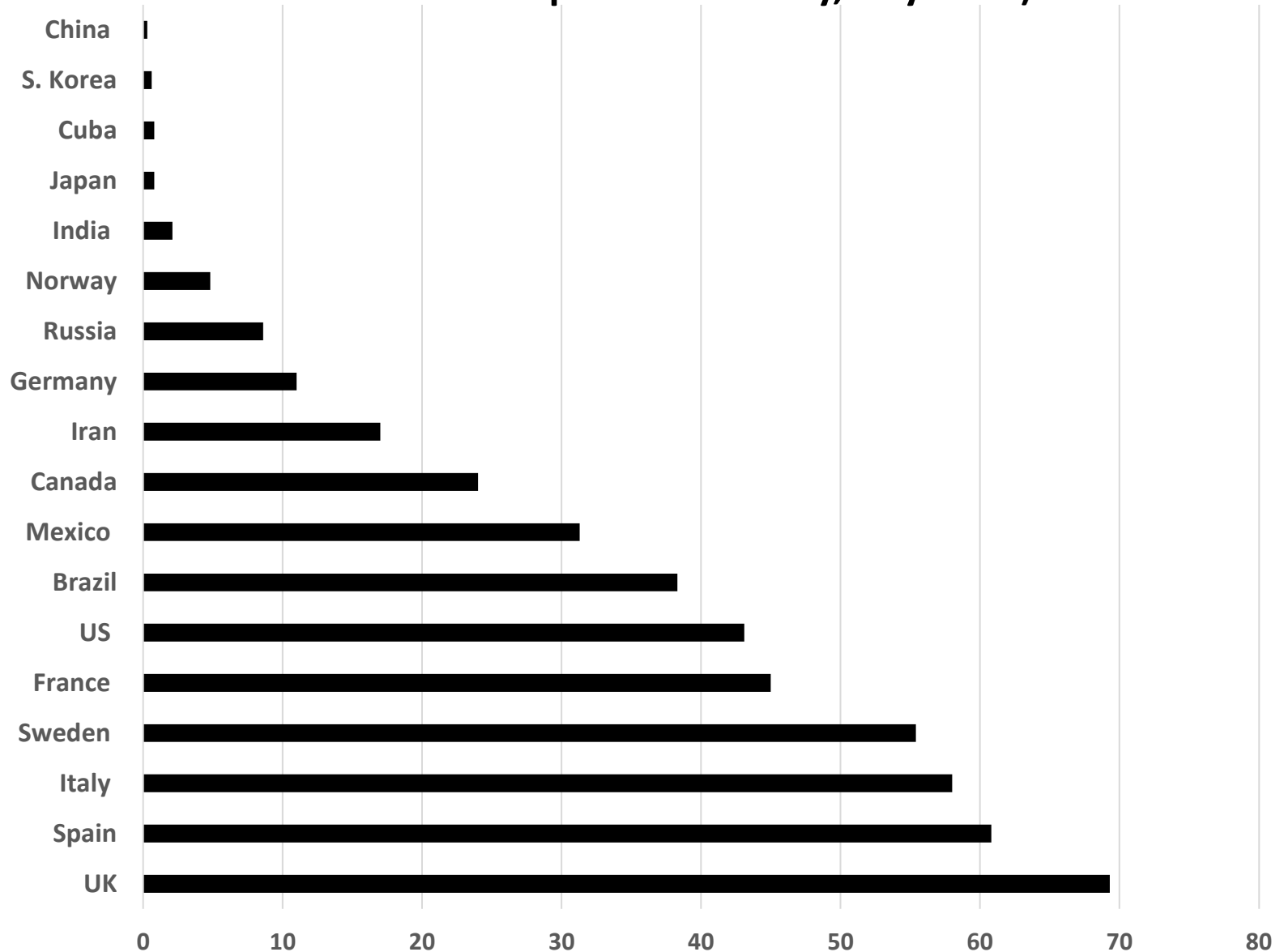
Life expectancy at birth (years)





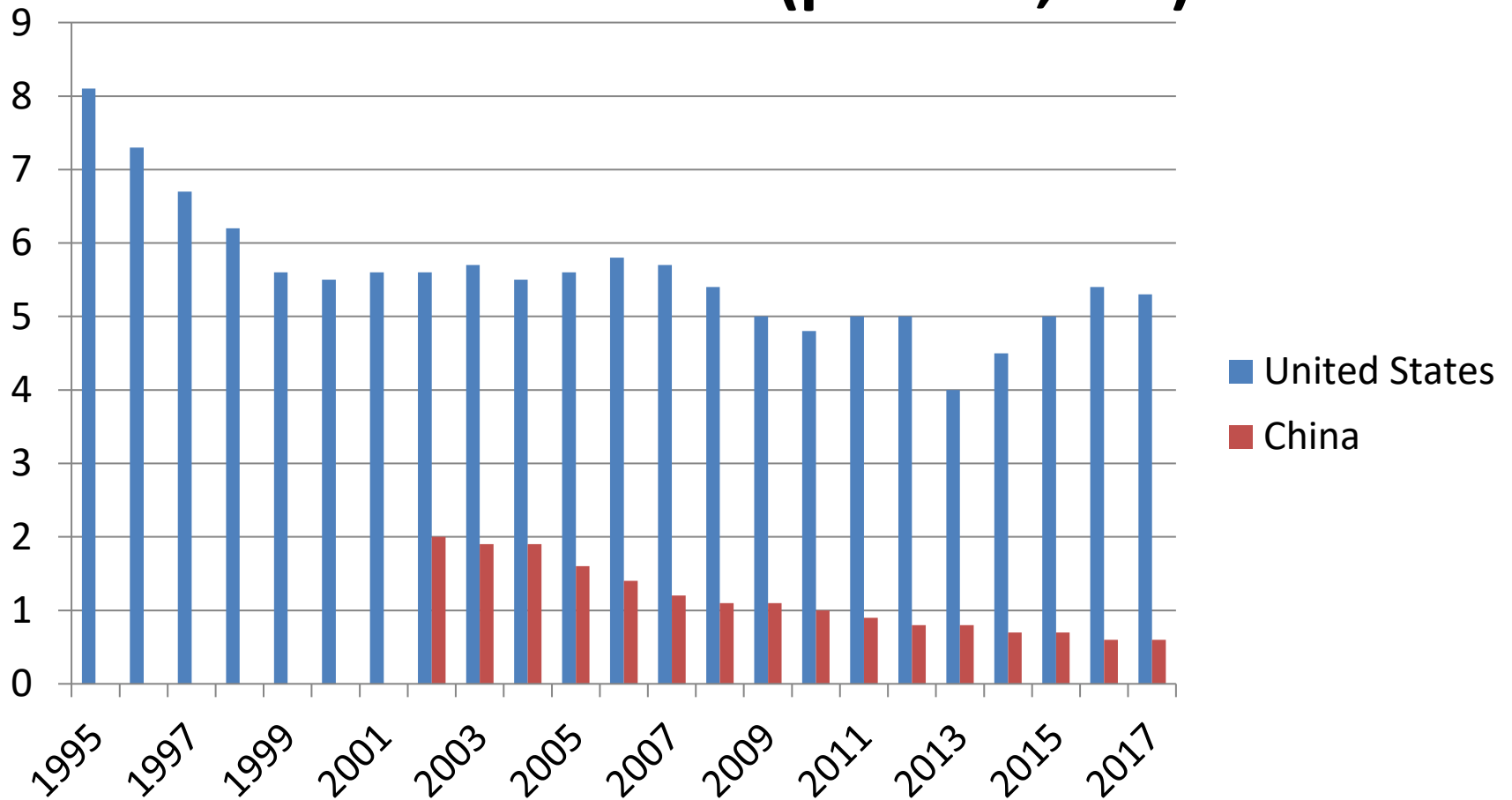
Covid-19 deaths per million

Source: John Hopkins University, July 2020)



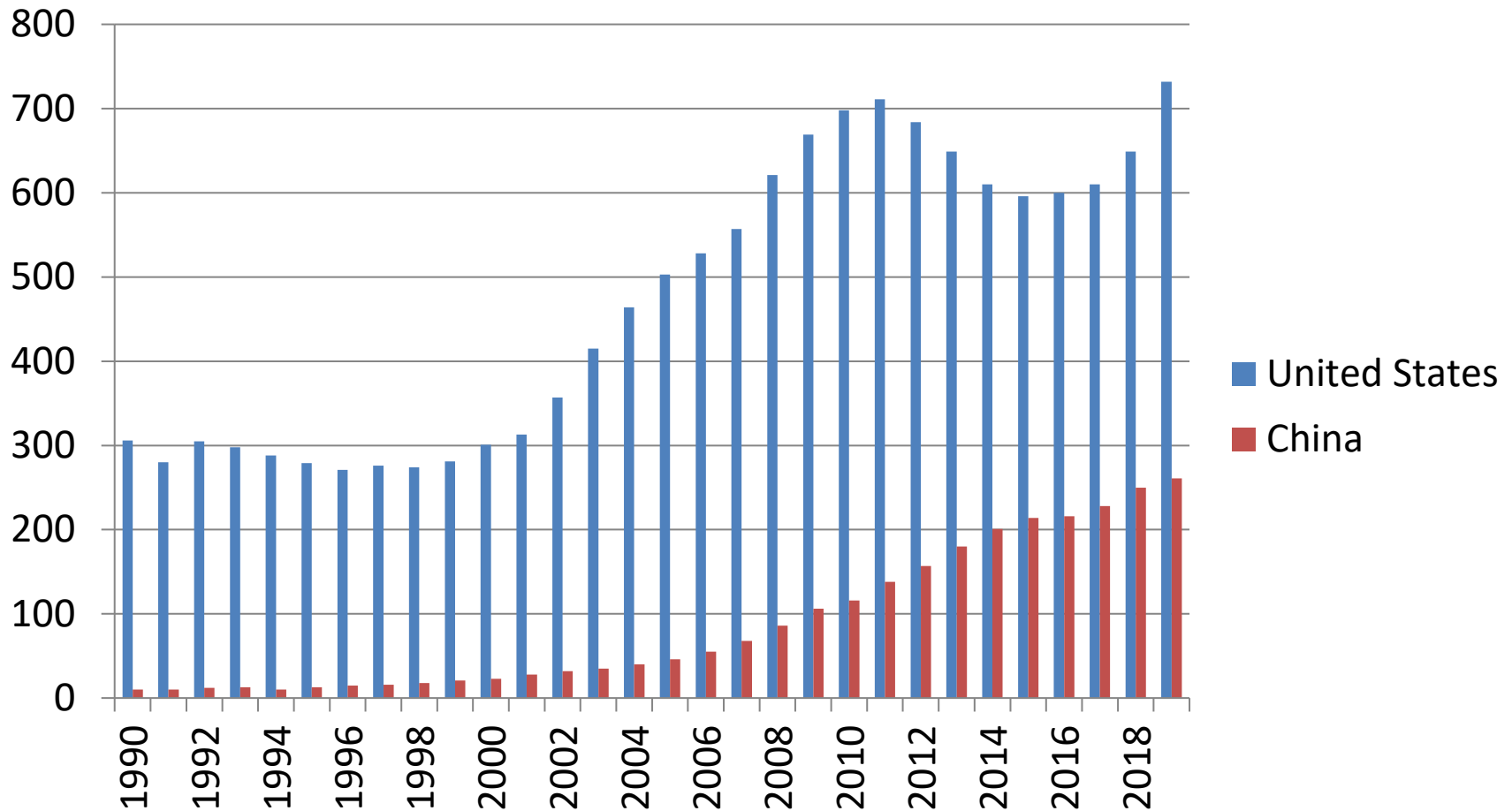


Homicide rate (per 100,000)





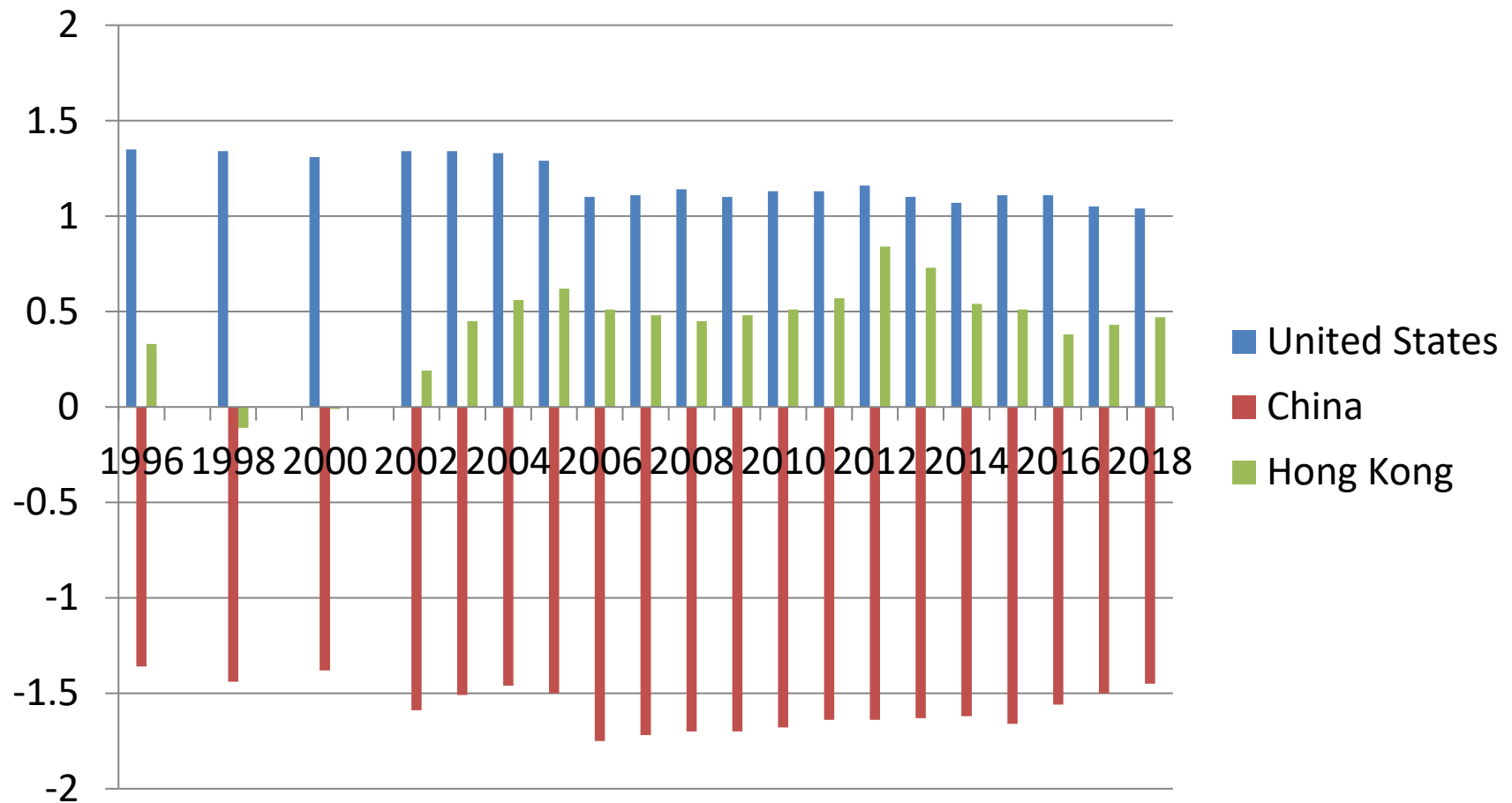
Military Spending (billions, current US\$)





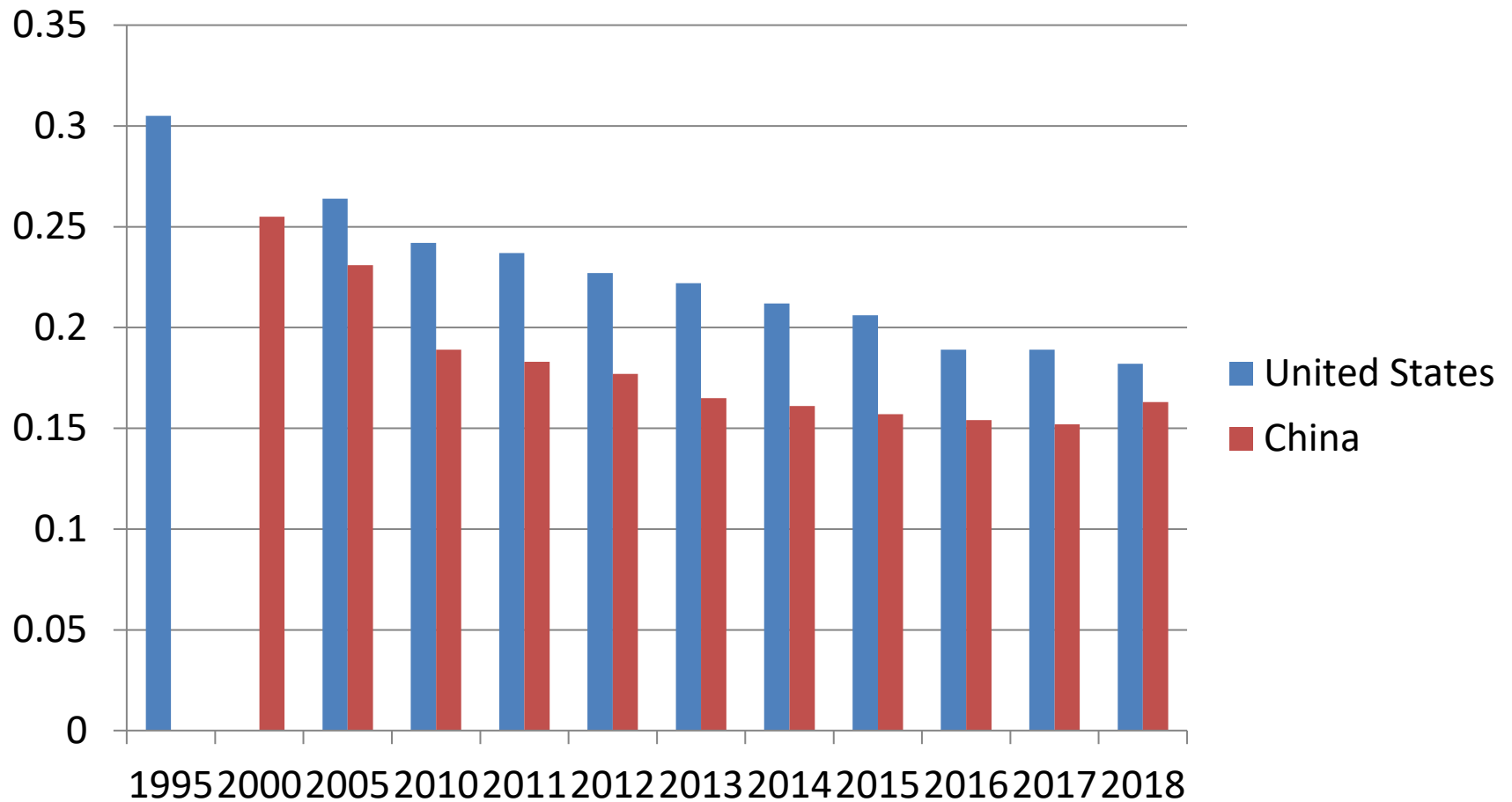
Human rights

("Voice & accountability," World Governance Indicators)





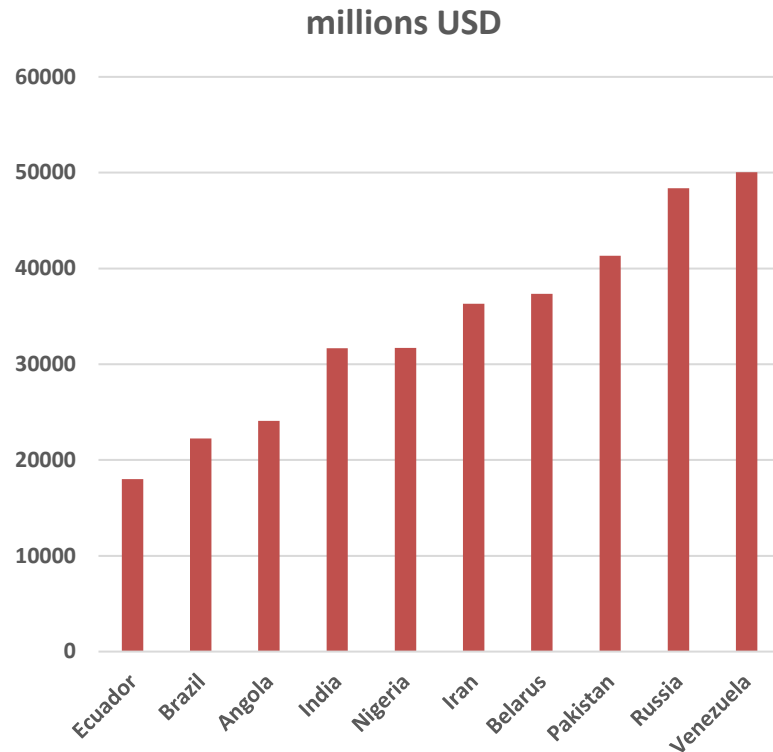
Gender inequality index (United Nations, 0.0 = equality)



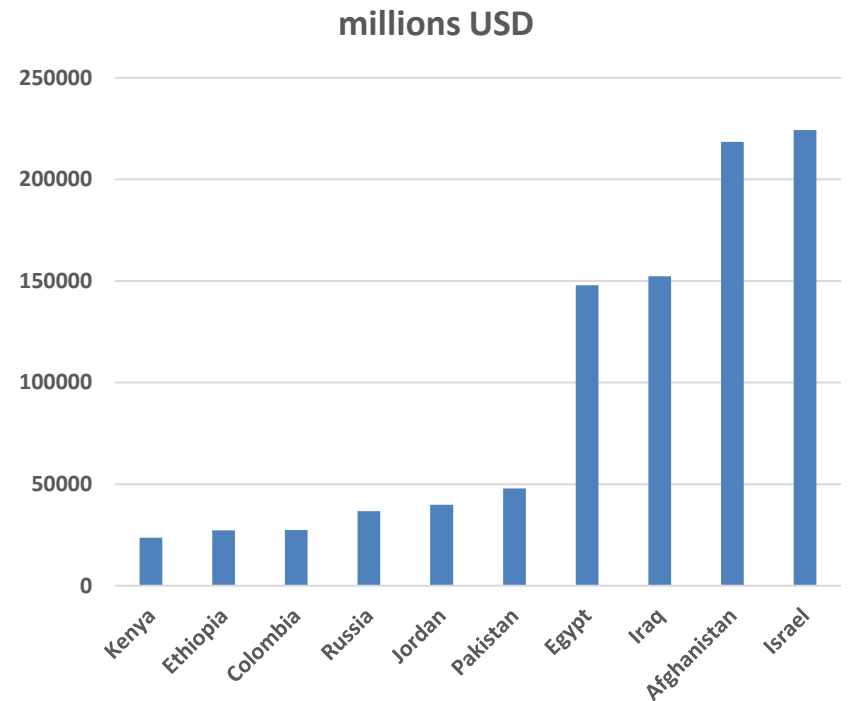


Foreign aid distribution 2000-2014 (different scales)

China



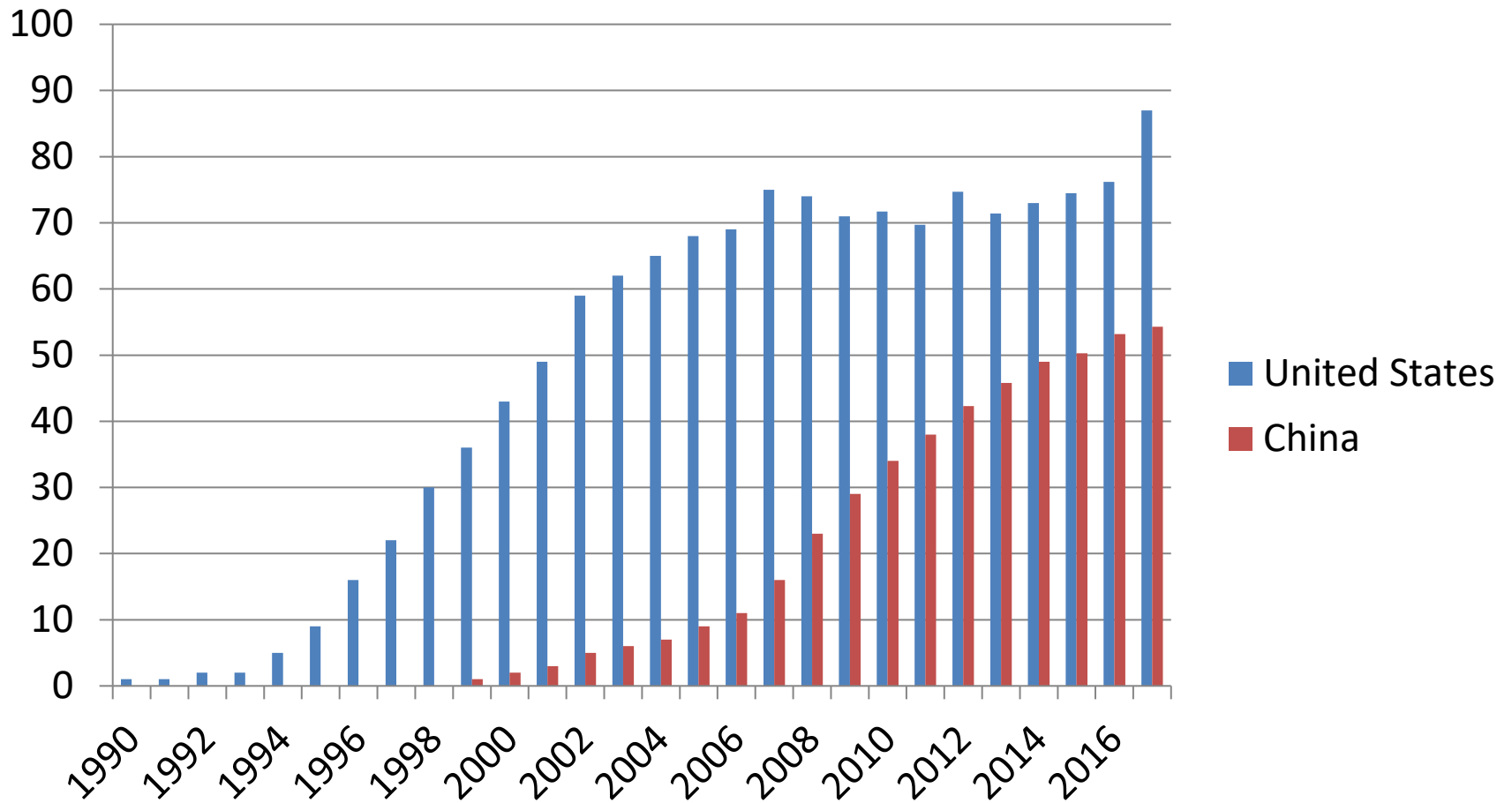
United States



Source: AidData, William & Mary;
USAID

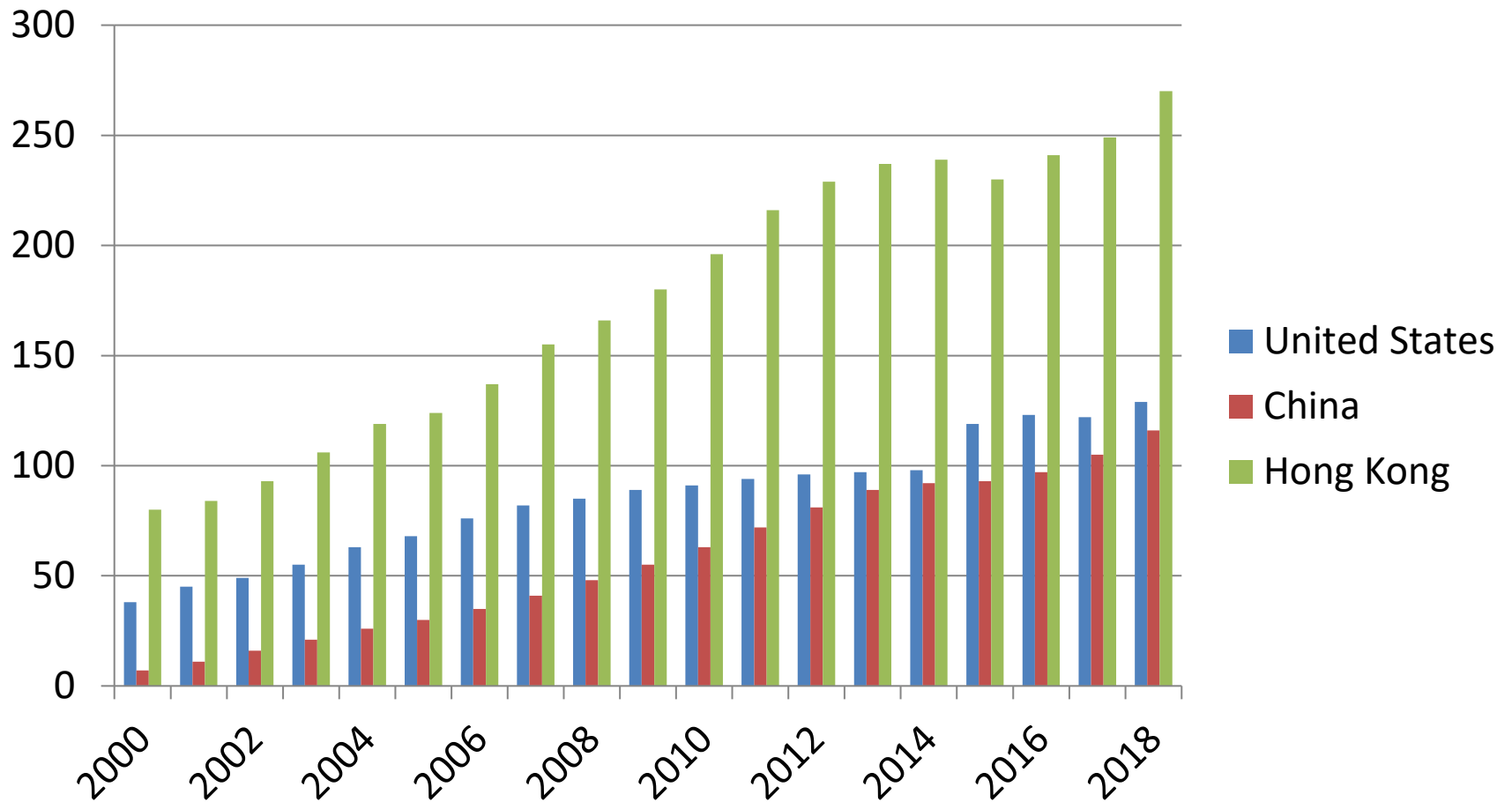


Internet users (%)



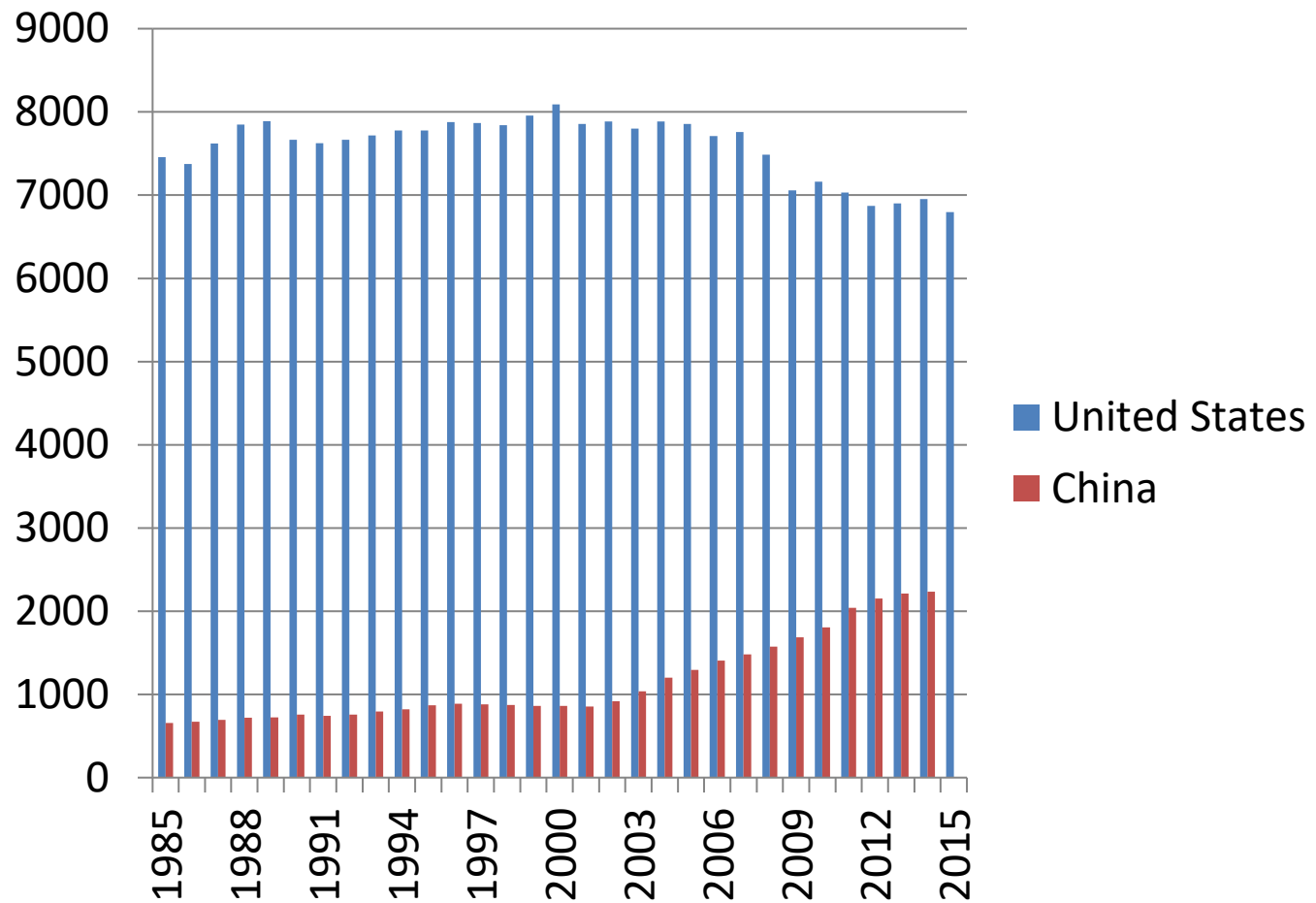


Mobile Phones (%)



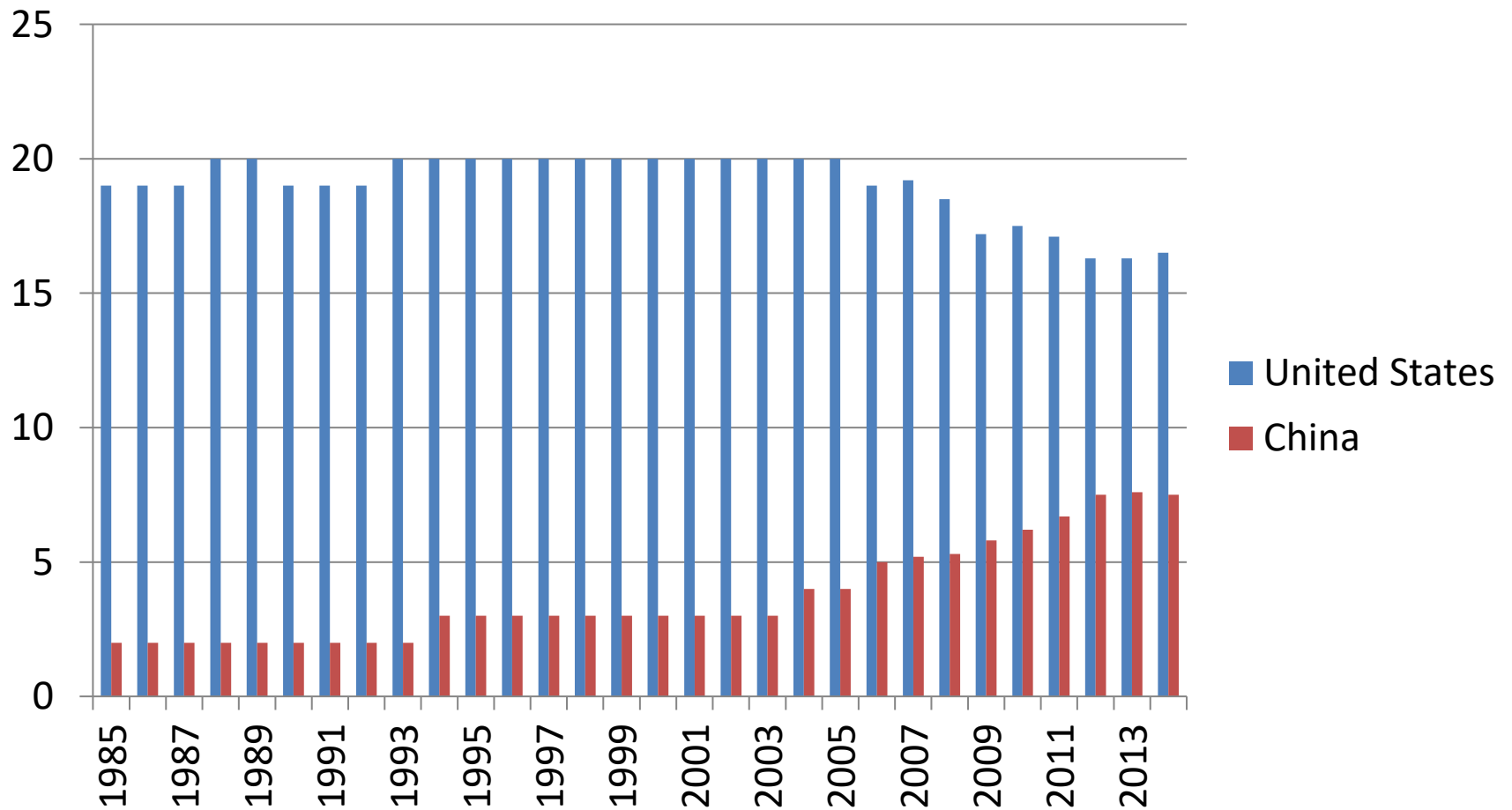


Energy use (kg of oil equivalent per capita)

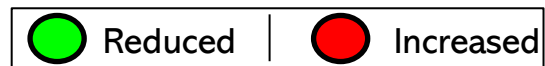




CO₂ emissions (metric ton per capita)



Greenhouse gas reductions versus increases in 10 cities: United States (2005-2013)



Source: Benjamin Leffel, Dept. of
Sociology, UC Irvine

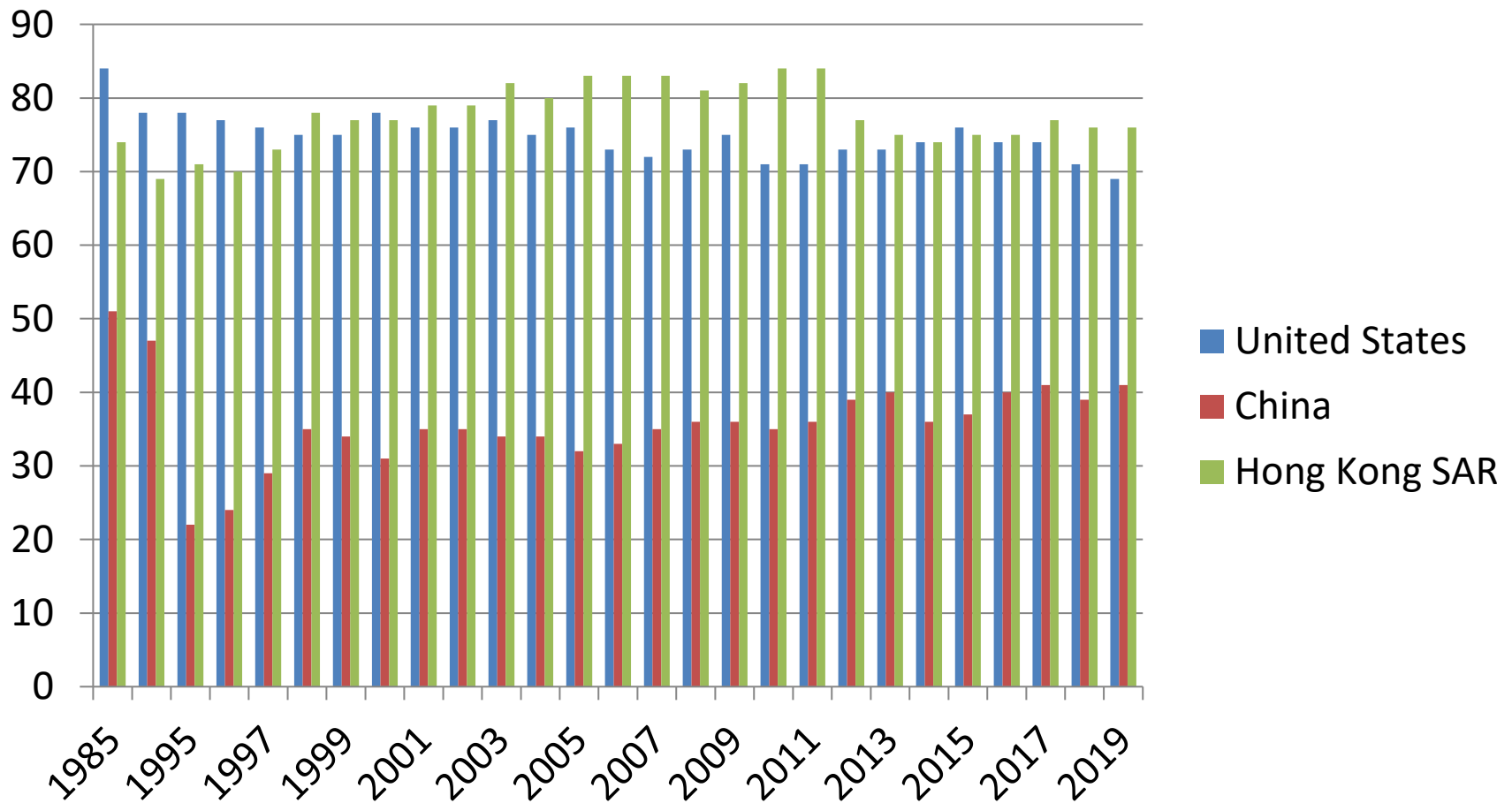
Changes in greenhouse gas emissions: 10 large Chinese cities (2005-2012)





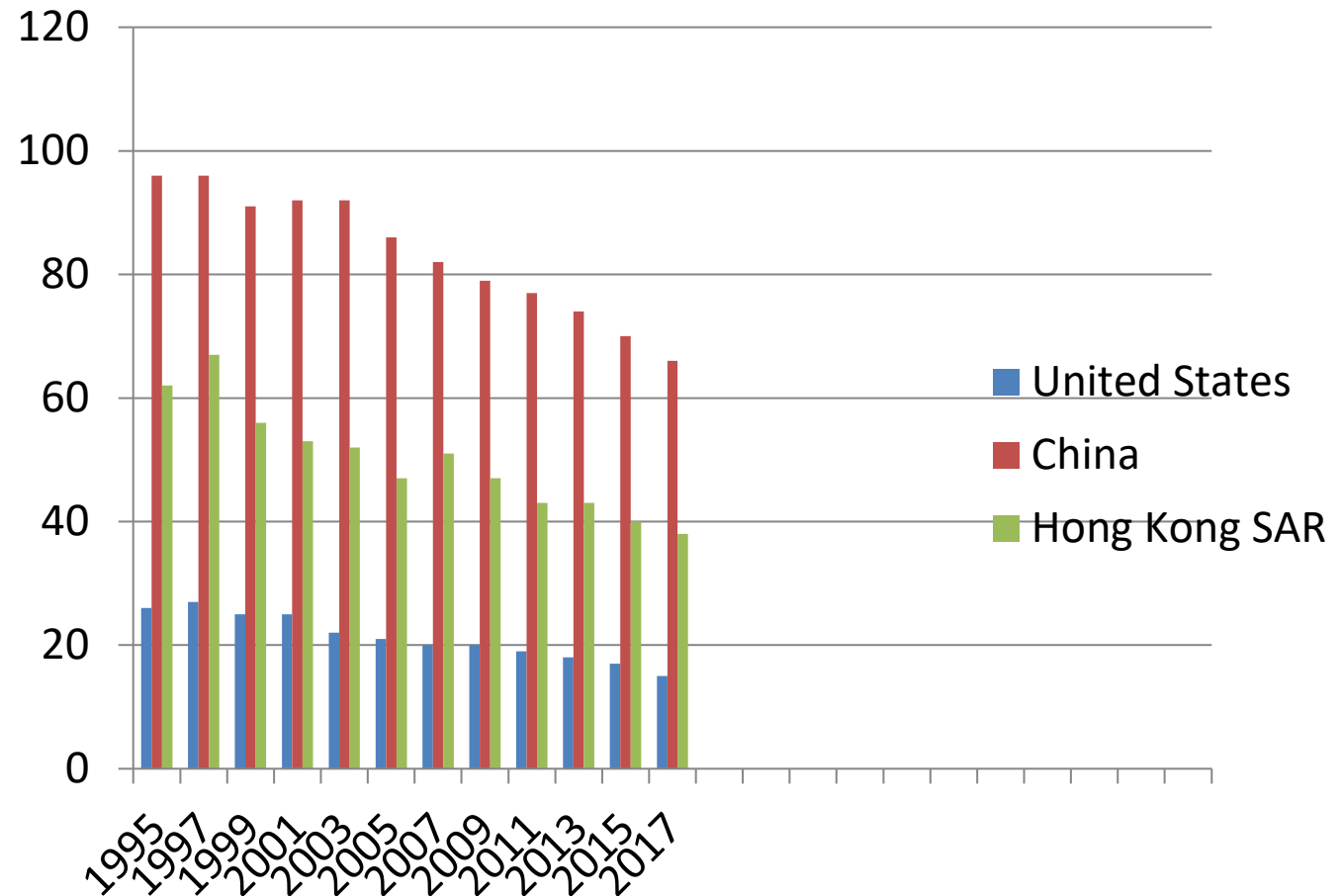
Corruption Perception Index

(higher scores mean bribery is less common)





Piracy rates for computer software (% unlicensed use)

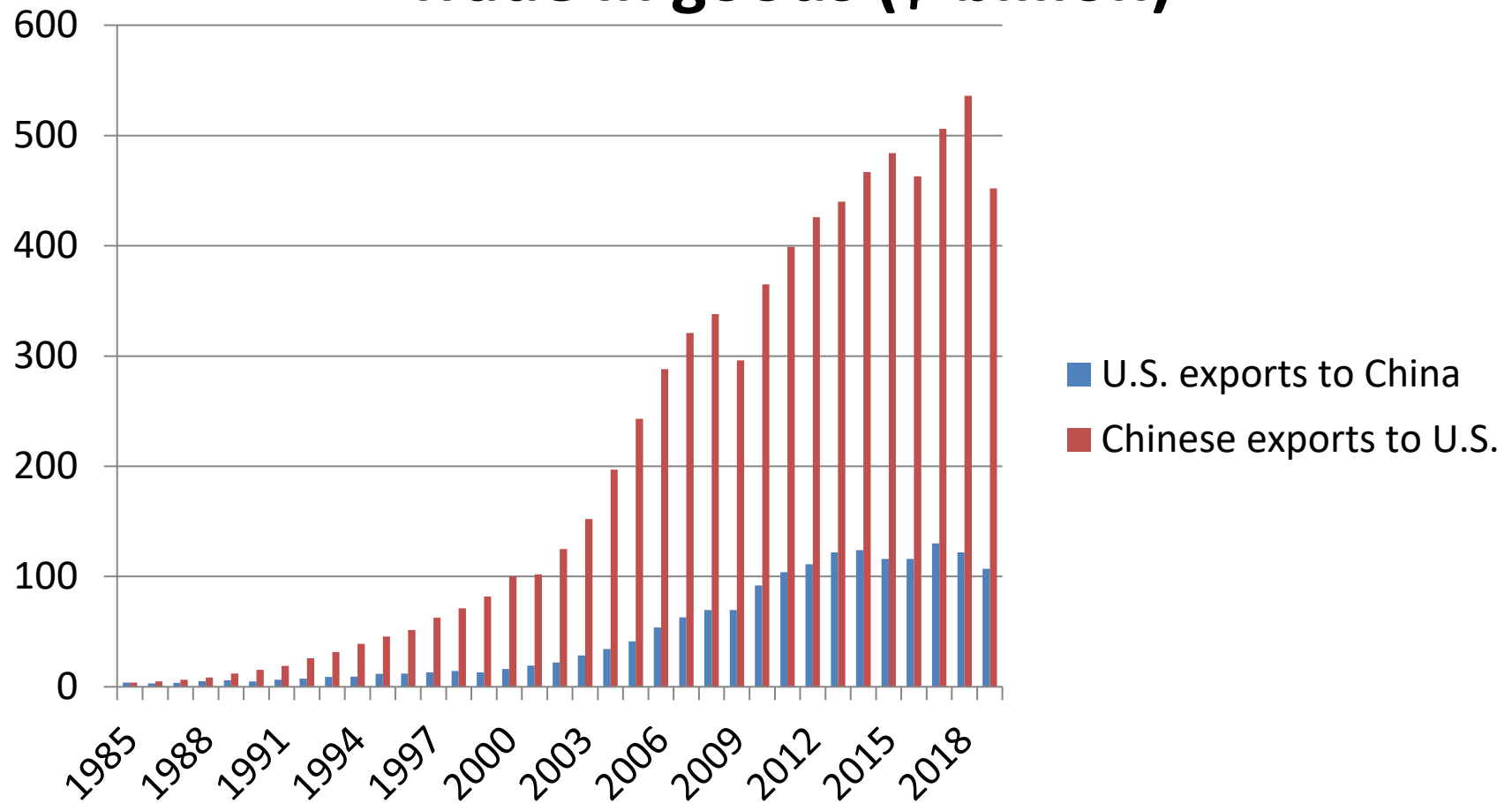


Interaction

The second group of slides presents measures of the mostly increasing interaction of the two countries. In many respects we see a strengthening of the bilateral relationship, but there is also big disappointment in the latest data.

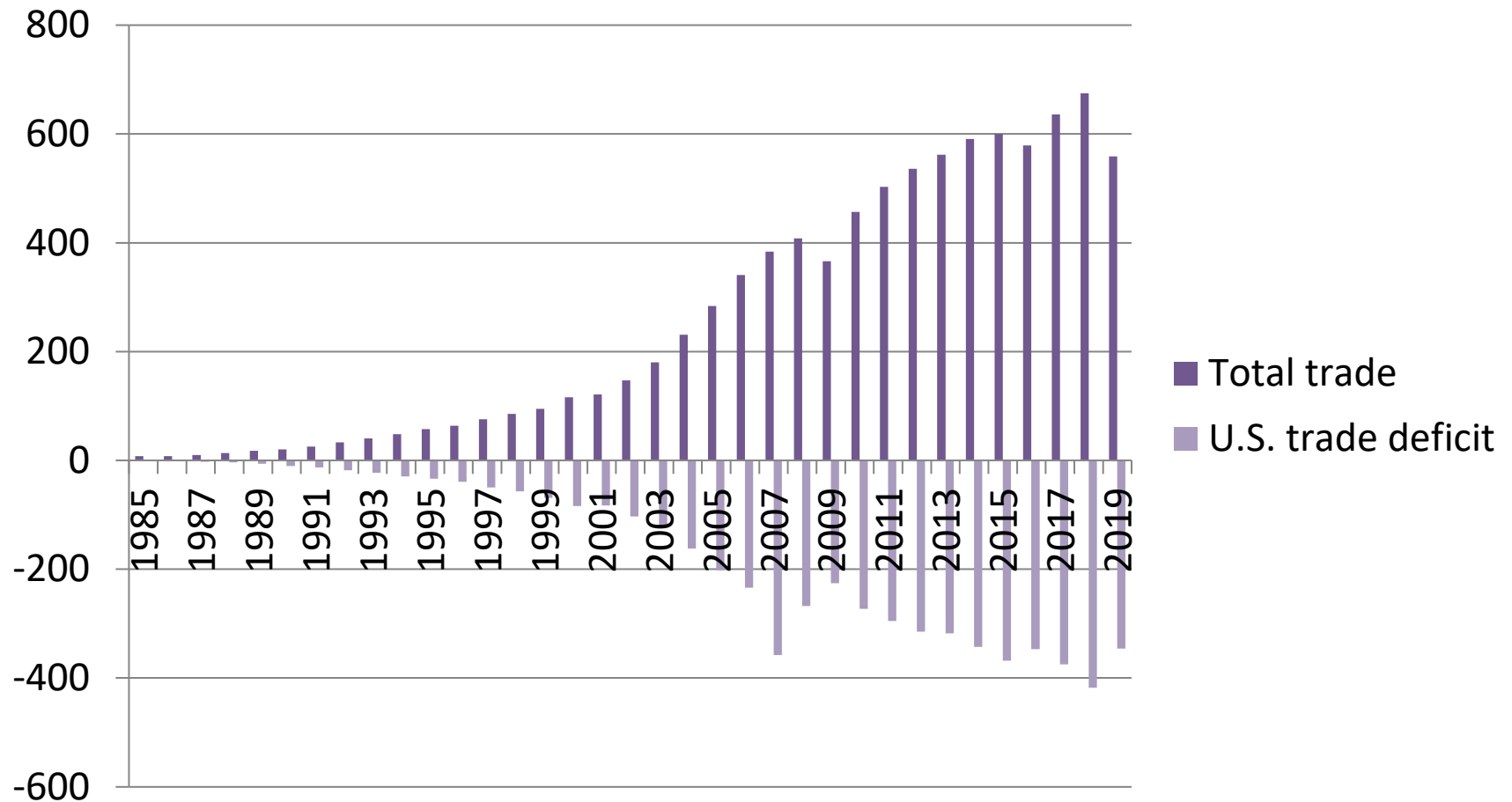


Trade in goods (\$ billion)





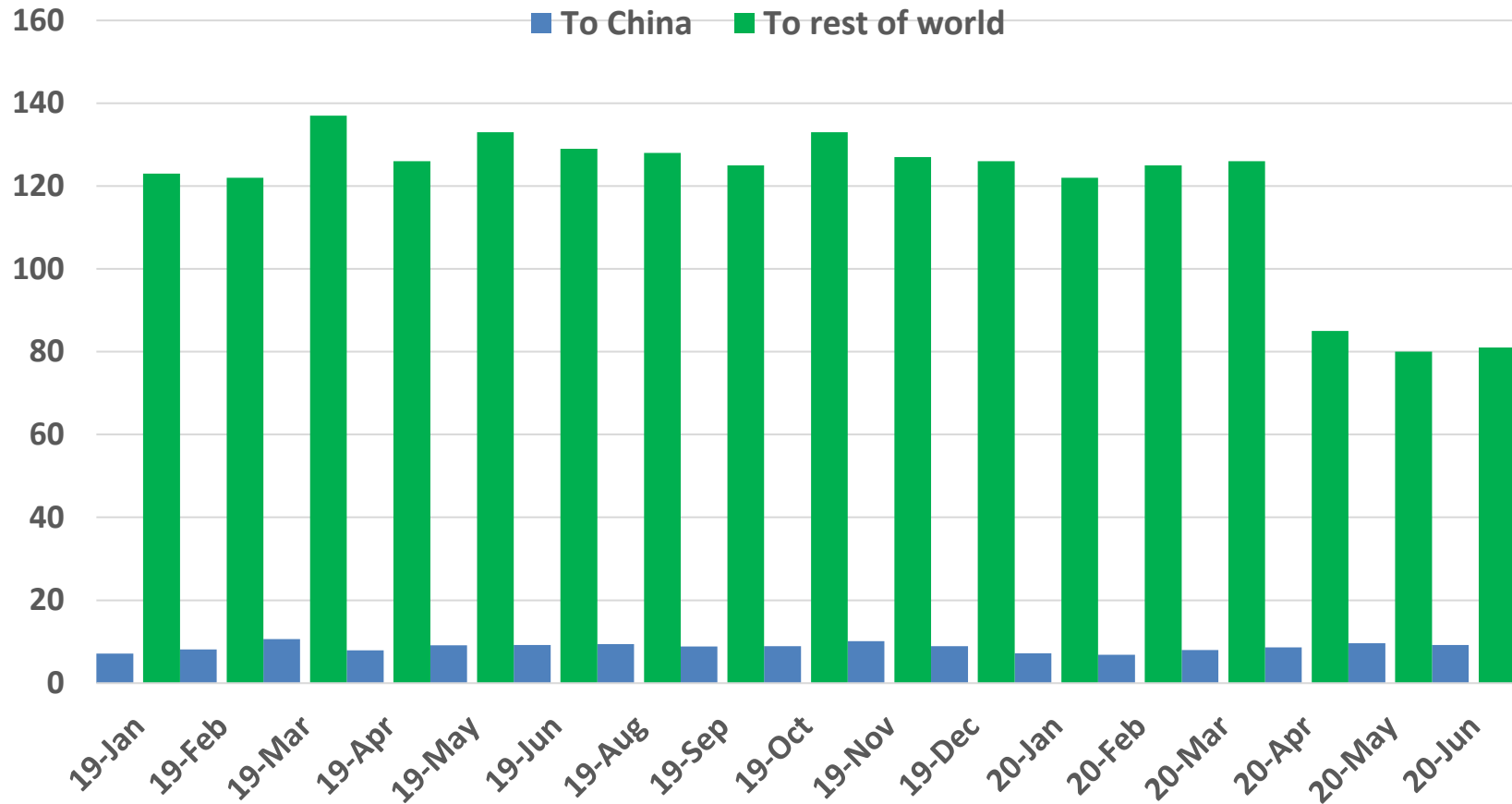
Total U.S.-China trade in goods and U.S. trade deficit in goods (\$ billion)





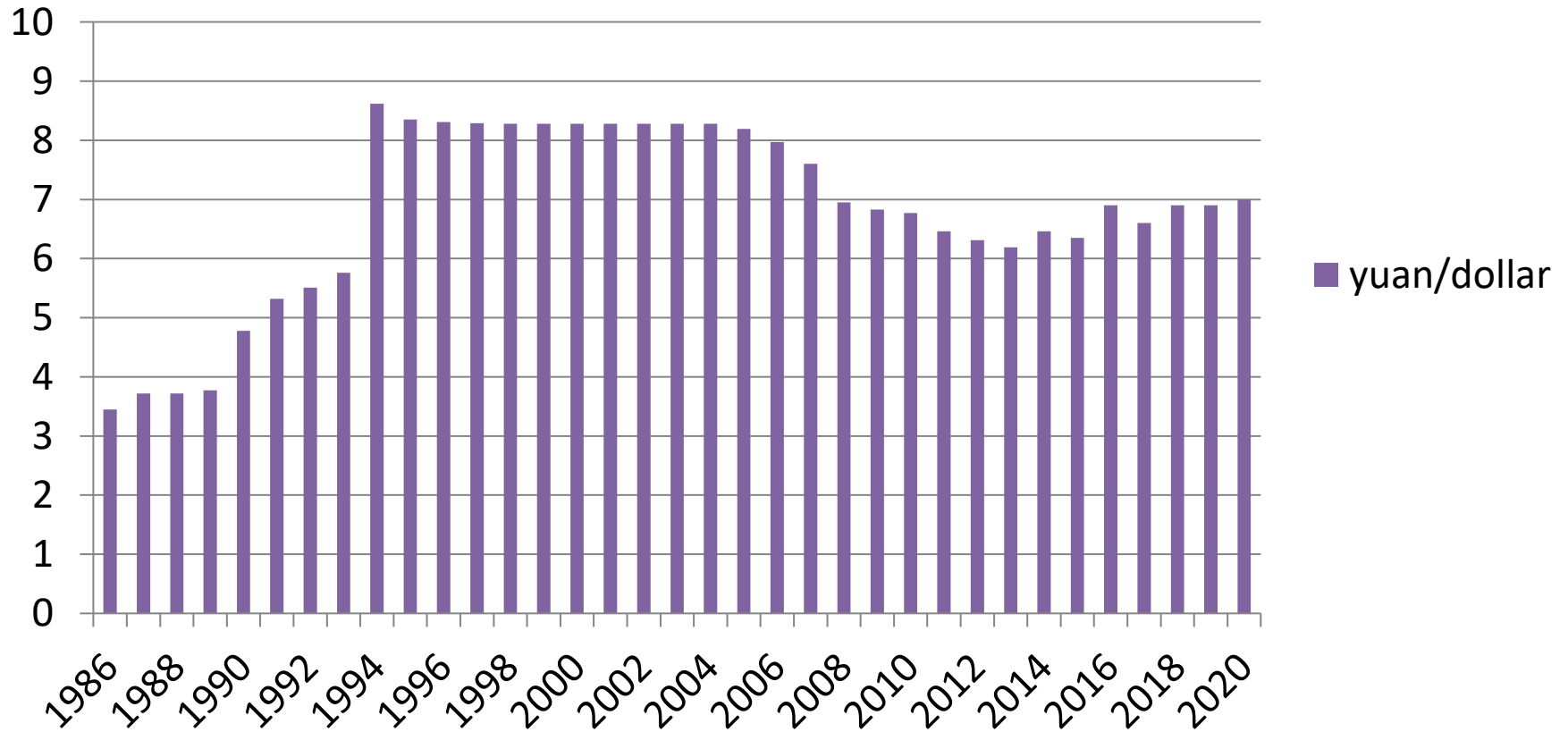
Covid-19's effect on trade

U.S. exports of goods (millions of US \$s)





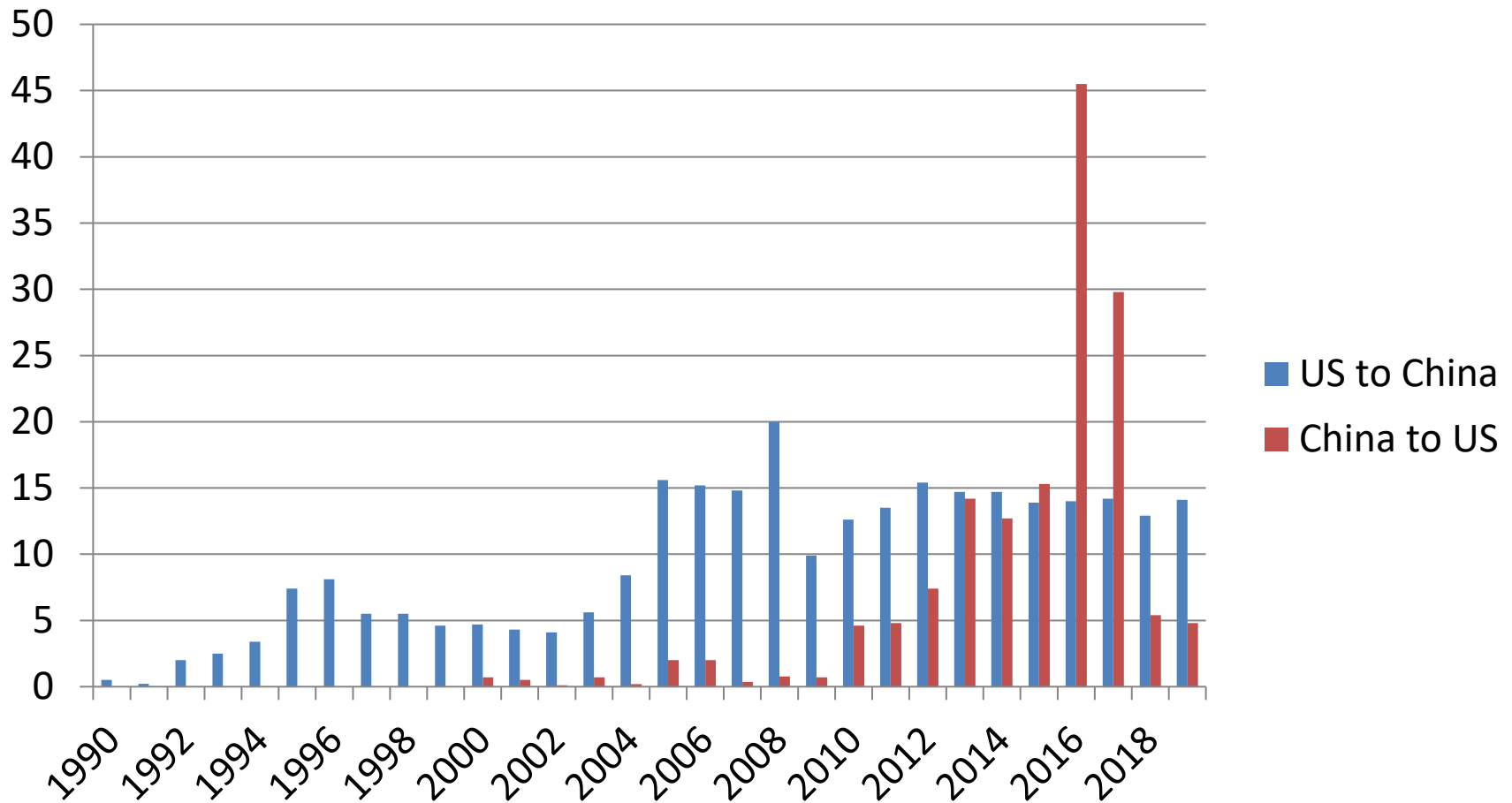
Historical currency exchange rate (yuan per one dollar)





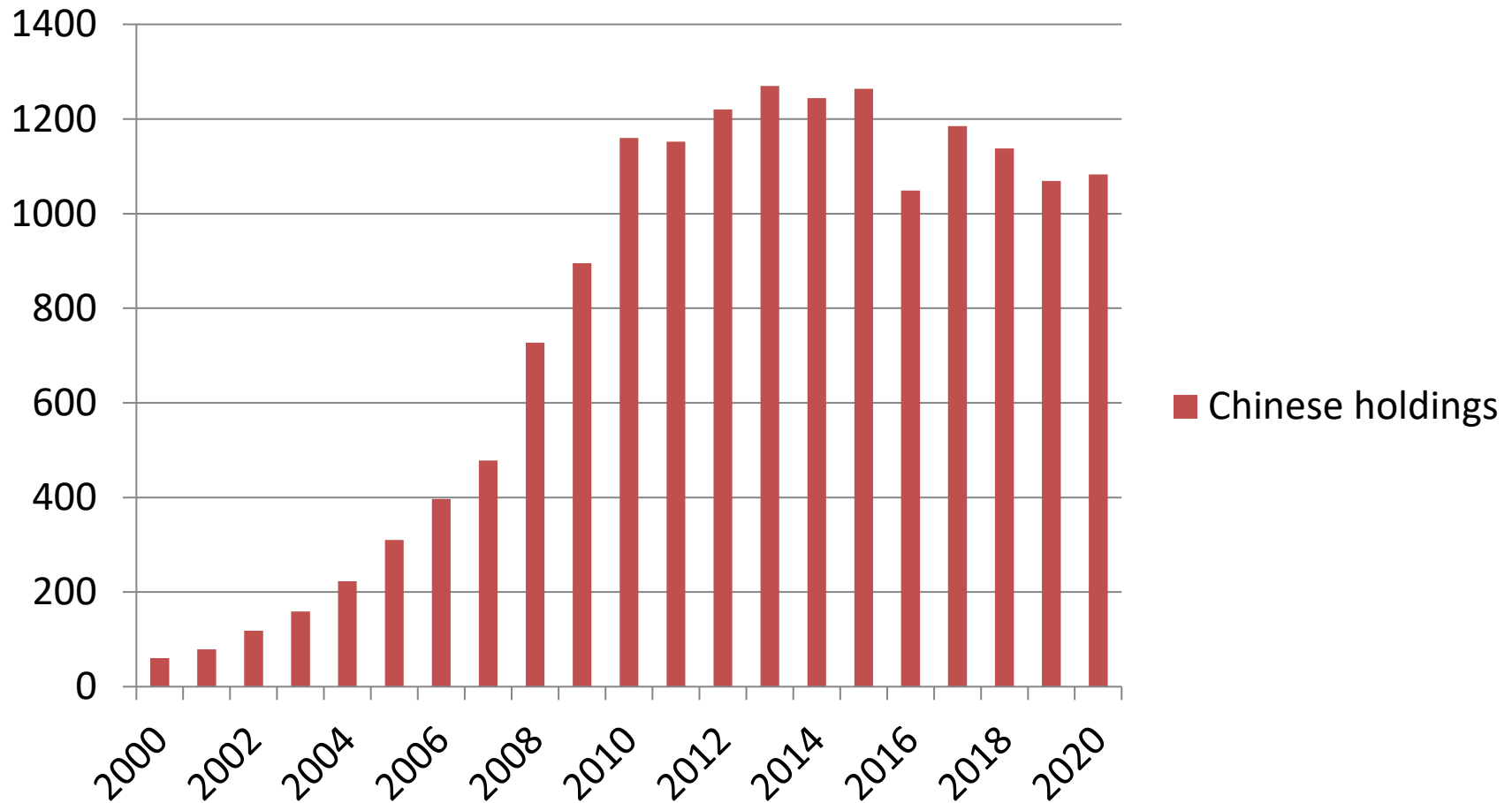
Exchange of direct investment (FDI)

(\$ billions, source: Rhodium, rhg.com)



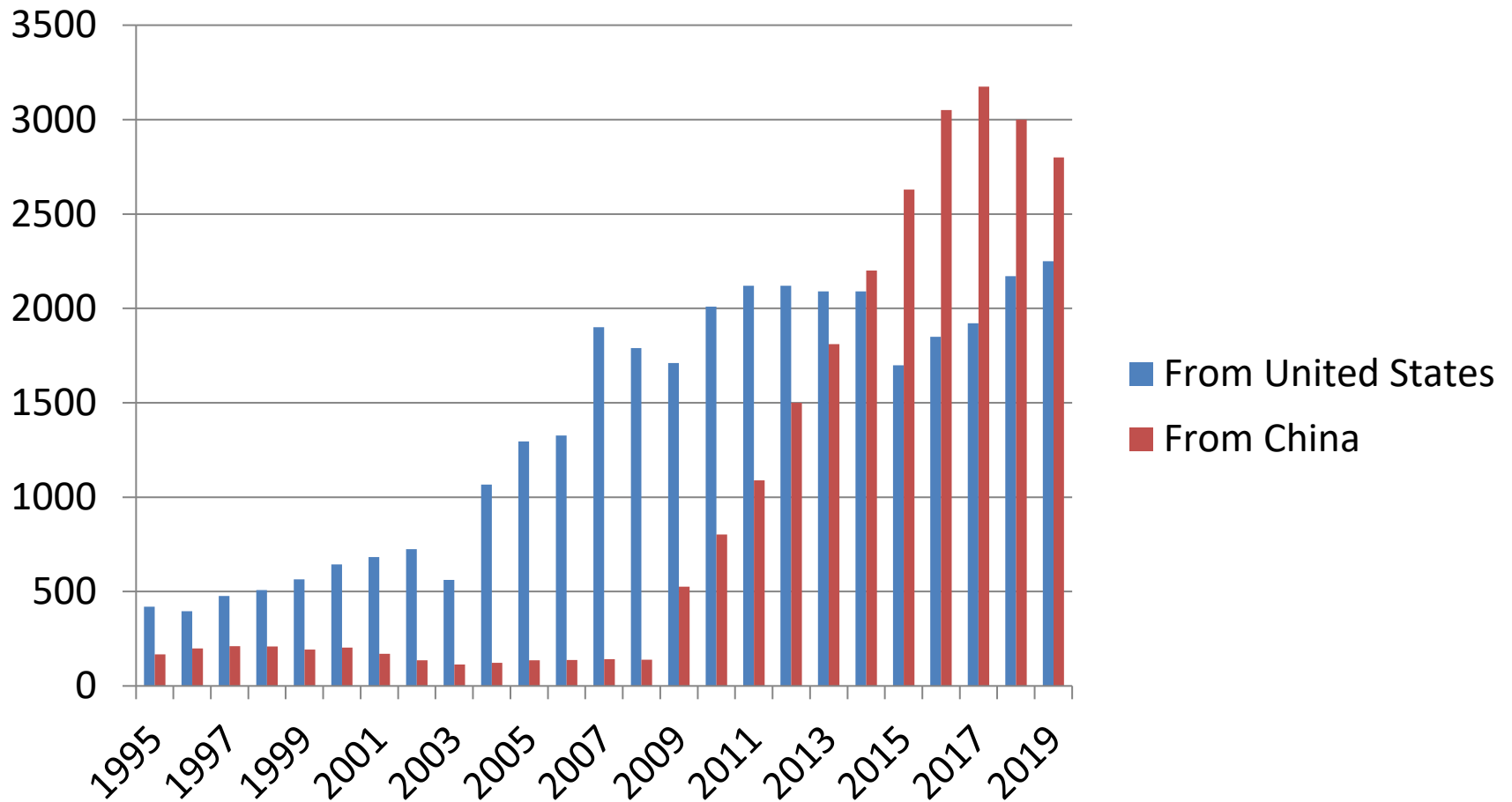


Chinese holdings of U.S. treasuries (\$ billion)





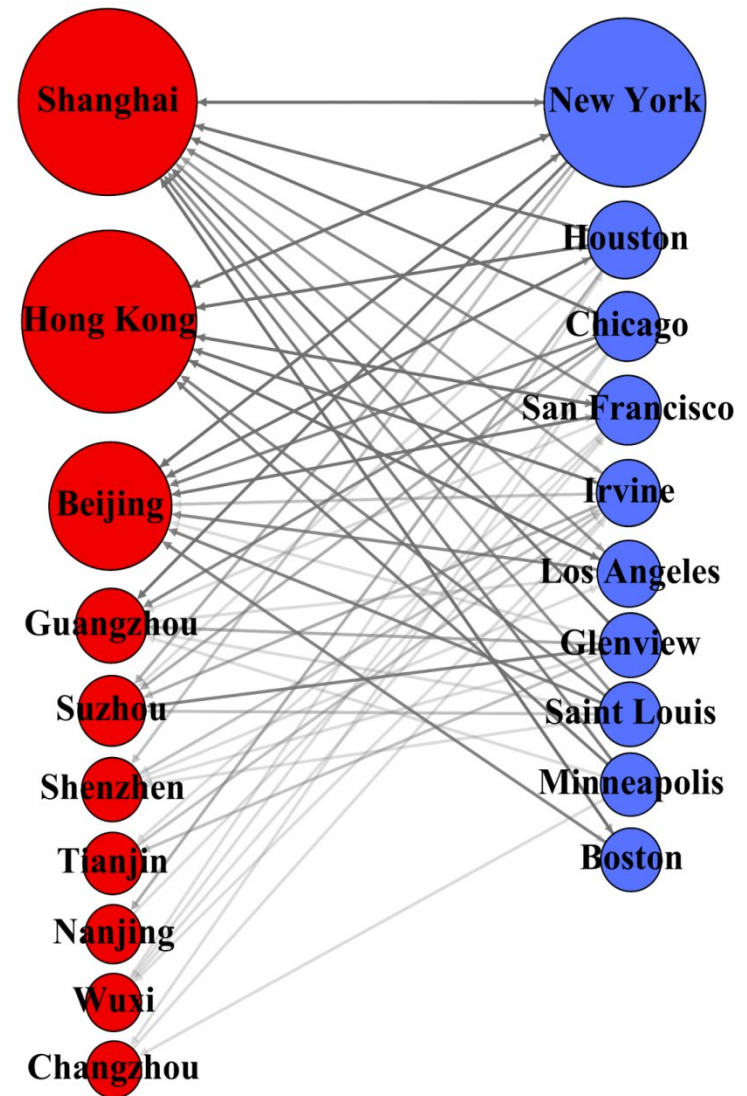
Travel between countries (thousands of passengers)



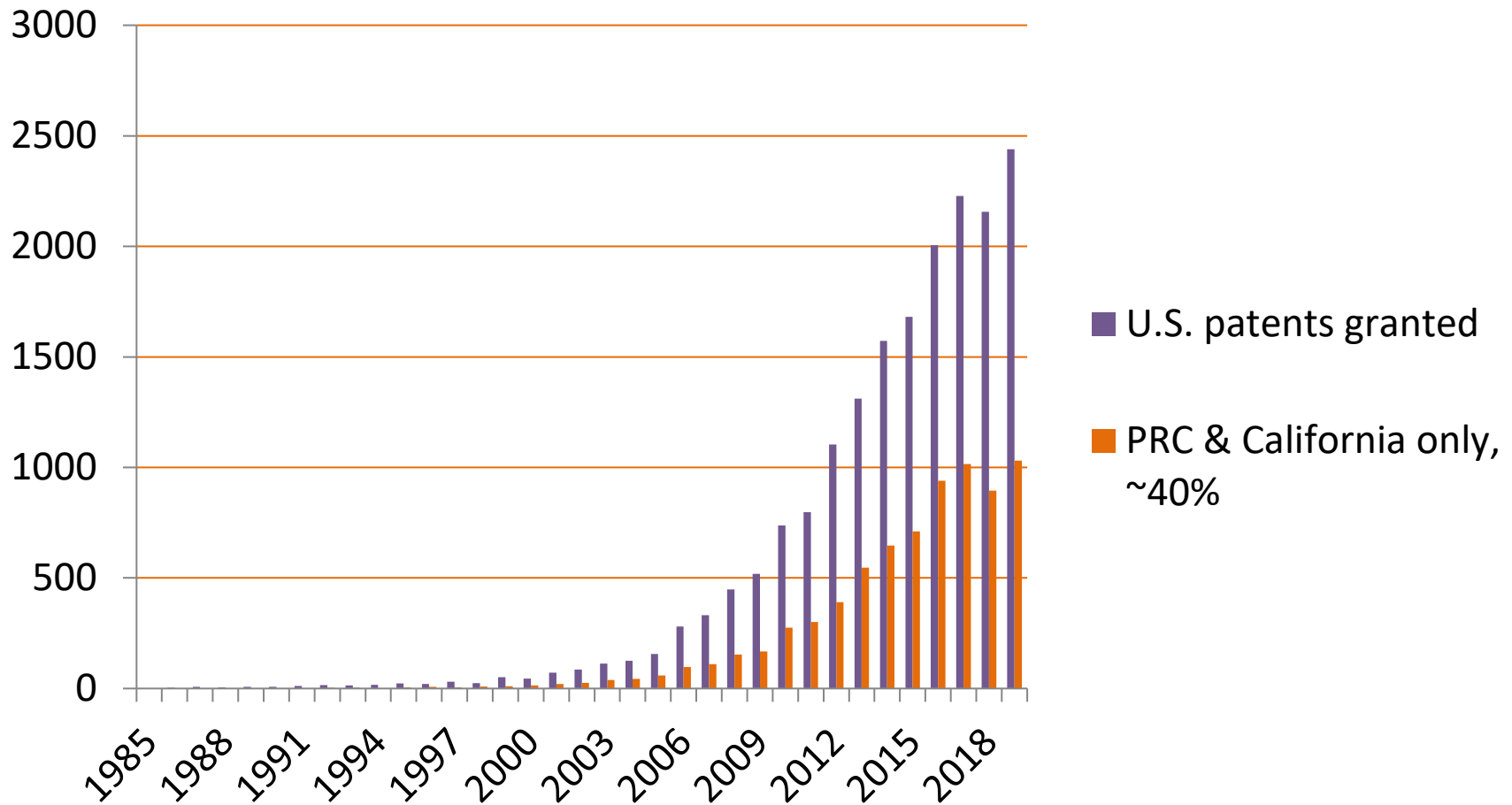


Top 10 gateway cities for bi-lateral commerce

(trans-Pacific links between
corporate HQs and their
subsidiaries and branches)

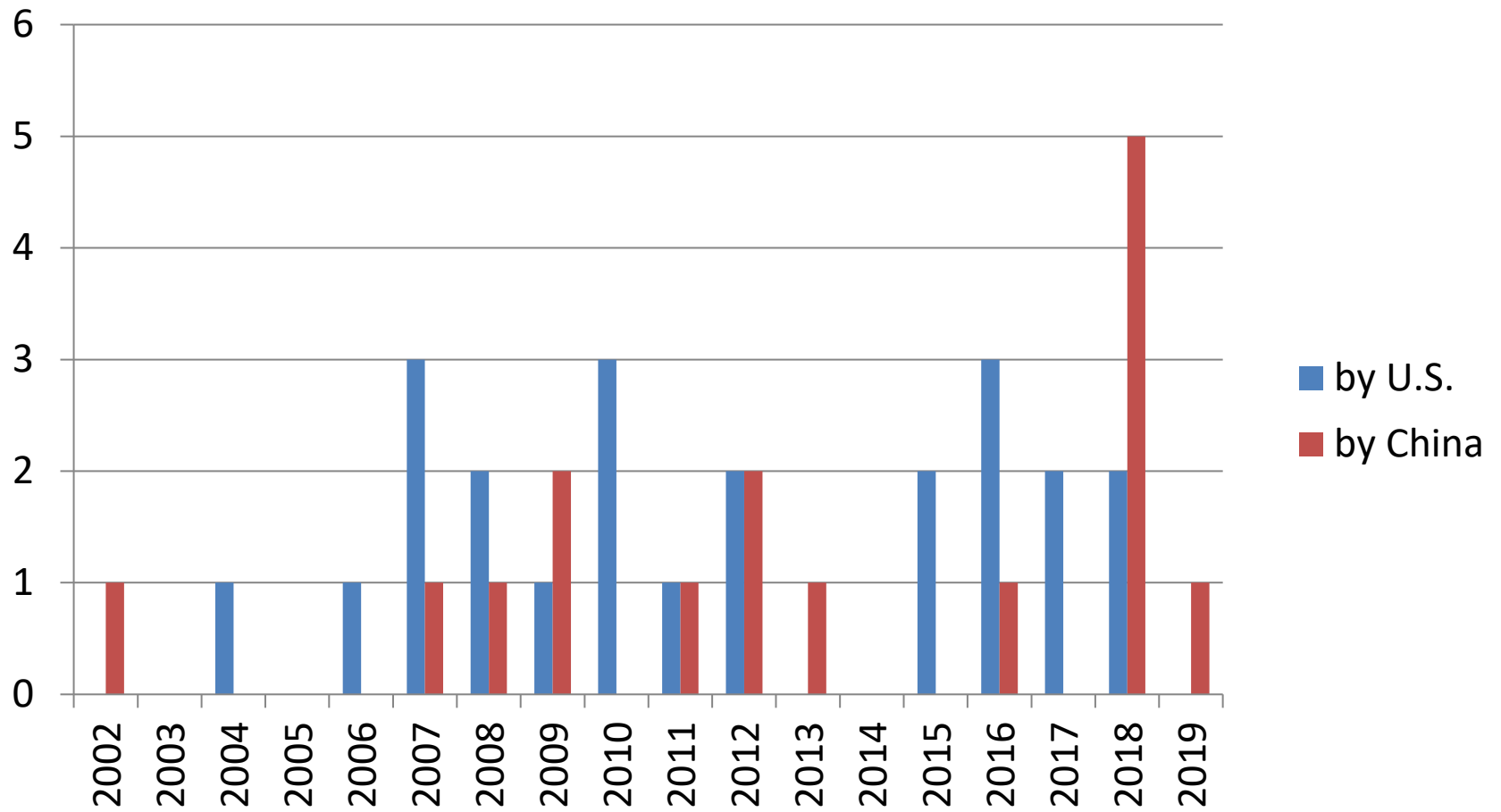


U.S. patents granted to invention teams that include both American and Chinese citizens



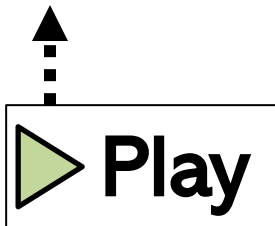
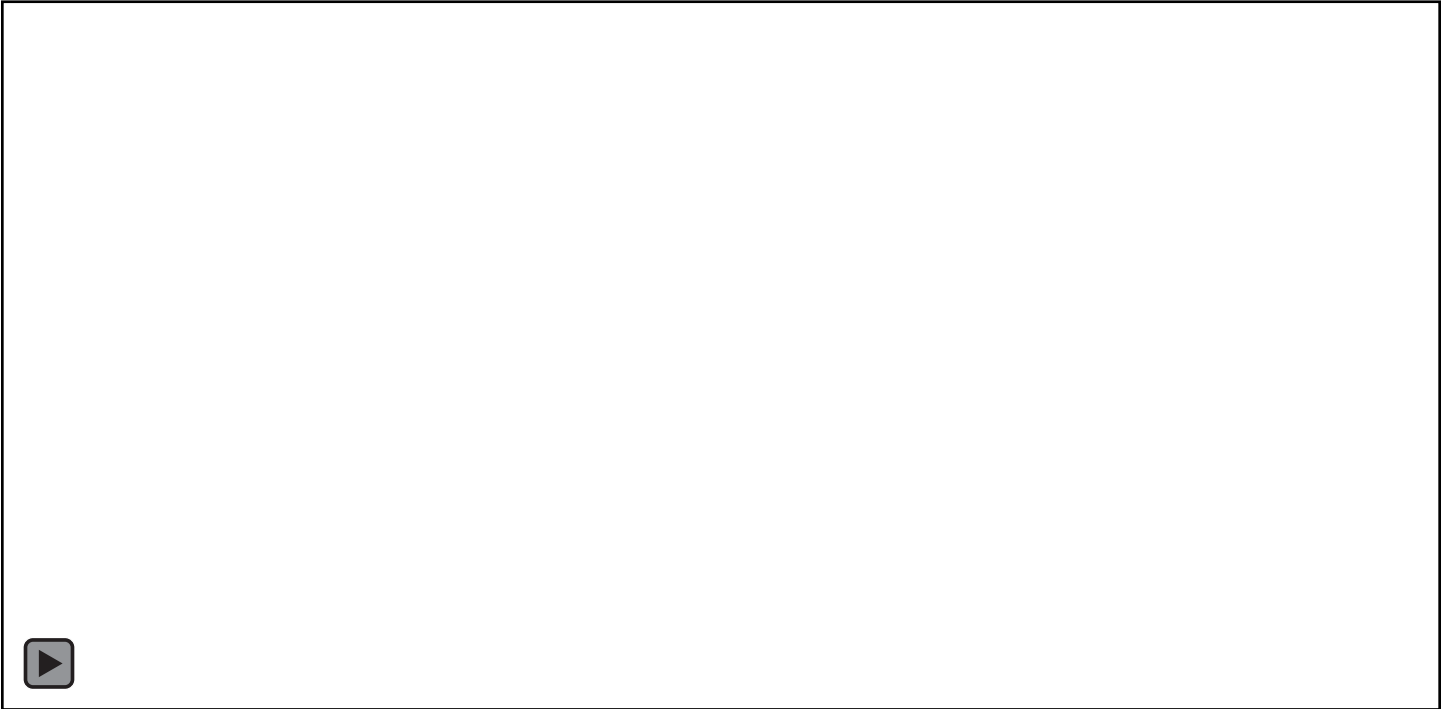


WTO complaints filed



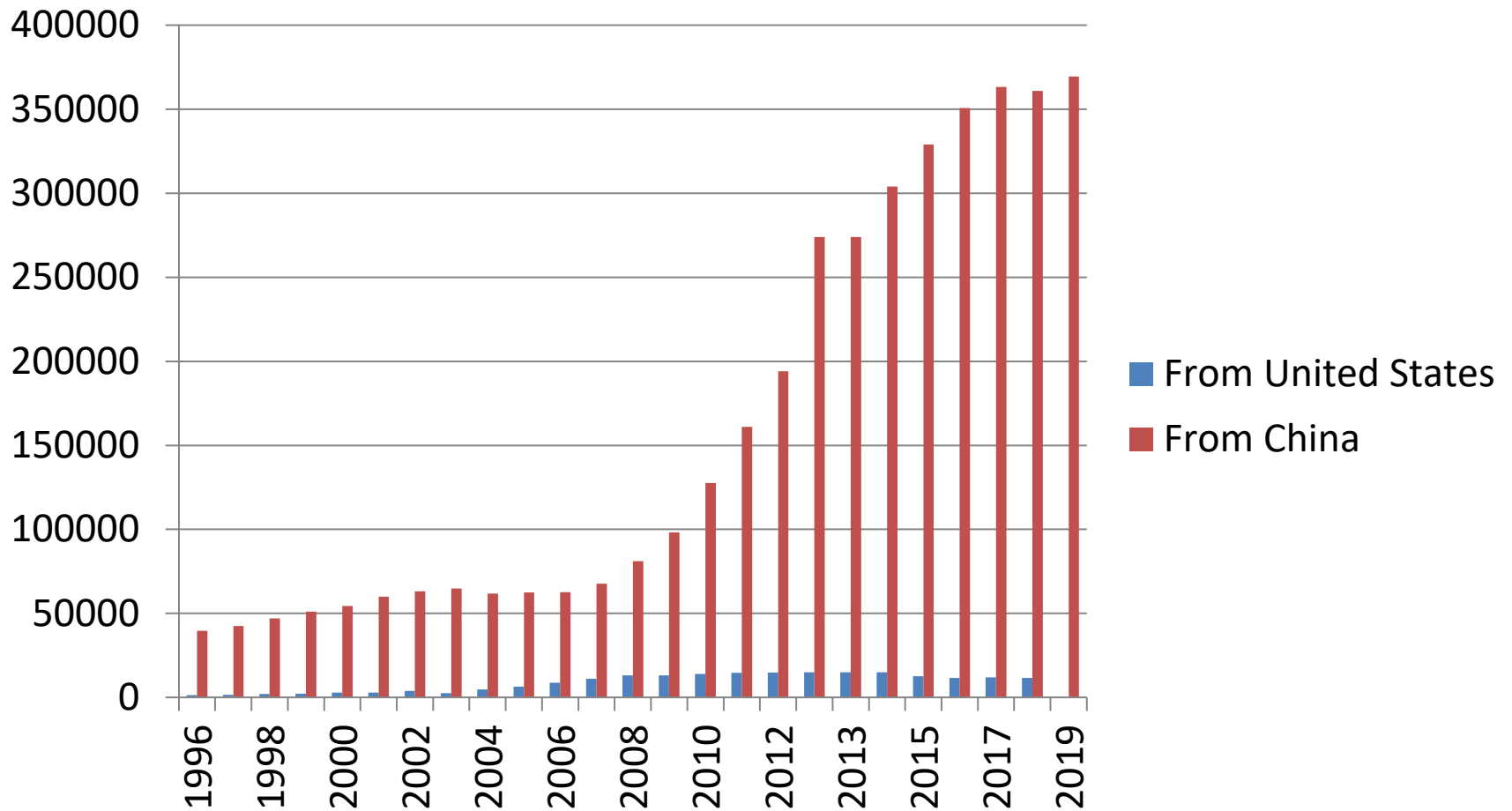


Animation of U.S.-China sister city formation, 1979-2009



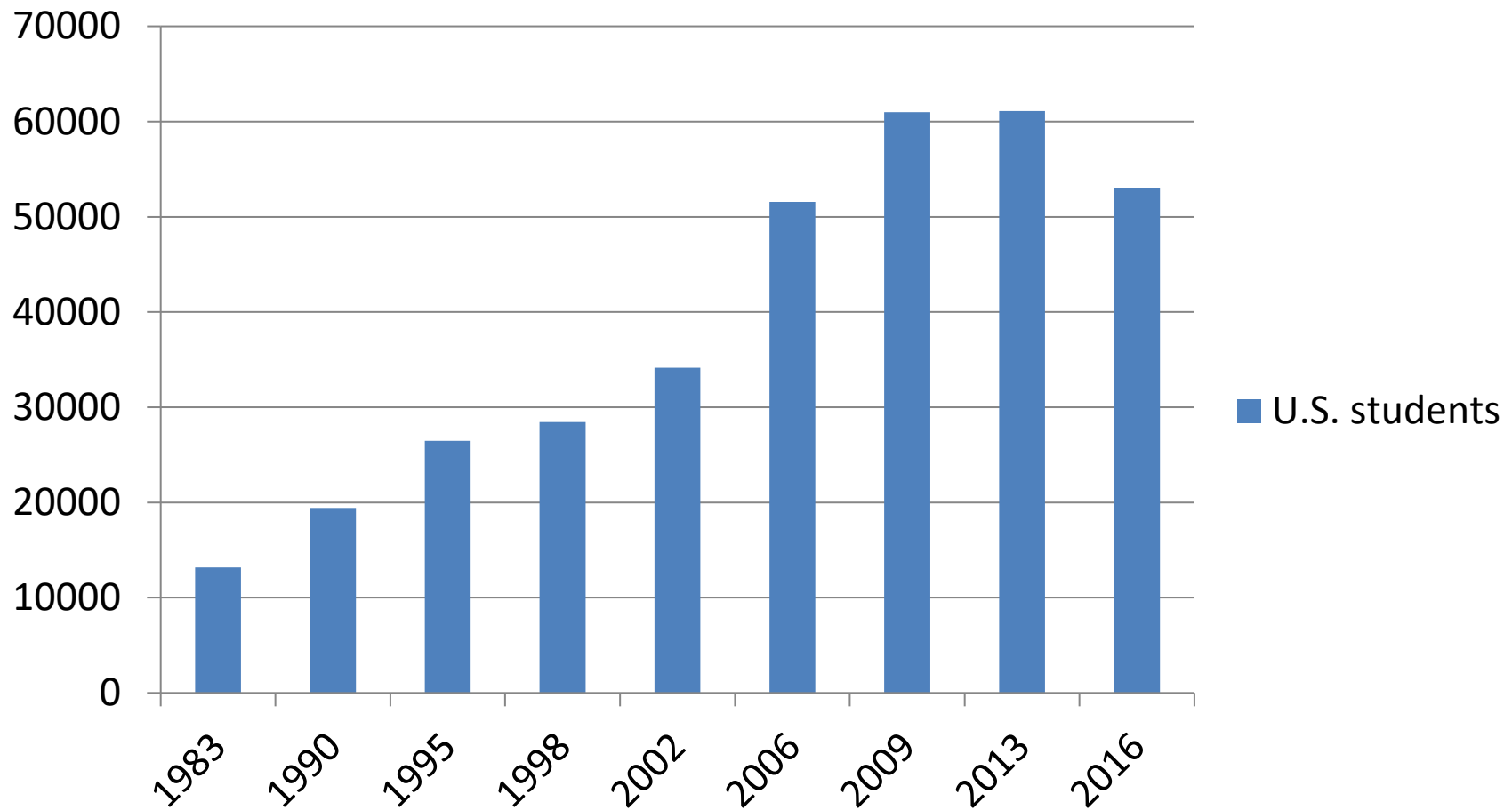


Educational exchange students





Chinese language training in higher education in U.S. (number of students)

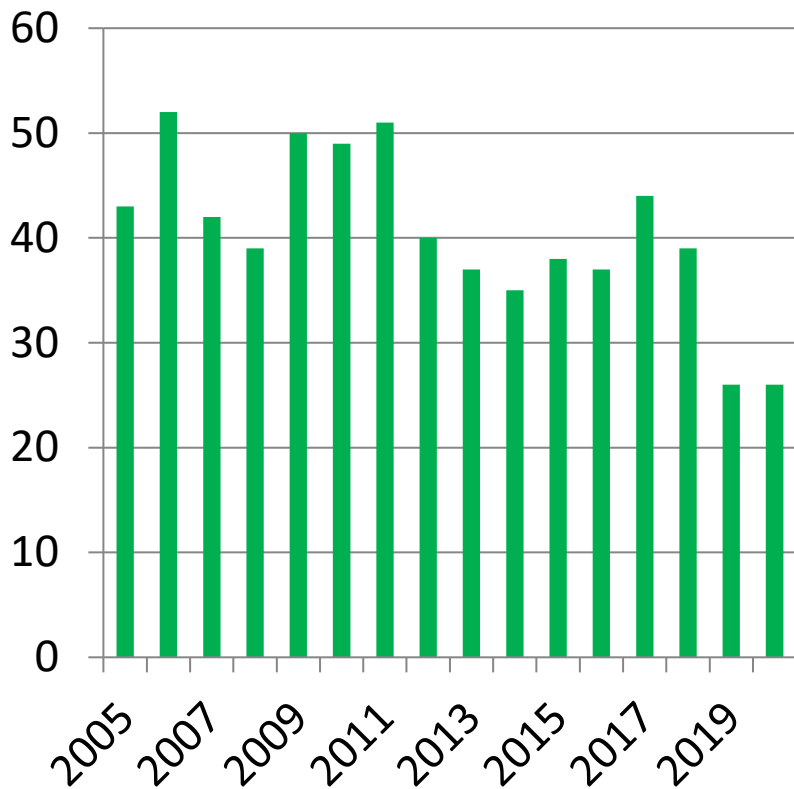




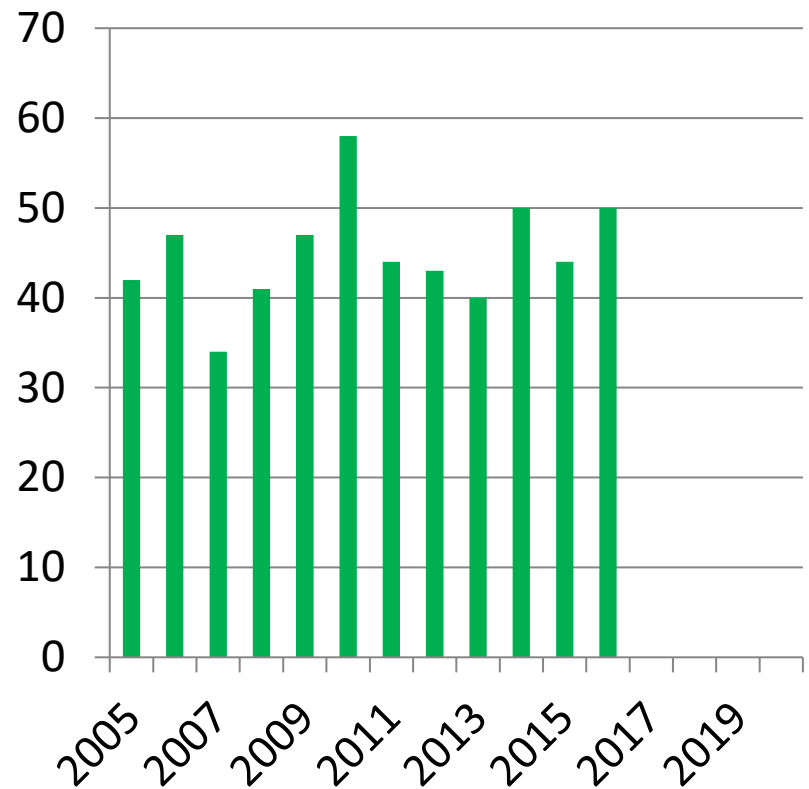
Public opinion

(Pew Research Center 2020)

**Americans' ratings of China,
% approving**



**Chinese ratings of America,
% approving**

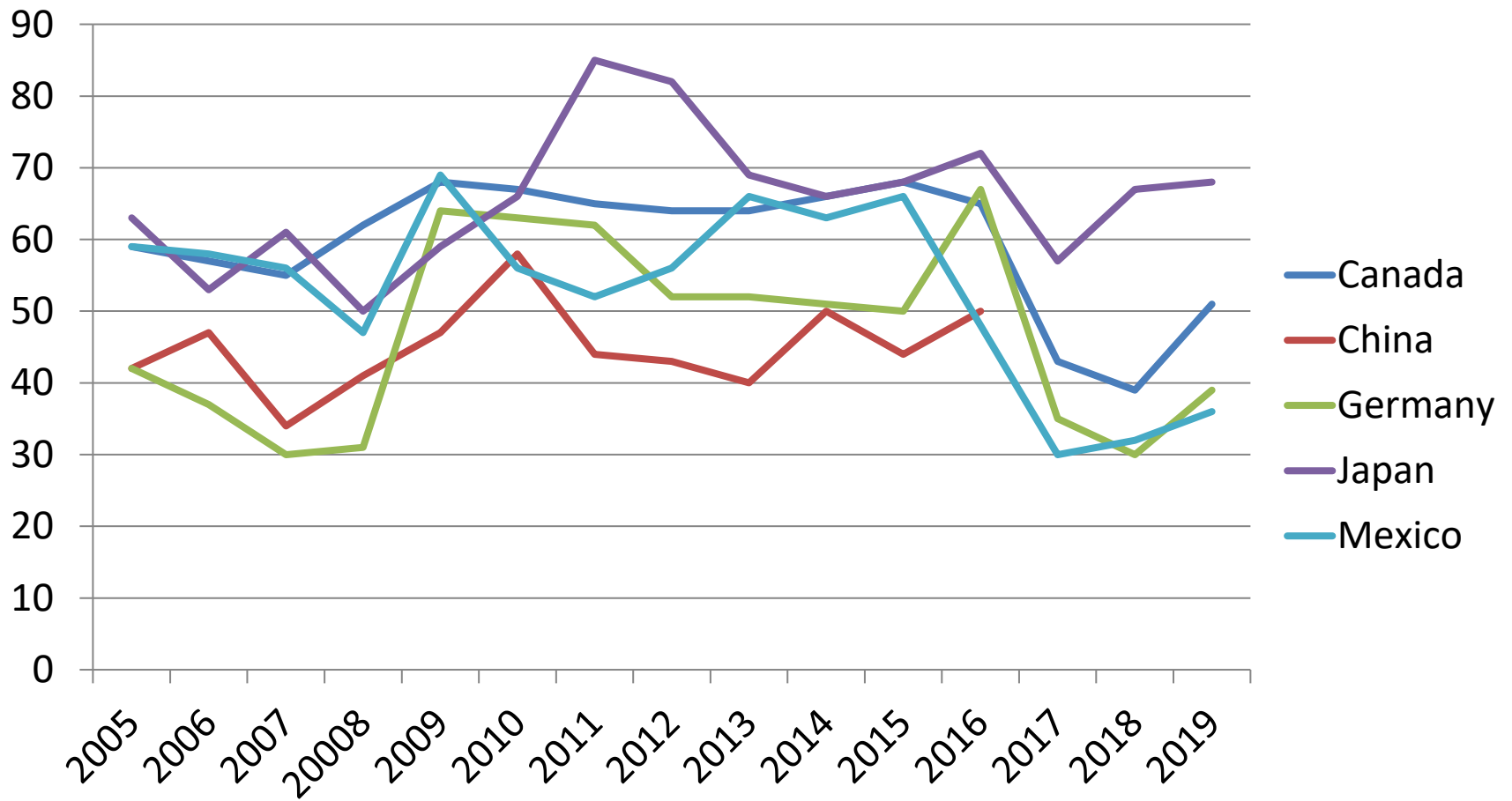




Public opinion

(Pew Research Center 2020)

5 largest trading partners ratings of America, % approving



Historical documents to follow

North Korea's foreign trade falls sharply

The total sank 10.6% in 2009, a report says. Pyongyang now seems to need Beijing more.

JOHN M. GLIONNA
REPORTING FROM SEOUL

Even before the deterioration last year of already tenuous relations between North and South Korea, Pyongyang was suffering from a severe foreign trade slump, analysts say.

The decline in trade, attributed in large part to international sanctions over North Korea's nuclear weapons program, was the largest for the reclusive nation since 1998, according to a new report by Seoul-based Korea Finance Corp. Total North Korean trade amounted to \$3.41 billion in 2009, down 10.6% from 2008, the report says.

With few options for trade, North Korea has been forced to rely even more heavily on its neighbor and key ally, China, experts say.

But it is unclear how much external trade matters to North Korea, because

The ventures were money-makers for the regime.

Last March, a South Korean warship was sunk, killing 46 crewmen. When South Korea eventually accused Pyongyang of having torpedoed the boat, North Korea defiantly said it would sever all ties with its neighbor. Since then, inter-Korean trade has dropped 30%.

In November, four people died when North Korea shelled a South Korean island.

In recent days, North Korea has proposed resumption of the joint tourism program and the industrial park. But that strategy took a hit Monday when South Korea once again rejected the North's attempt at renewing talks between the two.

Experts say Pyongyang is looking for cash outside China, which is estimated to account for as much as 80% of North Korea's international trade but which has recently taken a tougher line on the regime.

"After the North's attacks on South Korea in March and November, we believe China put much more economic pressure on Pyongyang to stay in line," researchers today said.



ANDY WONG Associated Press

WELCOME: Sailors form an honor guard during a ceremony for Defense Secretary Robert M. Gates in Beijing. Chinese officials appeared eager to iron out tensions ahead of President Hu Jintao's visit to Washington.

U.S., China vow to boost ties

Pentagon chief Gates, on a three-day visit, emphasizes easing

agreed to consider talks on nuclear posture, missile defense and cyber warfare.

But the U.S. had sought specific dates for Chen's visit, a request that was re-

portant that our military-to-military ties are solid, consistent and not subject to shifting political winds," Gates said.

Chinese officials ap-

"The gap between us and that of advanced countries is at least two to three decades," Liang said. "There are some people who want to label China's military develop-

PHOENIX, Ariz.—Federal prosecutors are assembling a case against suspected killer Jared Lee Loughner that portrays him as a man with psychological problems who was nonetheless competent enough to plot an assassination.

By Evan Perez, Devlin Barrett and Peter Sanders

Mr. Loughner appeared Monday in federal court—his head shaved, shackled at the waist and dressed in a beige jail jumpsuit—to hear the government's charges of murder and attempted murder against him.

Federal prosecutors will try to show that Mr. Loughner planned the Saturday attack that killed six people, gravely wounded Rep.

Charges and Potential Penalties

- **Count 1:** Attempted assassination of a member of Congress: life in prison
- **Counts 2, 3:** Murder of Judge John Roll and Gabriel Zimmerman: death or life in prison
- **Count 4, 5:** Attempted murder of Pamela Simon and Ron Barber: 20 years in prison

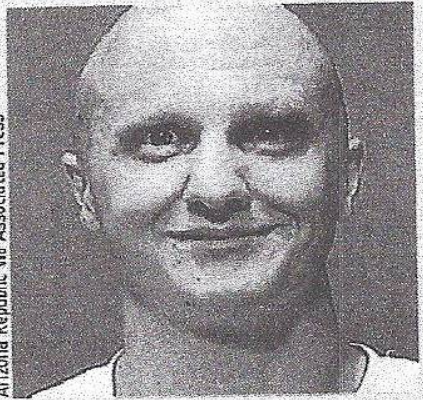
Complete coverage on the Arizona Shootings, A4

Gabrielle Giffords (D., Ariz.) and injured 13 others.

During the hearing, Magistrate Judge Lawrence O. Anderson asked Mr. Loughner whether he understood the charges, which could carry the death penalty. "Yes, I understand," he re-

plied in a loud voice.

Mr. Loughner was assigned two federal public defenders, including Judy Clarke, who had represented Theodore Kaczynski, the so-called Unabomber, as well as Sept. 11 conspirator Zacarias Moussaoui. She stood beside Mr.

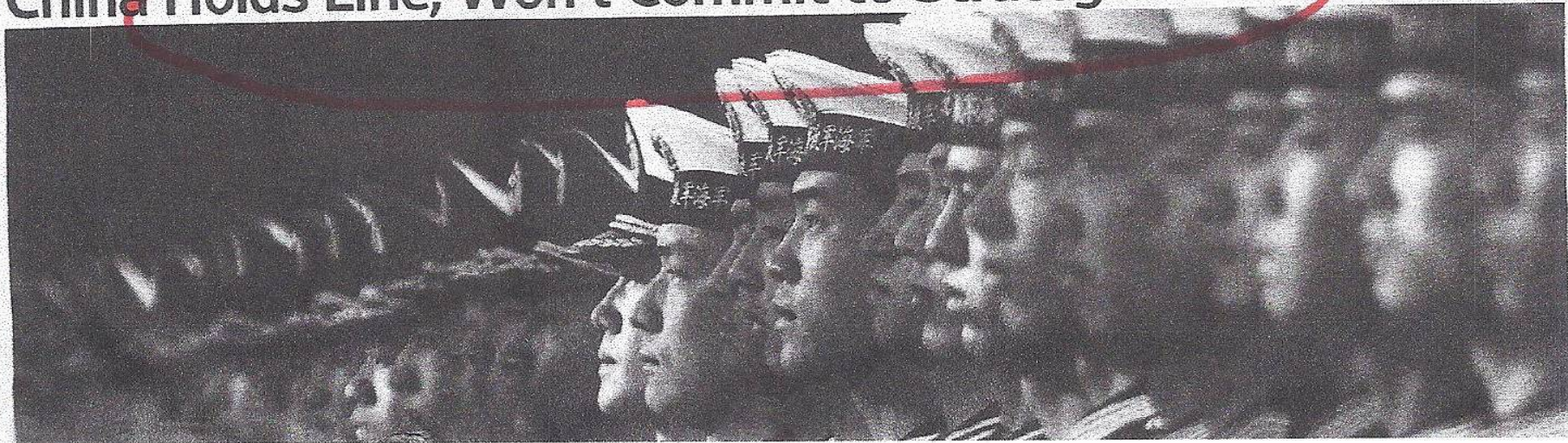


Jared Lee Loughner

Loughner (pronounced LOFF-ner) at the hearing, frequently resting her hand on his shoulder.

Investigators are still trying to piece together the events leading to Saturday's shooting. Mr. Loughner tried that morning
Please turn to page A4

China Holds Line, Won't Commit to Strategic Talks With U.S.



Is all this debt dangerous?

The 84-year-old king of luxury

GE, the ultimate CEO test

**Bloomberg
Businessweek**

How NOT To Cure Cancer

The U.S. is purging
Chinese scientists
in a new Red Scare ⁴⁶