



# Why Has Japan Become So “Cheap”?

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# Japan is cheap: Ramen, Ippudo Shiromaru

- Japan (Tokyo)
- Price 820 yen
- Tax included
- No tipping in Japan
  
- Total expenditure
- 820 yen = **\$5.66**
- (at 144.79 per dollar)



- US (NY)
- Price \$18
- Tax 8.875%
- Tip 20%
  
- Total expenditure **\$23.20**

4.1 times

# Japan is cheap: Big Mac

- Japan (Tokyo)
- Price 410 yen
- (up from 390 yen on 9/30/2022)
- Tax included
  
- Total expenditure
- 410 yen = **\$2.83**
- (at 144.79 per dollar)



- US (NY)
- Price \$5.59
- Tax \$0.50
  
- Total expenditure **\$6.09**

# Japan is cheap: Amazon prime membership

- Japan (Tokyo)
- 500 yen /month



- US (NY)
- \$14.99/month
- With tax
- \$16.32

- Total in USD: **\$3.45**
- (at 144.79 per dollar)



- Total expenditure **\$16.32**

# Japan is cheap: Uniqlo HEATTECH extra warm crew neck T

- Japan (Tokyo)
- 1990 yen



- US (NY)
- \$24.90

- Total in USD: **\$13.74**
- (at 144.79 per dollar)

1.8 times

- Total expenditure **\$24.90**

# Japan is cheap: college tuition

- University of Tokyo
- Tuition 535,800 yen
- (separately, new student fee 282,000 yen)



- Tuition only 535,800 yen, or **\$3,700.53**
- EXCH rate 144.79/\$

17.7 times

Columbia University  
Tuition \$65,524  
(separately, new student fee \$615; room and board \$16,156; books and personal \$3,672)

Tuition is **\$65,524**

# Takeaways

- Two macro variables made “cheap Japan” headlines recently
  - Rapid **yen depreciation** (vis-à-vis USD) this year
  - **Lower inflation** in Japan than in the US and Europe
- Depreciation in the **real exchange rate** (inflation adjusted exchange rate) is not new—depreciation has trended since 1995
- The root cause of real yen depreciation is **slower productivity gains** in Japan -- esp. in the tradable goods sector
- Lack of technological progress explains real exchange depreciation, real wage stagnation, and difficulty for millennials
- How to raise productivity: labor market reform to pay wages that workers deserve now rather than later; promote innovation by encouraging startups

# Outline

- Exchange rate
- Inflation rate
- Real Wage
- Lack of innovation and productivity increases
- Policy prescriptions: Labor market reforms to raise wages for highly productive workers
- Policy prescriptions: Targeted funding for innovation

# Exchange rate (USD/JPY), 1990-2022



Source: BOJ.

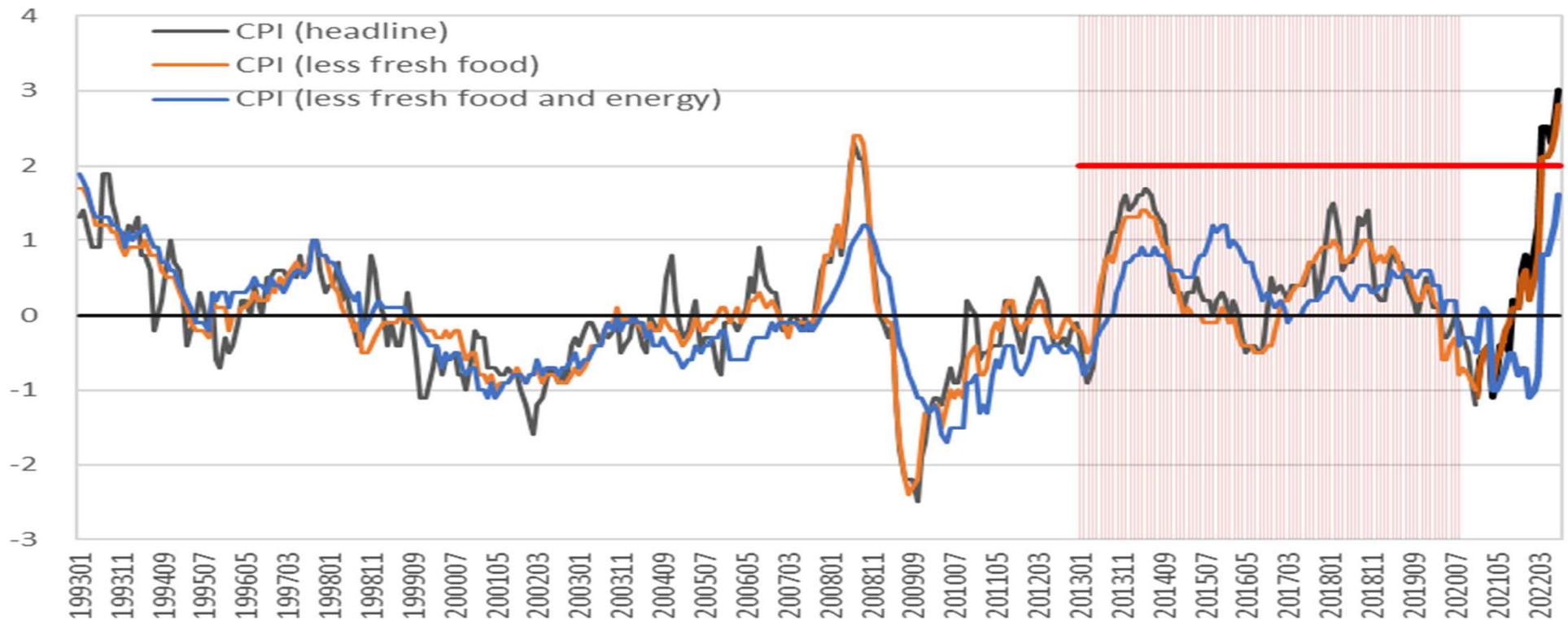
# Yen depreciation: not welcome anymore?

- The yen has greatly depreciated since 2012
  - Today's yen value is almost half of the peak 75.52 yen/\$ (Oct. 2011)
  - Depreciation from 80 yen/\$ to 120 yen/\$ under Abenomics and QQE was hailed as a great achievement, lifting the Japanese economy out of deflation and stagnation – export industries were revived
  - Since the end of last year, the yen depreciated by about 25% to 145 yen/\$
  - Criticism of MOF-BOJ inaction: making domestic (imported) inflation worse without visible signs of benefits (such as an export boom)
  - On September 22, the MOF-BOJ intervened to stop yen appreciation

# Three inflation rates, Japan: 1993-2022

## Headline; less fresh food; less fresh food and energy

CPI Inflation Rate adjusted for Consumption tax

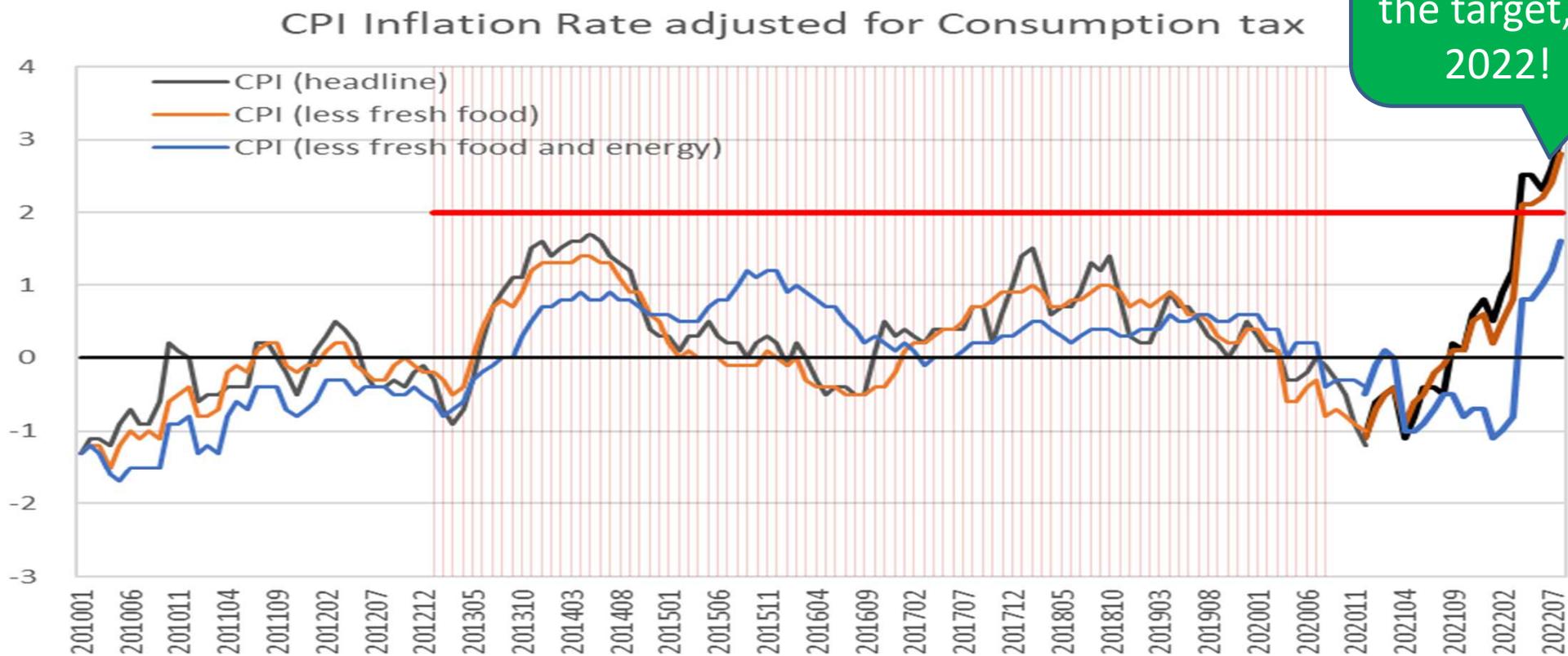


Source: Statistic Bureau of Japan

# Three inflation rates, Japan: 2010-2022

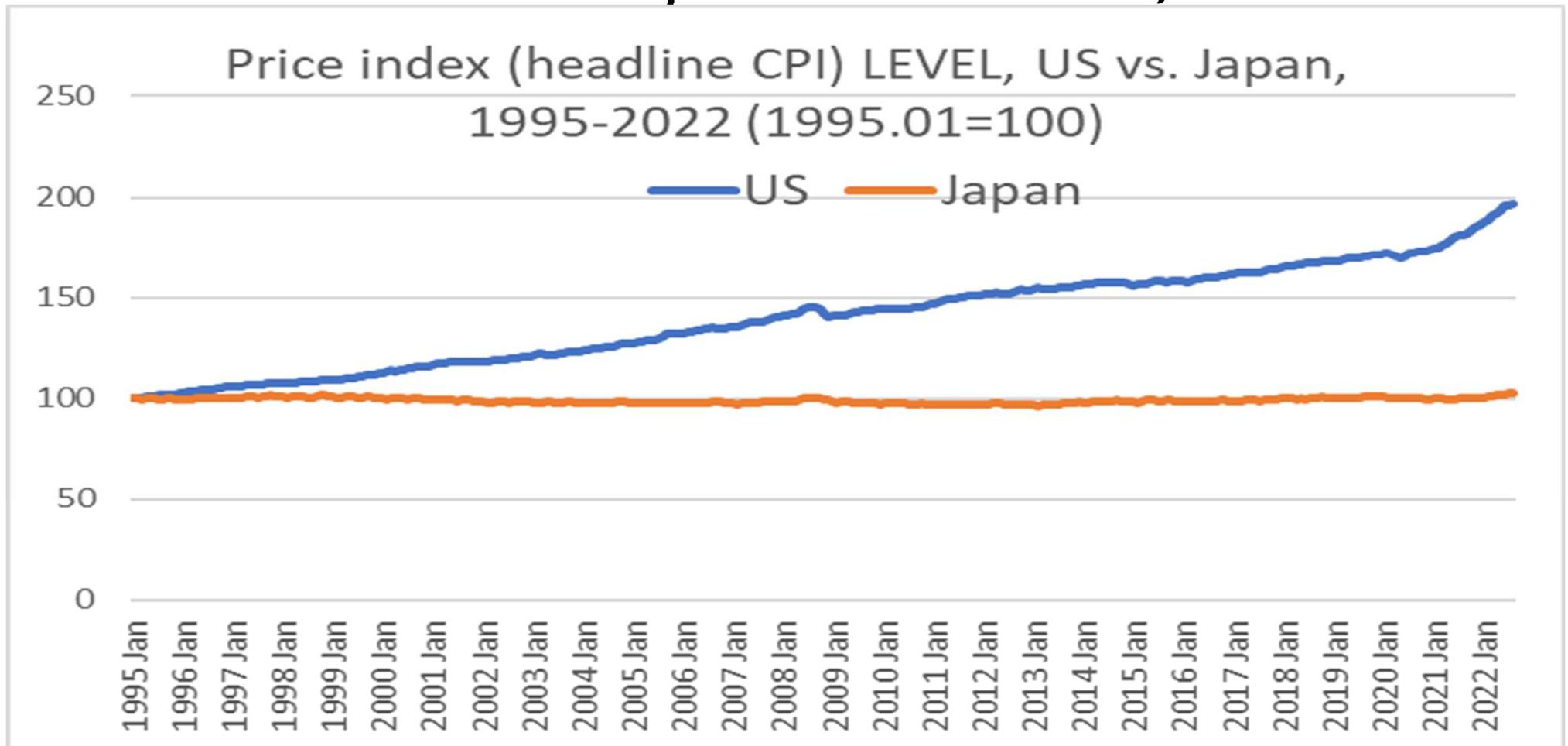
Headline; less fresh food; less fresh food and energy

Finally, achieving the target, in 2022!



Source: Statistic Bureau of Japan

# Inflation rate: US-Japan differential, 1995-2022



# Inflation rate: no celebration for achieving 2%

- Japan's inflation rate is lower than trading partner countries'
  - Long deflation (1998-2012), making Japanese prices inflexible
  - Lifting inflation from negative territory (deflation) to positive territory was a great achievement of Governor Kuroda's QQE introduced in 2013
  - The 2% inflation target has been underachieved until this year
  - But criticism is mounting, and PM Kishida will form a policy package to deal with too-high inflation
- Now, the inflation rate is around 2%. But no celebration, rather complaints
  - Wages are not rising so the standard of living is slipping
  - Price increases are concentrated in energy prices and food prices—which consumers have to buy (few substitutes), frequently

# Is the BOJ to blame?

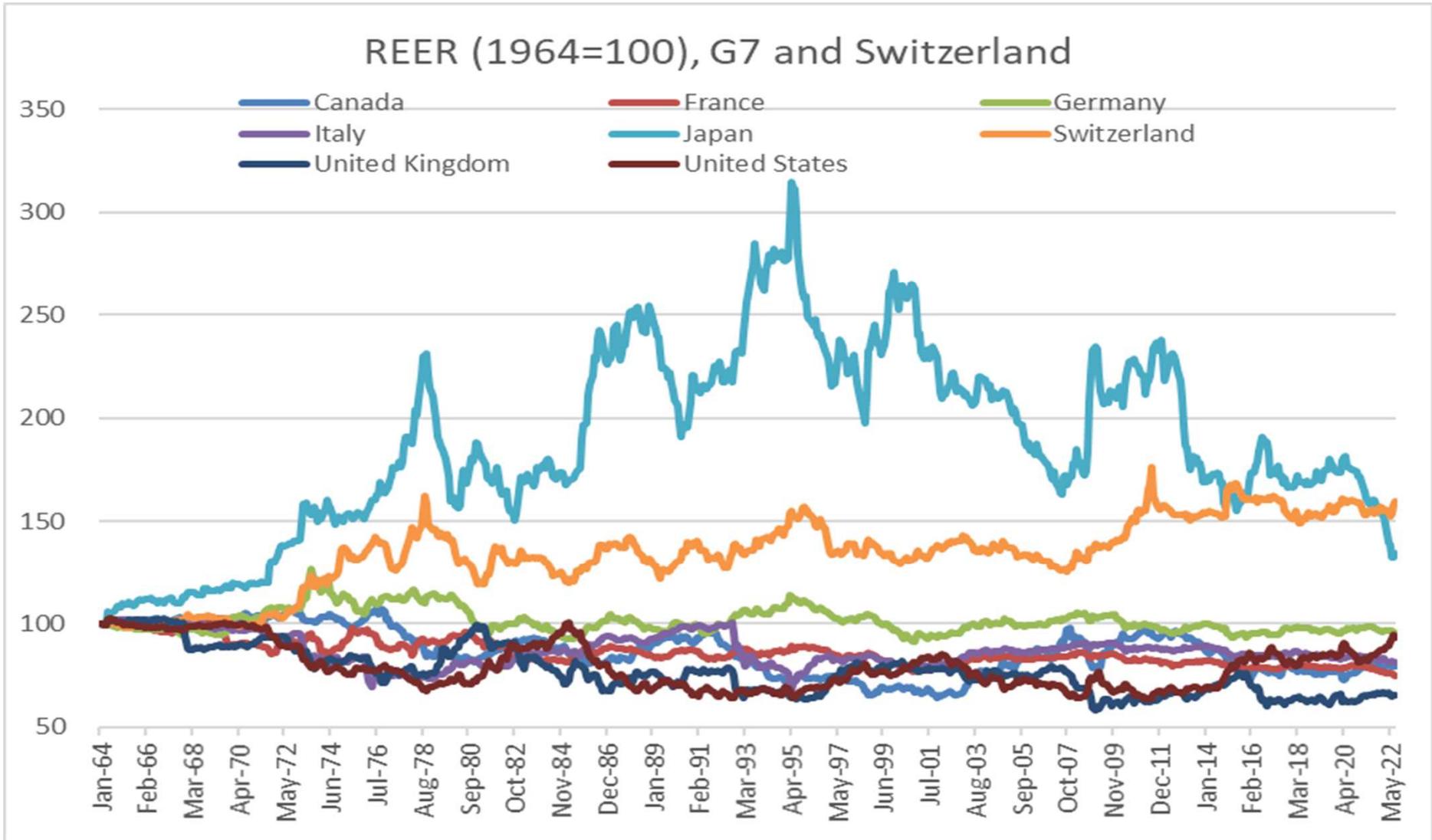
- Yen depreciation is caused by a widening interest rate differential
  - FRB has raised the policy rate (5 times this year, by 3 percentage points), while the BOJ has not changed the policy rate
  - A widening interest rate differential motivates investors to move capital out of Japan and into the US. (Japanese yen is not alone in depreciation vis-à-vis the US, but the degree of depreciation is the largest)
- Why doesn't the BOJ raise the policy rate?
  - Inflation rate has just hit 2%, the target
  - If the BOJ raises the interest rate, economic activities will be weakened
- Do not blame a BOJ that practices inflation targeting

# Possible factors for “becoming cheap”

- Two factors that directly cause “cheap Japan”
  - Yen depreciation
  - Inflation rate in Japan is lower than its trading partners’
- But explanations needed for why these factors happen
- Some observers, wrongly, think it is all the Bank of Japan’s fault

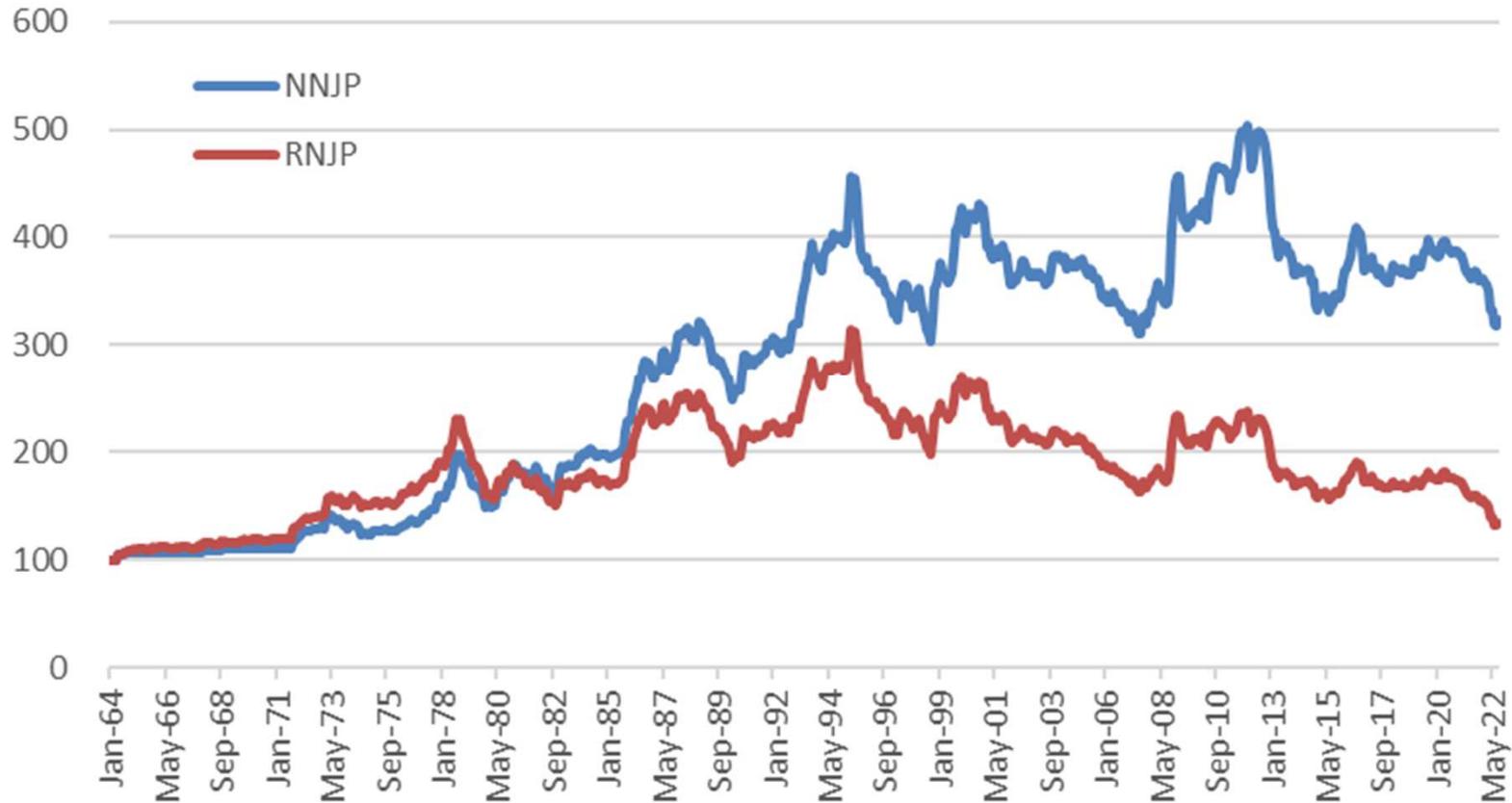
# The nominal effective exchange rate (NEER) and the real effective exchange rate (REER)

- The nominal effective exchange rate (NEER) is a trading-partner weighted average of a country's exchange rate
- The real effective exchange rate (REER) adjusts the NEER for the difference in price levels between the country and its trading partners
  - “Effective” refers to multi-currency aspects
  - “Real” refers to the fact that inflation differentials are adjusted for
  - The best way to understand “cheap Japan” is to look at the REER
  - The difference between the REER and the NEER is the degree of inflation differentials with trading partners

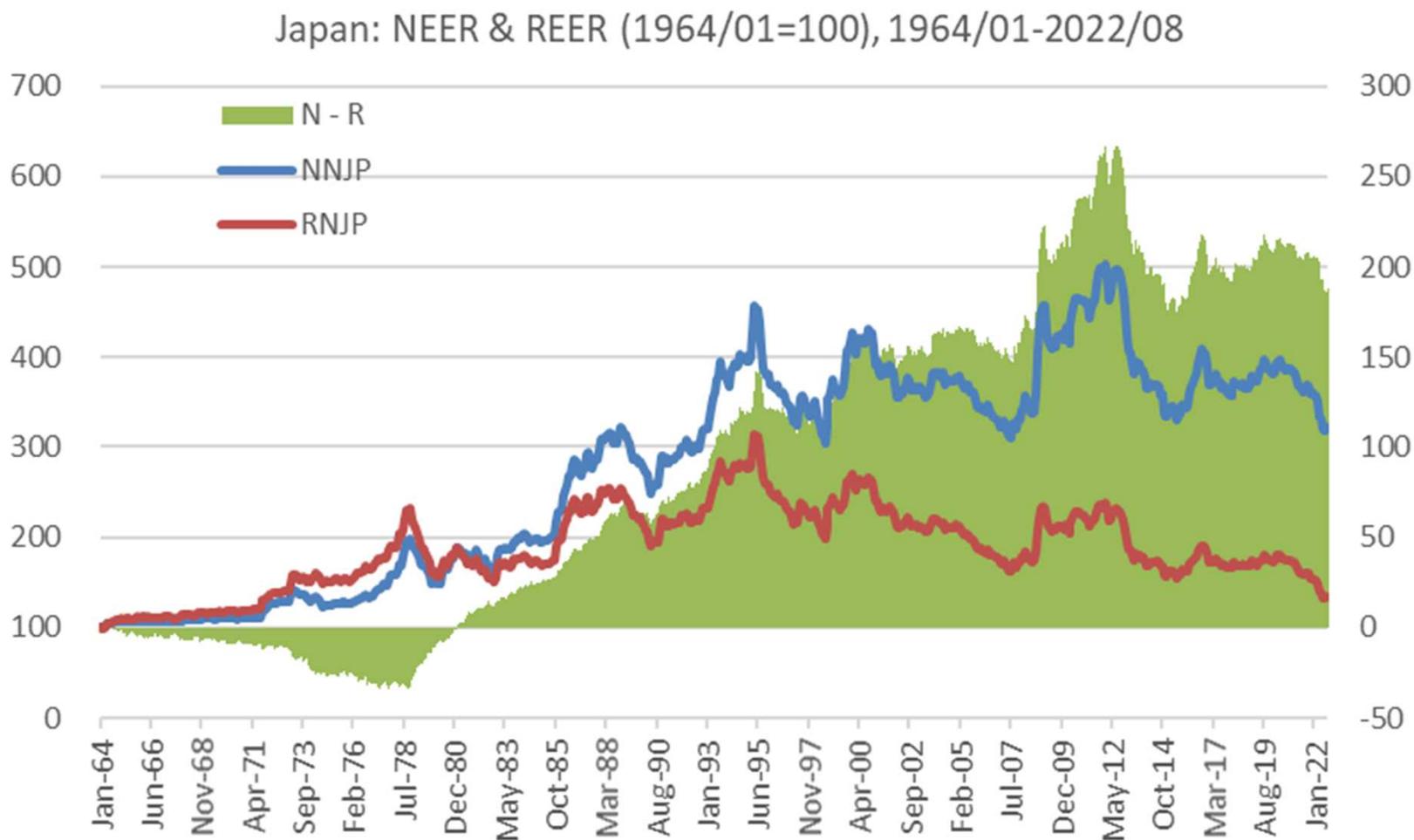


# Japan: NEER and REER

Japan: NEER & REER (1964/01=100), 1964/01-2022/08

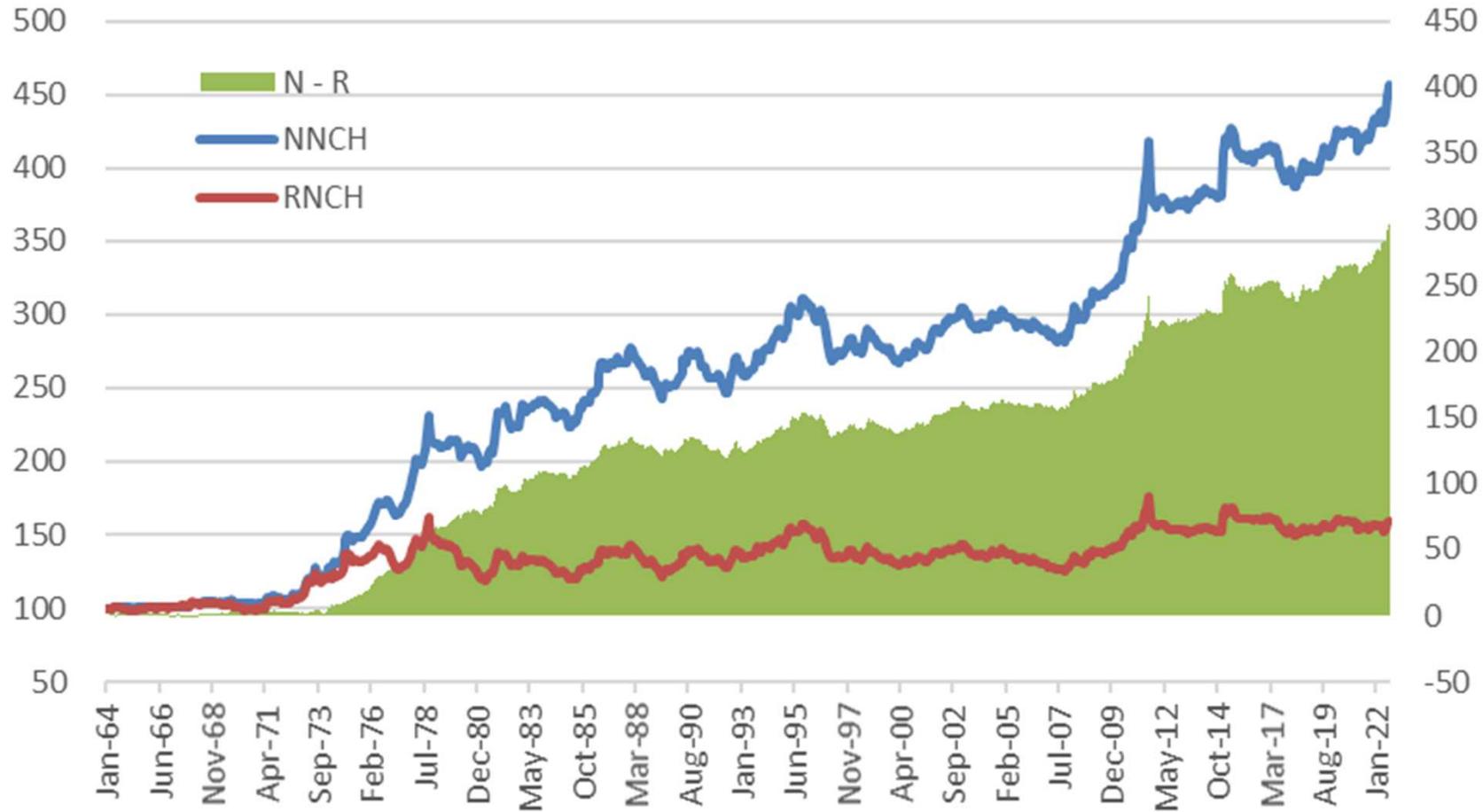


# Japan: NEER and REER, and cumulative differences



# Switzerland for comparison

Switzerland: NEER & REER (1964/01=100), 1964/01-2022/08



# The rise and fall of the yen REER

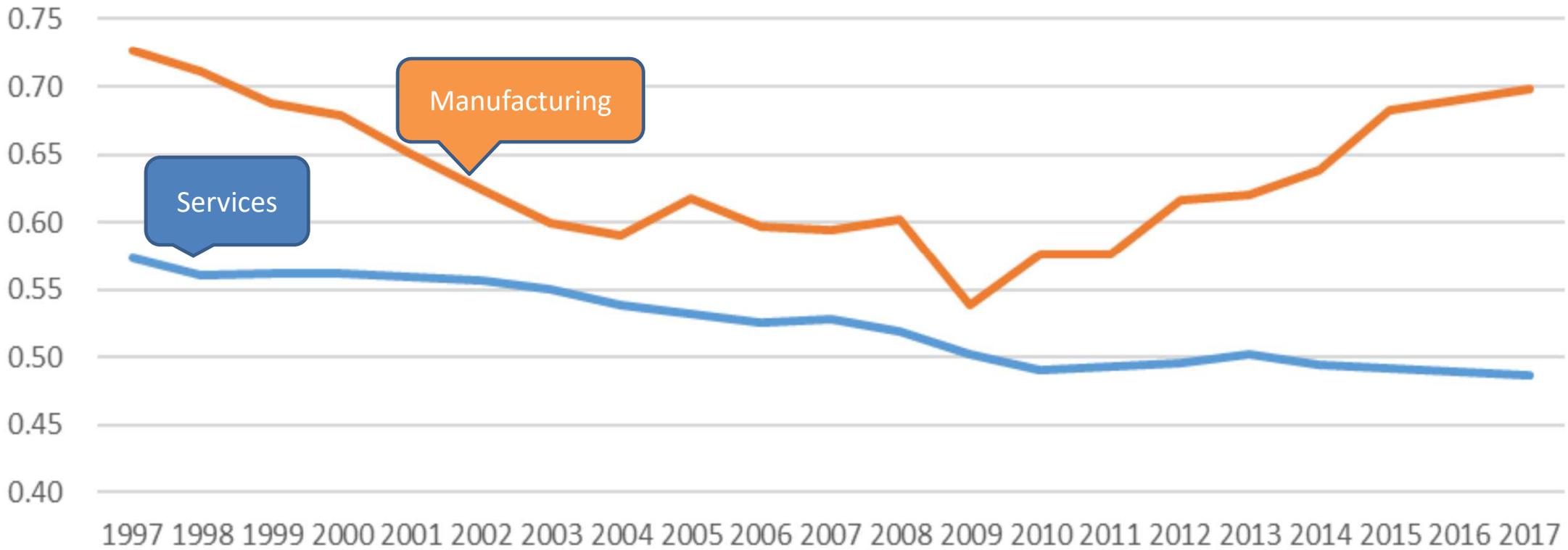
- Japan is an exception in having experienced a huge rise and an equally huge decline in the REER
- A frequently cited hypothesis for REER fluctuation is the Balassa-Samuelson effect
- According to the Balassa-Samuelson effect, a country with positive and large differences in productivity experiences increases in the tradable sector (such as manufacturing) and experiences REER appreciation in the non-tradable sector (such as services) – fits the data from 1960s to mid-1990s
- Is REER depreciation from the mid-1990s to 2022 also explained by the (reverse) Balassa-Samuelson effect?

# Productivity increases slowed down in Japan

- Productivity increases slowed down in Japan—more so than for trading partners, esp. the US
  - Stagnation in real wage and per-capita GDP since early 1990
- Productivity increases in tradable sectors declined more than in non-tradable sectors?
  - Inconclusive at best

US-Japan comparison of Labor productivity in the manufacturing and services sectors (US=1), 1997-2017

Japanese productivity in ratio to US productivity



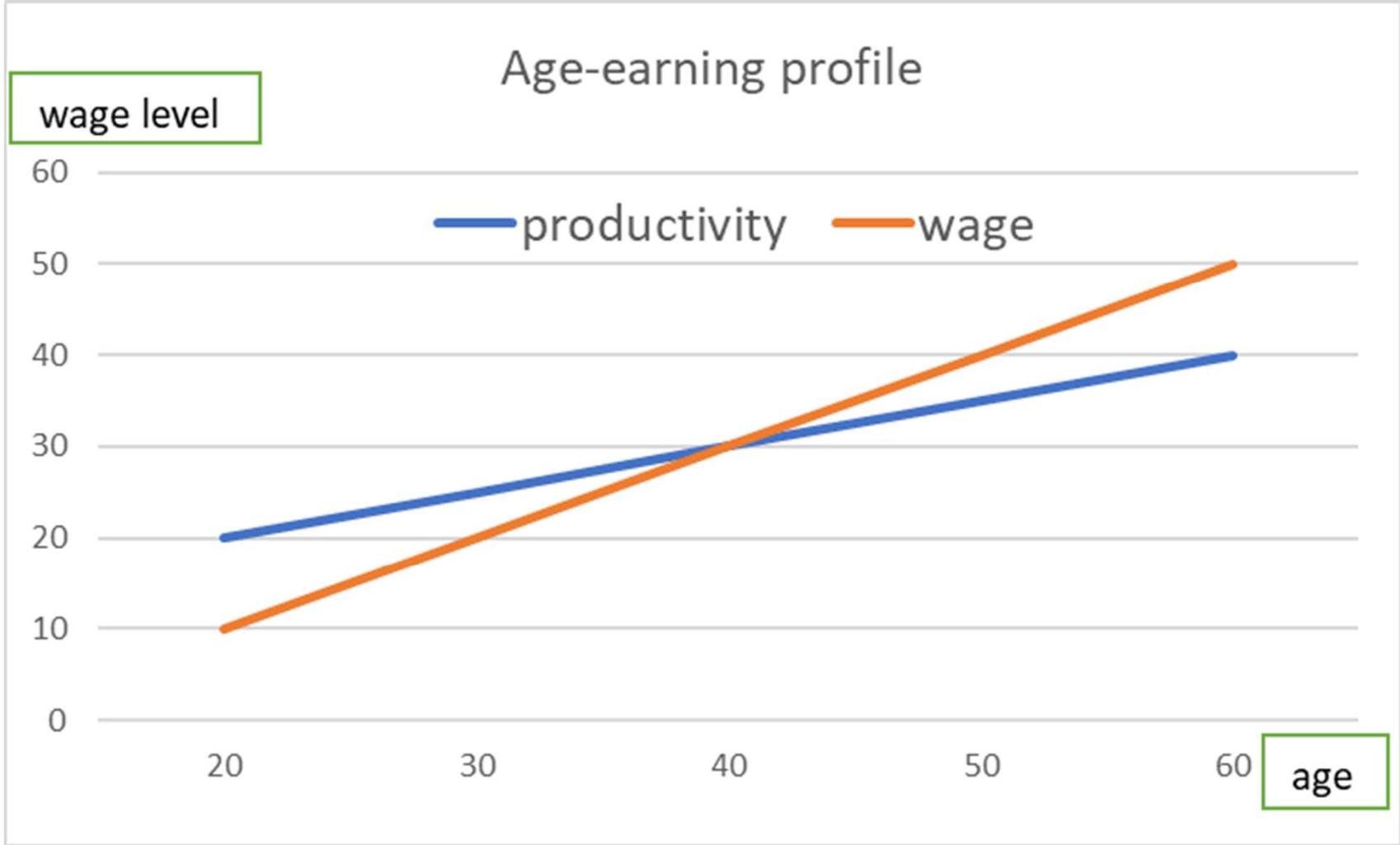
Source: Miho Takizawa, 2020. "International Comparison of Labor Productivities by Industry" (in Japanese) Seisansei Report vol. 13. <https://www.jpc-net.jp/research/detail/004375.html>

# Lack of innovation

- Some salient failures
  - Japan could not develop vaccines for COVID-19
  - Mitsubishi Heavy Industries (Mitsubishi Heavy Industries) failed to complete the Mitsubishi Space Jet (Mitsubishi Regional Jet)
  - Japanese universities fell in global university rankings
  - Disaster at the Fukushima Daiichi nuclear power plant could not be prevented
  - Development and adoption of renewable energy is slow
- The number of start-ups is low and only a few unicorns

# What to do? – Policy prescriptions, labor reforms

- The young suffer more in an age-based seniority wage (salary) system and under life-time employment practices
  - Raise wages of the young generation by flattening the age-earning profile (see next slide)
  - Pre-pay retirement severance pay by abolishing the tax break for retirement severance pay
  - Pay high salaries for highly-demanded jobs (e.g., system engineers) and those who perform better (inequality among cohorts should be tolerated)
- Japanese MNCs are posting record profits
  - Hollowing out is real; Production and R&D are moving abroad; and Japanese manufacturing companies are making large profits abroad
  - Provide tax incentives to repatriate profits and pay to Japanese workers



# What to do? – Policy prescriptions, R&D

- Japanese universities suffer from a lack of revenue, declining government subsidies, and micro-management by the Ministry
  - Low tuition; low and egalitarian professor salary; and no incentive
  - Until recently, professors were not allowed to create and run a company to take advantage of their patents and business models
- Last chance to change Japanese universities
  - 10-trillion-yen fund (University Fund), created by the government
  - Target returns, minimum of 3 percent for cash out
  - Proceeds of 300 billion yen will be distributed to select (5-7?) universities
  - Can universities change?

# References

- Ito, Takatoshi and Takeo Hoshi. *The Japanese Economy, Second Edition*, MIT Press, 2020. (Ch. 12, international finance)
- Ito, Takatoshi, “Why Is Japan So Cheap?” Project Syndicate, March 2022. <https://www.project-syndicate.org/commentary/japan-weak-productivity-low-real-effective-exchange-rate-by-takatoshi-ito-2022-03>

