

# Japanese Economy 2025: Rise and Fall of the Abenomics

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# The Inflation behind the Political Instability of the Major Advanced Economies

# Japanese economy after the Abenomics

- Japan's PM Shinzo Abe retired in the fall 2020 after struggling against the initial damage brought by the Covid-19 Pandemic.
- His successor, PM Yoshihide Suga, failed in handling the economic recovery under the still-continuing Pandemic in 2021.
- Japan's economy was normalized under the Kishida administration, helped by the availability of the mRNA vaccine which was the most frequently shot to Japanese people in the world.

# Inflation and Russian Invasion to Ukraine

- The Corona-virus Pandemic seemed to be over in the early 2022, when Ukraine was attacked by Russia, which was followed by the global inflation and the associated rise in the interest rates.
- Under the Abenomics, the BOJ took the QQE (qualitative and quantitative easing) policy, which has kept the short-term interest rate closed to zero.
- The central banks in the west drastically raised the interest rates, while the BOJ did not, since the targeted rate of inflation was not achieved even though all the countries suffered the even higher inflation.

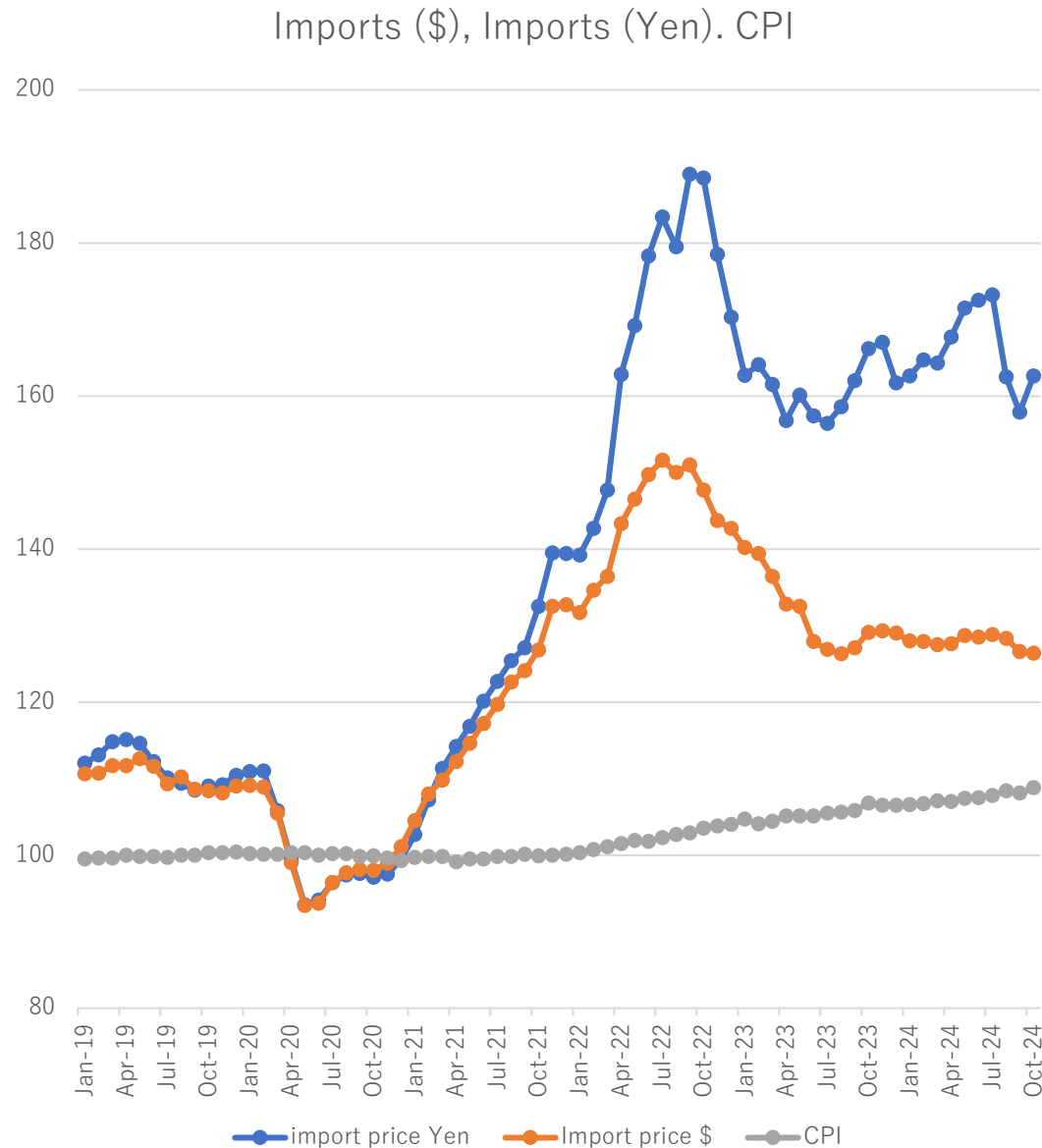
# The *Time-Horizon* policy

- The BOJ kept the QQE policy even though the targeted rate of inflation (annual rate 2%) was achieved in the early 2023.
- The BOJ held a vision that the inflation target was sustainable only if it is associated with a sufficient rise in the nominal wage.
- In Japan, the nominal wage is negotiated between the management and the unions regularly in the late March.
- The BOJ extended the QQE until it confirmed that a sufficient wage increase was reported in the early spring 2024.

# People complaints about the inflation

- Although the Abenomics was politically supported by the people, their life-standard was heavily damaged by the unexpected rise in the food and energy prices, which resulted in the loss of the LDP (Liberal Democratic Party) in the general election in October 2024.
- The unexpectedly-high rise in the food and energy prices were brought partly by the depreciation of the Japanese Yen from 110 yen per \$ in 2020 to 160 yen per \$ in July 2024.
- The BOJ finally decided to raise the short-term interest rate from 0.1% to 0.25% at the end of July 2024, which caused a financial turmoil in the early August.

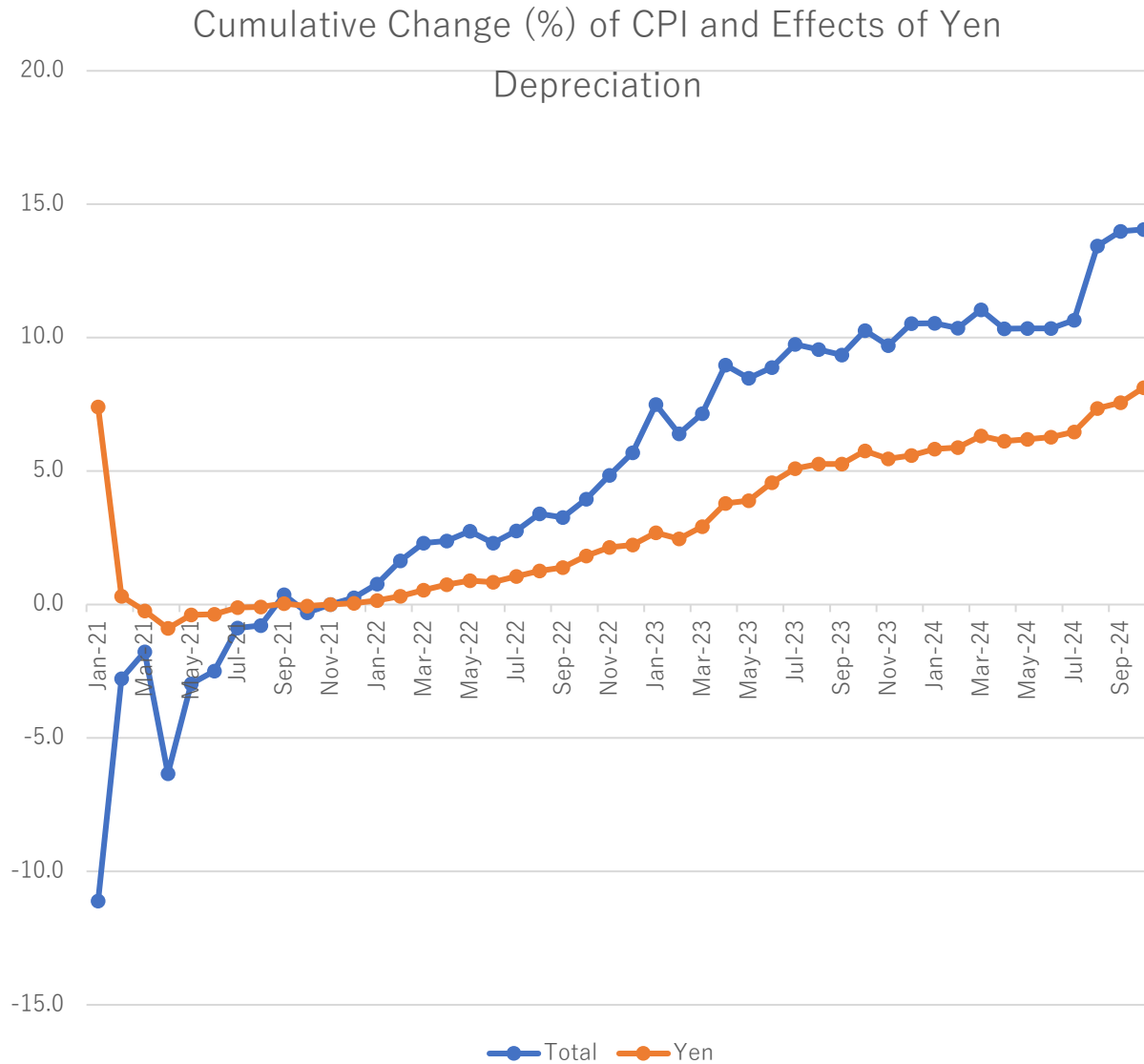
CPI has not fully reflected the rise in the Import Price Index.



- The import price in Yen has risen by 80% since 2020, while the import price in \$ has not increased so much,
- The gap between the blue line and the orange line is the effect of the Yen depreciation on CPI.

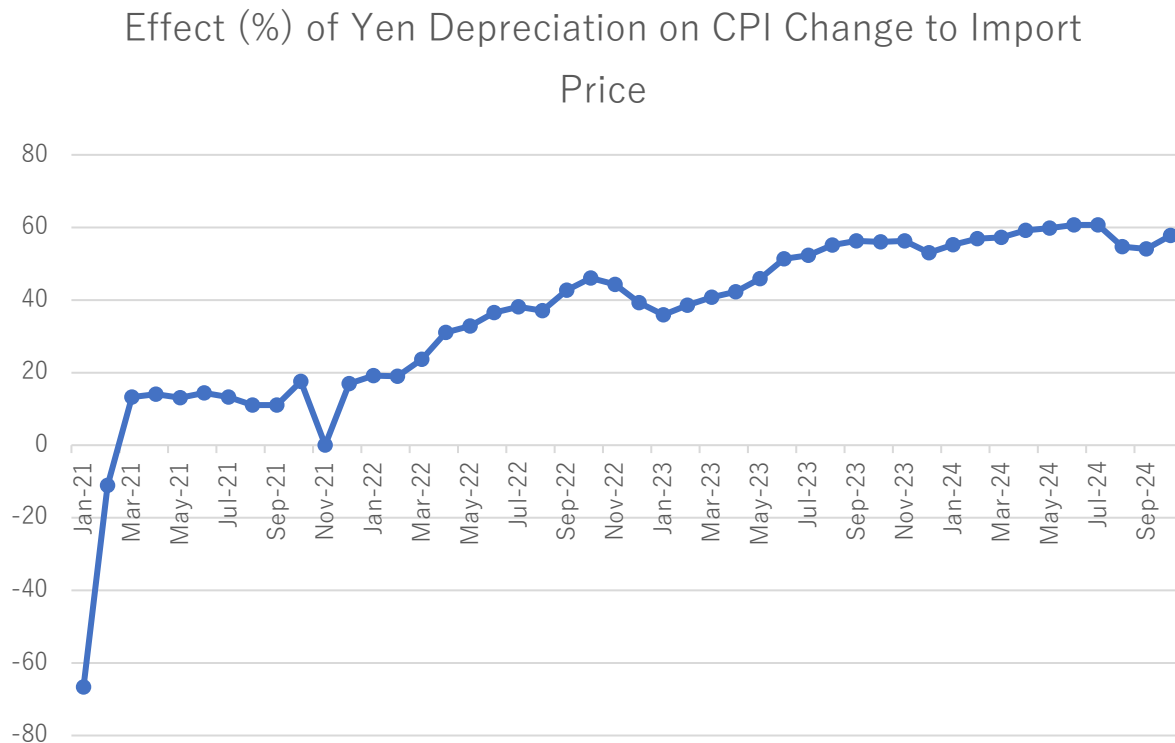


# The Rising Effects of the Weak Yen



- Since 2020, the CPI reflects only 14% of the rise in the import price index, while its 8% rise has come from the Yen depreciation.

# The effect of Yen depreciation on CPI is rising



- In 2021, the effect of the import price rise on CPI came from the Yen depreciation only by less than 20%.
- In 2024 however, the effect of import price rise on CPI comes from the Yen depreciation by more than 50%.

# Dollar/Yen

ドル・円

**155.18 - 155.19** (13日 17:27) **+1.37 (+0.89%)** (単位:円)



表示期間 1日 | 3カ月 | 6カ月 | **1年** | 5年

※縦軸は円、横軸は期

# Nikkei Index of TSE

## 日経平均株価

日経の指数について（指数公式ページ参照）

**38,721.66** (13日 15:45 大引) **-654.43 (-1.66%)** (単位:円)

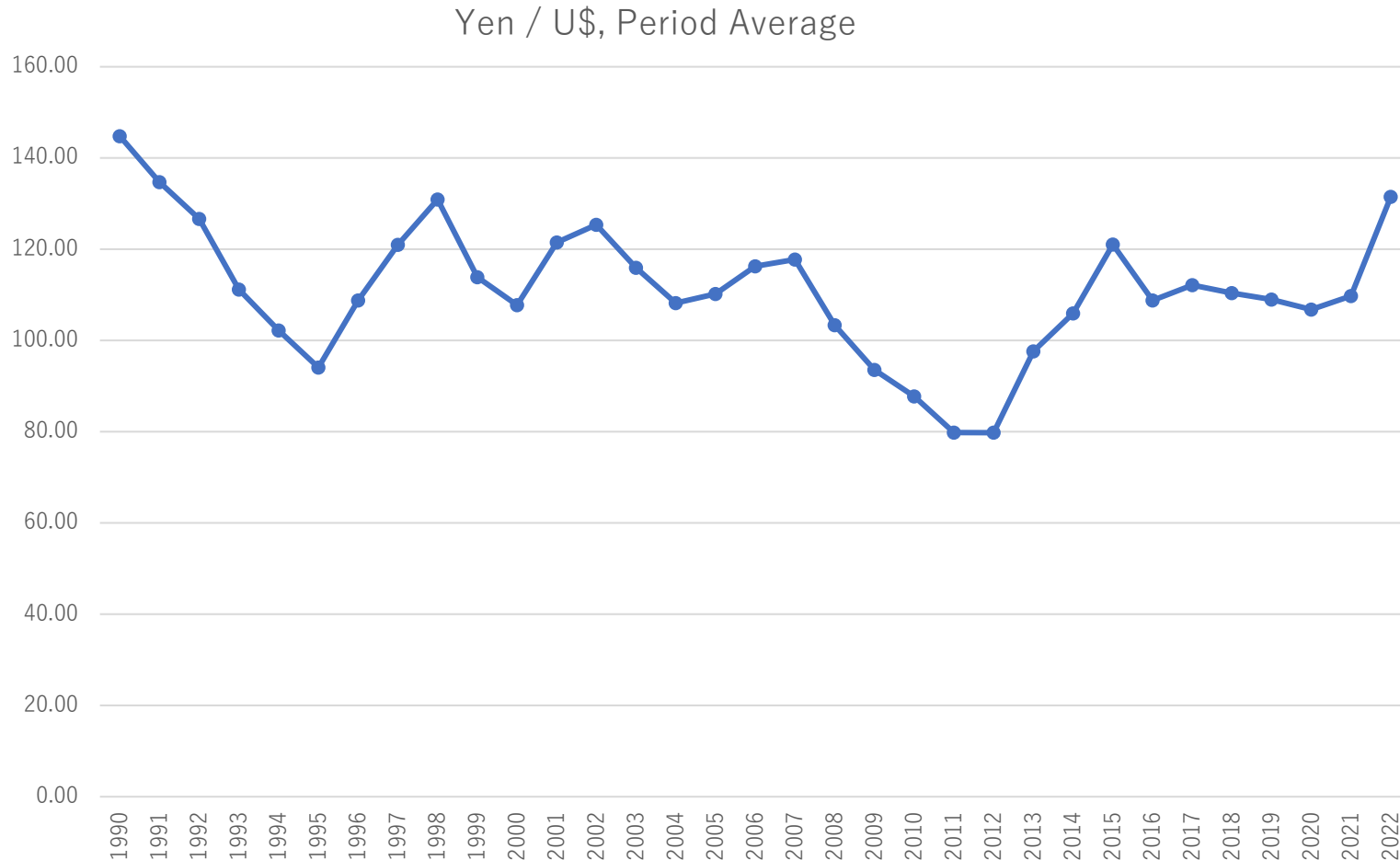


表示期間 1日 | 3ヵ月 | 6ヵ月 | **1年** | 5年 | 10年

※縦軸は円、横軸は期

# The Yen Depreciation

# Yen Depreciation

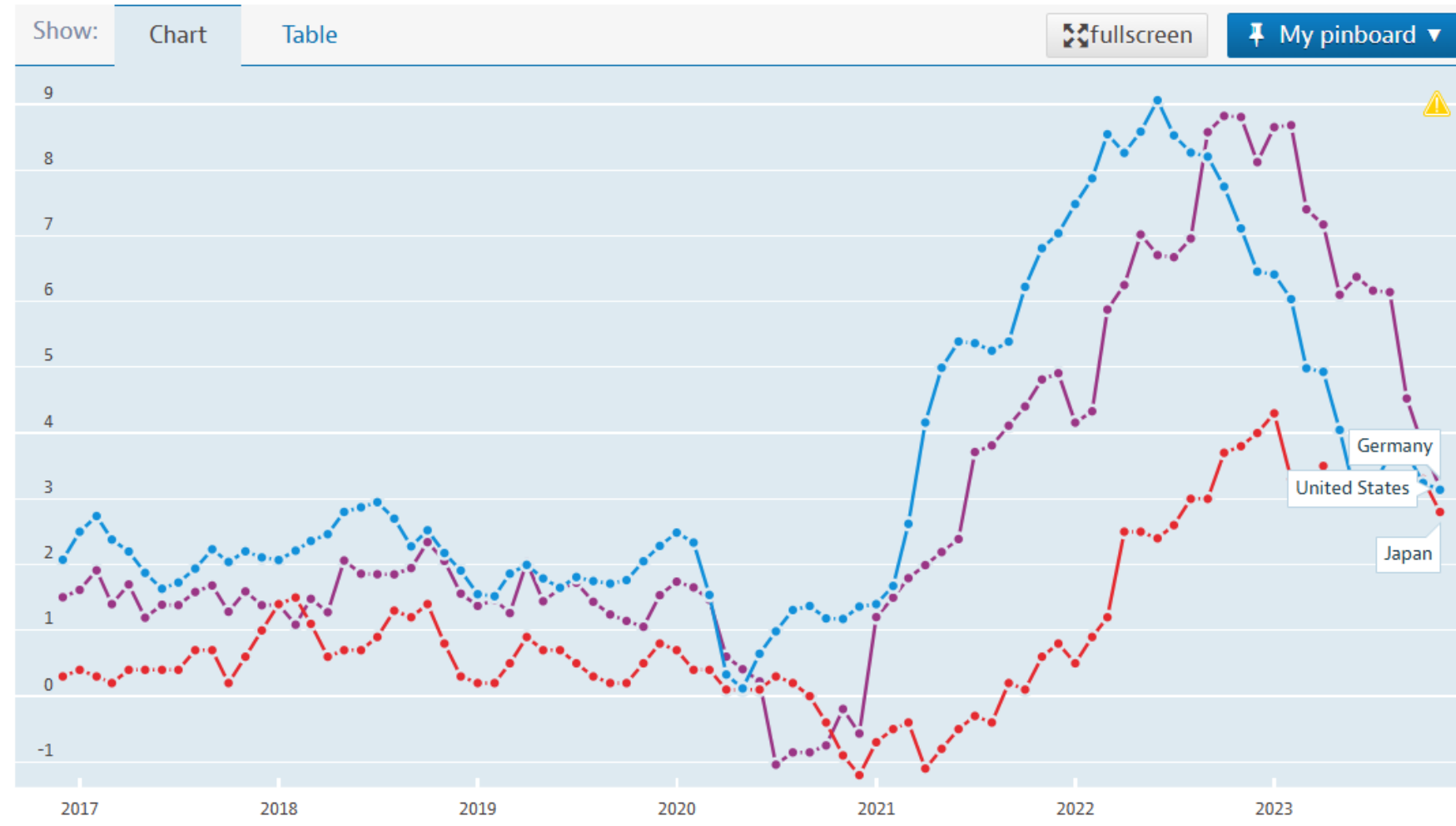


- Japanese Yen has been staying in the range of 100-120Y/\$ in the last three decades except for the period of 2008-2013.
- However, the current inflation reducing the international value of the Yen unexpectedly.

# Inflation (CPI)

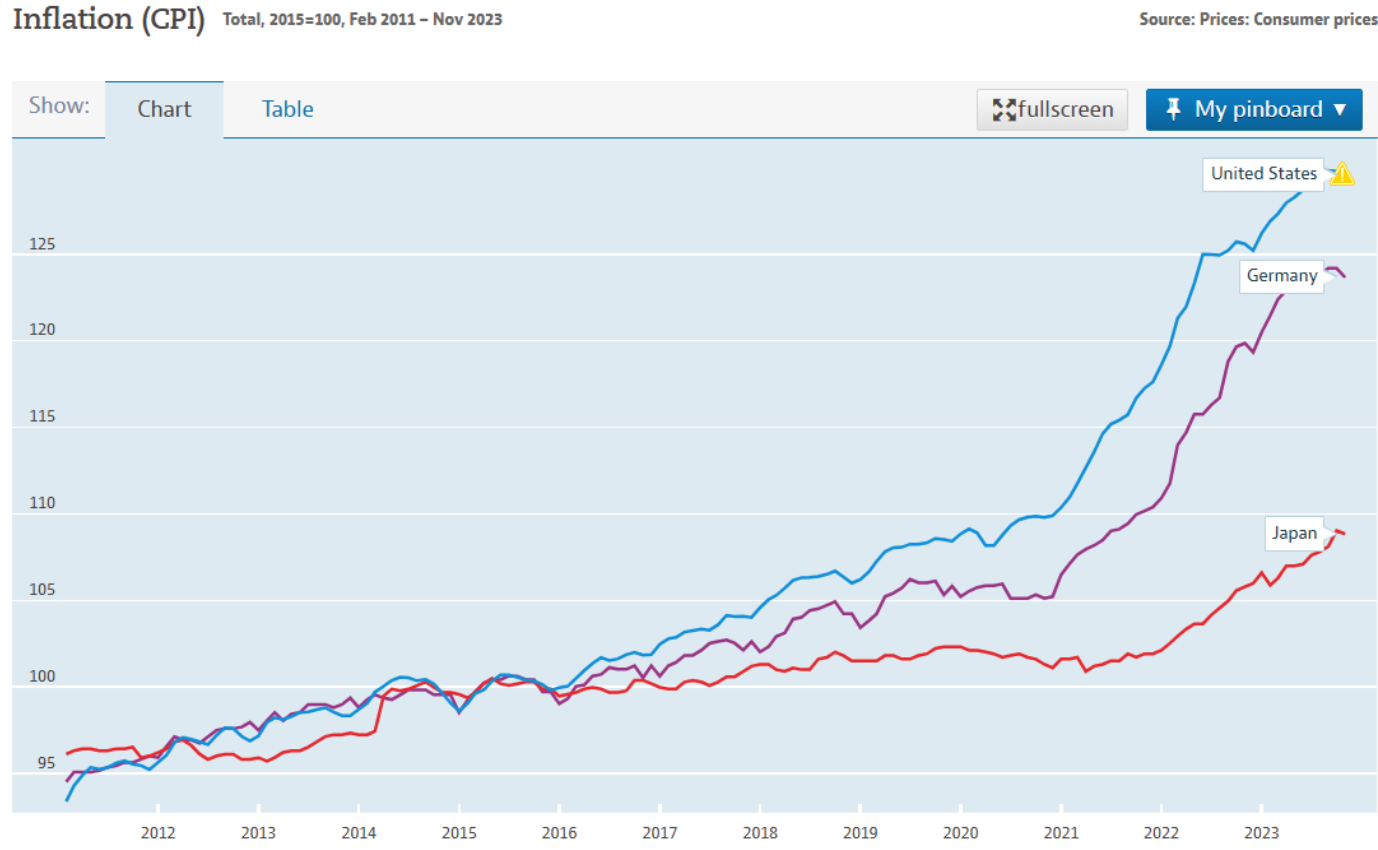
Inflation (CPI) Total, Annual growth rate (%), Dec 2016 – Nov 2023

Source: Prices: Consumer prices



- In Europe and USA, inflation hike started in early 2021, and recorded a peak in Spring 2022.
- Japan's inflation follows the world but is much behind US and Europe. It reached a peak in early 2023.
- Now the inflation rate seems to converge to 3 to 4 % in the three economies.

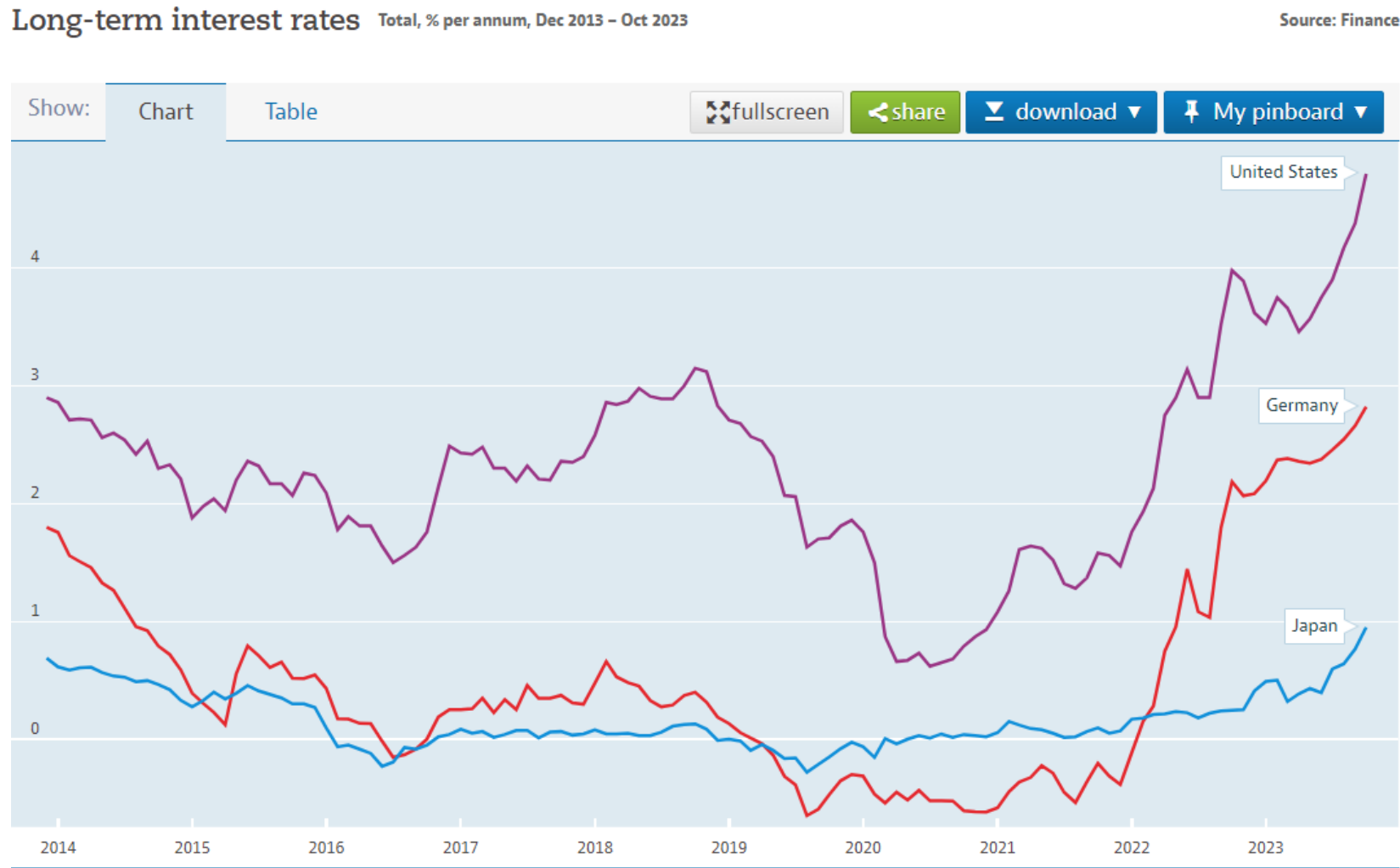
# Cumulative Inflation Matters



- The impact of inflation on the national economy should be assessed by the cumulative inflation rate (or price level) from the base year to date, not the current inflation rate.
- Although inflation in Europe and the United States is subsiding, price levels are still about 30% higher than they were before 2015.
- Prices in Japan, too, have risen by about 10% compared to 2015.
- Even if the inflation rate declines in the short term, if wages do not rise enough to compensate for the decline in purchasing power, the standard of living will decline for most citizens.
- Some citizens who invest in stocks and foreign currency deposits can thereby preserve their own purchasing power, but those with few assets will suffer inflation.



# Long-term interest rates

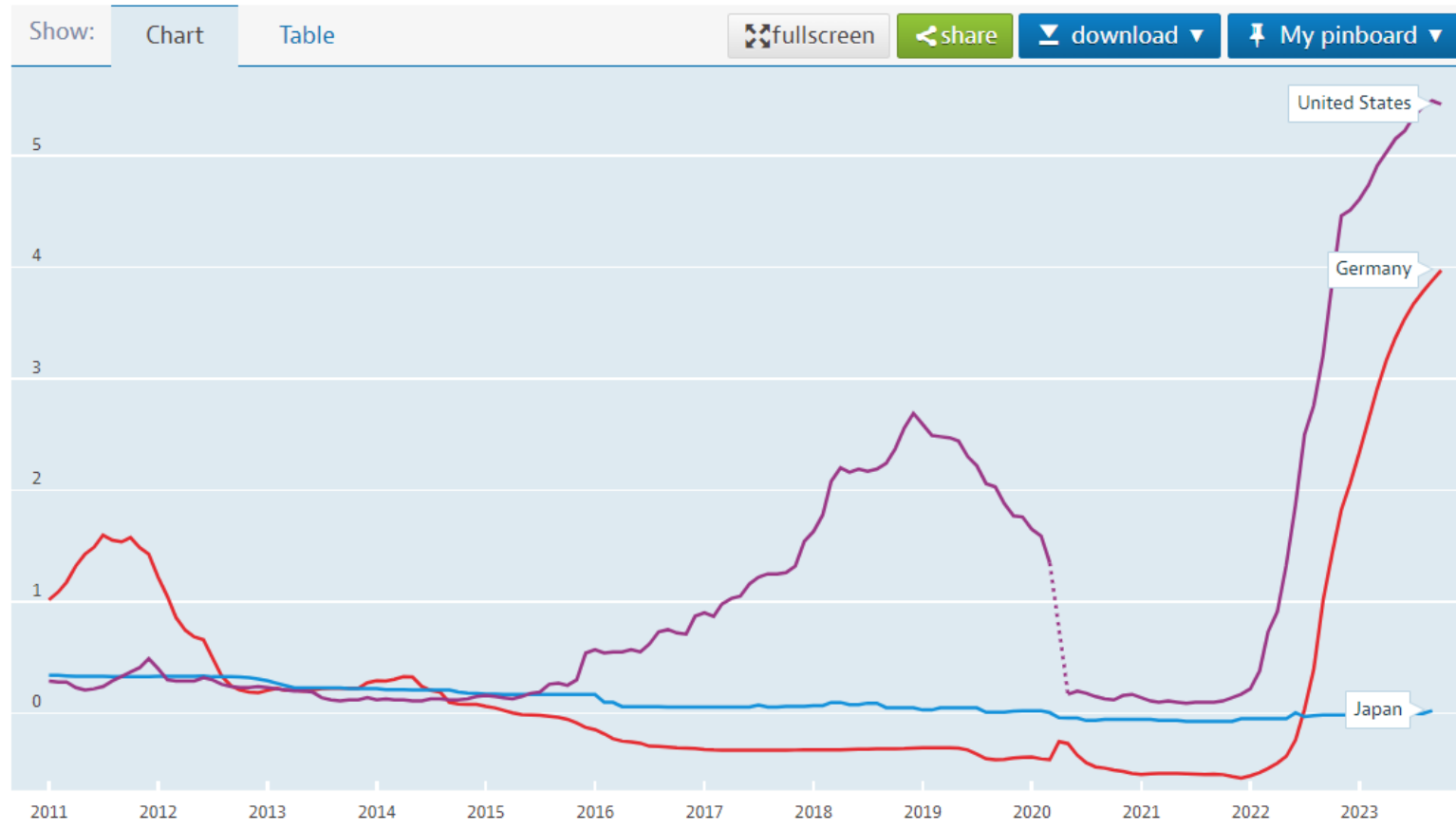


- For 2015-2019, US and Europe seems to leave the quantitative ease.
- However, the Coronavirus Pandemic suddenly prevented central banks from returning to normalization.
- In the recovery from the pandemic, the central banks let the long-term interest rates rise to 4% in US and 3% in Europe.
- In contrast to US and Europe, the BOJ has kept a very-low interest rate policy until recently, while the long-term interest rate is gradually rising to 1%.

# Short-term interest rates

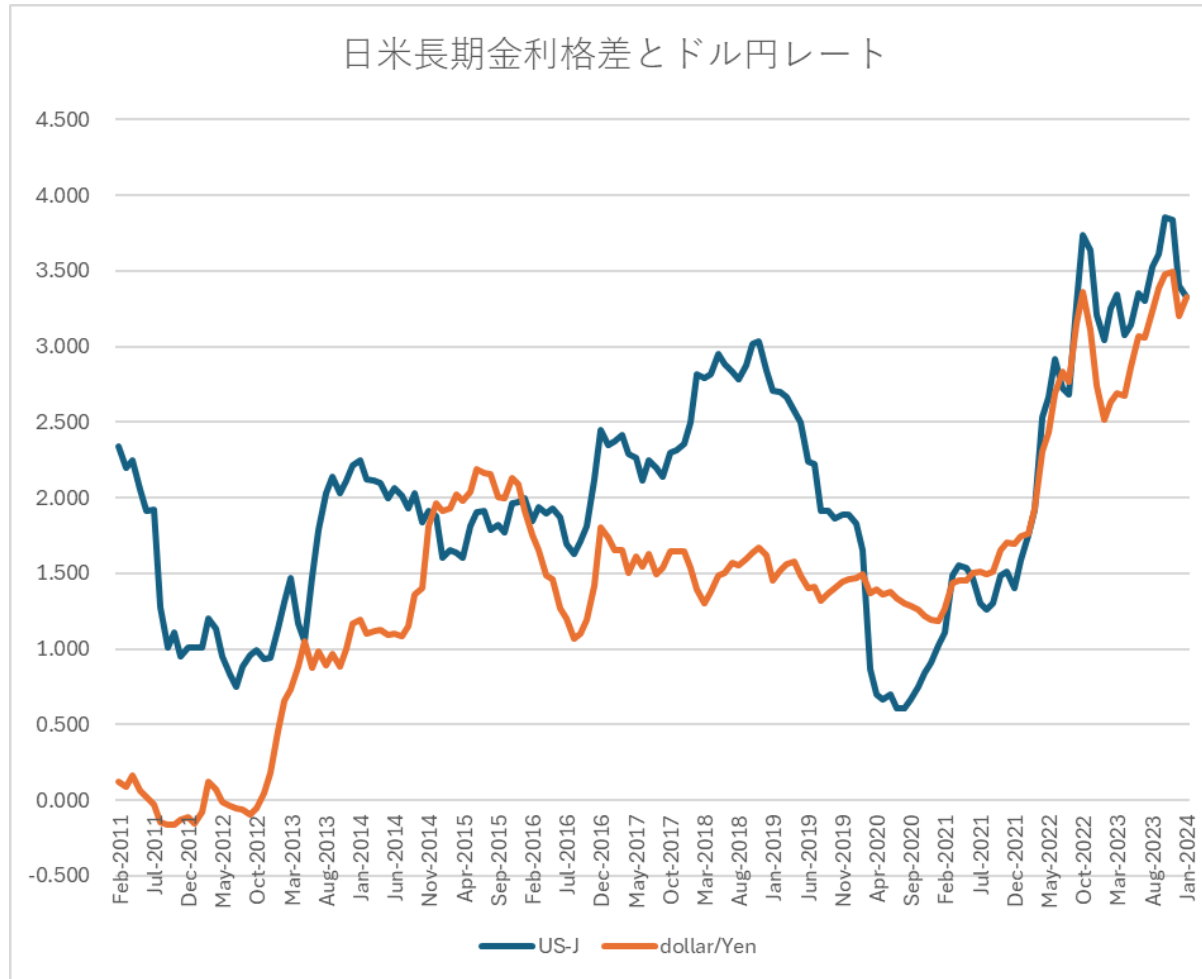
Short-term interest rates Total, % per annum, Jan 2011 – Oct 2023

Source: Finance



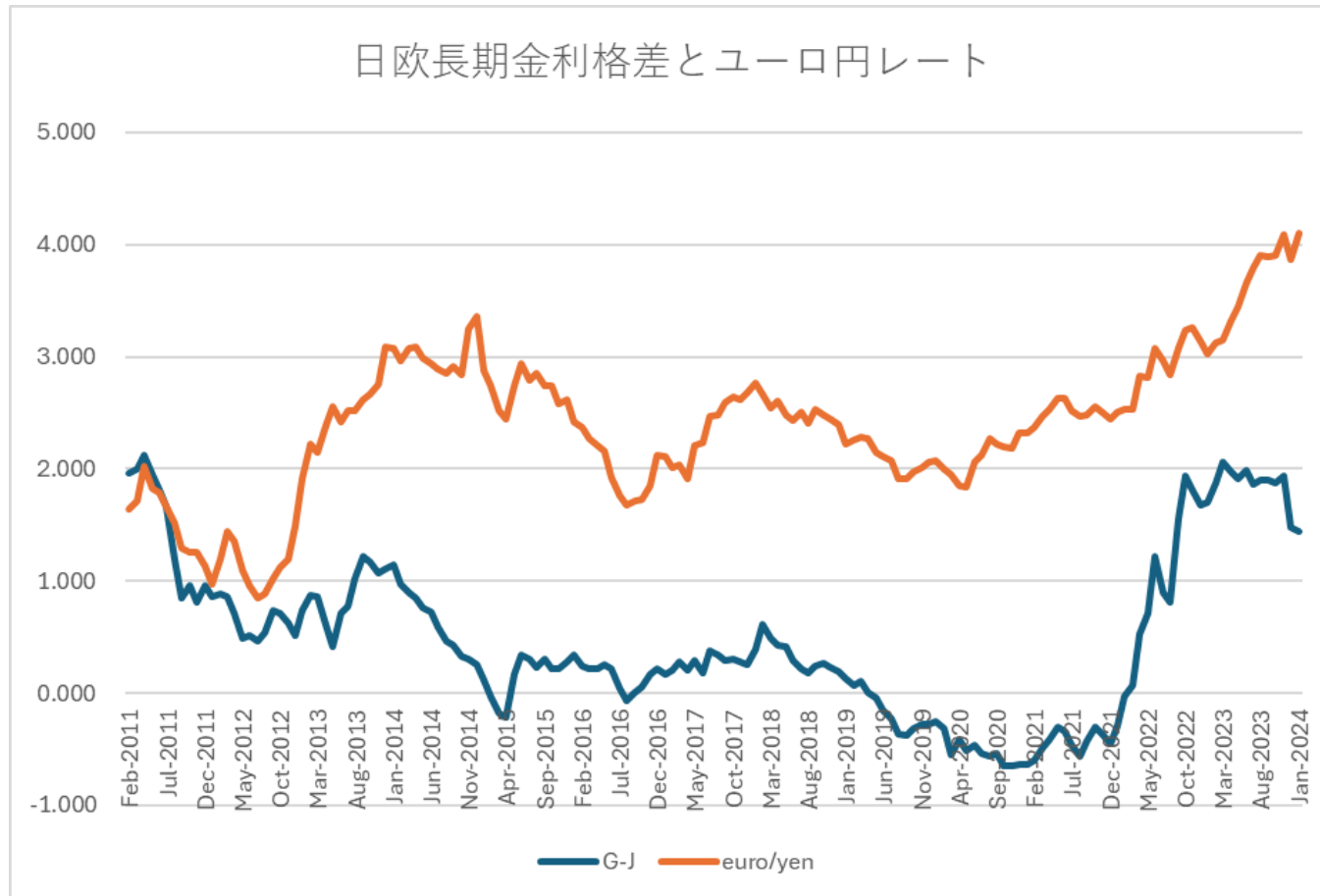
- The Covid-19 Period (2020-2021) :
  - US - zero
  - Germany - negative
  - Japan – zero.
- In 2022, US and Germany started to raise the short-term interest rates, which has reached 5% in US and 4% in Germany.
- BOJ still keeps zero interest rate.

# The Dollar (Yen) and the Long-term Interest Rate Gap between US and Japan



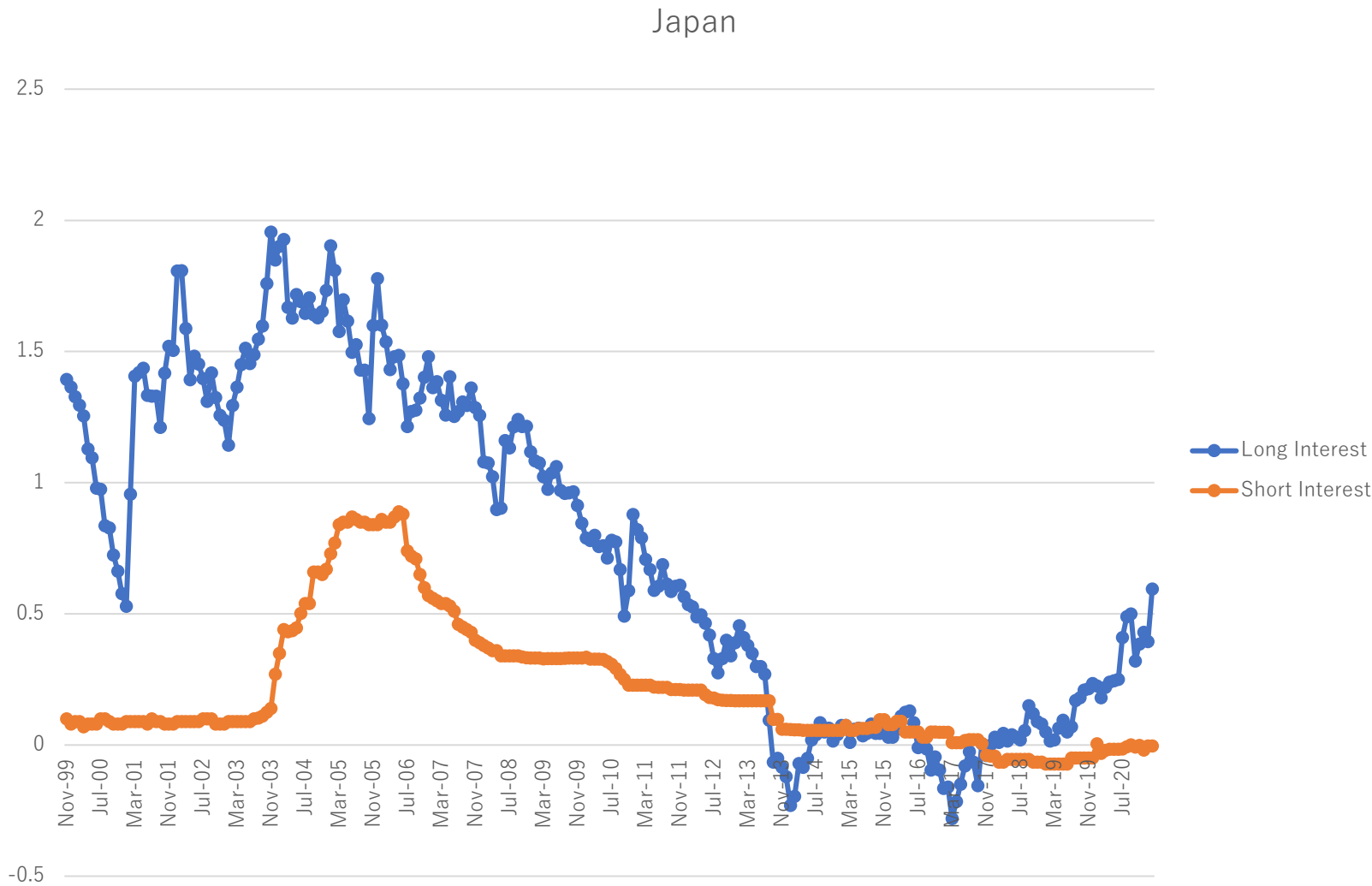
- After 2021, the U.S.-Japan interest rate differential appears to explain exchange rate fluctuations well.
- Before 2020, however, there does not appear to be a regular relationship between the U.S.-Japan interest rate differential and the exchange rate.
- In the 2010s, the U.S.-Japan interest rate differential fluctuated widely in response to changes in U.S. monetary policy, but the exchange rate remained very stable until 2021.

# The Euro (Yen) and the Long-term Interest Rate Gap between EU and Japan



- Compared to the dollar-yen rate, the euro-yen rate appears to move relatively regularly to the Japan-Europe (Japan-Germany) interest rate differential.
- However, since 2013, the yen has tended to weaken excessively relative to the interest rate differential.

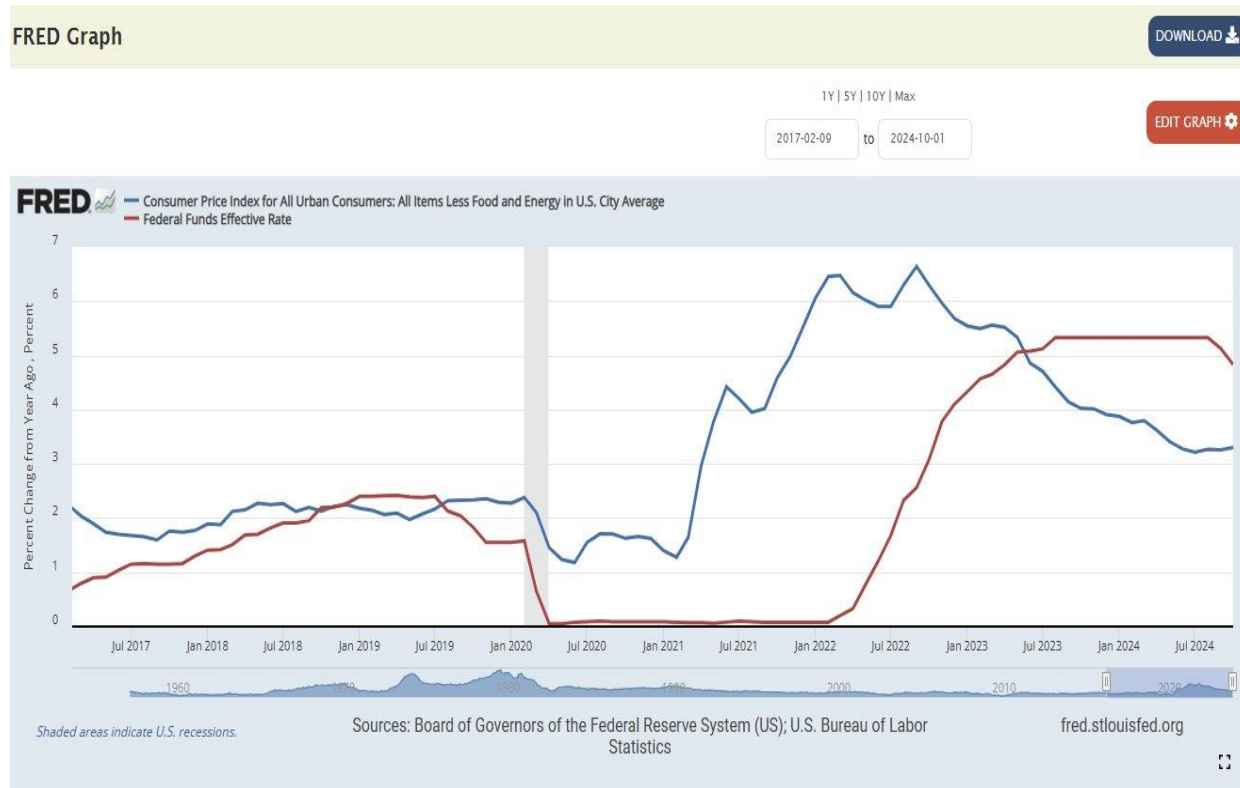
# Short and Long Interest Rates: Japan



- For most time, the long-term interest has been higher than the short-term interest rate.
- In 2013 and 2017, the long-term interest rate was negative.
- Since 2017, the short-term interest rate has been negative.

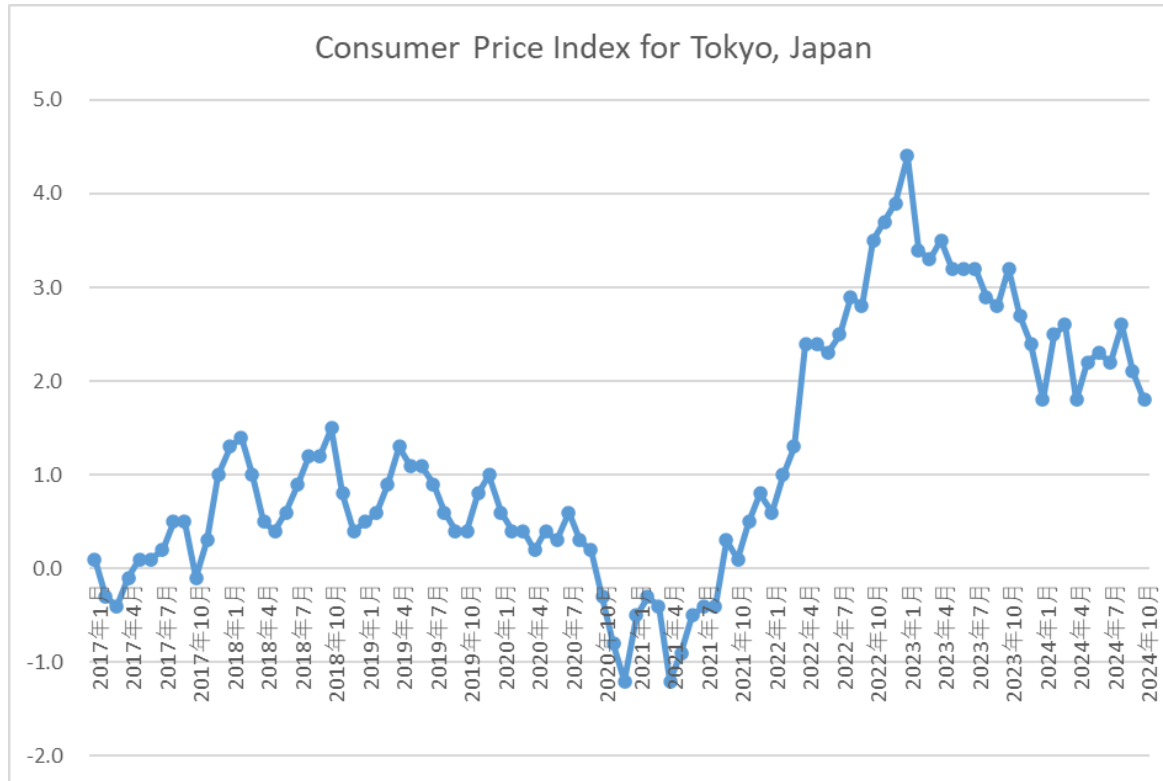
# Inflation and the Interest Rate: US

The federal fund rate of US is still around 5%, while the US inflation rate is 3.3%. The consumption remains still high, partly because the high interest revenue may encourage US people to consume more.



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

# Inflation and the Interest Rate: Japan



On the contrary, the BOJ policy rate is only 0.25%, while the CPI inflation rate is still higher than 2%. The lawmakers and the BOJ seem to pay too much attention to the borrowers of loans, neglecting the positive income effect of increasing interest revenues.

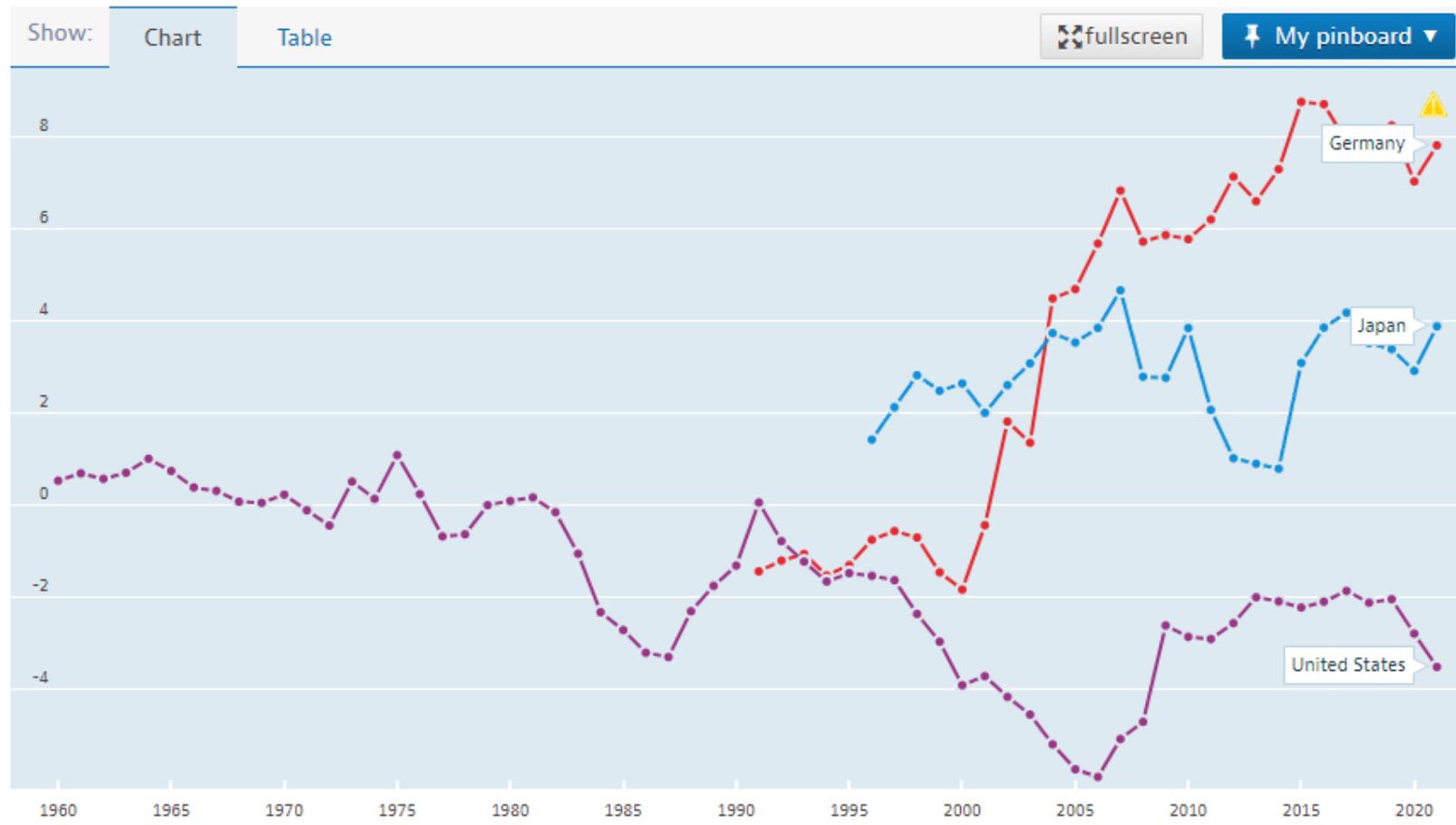
Japan's household financial wealth is concentrated to bank deposits. A rise in the interest revenues might induce households to consume more.

<https://e-stat.go.jp/stat-search/files?page=1&layout=datalist&toukei=00200573&tstat=000001150147&cycle=1&year=20240&month=23070909&tclass1=000001150149>

# Current Account

Current account balance Total, % of GDP, 1960 – 2021

Source: Balance of payments BPM6

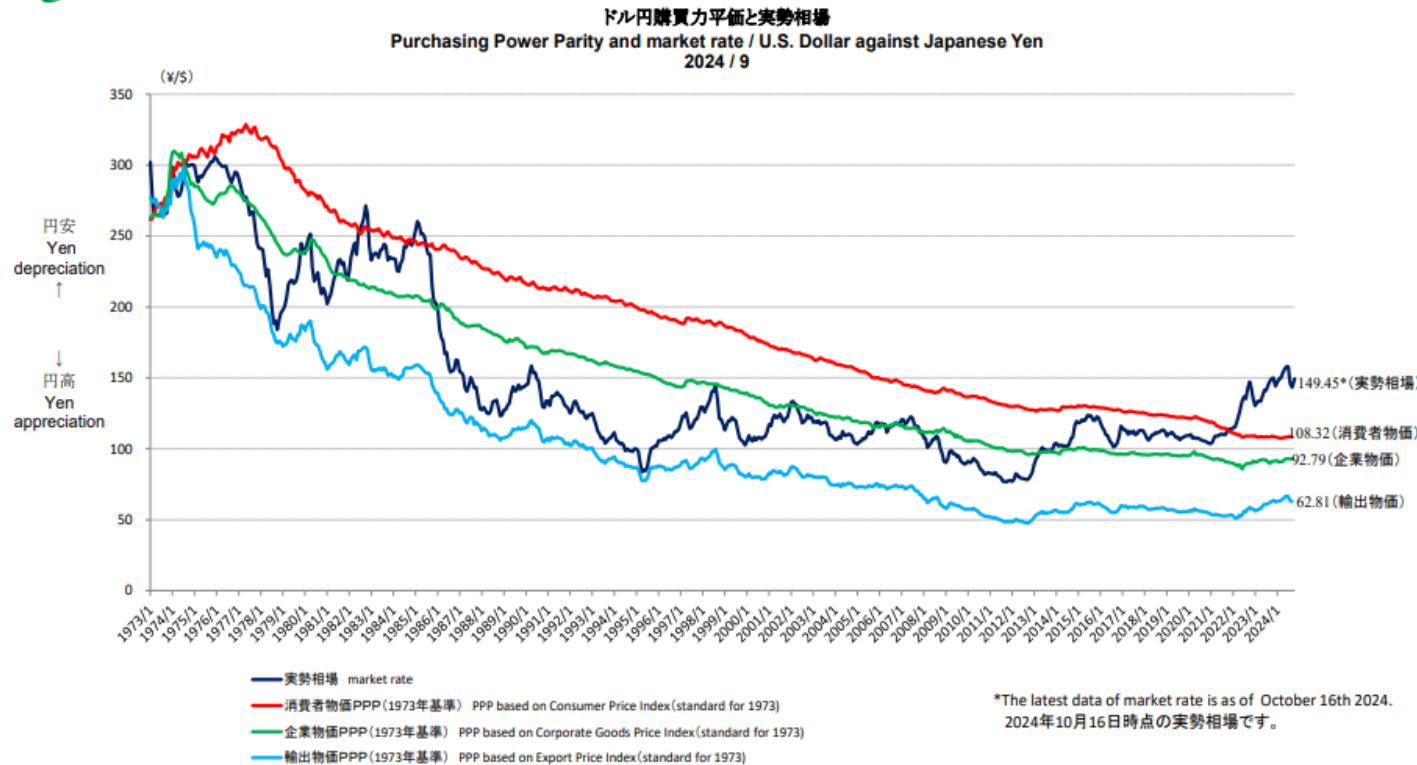


- Changes in the current account balance have not had a significant impact on the exchange rate.
- Germany's current account balance has been significantly in surplus since 2005.
- The U.S. current account balance deteriorated significantly until the Lehman crisis (2008), but then the deficit shrank until the Corona crisis.
- In contrast, the underlying tone of Japan's current account balance is a surplus, although not as large as Germany's, and tends to move just opposite to that of the U.S.
- Nevertheless, the impact of these factors on the exchange rate is unknown.



# Purchasing Power Parity (PPP)

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データ: 消費者物価... 日本総務省, U.S. Department of Labor  
企業物価、輸出物価... 日本銀行, U.S. Department of Labor, IMF  
ドル円相場... 日本銀行

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

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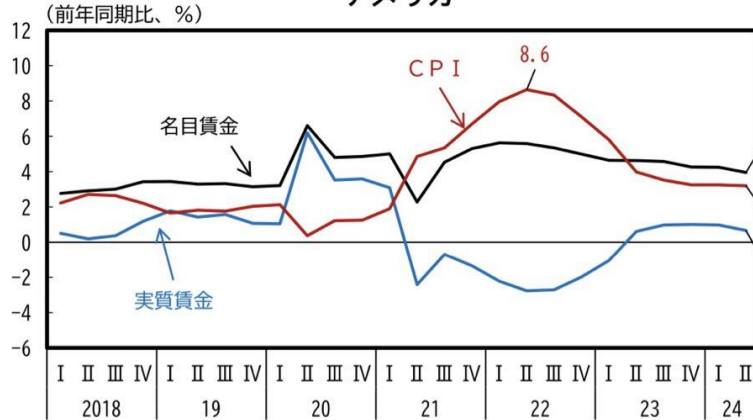
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# Price Hike in Energy and Food

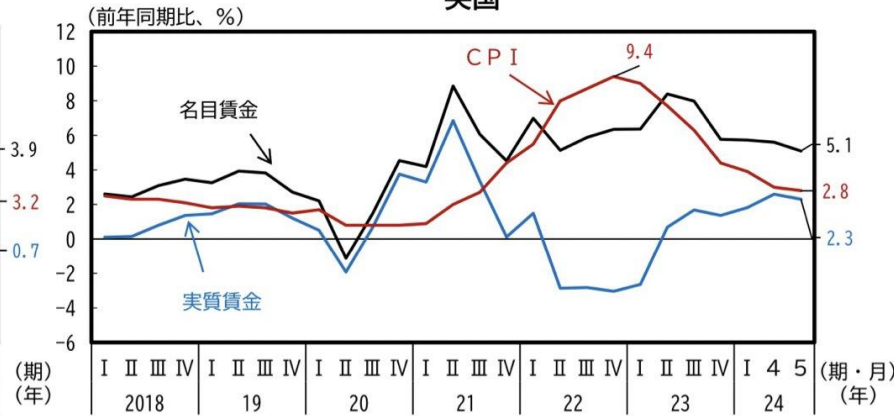
# Monthly Review of the Economy

## 各国の名目賃金上昇率、物価上昇率、実質賃金上昇率

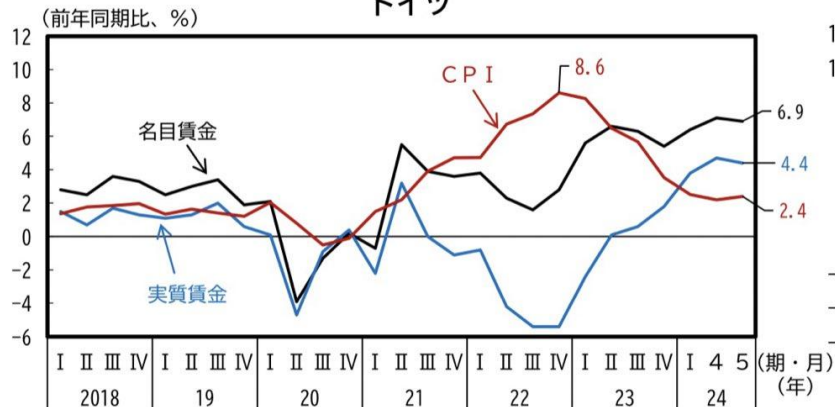
### アメリカ



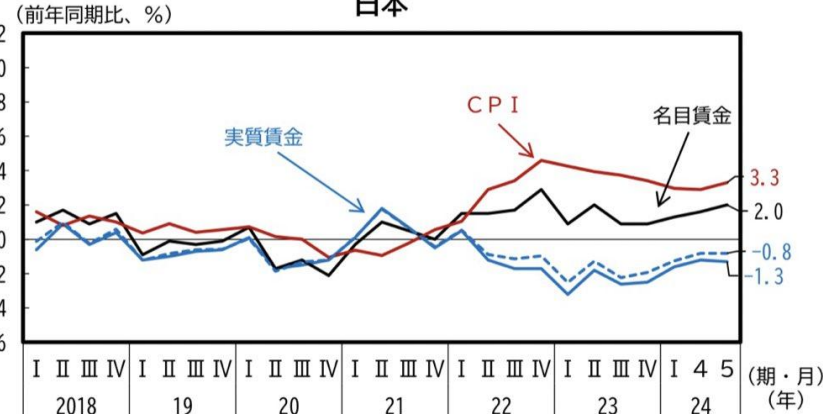
### 英国



### ドイツ



### 日本



(備考) 1. アメリカ労働省、英国国家統計局、ドイツ連邦統計局、総務省「消費者物価指数」及び厚生労働省「毎月勤労統計調査」により作成。

2. アメリカは、名目賃金は時間あたり賃金、物価は消費者物価（帰属家賃含む）。英国は、名目賃金は週平均賃金、物価は消費者物価（帰属家賃含む）。ドイツは、名目賃金は月間平均賃金、物価は消費者物価（帰属家賃含む）。日本は、名目賃金は月平均賃金、物価は消費者物価（持家の帰属家賃を除く総合）。

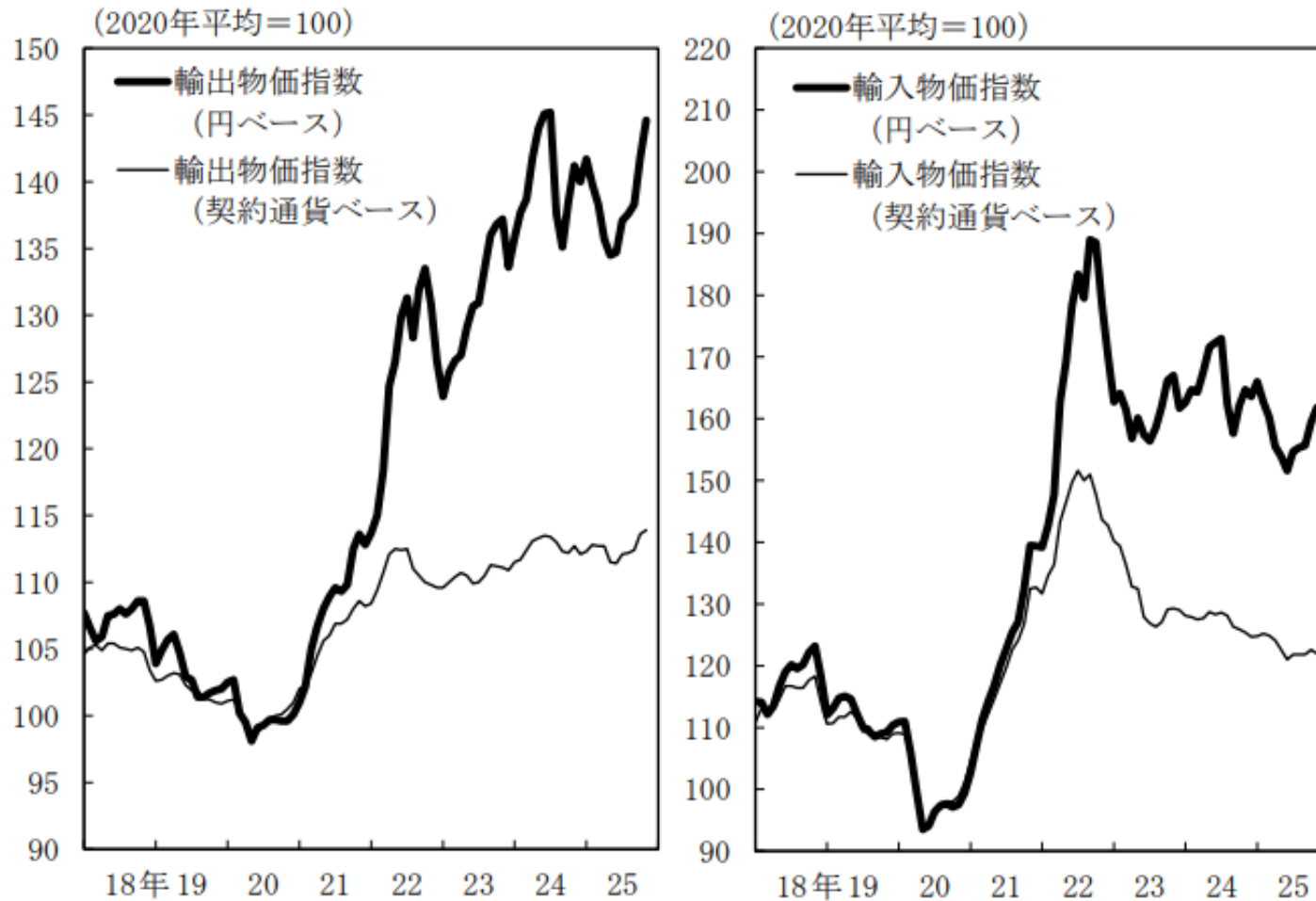
3. 日本の実質賃金について、実線は消費者物価指数（持家の帰属家賃を除く総合）で実質化、点線は消費者物価指数（総合）で実質化。

29

The inflation heavily damaged the life-standard for the common people in the US, UK, Germany, and Japan.

The real wage turned positive in 2023 in US, UK and Germany, while it still remains under zero in Japan.

# BOJ Report on Prices of Exports and Imports

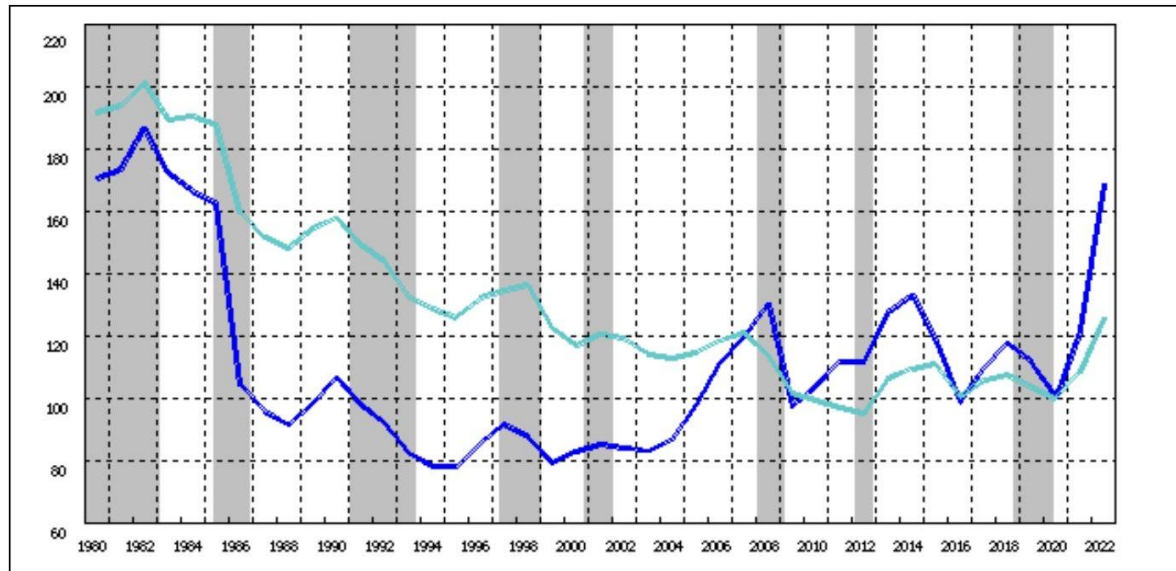


There is a wide discrepancy of the price indices denominated in the Yen and the U\$, which reflects the effect brought by the Yen depreciation.

The BOJ policy change in July 2024 seemed to be based on the recognition that the Yen depreciation was more likely to raise the domestic price level than before.

# Term of Trade matters little recently

## グラフ

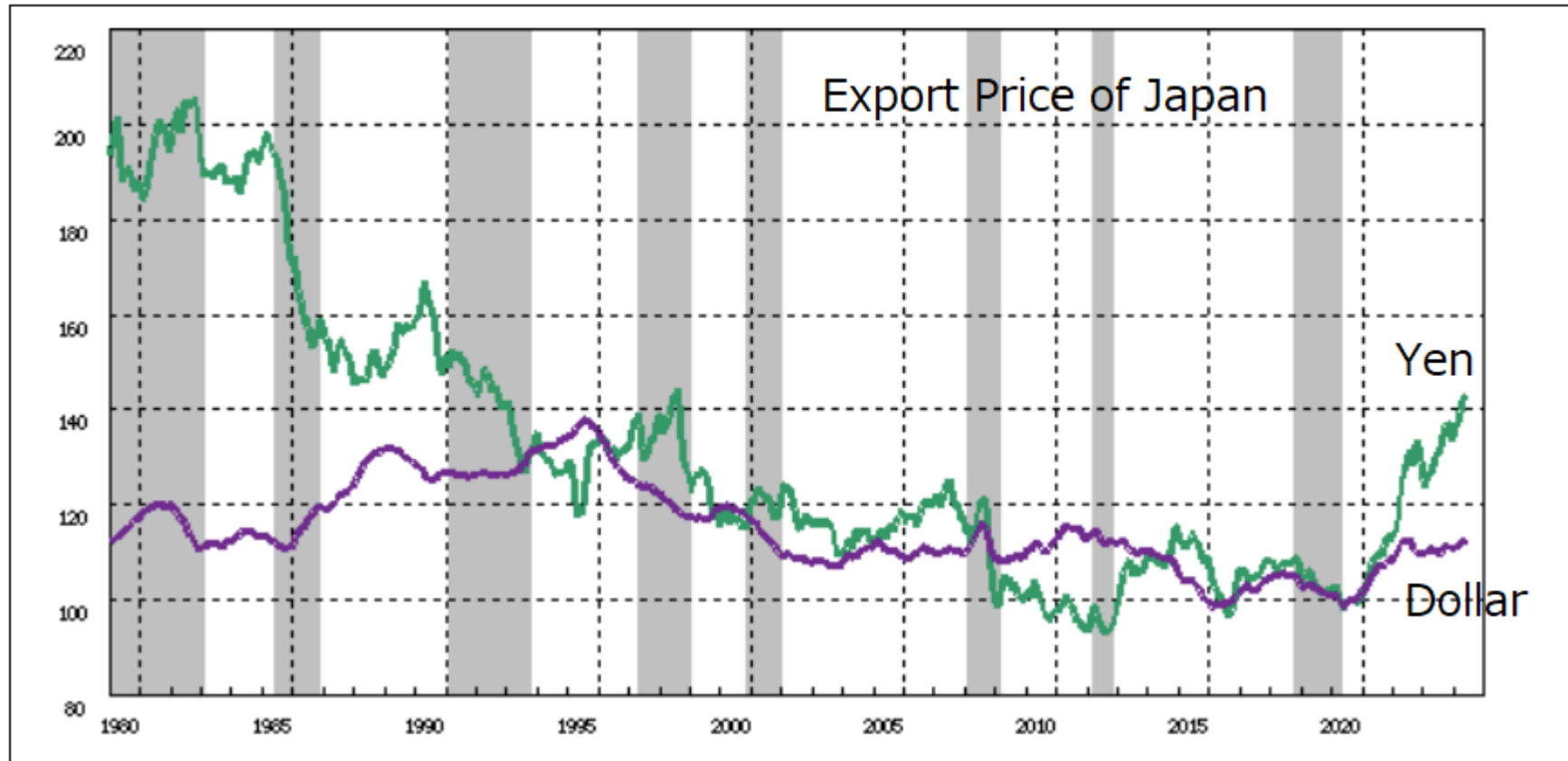


※グラフのデータソースはフッターの上部にある「データ表示」ボタンを押すと確認できます。

Drawn by the author using data compiled by BOJ  
<https://www.stat-search.boj.or.jp/index.html>

- Term of Trade is the ratio of export prices to import prices.
- Current inflation increases export prices and greatly benefits business and their shareholders.
- The term of trade of Japan improved drastically in 1980, had deteriorated since 1990 until 2008 (Lehman crisis), and since then has stabilized.
- However, it deteriorates again recently, reflecting world inflation.
- Japanese people's welfare is affected more by the import price index than by the export price index.
- The import price index is greatly affected by prices in food and energy.

# Export Price Index: Yen and Dollar

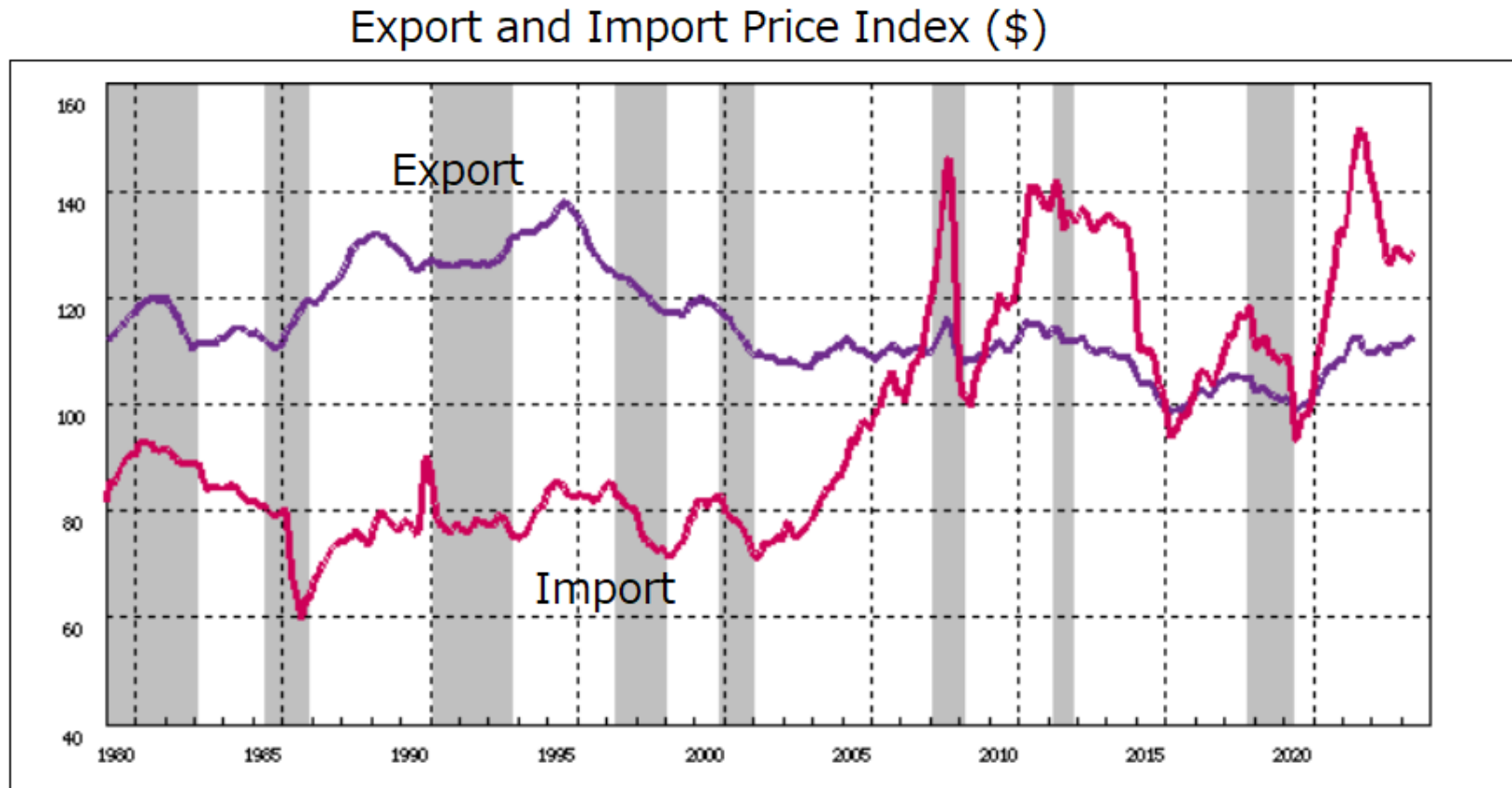


Japan's export price index, with 2020 as 100, showing a long-term low trend through 2020.

The gap of the indices based on the yen and the contract currency suggests a large appreciation or depreciation of the U\$/yen.



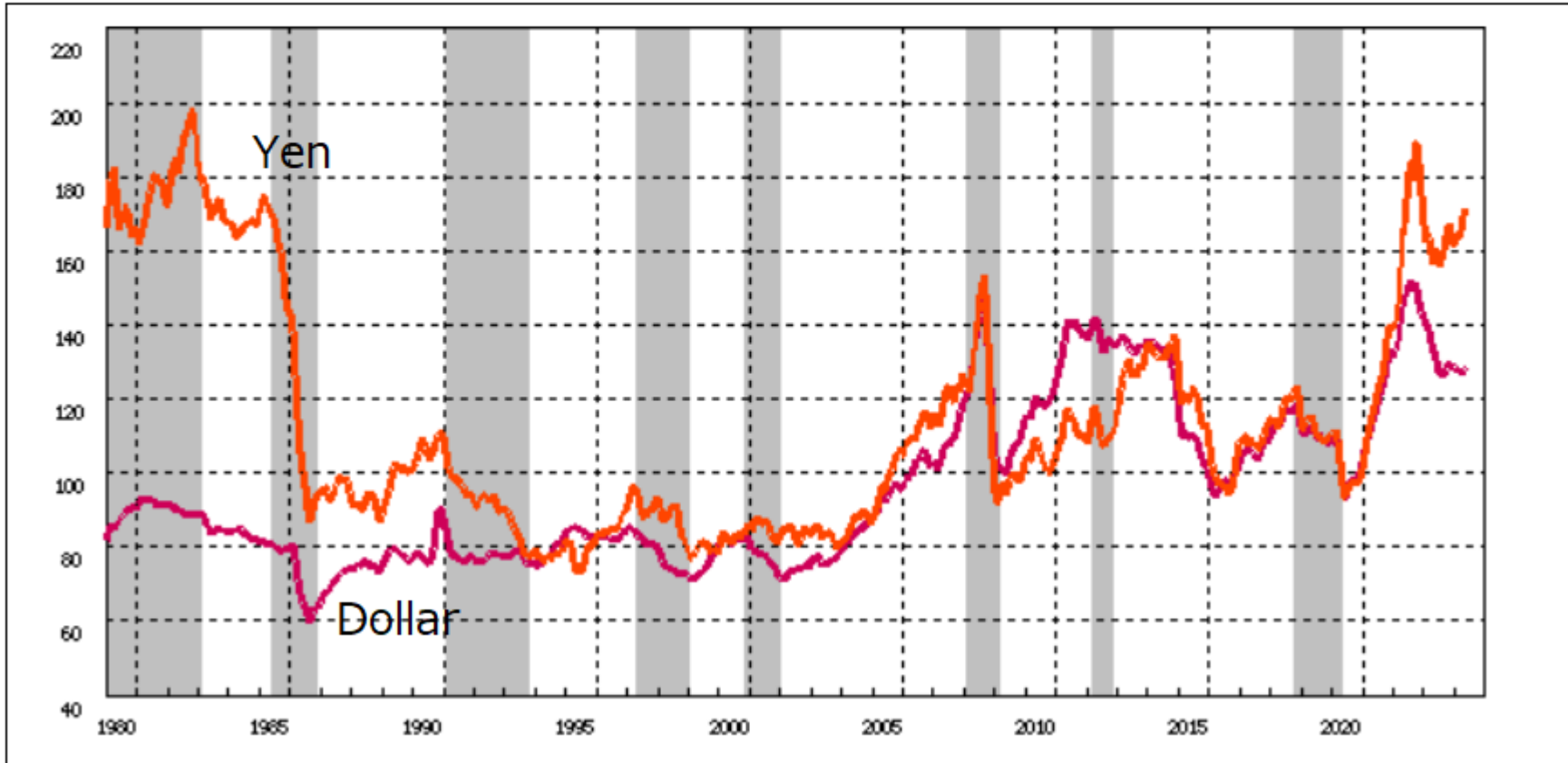
# Export and Import Price in Dollar



The dollar price of Japan's exports has shown a long-run stagnated trend, while the dollar price of Japan's imports increased in the early 2000s, reflecting the rise in the energy and food prices.

# Import Price Index in Yen and Dollar

Import Price of Japan



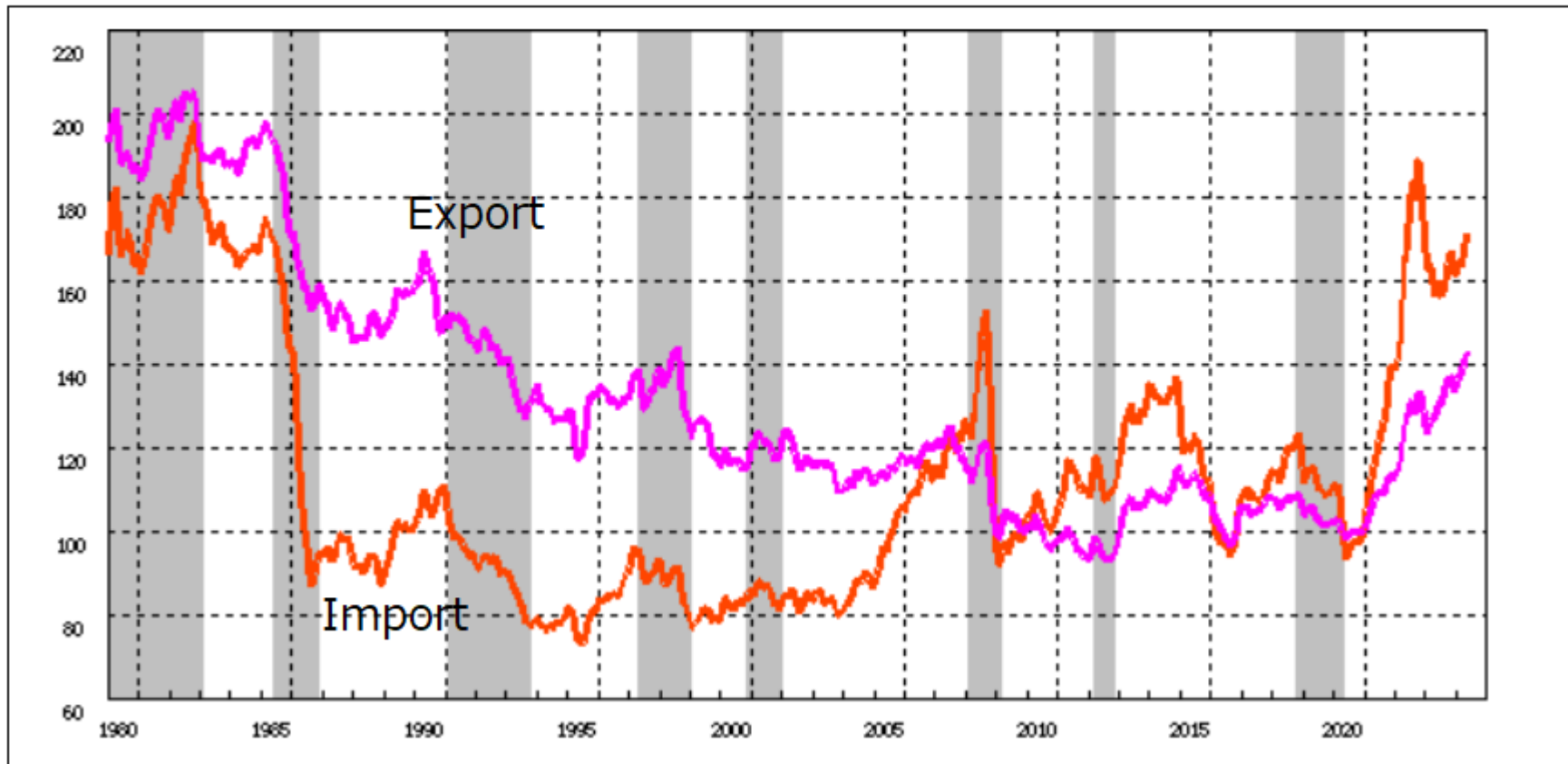
In 1985, there was a sudden and large decline in Japan's import prices denominated in Yen, which was caused by the Plaza Accord that brought the rise and fall of the Japanese economy.

There is an increasing trend of Japan's import prices, mainly of food and energy.



# Export and Import Price Index in Yen

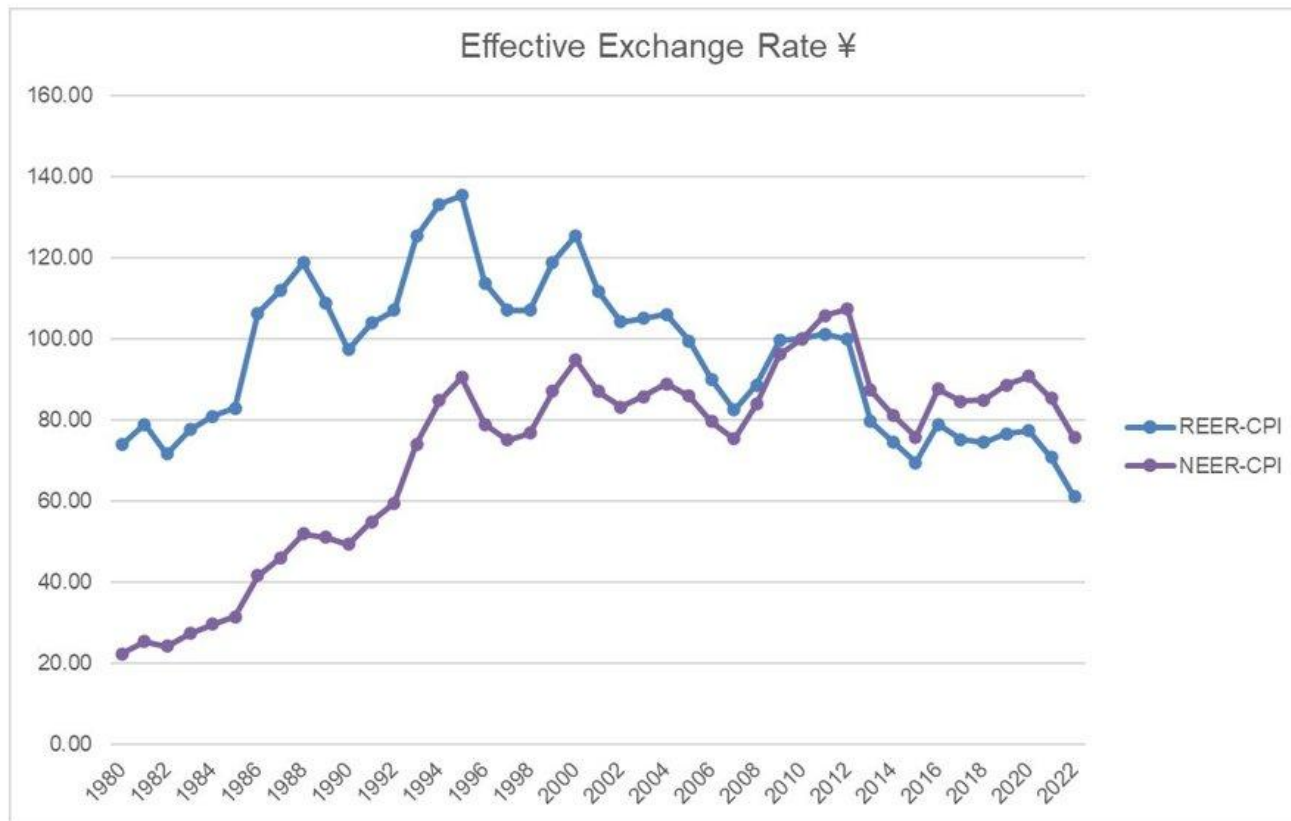
Export and Import Price Index (¥)



Japan's import prices in Yen are more volatile than Japan's export prices in Yen, suggesting the Yen appreciation is associated with the decline in food and energy prices.

# Nominal versus Real Effective Exchange Rate

## Nominal versus Real Effective Exchange Rate



Inflation is reflected in the REER, while it is not in the NEER, suggesting the larger decrease in the REER has been caused by Japan's low inflation rate relative to the west.

The Abenomics targeting acceleration of inflation has not effectively created inflation sufficient to raise the REER.

# Consumer Price Index (CPI)

表1 総合、生鮮食品を除く総合、生鮮食品及びエネルギーを除く総合の指数及び前年同月比

2020年=100

原数値		2024年		2025年										
		10月	11月	12月	1月	2月	3月	4月	5月	6月	7月	8月	9月	10月
総合	指数	109.5	110.0	110.7	111.2	110.8	111.1	111.5	111.8	111.7	111.9	112.1	112.0	112.8
	前年同月比 (%)	2.3	2.9	3.6	4.0	3.7	3.6	3.6	3.5	3.3	3.1	2.7	2.9	3.0
生鮮食品を除く総合	指数	108.8	109.2	109.6	109.8	109.7	110.2	110.9	111.4	111.4	111.6	111.6	111.4	112.1
	前年同月比 (%)	2.3	2.7	3.0	3.2	3.0	3.2	3.5	3.7	3.3	3.1	2.7	2.9	3.0
生鮮食品及びエネルギーを除く総合	指数	108.1	108.4	108.4	108.5	108.7	109.2	109.7	110.0	110.3	110.5	110.9	110.8	111.5
	前年同月比 (%)	2.3	2.4	2.4	2.5	2.6	2.9	3.0	3.3	3.4	3.4	3.3	3.0	3.1

Row 1=General

Row 2=General minus fresh food

Row 3=General minus fresh food and energy

<https://stat.go.jp/data/cpi/sokuhou/tsuki/index-z.html>

# Consumer Price Index (CPI)

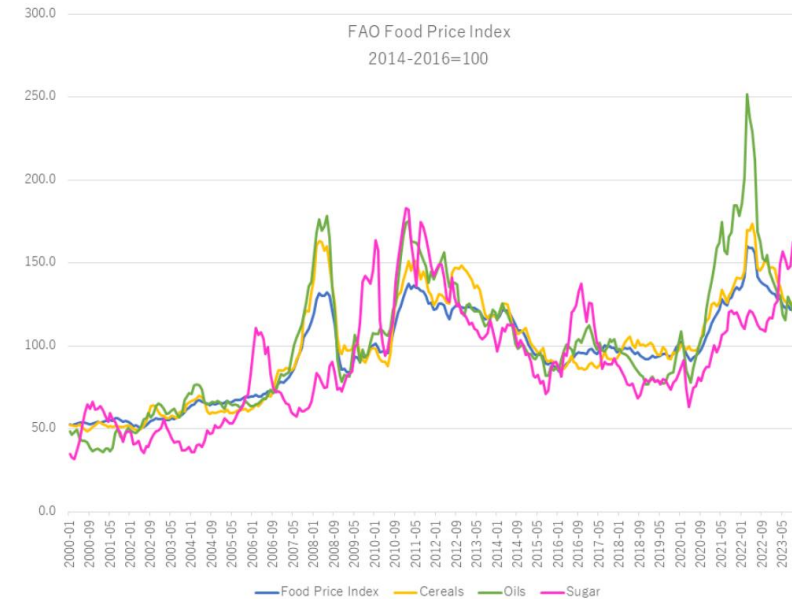
年 月	原 数							Home goods	Furniture
	総 合 Total	生鮮食品を 除く総合	生鮮食品及び エネルギー を除く総合	食 料 Food	生鮮食品	生鮮食品 を除く 食 料	住 居 Housing	光熱・ 水 道 utility	家具・ 家事用品
ウェイト 指数	10000	9604	8892	2626	396	2230	2149	693	387
2019 年平均	100.0	100.2	99.8	98.7	96.8	99.0	99.4	102.5	97.7
2020	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2021	99.8	99.8	99.5	100.0	98.8	100.2	100.6	101.3	101.7
2022	102.3	102.1	100.5	104.5	106.7	104.1	101.3	116.3	105.5
2023	105.6	105.2	104.5	112.9	114.6	112.6	102.4	108.5	113.8
2022 年 5 月	101.8	101.6	100.1	103.4	107.5	102.6	101.1	115.2	105.1
6	101.8	101.7	100.1	103.6	105.7	103.2	101.2	115.6	105.7
7	102.3	102.2	100.6	104.0	104.9	103.8	101.2	117.0	106.3
8	102.7	102.5	100.9	104.5	106.4	104.2	101.3	117.9	106.8
9	103.1	102.9	101.1	105.6	108.5	105.0	101.3	118.5	108.4
10	103.7	103.4	101.7	107.1	109.6	106.7	101.8	119.7	108.7
11	103.9	103.8	102.0	107.8	107.2	107.9	101.9	121.0	109.6
12	104.1	104.1	102.1	107.9	105.7	108.3	102.0	123.3	108.6
2023 年 1 月	104.7	104.3	102.2	109.5	114.2	108.7	102.0	124.5	108.5
2	104.0	103.6	102.6	110.0	113.3	109.4	102.1	110.8	109.2
3	104.4	104.1	103.2	110.4	111.6	110.2	102.1	110.2	111.4
4	105.1	104.8	104.0	111.6	111.4	111.6	102.2	109.9	114.1
5	105.1	104.8	104.3	112.2	113.1	112.1	102.3	105.6	115.2
6	105.2	105.0	104.4	112.2	109.7	112.7	102.3	108.0	114.8
7	105.7	105.4	104.9	113.1	111.7	113.4	102.4	105.8	115.3
8	105.9	105.7	105.2	113.5	112.1	113.8	102.4	103.4	114.4
9	106.2	105.7	105.4	115.0	119.0	114.3	102.5	101.5	115.0
10	107.1	106.4	105.8	116.3	125.0	114.8	102.5	107.7	116.2
11	106.9	106.4	105.9	115.6	118.4	115.2	102.6	107.2	116.3
12	106.8	106.4	105.9	115.2	116.0	115.1	102.6	107.1	115.7
2024 年 1 月	106.9	106.4	105.8	115.7	119.5	115.0	102.7	107.2	115.6
2	106.9	106.5	105.9	115.3	116.2	115.1	102.8	107.4	114.8
3	107.2	106.8	106.2	115.7	117.7	115.3	102.8	108.3	114.9
4	107.7	107.1	106.5	116.4	121.5	115.5	102.8	108.8	117.0
5	108.1	107.5	106.6	116.8	123.1	115.7	102.9	112.6	118.6

- Cumulative rise in CPI affects people's recognition of the economy more directly than the current rise in CPI.
- Cumulative CPI is normalized to 100 for 2020.
- In May 2024, Total CPI is 108.
- CPI is
  - 117 for food
  - 103 for housing rent
  - 113 for utility
  - 119 for home goods and furniture
- Most of food, energies, and home goods are imported from abroad, much affected by world inflation.

## FAO food price index

2024-04-08

		Food Price Index <sup>1</sup>	Meat <sup>2</sup>	Dairy <sup>3</sup>	Cereals <sup>4</sup>	Vegetables Oils <sup>5</sup>	Sugar <sup>6</sup>
2007		94.6	77.8	122.4	100.9	107.3	62.4
2008		117.7	90.8	132.3	137.6	141.1	79.2
2009		91.8	81.6	91.4	97.2	94.4	112.2
2010		106.9	91.4	111.9	107.5	122.0	131.7
2011		131.8	105.0	129.9	142.2	156.5	160.9
2012		122.8	104.7	111.7	137.4	138.3	133.3
2013		120.1	106.2	140.9	129.1	119.5	109.5
2014		115.0	112.1	130.2	115.8	110.6	105.2
2015		93.1	96.8	87.1	95.9	89.9	83.2
2016		92.0	91.1	82.6	88.3	99.4	111.6
2017		97.9	97.5	108.0	91.0	101.9	99.1
2018		95.8	94.4	107.3	100.8	87.8	77.4
2019		94.9	99.5	102.8	96.6	83.2	78.6
2020		98.1	95.3	101.8	103.1	99.4	79.5
2021		125.7	107.5	119.6	131.2	164.9	109.3
2022		144.5	118.3	149.5	154.7	187.8	114.5
2023		124.5	114.1	123.7	130.9	126.3	145.0
2024		122.0	117.3	129.7	113.5	138.1	125.7
2024	November	127.7	118.7	139.8	111.4	164.1	126.4
	December	127.3	119.6	141.2	111.4	162.1	119.3
2025	January	124.7	116.7	143.1	111.8	153.0	111.2
	February	126.6	116.9	147.7	112.6	156.0	118.5
	March	127.2	118.3	148.7	109.7	161.8	116.9
	April	128.2	121.6	151.7	110.9	158.0	112.3
	May	127.1	122.8	153.6	109.0	152.2	109.4
	June	128.1	126.0	155.5	107.3	155.7	103.6
	July	129.8	126.7	154.6	106.5	166.8	103.3
	August	130.0	127.8	152.3	105.7	169.1	103.6
	September	128.7	128.1	147.2	104.9	167.9	99.4
	October	126.6	125.5	141.9	103.6	169.4	94.1
	November	125.1	124.6	137.5	105.5	165.0	88.6



<https://www.jircas.go.jp/ja/program/proc/blog/20240408>

### Rising food price

- World food prices rose sharply during the economic recovery after the Corona disaster. This is the main cause of the recent political turmoil.
- However, as we move into 2024, the price increase has subsided and some prices are declining.

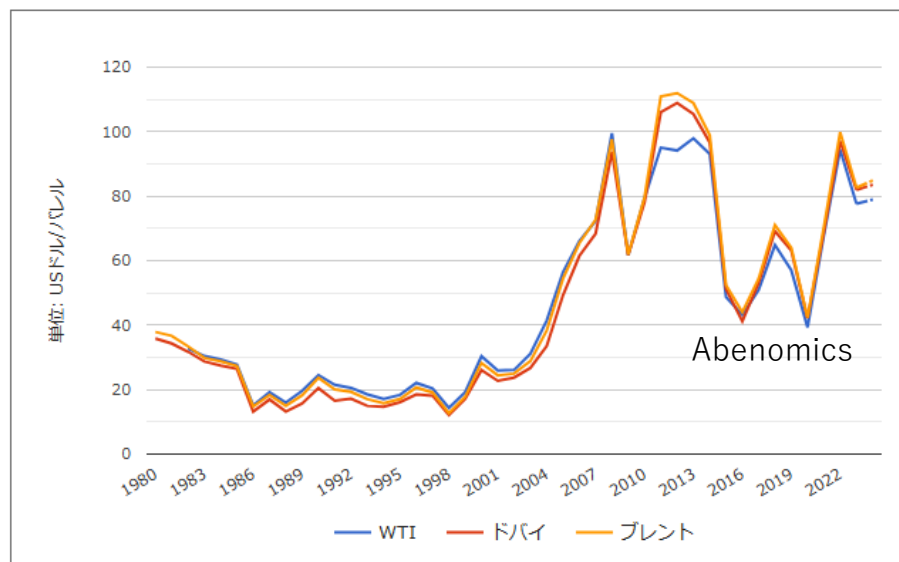
- Although PM Abe resigned because of its failure of handling the anti-Corona measures, Corona was only one of the foreign circumstances that made his situation worse.
- These days, foreign circumstances have a greater impact on Japanese politics than the performance by domestic policies.
- The impact of foreign shocks on domestic politics differs depending on whether exchange rate fluctuations amplify the shocks or, conversely, reduce them.
- In the past, the dollar/yen rate moved in the direction of reducing shocks from abroad (war, recession, inflation, etc.), so politics was not destabilized.
- During the DPJ administration, world food prices were also high, but domestic prices did not rise because of the strong yen.
- Recently, however, the yen has weakened in tandem with rising international prices for energies and food, amplifying the shocks and increasing public dissatisfaction with politics.

How foreign  
exchange rates  
affect politics?



# Living cost is more important than political scandals

- The dollar-yen rate has risen by about 1.5 times compared to its stable period. With rising food prices coming to Japan, it is no wonder that the approval rating of the administration is falling.
- The media is still saying that "politics-money scandals have caused distrust in politics," but the economy and people's lives are much more important.
- Gerald Curtis (Columbia University) said on Japanese TV that "the issue of politics and money is nothing compared to the era of Kakuei Tanaka and Shin Kanemaru."
- What the people are most upset about is the rising cost of living.
- Reflationists say, "There are many advantages to a weak yen," but they cannot persuade the public.



※ 画像出力

年	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
WTI	no data	no data	32.77	30.41	29.38	27.76	15.08	19.16	15.97	19.60
ドバイ	35.85	34.29	31.76	28.73	27.49	26.46	13.20	16.94	13.22	15.70
ブレント	37.89	36.68	33.42	29.83	28.80	27.33	14.77	18.34	14.97	18.22
年	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
WTI	24.49	21.48	20.56	18.56	17.16	18.37	22.07	20.33	14.35	19.24
ドバイ	20.46	16.56	17.19	14.94	14.67	16.12	18.54	18.10	12.13	17.17
ブレント	23.68	20.07	19.31	17.02	15.83	17.07	20.65	19.09	12.72	17.81
年	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
WTI	30.33	25.92	26.09	31.11	41.44	56.44	66.04	72.28	99.56	61.65
ドバイ	26.08	22.71	23.72	26.74	33.46	49.29	61.43	68.37	93.78	61.75
ブレント	28.27	24.42	24.97	28.85	38.30	54.43	65.39	72.70	97.64	61.86
年	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
WTI	79.43	95.05	94.16	97.94	93.11	48.71	43.19	50.91	64.82	57.01
ドバイ	78.06	106.03	108.90	105.43	96.66	51.18	41.20	53.12	69.15	63.18
ブレント	79.64	110.94	111.97	108.86	98.94	52.37	44.05	54.39	71.07	64.03
年	2020	2021	2022	2023	2024					
WTI	39.31	67.96	94.43	77.67	78.93					
ドバイ	42.17	68.81	97.05	81.98	83.53					
ブレント	42.30	70.44	99.82	82.62	84.87					

単位: USドル/バレル

※ 年間の平均価格

※ 数値 は1月～最新月の平均価格

<出典>

※ World Bank - Commodity Markets

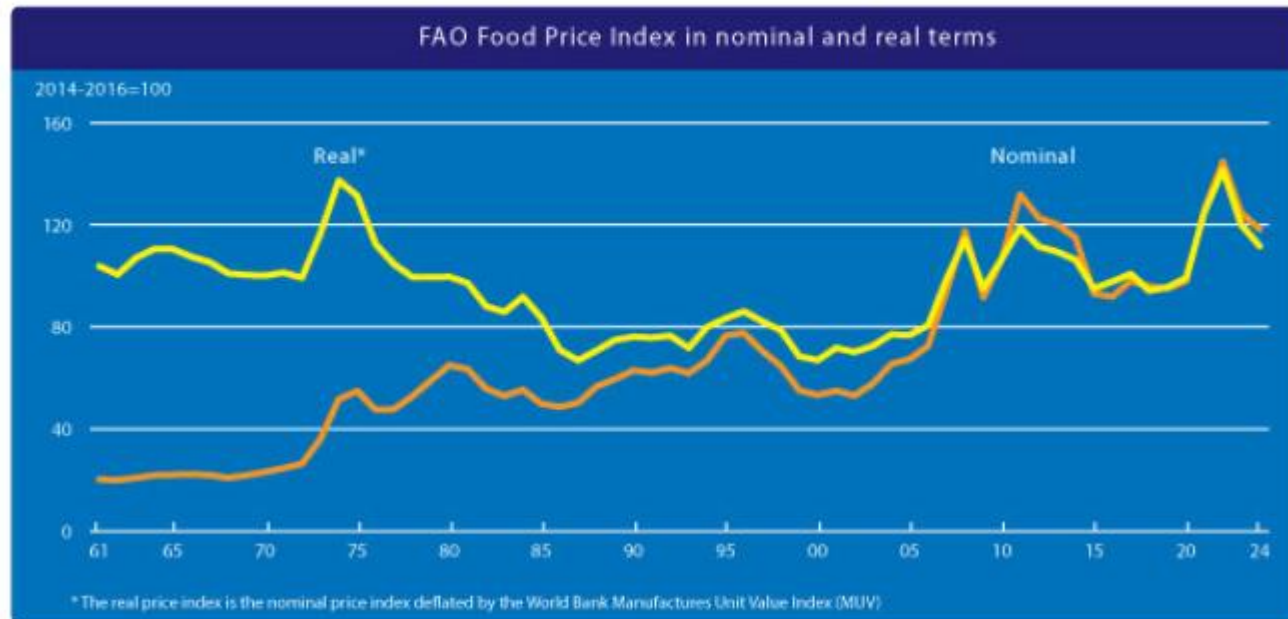
# World Oil Price

- World oil prices remained stable at low levels until 2000, but rose sharply after 2000, reaching a high of around \$100 in the 2010s.
- The price then declined sharply through the Corona period but has recently risen sharply again.
- It can be said that the stability of the Abe administration has been brought by the low and stable price of crude oil.

[https://ecodb.net/commodity/group\\_oil.html](https://ecodb.net/commodity/group_oil.html)



# Return of the Pessimism



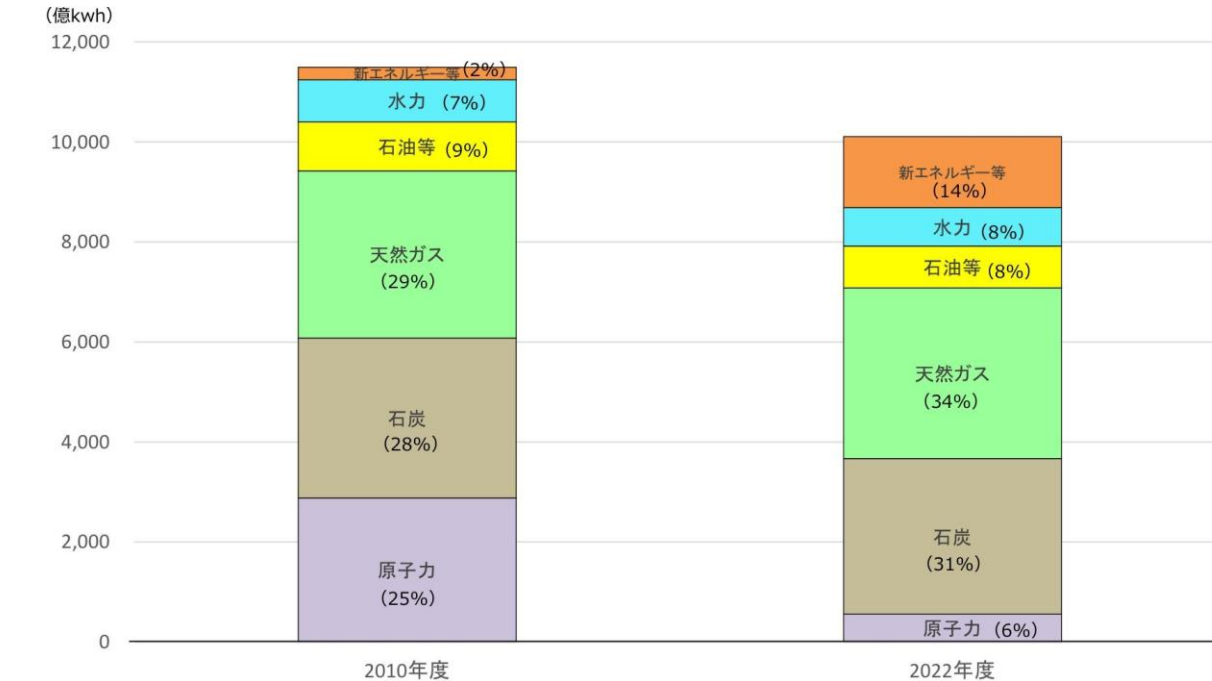
<https://fao.org/worldfoodsituation/foodpricesindex/en/>

- The long-term trend of the real index of the World Food Price (perhaps denominated by the CPI) shows that it was high until about 1975, then declined and remained stable at a low level until about 2005.
- The period from 1975 to 2005 can be described as a period of optimism, while the period after 2005 is the return of pessimism originally proposed by the Club of Rome in 1972, which emphasized the upcoming food crisis.
- The rise in the price of food and energy might have been brought by the Globalization with economic growth of emerging countries.<sup>1</sup>

## 電源構成の推移

図表 4

- 原子力の占める割合は東日本大震災後に減少。その分、石炭・天然ガス等の化石燃料や太陽光等の割合が増加。



(※) 「新エネルギー等」には、太陽光、風力、地熱、バイオマス、が含まれる。

(出所) 資源エネルギー庁 「総合エネルギー統計」

4

# Changes in Power Supply Composition

Energy consumption in power supply has significantly declined in the last decade, while Japan's real GDP is growing.

Energy saving has been driven by the efforts of the government and the industries to avoid the energy shortage after the east-Japan mega-earthquake and the nuclear power plant accident in 2011.

[https://mof.go.jp/policy/international\\_policy/councils/bop/20240701140554.html...](https://mof.go.jp/policy/international_policy/councils/bop/20240701140554.html...) [https://mof.go.jp/policy/international\\_policy/councils/bop/20240702.pdf](https://mof.go.jp/policy/international_policy/councils/bop/20240702.pdf)

What drives foreign exchange rates?

# Theories to explain exchange rates

- Current account approach: The idea that exchange rates are determined by current transactions of currencies, such as trade balance and income balance. This was the mainstream approach until the 1970s.
- Asset approach: The idea that exchange rates are determined by asset transactions such as deposits, bonds, and stocks, which became the mainstream idea around the 1980s.
- Interest rate parity
- Purchasing power parity
- Labor Productivity

# Uncovered Interest rate parity (UIRP)

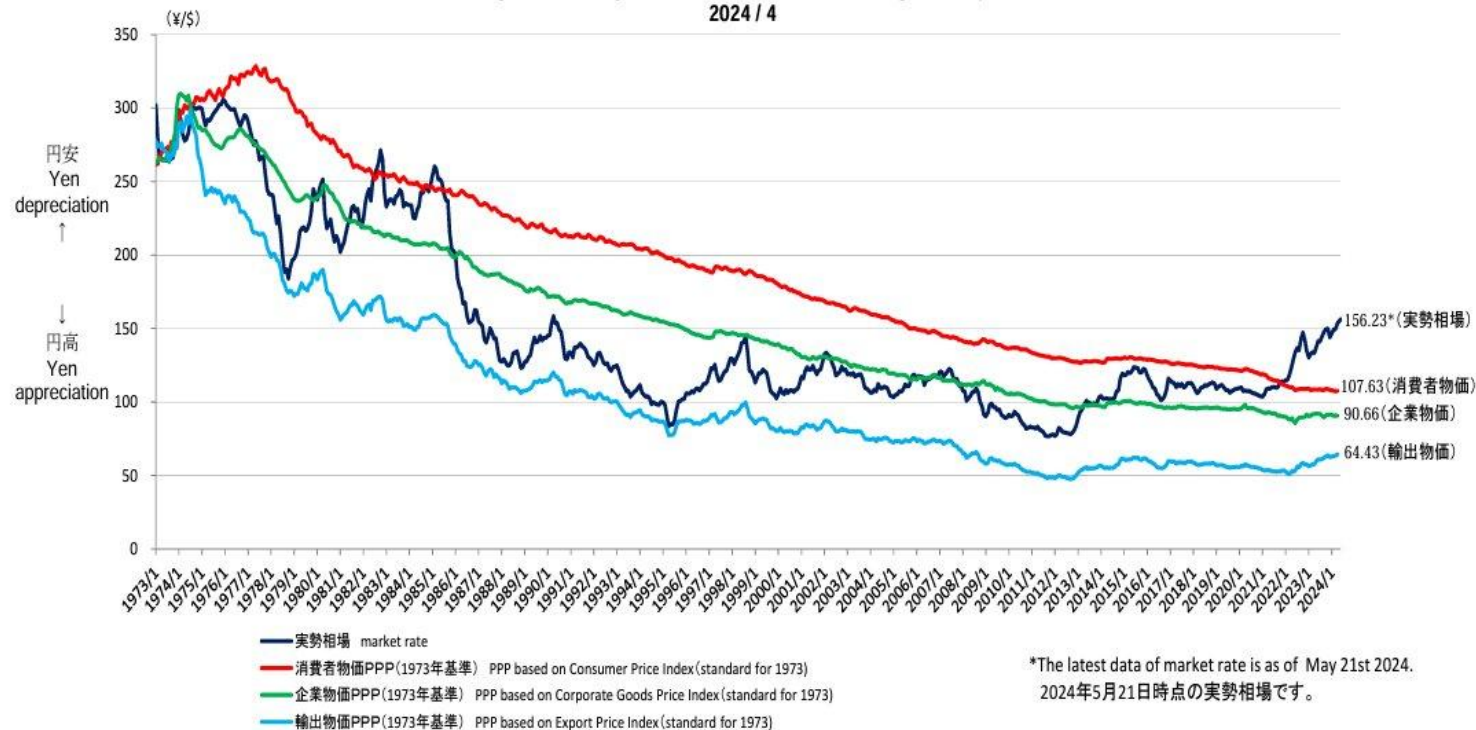
- The idea that exchange rates are determined in such a way as to equalize the rates of return of each currency.
- There are different versions with and without currency hedging.
- For example, the currency of a high-interest-rate country will eventually depreciate, but at the start of the comparison, the currency will instead rise in value to reflect future depreciation.
- To complicate matters, for example, the dollar/Yen rate is currently appreciating due to the large difference in interest rates between Japan and the U.S.
- However, in order for the rate of return to equalize, the dollar should depreciate in the future. However, in a phase of widening interest rate differentials, the currencies of higher-interest-rate countries will apparently rise.
- Under the interest rate parity theory with currency hedging on the contrary, the rate of return on a currency is equalized after paying a premium to protect against exchange rate fluctuations.

# Covered Interest Rate Parity (CIRP)

- You can hedge the return to invest in dollar by signing a forward contract to sell dollars at forward rate,
- Assume that the interest rate per annum is 0% for Japan, 5% for US.
- The spot rate is  $\$1 = ¥150$ .
- If you invest  $¥1500$  into Yen, you will get  $\$1500$  one year later.
- Today you will get  $\$10$  by exchange your  $¥1500$  for dollars.
- If you invest  $\$10$  into dollar, you will get  $\$10.5$  one year later.
- If the yen appreciates one year later, your investment return will lose a part of its value if you convert it to Yen.
- But you can assure the Yen value of your investment into by selling dollars at a forward rate.
- If you now sign a forward contract to sell your dollar at forward rate  $142.857 (= 1500 / 10.5)$ , you will get  $¥1500$  for sure one year later.
- This is the covered interest rate parity.
- The forward rate is based not on the investor's speculation on the future exchange rate but on the prevailing interest rate spread.
- CIRP always holds if various transaction costs, institutional differences, and political costs are considered.

# Purchasing Power Parity (PPP)

- PPP says that exchange rate will converge to the rate at which all the prices of commodities will be equated across countries.
- However, the market exchange rate might diverge from its PPP rate for long time.
- Japanese yen has been overvalued against US dollar for 5 decades until 2021.
- Japanese yen has been undervalued against Euro for 5 decades. Diversion seems to expand.
- Euro was against US dollar
  - undervalued for 1999-2003
  - overvalued for 2003-2015
  - undervalued for 2015-



データ:消費者物価・・・日本 総務省、U.S. Department of Labor  
企業物価、輸出物価・・・日本銀行、U.S. Department of Labor、IMF  
ドル円相場・・・日本銀行

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

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# Dolar/Yen

- Black: market rate
- Red: PPP based on consumer price index (CPI)
- Green: PPP based on corporate price
- Blue: PPP based on export price.



ユーロ円購買力平価と実勢相場  
Purchasing Power Parity and market rate / Euro against Japanese Yen  
2024 / 3



# Euro/Yen

- Black: market rate
- Red: PPP based on consumer price index (CPI)
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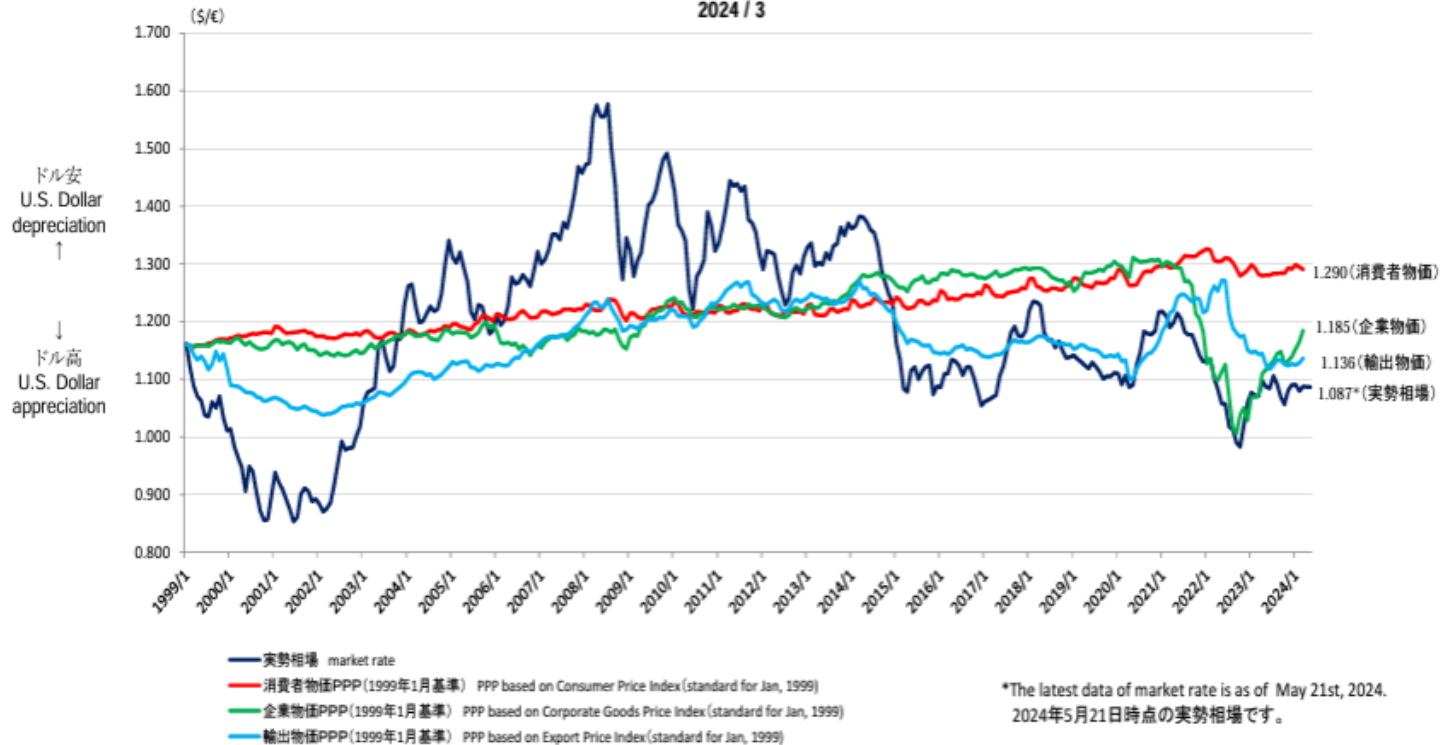
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# Euro/Dollar



公益財団法人 国際通貨研究所

ユーロドル購買力平価と実勢相場  
Purchasing Power Parity and market rate / Euro against U.S. Dollar  
2024 / 3



データ: 消費者物価、企業物価、輸出物価...U.S. Department of Labor, Eurostat, Datastream  
ユーロドル相場...ECB

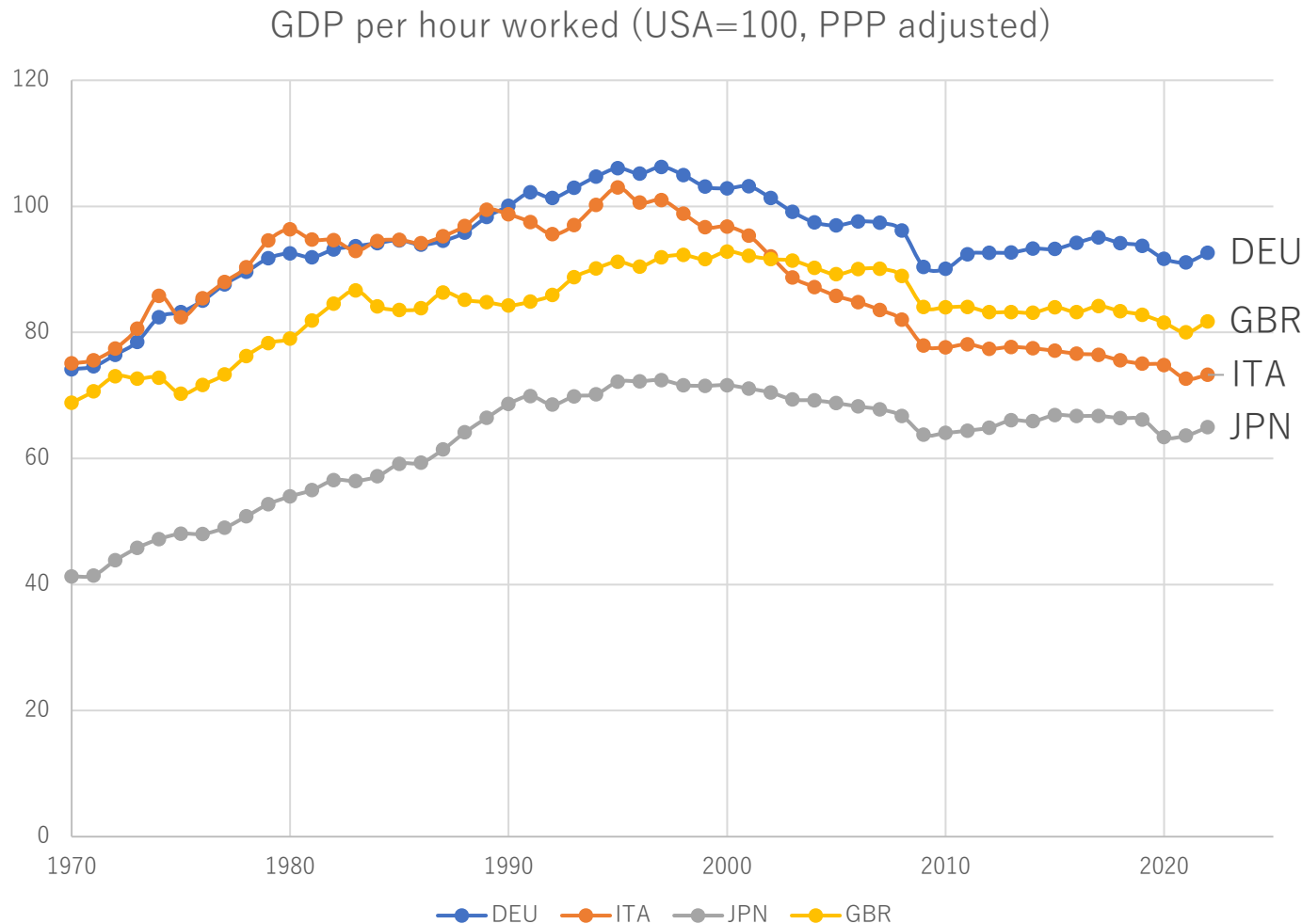
[グラフの原データはこちら \(The original data of the chart is here.\)](#)

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- Black: market rate
- Red: PPP based on consumer price index (CPI)
- Green: PPP based on corporate price
- Blue: PPP based on export price.

# Labor Productivity?



- Productivity seems not to well explain the exchange rate.
- GDP per hour worked in Japan has been 70% of the US.
- There is no such a large decline in Japan's labor productivity from its peak recorded in the middle of 1990s.
- No Japanese people have complained about the weak Yen until 2021, even though the relative labor productivity has been much lower than US for a long time.
- Relative decline in productivity in Europe seems to be larger than in Japan, while no continuing trend of Euro depreciation is observed,
- Japan's labor productivity might be undervalued because of some data problem.

# Summary

- Interest Rate Parity (UIRP or CIRP) seems to most convincingly explain the current Yen depreciation, while there are many residuals to be explained by other theories.
- The flow factors such as trade and capital investment, seem to be too small to generate such a large trend toward the weak Yen.
- Speculative incentives might affect the Yen depreciation.
- In the long-run, foreign exchange rates tend to converge to their PPP, while their inexplicable deviation might emerge for very long time.
- Productivity gap does not well explain the long-term trend of foreign exchange rates.

How to explain the real wage stagnation?

Employment, Hours, and Earnings from the Current Employment Statistics survey (National)

12-Month Percent Change

Series Id: CES0500000003

Seasonally Adjusted

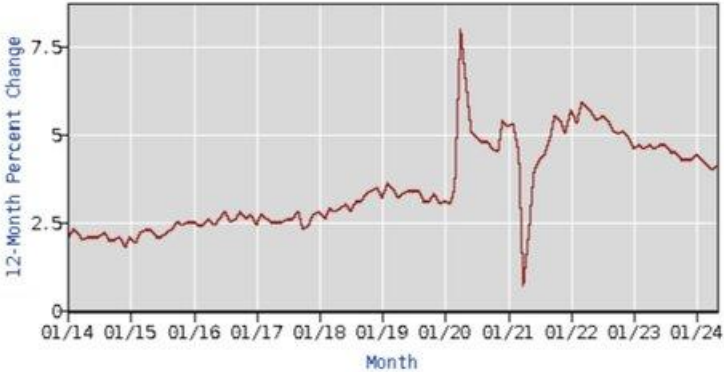
Series Title: Average hourly earnings of all employees, total private, seasonally adjusted

Super Sector: Total private

Industry: Total private

NAICS Code: -

Data Type: AVERAGE HOURLY EARNINGS OF ALL EMPLOYEES



Download: [XLS](#) [xlsx](#)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2014	2.0	2.3	2.2	2.0	2.1	2.1	2.1	2.2	2.0	2.0	2.1	1.8
2015	2.1	1.9	2.2	2.3	2.3	2.1	2.1	2.2	2.3	2.5	2.4	2.5
2016	2.5	2.4	2.4	2.6	2.4	2.6	2.8	2.5	2.6	2.8	2.6	2.7
2017	2.4	2.7	2.6	2.5	2.5	2.5	2.6	2.6	2.8	2.3	2.4	2.7
2018	2.8	2.6	2.9	2.8	2.9	3.0	2.8	3.1	3.1	3.3	3.4	3.5
2019	3.2	3.6	3.5	3.2	3.3	3.4	3.4	3.4	3.1	3.1	3.3	3.0
2020	3.1	3.0	3.5	8.0	6.7	5.1	4.9	4.8	4.8	4.6	4.5	5.4
2021	5.2	5.3	4.5	0.7	2.3	3.9	4.3	4.4	4.9	5.5	5.4	5.0
2022	5.7	5.3	5.9	5.8	5.6	5.4	5.5	5.4	5.1	5.0	5.1	4.9
2023	4.6	4.7	4.6	4.7	4.6	4.7	4.7	4.5	4.5	4.3	4.3	4.3
2024	4.4	4.3	4.1	4.0(P)	4.1(P)							

P : preliminary

# Average hourly earnings US

米労働統計局から持って来た、時間当たり賃金前年度比。20年と21年の4月だけ変な値なのはコロナ対応のせいだろう。コロナ以前は年率2.5%前後で上がっていたのが、コロナ明けに5%前後に跳ね上がった。インフレのタイミングとズレがないのは、日本では考えられず。

<https://data.bls.gov/pdq/SurveyOutputServlet>



Consumer Price Index for All Urban Consumers (CPI-U)

12-Month Percent Change

Series Id: CUSR0000SA0

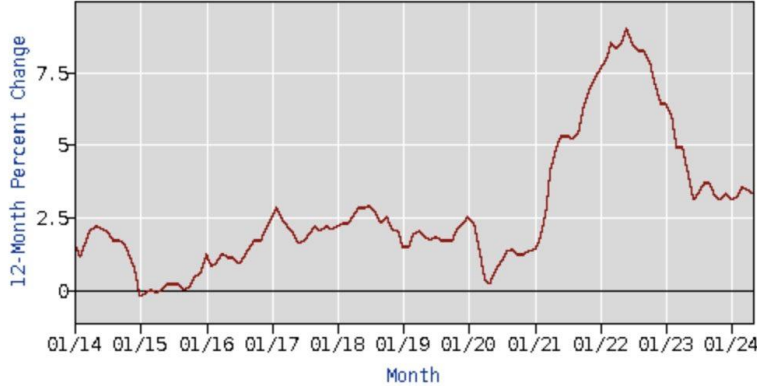
Seasonally Adjusted

Series Title: All items in U.S. city average, all urban consumers, seasonally adjusted

Area: U.S. city average

Item: All items

Base Period: 1982-84=100



Download: [xlsx](#)

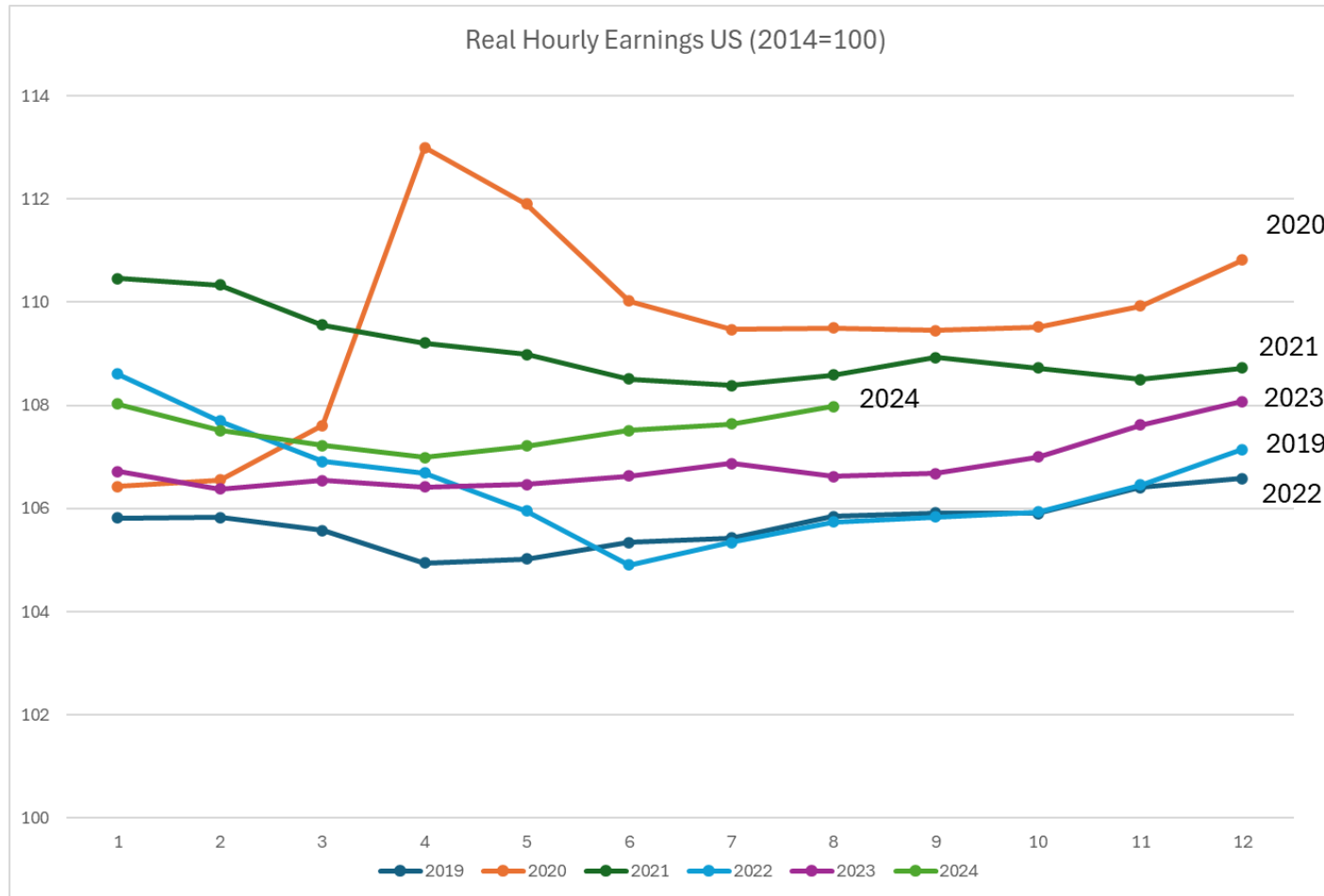
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	HALF1	HALF2
2014	1.6	1.1	1.6	2.0	2.2	2.1	2.0	1.7	1.7	1.6	1.2	0.7		
2015	-0.2	-0.1	0.0	-0.1	0.0	0.2	0.2	0.2	0.0	0.1	0.4	0.6		
2016	1.2	0.8	0.9	1.2	1.1	1.1	0.9	1.1	1.5	1.7	1.7	2.1		
2017	2.5	2.8	2.4	2.2	1.9	1.6	1.7	1.9	2.2	2.0	2.2	2.1		
2018	2.2	2.3	2.3	2.5	2.8	2.8	2.9	2.6	2.3	2.5	2.1	2.0		
2019	1.5	1.5	1.9	2.0	1.8	1.7	1.8	1.7	1.7	1.7	2.1	2.3		
2020	2.5	2.3	1.5	0.3	0.2	0.7	1.0	1.3	1.4	1.2	1.2	1.3		
2021	1.4	1.7	2.6	4.1	4.9	5.3	5.3	5.2	5.4	6.2	6.9	7.2		
2022	7.6	7.9	8.5	8.3	8.5	9.0	8.4	8.2	8.2	7.8	7.1	6.4		
2023	6.4	6.0	4.9	4.9	4.1	3.1	3.3	3.7	3.7	3.2	3.1	3.3		
2024	3.1	3.2	3.5	3.4	3.3									

# CPI urban consumers US

CPIの対前年上昇率。2020年までは賃金上昇率を平均的にやや下回っていたので、実質賃金がプラス成長していた。その後CPI上昇率は一時的に賃金上昇率を上回ったが、23年から逆転し、実質賃金上昇率は再びプラスになった。4年連続で実質賃金マイナスの日本は異常である。

<https://data.bls.gov/pdq/SurveyOutputServlet>

# Real Hourly Earnings US (2014=100)





☆ **Employed full time: Median usual weekly real earnings: Wage and salary workers: 16 years and over** (LES1252881600Q)

DOWNLOAD

**Observation:**  
Q3 2024: **371**  
(+ more)  
Updated: Oct 17, 2024  
9:02 AM CDT

**Units:**  
1982-84 CPI  
Adjusted Dollars,  
Seasonally Adjusted

**Frequency:**  
Quarterly

1Y | 5Y | 10Y | Max

2015-01-26

to 2024-07-01

EDIT GRAPH



The real wage in the US in 2024 is now higher than that in 2019.

It overshot in 2020 because working hour drastically decreased, while workers' income was raised by the government subsidy to prevent Covid-19 infection.

<https://fred.stlouisfed.org/series/LES1252881600Q>

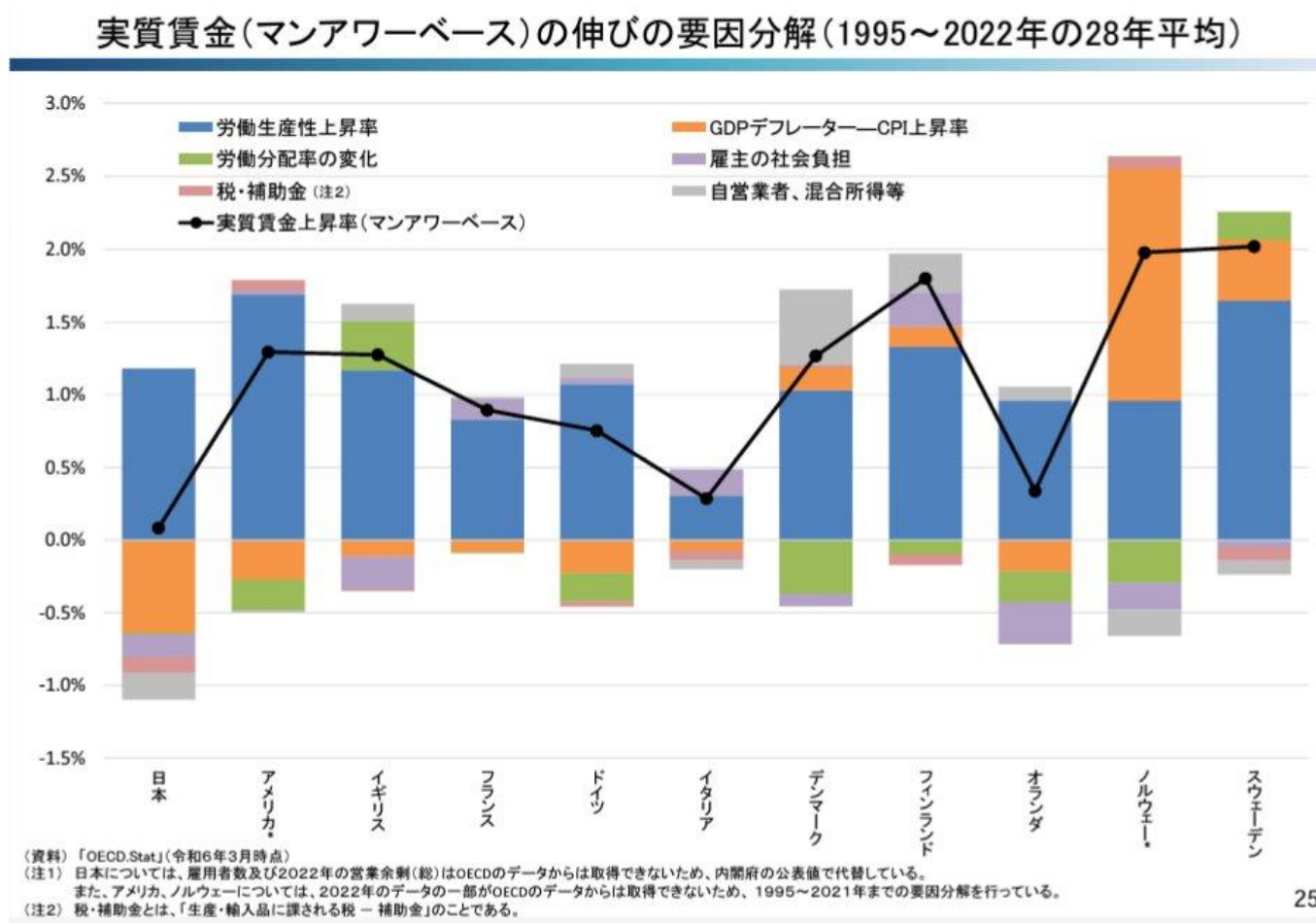
時系列表第6表  
各国公表による主要国の実質賃金

(前年比)

年 月	日本	アメリカ		イギリス	ドイツ
		時給	週給		
	%	%	%	%	%
2021年	0.5	-0.4	0.1	3.4	0.0
2022年	-0.5	-2.4	-2.9	-1.6	-4.0
2023年	-2.0	0.5	0.0	0.2	0.1
2024年	0.0	1.0	0.5	2.0	3.1
2024年 9 月	-0.1	1.4	0.9	2.2	3.4
10月	0.0	1.5	1.5	3.3	3.0
11月	0.9	1.4	1.1	1.7	3.1
12月	0.7	1.1	0.5	2.7	1.8
2025年 1 月	-2.2	0.9	0.6	1.3	1.1
2 月	-0.8	1.1	0.8	2.0	1.4
3 月	-1.2	1.4	1.2	2.3	1.0
4 月	-1.5	1.4	1.8	0.3	1.5
5 月	-2.0	1.4	1.4	0.4	1.7
6 月	-0.1	1.0	0.7	0.7	3.0
7 月	0.3	1.2	1.4	0.8	2.3
8 月	-1.4	0.8	0.6	1.2	0.0
9 月	-0.7	0.8	0.7	0.2	2.9
10月	-0.4	—	—	—	—

厚生労働省調べ (2025年11月28日15:00(JST)時点)

# Factorization of Real Wage 1995-2022



In the last 3 decades, Japan's real wage did not grow at all!

Japan's life standard might have deteriorated relatively to that of the western country, while Japan's daily life does not such a large stagnation.

How can we explain the gap between the economic data and our daily recognition?

# Factorization of real wage

(参考)実質賃金上昇率の要因分解について

$$\begin{aligned}
 \text{実質賃金(マンアワーベース)} &= \frac{\text{名目賃金(マンアワーベース)}}{\text{CPI}} \\
 &= \underbrace{\frac{\text{実質GDP}}{\text{総労働時間(就業者)}}}_{\text{労働生産性}} \times \underbrace{\frac{\text{GDPデフレーター}}{\text{CPI}}}_{\text{デフレーターとCPIの差}} \times \underbrace{\frac{\text{名目賃金(マンアワーベース)} \times \text{総労働時間(雇用者)}}{\text{名目GDP}}}_{(*)} \times \frac{\text{総労働時間(就業者)}}{\text{総労働時間(雇用者)}}
 \end{aligned}$$

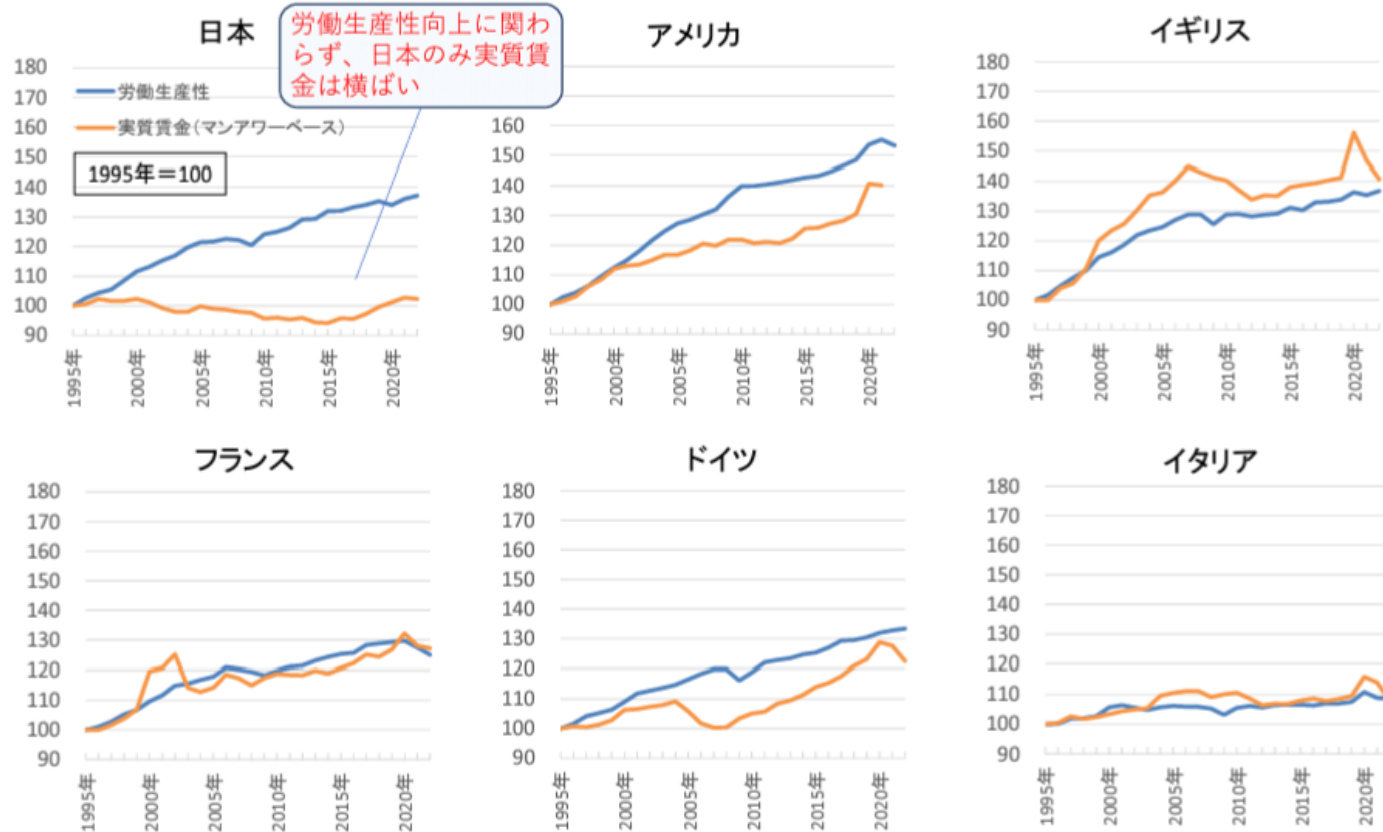
ここで、(\*)について、

$$\begin{aligned}
 &\frac{\text{名目賃金(マンアワーベース)} \times \text{総労働時間(雇用者)} (= \text{賃金・俸給})}{\text{名目GDP}} \times \frac{\text{総労働時間(就業者)}}{\text{総労働時間(雇用者)}} \\
 &= \frac{\text{雇用者報酬}}{\text{雇用者報酬} + \text{営業余剰(総)}} \times \frac{\text{賃金・俸給}}{\text{雇用者報酬}} \times \frac{\text{雇用者報酬} + \text{営業余剰(総)}}{\text{総労働時間(雇用者)}} \times \frac{\text{総労働時間(就業者)}}{\text{名目GDP}} \\
 &\quad = \text{時間当たり付加価値(雇用者)} \quad = 1 / \text{時間当たり付加価値(就業者)}
 \end{aligned}$$

$$\begin{aligned}
 &= \underbrace{\frac{\text{雇用者報酬}}{\text{雇用者報酬} + \text{営業余剰(総)}}}_{\text{労働分配率}} \times \underbrace{\frac{\text{賃金・俸給}}{\text{雇用者報酬}}}_{\text{雇主の社会負担}} \times \underbrace{\frac{\text{時間当たり間接税補助金除く付加価値(就業者)}}{\text{時間当たり付加価値(就業者)}}}_{\text{生産・輸入品に課される税-補助金}} \times \underbrace{\frac{\text{時間当たり付加価値(雇用者)}}{\text{時間当たり間接税補助金除く付加価値(就業者)}}}_{\text{自営業・混合所得等}}
 \end{aligned}$$

# Productivity and Real Wage: Advanced Economies

## 労働生産性と実質賃金の推移の国際比較①



(資料) 「OECD.Stat(令和6年3月時点)」を用いて年金局数理課にて作成。  
(注1) 賃金(マンアワーベース)については、賃金・俸給を雇用者数及び雇用者1人当たり平均労働時間で除することにより算出している。  
(注2) 日本の雇用者数はOECDのデータからは取得できないため、内閣府の国民経済計算の公表値で代替している。  
(注3) アメリカの2022年の労働生産性及び実質賃金(マンアワーベース)について、OECDのデータから取得できないため、2021年までとしている。

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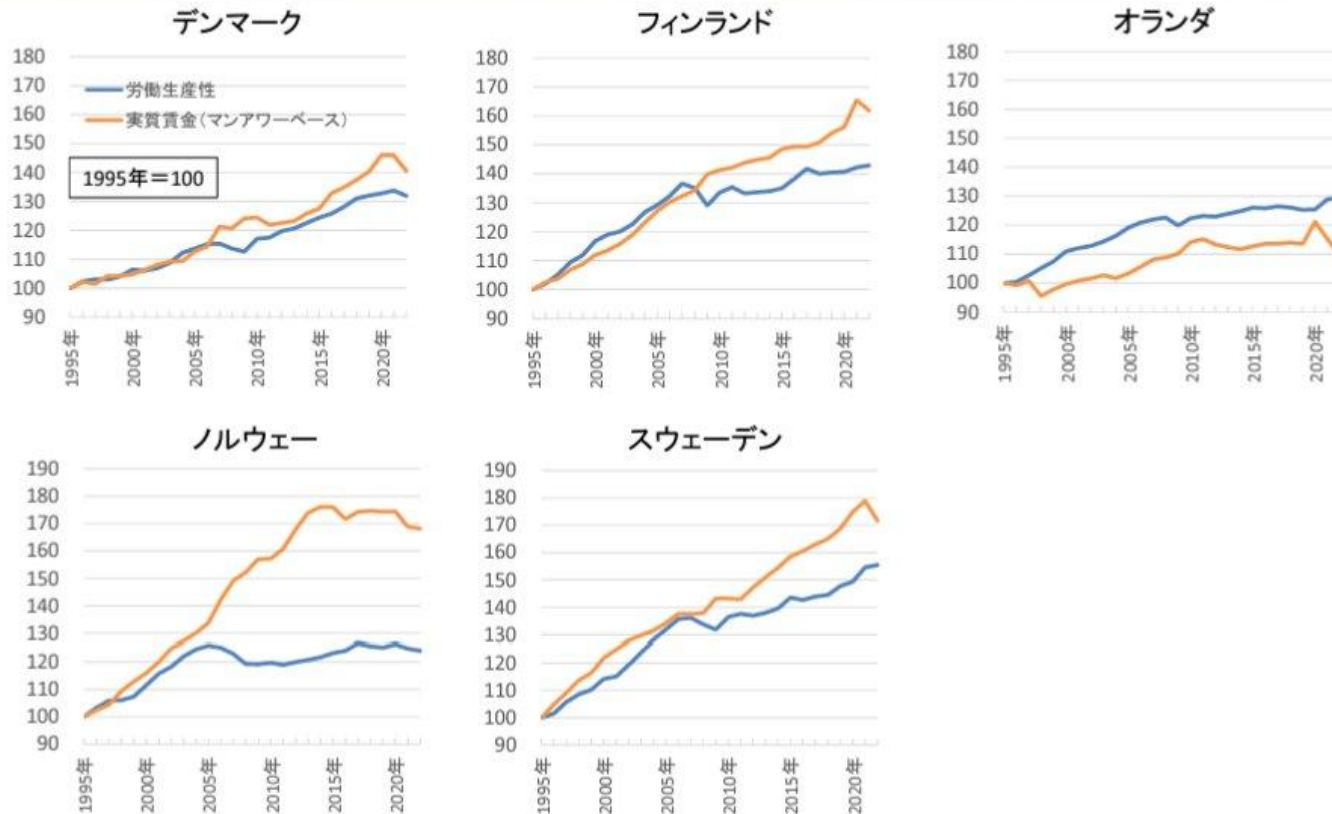
Japan is different from other G7 countries in the sense that there is a larger gap between labor productivity and the real wage.

This gap is explained mainly by the deterioration of the terms of trade = GDP deflator minus CPI.



# Productivity and Real Wage: Northern Europe

労働生産性と実質賃金の推移の国際比較②



(資料) 「OECD.Stat(令和6年3月時点)」を用いて年金局数理課にて作成。

(注) 賃金(マンアワーベース)については、賃金・俸給を雇用者数及び雇用者1人当たり平均労働時間で除することにより算出している。

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Interestingly, like Japan, Norway has a large discrepancy between real wages and labor productivity. However, this probably means that labor productivity growth is too large (and oil prices too high) to be used for **social security instead of wage increases**.

Norway's average annual real wage increase over the past 30 years has been 2%. Japan's is negative.

If Japan had abundant resources, there would be no need for intergenerational conflict over pensions and health care, and they could pay pensions with the proceeds from the sale of resources.

# Reports on Real Wage

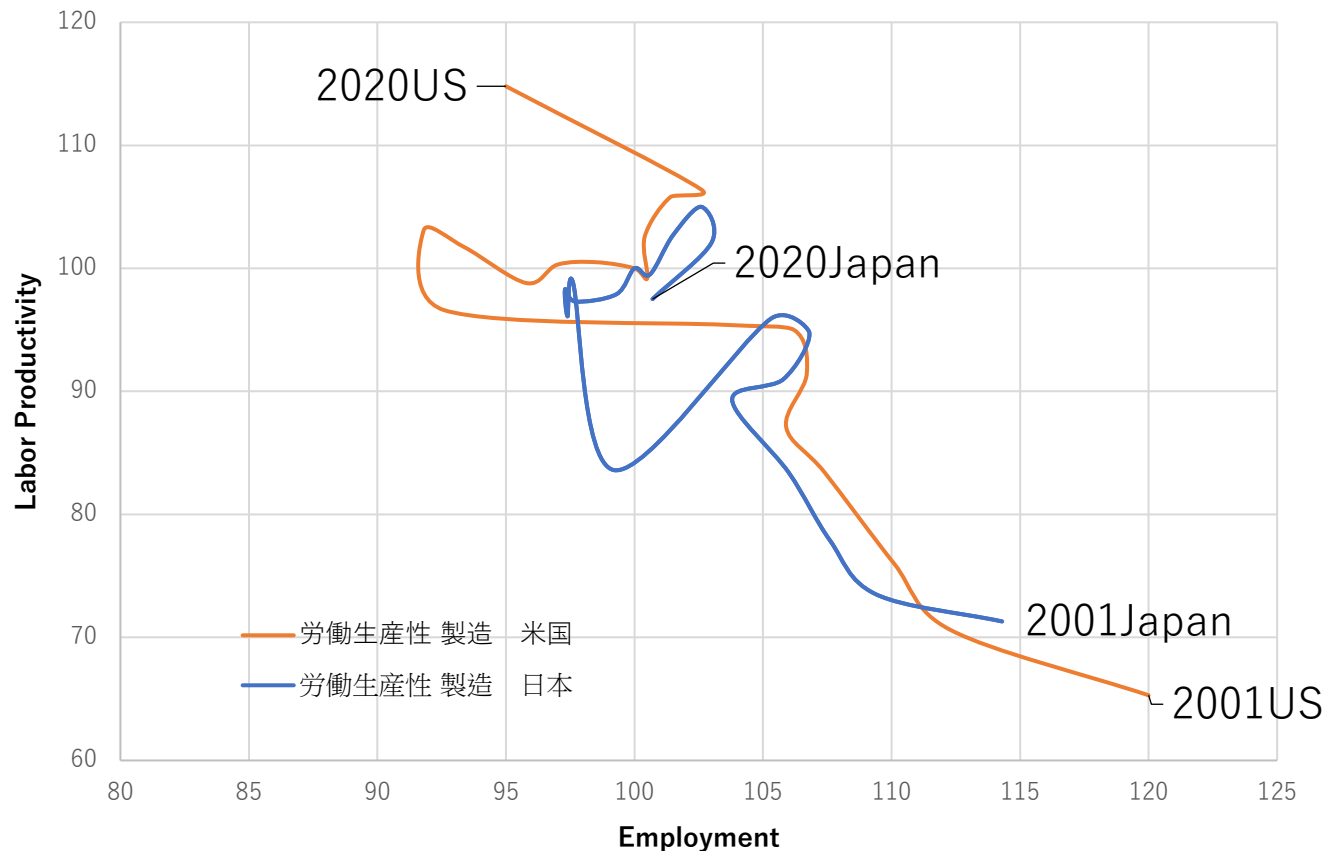
- インフレの日米欧比較  
<https://www.mizuho-rt.co.jp/publication/report/2024/pdf/insight-jp240703.pdf>
- CPI家賃はなぜ上がりにくいのか  
<https://www.mizuho-rt.co.jp/publication/report/2024/pdf/insight-jp240314.pdf>
- 消費者物価指数における民営家賃の経年原価調整  
<https://www.stat.go.jp/training/2kenkyu/ihou/79/pdf/2-2-796.pdf>
- アメリカの賃金と物価 <https://data.bls.gov/toppicks?survey=bls>
- Weekly Real Earnings  
<https://fred.stlouisfed.org/series/LES1252881600Q>

# Productivity Growth and Employment



# Manufacturing

## Manufacturing : Japan and US

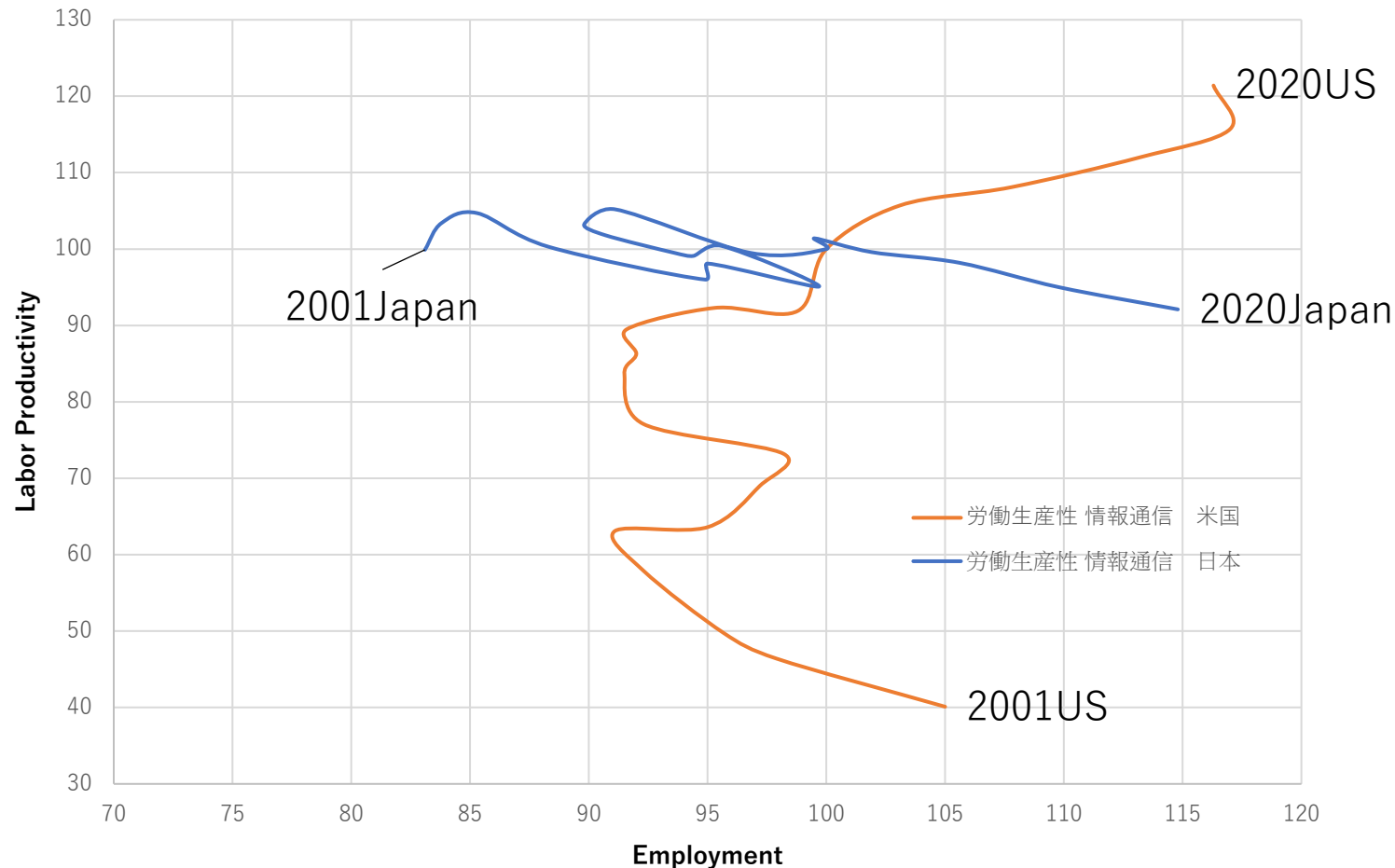


Labor productivity in manufacturing has been steadily growing both in Japan and US, while employment has declined in both Japan and US.

The popular theory that employment moves to the industry in which productivity grows faster, does not work in the real world.

# Information Technology

## IT : Japan and US



In the Information technology industry, the relation between productivity growth and employment differs drastically between Japan and US.

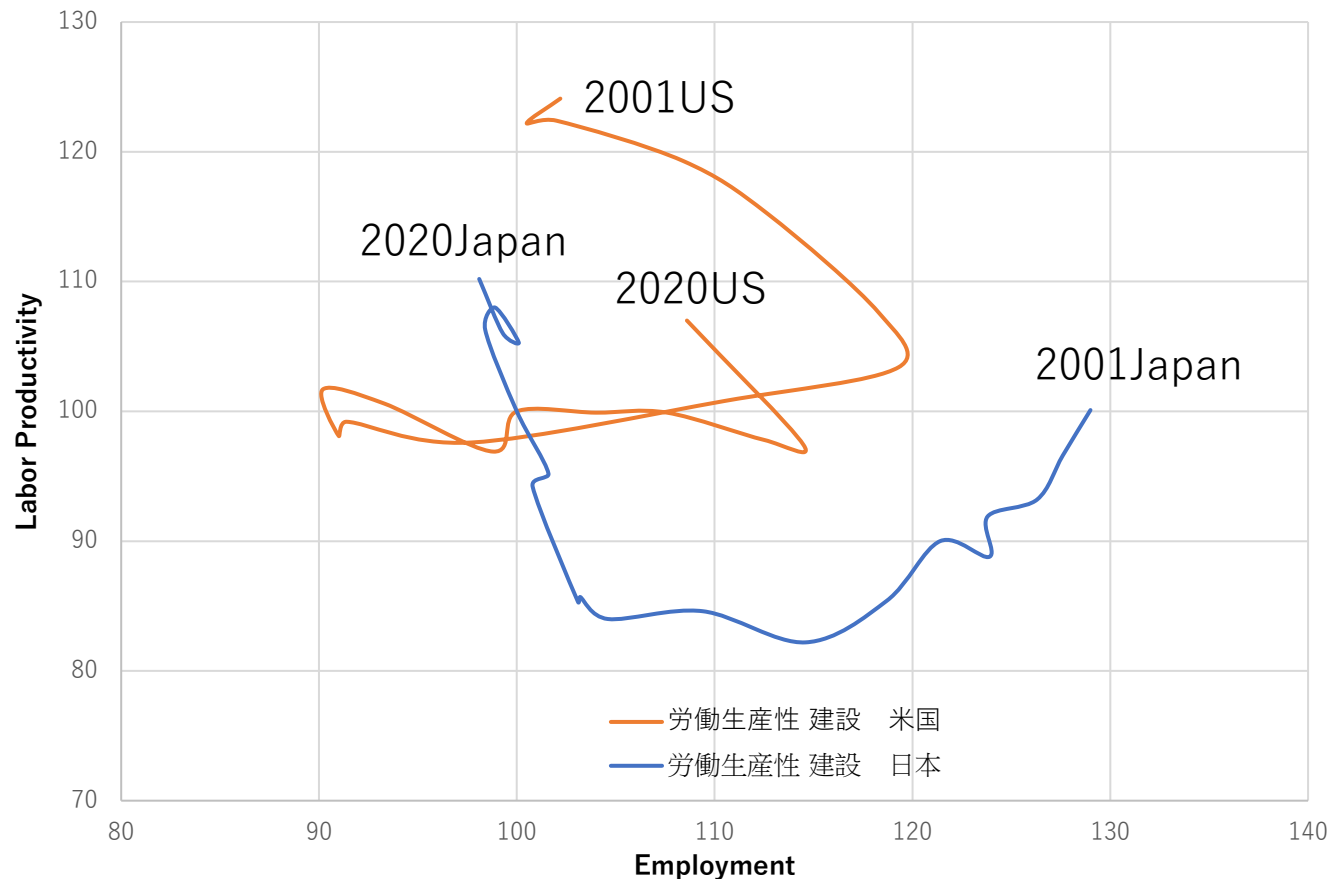
In Japan, productivity has stagnated in the last two decades, while employment has steadily grown.

In US, productivity seems to have grown in the last two decades, while employment temporarily stagnated around 2010.

# Construction

Surprisingly, the one Japanese industry that performs better than the U.S. is construction. In the U.S., as usual, employment fluctuates widely with economic changes, but from 2001 to 2020, labor productivity has declined.

Construction : Japan and US



In contrast, in Japan, labor productivity grew substantially. Perhaps the slump observed in the 2000s reflects the financial sector crisis, which continued until the early 2010s.

Abenomics led to a recovery in the real estate market as well as in the labor productivity of the industry.

# Discussion

1. The stagnation and decline in productivity in Japan's information and telecommunications industry as employment increases can be attributed to the large price declines experienced as information services become more widespread.
2. How should we explain the steady increase in productivity in the U.S. without the similar productivity stagnation?
3. The relatively better performance of Japan's construction industry might have been brought by the demand recovery created by the monetary easing under the Abenomics.

Supplement:  
Why does BOJ move so slowly?

# BOJ Reports (金融政策決定事項)

<https://www.boj.or.jp/mopo/mpmdeci/index.htm>

- 日本銀行「金融市場調節方針の変更について」  
[https://www.boj.or.jp/mopo/mpmdeci/state\\_2025/k250124a.htm](https://www.boj.or.jp/mopo/mpmdeci/state_2025/k250124a.htm)
- 日本銀行「長期国債買入の減額計画（2025年6月金融政策決定会合）」、  
[https://www.boj.or.jp/mopo/mpmdeci/mpr\\_2025/k250617b.pdf](https://www.boj.or.jp/mopo/mpmdeci/mpr_2025/k250617b.pdf)
- 金融市場調節方針の変遷  
<https://www.boj.or.jp/about/education/oshiete/seisaku/b42.htm>
- 2024年7月：無担保コールレート（オーバーナイト物）を0.25％程度で推移。国債買い入れ額を減額。 [https://www.boj.or.jp/mopo/mpmdeci/mpr\\_2024/k240731a.pdf](https://www.boj.or.jp/mopo/mpmdeci/mpr_2024/k240731a.pdf)
- 2024年3月：長短金利操作廃止。金融政策の目的を無担保コールレート（0.1％）に戻す。ETF、J-REIT購入終了 [https://www.boj.or.jp/mopo/mpmdeci/mpr\\_2024/k240319a.pdf](https://www.boj.or.jp/mopo/mpmdeci/mpr_2024/k240319a.pdf)
- 2016年：「マイナス金利付き量的・質的金融緩和」。マイナス金利（-0.1％）が日銀当座預金の一部に適用。「10年もの国債金利がゼロ％程度で推移するように」、長短金利を操作する。
- 2013年：「量的・質的金融緩和」開始。金融政策の操作目標を無担保コールレートからマネタリーベースに変更。

# The BOJ executive's remarks had a significant impact on the market.

- 氷見野副総裁2024年8月28日  
<https://www.nikkei.com/article/DGXZQOUB284LP0Y4A820C2000000/>
- 植田総裁2024年8月23日  
<https://www.nikkei.com/article/DGXZQOUB225MT0S4A820C2000000/>
- 「ハト派日銀に安堵」  
<https://www.nikkei.com/article/DGXZQOUB070RN0X00C24A8000000/>
- 内田副総裁2024年8月7日  
<https://www.nikkei.com/article/DGXZQOUB075QG0X00C24A8000000/>
- タカ派日銀で逆回転<https://www.nikkei.com/article/DGXZQOUB011HE0R00C24A8000000/>
- ドル円150円台に急上昇  
<https://www.nikkei.com/article/DGXZQOUB3167F0R30C24A7000000/>
- 植田総裁2024年7月31日  
<https://www.nikkei.com/article/DGXZQOUB312Z10R30C24A7000000/>
- 金利ある世界に本格回帰  
<https://www.nikkei.com/article/DGXZQOUB212RC0R20C24A7000000/>
- 市場との対話<https://www.nikkei.com/article/DGXZQODK175KI0X10C24A5000000/>
- 植田総裁「ハイ」2024年4月26日  
<https://www.nikkei.com/article/DGXZQOUB259XB0V20C24A4000000/>
- 日銀現状維持で円急落  
<https://www.nikkei.com/article/DGXZQOUB264AF0W4A420C2000000/>

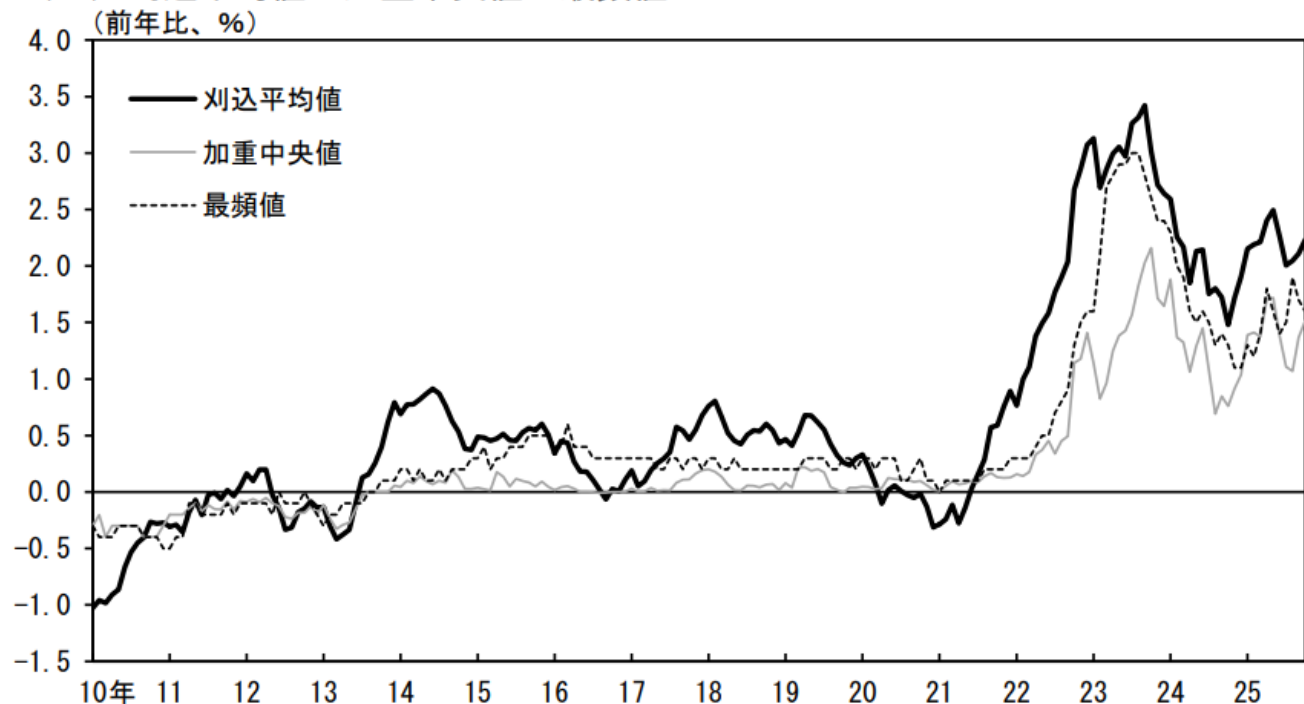
# BOJ and the Dollar/Yen

- 日銀は対話できない <https://www.nikkei.com/article/DGXZQOUA09C4K0Z00C24A5000000/>
- 茂木幹事長、日銀の利上げ言及2024年7月22日  
<https://www.nikkei.com/article/DGXZQOUA224FB0S4A720C2000000/>
- 日米要人から円安牽制発言相次ぐ <https://www.nikkei.com/article/DGXZQOUB177XA0X10C24A7000000/>
- 円キャリー取引 <https://www.nikkei.com/article/DGXZQOUB0925S0Z00C24A8000000/>
- 為替介入 <https://www.nikkei.com/article/DGXZQOUA30BQR0Q4A730C2000000/>
- 神田財務官 <https://www.nikkei.com/article/DGXZQOUA3068A0Q4A730C2000000/>
- イエレン氏「問題は通貨安誘導」  
<https://www.nikkei.com/article/DGXZQOQN26CQN0W4A720C2000000/>
- 投機筋の円売りにブレーキ <https://www.nikkei.com/article/DGXZQOUB189J70Y4A710C2000000/>
- 消費が弱いから利上げ <https://www.nikkei.com/article/DGXZQOCD129RF0S4A710C2000000/>
- 賃上げ効果の喪失に危機感 <https://www.nikkei.com/article/DGXZQOUA11BKS0R10C24A7000000/>
- 日本の購買力3分の1に <https://www.nikkei.com/article/DGKKZO81751260Z20C24A6MM8000/>



## 消費者物価の基調的な変動

(1) 刈込平均値・加重中央値・最頻値



- (注) 1. 消費者物価指数は、消費税率引き上げ・教育無償化政策、旅行支援策の影響を除く  
(2020/4月以降は、高等教育無償化等の影響も除いた日本銀行調査統計局の試算値)。  
下の図表も同じ。
2. 刈込平均値は、品目別価格変動分布の両端の一定割合（上下各10%）を機械的に控除した値。  
加重中央値は、価格上昇率の高い順にウェイトを累積して50%近傍にある値。最頻値は、  
品目別価格変動分布において最も頻度の高い価格変化率。

- BOJ's target is not the consumer price index (CPI) monthly announced by the Ministry of General Affairs.
- BOJ proposes three alternative criteria to be targeted by the monetary policy.
- They are:
  1. Cut-off average
  2. Weighted median
  3. Mode
- BOJ probably targets stabilizing the weighted median, because it is not so much affected by external factors such as prices of imports, and seems to reflect demand factors of the domestic economy.
- However, the weighted median might underestimate inflation since the distribution of inflation rates is skewed left.

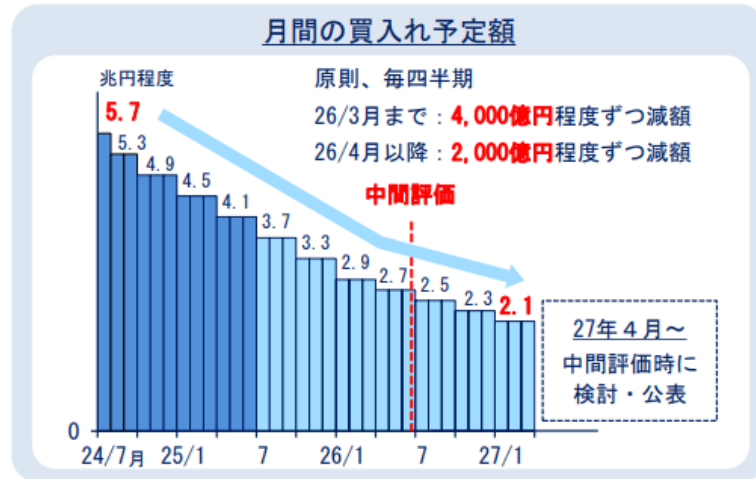
日本銀行「基調的なインフレ率を補足するための指標」

[https://www.boj.or.jp/research/research\\_data/cpi/index.htm](https://www.boj.or.jp/research/research_data/cpi/index.htm)

## 長期国債買入れの減額計画（2025年6月金融政策決定会合）

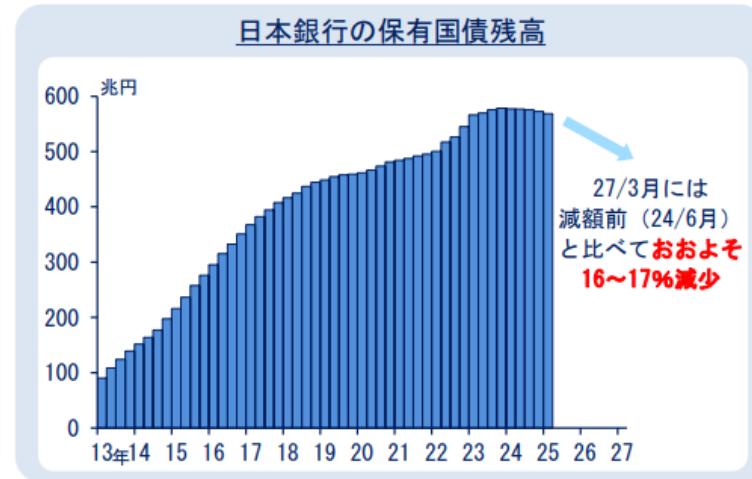
- ①長期金利：金融市場において形成されることが基本
- ②国債買入れ：国債市場の安定に配慮するための柔軟性を確保しつつ、予見可能な形で減額が適切
  - 2026年3月まで：原則、毎四半期4,000億円程度ずつ減額（従来の減額計画を維持）
  - 2026年4月～2027年3月まで：原則、毎四半期2,000億円程度ずつ減額
- 国債市場の安定に配慮した形で市場機能の改善を進めていけるよう、段階的に減額していく

### <予見可能な形で減額>



### <柔軟性の確保>

- ①来年6月の金融政策決定会合で中間評価を実施
- ②長期金利が急激に上昇する場合には、機動的に、買入れ額の増額等を実施
- ③必要な場合には、金融政策決定会合において、減額計画を見直す

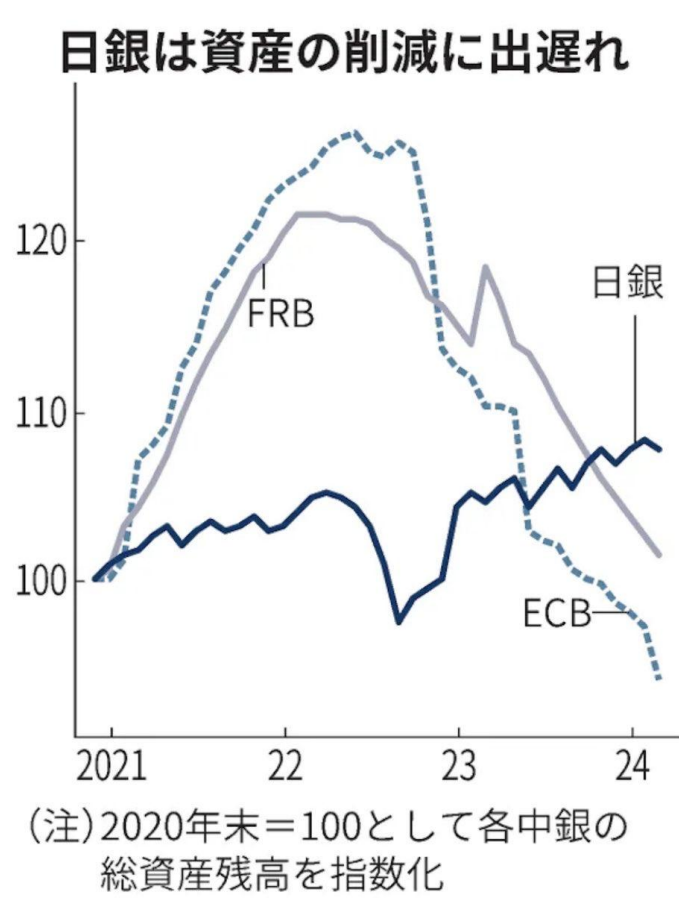


## Updated BOJ Schedule to Shrink Its Balance Sheet

- BOJ announced that it would reduce its purchase of JGBs by 400 billion yen per season, until the BOJ stock of JGBs reach the 83% of the current level in the early 2027.
- Such a tiny decline suggests the difficulty for BOJ to drastically reduce JGB holding, which is the background behind the weak Yen.

日本銀行「長期国債買入の減額計画（2025年6月金融政策決定会合）」、  
[https://www.boj.or.jp/mopo/mpmdeci/mpr\\_2025/k250617b.pdf](https://www.boj.or.jp/mopo/mpmdeci/mpr_2025/k250617b.pdf)

# Balance Sheets of the Central Banks



Whereas European and U.S. central banks were quick to shrink their central bank balance sheets in response to the recent rise in inflation, the BOJ lagged behind in asset reduction.

<https://nikkei.com/article/DGXZQOUB256DQ0V20C24A4000000/>

## (参考) 日銀財務のシミュレーション

- 中銀財務に関する有識者からは、一定のシナリオを設定したうえで、日本銀行の先行きの財務をシミュレーションしたものが発表されている。結果をみると、シナリオの設定の仕方に応じて、大きく幅のあるものとなっている。
- シミュレーションを見る際には、上述した4つの要因などについて、どのような前提が置かれているのかにも留意する必要。

		Fujiki and Tomura[2017]	伊藤[2022]	左三川・中野[2023]
シミュレーション結果		19年間赤字継続	赤字回避	赤字回避
バランスシートの規模（基準時点）		432兆円（2016年6月末）	736兆円（2022年3月末）	733兆円（2023年1月末）
国債の再投資規模（再投資対象）		再投資なし（注）	償還額の3分の2（5年債）	償還額の4分の3（10年債）
長短金利の推移	短期	2年で2.75%に上昇	初年度+0.1% 年+0.25%（上限2.5%）	初年度+0.1% 年+0.125%（上限1.0%）
	長期	—	年+0.5% （上限4.0%）	初年度+0.5% 年+0.125%（上限2.0%）
銀行券発行残高		名目GDP比8%まで減少	—	年率2%で増加
上記以外のシナリオ		3シナリオ：銀行券需要の収益への感応度分析を実施	5シナリオ：再投資規模、短期金利の上昇ペースを変更（複数シナリオで赤字）	3シナリオ：短期金利・長期金利の上昇ペースを変更（複数シナリオで赤字）

- **The BOJ's BS problem** is that if the BOJ reduces its holdings of JGBs as it cuts back on monetary easing, interest rates will rise both on government debts and on reserve deposits held by private banks with the BOJ, causing the BOJ to run a deficit.
- The BOJ refers to three scenarios. Under the first scenario, the deficit will continue for 20 years because the balance of JGBs held by the BOJ will be dramatically reduced.
- In contrast, in the second and third scenarios, the BOJ will continue to purchase JGBs, so the balance of JGBs held by the BOJ will not decrease that much and the deficit will be avoided because the BOJ will receive both the advantages and disadvantages of higher interest rates.
- The question is whether there is a way for the BOJ to raise interest rates without selling JGBs.

<https://boj.or.jp/mopo/outline/bpreview/bpr231206a.htm...>

<https://boj.or.jp/mopo/outline/bpreview/data/bpr231206c.pdf>

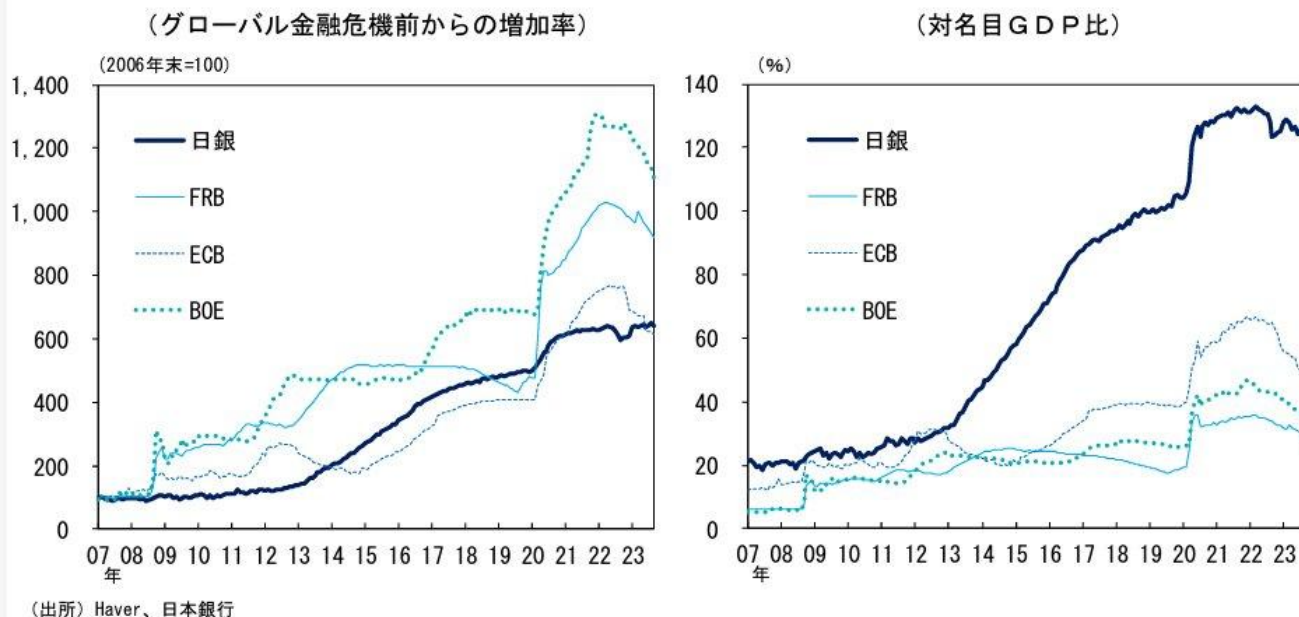


# QT: FRB, ECB and BOJ

## (1) 大規模な金融緩和の実施

- 日本銀行は1990年代後半以降、主要な海外中央銀行はグローバル金融危機の発生以降、非伝統的な金融政策を実施。
- 各中央銀行ともに、バランスシートの規模は大きく拡大。

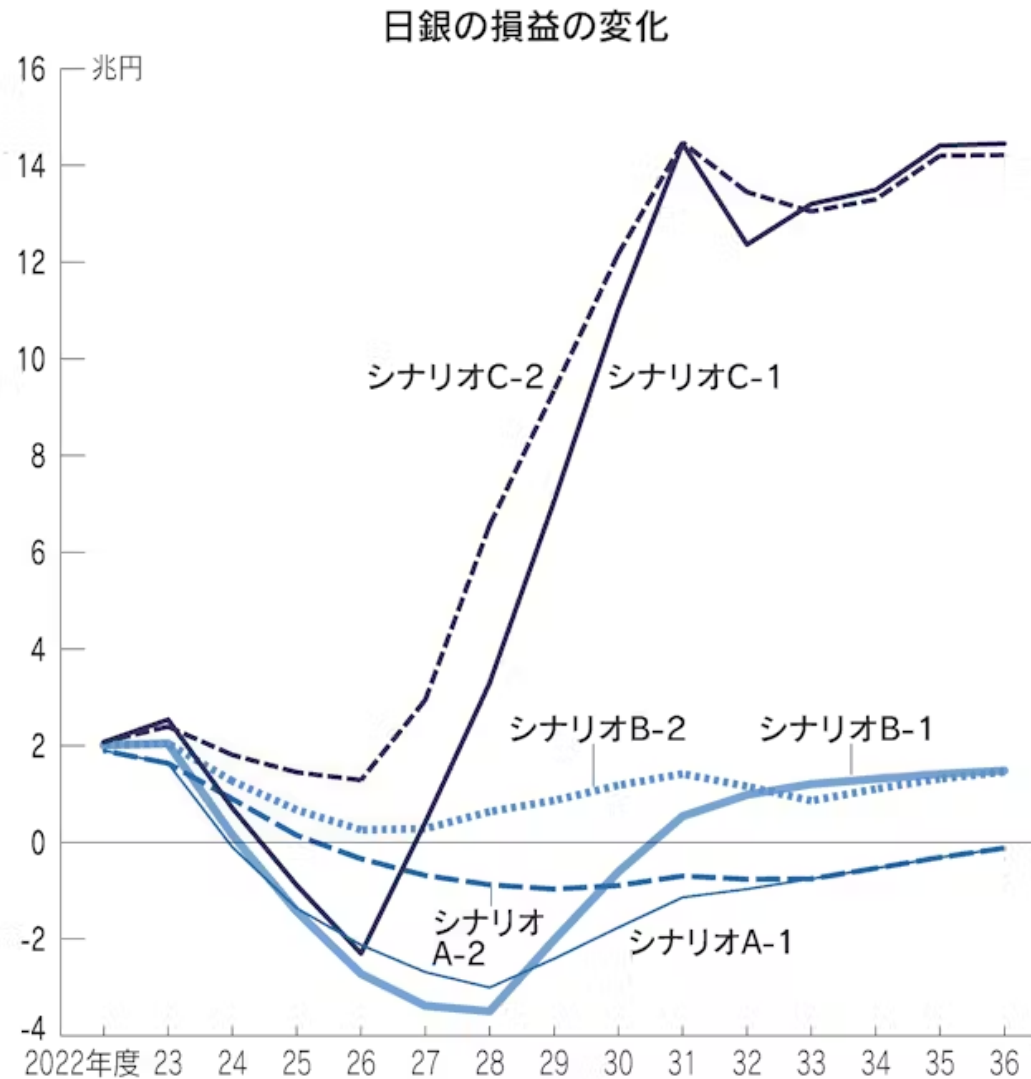
(図表1) 主要中央銀行のバランスシート規模の推移



3

- Since the Lehman crisis, central banks in Japan, the U.S., and Europe have dramatically increased their holdings of government bonds.
- This trend was further extended in response to the Corona disaster.
- However, in order to cope with inflation during the economic recovery period, the central banks in Europe and the U.S. rapidly reduced their JGB holdings, whereas the BOJ's reduction of its JGB holdings did not proceed rapidly.
- The reason is that the BOJ holds far more bonds as a percentage of GDP than the Western central banks. At its peak, the BOJ's bond holdings exceed 120% of GDP, while the Western central banks' bond holdings are 30-60% of GDP.
- This means that a rise in interest rates will have a greater impact on the BOJ's BS than on the US and European Central Banks.

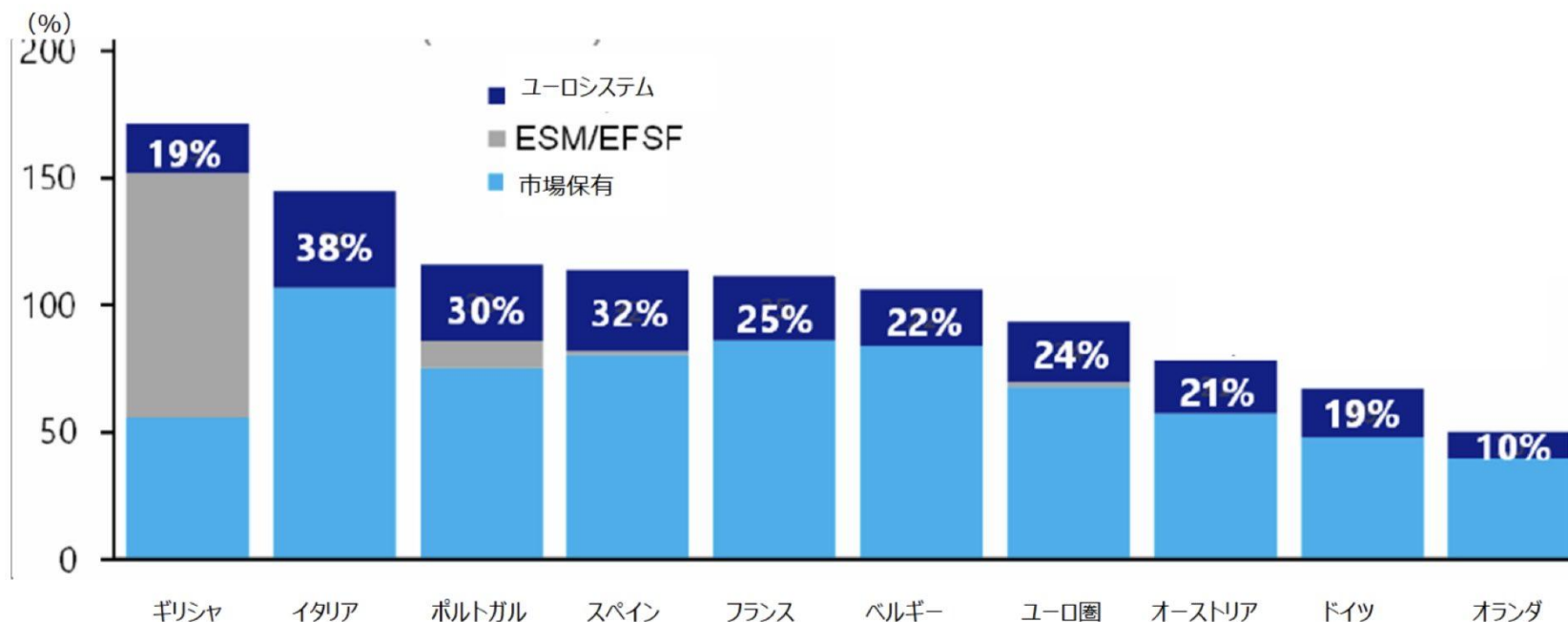
BOJ can avoid deficits simply by keeping its BS



<https://www.nikkei.com/article/DGXZQOCD1794J0X10C22A8000000/>

# Share of ECB holding to the EU sovereign debts

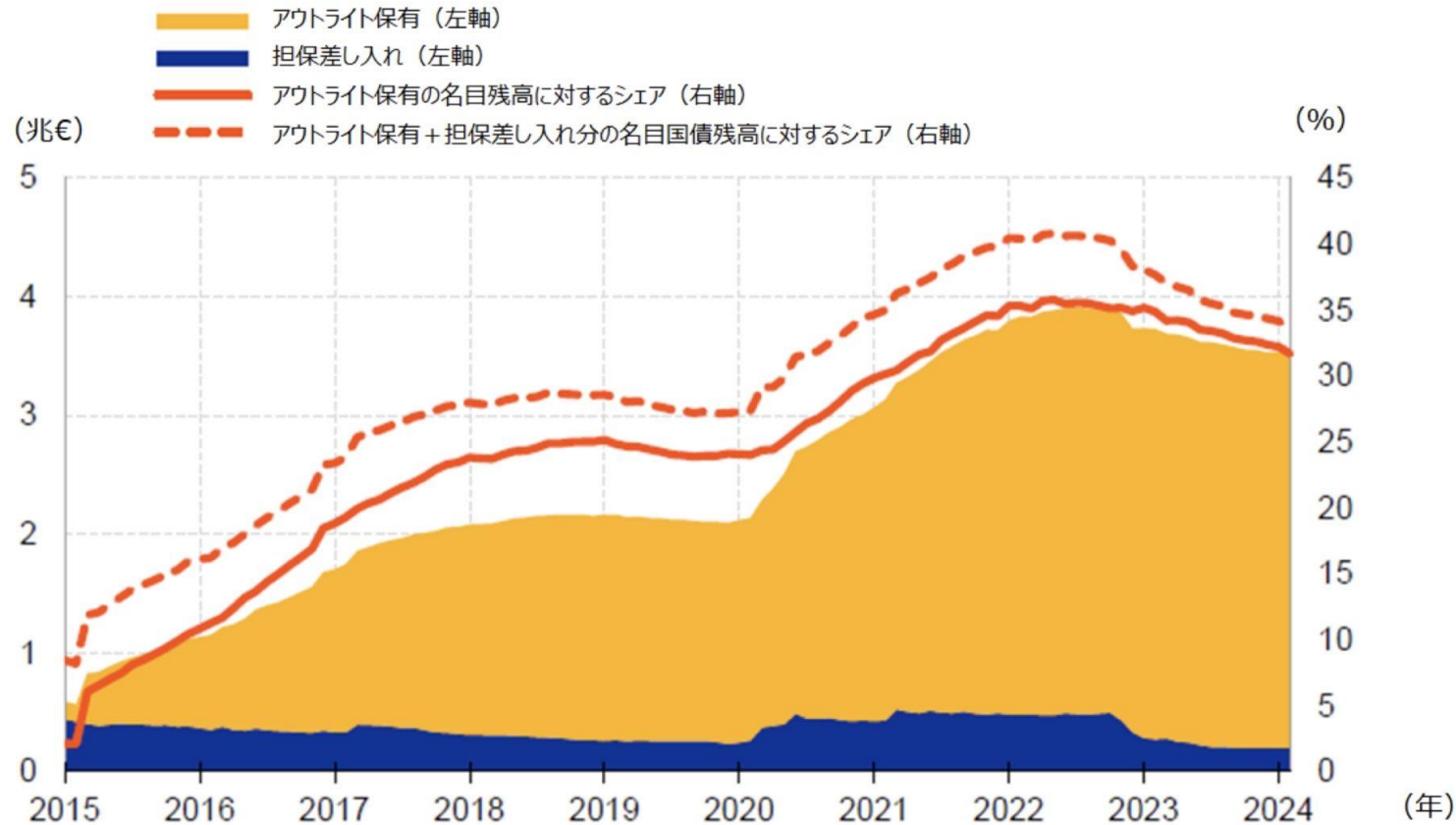
(図表 4) 【IMF】ユーロ圏各国のグロス政府債務残高とユーロシステムが保有する割合



(資料) Nazim Belhocine, Ashok Vir Bhatia, and Jan Frie, "Raising Rates with a Large Balance Sheet: The Eurosystem's Net Income and i Fiscal Implications", Working Paper 23/145, International Monetary Fund, July 7, 2023, p10, Figure 5を基に日本総合研究所作成。

(原資料) ECBおよびIMFスタッフによる算出。

(図表5) ユーロシステムの国債買い入れ割合



At the peak, ECB held 40% of sovereign debts in EU

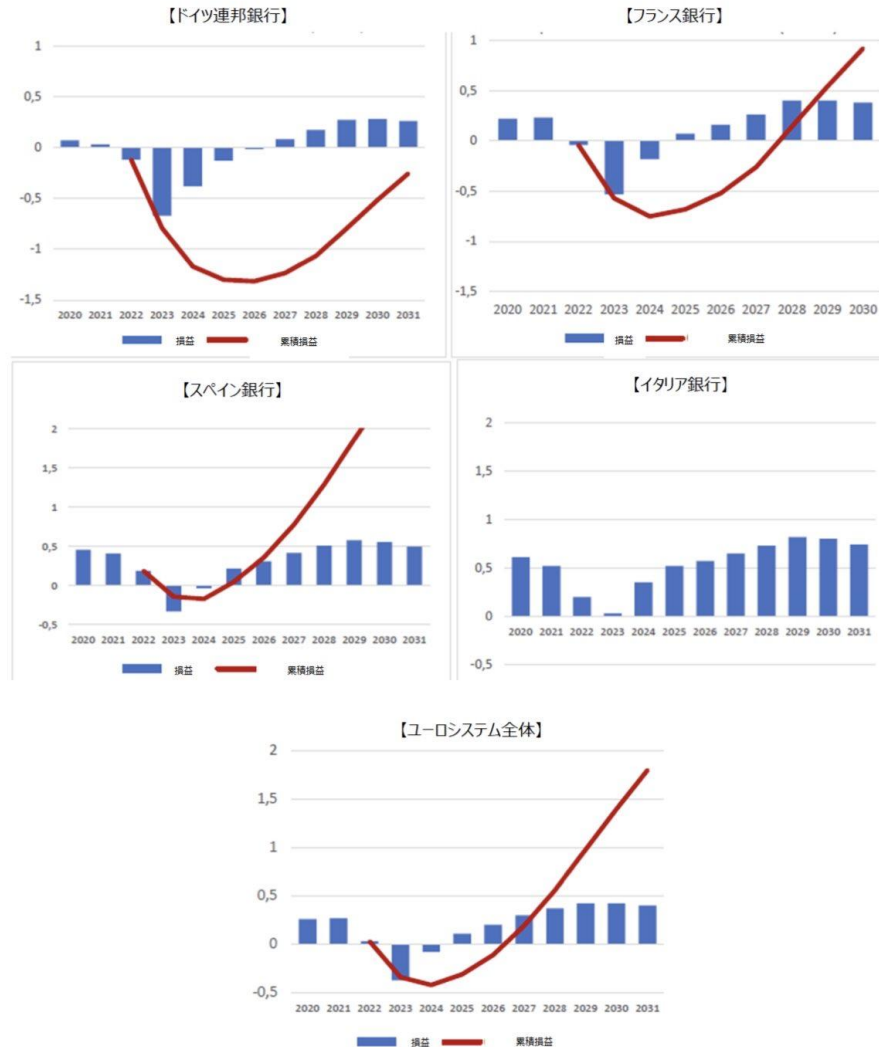
(資料) Isabel Schnabel, "The Eurosystem's operational framework", *Speech at the Money Market Contact Group meeting*, March 14, 2024, Slides, p10を基に日本総合研究所作成.

(原資料) Eurosystem, CSDBおよびECBスタッフによる算出.



(図表 11) ユーロシステムを構成する中央銀行の損益の見通し

(IMF 推計を基に CESifo が算出、対名目 GDP 比、%)



(資料) Paul De Grauwe and Yuemei Ji, “Fighting Inflation More Effectively without Transferring Central Bank’s Profits to Banks”, CESifo Working Papers, No 10741, Munich Society for the Promotion of Economic Research – CESifo GmbH, November 2023, p9, Figure 2を基に日本総合研究所作成。

(原資料) Nazim Belhocine, Ashok Vir Bhatia, and Jan Frie, “Raising Rates with a Large Balance Sheet: The Eurosystem’s Net Income and its Fiscal Implications”, Working Paper 23/145, International Monetary Fund, July 7, 2023, IMF, およびCESifo推計。

(原資料注) 本図の基となっているIMFの推計の前提は次の通り。①預金金利は2024年に3.5%でピークを付け、その後2.3%まで下落。②各中央銀行が保有するQEのポートフォリオのイールドは、2024～25年まで上昇した後、徐々に2%まで下落。③ECBのAPP（資産買い入れプログラム）は、満期が到来した債券の再投資をしないことにより徐々に落とされる。④PEPPは再投資によって、今日と同じレベルで維持される。

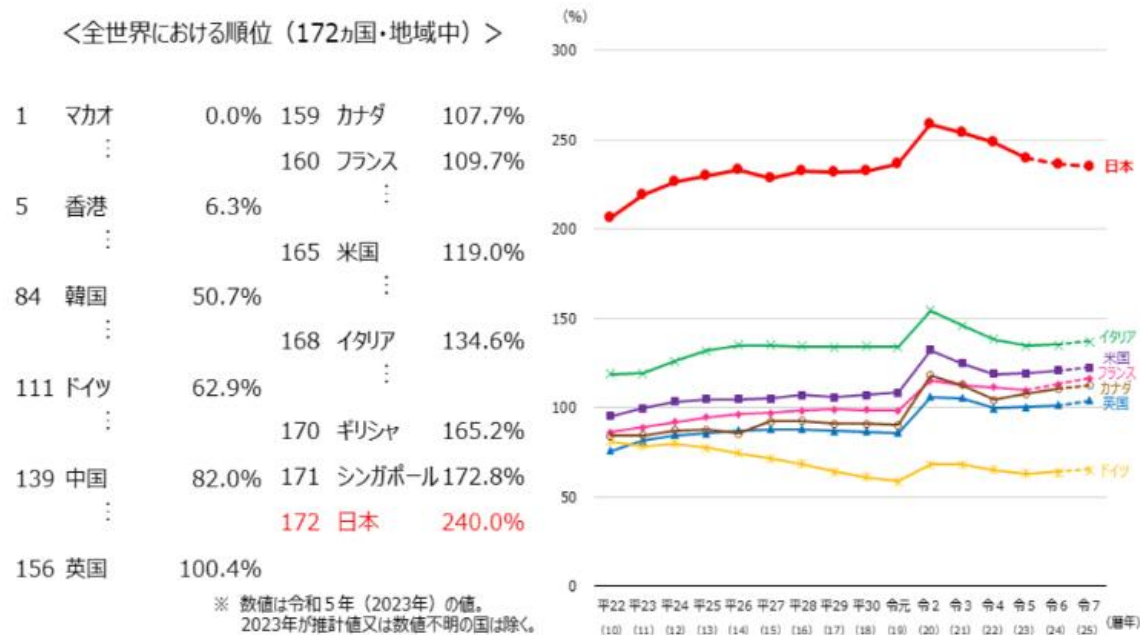
(注) イタリア銀行は本試算では赤字転落を回避できる見込みのため、本図では累積損益は表記されていない。

- The central banks of European countries have incurred many deficits in the process of BS contraction, but the accumulated deficits are expected to be eliminated around 2030.
- Thus, there is not much concern that rising interest rates will destabilize central bank finances, and currency depreciation has not occurred. Rather, the European currency is overvalued.
- There are a number of ways for the BOJ to allow interest rates to rise and not fall into deficit, so why hasn't the BOJ raised interest rates?
- Perhaps it is because raising interest rates is expected to bring about a recession in the short term. Not only would a rate hike make it more difficult for small and medium-sized businesses to finance their operations, but there are also concerns that it would raise mortgage rates and create a bad loan problem in the real estate sector.
- **Of fundamental importance, however, is that higher interest rates will make government budgeting more difficult.**

# International Comparison of Government Debts

## 債務残高の国際比較（対GDP比）

債務残高の対GDP比は、G7諸国のみならず、その他の諸外国と比べても突出した水準となっています。



（出所）IMF “World Economic Outlook”（2025年4月）

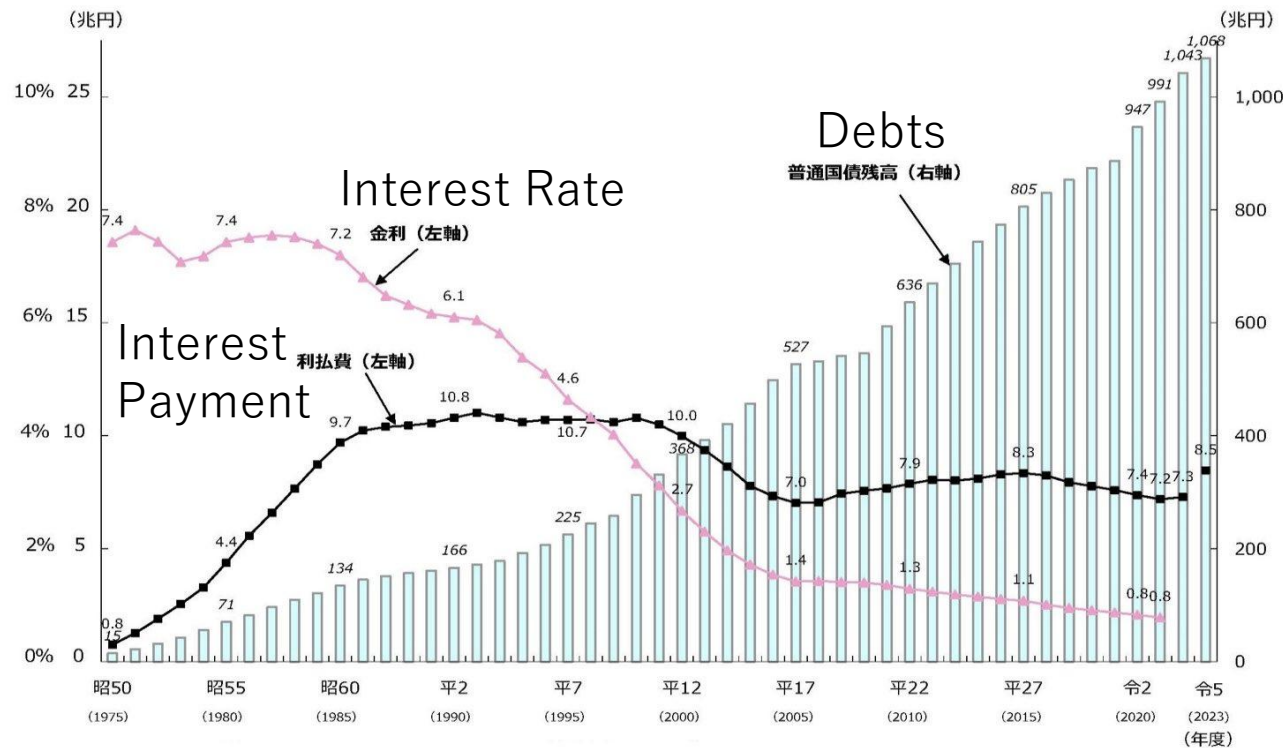
（注1）数値は一般政府（中央政府、地方政府、社会保障基金を合わせたもの）ベース。

（注2）右図の日本及びフランスは、2024年及び2025年が推計値。それ以外の国は、2025年が推計値。

- It is clear that the ratio of government debt to GDP rises during deflationary periods and falls during inflationary periods.
- During the DPJ administration (2009-2012), People's life was easier due to a strong yen and deflation, but the government's finances worsened as a result.
- With Abenomics (2013-2020), the yen depreciated, and disinflation reduced the debt to GDP ratio.
- In the high-inflation period (2021-2025), Japan's government debt relative to its GDP significantly declines, while it is still much over 200%.

財務省「財政に関する資料」

[https://www.mof.go.jp/tax\\_policy/summary/condition/a02.htm](https://www.mof.go.jp/tax_policy/summary/condition/a02.htm)



(注1) 利払費は、令和3年度までは決算、令和4年度は第2次補正後予算、令和5年度は予算による。

(注2) 金利は、普通国債の利率加重平均の値を使用。

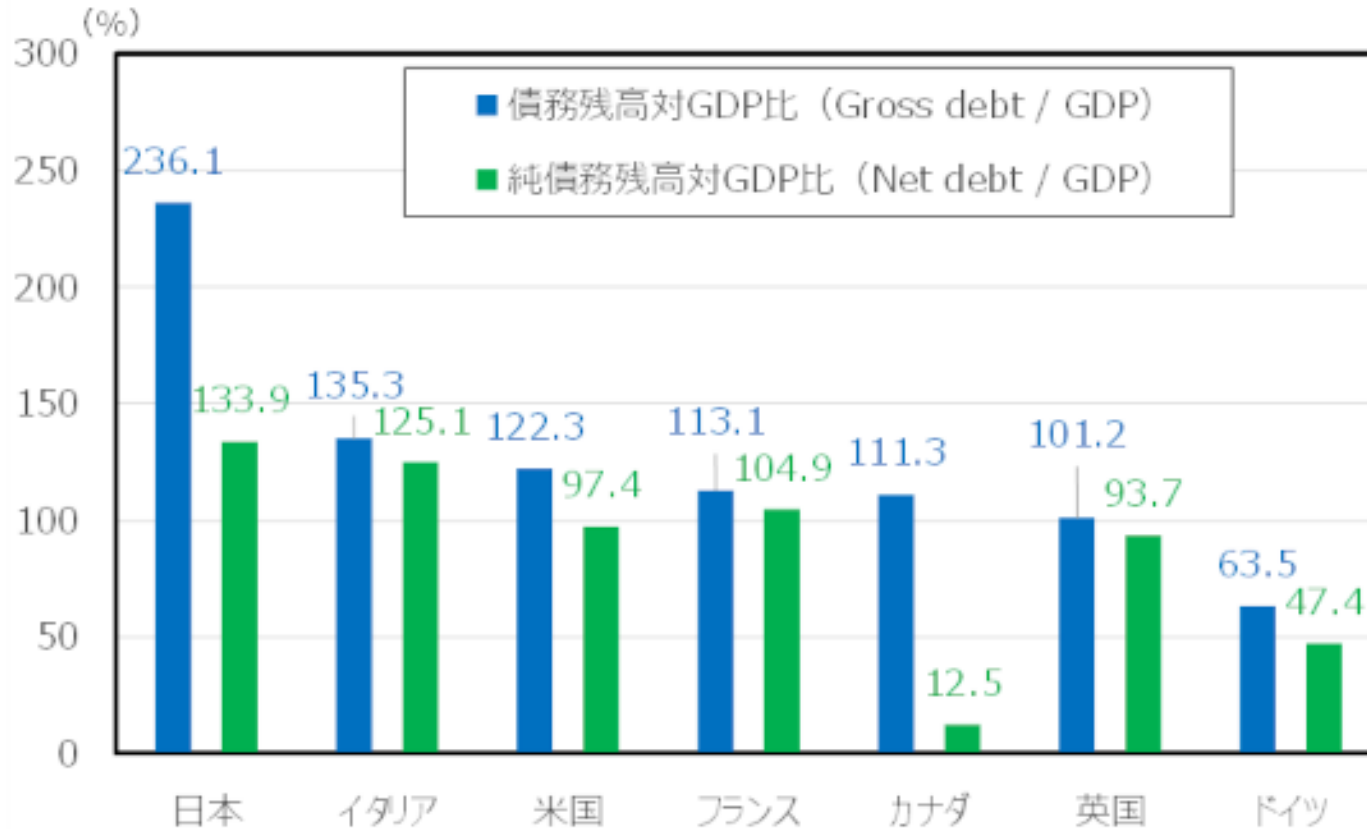
(注3) 普通国債残高は各年度3月末現在高。ただし、令和4年度は第2次補正後予算、令和5年度は予算に基づく見込み。

[https://mof.go.jp/tax\\_policy/summary/condition/a02.htm](https://mof.go.jp/tax_policy/summary/condition/a02.htm)

# Government Debts Matters

- Despite the rapid growth of outstanding government debt, interest payments have continued to decline thanks to very low interest rates.
- However, if the BOJ reduces monetary easing, interest rates will rise, and higher interest expenses will make it difficult for the government to compile a budget.
- It is said that raising interest rates would result in a loss of earnings for the BOJ. But the fundamental reason for the inability to raise interest rates is the government budget deficit.

# Gross versus Net Debts



(注) 値は2024年、日本はIMFによる推計値。

(出所) IMF「世界経済見通し」(2025年10月)より大和総研作成

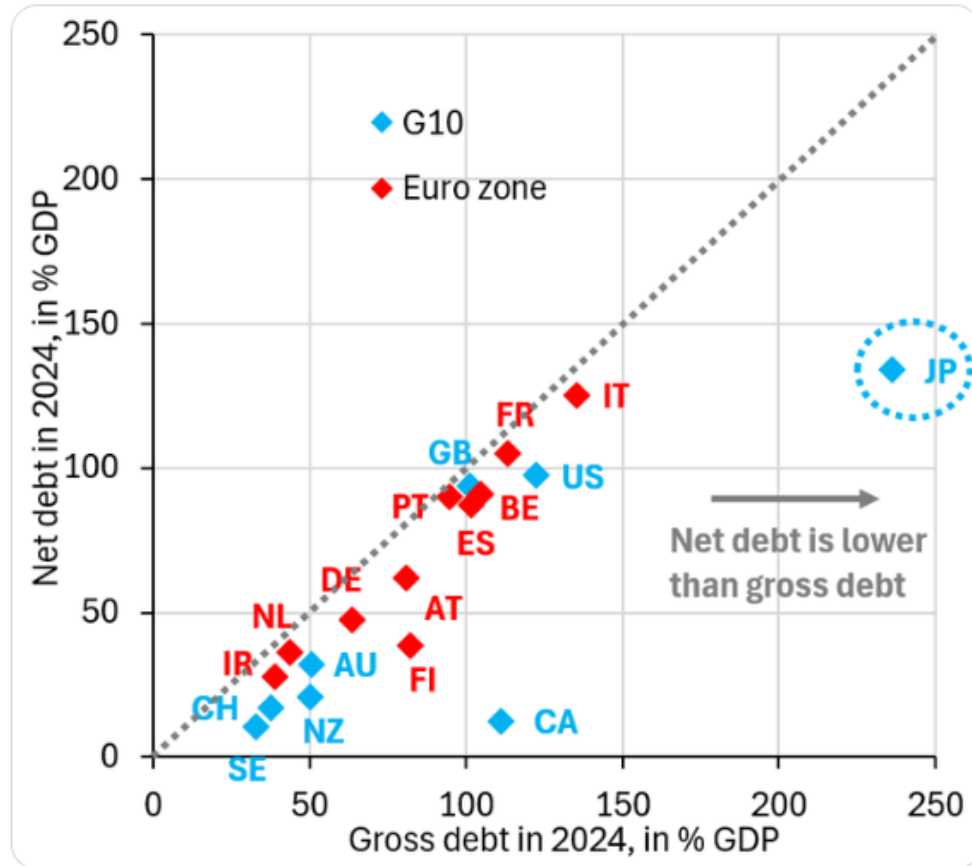
1. Japan has a huge amount of financial assets, consisting mainly of US government bonds.
2. If we calculate net debts, Japanese government's financial liability is much improved, comparable to other G7 countries.
3. Japan holds large foreign assets to prepare for potential debts crisis, possibly being afraid of isolation from western countries.
4. A similar gap between gross and net debts is observed for Canada, who might hold a huge amount of US governments bonds.

吉田亮平 (大和総研) 「純債務って何? 高市総理が目指す財政指標の意味」

[https://www.dir.co.jp/report/column/20251024\\_012337.html](https://www.dir.co.jp/report/column/20251024_012337.html)

There is a way for Japan to escape its debt trap. Japan's gross government debt is 240% of GDP, but net debt is only 130%. The difference is lots of financial assets the government owns. Those need to be sold and used to buy back debt. It's the only way...

[robinjbrooks.substack.com/p/how-japan-ca...](https://robinjbrooks.substack.com/p/how-japan-ca...)



午後5:19 · 2025年12月21日 · 7.5万 件の表示

1. Robin Brooks is an economist, having worked for the Goldman-Sachs.
2. He argues that Japan can escape its debt trap only by selling its large holding of foreign assets.
3. In the past, Japanese government purchase a lot of foreign assets to prepare for potential liquidity crisis in the case of large depreciation of its sovereign currency.
4. However, selling foreign assets might deteriorate Japan's financial position and cause US bond market crisis.
5. So she won't.



## アメリカ合衆国ドル から ユーロ

0.8538 ↑4.05% +0.0333 最大

12月21日, 9:52:02 UTC ・ 免責条項



## アメリカ合衆国ドル から カナダドル

1.3793 ↑2.39% +0.0321 最大

12月21日, 17:25:02 UTC ・ 免責条項



1. U\$/Euro has been stable since 2015, while U\$/Canadian\$ has been much depreciated.
2. Japan and Canada share the similar characteristic that there is large gap between gross and net sovereign debts.
3. **Is this a mystery?**

# How can Japan stop current Yen depreciation?

1. There are several explanations for the current Yen depreciation.
2. A major view is that Yen depreciates because there is a large nominal/real interest rate gap with the G7 countries, and BOJ cannot raise its policy rate sufficiently because it is afraid of its potential balance sheet loss.
3. Another reason for the weak Yen is that the economic policy of the Takaichi cabinet is biased toward demand stimulation, which will even worsen the financial position of the government.
4. The economic advisers of Mrs. Takaichi are optimistic about the sovereign debt problem, because it will tax Japanese people through inflation.
5. The weak Yen might drive people to shift their financial wealth from domestic to foreign assets, helped by the incentive created by the new tax waiver system named “NISA,” the Nippon Individual Savings Account.