

Covid-19 and the Japanese Economy 2022

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June 2022

Revised in December 2022

Contents

1. Public Health
2. Recovery

Correction is shown in red in order to emphasize the difference between June and December 2022.

I. Public Health

Daily new confirmed COVID-19 cases and deaths

Accumulated confirmed COVID-19 cases and deaths



Mutant strains (variants)

- The first through third waves were caused by the **original strains** of the Covid-19.
- The fourth wave that came in April 2021 was caused by the **alpha variant**, first found in the United Kingdom. The alpha strain which was 1.3 times more infectious than the original one.
- The fifth wave in July 2021 was caused by the **delta variant**, which originated in India, and is said to be 1.7 times more infectious than the original strain.
- Initially, these strains were called the British and Indian strains, but under WHO guidelines, the world decided to avoid naming the virus after specific countries.
- First discovered in Africa, the **Omicron variant** has been raging in Japan since December 2021.

The Fifth Wave

- From July to September 2021, Japan was attacked by the Delta variant of the Covid-19.
- Although vaccination of the elderly aged 65 and over was almost complete as of the end of July, the increase in the number of people infected with the Delta strain was very rapid and exceeded the previous peak.
- On the other hand, the number of deaths did not exceed the previous peak, possibly due to the effect of vaccination.
- Most experts believed that the number of new infections would not decrease easily, given the infectious power of the delta strain.
- But the number of new infections decreased rapidly in September, and the state of emergency was lifted nationwide on September 30.

The Sixth Wave

- In October and November 2021, the economy temporarily recovered.
- Restrictions on the travel and food service industries were lifted. They attracted many customers.
- In December, however, another attack was brought by the Omicron variant, a new strain of the Covid-19.
- On January 7, 2022, the government announced **the priority measures to prevent the spread of disease** (蔓延防止等重点措置) for the selected prefectures where a sharp increase in the number of infected people was reported.

The Seventh Wave

- In July 2022, the BA5 variant of the Covid-19 virus has brought a further rise in the infection cases and deaths.
- However, the government took no special measures to restrict economy in order to prevent the corona infection.
- In September during the seventh wave, the government started a special tourism campaign (the **nation-wide tour discount**).
- The restriction on the entry of foreigners was abolished in October 2022.

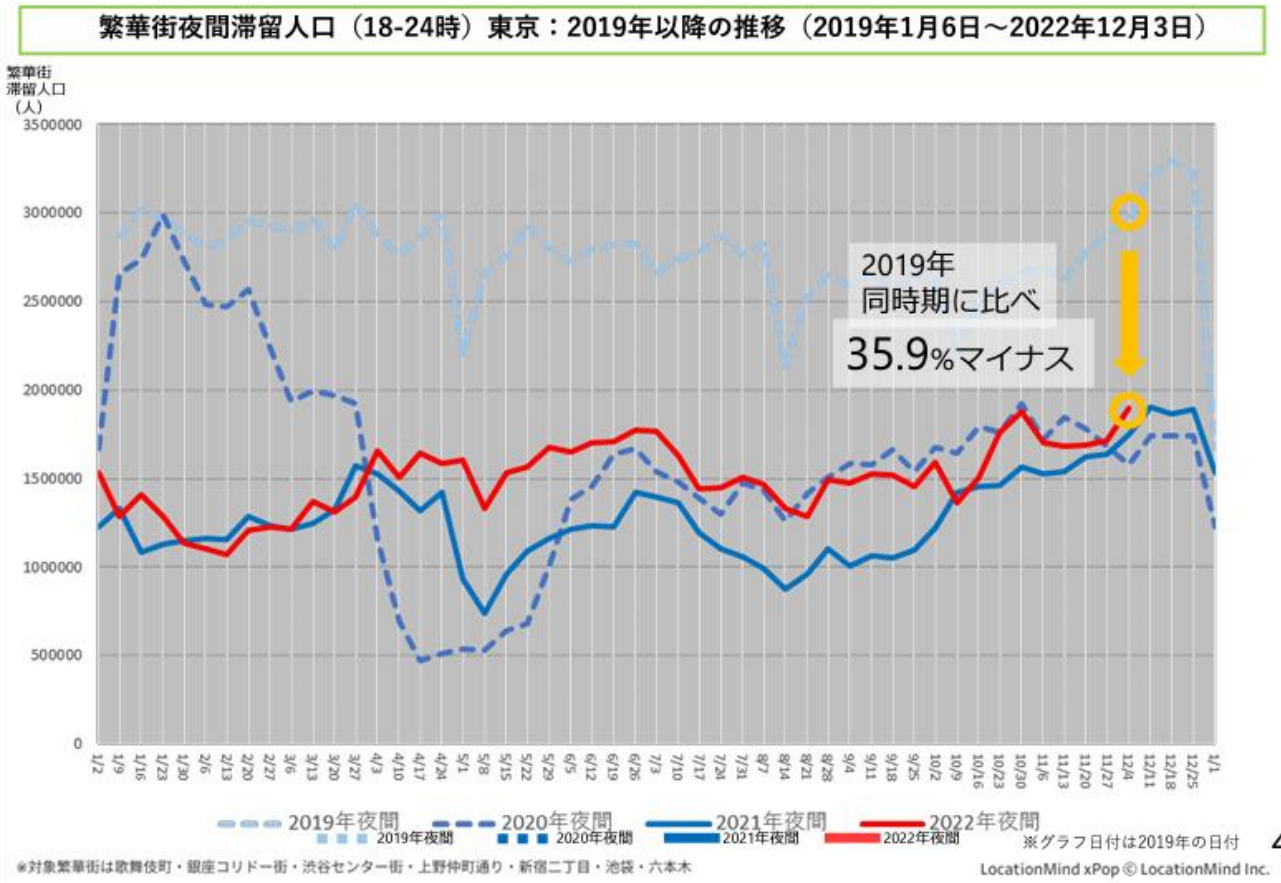
The 6th Wave: Restaurants under the priority measures to prevent Covid-19 infection

- In prefectures where priority measures to prevent the spread of the disease were issued, restaurants shortened their hours of operation and restricted the serving of alcoholic beverages.
- In general, restaurants that observe the infection prevention measures set by the prefectures were allowed to stay open until 9 p.m. and serve alcoholic beverages, while those restaurants that did not take the disaster prevention measures were not permitted to serve them.
- Cooperative stores were paid a cooperation subsidy, but stores that did not comply with the request were not punished by the administration.

The 6th Wave: Unconforming Restaurants and Regional Governments

- Majority of stores complied with the request, but many other stores ignored it.
- Some prefectures, such as Nara, did not implement measures to prevent the spread of the disease.
- The governor of Nara Prefecture asserted:
 - Nara Prefecture is within commuting distance of Osaka Prefecture, and the spread of the disease is exclusively due to the influence of Osaka Prefecture.
 - Even if Nara Prefecture took its own measures to prevent the spread of the disease, the effect would be small, and the harm of stopping the economy would be greater.

Restaurants and Travels



- Although most restrictions on the restaurant industry have been lifted, Tokyo's downtown nighttime population is still only 64% of its 2019 level.
- The loss of the urban night-lives might be a structural change of urban lifestyles.
- In June 2022, the government announced that it would expand the scope of its subsidy program (prefecture-wide) to subsidize tourists' spendings at their destinations throughout Japan.
- This is a substantial revival of the GoTo campaign implemented in 2020.
- However, GoTo was also criticized for spreading corona infection throughout the country, so the use of the same name is carefully avoided.
- All the restrictions on the entry of foreigners were abolished in October 2022.

<https://www.mhlw.go.jp/content/10900000/001021506.pdf>

Education

- In March 2020, the government requested all elementary and secondary schools to close due to the spread of corona infection. The closure of schools was succeeded by the declaration of a state of emergency in April and continued until the end of May.
- Most of the university classes were also put online and continued almost until the summer vacation.
- In April 2022, universities nationwide fully returned to face-to-face classes, while the sixth wave of infection continued to prevail all over Japan.

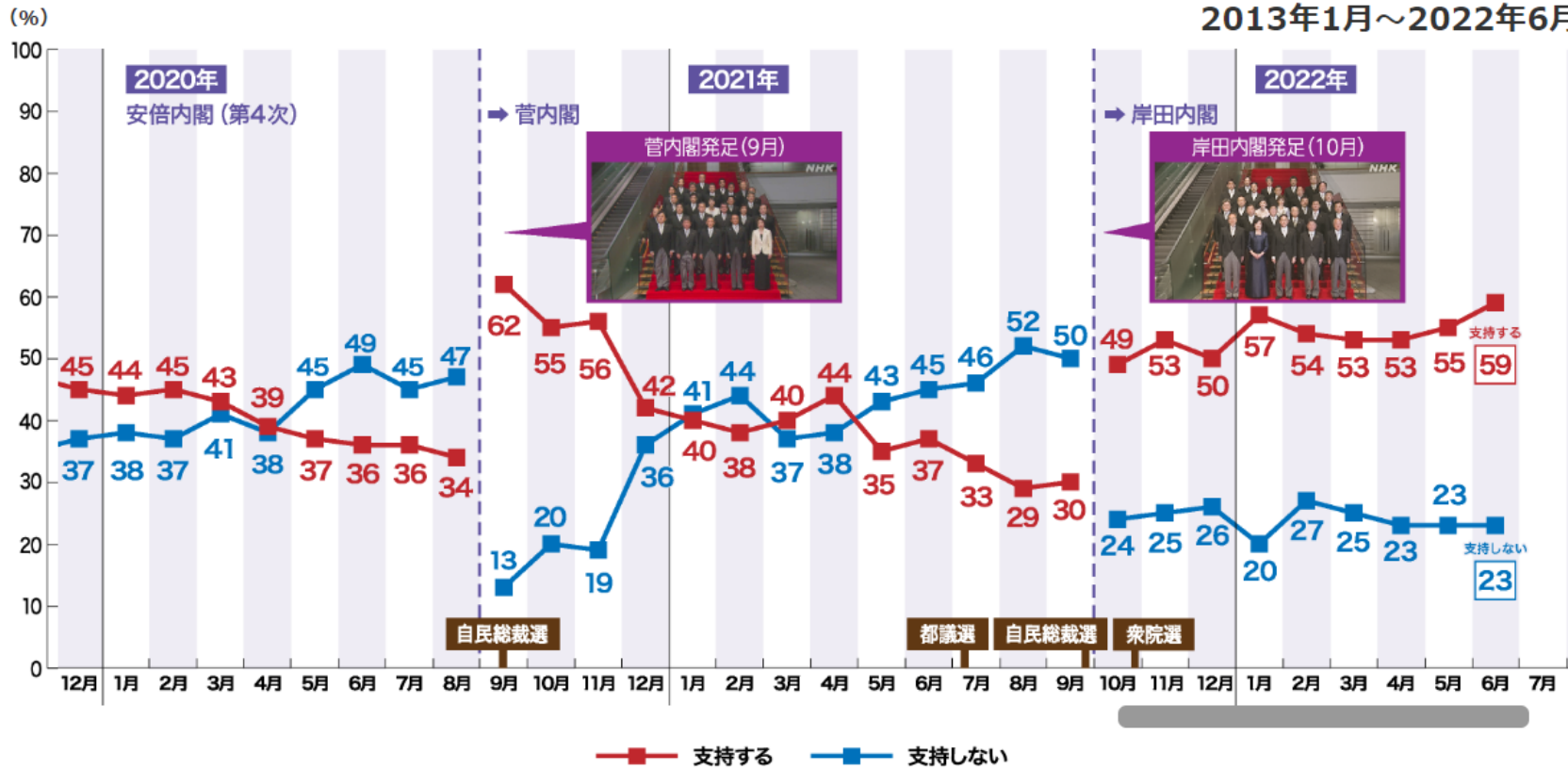
Changes in public opinion

- Until 2021, Japanese public opinion has focused exclusively on the prevention of infection, criticizing policies that prioritize economic revitalization while leaving the spread of the disease uncontrolled.
- This is why the Suga administration, which hosted the Tokyo Olympics at the peak of the delta strain outbreak, saw its approval ratings plummet. Prime Minister Suga resigned after the olympic.
- In response to the sixth wave 2022, the government did not declare a state of emergency and limited itself to measures to prevent the spread of the disease.
- Behind the government's decision not to take stronger measures was a change in public opinion.

Why People Changed their Attitude?

- In the sixth wave, despite the fact that the number of new infections and deaths exceeded those of the fifth wave, public opinion and the media remained less critical of the government.
- Some intellectuals said that the government should focus on the negative effects of economic restraint, such as the sharp increase in suicides.
- The change in public opinion can be attributed to a deepening of public learning about the risk of infection and serious illness.
- Japanese people are influenced by the successive elimination of infection prevention regulations in Europe and the United States, such as lockdowns and the wearing of masks.

内閣支持率



Supporting Rate for the Kishida Administration Remained High, but it decreased recently.

<https://www.nhk.or.jp/senkyo/shijiritsu/>

- The Suga administration's approval rating plummeted from around May 2021, and Suga stepped down in September.
- His successor, Prime Minister Kishida, who was seen as more enthusiastic about curbing infections, did not take strong measures to prevent infections during the sixth wave, which began in the New Year of 2022.
- Despite this, the approval rating of the Kishida cabinet remained high until Summer 2022.

ワクチン接種歴別の新規陽性者数（4/25-5/1）

Effectiveness of Vaccination

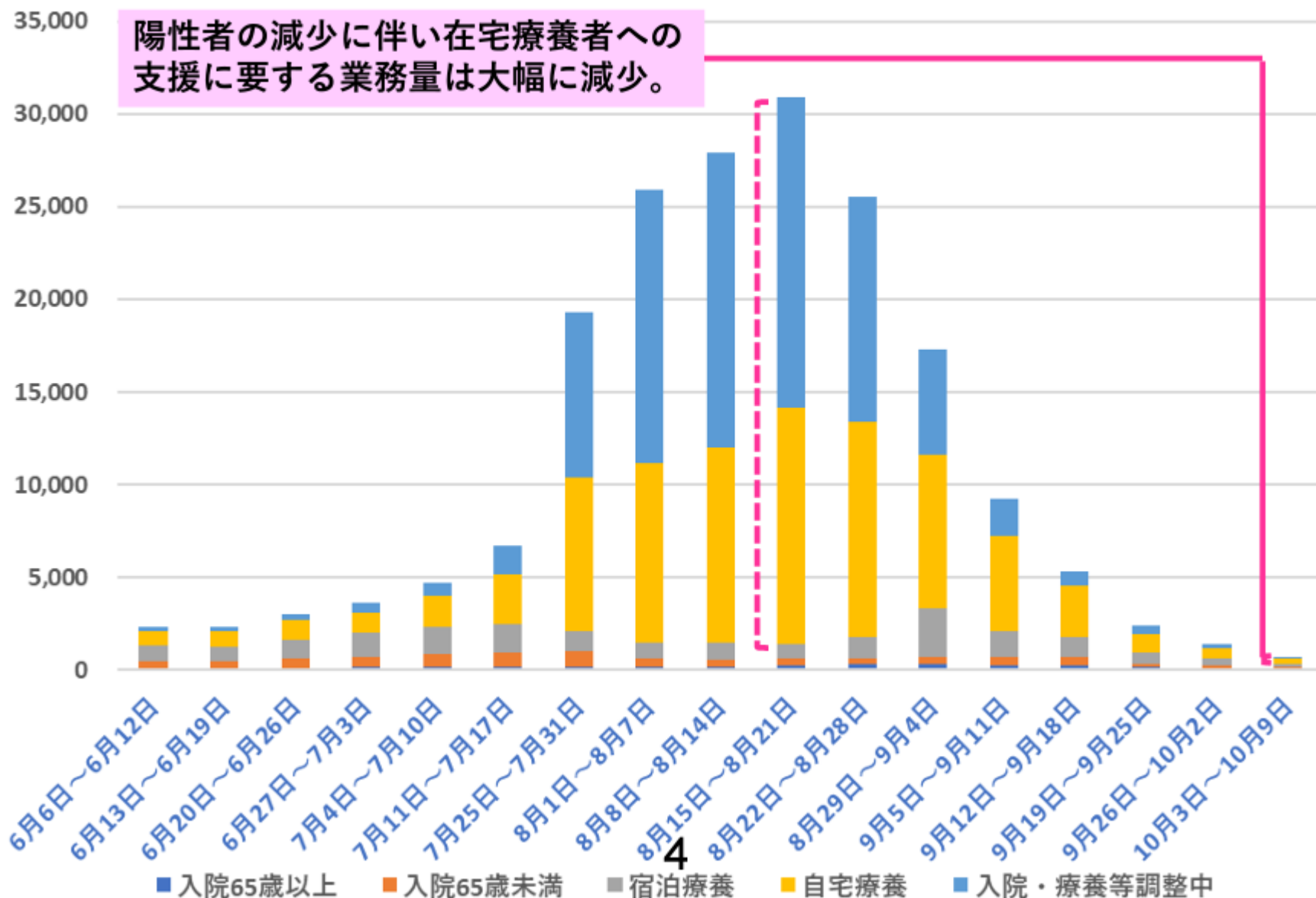
	未接種			2回目接種済み (3回目接種済みを除く)			3回目接種済み			接種歴不明
	新規陽性者数 (4/25-5/1の合計)	未接種者数 (5/1時点)	10万人あたりの新規陽性者数	新規陽性者数 (4/25-5/1の合計)	2回目接種者数 (3回目接種者数を除く) (5/1時点)	10万人あたりの新規陽性者数	新規陽性者数 (4/25-5/1の合計)	3回目接種者数 (5/1時点)	10万人あたりの新規陽性者数	新規陽性者数 (4/25-5/1の合計)
0-11歳	33,518	10,410,375	322.0							
12-19歳	6,013	2,094,217	287.1	12,246	5,677,150	215.7	902	1,143,855	78.9	10,732
20-29歳	5,204	2,431,304	214.0	10,005	6,056,280	165.2	3,686	4,224,012	87.3	9,541
30-39歳	5,001	2,788,305	179.4	11,237	6,265,850	179.3	5,603	5,231,144	107.1	12,121
40-49歳	3,416	3,071,124	111.2	9,986	6,751,125	147.9	6,702	8,527,097	78.6	11,167
50-59歳	1,783	1,367,345	130.4	4,273	4,481,155	95.4	4,657	10,911,895	42.7	5,516
60-64歳	393	629,542	62.4	890	1,103,817	80.6	1,792	5,663,038	31.6	1,515
65-69歳	238	986,650	24.1	384	558,438	68.8	1,683	6,537,907	25.7	1,252
70-79歳	390	893,184	43.7	528	920,356	57.4	2,591	14,377,782	18.0	1,873
80-89歳	222	105,742	209.9	380	642,402	59.2	1,608	8,276,193	19.4	1,368
90歳以上	120	2,913	4119.5	168	229,756	73.1	703	2,136,842	32.9	645

※ HER-SYSに登録されている新規陽性者を、不明を含むワクチン接種歴の有無で分けて集計し、報告日における新規陽性者数の7日間の合計を算出。(データは5月2日参照。データは日々更新され、今後最新のデータが反映される。)
 ※ ワクチン接種歴が未記入の場合、令和4年4月20日までのADB提出データでは未接種に分類していたが、5月11日以降のADB提出データでは接種歴不明に分類している。

<https://www.mhlw.go.jp/content/10900000/000937646.pdf>

- There is no significant difference between the twice-vaccinated and the unvaccinated.
- The probability of infection for the unvaccinated is double or triple that of the triple-vaccinated.
- However, the strong effect of the vaccination to prevent corona infection was exaggerated due to the data problem.

東京都内の陽性者の調整状況（時系列）



Medical Shortage

The Fifth Wave (Summer 2021)
 Blue: awaiting hospitalization
 Yellow: recovering at home
 Gray: Recuperating in a hotel
 Orange and indigo: in hospital

<https://www.mhlw.go.jp/content/10900000/000843178.pdf>

東京都内の陽性者の調整状況（時系列） <2022.1～2022.8> 積み上げグラフ



3

Medical Shortage

- The Sixth Wave: Despite the gradual decrease in the number of infected patients with the convergence of the 6th wave, there are still a certain number of patients "under adjustment" or waiting for hospitalization.
- The Seventh Wave: The medical over-capacity was even more serious, but the government took no strong measures to prevent corona infection.

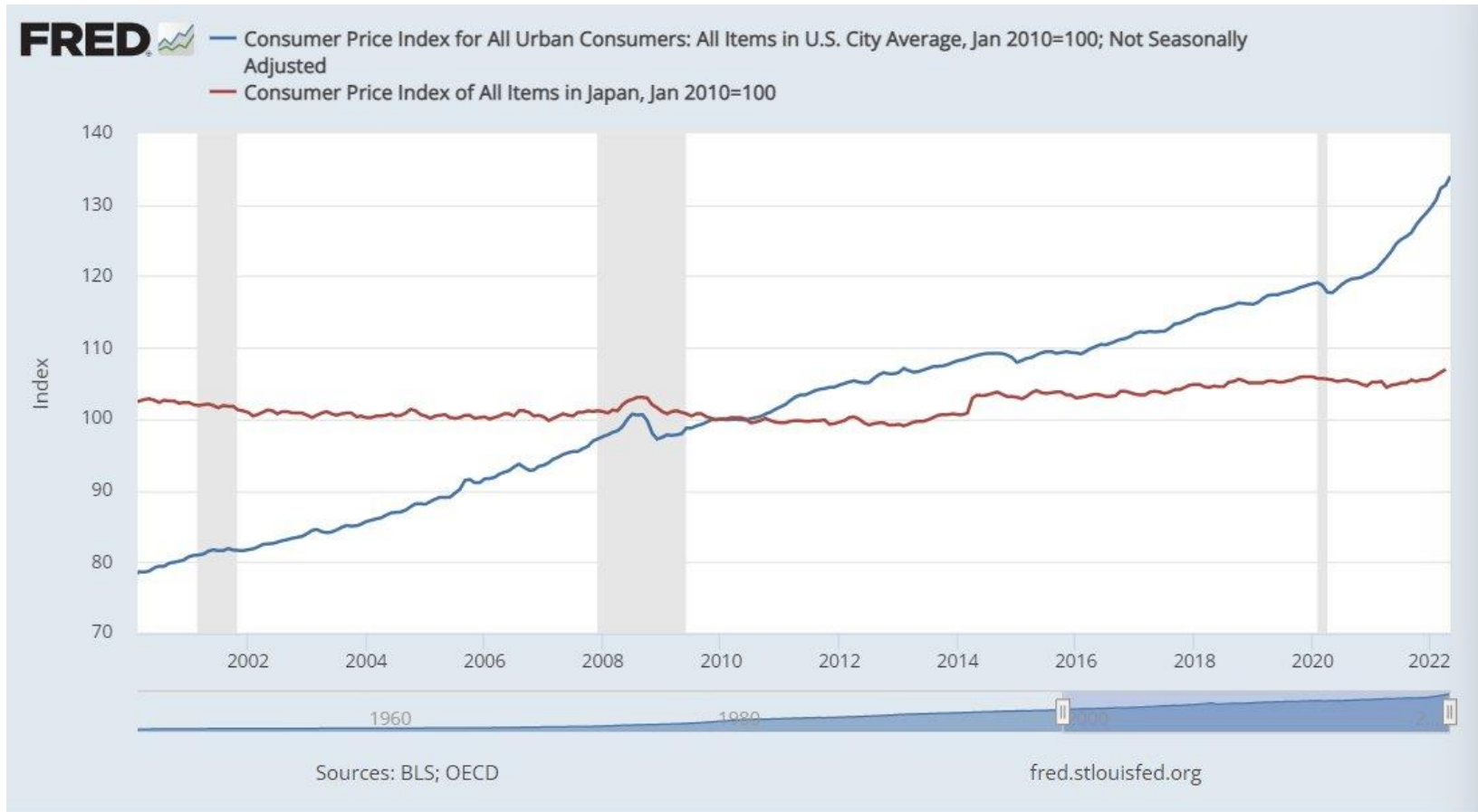
<https://www.mhlw.go.jp/content/10900000/000983452.pdf>

II. Recovery

Recovery is not easy

- Most countries are now under recovery from the pandemic.
- However, economic recovery is associated with rapid inflation and supply shortage.
- The inflation is accelerated by a sudden invasion of Russia into Ukraine.
- In Japan, inflation is considerably large in food and energy.
- Even though Japan's inflation rate is lower than other countries, its impacts on the households are unexpectedly large, causing a decline in the supporting rate of the Kishida cabinet.

Inflation



- After Covid-19 leaves, the economy worldwide suffers a rapid inflation.
- Behind the current inflation, there are two factors.
- First, the strong demand for economic recovery is not satisfied by insufficient supply.
- Second, the Russian invasion into Ukraine raises the energy prices worldwide.

<https://fred.stlouisfed.org/series/CPIAUCSL>

Stock Market was in boom 2021

日経平均株価

日経の指数について (指数公式ページ) >
採用銘柄一覧 >

26,694.05 (16日 11:35 前引) **+367.89 (+1.40%)** (単位:円)

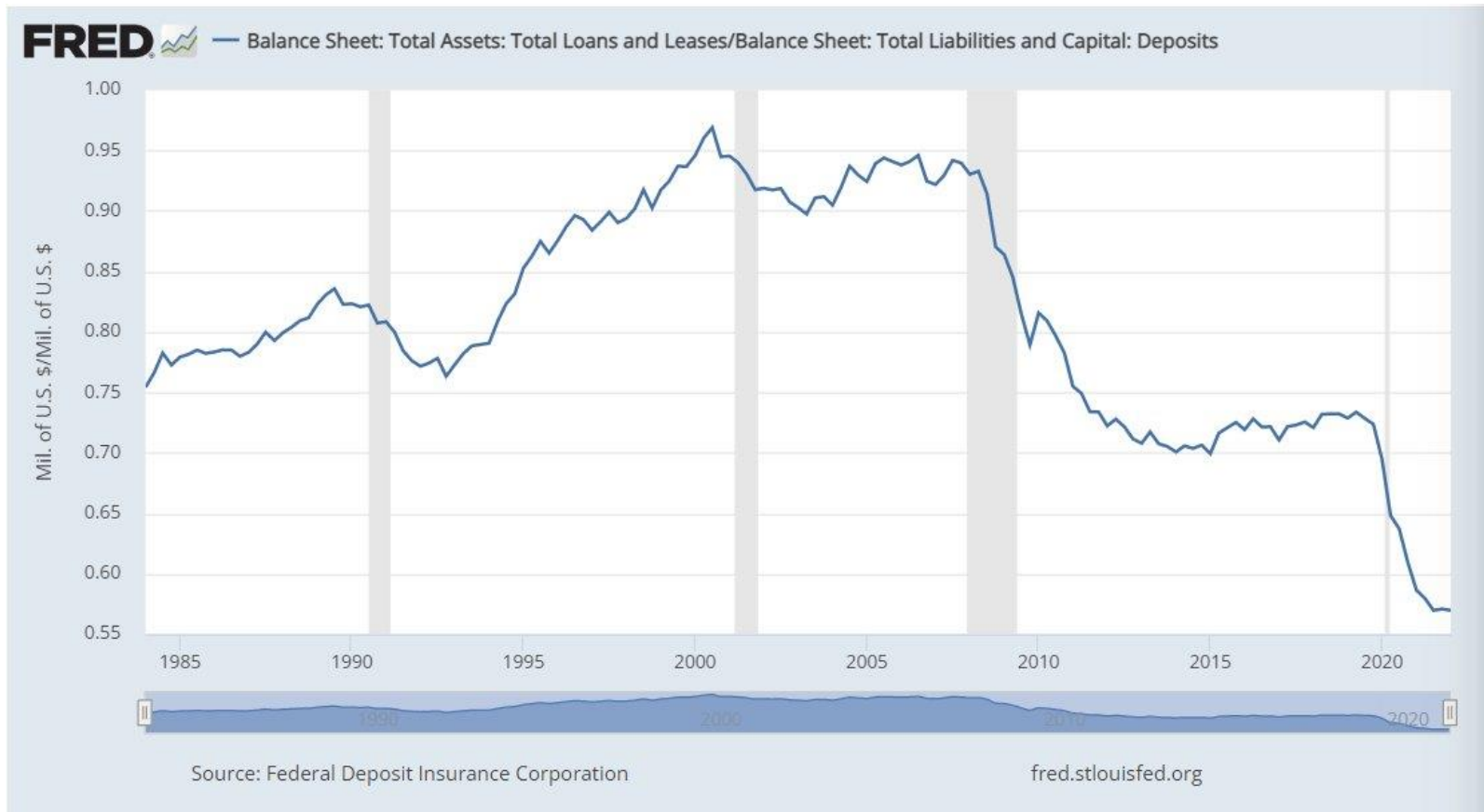
2022/6 始値: 27,457.89 高値: 28,246.53 安値: 26,326.16 終値: 26,326.16
—12カ月移動平均: 27,678 —24カ月移動平均: 27,054.09 —売買代金: 31,181,850



<https://www.nikkei.com/markets/marketdata/chart/nk225/?type=5year>

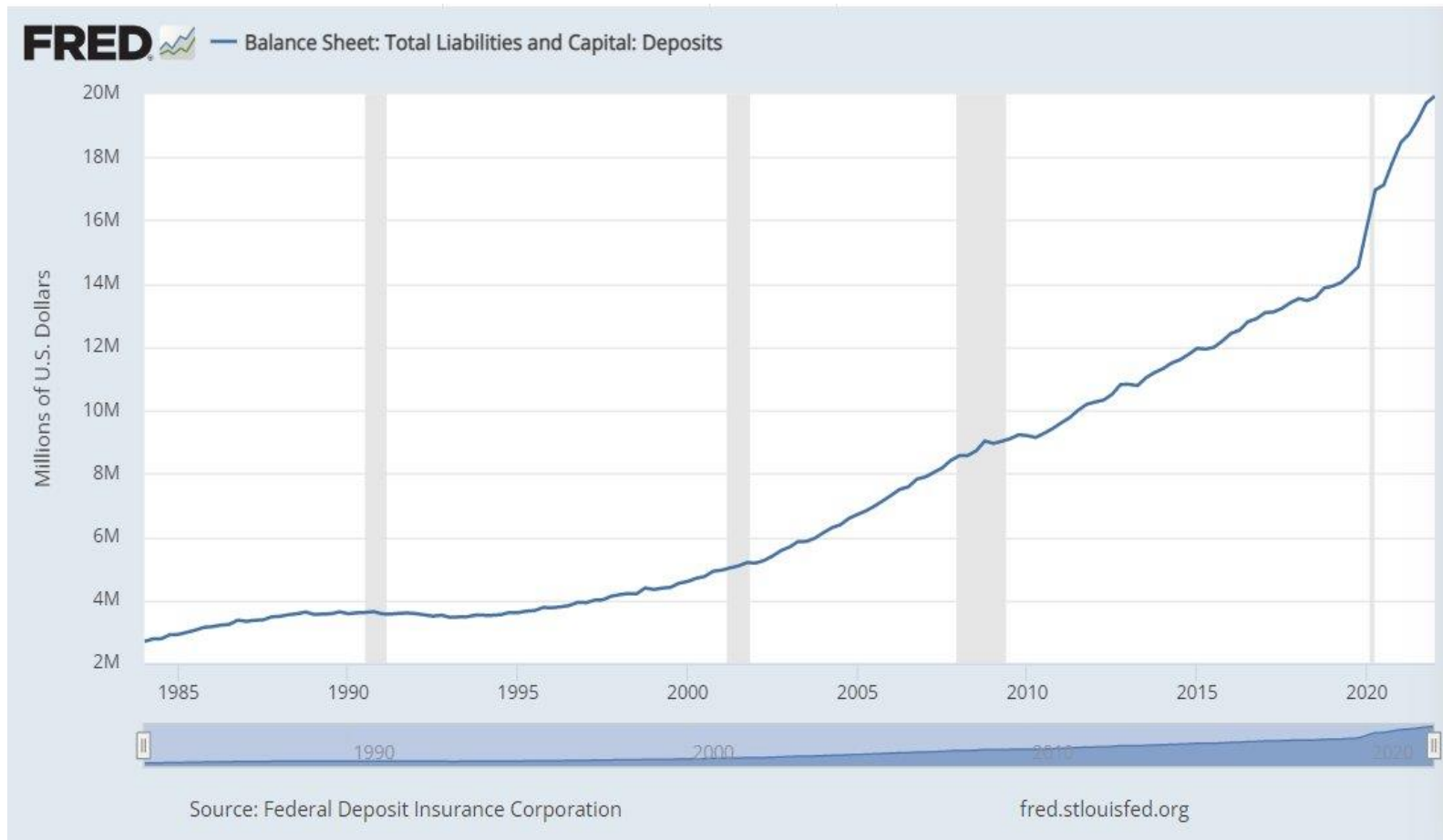
- In early 2020, the stock market temporarily declined, shocked by the unexpected attack of the Covid-19.
- However, in the spring of 2021, major countries took strong cash transfer policies to reduce human contact with economic activity.
- Stock markets worldwide entered a boom, despite the negative growth of the real economy under the Corona Disaster.
- Many people believed that this was a bubble that would eventually burst.
- However, stock markets started to decline in 2021.
- The current weak market is often explained by the rapid inflation caused by the economic recovery and the Russian aggression to Ukraine.

The Loans to Deposits Ratio (LD ratio)



- The Loans to Deposits ratio is L (loans and leases) divided by D (deposits).
- The LD ratio is one of the useful indicators to determine whether the asset market is overheated (i.e., whether a bubble is about to burst).
- For US, the LD ratio was about 90% right before the crash of the IT Bubble (2001), and the Lehman crisis (2008).
- Looking at the LD ratio alone does not tell us whether the variation is due to L or D factors.

Deposits has increased



- Looking at Deposits, as you can see, there is a sharp increase from 2020.
- This is clearly due to a sharp increase in government spending for corona control.
- The major view argues that the current inflation is fueled by the increasing government transfer in order to alleviate the economic loss due to the Covid-19 pandemic.

<https://fred.stlouisfed.org/series/QBPBSTASTLN#0>

Loans have not increased so much

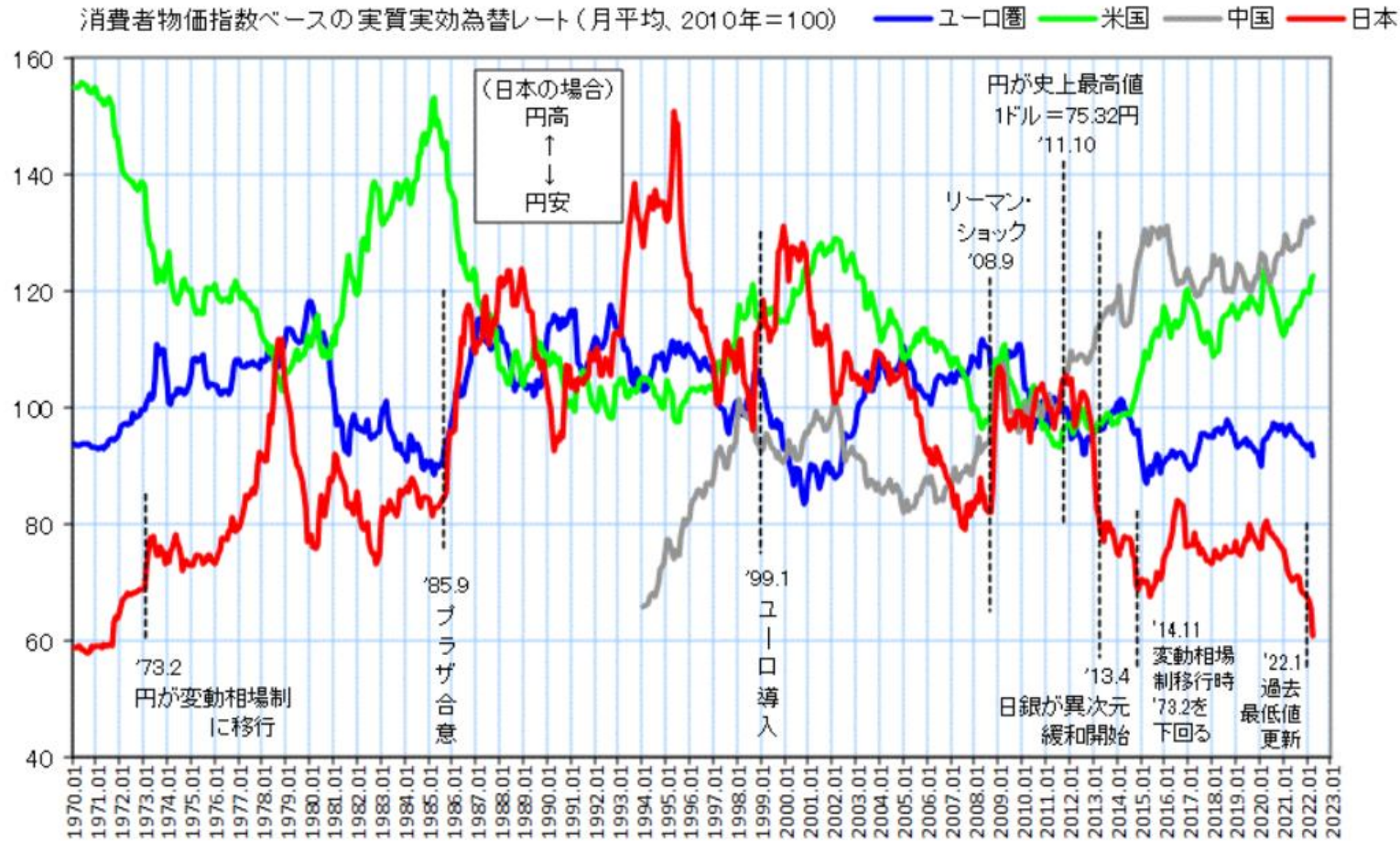


- Loans and Leases, which had been stagnant since the beginning of 2020, have recently increased rapidly.
- However, the increase is smaller than that of Deposits.
- This has resulted in the recent sharp decline in the LD ratio.

<https://fred.stlouisfed.org/series/QBPBSTASTLN#0>

実効為替レートの推移(日本・米国・ユーロ圏・中国)

(2022年4月まで)



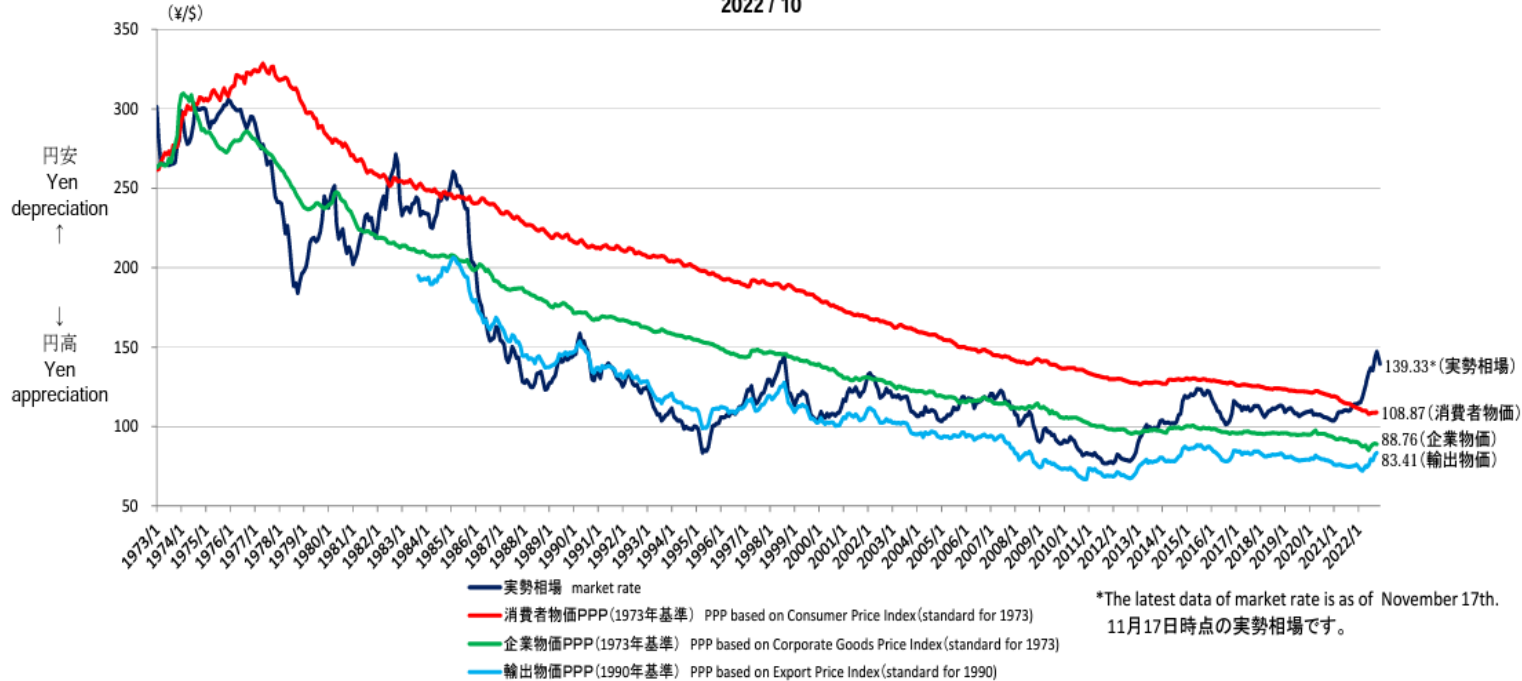
(注) 対象バスケットはブロードベース(58カ国)。ただし1993年以前はナローベース(27カ国、中国を含まず)に接続。

(資料) BIS(国際決済銀行)HP、毎日新聞2014.12.19(年表事項)

Real Effective Exchange Rate

- Japanese Yen hit its historical peak in 1995, then declined and returned to its 1970s level.
- US dollar seems to slightly decrease in the long run, while Euro looks steady.
- China's Yuan is appreciating against other currencies.
- There are two major reasons for currency appreciation in the long run
 1. Higher productivity growth
 2. Lower inflation rate

ドル円購買力平価と実勢相場
purchasing power parity and market rate / U.S. Dollar against Japanese Yen
2022 / 10



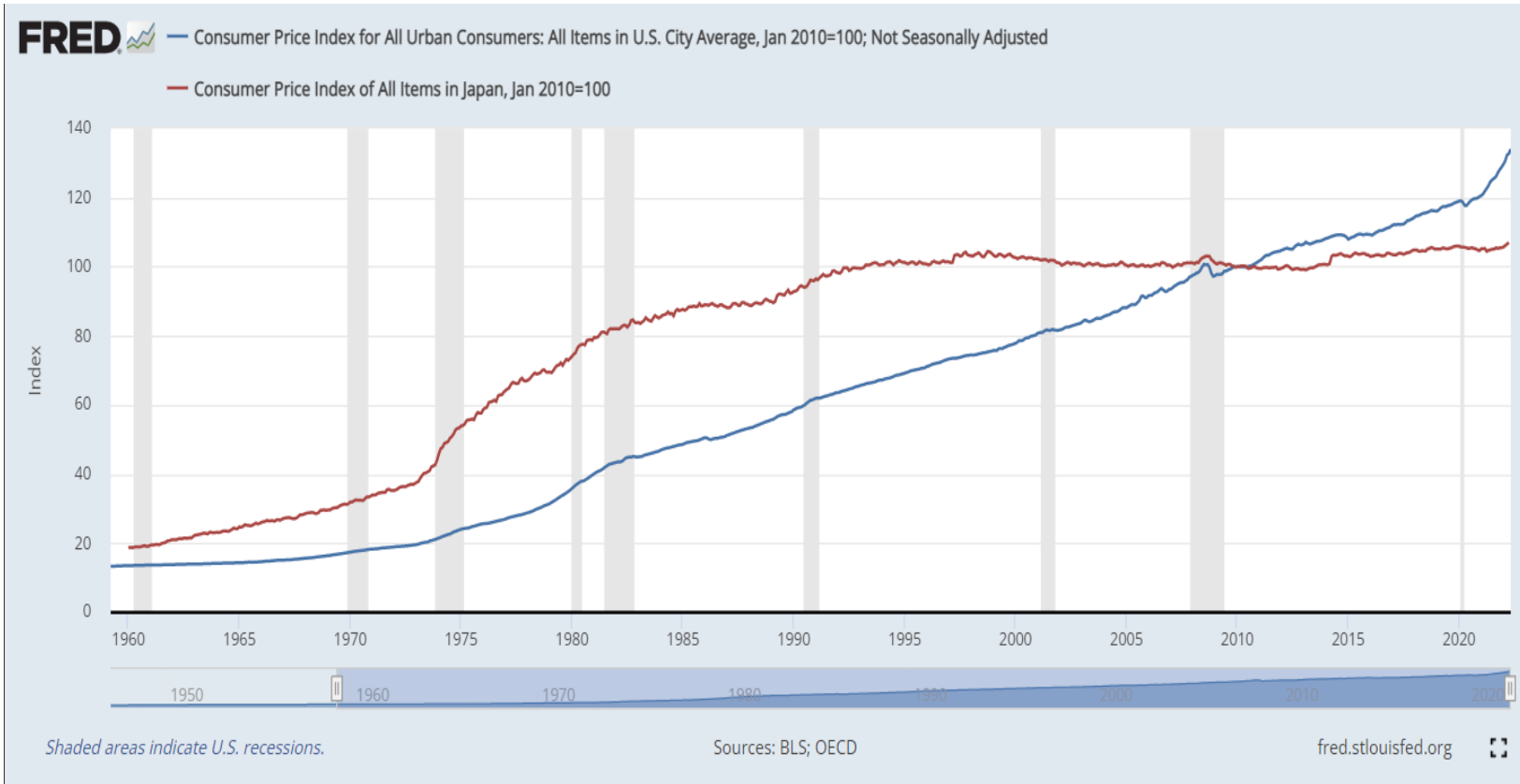
データ:消費者物価、日本 総務省、U.S. Department of Labor
企業物価と輸出物価、日銀、U.S. Department of Labor
ドル円相場、日銀
消費者物価PPP、企業物価PPPは1973年基準。
輸出物価PPPについては、米国の現在の輸出物価指数が1973年まで連続して
適及できないようになったため、以前に適及できた際にPPPと実勢相場との
乖離が比較的小さかった1990年を基準年として算出した。

[グラフの原データはこちら \(The original data of the chart is here.\)](#)

PPP Purchasing Power Parity

- Indigo: market
- Red: PPP on CPI
- Green: PPP on Corporate Price Index
- Blue: PPP on Export Price Index
- Market rate tends to remain between Red and Blue lines.
- Market rate is undervalued if it is above Red, overvalued if it is below Blue.

CPI Comparison USA and Japan in the last 6 decades



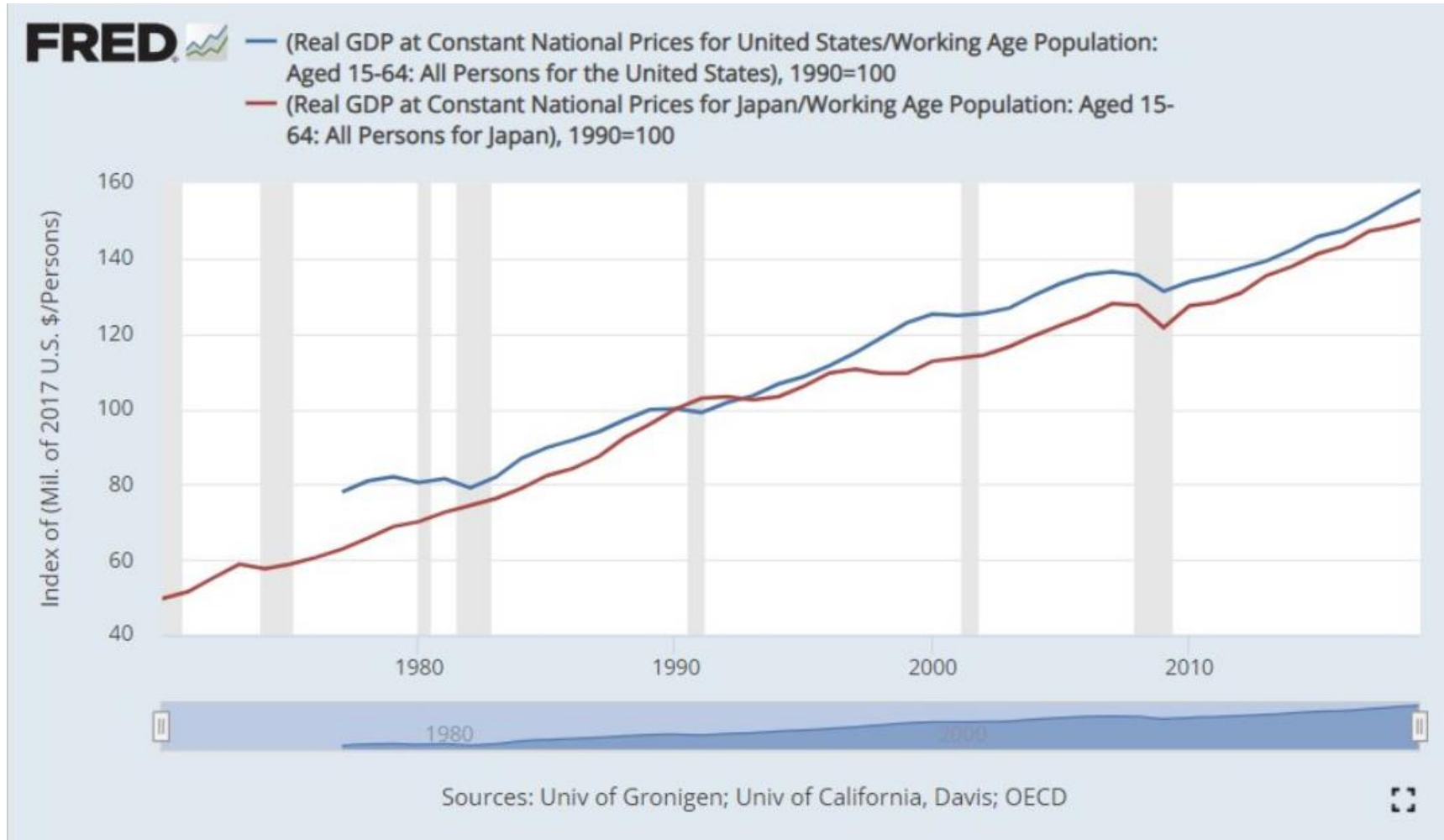
- Taking 2010 as 100, the CPI in 1960 was 18 for Japan and 13 for the U.S.
- The Rate of Inflation rate of Japan was higher than that of the US until 1980.
- The CPI in 1980 was 74 for Japan and 35 in the U.S.
- Prices in Japan has stuck at 100 since 1995, but prices in the U.S. have been rising steadily.

<https://fred.stlouisfed.org/series/CPIAUCSL>

Real GDP per working age population aged 15-64 = labor productivity

Blue: USA
Red: Japan

- Japan's productivity growth matches that of US.
- The Inflation rate has been higher in the US than in Japan, which is the factor to raise Yen relative to \$.
- Even if the US productivity grows slightly faster than that of Japan, it is not enough to explain the latest appreciation of \$ against Yen.



<https://fred.stlouisfed.org/graph/?g=QwLT>