

The Impacts of the Trade War and the COVID-19 Epidemic on the Chinese and U.S. Economies

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- ◆ Concluding Remarks

Introduction

- ◆ The China-U.S. trade war actually started in January 2018, even though the first tariffs did not actually take effect until mid-2018. It is still ongoing despite an interim “Phase 1” truce. (It has also escalated to include U.S. export controls on critical products and technologies against Chinese entities such as Huawei.)
- ◆ The average U.S. tariff rate on imports of goods from China rose from 3.1% in January 2018 to 19.3% by March 2020. Most Chinese exporters do not have this kind of profit margins so that the new U.S. tariff rates will prove to be prohibitive to many of them.
- ◆ Even though the U.S. tariffs against imports from China did not become effective until mid-2018, they were anticipated and had an effect on Chinese export orders. The rate of growth of the Chinese economy declined from 6.9% in 2017 to 6.7% in 2018, and then to 6.1% in 2019, a total reduction of 0.8%. The year-over-year quarterly rate of growth tells more or less the same story—it declined from 6.9% in 2018 Q2 to 6.0% in 2019 Q4—a net reduction of 0.9%. These declines may be largely attributed to the China-U.S. trade war.
- ◆ The trade war caused only a very slight decline in the rate of growth of the U.S. economy in 2019.

The Immediate Impacts of the China-U.S. Trade War—The Stock Markets

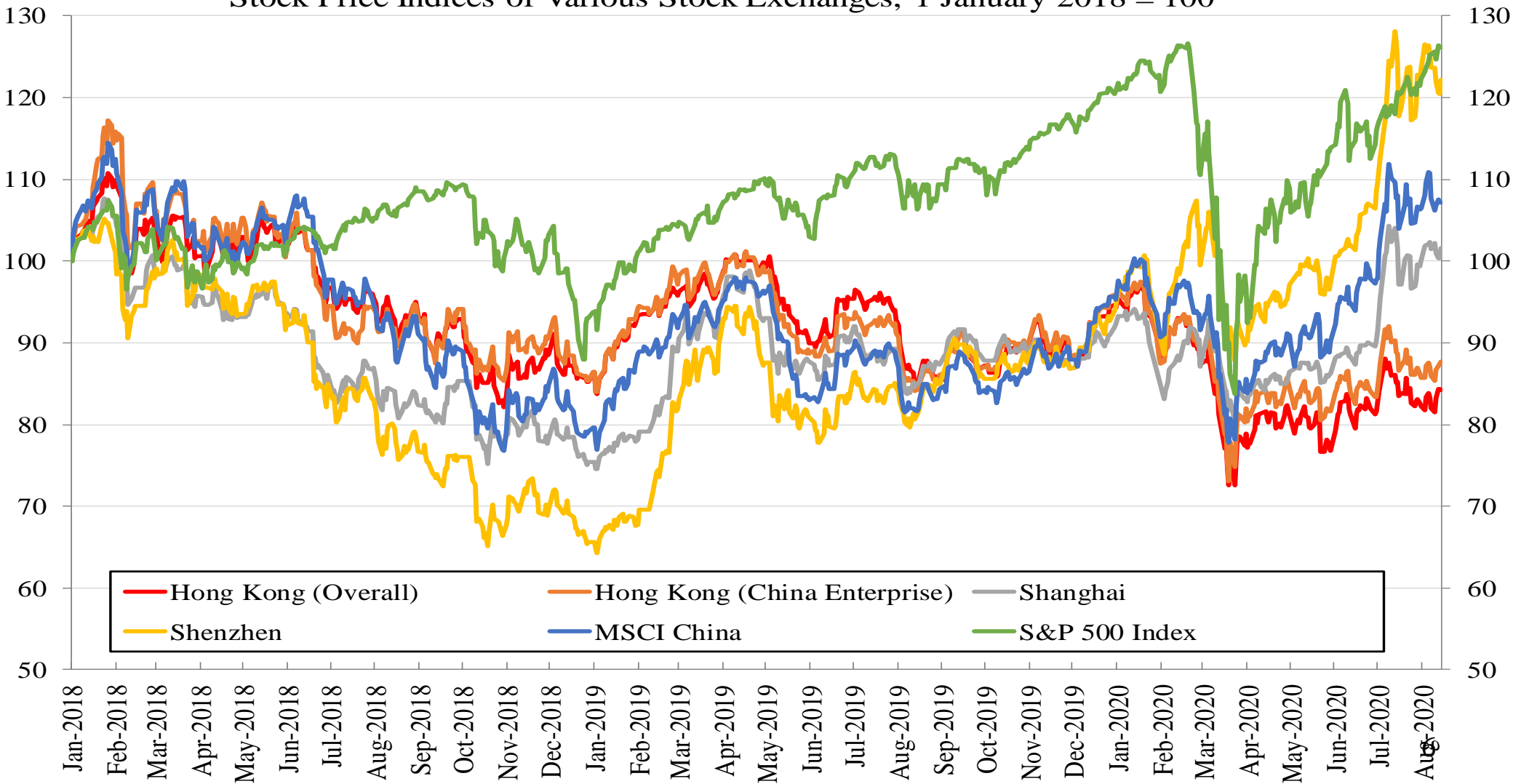
- ◆ The Chinese stock markets took heavy hits at the beginning, as the psychological effects dominated. As of the end of 2018, the shares on the Shenzhen Stock Exchange had on average lost 30%, and those on Shanghai and Hong Kong exchanges 20% and 10% respectively. In contrast, the Standard and Poor 500 Index of U.S. stocks did not suffer any loss on a whole-year (2018) basis.
- ◆ At the beginning of 2019, the Chinese stock markets continued to fall, until the latter part of January, then it began to rise, buoyed by hopes of a successful conclusion of a China-U.S. trade agreement.
- ◆ However, between May 2019 and March 2020, the stock markets became quite volatile, reflecting the progress or lack thereof of the trade negotiations, and reacting to every trade-related tweet of U.S. President Donald Trump.

The Immediate Impacts of the China-U.S. Trade War—The Stock Markets

- ◆ The Standard and Poor 500 Index also fell at the beginning of 2019 and experienced volatility similar to the Chinese stock market price indices. As of year-end 2019, it showed a gain of approximately 20% from the beginning of 2018, in part due to the continuing low U.S. rate of interest.
- ◆ In 2020, there was a large sell-off in all markets in March, caused by the uncertainties created by the COVID-19 epidemic. But as of August 2020, the S&P index as well as the Shenzhen Stock Exchange index reached new highs and the Shanghai Stock Exchange index recovered all of its losses since January 2018.

The Chinese, Hong Kong and U.S. Stock Market Indexes, 2018M1 to Date

Stock Price Indices of Various Stock Exchanges, 1 January 2018 = 100



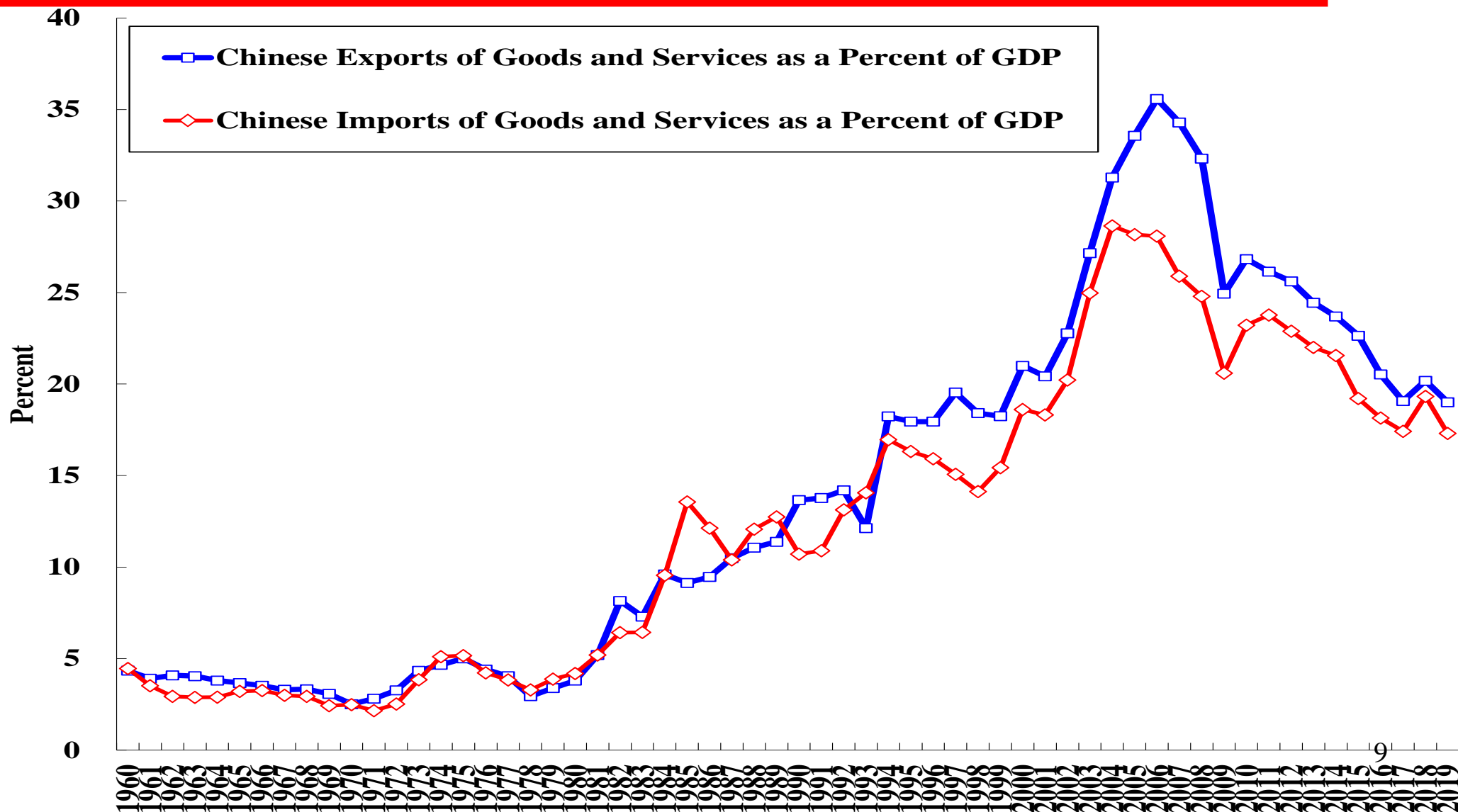
Introduction

- ◆ The first COVID-19 case in China was found in Wuhan, Hubei in December 2019. China has actually managed the COVID-19 epidemic quite well--imposing a blockade on Wuhan and Hubei on 23 January 2020 and lockdowns in many cities, and mandating measures such as testing, isolation, contact-tracing, social distancing, and quarantine.
- ◆ As an indicator of the success of the blockade and lockdown, consider that on 31 August 2020, the bulk of the cumulative total COVID-19 cases and deaths on the Mainland (**85,058** and **4,634** respectively) were found in Hubei (**68138** and **4512** respectively), with a population of only 60 million. For Mainland ex Hubei, with a population of 1.34 billion, the cumulative total numbers of cases and deaths were only **16,920** and **122** respectively (these numbers include imported cases).
- ◆ The blockade and lockdown of Wuhan and Hubei effectively prevented the COVID-19 virus from spreading to the rest of Mainland China.
- ◆ However, the COVID-19 epidemic lowered the year-over-year rates of growth of the Chinese economy in 2020Q1 and Q2 to -6.8% and 3.2% respectively. For 2020 as a whole, the rate of growth may be projected to be 3.4%, compared to an expected 6% under normal circumstances, a projected reduction of 2.6%.

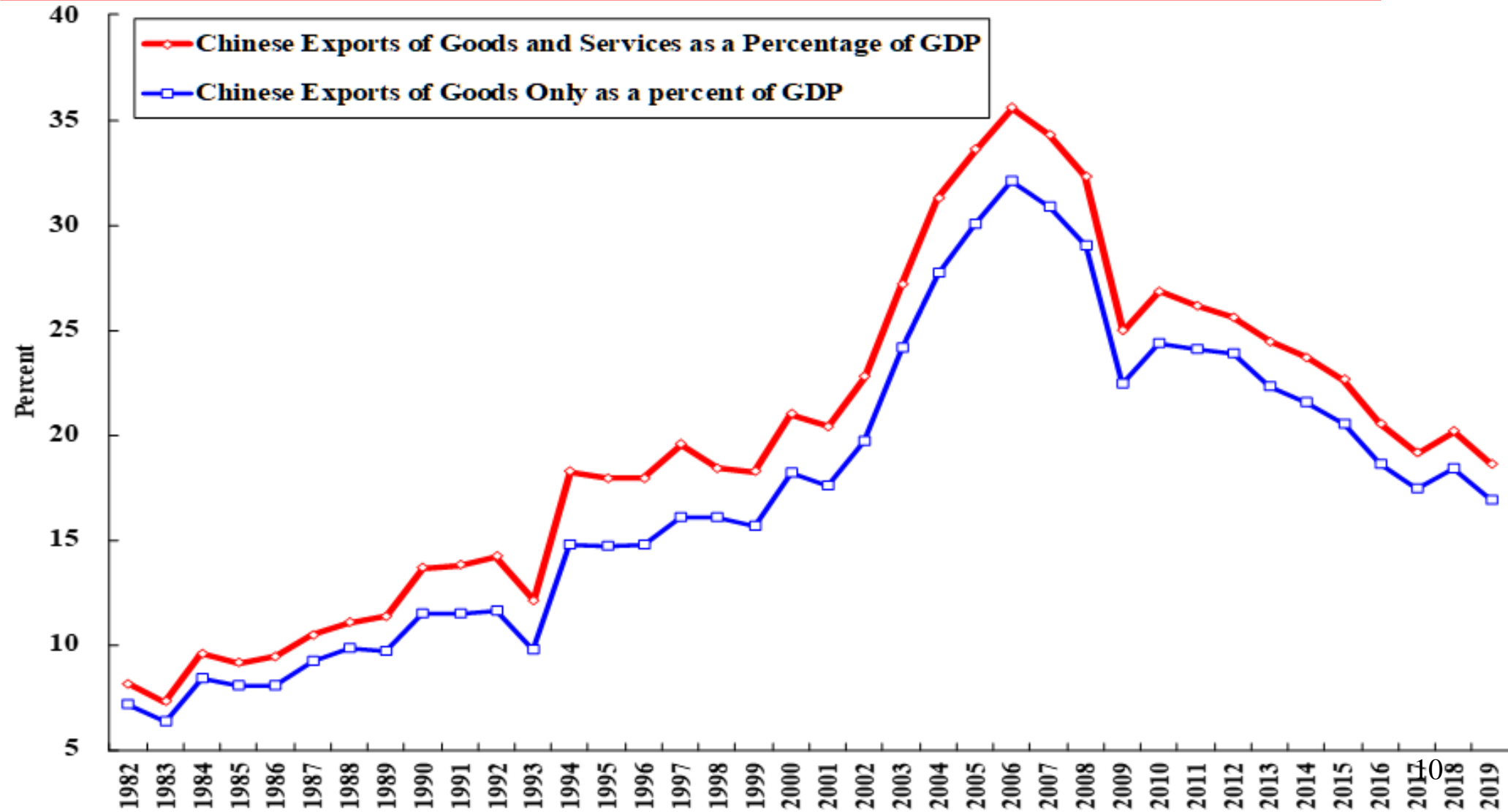
Introduction

- ◆ The first confirmed COVID-19 case in the U.S. was reported on 21 January 2020. Unfortunately, the U.S. did not manage the epidemic too well. The cumulative number of confirmed cases began growing rapidly a month later, on 22 February.
- ◆ As of 31 August 2020, the U.S. had more than **6.17 million** cumulative confirmed cases and **187 thousand** cumulative deaths, the highest such numbers of any country in the world, compared to **85,058** cumulative cases and **4,634** cumulative deaths for the Mainland of China as a whole.
- ◆ The COVID-19 epidemic has also resulted in a projected contraction of the U.S. economy in 2020 of more than 5%. (My own projection is a contraction of 5.7%.)
- ◆ The trade war and the acrimony over the COVID-19 epidemic also led to the deterioration of China-U.S. relations to arguably the lowest point since 1971.

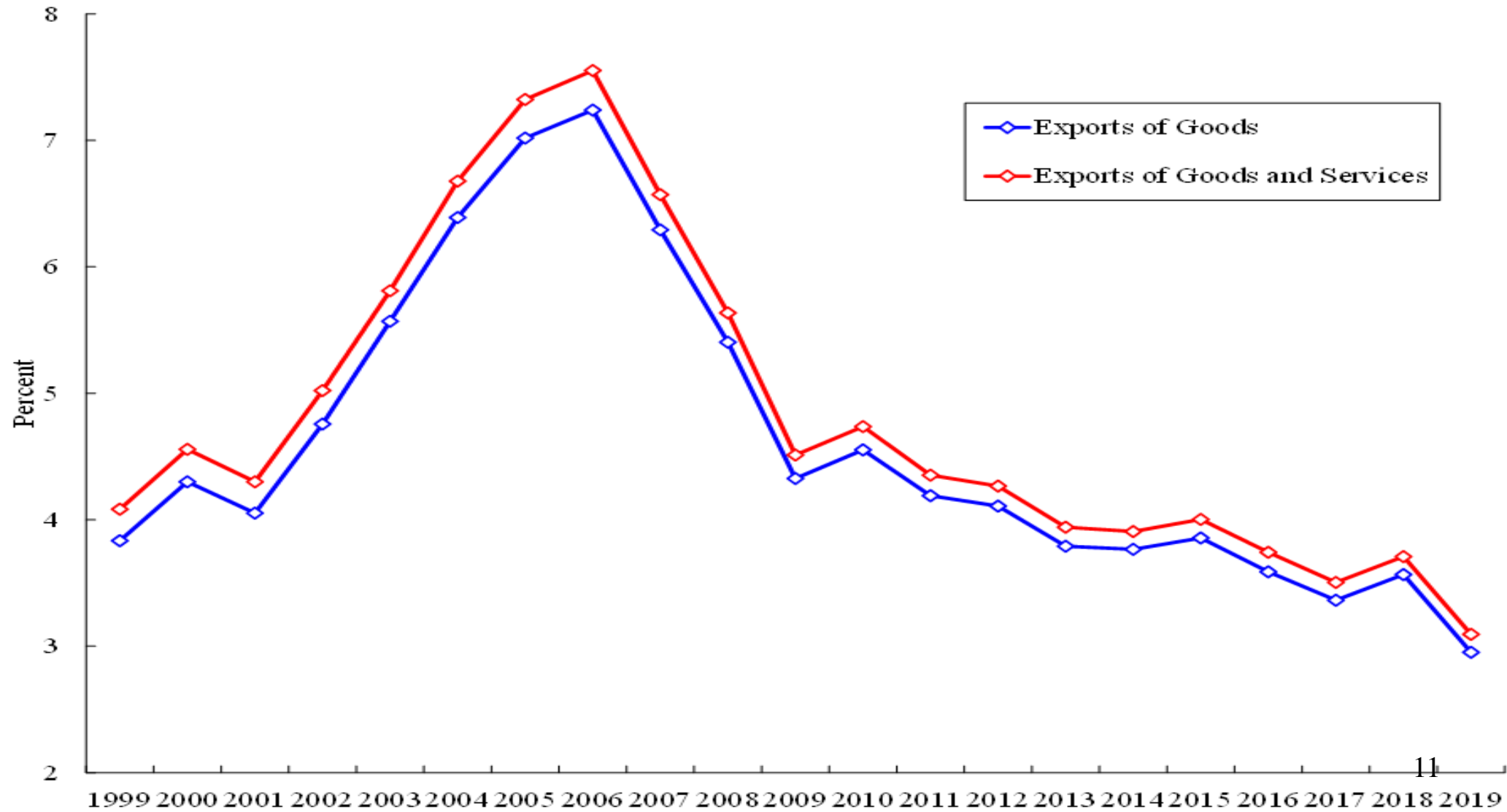
Chinese Exports and Imports of Goods and Services as a Percentage of Chinese GDP



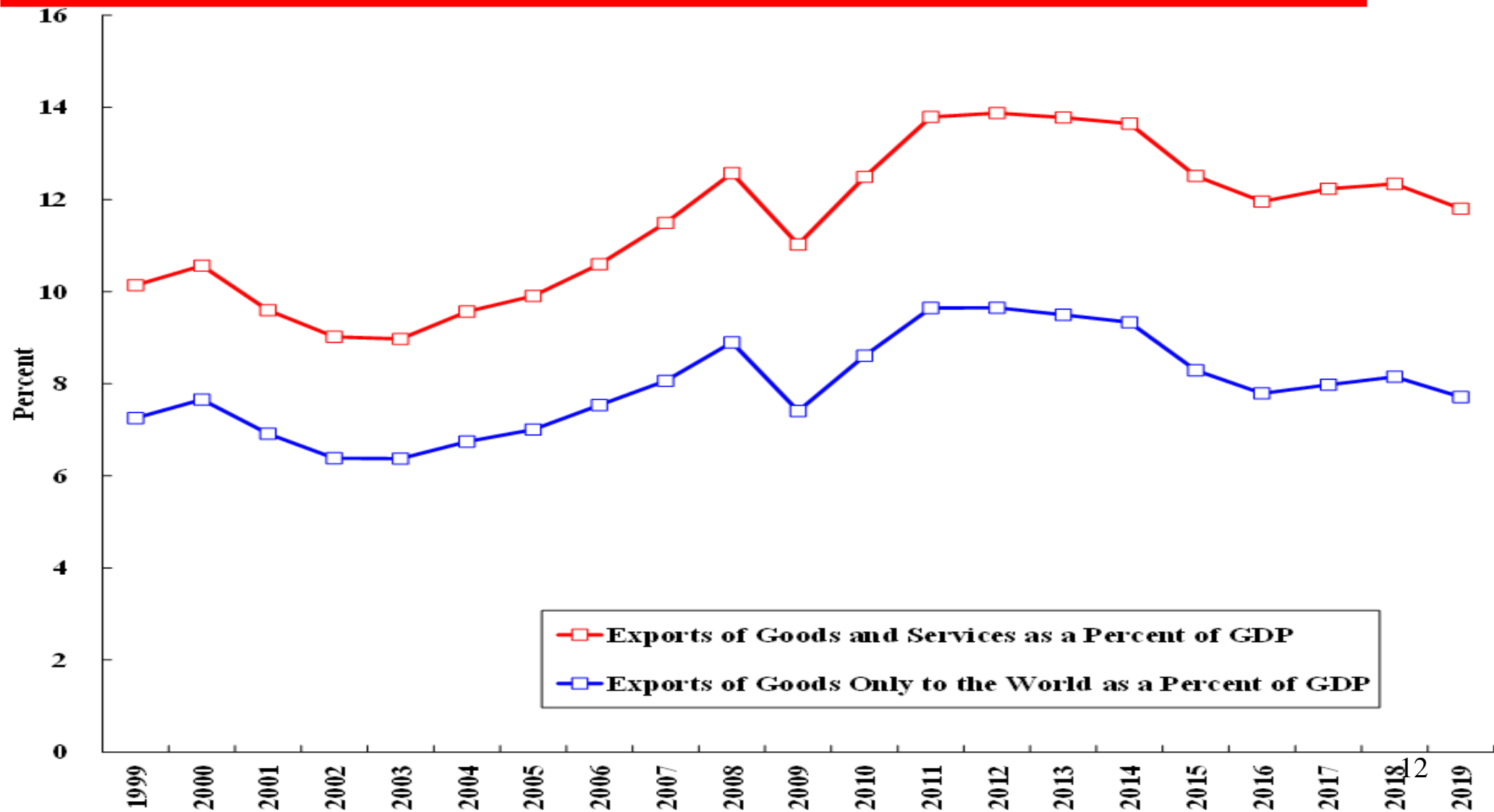
Chinese Exports of Goods and Services and Goods to the World as a Percentage of GDP



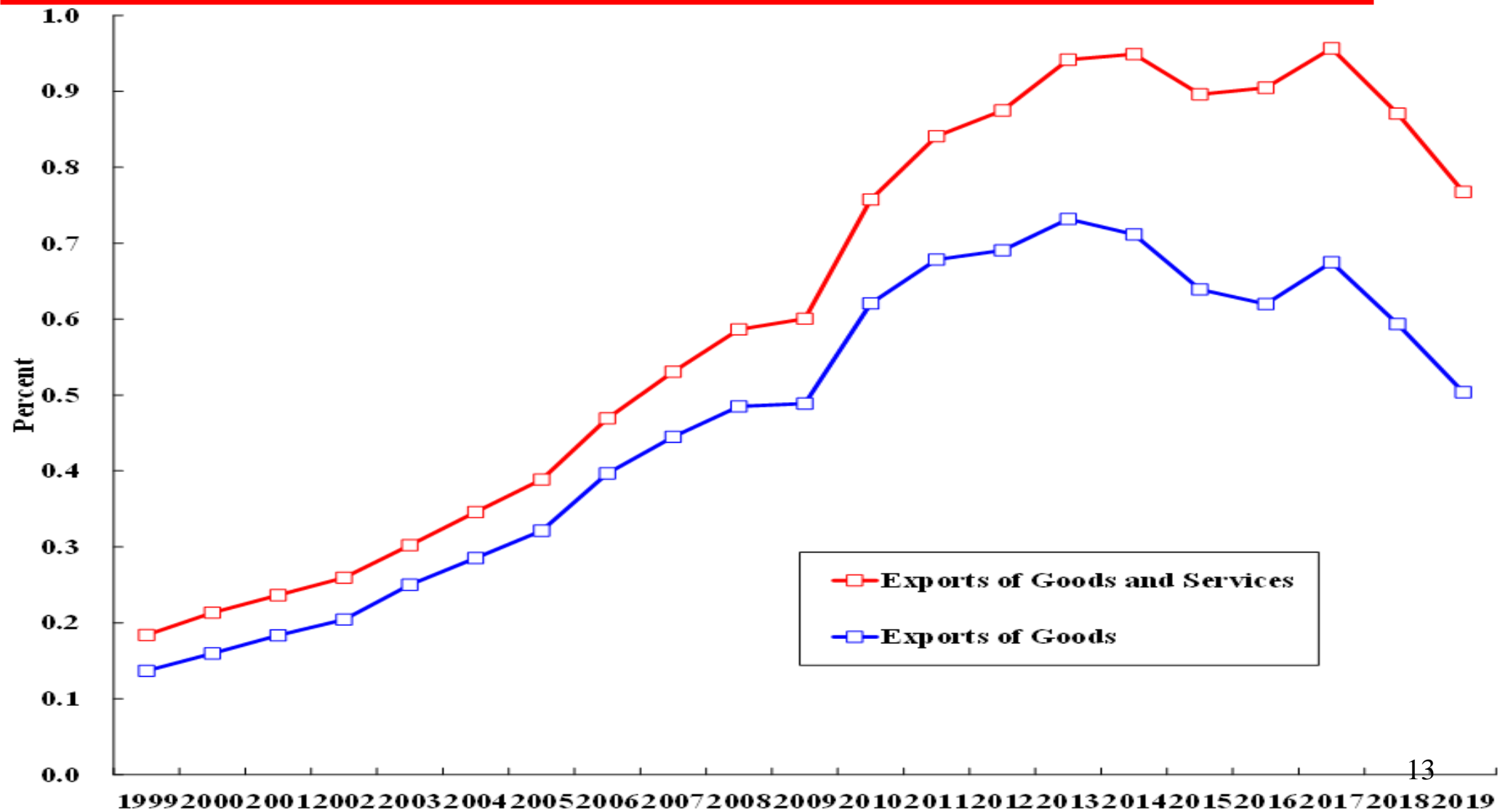
Chinese Exports of Goods and Services and Goods to the U.S. as a Percentage of GDP



U.S. Exports of Goods and Services and Goods to the World as a Percentage of GDP



U.S. Exports of Goods and Services and Goods to China as a Percentage of GDP



The Impacts of the China-U.S. Trade War

- ◆ The gross value of exports does not reflect accurately the real benefits of exports to the exporting country. What really matters is the GDP created by the exports, that is, the domestic value-added created by the exports, directly and indirectly. (The employment and GNP generated by the exports are also important.)
- ◆ As an example, consider the Apple iPhone, an export of China since it is finally assembled by Foxconn (Hon Hai Precision Industry Co., Ltd. of Taiwan) in China. The value of an iPhone is at least US\$600 whereas the Chinese direct domestic value-added is less than US\$20, with a value-added content of at most 3.3%. (The GNP generated is even lower since Foxconn is not a Mainland Chinese company.)

The Impacts of the China-U.S. Trade War

- ◆ The average direct domestic value-added content of Chinese exports of goods to the U.S. is approximately **24.8%**, so that US\$100 billion worth of Chinese exports to the U.S., f.o.b., generates directly no more than US\$24.8 billion of Chinese GDP.
- ◆ However, the reduction of exports leads to a reduction in the demands for domestic inputs used in their production and the demands for consumption goods by the workers in the exporting industries, which in turn lead to a second-round reduction in the demands for domestic inputs used in the production of the domestic inputs and demands for domestic final consumption.
- ◆ With the indirect, that is, second-, third-, fourth- and higher-round effects of the reduction of Chinese exports kicking in, the total domestic value-added affected will eventually increase to approximately **66%** cumulatively, with the indirect value-added content being approximately 41%.

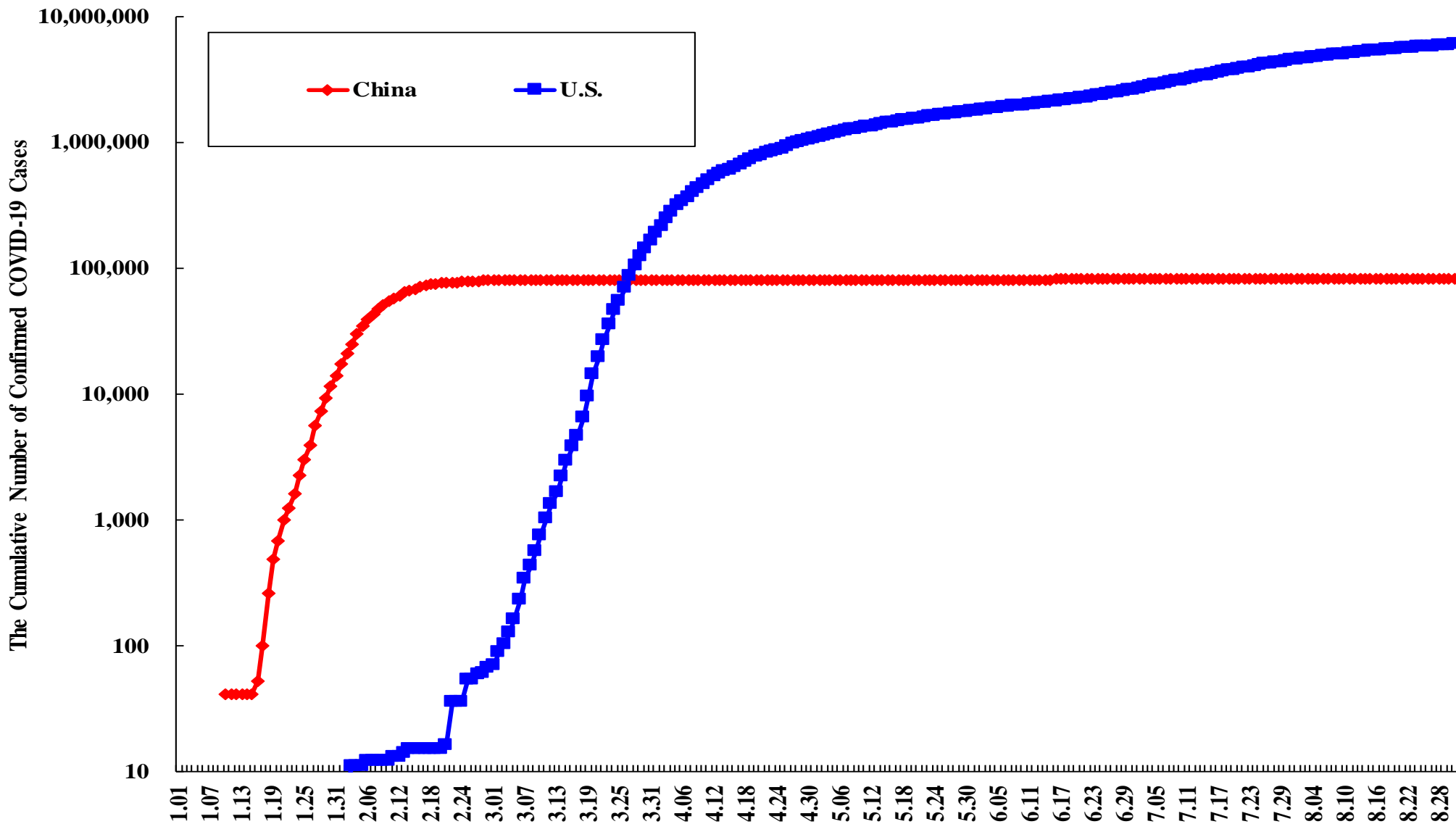
The Impacts of the China-U.S. Trade War

- ◆ The U.S. economy is much less dependent on exports than the Chinese economy, even though the Chinese economy has already become much less export-dependent over the years.
- ◆ The share of Chinese exports of goods to the U.S. in Chinese GDP was **3.0%** in 2019. The U.S. share of exports of goods to China in U.S. GDP was **0.50%** in 2019.
- ◆ The total (direct plus indirect) domestic value-added content of Chinese exports of goods to the U.S. may be estimated as **66%**. The direct total domestic value-added content of U.S. exports of goods to China may be estimated as **50.8%**, whereas the total (direct plus indirect) domestic value-added content of U.S. exports may be estimated as **88.7%**.
- ◆ If trade in goods is halted completely in both directions, the loss in Chinese GDP may be estimated at **1.98%** (3.0×0.66) and the loss in U.S. GDP may be estimated at **0.44%** (0.50×0.887).
- ◆ At the present time, the Chinese economy is still more dependent on exports to the U.S. than the U.S. economy is dependent on exports to China. Hence the economic impacts of the trade war will be much heavier on China than the U.S.

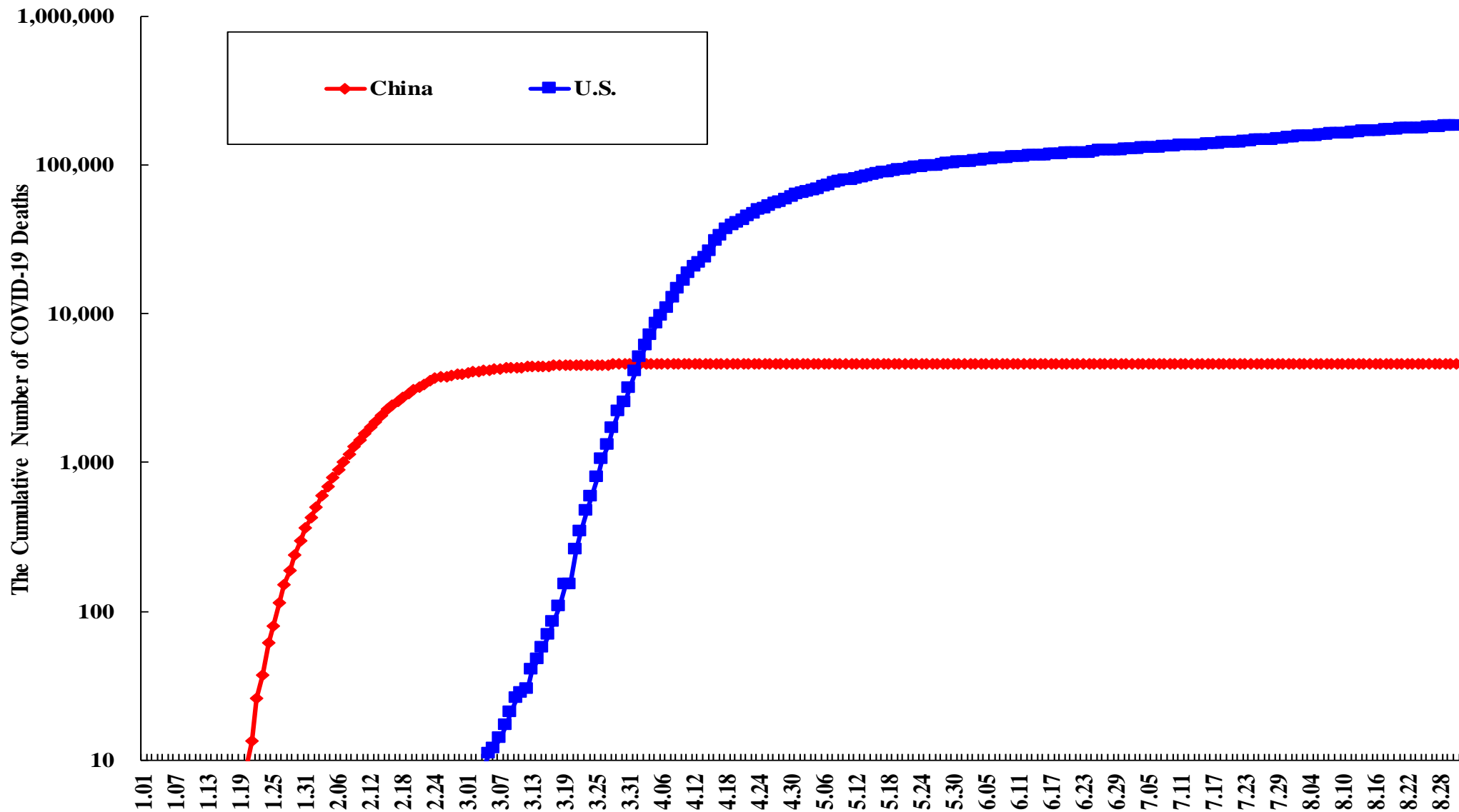
Estimated Impacts of the Trade War on the GDPs of China and the U.S.

| | Assuming 50% of Exports Halted | | Assuming 100% of Exports Halted | |
|-------|--------------------------------|----------------|---------------------------------|----------------|
| | US\$ Billion | Percent of GDP | US\$ Billion | Percent of GDP |
| China | -135 | -0.99% | -269 | -1.98% |
| U.S. | -47 | -0.22% | -94 | -0.44% |

The Cumulative Number of Confirmed COVID-19 Cases, China and the U.S.



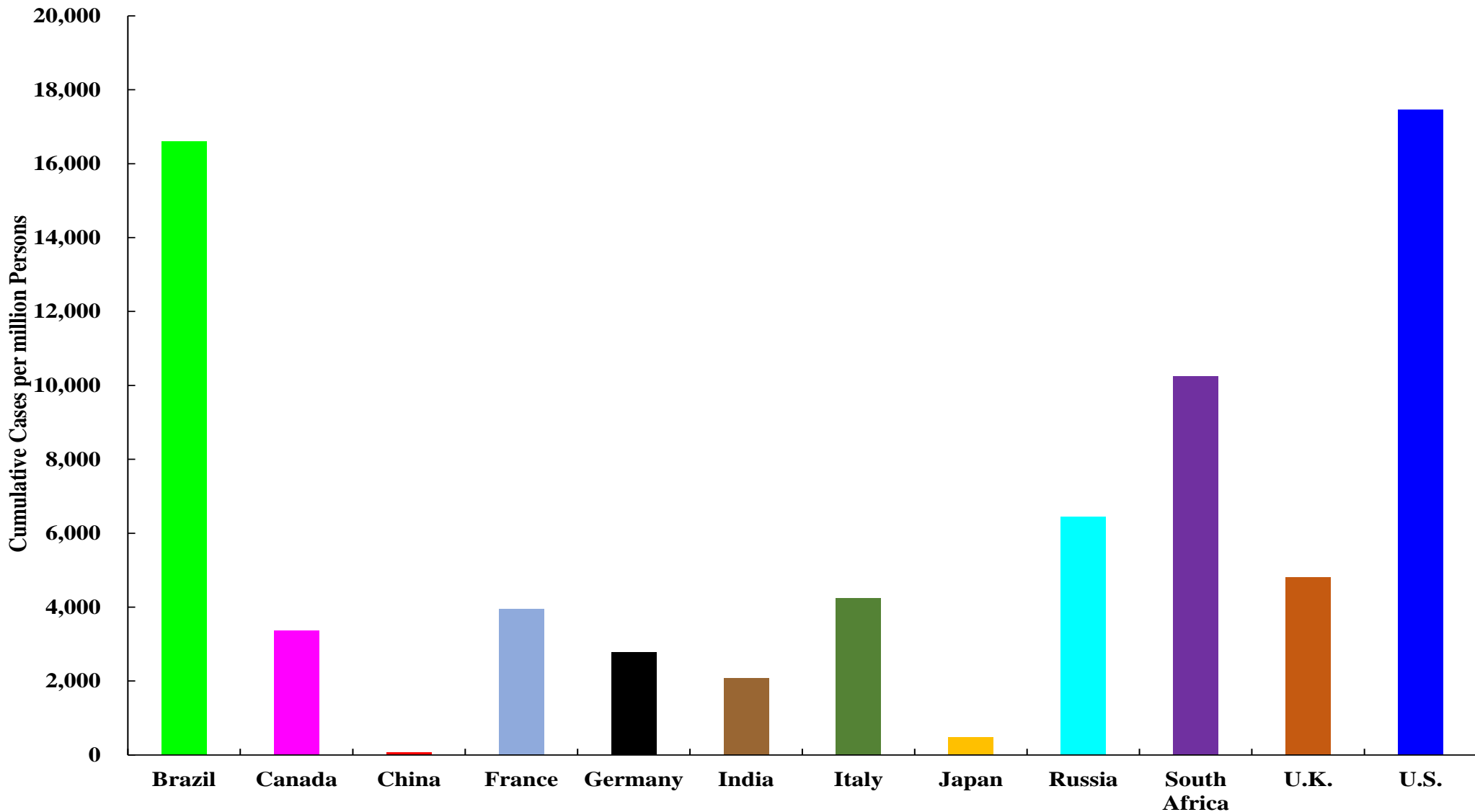
The Cumulative Number of COVID-19 Deaths, China and the U.S.



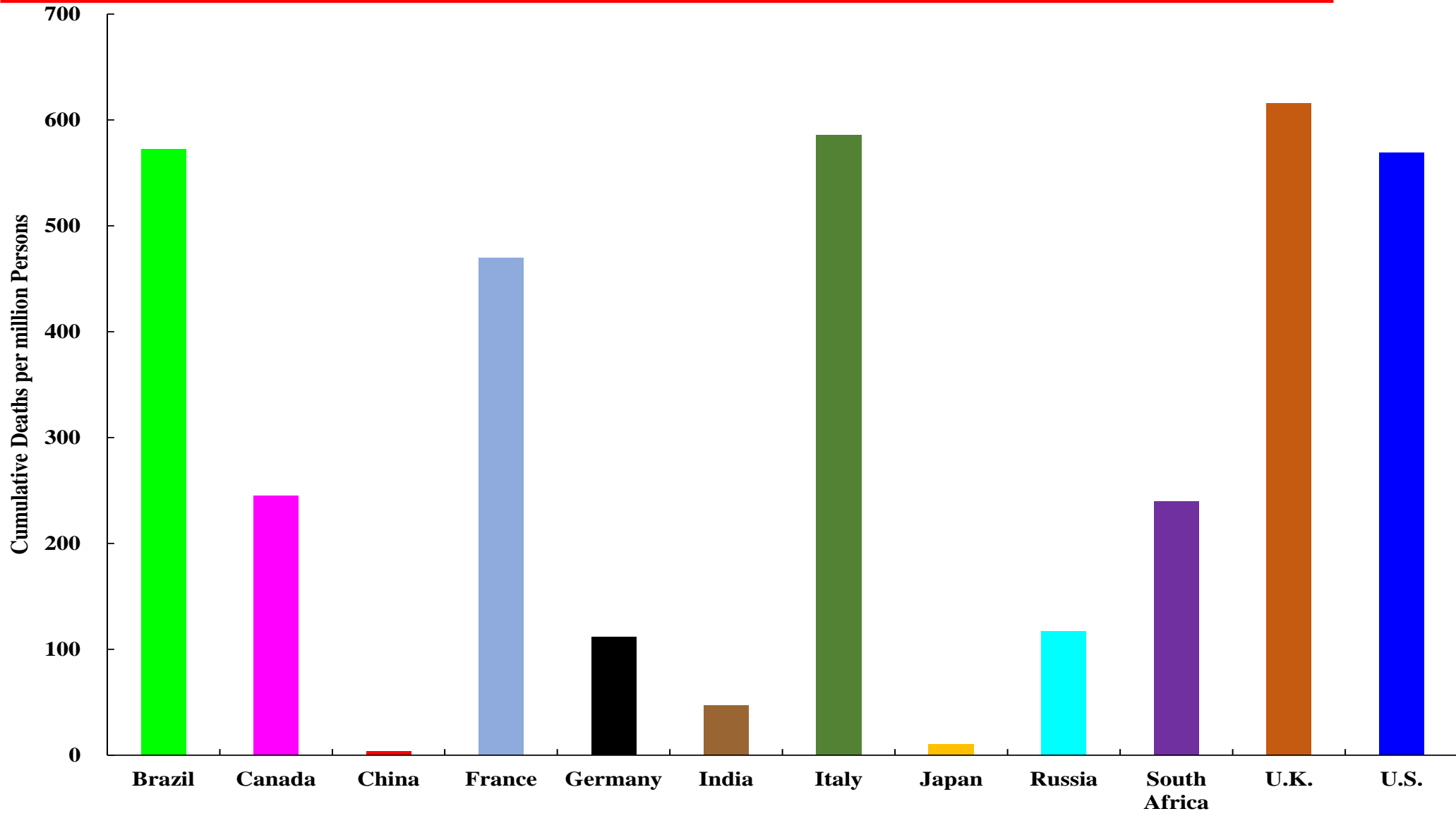
The COVID-19 Epidemic

- ◆ Among the Group-of-Seven (G-7) Countries (Canada, France, Germany, Italy, Japan, the U.K. and the U.S.) and the BRICS (Brazil, Russia, India, China and South Africa) Countries, China has performed the best in terms of controlling the COVID-19 epidemic.
- ◆ As of 31 August 2020, China's population infection rate (the number of confirmed COVID-19 cases per million persons) was **61** and its population mortality rate (COVID-19 deaths per million persons) was **3.3**, the lowest among these twelve countries, followed by Japan. By comparison, the U.S. population infection and mortality rates were **18,760** and **569** per million persons respectively.
- ◆ However, this has not prevented the U.S. from blaming China for causing the COVID-19 outbreak and allowing it to spread to the rest of the world. This has become a major bone of contention between the two countries.

COVID-19 Population Infection Rates: Group-of-Seven and BRICS Countries, 31/08/20



COVID-19 Population Mortality Rates: Group-of-Seven and BRICS Countries, 31/08/20



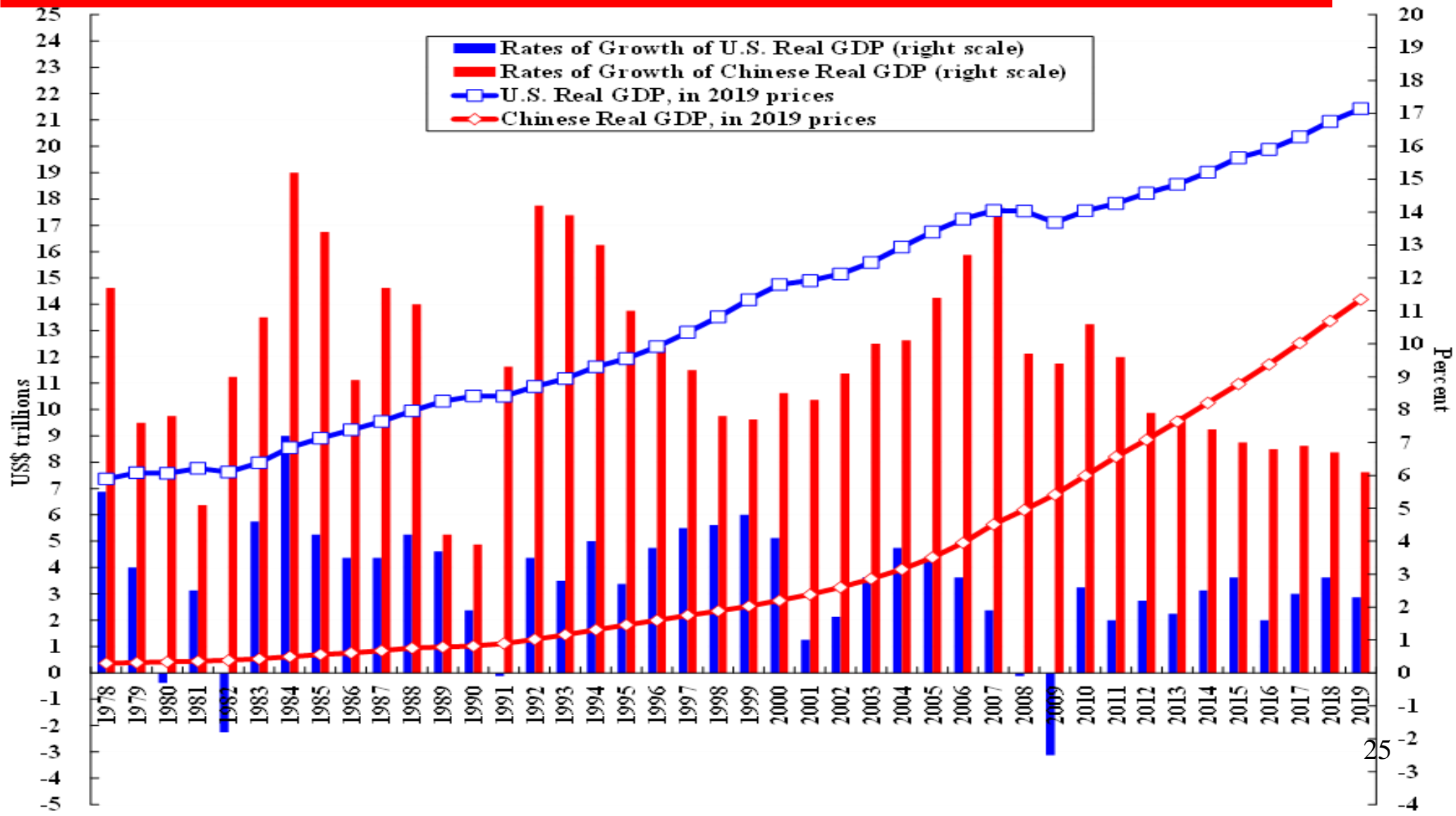
The Costs of the COVID-19 Epidemic to China and the U.S.

| | Loss of GDP (2020) | | Loss of Lives (up to 31 August 2020) | |
|-------|--------------------|-------------------|---|--------------------------|
| | US\$ Trillion | Percent of GDP | Number (thousands) | Percent of Population |
| China | 0.5 | 3.5% | 4.6 | 0.0003% |
| U.S. | 1.8 | 8.5% | 187 | 0.0568 _{2/30} % |

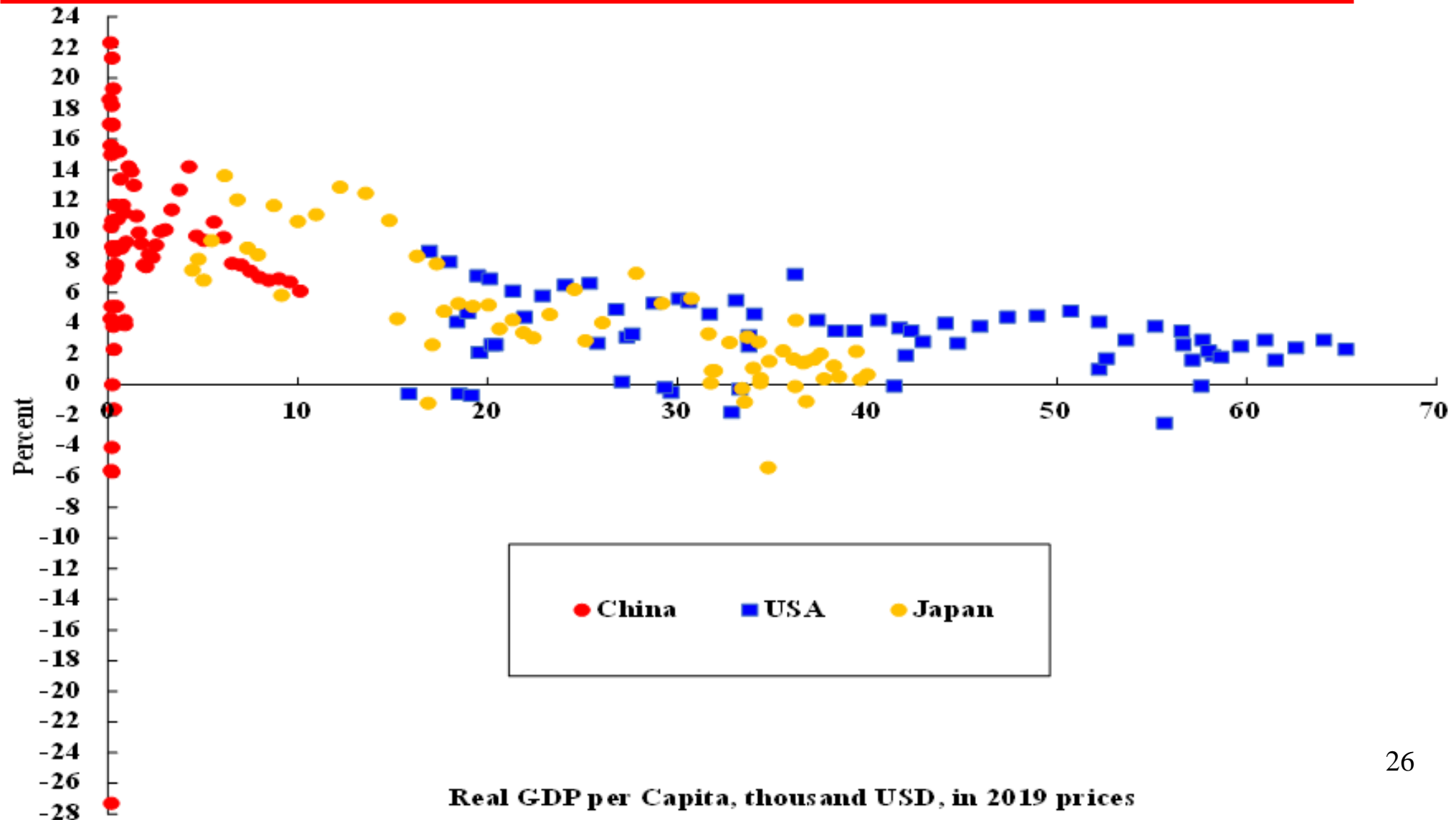
Projected Rates of Growth of Real GDP in China and the U.S., 2020 and 2021 (% p.a.)

| | Source of Projections | | | | | |
|--------------------------|-----------------------|------|----------------|------|----------------------|-----------------------------|
| | Lawrence J. Lau | IMF | The World Bank | OECD | A US Investment Bank | Chinese Academy of Sciences |
| China 2020 Projected | 3.4 | 1.2 | 1.0 | -2.6 | 2.3 | 2.8 |
| China 2021 Projected | 8.0 | 9.2 | 6.9 | 6.8 | 8.9 | 8.5 |
| China 2020-2021 combined | 11.4 | 10.4 | 7.9 | 4.2 | 11.2 | 11.3 |
| U.S. 2020 Projected | -5.3 | -5.9 | -6.1 | -7.3 | -3.4 | N.A. |
| U.S. 2021 Projected | 4.4 | 4.7 | 4.0 | 4.1 | 6.4 | N.A. |
| U.S. 2020-2021 combined | -0.9 | -1.2 | -2.1 | -3.2 | 3.0 | N.A. ²⁴ |

The Real GDPs and Their Rates of Growth: China and the U.S. (tril. 2019 US\$ & %)



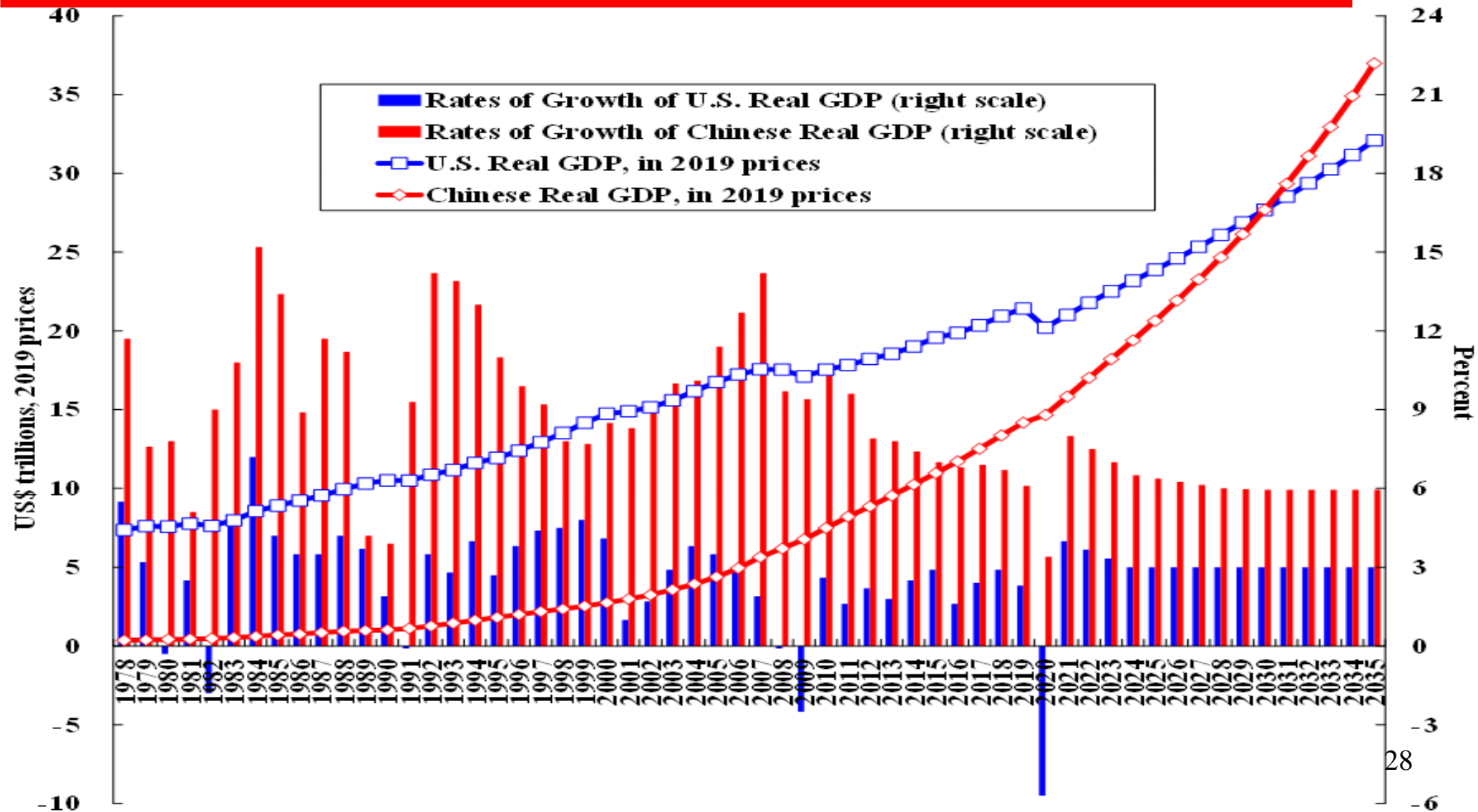
Rate of Growth of GDP vs. Level of Real GDP per Capita: China, Japan and the U.S.



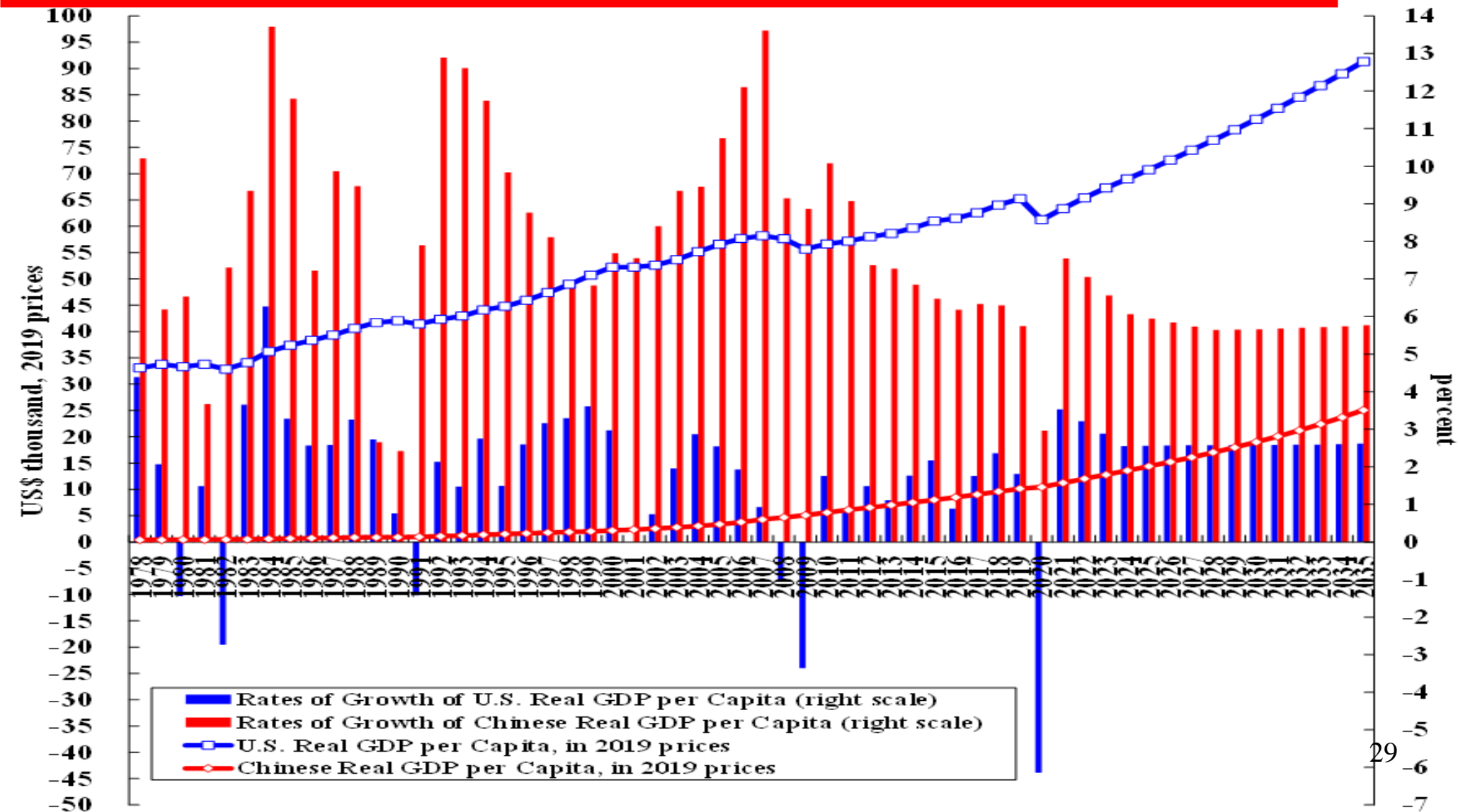
Long-Term Forecasts of the Chinese and the U.S. Economies

- ◆ Our projections suggest that in 2030, the Chinese aggregate real GDP (US\$27.70 trillion in 2019 prices) is likely to just barely edge out the U.S. aggregate real GDP (US\$27.69 trillion in 2019 prices). The implied average real rates of growth between 2019 and 2030 are 6.08% for China and 2.33% for the U.S., reflecting the fact that the Chinese economy will continue to grow in 2020 at a projected 3.4% whereas the U.S. economy will contract approximately 5.7% in 2020.
- ◆ However, because the Chinese population is approximately 4 times that of the U.S., by 2030, the projected U.S. GDP per capita of US\$80,400 will still be more than four times the projected Chinese GDP per capita of US\$19,000.
- ◆ Chinese real GDP per capita will lag behind that of the U.S. until at least the end of the 21st Century. It is possible that Chinese real GDP per capita may never catch up to the U.S. real GDP per capita because of the much richer endowment of resources in the U.S. (arable land, water, mineral resources) on a per capita basis

Actual and Projected Real GDPs (2019 US\$) and Their Rates of Growth: China and the U.S.



Actual and Projected Real GDPs per Capita and Their Rates of Growth: China and the U.S.



Concluding Remarks

- ◆ The economic impacts of the China-U.S. trade war and the COVID-19 pandemic actually extend far beyond China and the U.S. There are not only direct effects, but also indirect and spillover effects on the rest of the world. For example, the U.S. tariffs on Chinese exports of goods to the U.S. may increase Vietnamese exports of goods to the U.S. The Chinese tariffs on U.S. exports may increase Brazilian exports of agricultural commodities to China.
- ◆ The COVID-19 pandemic interrupted the aggregate supplies and demands of almost every economy in the world. It also disrupted the established supply chains. The declines in the GDPs in all the countries in the world will also cause the flows of international trade to contract.
- ◆ All of these impacts are ideally suited to be analyzed within the Project LINK framework. I trust the United Nations team that took over Project LINK is working on it.