

Czy analizując
doświadczenia
Japonii widzimy
naszą
gospodarczą
przyszłość?



- Japonia **najwcześniej** ze wszystkich państw wysoko rozwiniętych weszła w **sekularną stagnację**
- Bank Japonii był
- **pierwszym bankiem centralnym**, który musiał na długo obniżyć **stopy procentowe do zera**
- **pierwszym bankiem centralnym**, który zastosował **QE** (8 lat wcześniej niż Fed i BoE, 14 lat wcześniej niż ECB)

**Dlaczego doświadczenia
Japonii są ważne?**

- Today's activism in global monetary policy has arisen, in part, from the lessons allegedly learned during so-called „Japan's lost decades”

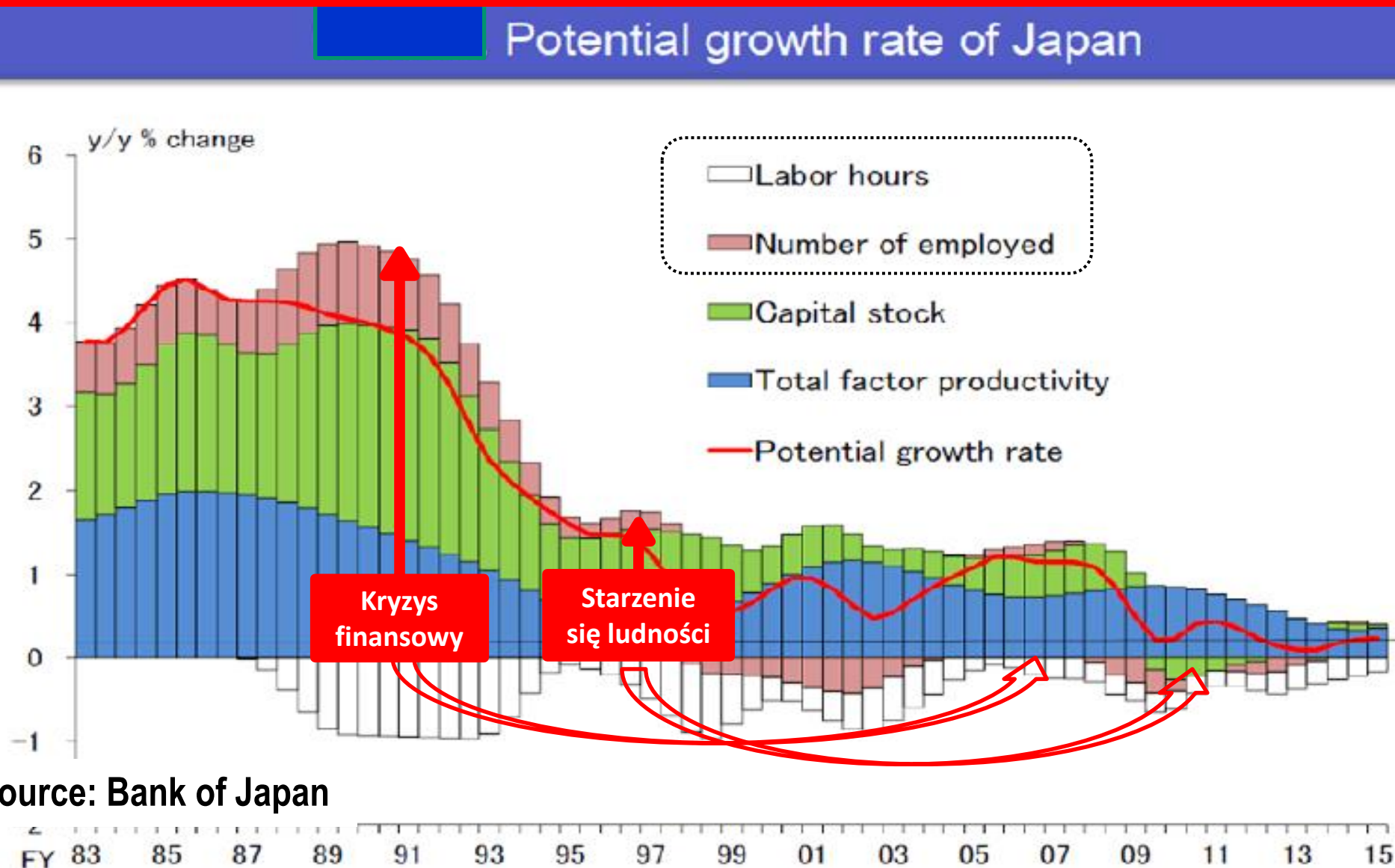
Masaaki Shirakawa comments on: Charles Goodhart, Manoj Pradhan (2017) „Demographics will reverse three multidecade global trends”, BIS Working Papers, No. 656

Czy Japonia okaże się kanarkiem w kopalni?



Czy będziemy świadkami „japonizacji” gospodarek pozostałych państw wysoko rozwiniętych.

Czy Japonia okaże się kanarkiem w kopalni?

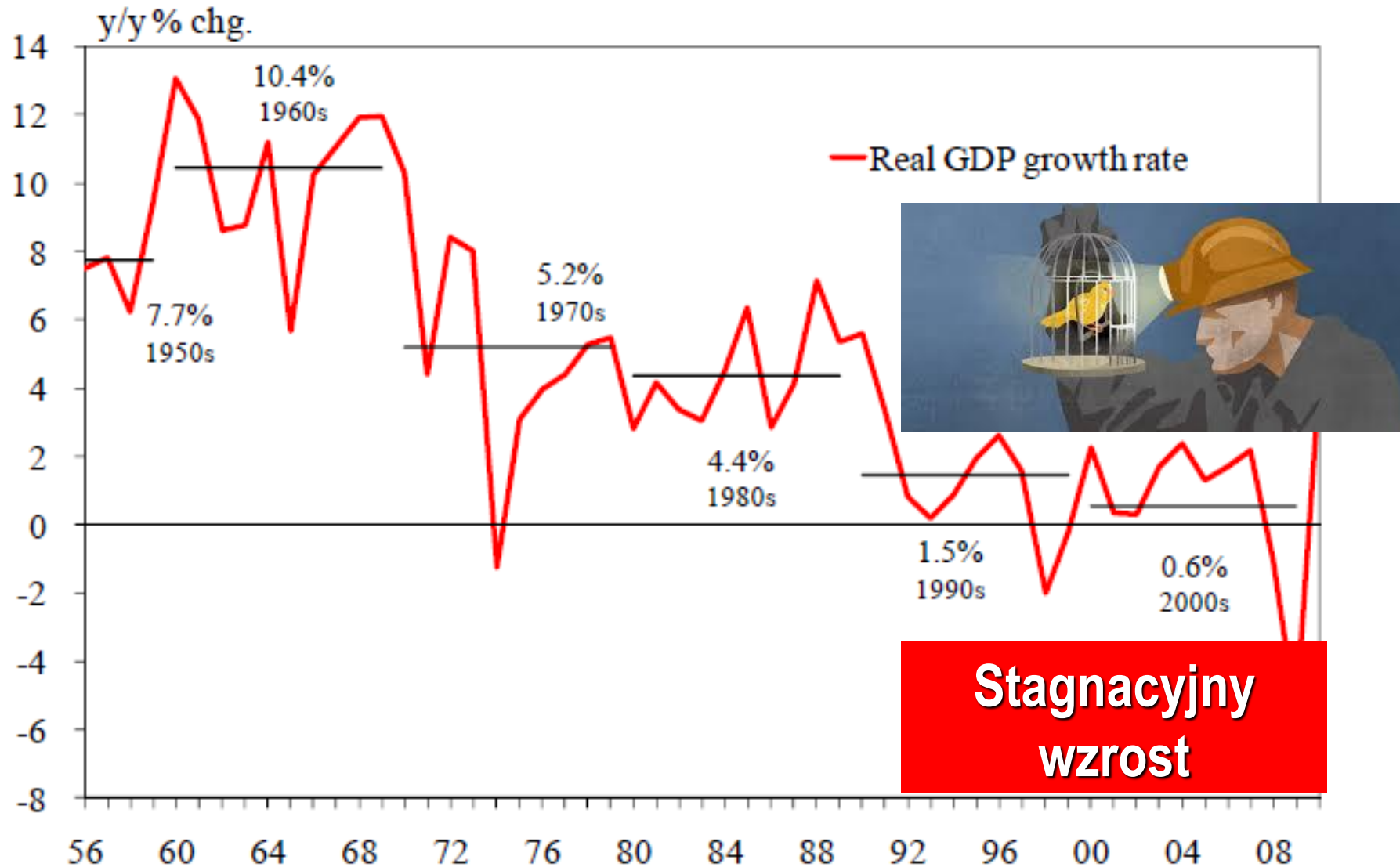


Source: Bank of Japan

Notes: The potential growth rate is estimated by the Research and Statistics Department, Bank of Japan.

Sources: Bank of Japan; Cabinet Office; Ministry of Internal Affairs and Communications; Ministry of Economy, Trade and Industry; Ministry of Health, Labour and Welfare; Research Institute of Economy, Trade and Industry.

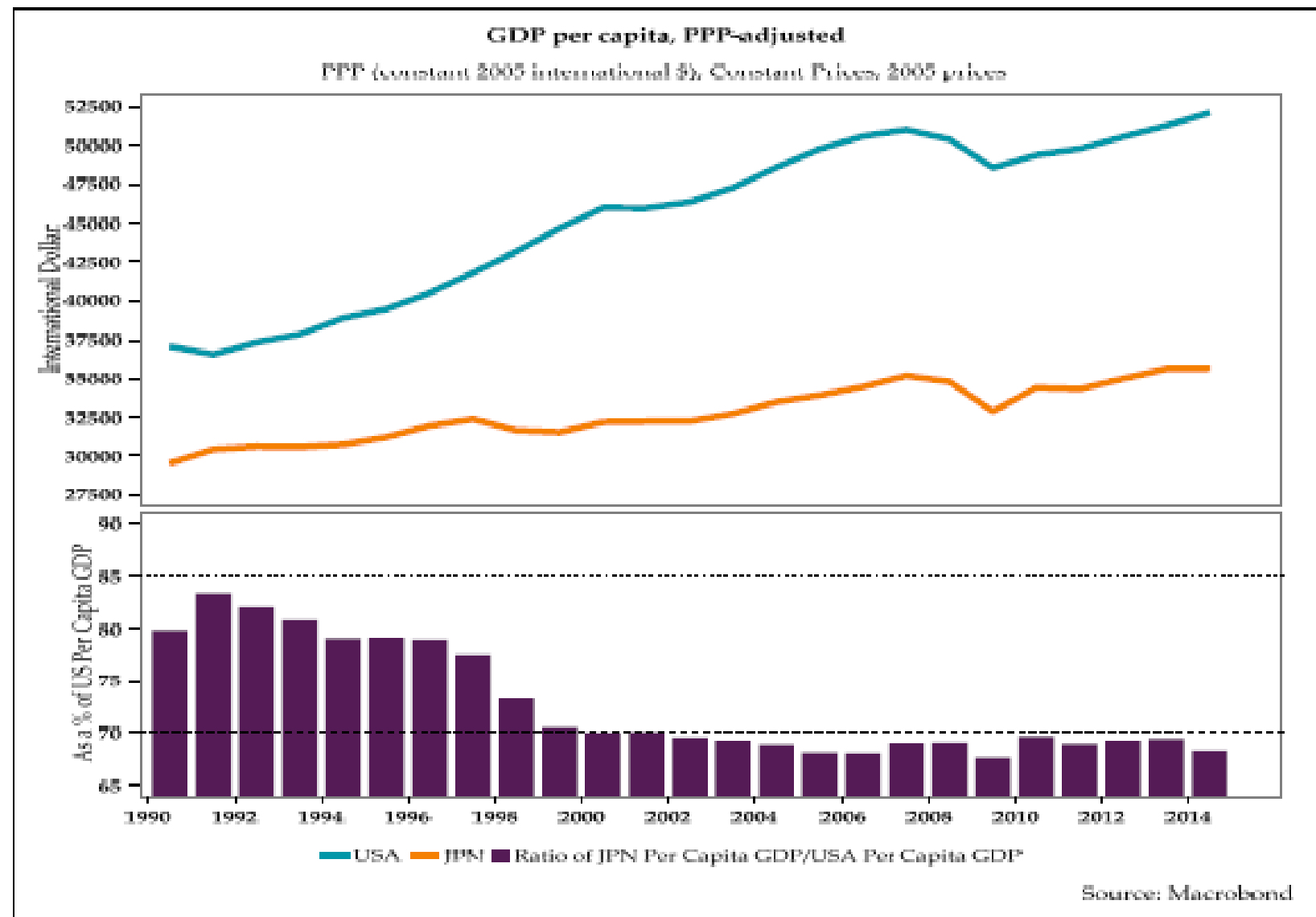
Japan's Real Economic Growth Rate in a Long-Term Horizon



Masaaki Shirakawa, „Deleveraging and Growth: **Is the Developed World Following Japan's Long and Winding Road?**” Bank of Japan. 10 January 2012

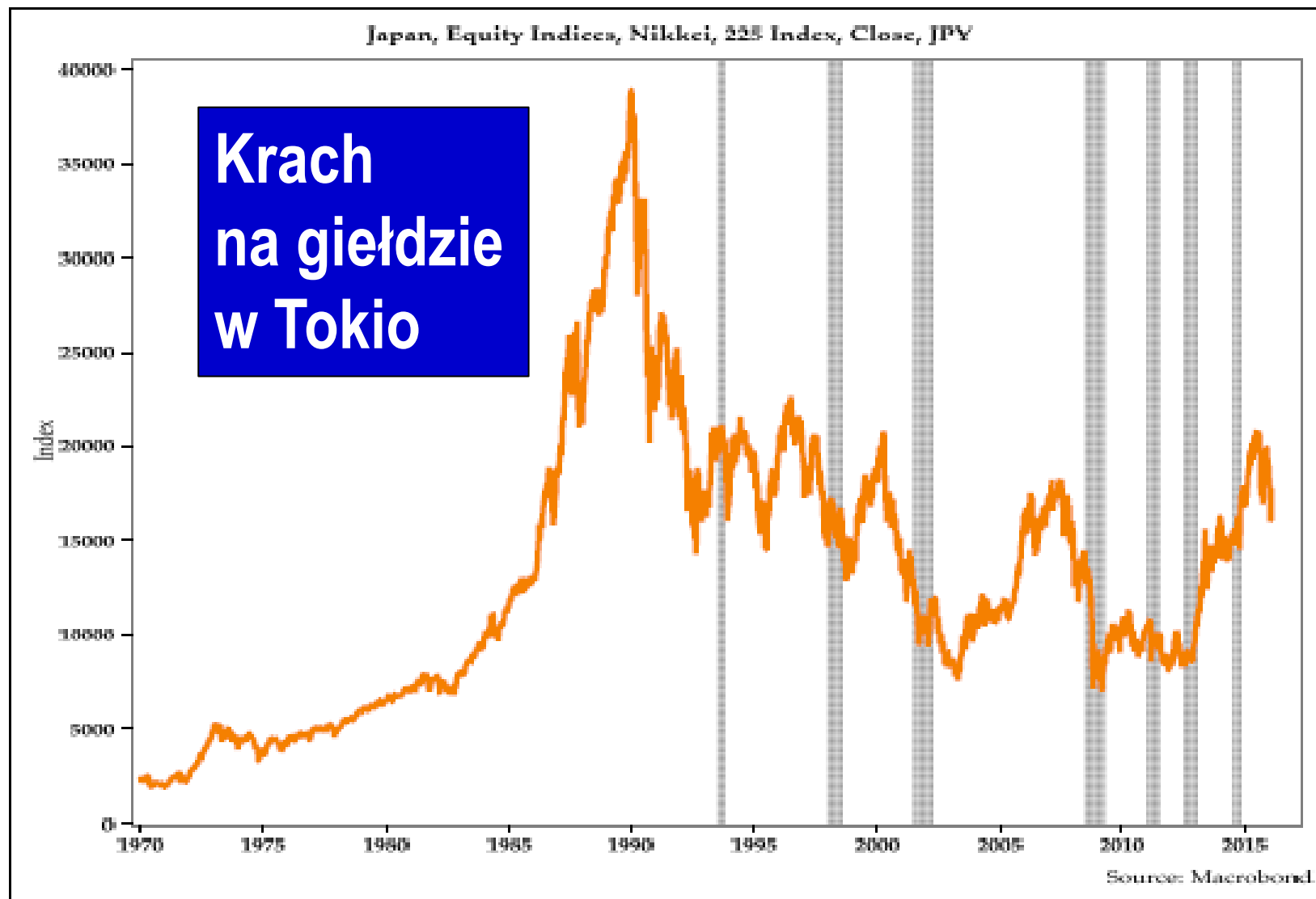
„Przerwana” realna konwergencja

Per capita real income growth has slowed, resulting in a widening of the gap between Japan and the US



**Co spowodowało nagłe
wyhamowanie tempa
wzrostu gospodarczego
w Japonii?**

Japan's equity bubble burst in the early 1990s



**Ważniejsze jednak było
załamanie cen na rynku
budowlanym**

Boom na rynku budowlanym

Gospodarstwa domowe
i przedsiębiorstwa

Banki

Rynkowa
wartość
kupionych
nieruchomości
(**wartość
zastawów**)

Zadłużenie
w bankach

Kredyty
hipoteczne

Kapitał

Skutki załamania cen nieruchomości

Gospodarstwa domowe
i przedsiębiorstwa

Banki

**Nieemożność
refinansowania
kredytów
hipotecznych**

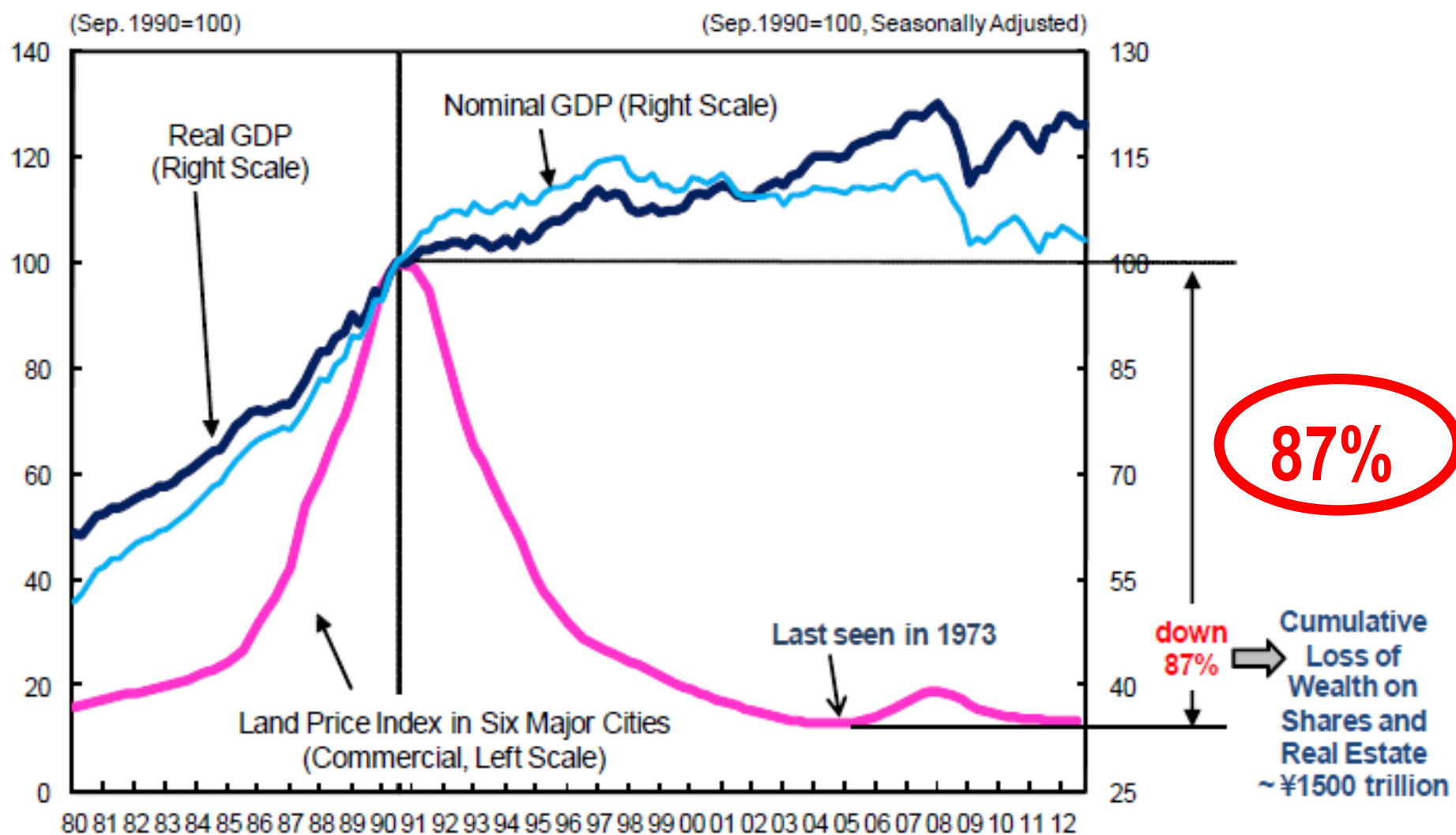
Rynkowa wartość
kupionych na kredyt
nieruchomości

Zadłużenie
w bankach

Kredyty
hipoteczne

Straty kapitałowe

Exhibit 4. Japan's GDP Grew despite major Loss of Wealth and Private Sector De-leveraging



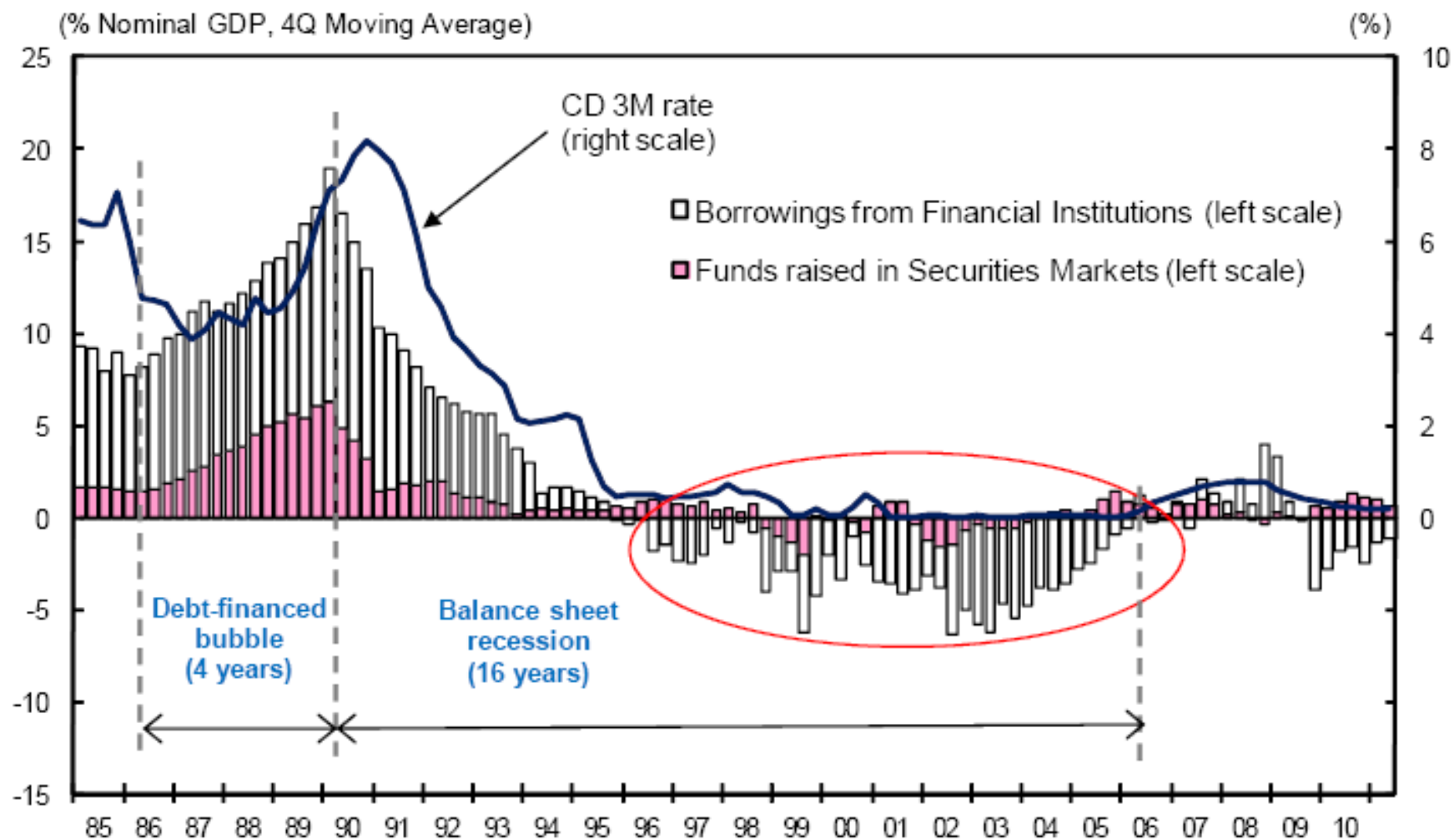
Wiele gospodarstw domowych znalazło się „pod wodą”

- Z ujemną wartością majątku (**nie mając odpowiedniego zastawu**) gospodarstwa domowe nie miały możliwości zaciągania nowych kredytów, co sprawiało, że musiały **więcej oszczędzać**, wydając **mniej na konsumpcję**, by móc spłacać zaciągnięte wcześniej kredyty hipoteczne.
- W takiej sytuacji, obniżenie stóp procentowych do zera nie powodowało wzrostu popytu na kredyt



Exhibit 5. Japan's Deleveraging under Zero Interest Rates Lasted for 10 Years

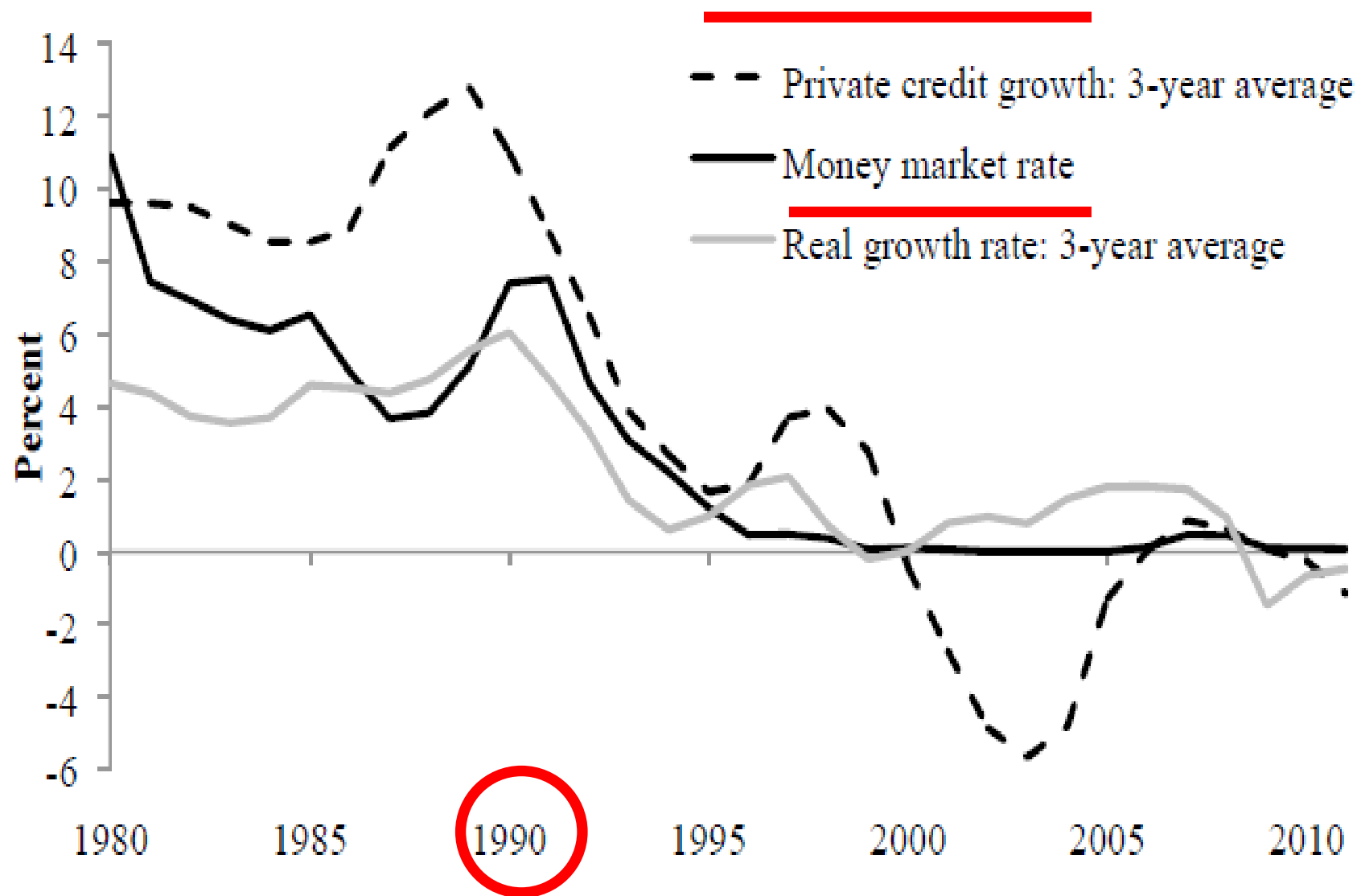
Funds Raised by Non-Financial Corporate Sector



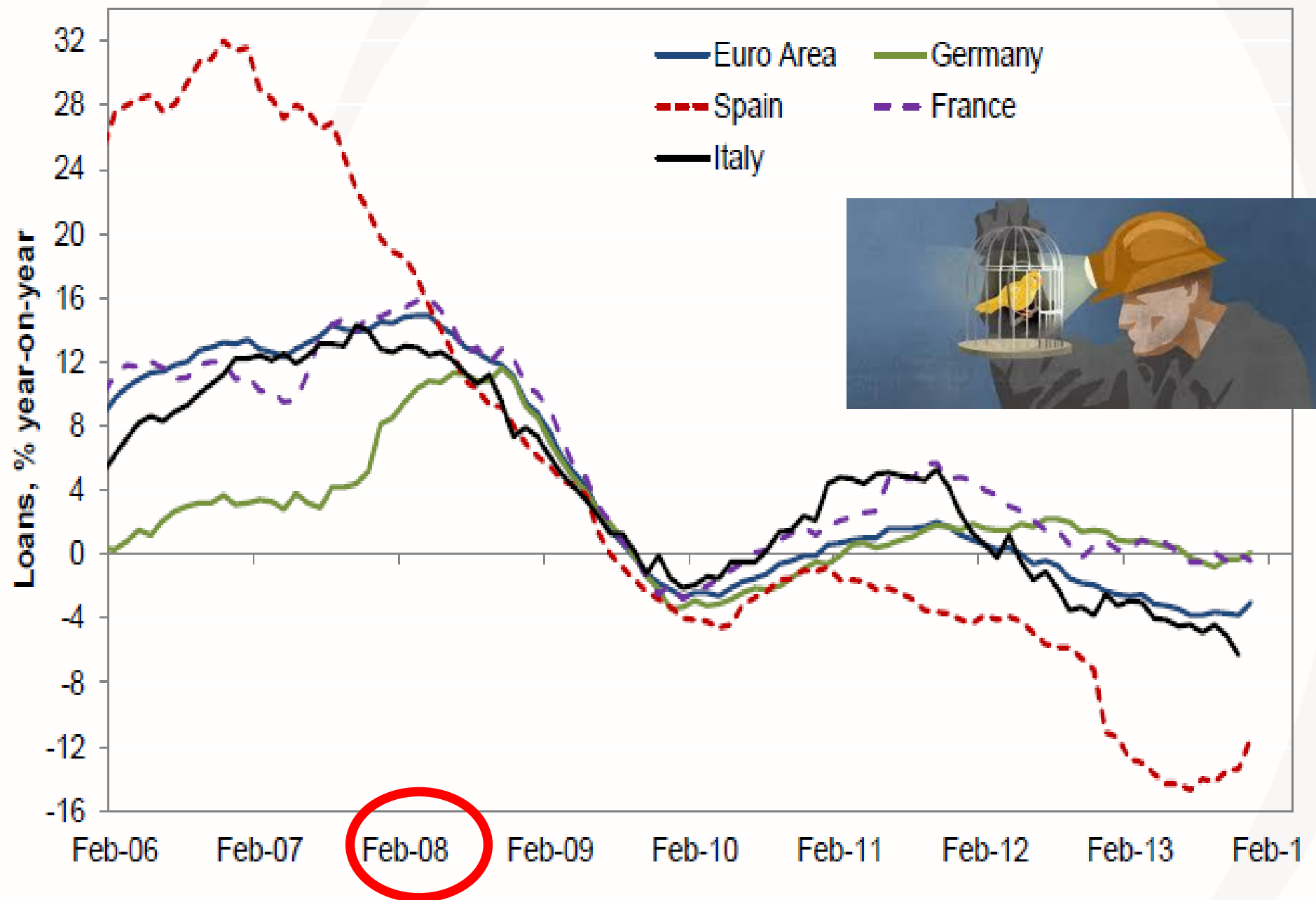
Sources: Bank of Japan, Cabinet Office, Japan

Richard C. Koo, *The world in balance sheet recession: causes, cure, and politics*, "Real-World Economics Review", no. 58/2011

Figure 7: Interest Rates, Real Growth and Credit Growth in Japan



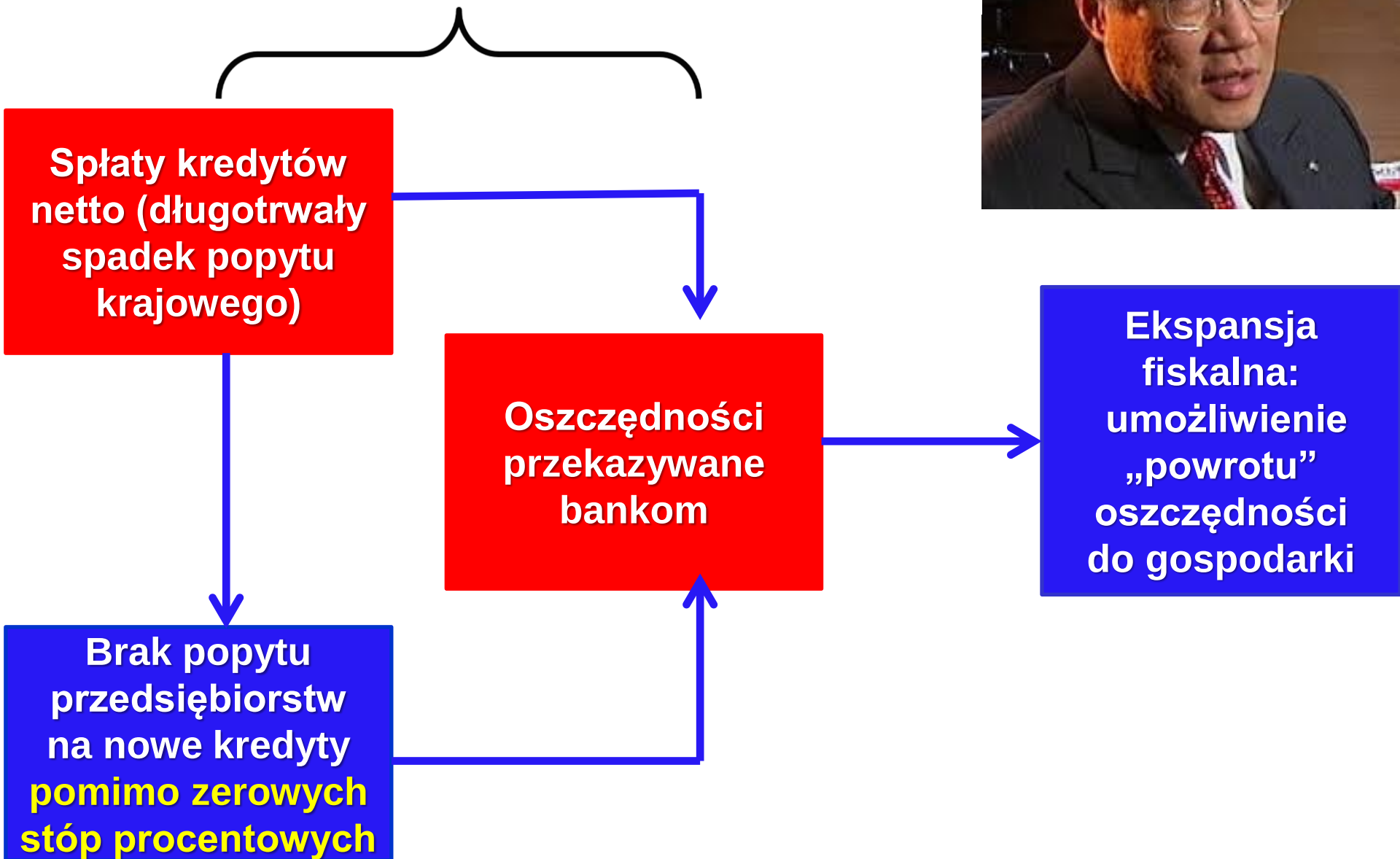
Gunter Schnabl (2013) "The Macroeconomic Policy Challenges of Balance Sheet Recession: Lessons from Japan for the European Crisis", CESifo Working Paper No. 4249, May



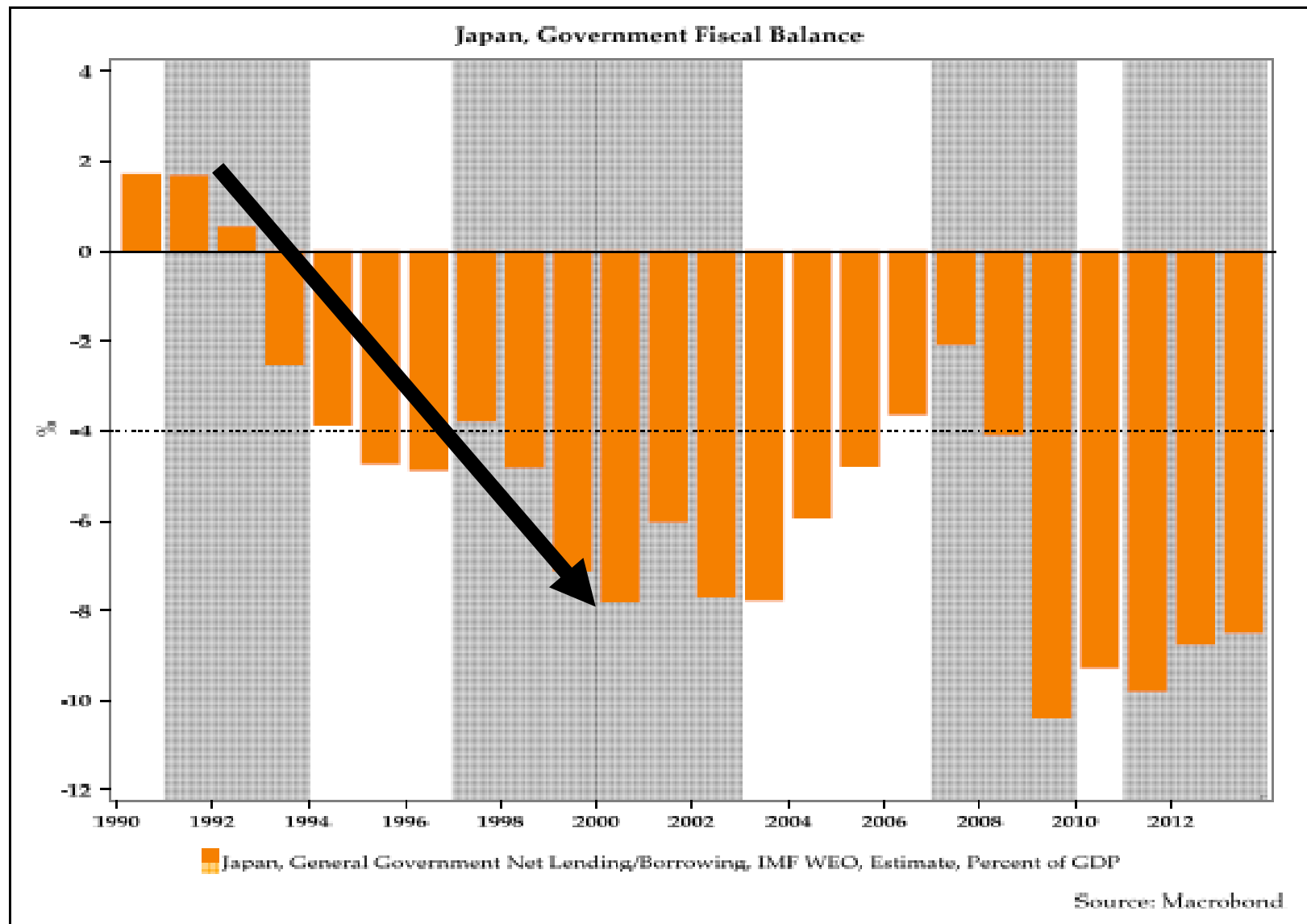
**Co ratowało gospodarkę
Japonii przed wejściem w
głęboką i długotrwałą recesję?**

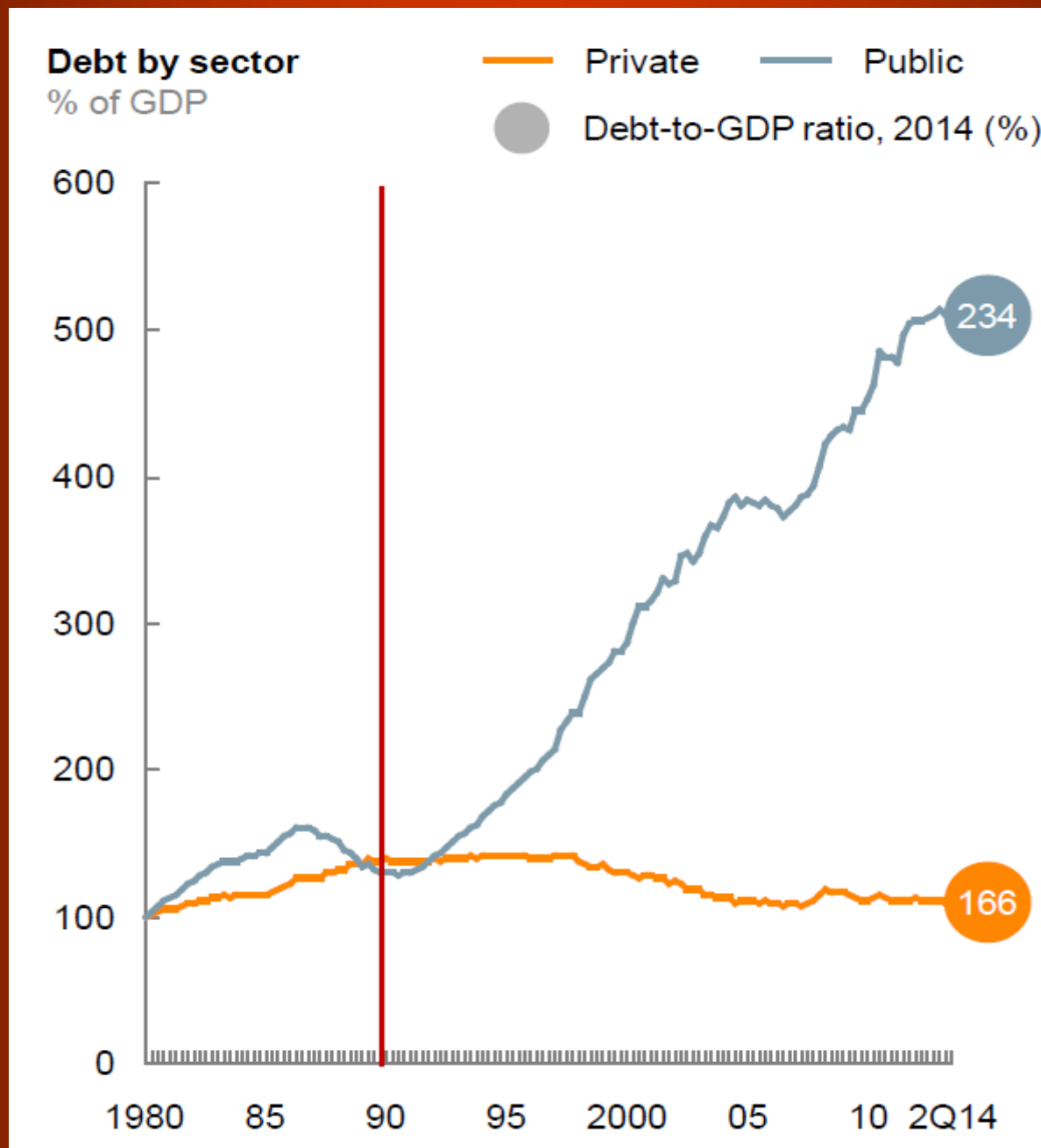
Recesja bilansowa:

Gospodarstwa domowe zmniejszają konsumpcję,
by spłacić zadłużenie w bankach.



The Japanese government has been running persistently large fiscal deficits since the mid-1990s

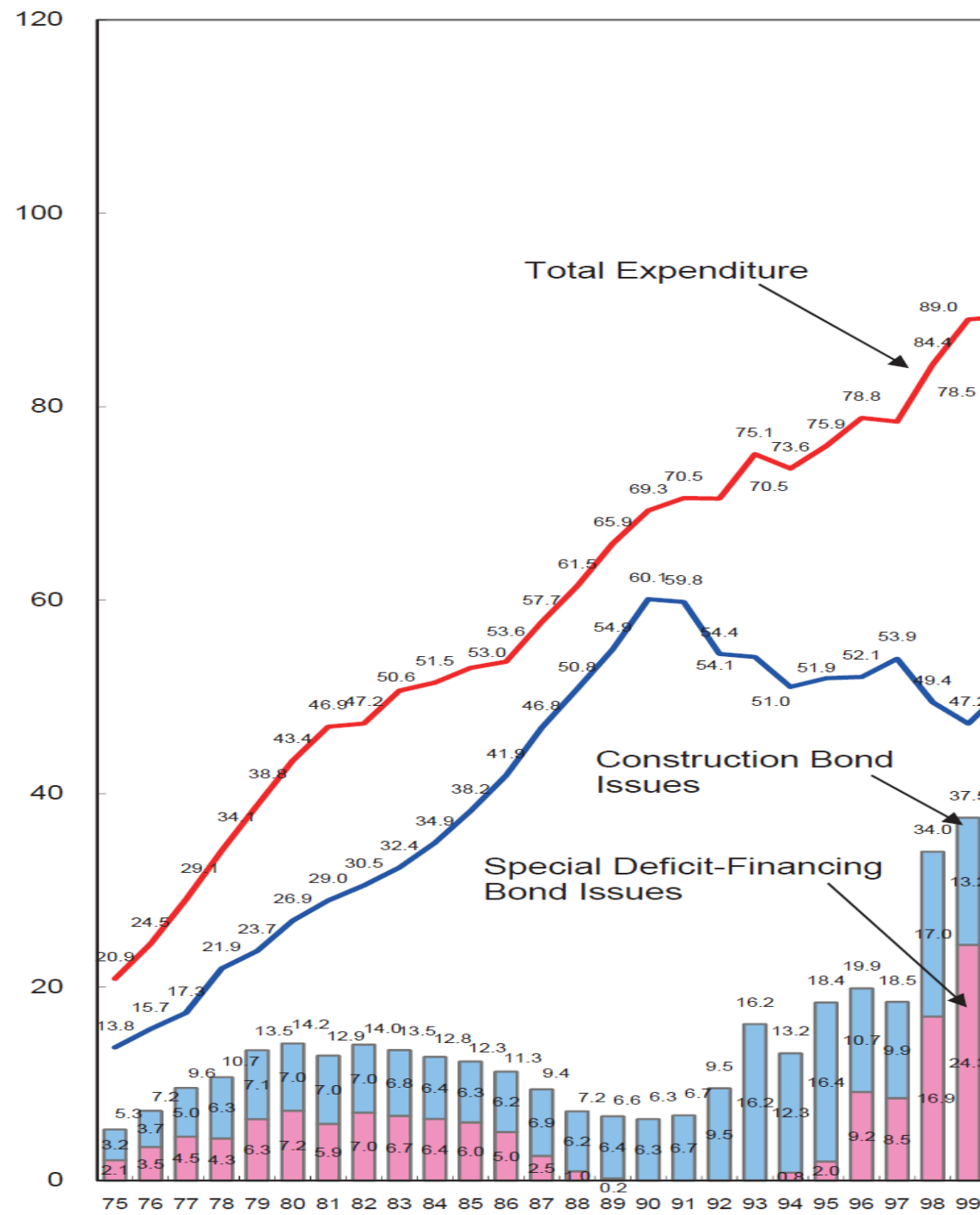




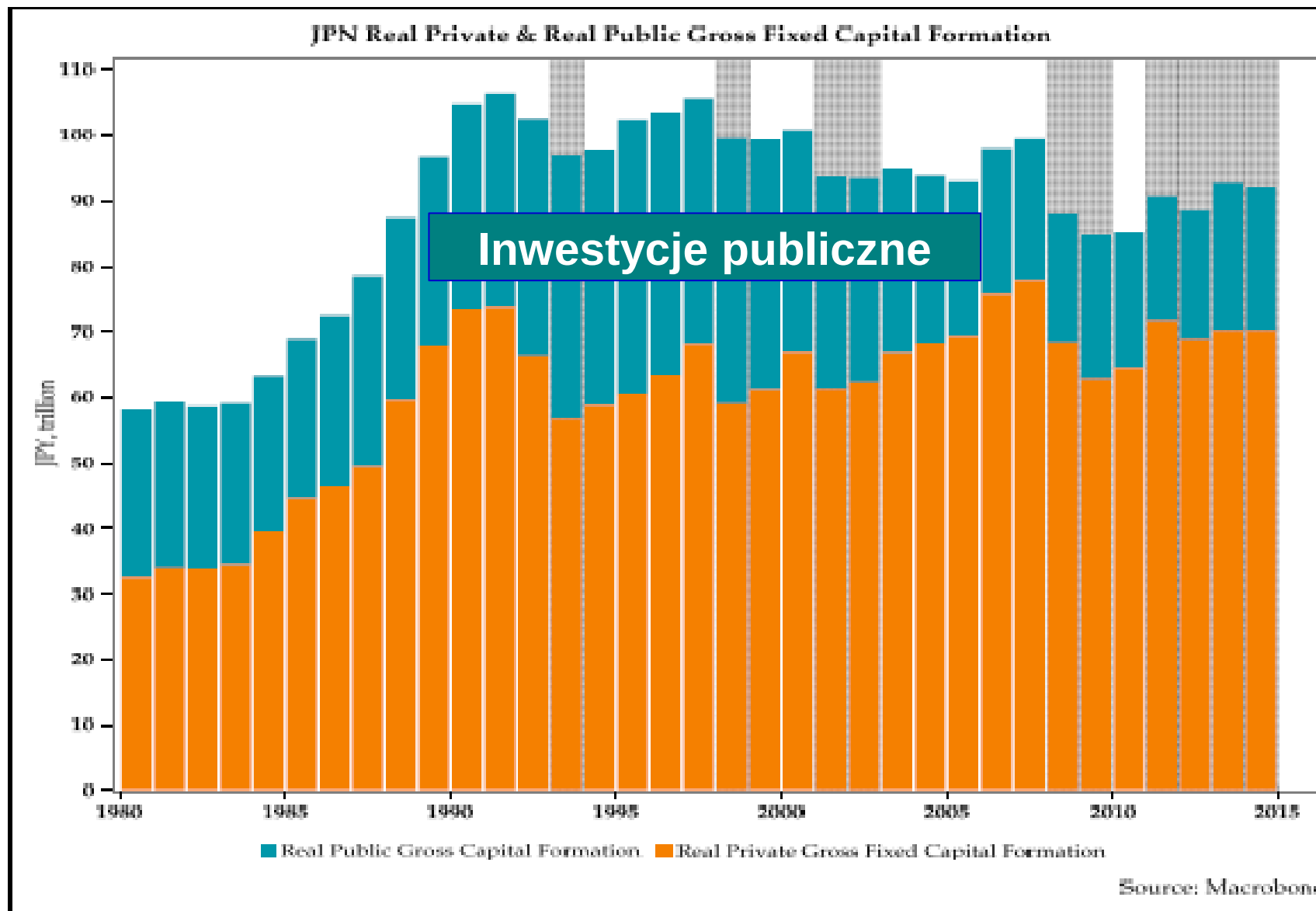
McKinsey Global Institute (2015) Debt and (not much) delevering

**Dlaczego ekspansja fiskalna
przynosiła jedynie
umiarkowany wzrost
gospodarczy?**

(trillion yen)

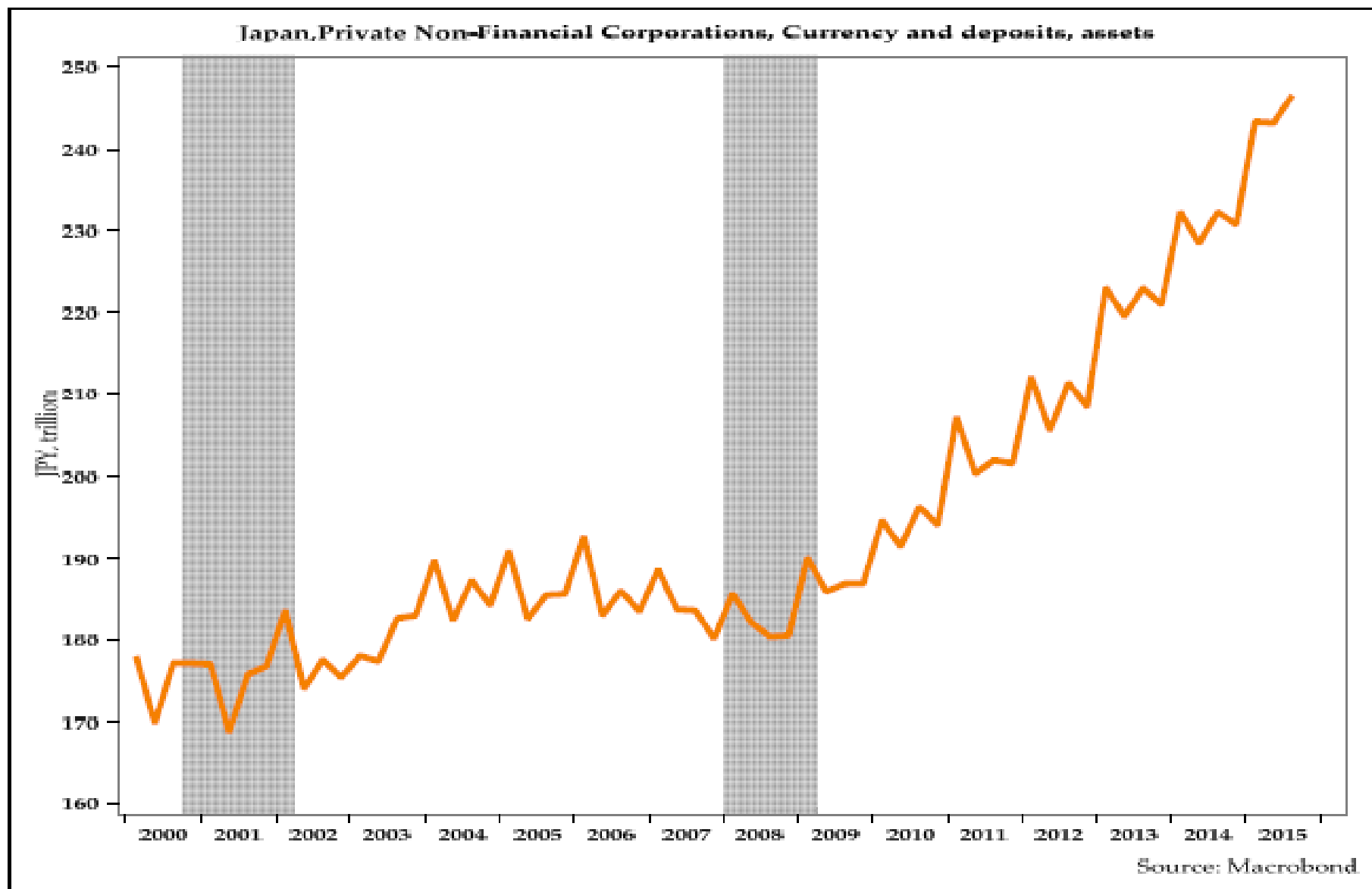


The level of investment has been soft, especially in the public sector



**Dlaczego duże deficyty
budżetowe nie powodowały
inflacji?**

Japanese businesses have plenty of idle cash on hand



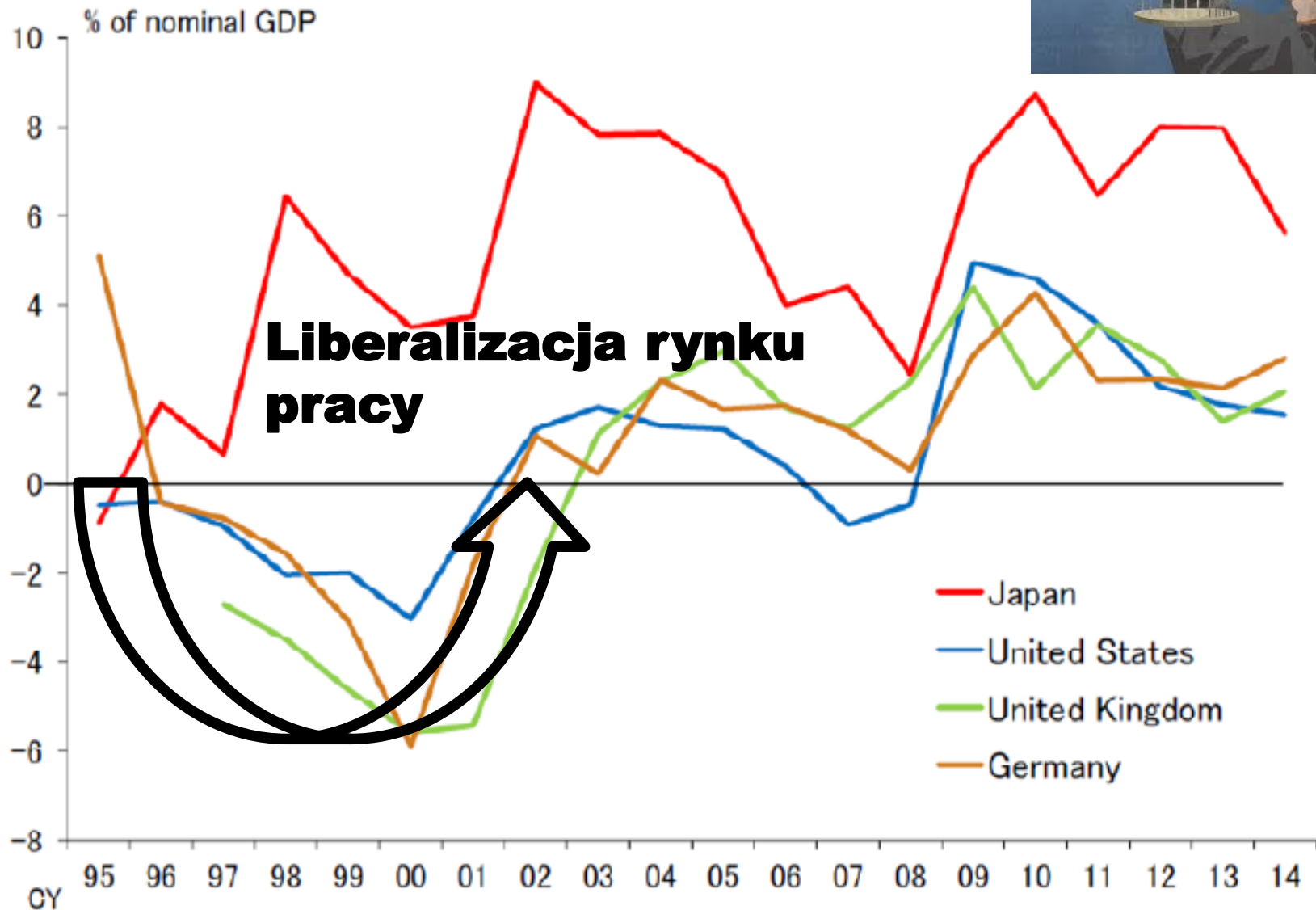


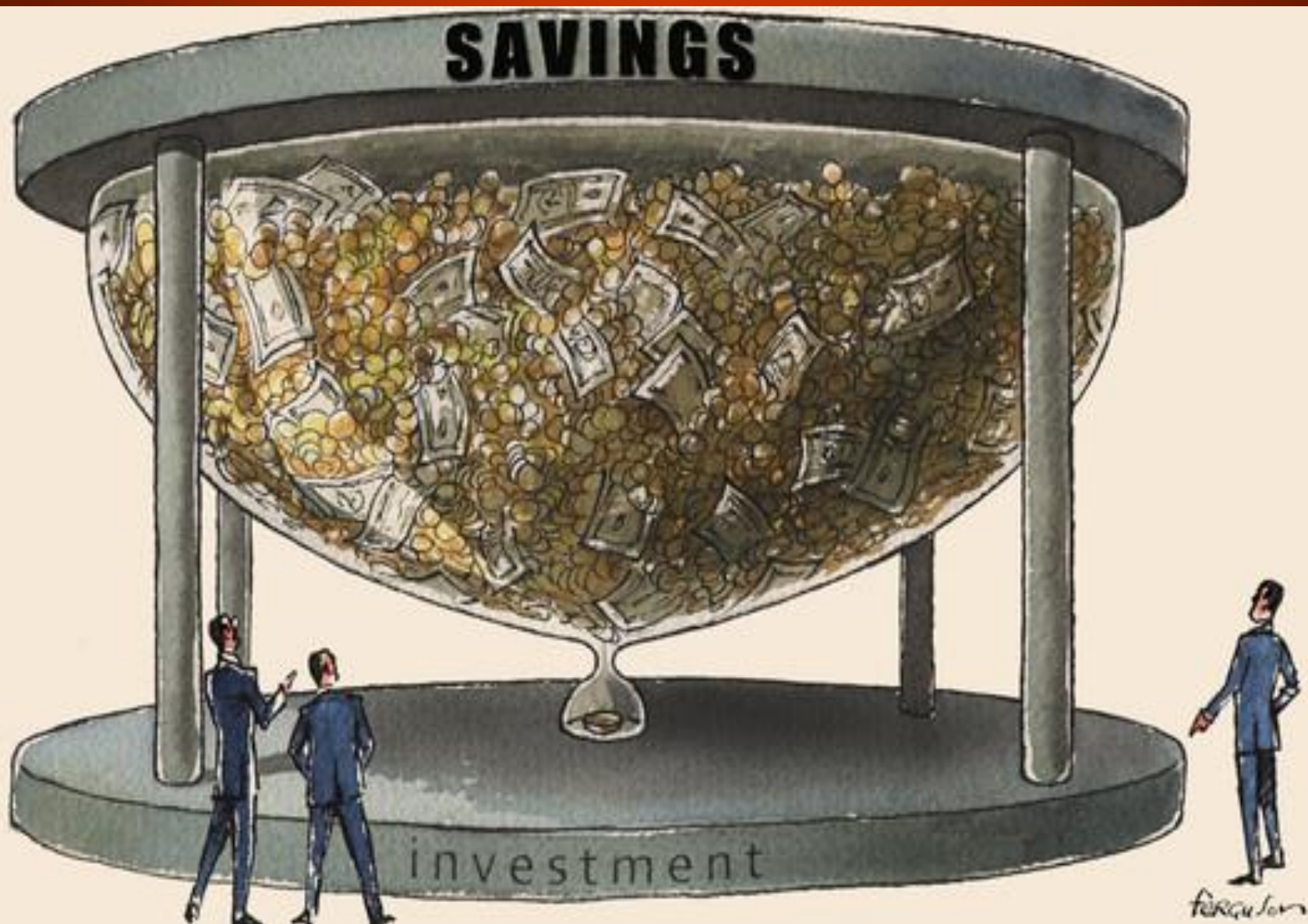
Cash to investment ratios across countries, percent

Country	Pre-crisis	Post-crisis
United States	121	172
United Kingdom	216	332
France	122	194
Germany	126	158

Note: Pre-crisis average calculated between 1997-2006. Post-crisis between 2010-2012, and for the UK between 2010-2014.

Savings surplus by corporate sector





Martin Wolf (2015) "Corporate surpluses are contributing to the savings glut", November 17, 2015

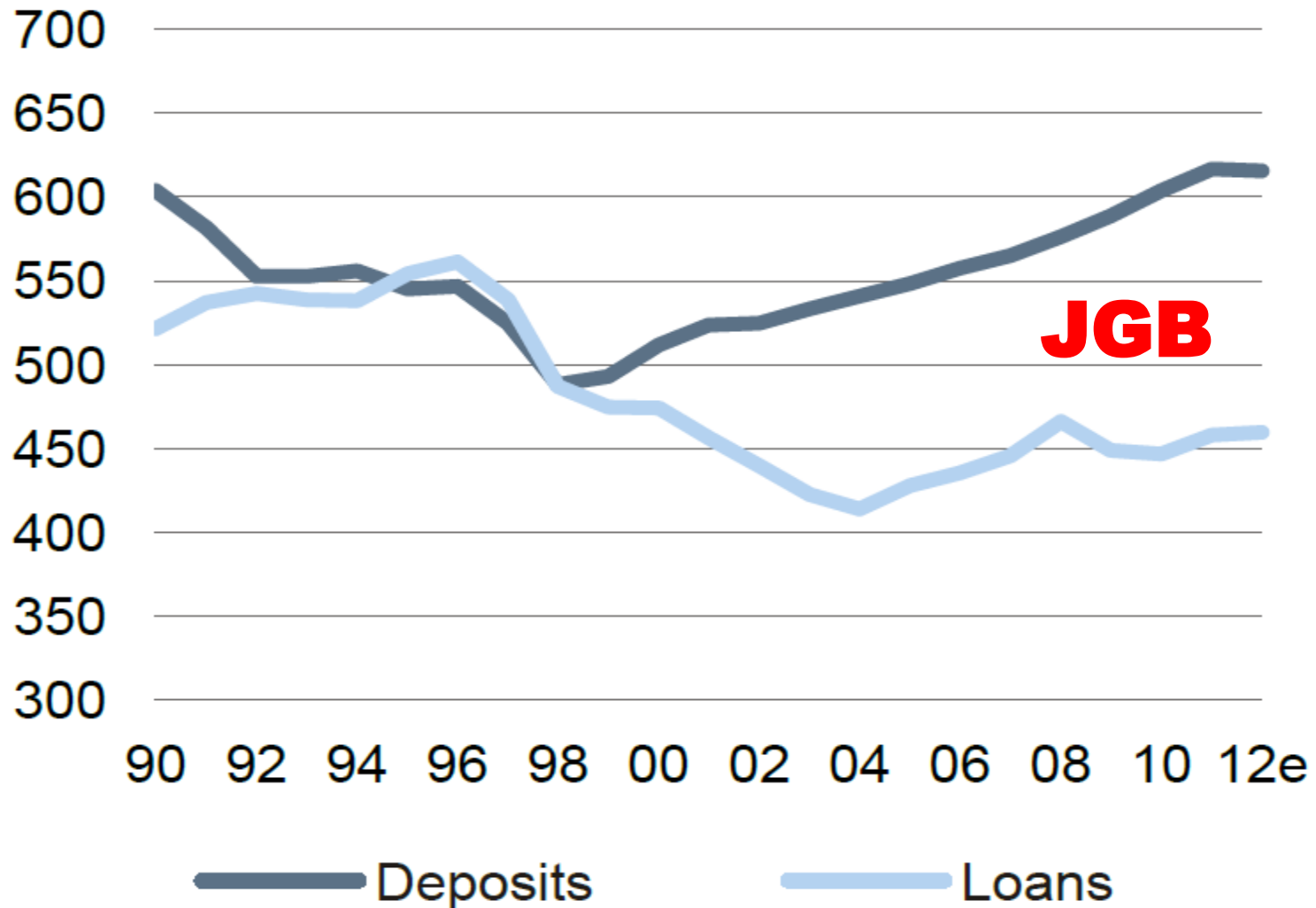
**Co było główną metodą
ochrony gospodarki przez
przewlekłą recesją?**



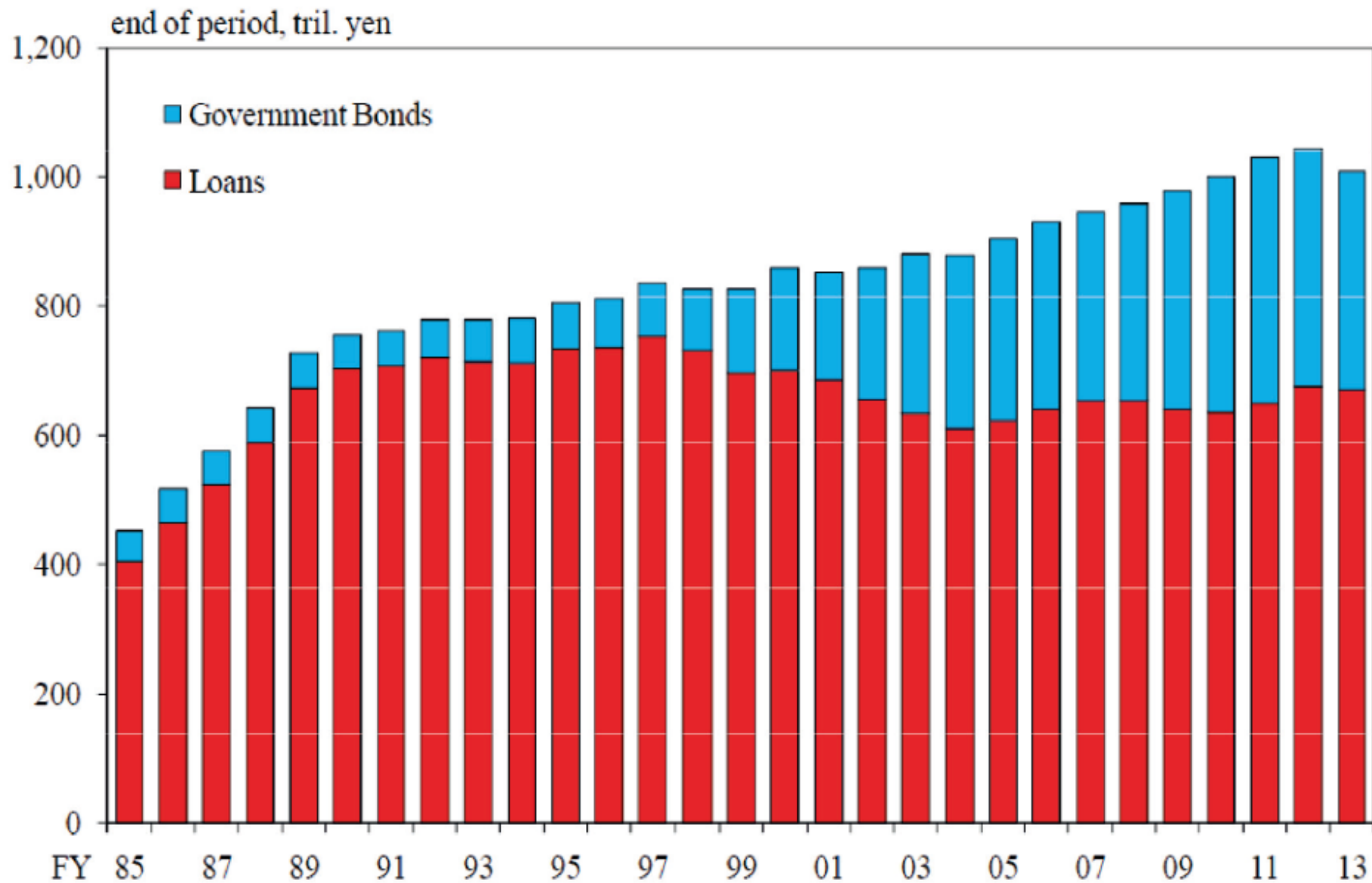
JGB

Deposit overhang

JPY tr, all banks

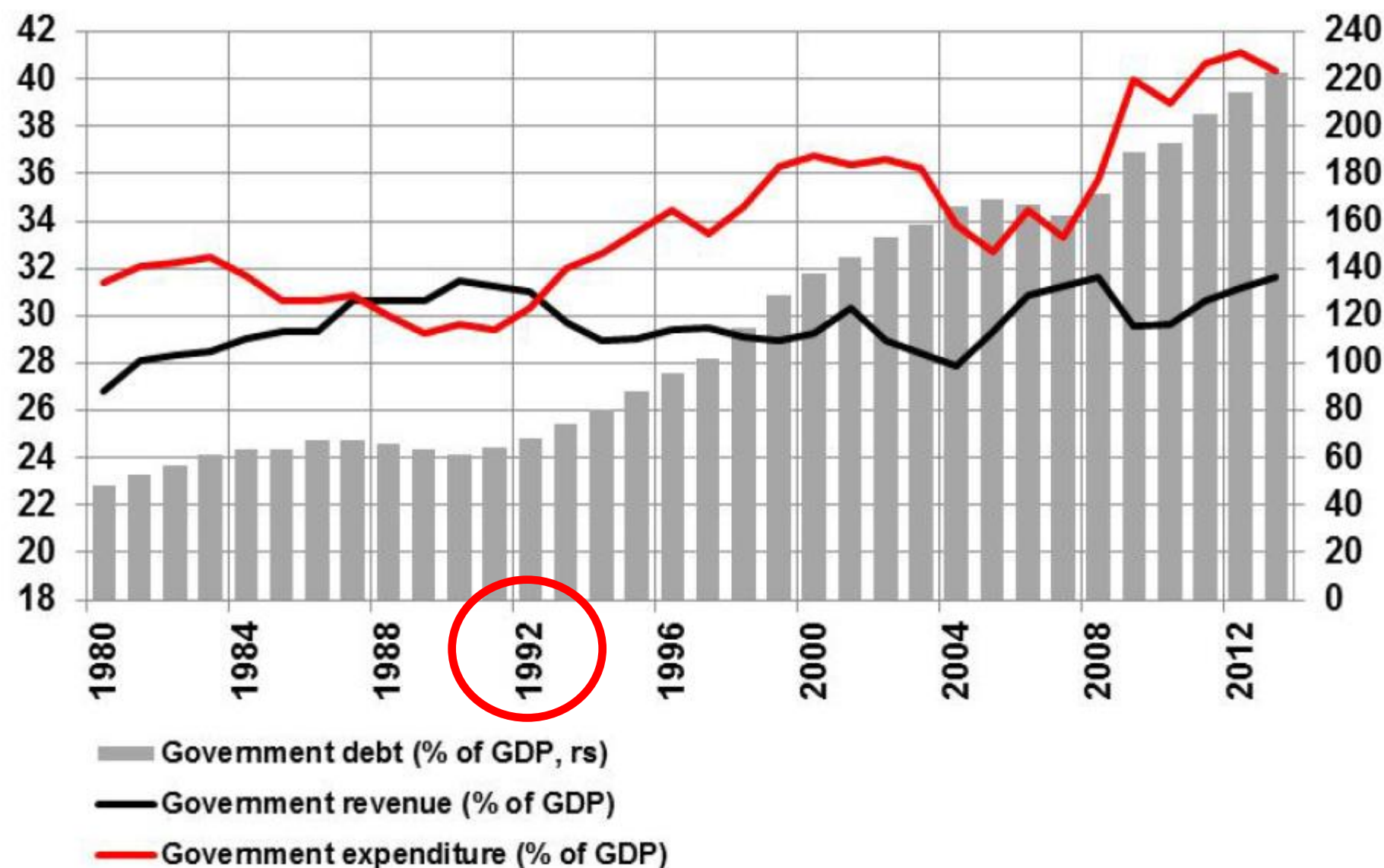


Asset Portfolio of Banks



Haruhiko Kuroda, „Overcoming deflation and after, Speech at the Meeting of Japan Business Federation, Tokyo, 25 December 2013

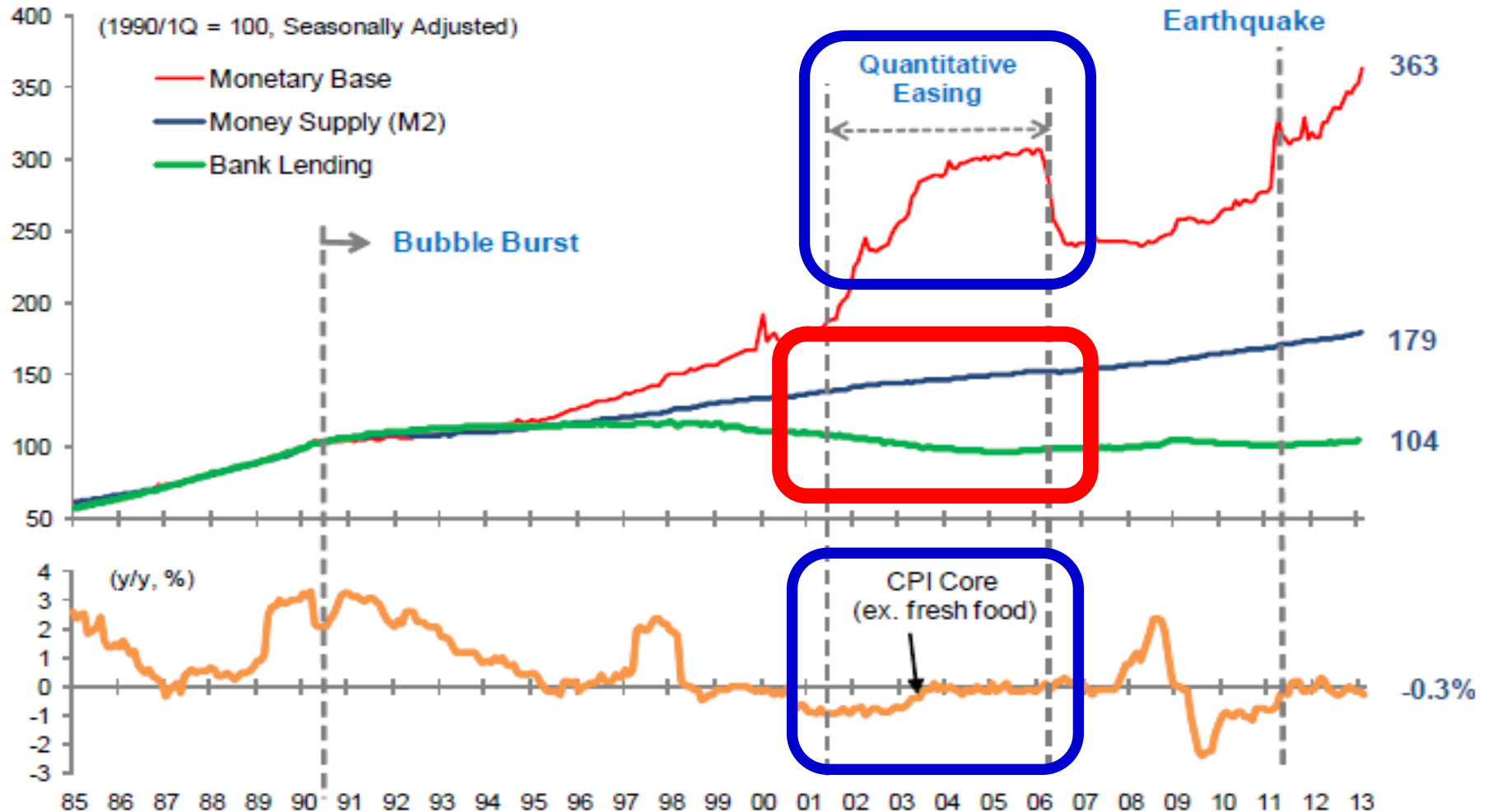
Figure 4: Government expenditure, revenue and debt in Japan



W marcu 2001r. Bank Japonii skorzystał w rady Bena Bernanke, by wykorzystać QE jako formę ekspansji monetarnej

Exhibit 7. Drastic Liquidity Injections in Japan Resulted in minimal Increases in Money Supply and Credit

ponieważ nie rosła akcja kredytowa



**Dlaczego wydatki
budżetowe przyczyniają się
do wzrostu podaży
pieniadza?**

- W sytuacji, w której wydatki budżetu są finansowane z wpływów podatkowych i emisji obligacji, na których zakup instytucje finansowe wykorzystują lokowane w nich depozyty terminowe (banki), udziały (fundusze inwestycyjne), składki (towarzystwa ubezpieczeniowe i fundusze emerytalne) deficyt budżetowy finansują oszczędności gospodarstw domowych i firm.
- W takiej sytuacji, w której wydatki budżetu stanowią bieżące wydatki i transfery, **oszczędności** (dochody nie wydawane na bieżące potrzeby) są **zamieniane na pieniądź** (dochody wydawane na bieżące potrzeby).

Dlaczego mimo QE pojawiła się deflacja?

(trillion yen)

120

100

80

60

40

20

0

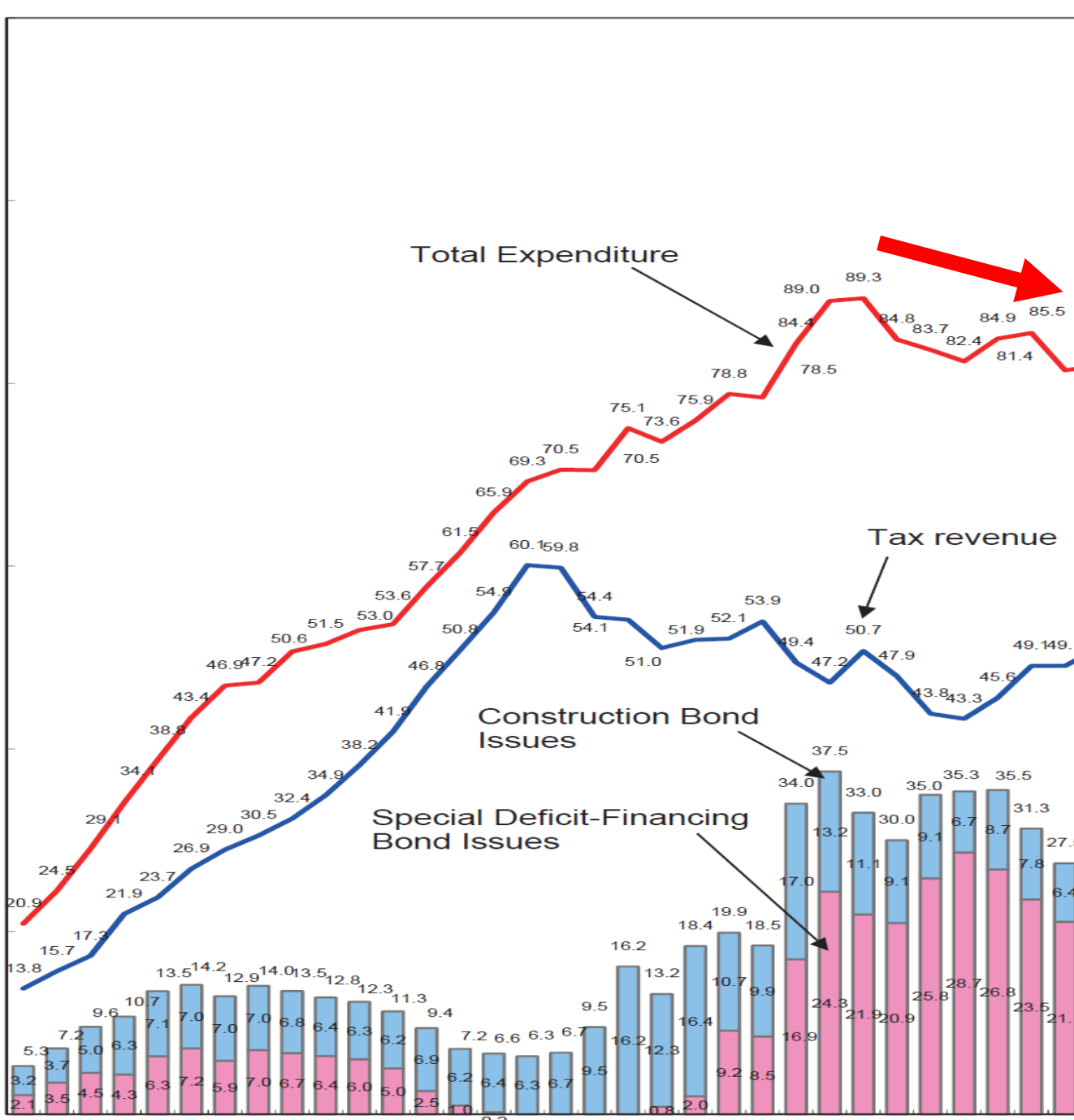
Total Expenditure

Tax revenue

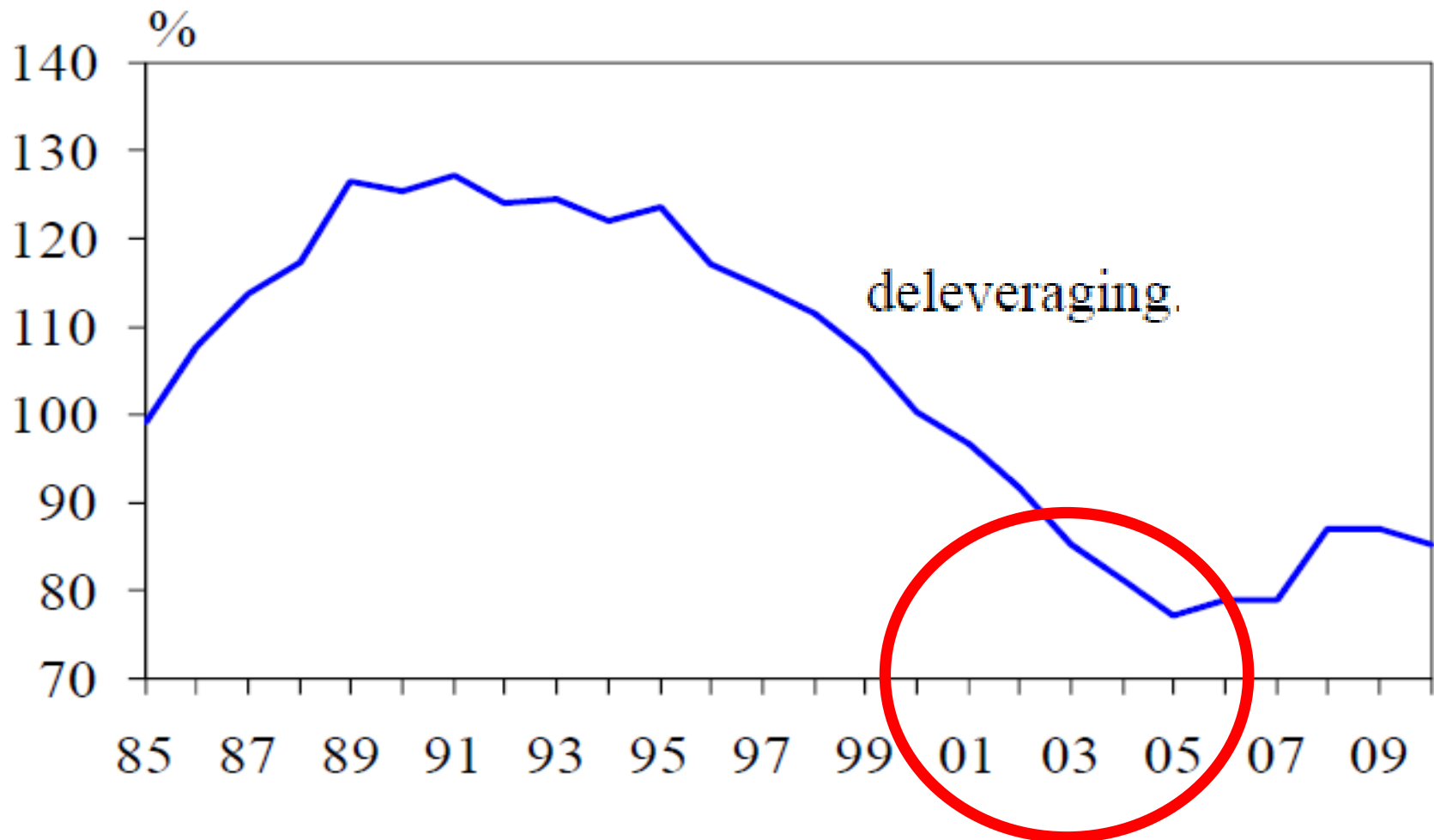
Construction Bond Issues

Special Deficit-Financing Bond Issues

75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06

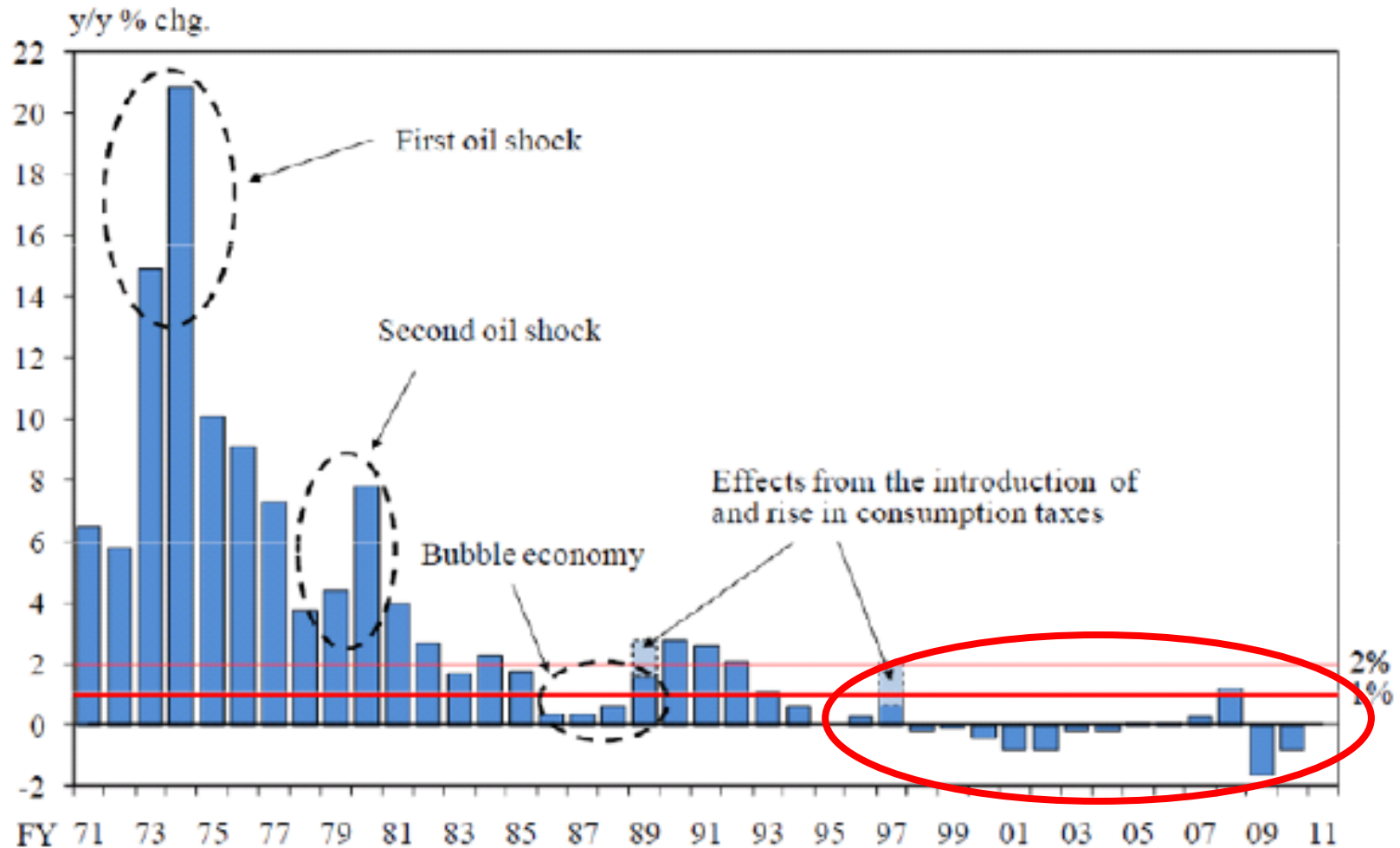


Ratio of Debt to Nominal GDP¹



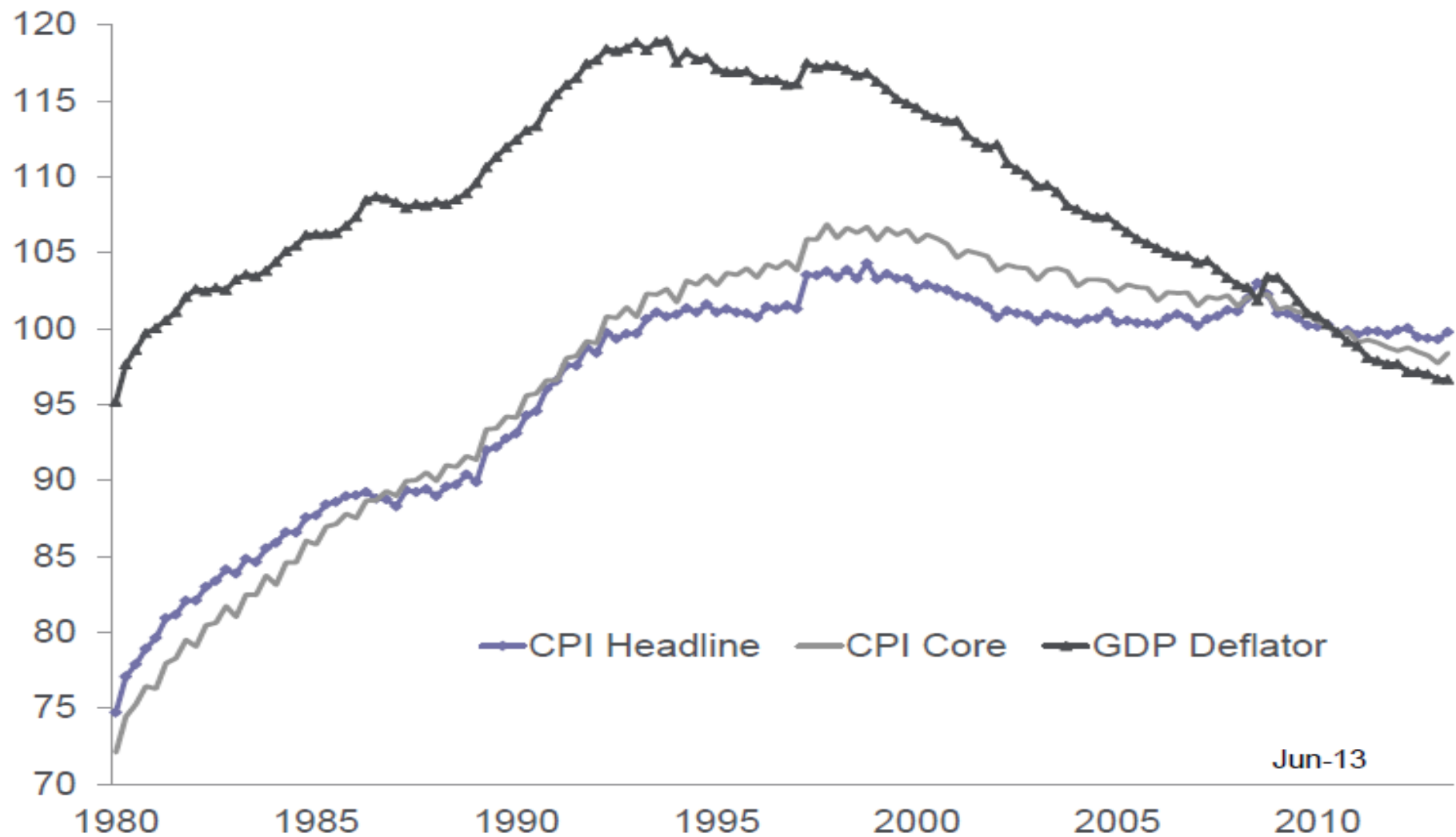
Notes: 1. Debt is the sum of loans and securities (other than equities) in private non-financial corporations.

Changes in Japan's CPI



Masaaki Shirakawa, „Japan's economy and monetary policy”, Speech, Research Institute of Japan, 4 June 2014

Figure 1. Japan – General Price Levels (2010 = 100), 1980-2013

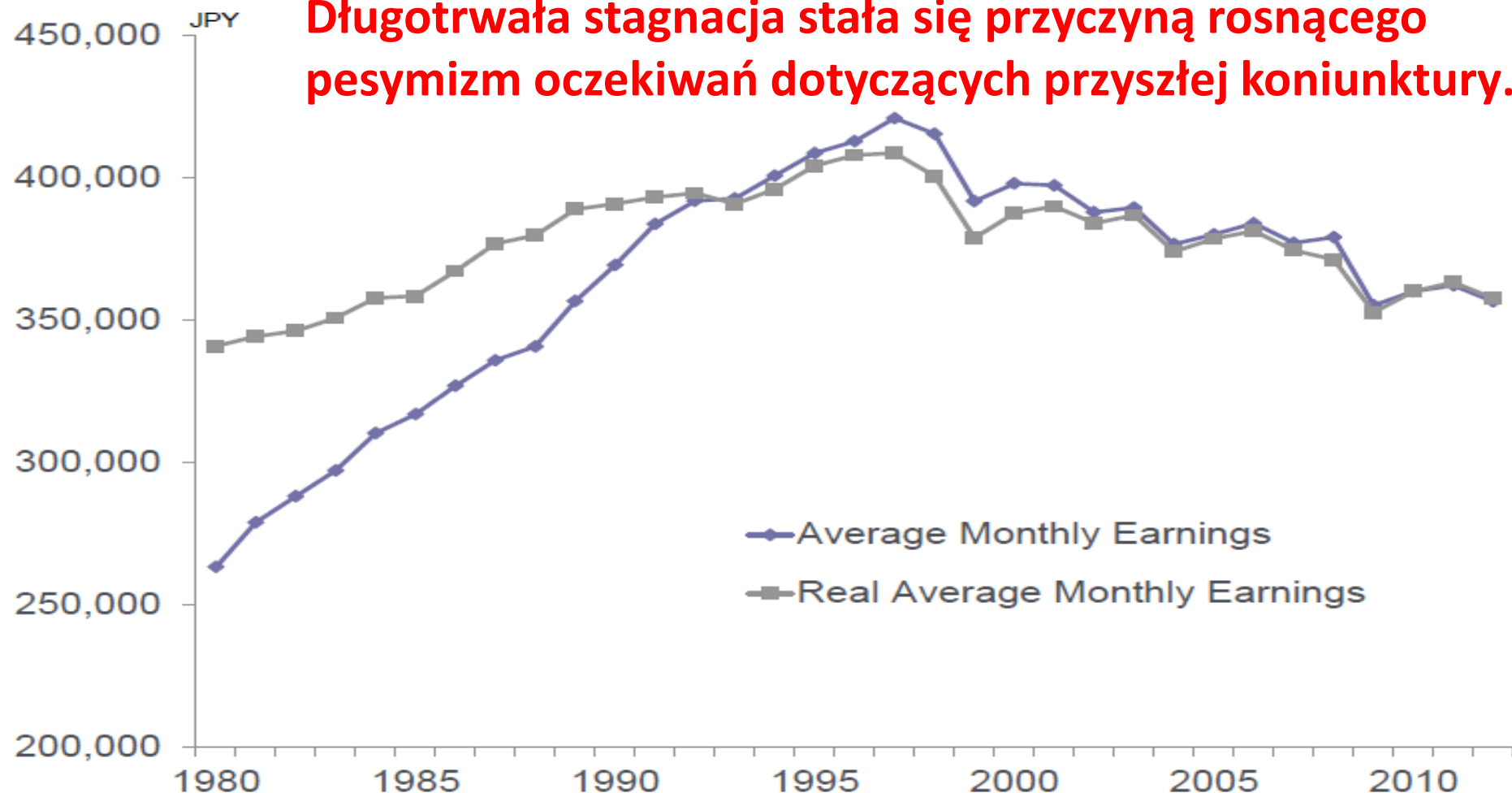


Source: Cabinet Office of Japan and Citi Research

Willem Buiter Ebrahim Rahbari (2013) What to expect from Abenomics: Four arrows to target four challengesCiti GPS: Global Perspectives & Solutions, October.

Figure 9. Japan – Labour Earnings Per Employee (¥), 1980-2013

Długotrwała stagnacja stała się przyczyną rosnącego pesymizmu oczekiwań dotyczących przyszłej koniunktury...

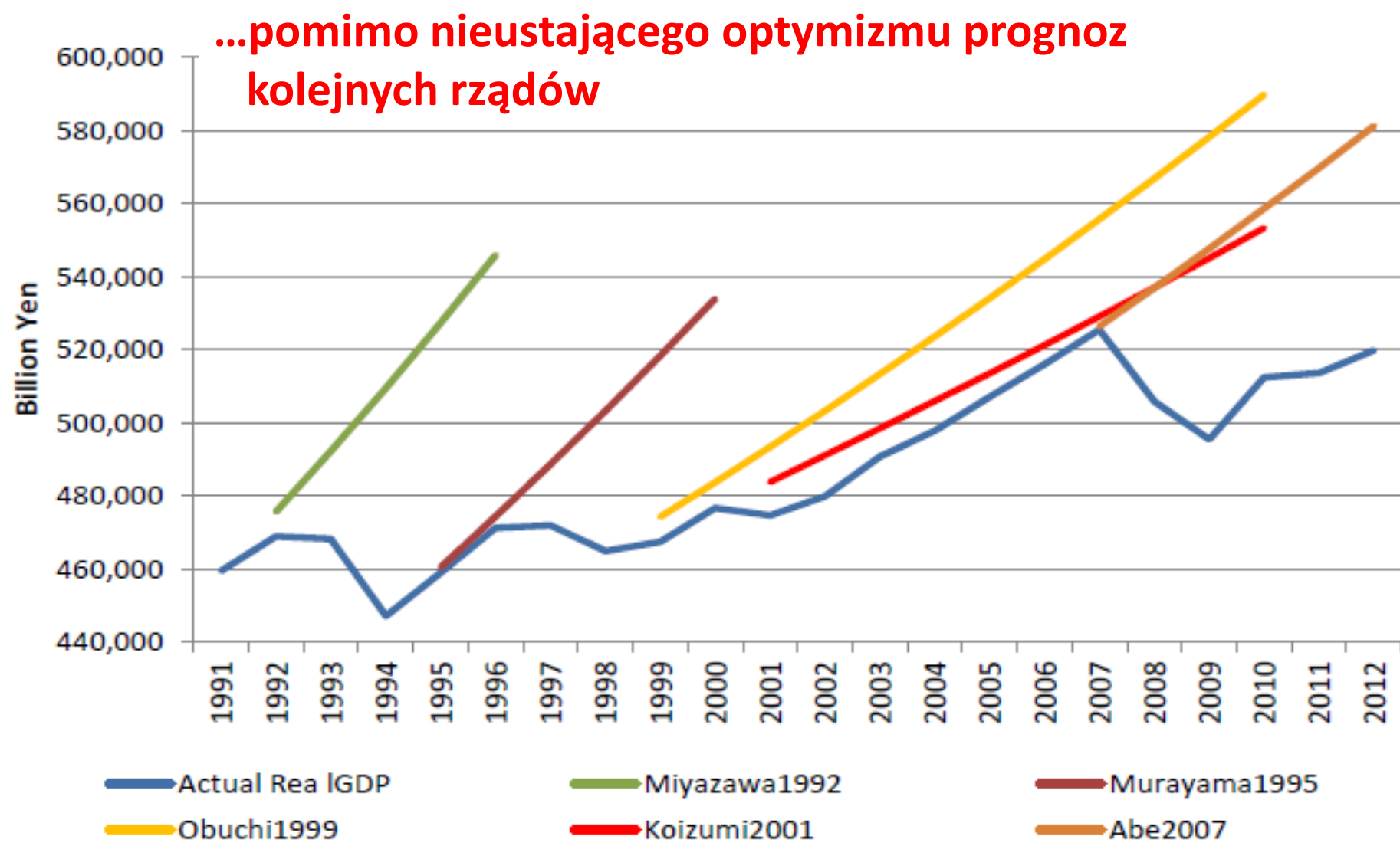


Note: Average monthly cash earnings per regular employee in establishments with 30 or more employees. Real data deflated using CPI (2010 = 100)

Source: Ministry of Health, Labour and Welfare, Citi Research

Willem Buiter Ebrahim Rahbari (2013) What to expect from Abenomics: Four arrows to target four challengesCiti GPS: Global Perspectives & Solutions, October.

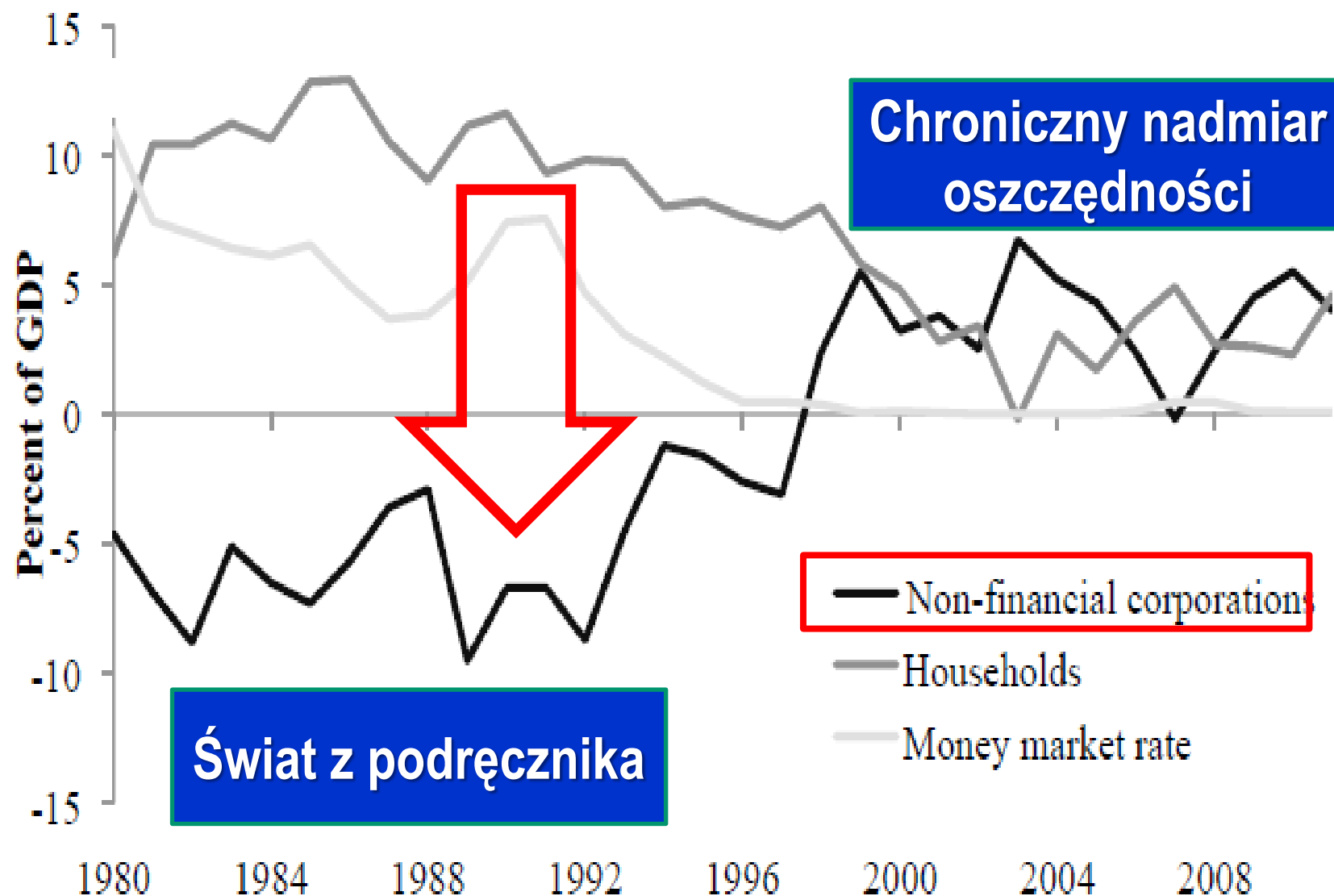
Figure 6. Government Growth Forecasts



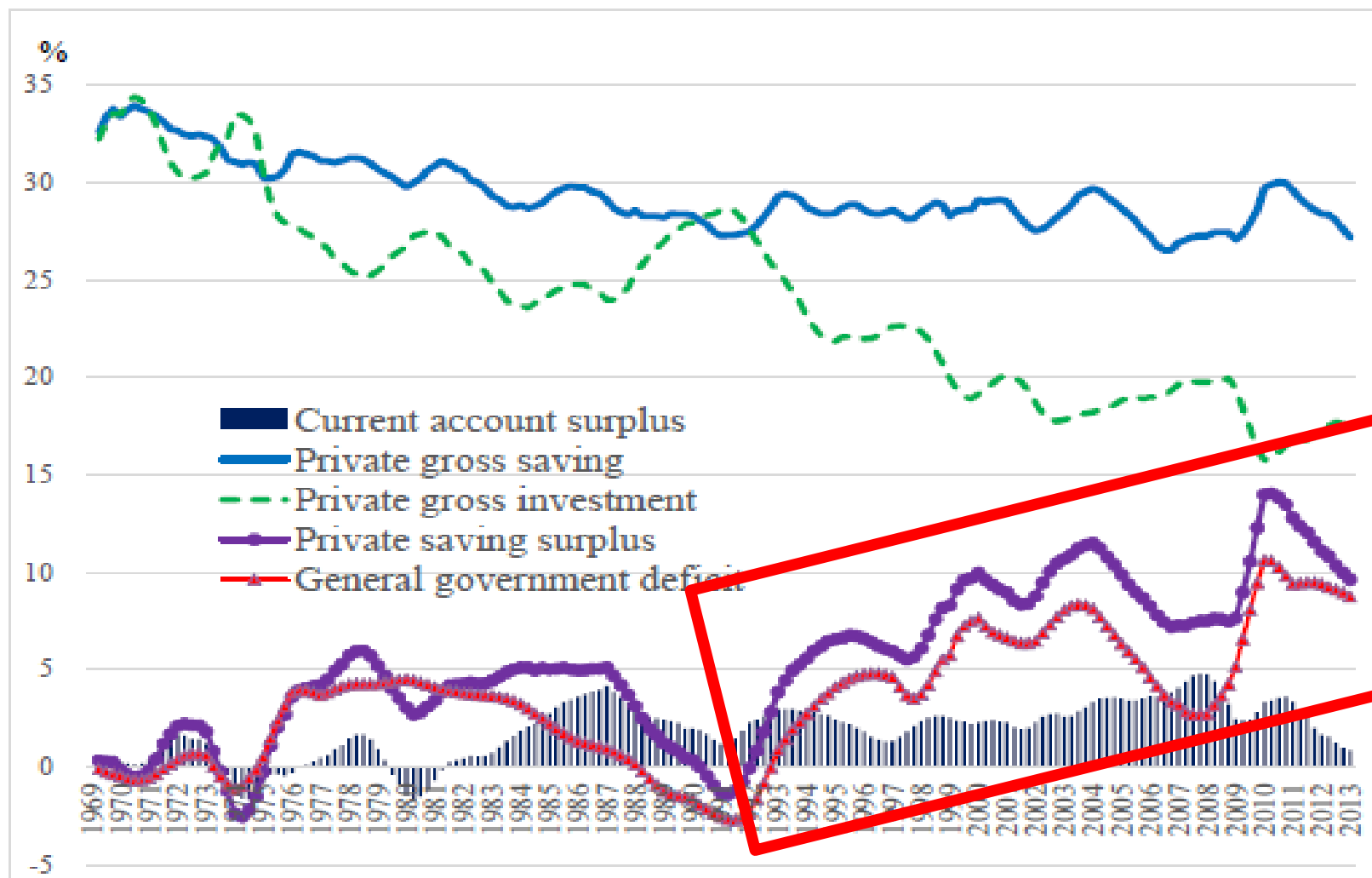
Takeo Hoshi, Anil K. Kashyap (2013) Will the US and Europe Avoid a Lost Decade? Lessons from Japan's Post Crisis Experience, 14th Jacques Polak Annual Research Conference, 7-8 November

**Sytuacja w gospodarce stała się
„nie-podręcznikowa”**

Figure 8: Japan: Financial Surplus or Deficit by Sector



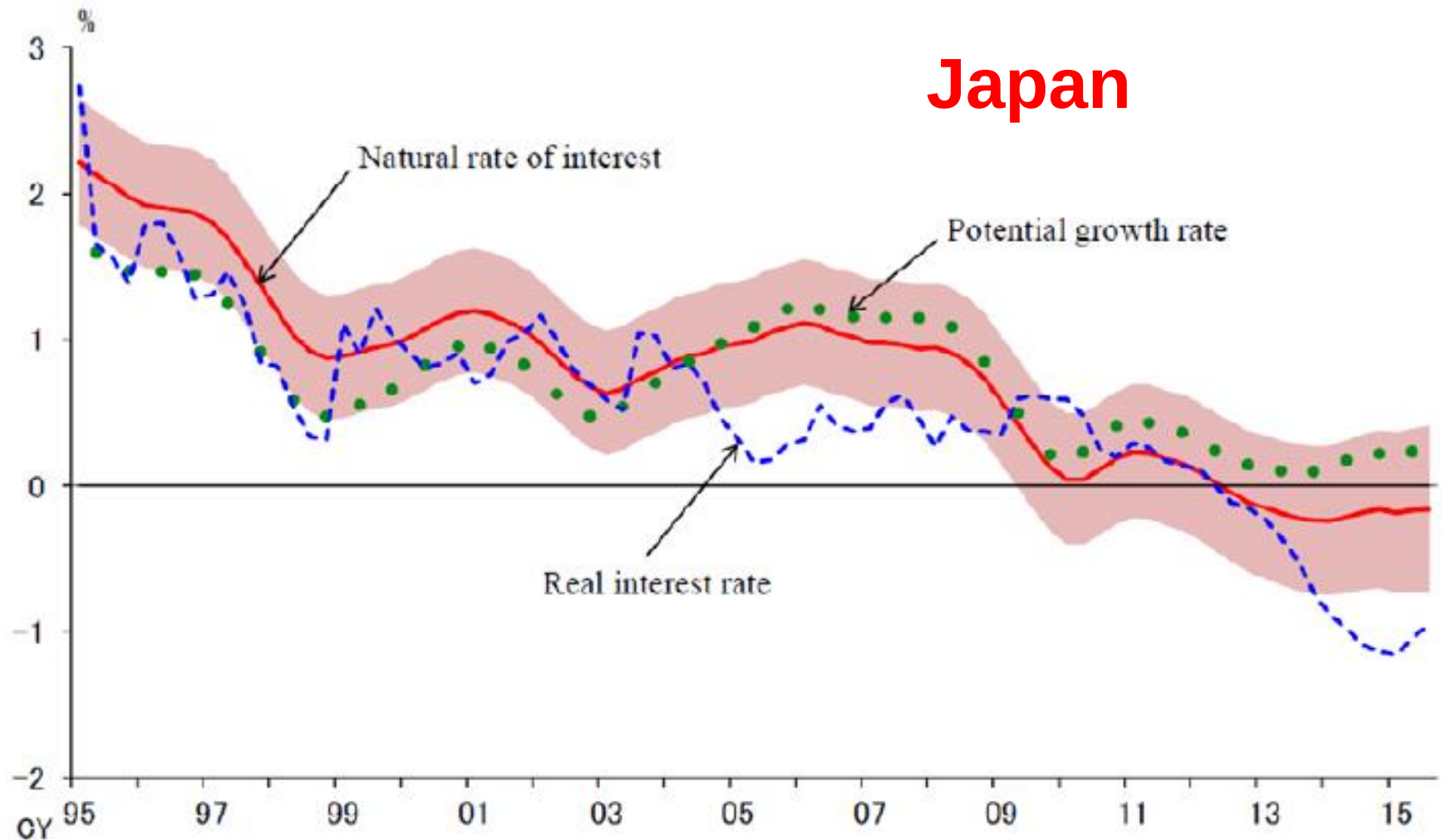
- Japan has been suffering from a large **negative GDP gap since the 1970s**.
- Underlying this large negative GDP gap is an **excess saving** problem caused by the persistently high private saving rate and the decline in private investment.
- Moreover, the
- **declining trend in private investment** from the 1970s is **due to structural factors** such as the
- *slowdown in the growth of the working age population* and the
- *decline in TFP growth*.



Note: The data were compiled by Mr. Ryutaro Kono of BNP Paribas Japan. The original data source is the SNA Statistics published by the Cabinet Office.

Kyoji Fukao, Kenta Ikeuchi, YoungGak Kim, Hyeog Ug Kwon Tatsuji Makino, Miho Takizawa (2014) The Structural Causes of Japan's Lost Decades, *RIETO Discussion Paper Series 15-E_124*

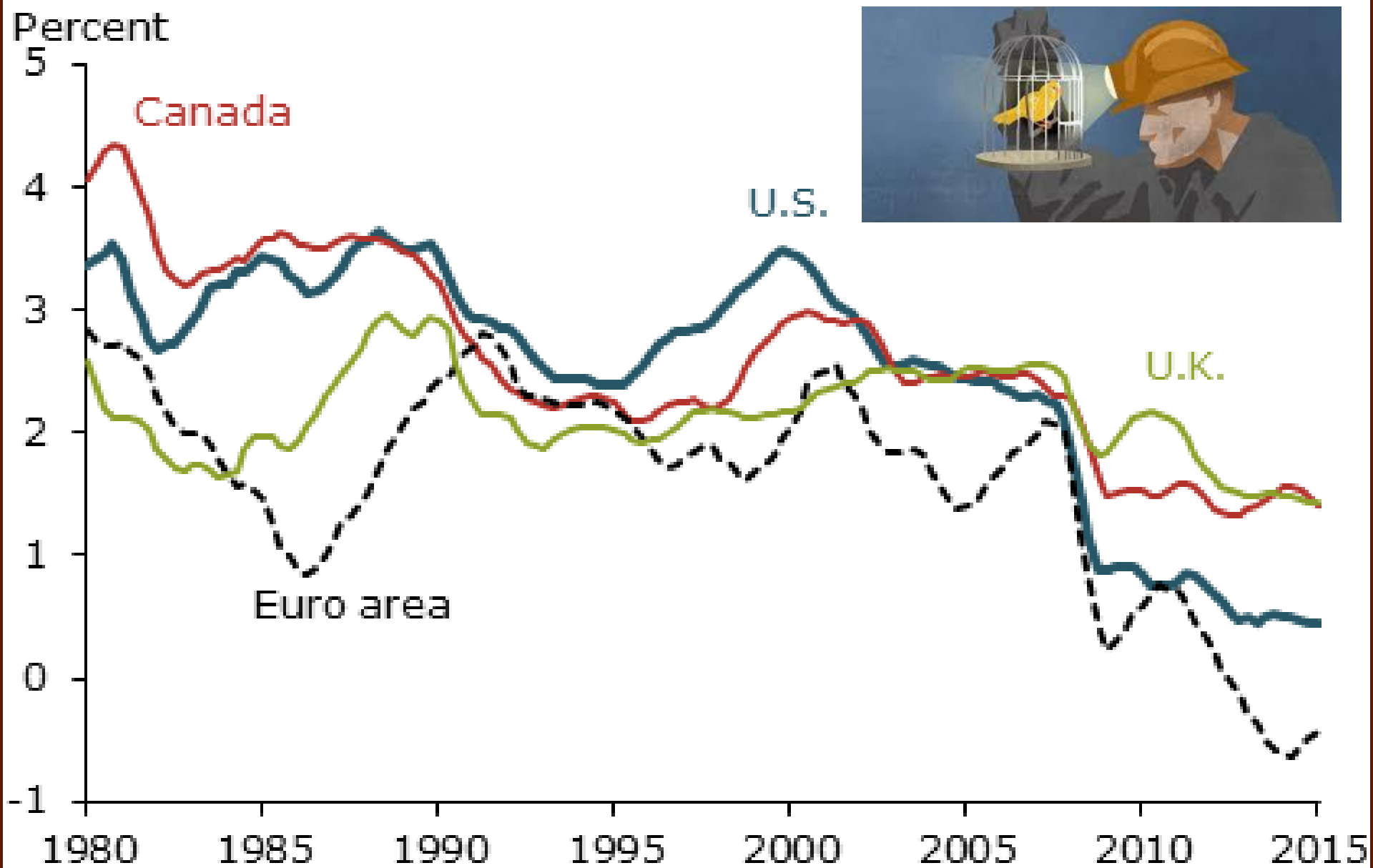
Japan



Notes: 1. The natural rate of interest and real interest rate are calculated based on 10-year government bond yields.

2. The shaded area indicates the 95 percent confidence interval for the natural rate of interest.

3. For details of the estimation procedures, see Imakubo et al. (2015), "The Natural Yield Curve: Its Concept and Measurement," Bank of Japan Working Paper Series, 15-E-5, and Hara et al. (2006), "The New Estimates of Output Gap and Potential Growth Rate," Bank of Japan Review Series, 2006-E-3.

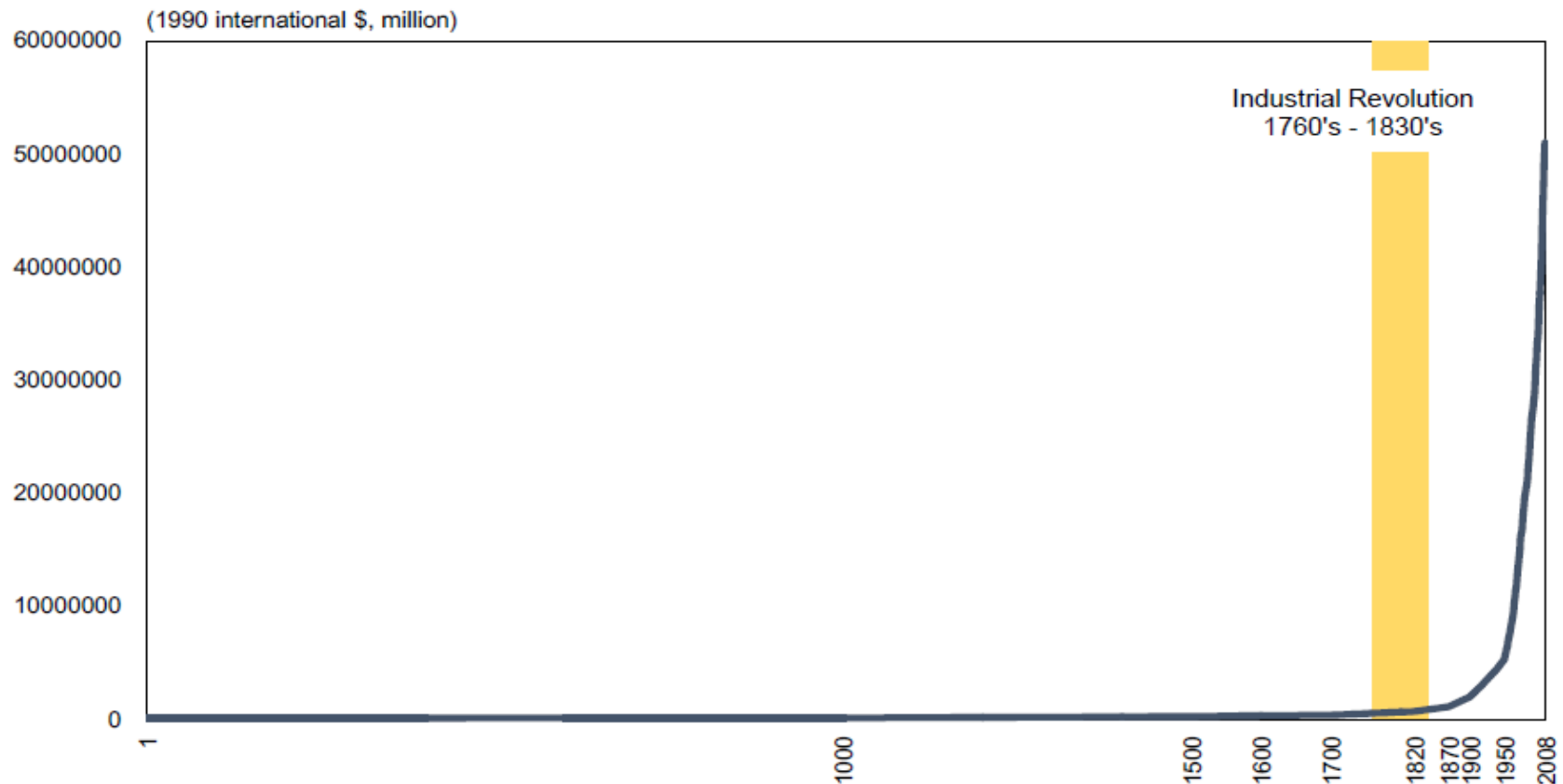


Holston, Laubach and Williams (2016) “Measuring the Natural Rate of Interest: International Trends and Determinants.” FRBSF Working Paper 2016-11, June.

**Czy trwała nadwyżka oszczędności
rzeczywiście ma tak duże znaczenie?**

Do czasu pierwszej rewolucji przemysłowej wzrost gospodarczy był bardzo powolny

Exhibit 1. Economic Growth Became Norm Only After Industrial Revolution

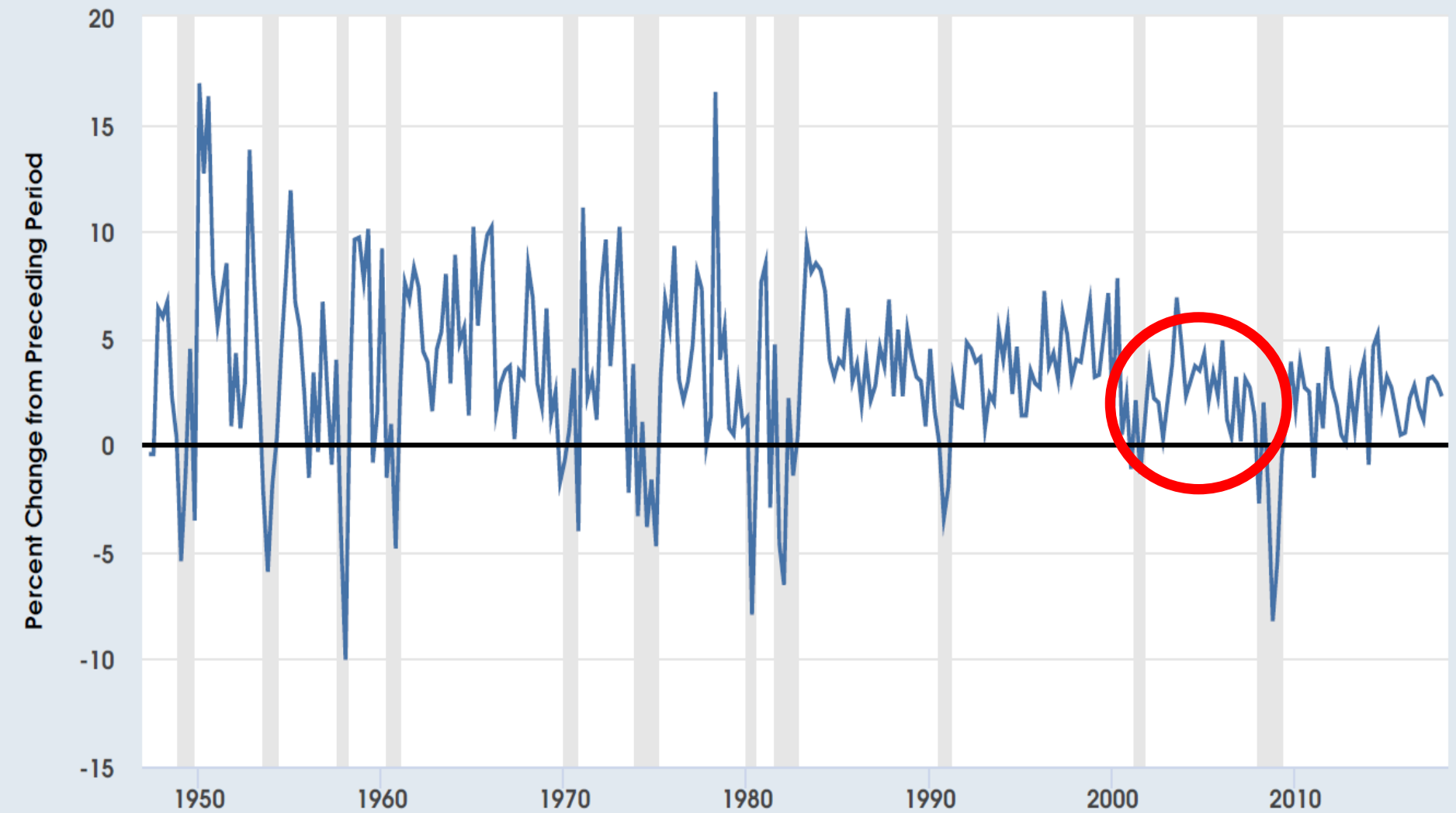


Source: Angus Maddison, "Historical Statistics of the World Economy: 1-2008 AD",
http://www.ggdc.net/maddison/Historical_Statistics/vertical-file_02-2010.xls

Richard Koo (2016) The Other Half of Macroeconomics and the Three Stages of Economic Development, Conference of World Economic Association: Capital Accumulation, Production and Employment: Can We Bend the Arc of Capital Toward Justice?



**W 2014 r Larry
Summers powrócił
do koncepcji
sekularnej stagnacji
Alvina Hansena**



Shaded areas indicate U.S. recessions

Source: U.S. Bureau of Economic Analysis

myf.red/g/jFc1

- It is my growing conviction that the combined effect of the
- **decline in population growth,**
- together with the **failure of any really important innovations of a magnitude sufficient to absorb large capital outlays,**
- weights very heavily as an explanation for the failure of the recent recovery to reach full employment.

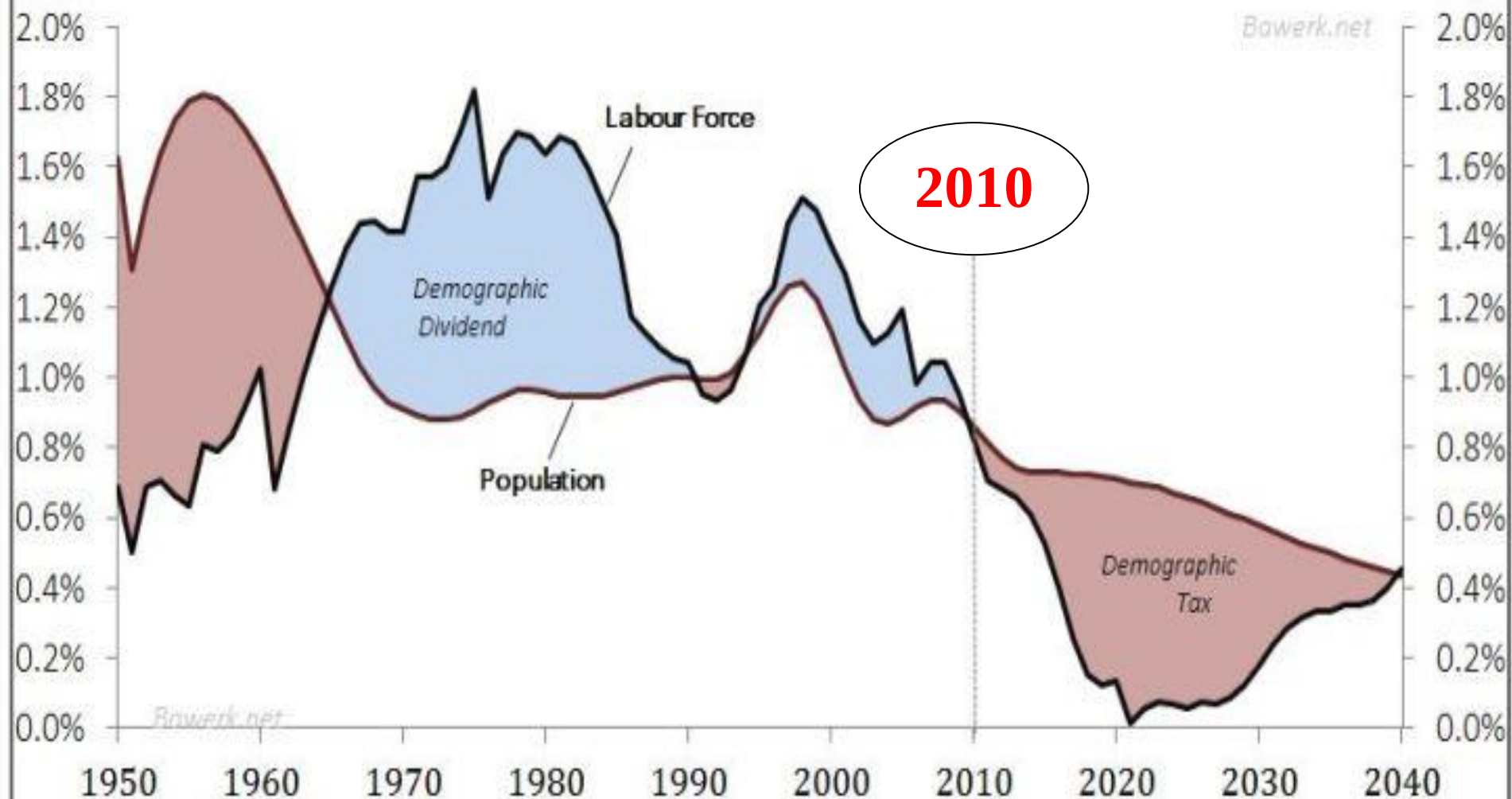
Alvin Hansen (1939) „Progress and Declining Population: The Road to Recovery”, *The American Economic Review*, vol. 29 No. 1

**Dlaczego obawy Alvina Hansena
zmaterializowały się po tak wielu
latach?**

YoY

Annual population and labour force growth in the US

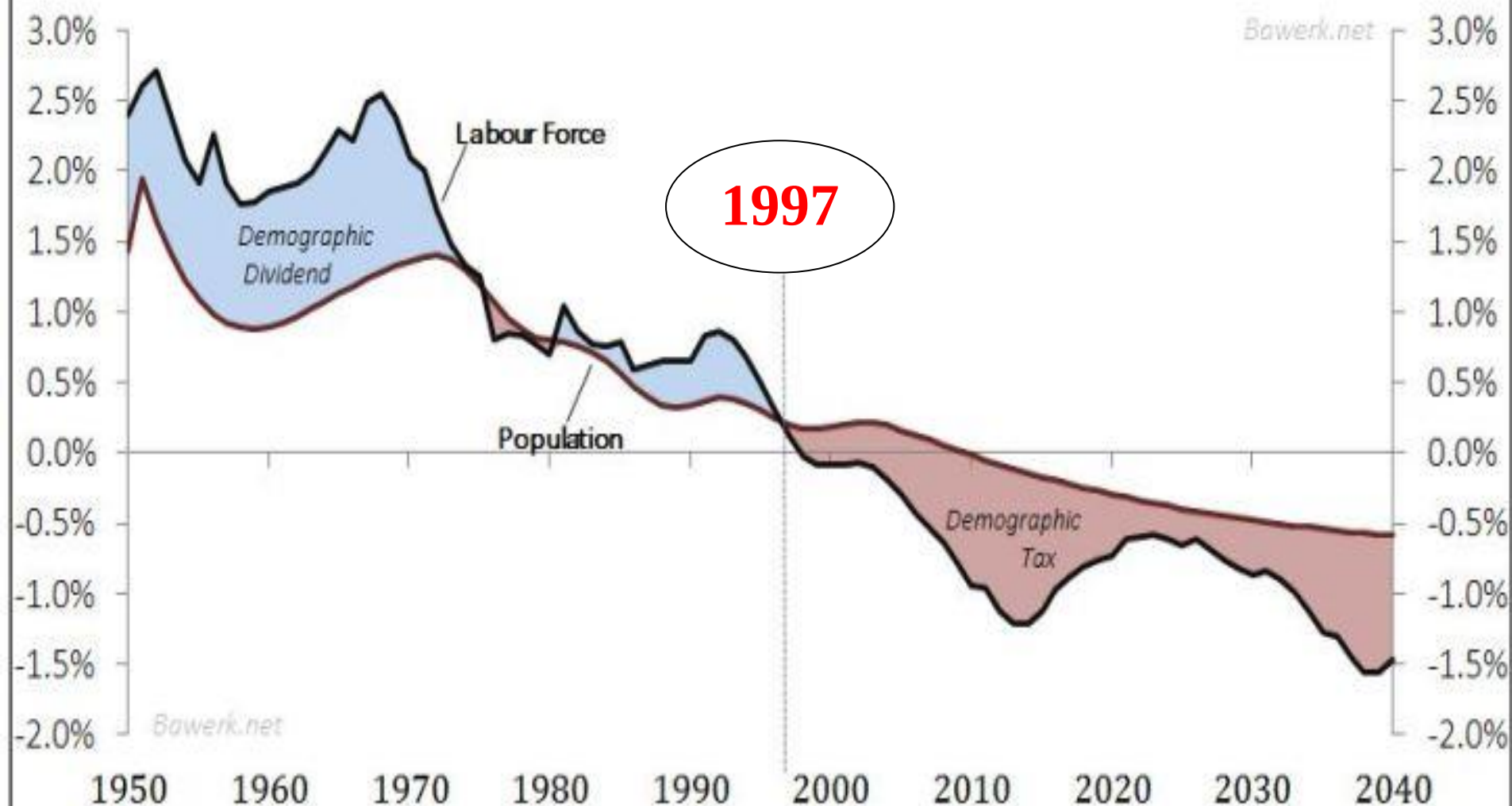
YoY



YoY

Annual population and labour force growth in Japan

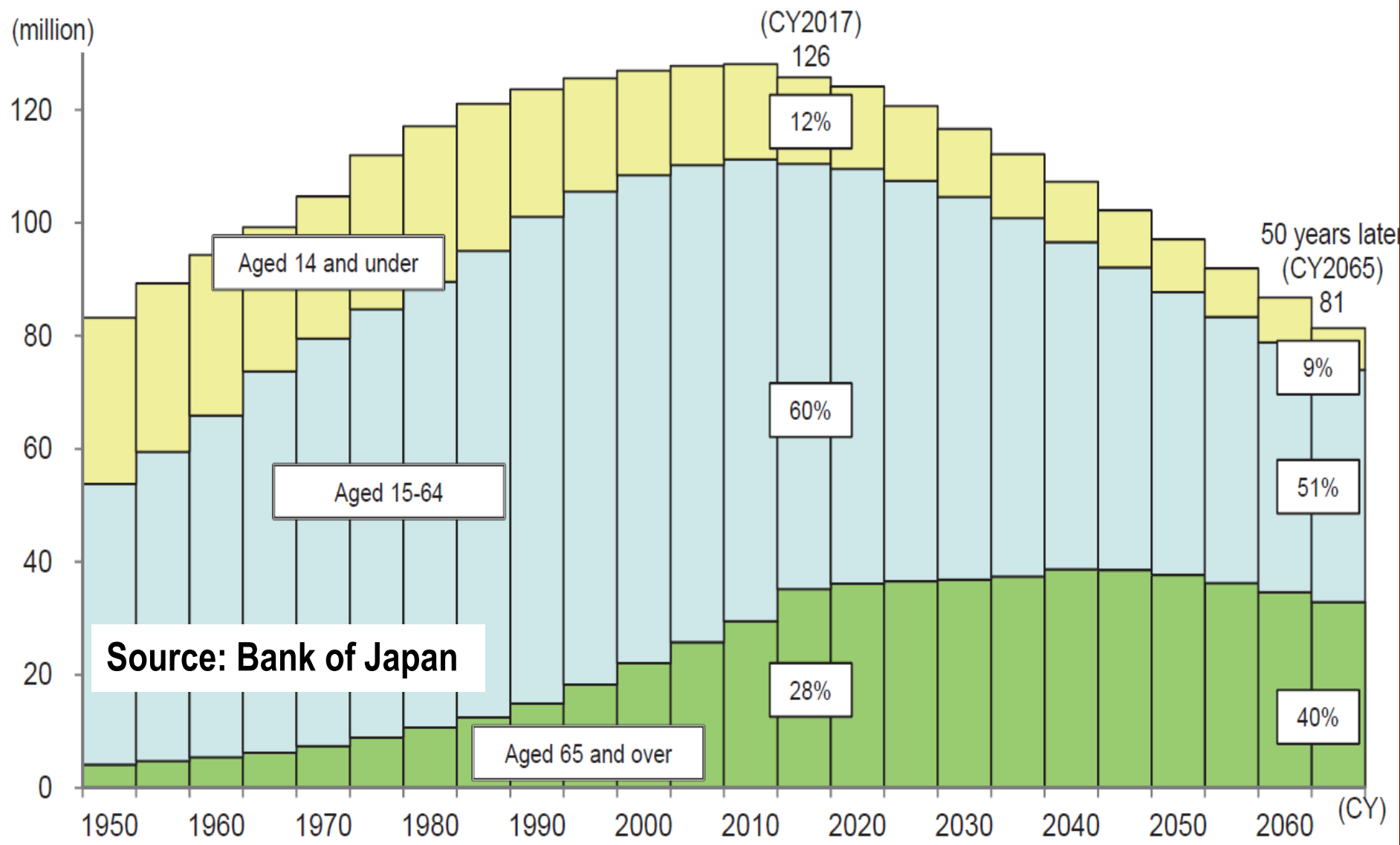
YoY



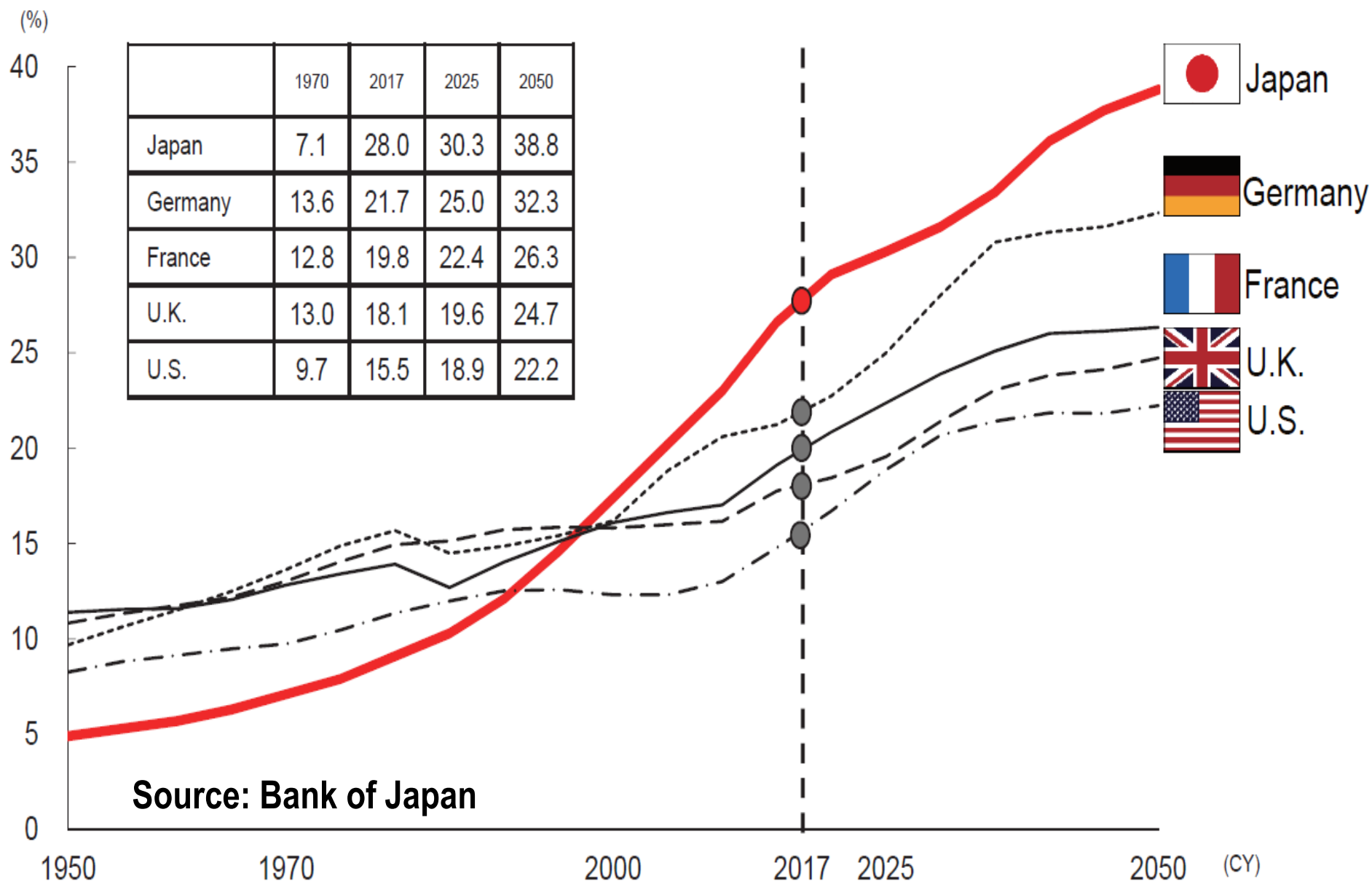
Source: United Nations (UN), Bawerk.net

(1) Aging Population

Japan faces low birth rate and population aging. The low birth rate reduces the number of younger population, while the population aging leads to an increase of the proportion of the old-age population.

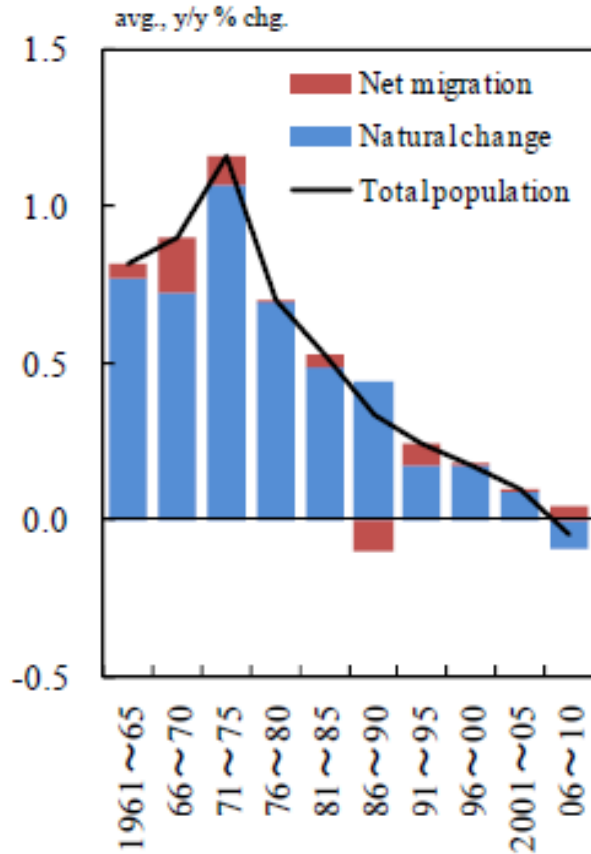


International Comparison of Population Aging Rate

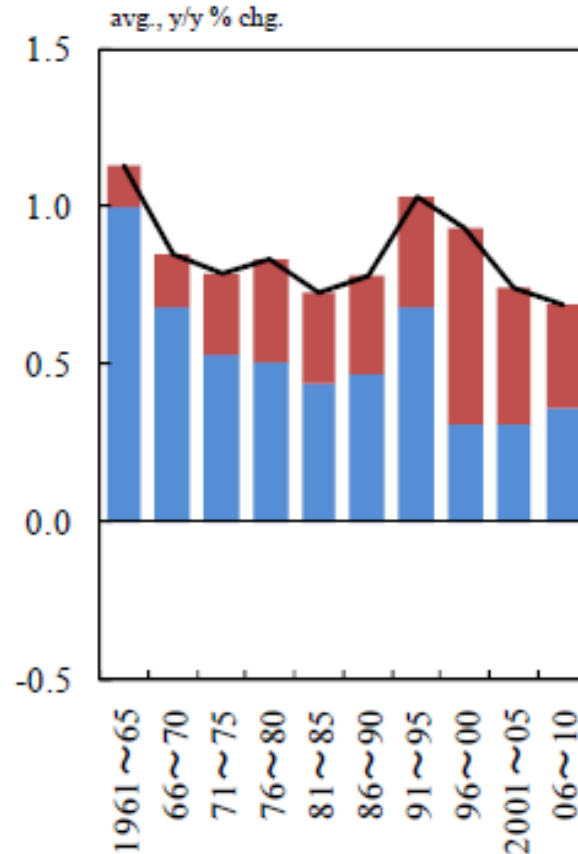


Population Growth Rate

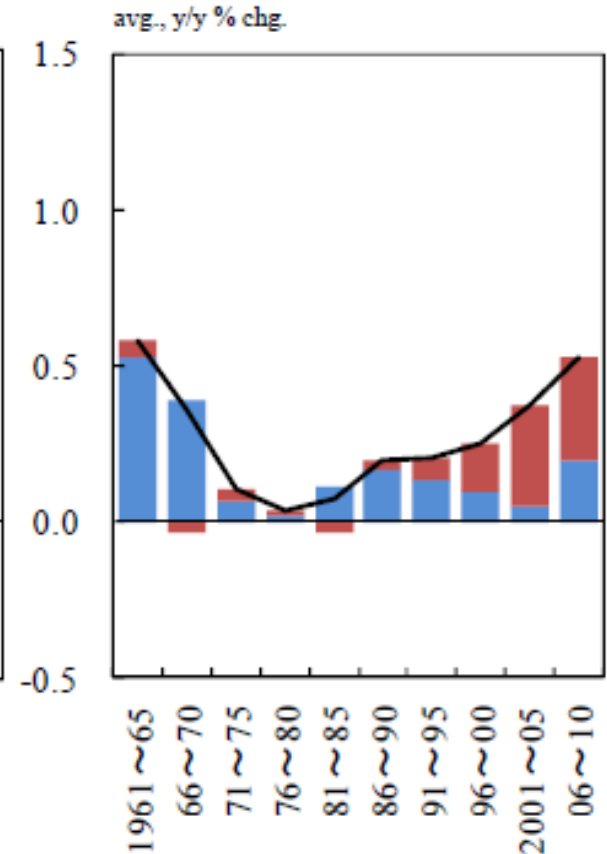
Japan



United States



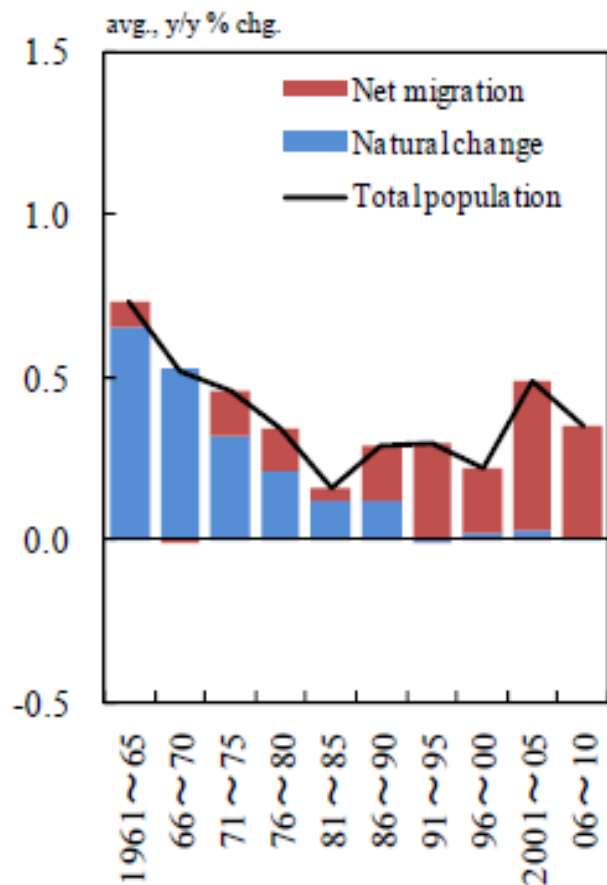
United Kingdom



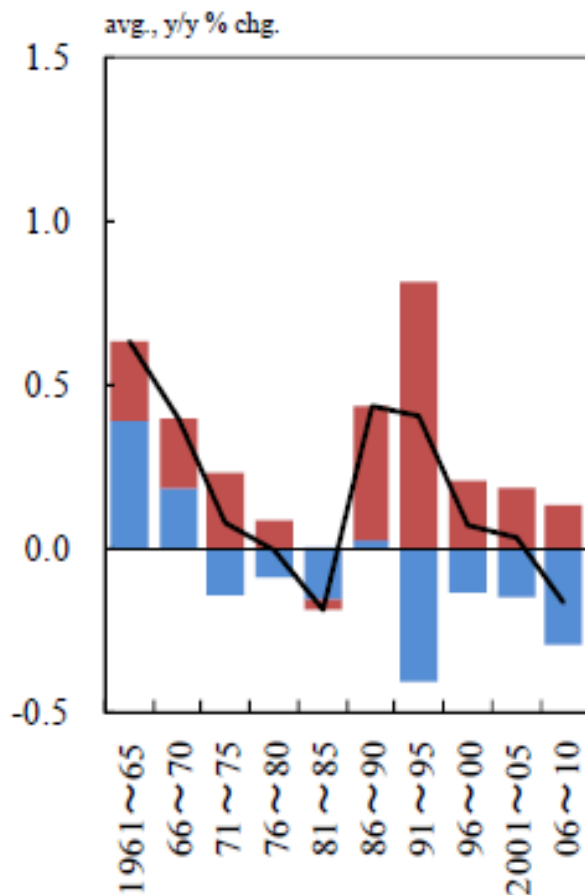
Source: World Bank.

Population Growth Rate (Cont.)

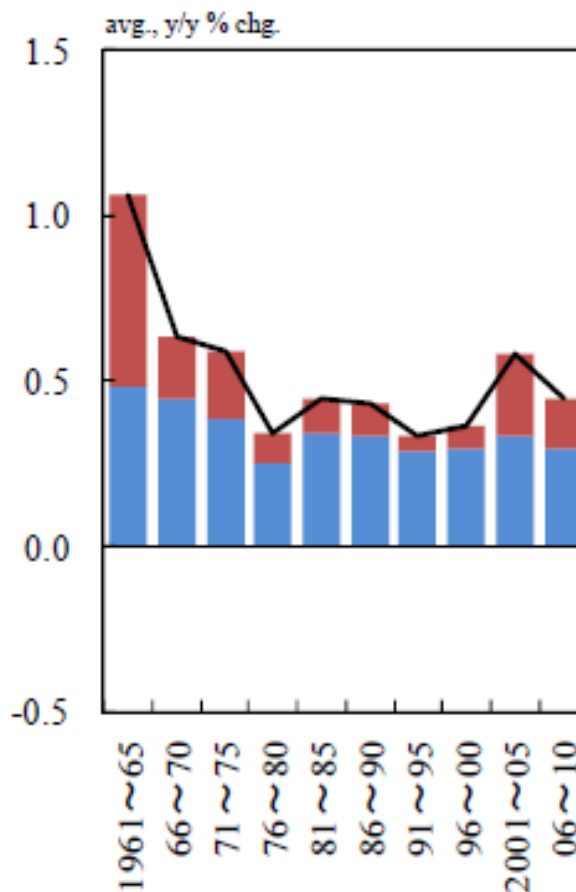
Euro Area



Germany

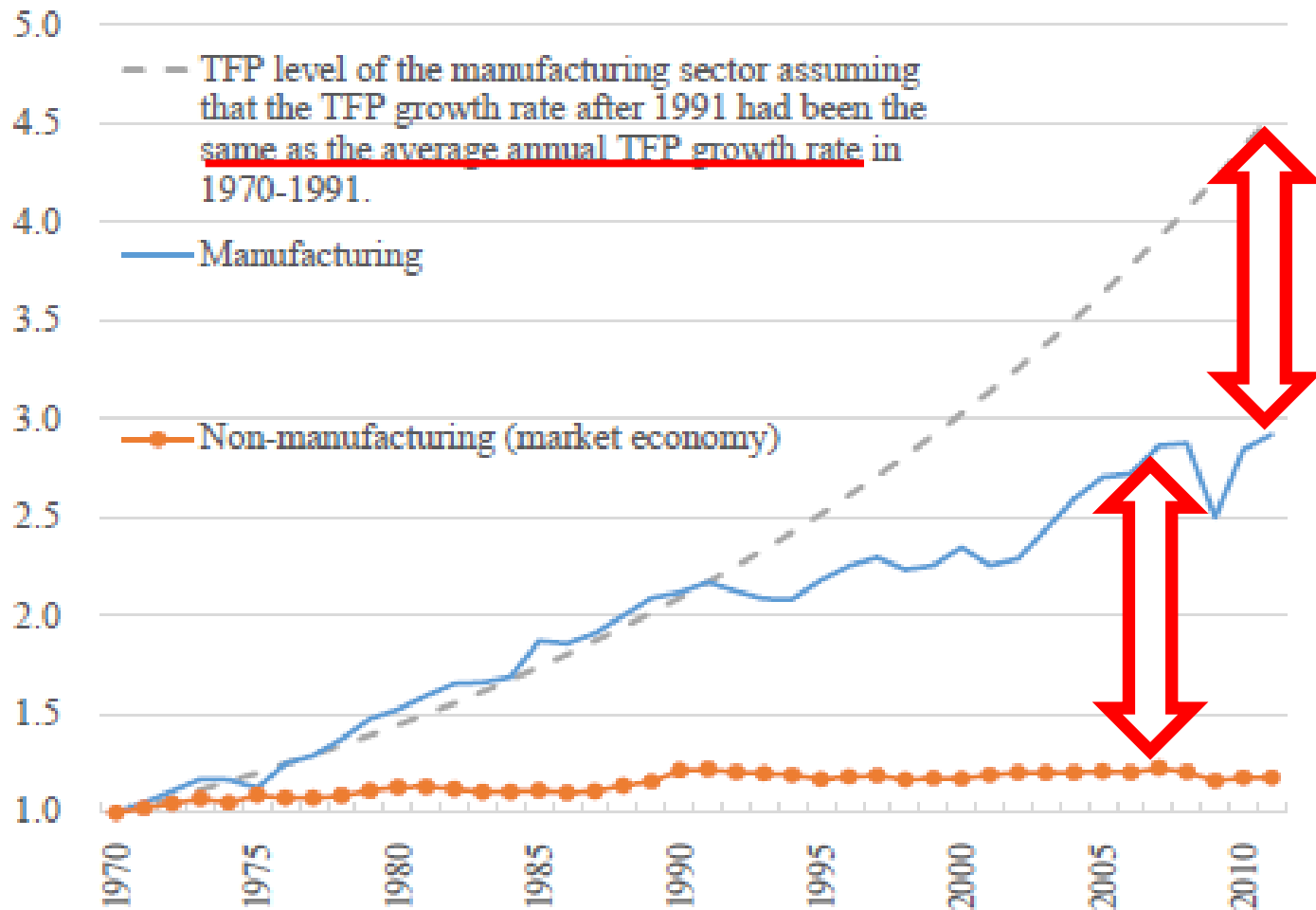


France



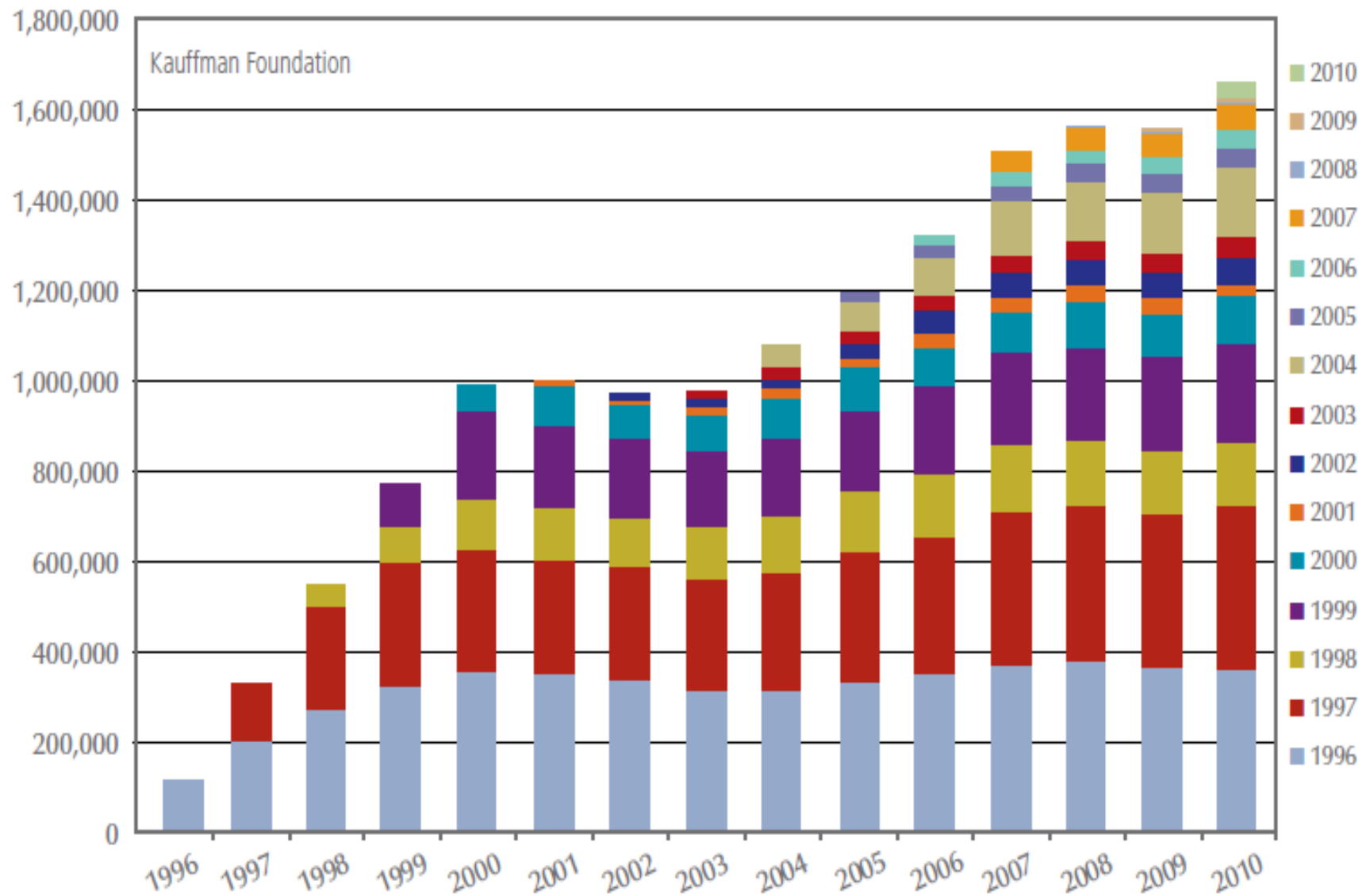
Source: World Bank.

TFP Level of the Manufacturing and the Non-manufacturing Sector (Market Economy), 1970–2011 (1970=1)



**Nowe technologie kreują mało nowych
miejsc pracy**

Figure 3. Annual Employment by Cohort Year, Emerging Growth Company IPOs, 1996–2010

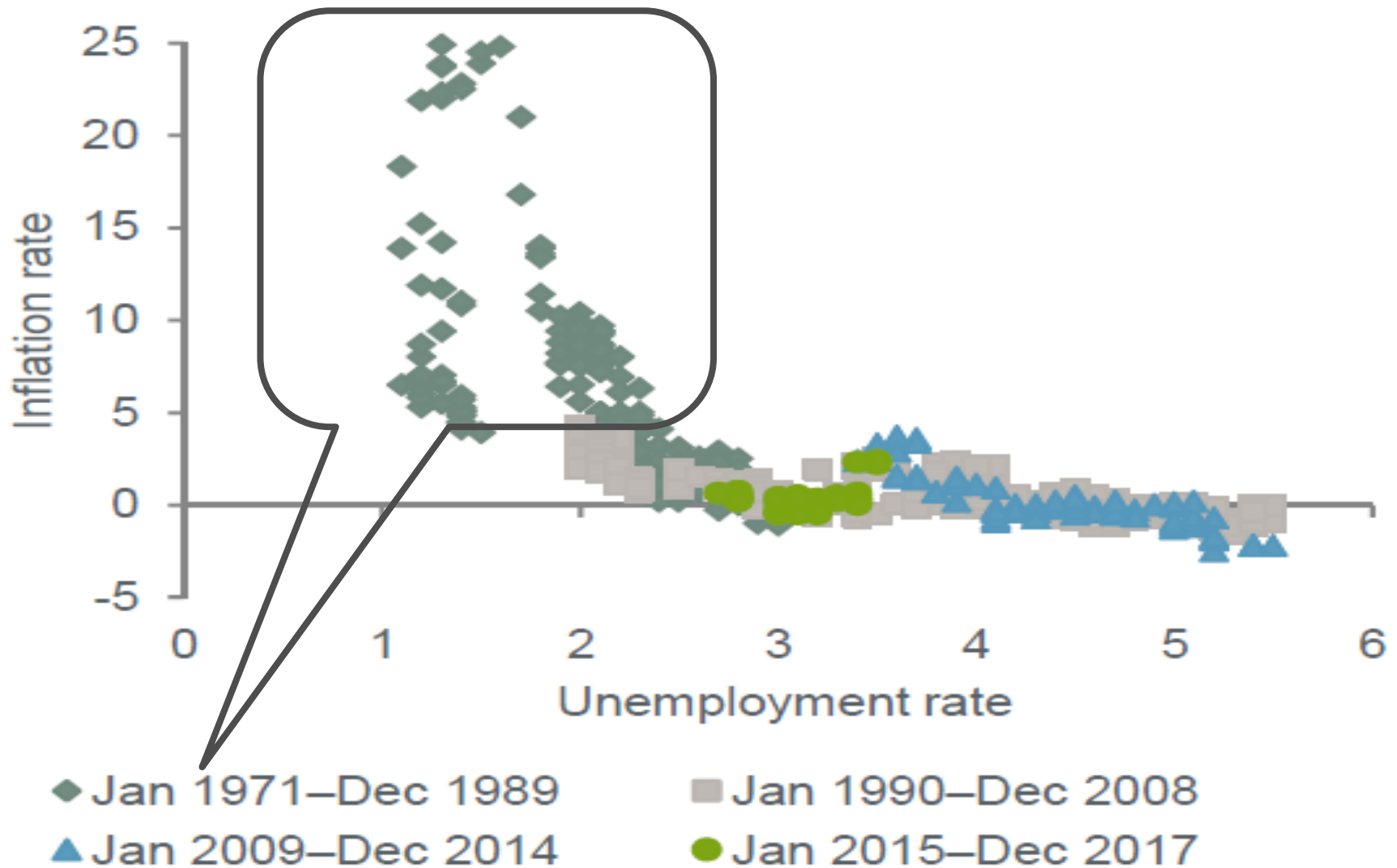


M. Kenney, D. Patton, J. R. Ritter, (2012) *Post-IPO Employment and Revenue Growth for U.S. IPOs*, Report for the Kauffman Foundation, May

Co powodowało słabość popytu krajowego i silne wypiaszczenie się krzywej Phillipsa?

Inflation and unemployment

Monthly figures, inflation rate based on the general consumer price index.

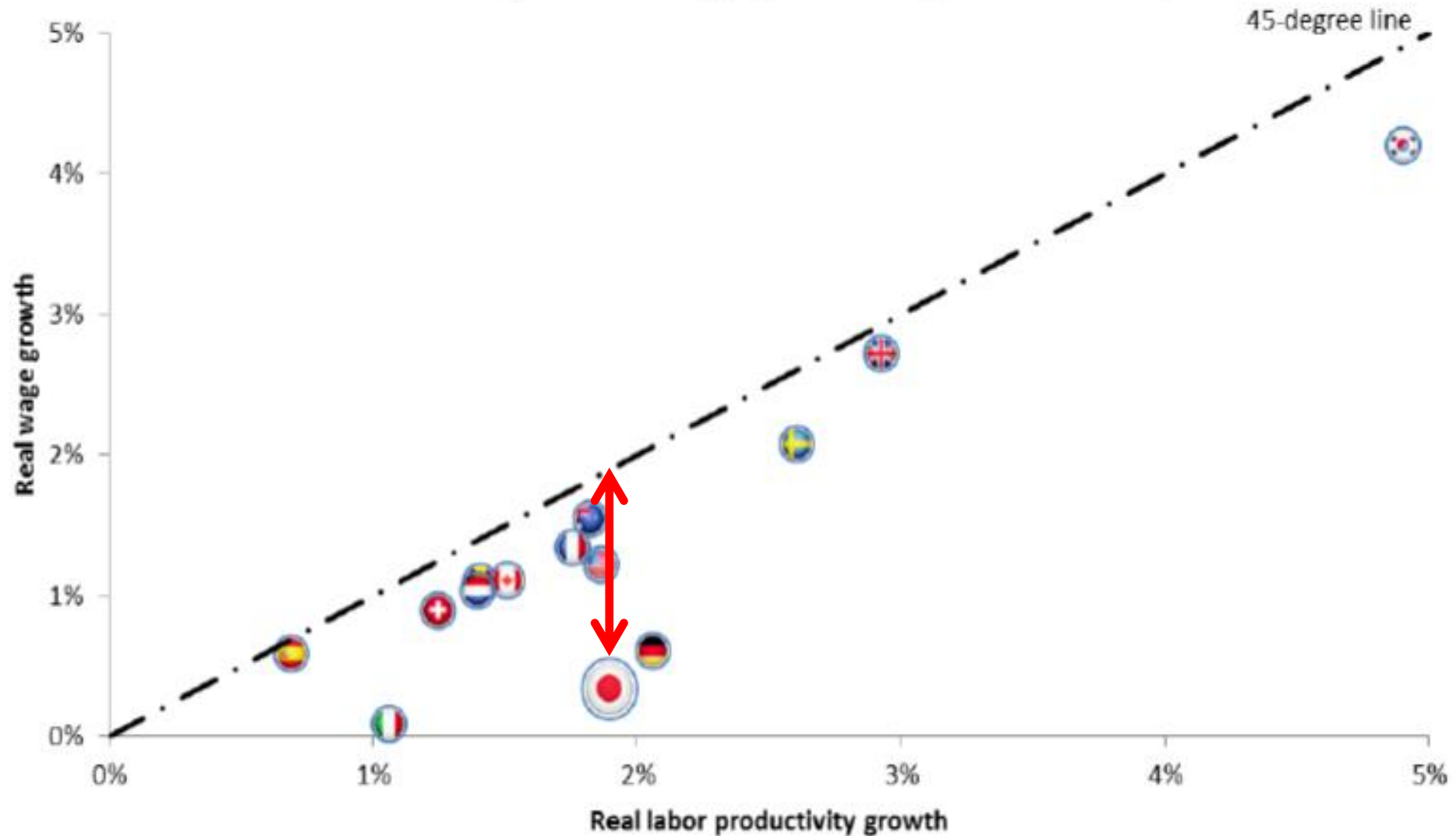


Katrin Urlich (2018). „Japan: Is record low employment finally bringing back” inflation? Focus on Economics, KfW

- The neoclassical consensus assumes that corporate savings surplus is cyclical
- The evidence shows this assumption is without merits
- Corporate surpluses in Japan, the U.K. and the U.S. are structural

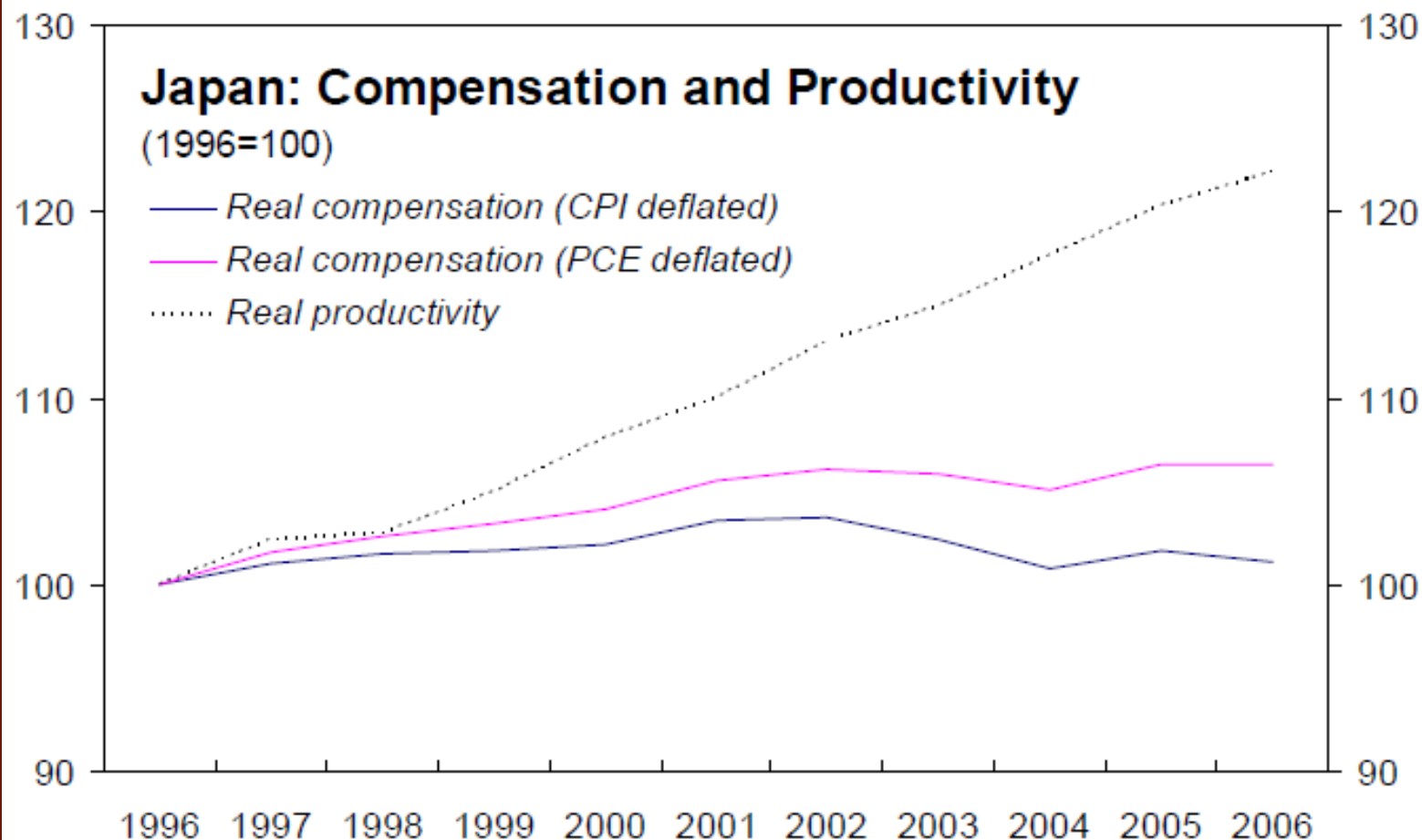
Andrew Smithers (2013), „The Road to Recovery”, The Daiwa Anglo-Japanese Foundation, London, 25th September

Productivity and Wage growth (1992-2007)



Davide Porcellachia (2016) „Wage-Price Dynamics and Structural Reforms in Japan”, IMF Working Paper, WP/16/20

A. In Japan, wages have been trailing productivity ...

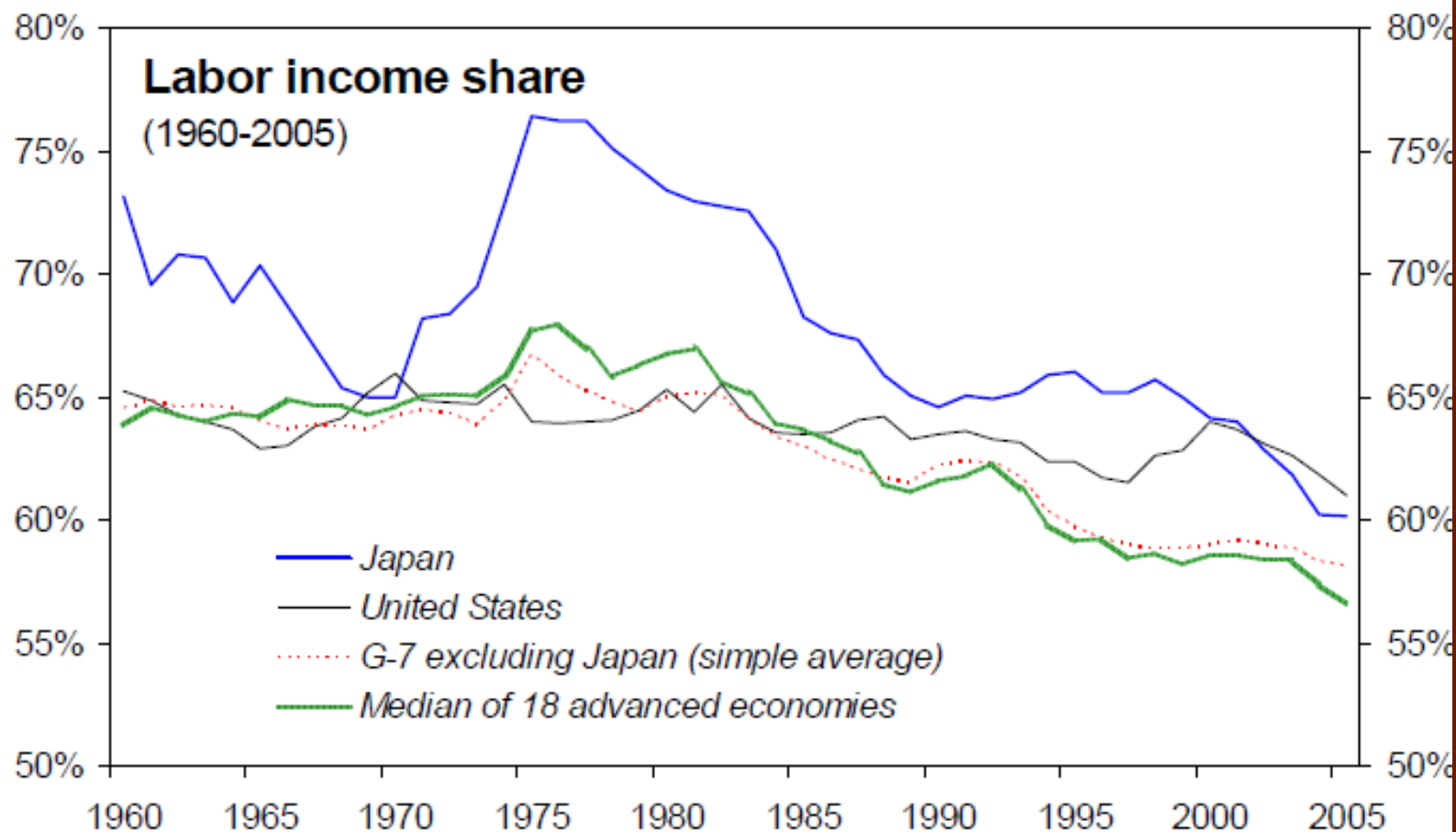


Sources: Cabinet Office; and IMF staff calculations.

Note: Compensation and productivity are expressed in per-hour terms.

Martin Sommer (2009). "Why Are Japanese Wages So Sluggish?", IMF Working Paper, WP/09/97, May

B. ... and the Japan's labor share has therefore declined considerably, although from high initial levels.

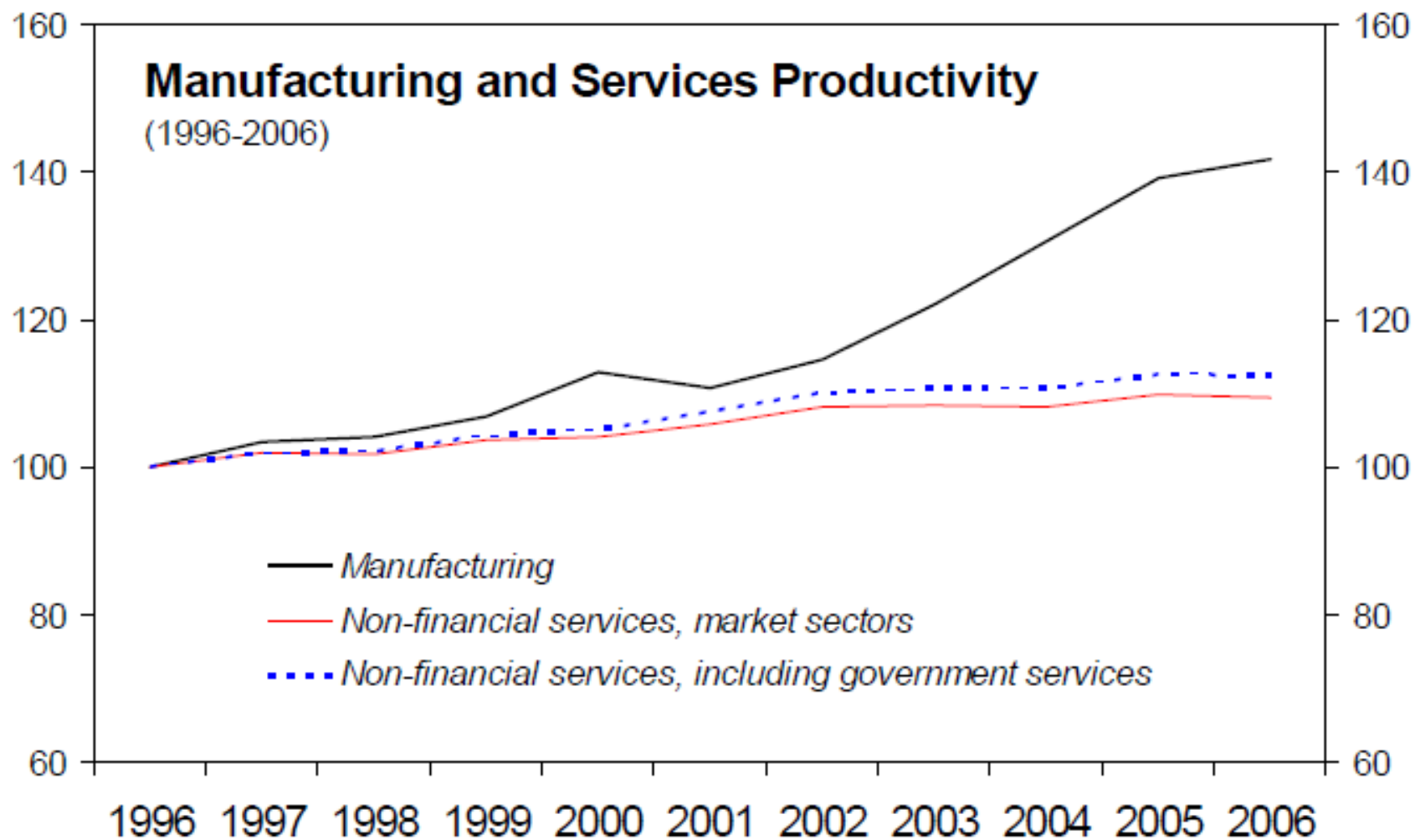


Source: AMECO database.

Note: Labor income share is defined as the share of employees' and self-employed persons' compensation in GDP.

Martin Sommer (2009). "Why Are Japanese Wages So Sluggish?", IMF Working Paper, WP/09/97, May

***D. ... due to low productivity growth in the sector,
in striking contrast with manufacturing.***

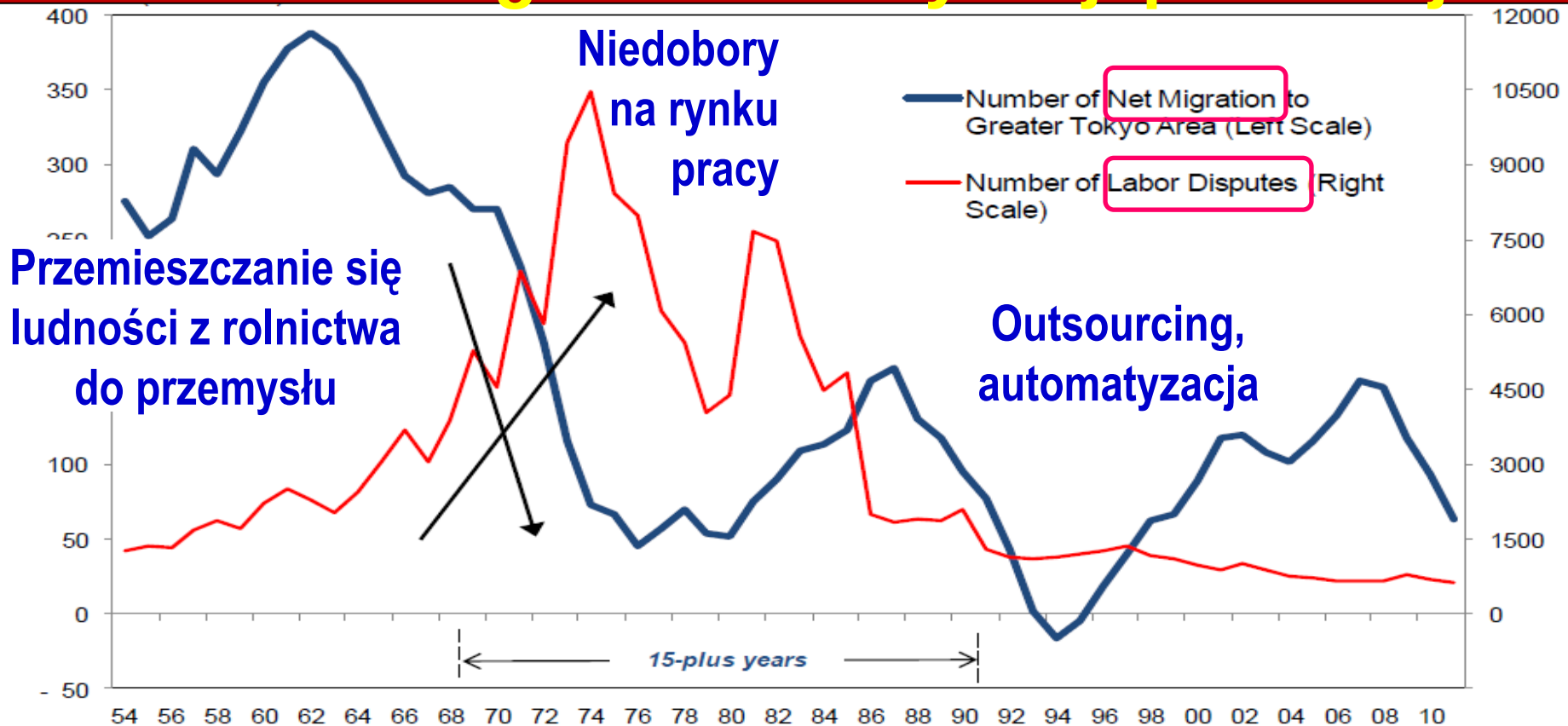


Martin Sommer (2009). “Why Are Japanese Wages So Sluggish?”, IMF Working Paper, WP/09/97, May

**Dlaczego zmniejszająca się liczba
pracujących nie spowodowała wzrostu
płac?**

- Skokowy **wzrost podaży pracy na rynku globalnym** (umożliwiający **outsourcing produkcji**)
- Rosnące znaczenie **sektora usług**
- **Liberalizacja rynku pracy**

Konsekwencje starzenia się społeczeństw, outsourcingu i automatyzacji produkcji



Note: Greater Tokyo Area consists of Tokyo Metropolis, Kanagawa prefecture, Saitama prefecture and Chiba prefecture.
Sources: Ministry of Internal Affairs and Communications, *Report on Internal Migration in Japan*, and Ministry of Health, Labour and Welfare, *Survey on Labour Disputes*

Richard Koo (2016) The Other Half of Macroeconomics and the Three Stages of Economic Development, Conference of World Economic Association: Capital Accumulation, Production and Employment: Can We Bend the Arc of Capital Toward Justice?

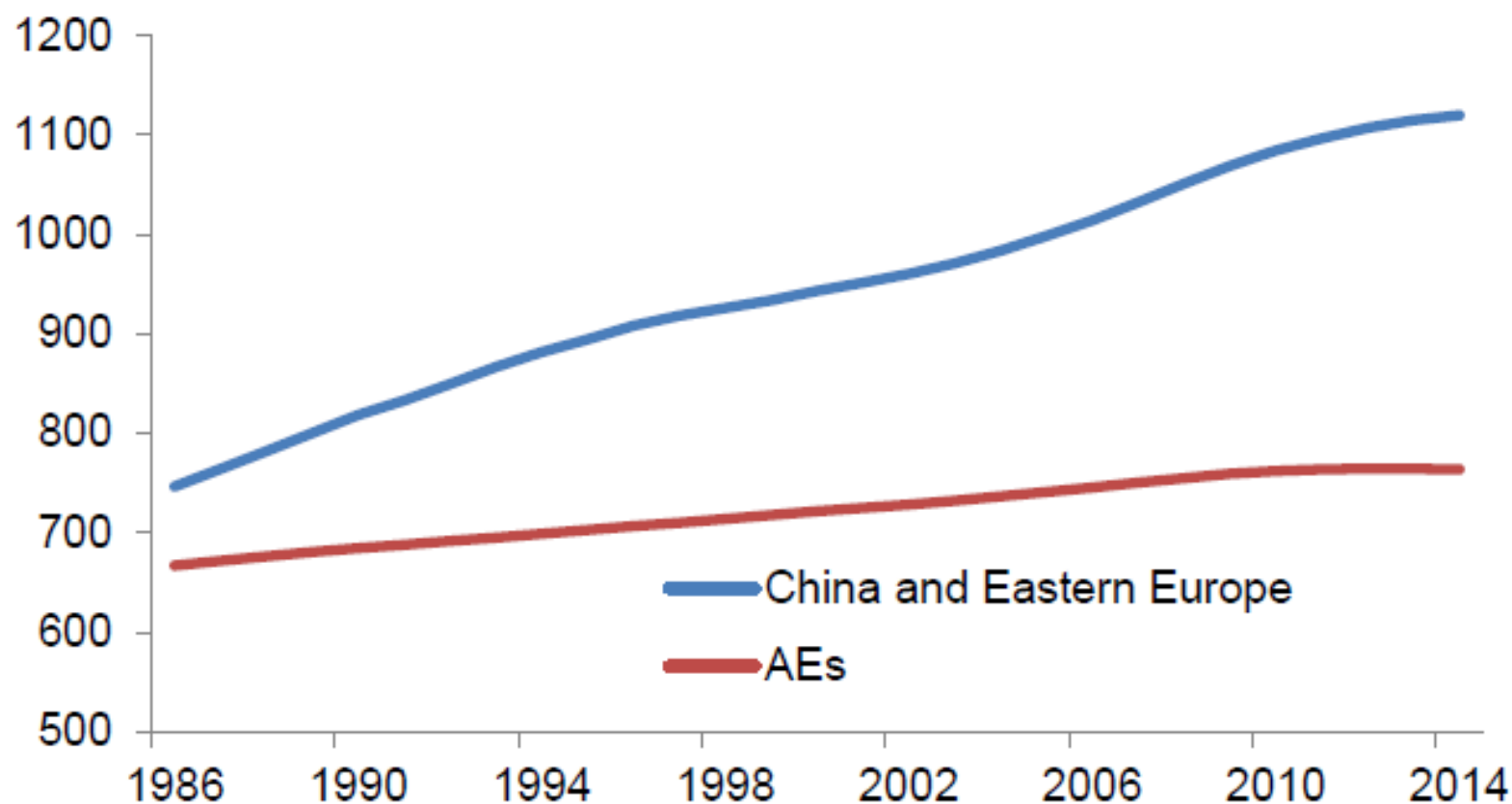
- While Japan's labor was becoming scarce, labor was abundantly available in the rest of the world. Japan's corporates could offshore production and keep wages from rising.

Charles Goodhart, Manoj Pradhan (2017) „Demographics will reverse three multidecade global trends”, BIS Working Papers, No. 656

The positive labour supply shock from China and eastern Europe

Working age populations (20–64), millions

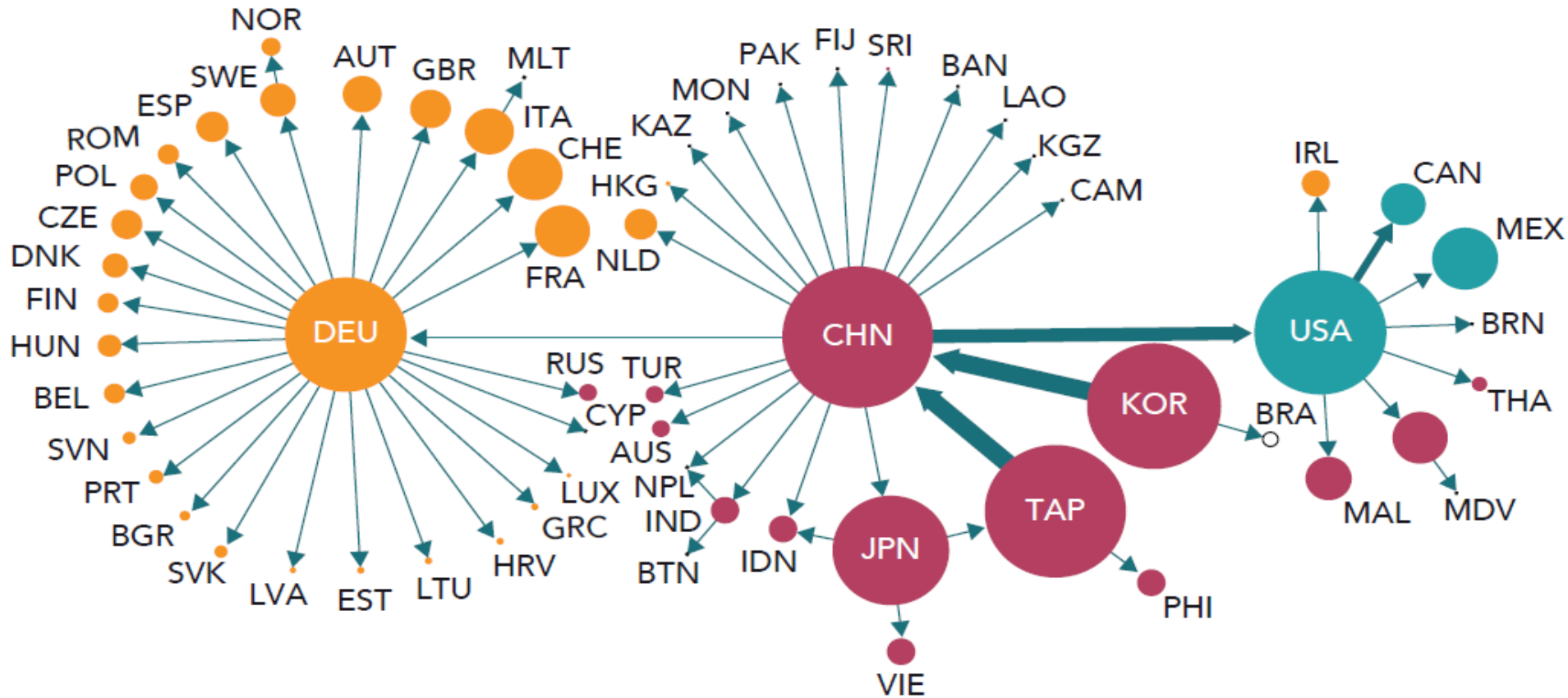
Graph 4



Source: UN World Population Database.

Charles Goodhart, Manoj Pradhan (2017) „Demographics will reverse three multidecade global trends”, BIS Working Papers, No. 656

Three interconnected hubs in the world's supply chain for ICT goods

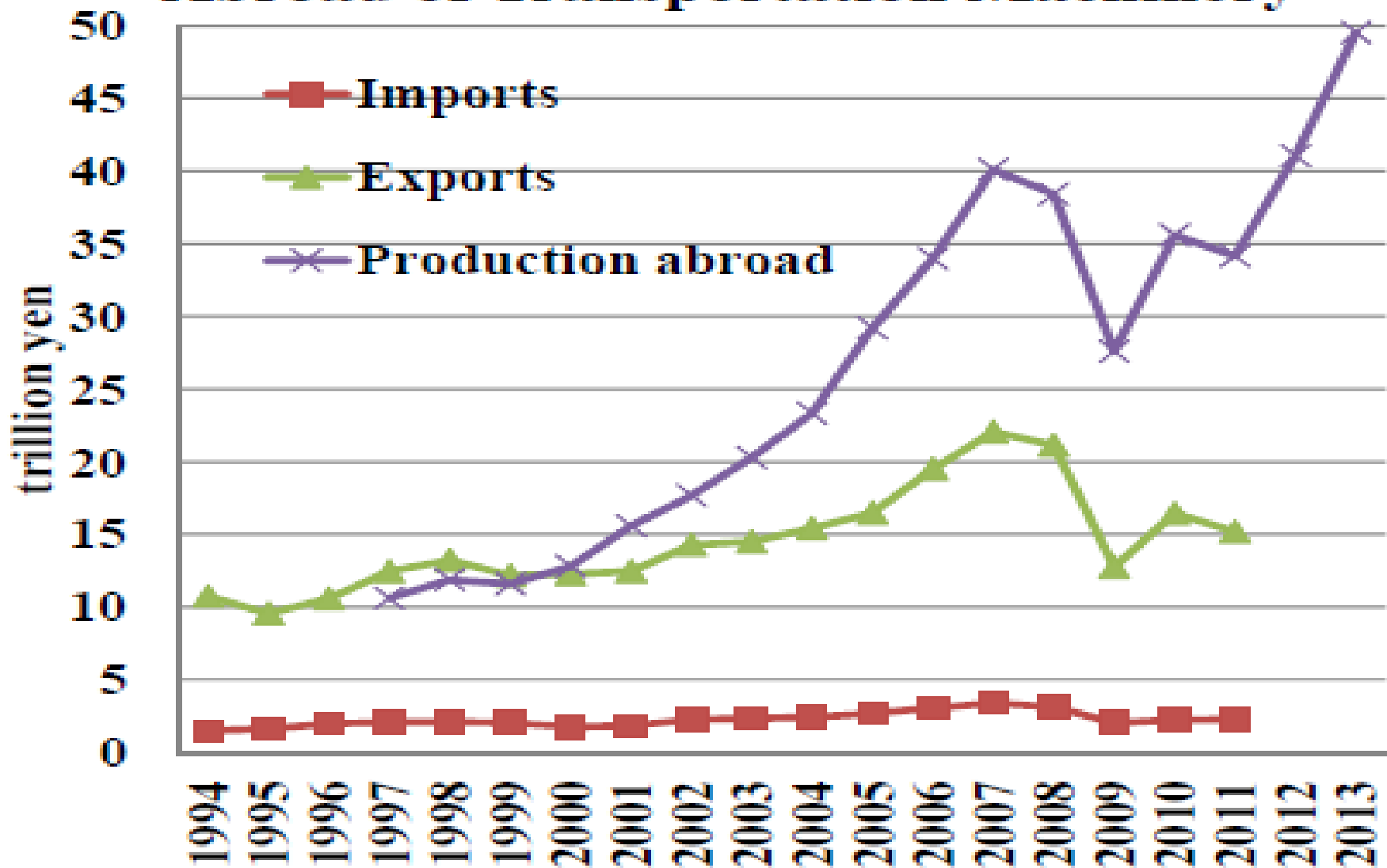


Source: Global Value Chain Development Report, 2019, www.WTO.org

Economics in the Time of COVID-19 (2010) Edited

by Richard Baldwin and Beatrice Weder di Mauro, CEPR Press, London

Imports, Exports and Production Abroad of Transportation Machinery

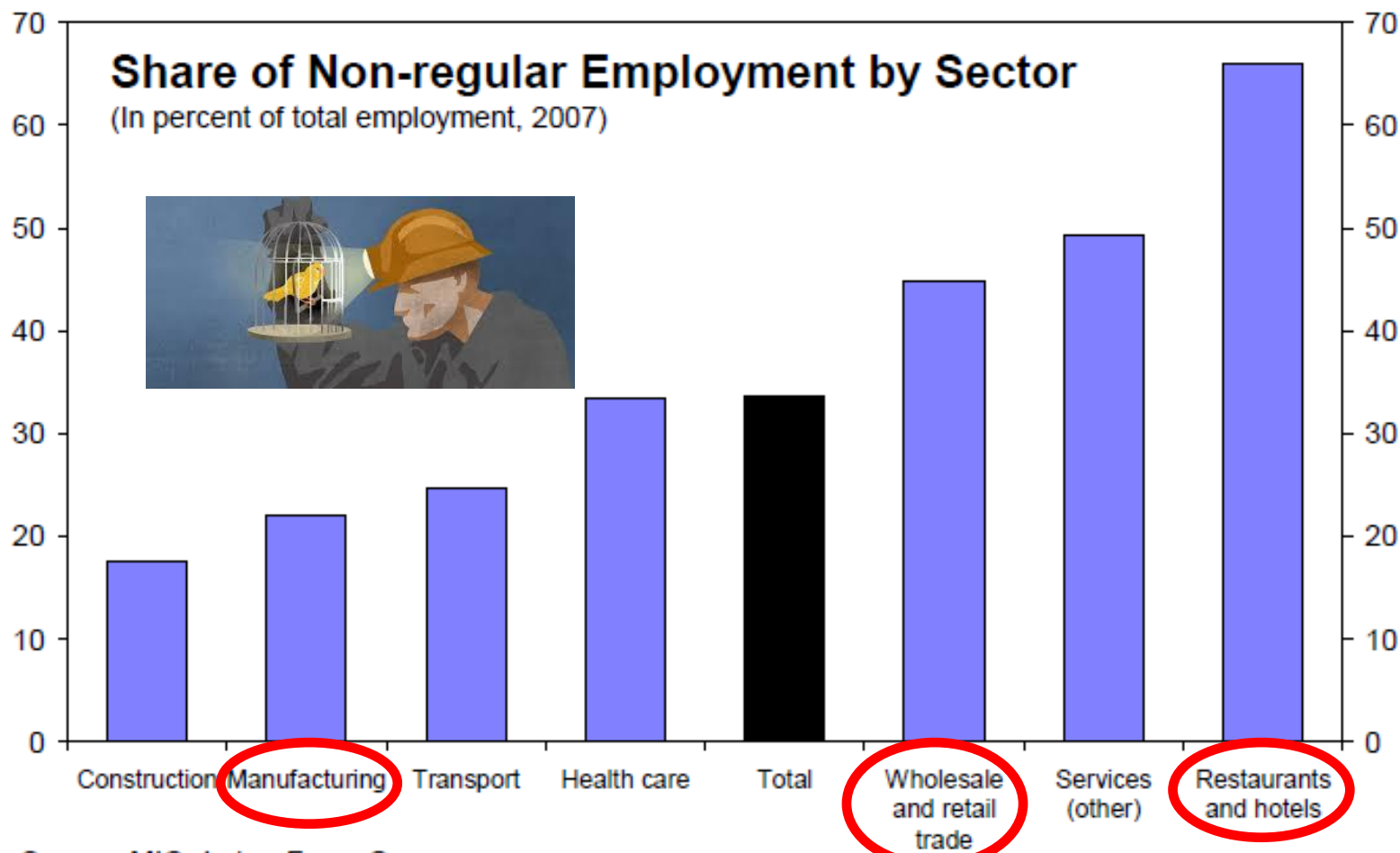


Kyoji Fukao (2016) The Structural Causes of Japan's Low TFP Growth, Prepared for a seminar at the Walter H. Shorenstein Asia-Pacific Research Center, Stanford University, April 27, 2016

- The **paradox** between observed **tightness** in the labor market amid overall slack in the economy
- can reflect **shift towards part-time workers** as evidenced by the considerable decline in total hours worked.

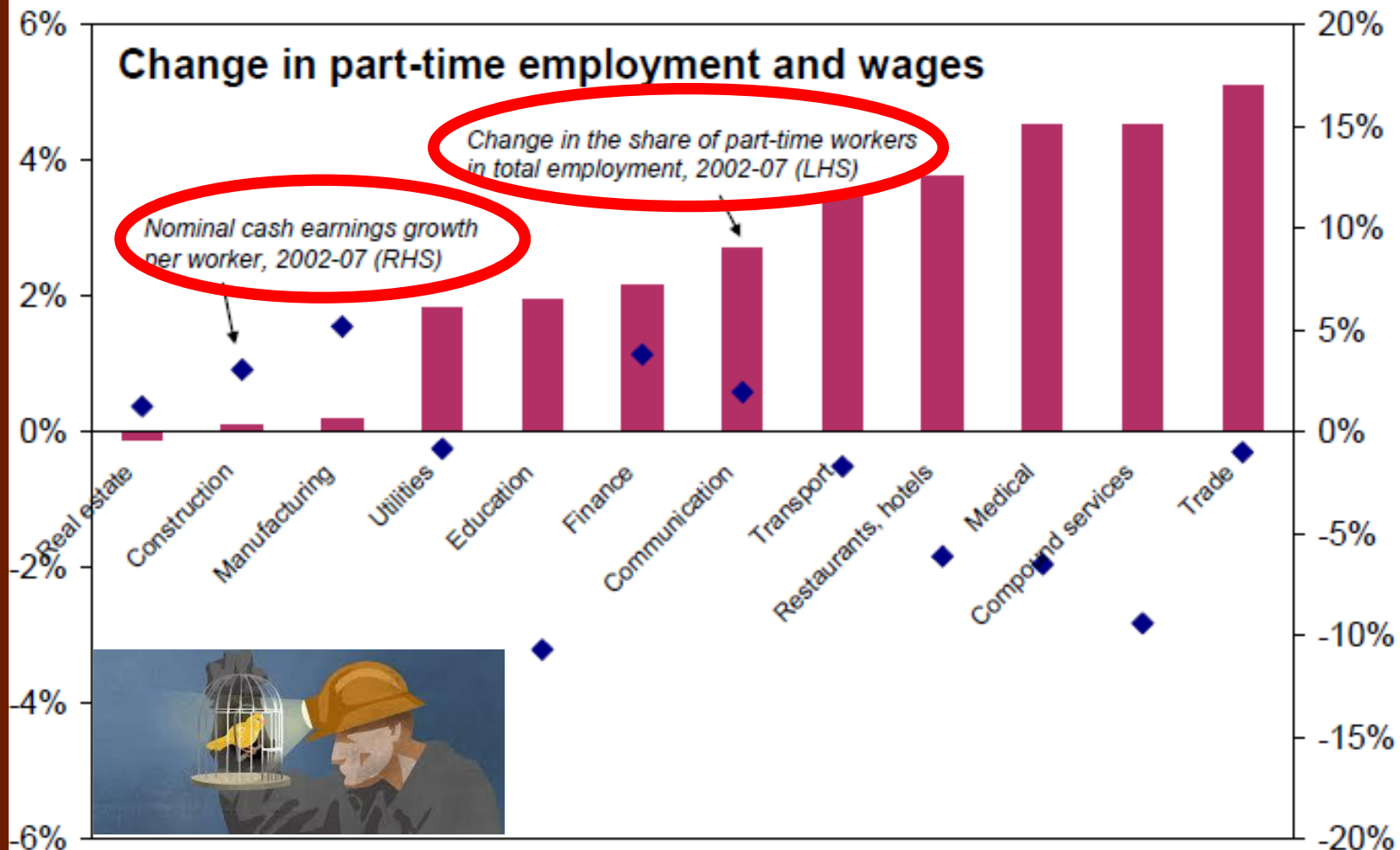
Elif Arbatli, Denis Botman, Kevin Clinton, Pietro Cova, Victor Gaspar, Zoltan Jakab, Fouglaas Laxton, Constant Aime Lonkeng Ngouana, Joannes Mongardini, Hou Wang (2016) „Reflating Japan: Time to Get Unconventional?”, *IMF Working Paper*, WP/16/157

A. The incidence of non-regular employment is largest in services sectors.



Martin Sommer (2009). "Why Are Japanese Wages So Sluggish?", IMF Working Paper, WP/09/97, May

B. The significant increase in non-regular employment helped to push down average wages in services ...



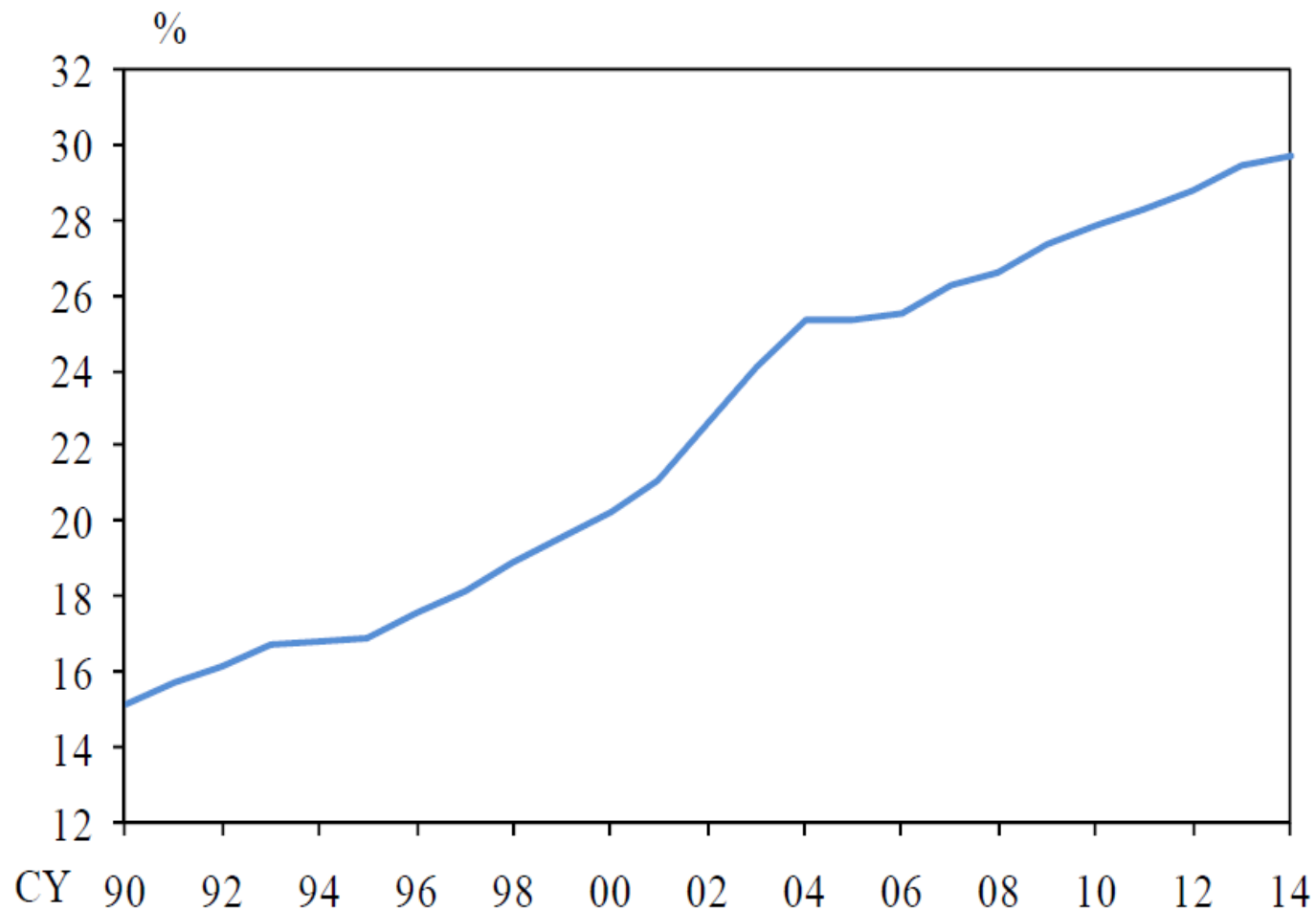
Sources: MHLW, *Monthly Labor Survey*; and IMF staff

Martin Sommer (2009). "Why Are Japanese Wages So Sluggish?", IMF Working Paper, WP/09/97, May

- Japanese part-time workers are **75%** less productive than full-time workers
- **50%** of all part-time workers would be willing to work as regular workers

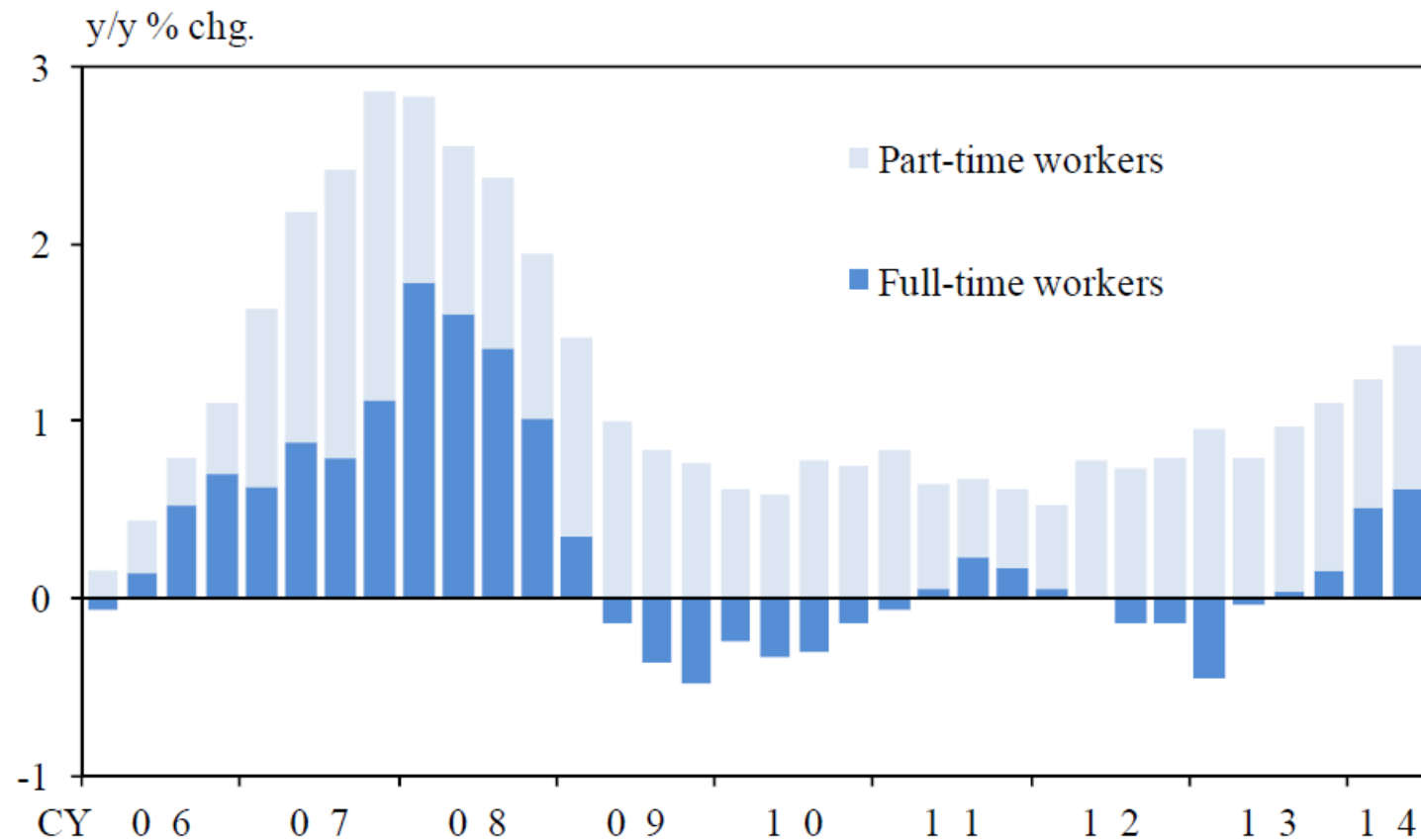
Davide Porcellachia (2016) „Wage-Price Dynamics and Structural Reforms in Japan”, IMF Working Paper, WP/16/20

Share of Part-time Workers in Total Employees



Haruhiko Kuroda (2015) „Dealation, the Labor Market, and QQE,
Remarks at the Economic Policy Symposium Held by the Federal Reserve
Bank of Kansas City, 23 August

Number of Part-time and Full-time Workers



Haruhiko Kuroda (2015) „Deflation, the Labor Market, and QQE, Remarks at the Economic Policy Symposium Held by the Federal Reserve Bank of Kansas City, 23 August

- **Unionization of Japanese workers is low and decreasing**, with 18 percent of Japanese employees enrolled in a union in 2014 compared to 25 percent in 1991.

Davide Porcellachia (2016) „Wage-Price Dynamics and Structural Reforms in Japan”, IMF Working Paper, WP/16/20

- Unionization rates have declined and **labor conflicts** have all but **disappeared**.

Elif Arbatli, Denis Botman, Kevin Clinton, Pietro Cova, Voctor Gaspar, Zoltan Jakab, Fouglaas Laxton, Constant Aime Lonkeng Ngouana, Joannes Mongardini, Hou Wang (2016) „Reflsting Japan: Time to Get Unconventional?”, *IMF Working Paper*, WP/16/157

- **In spite of the failure of wage increases** to keep up with increases in labor productivity, Japan has experienced **a spectacular decrease in industrial conflict**, with number of strikes dropping from
- **707** per year on average in 1980s, to
- **220** in the 1990s, and
- **63** in the 2000s.

Davide Porcellachia (2016) „Wage-Price Dynamics and Structural Reforms in Japan”, IMF Working Paper, WP/16/20

Jakie rady ma MFW dla Japonii?

- The U.S. incomes policy during the Great Depression of the 1930s was **effective in ending deflation:**
- **collective bargaining rights,**
- **a system of codes to set minimum wages**

Elif Arbatli, Denis Botman, Kevin Clinton, Pietro Cova, Victor Gaspar, Zoltan Jakab, Fouglaas Laxton, Constant Aime Lonkeng Ngouana, Joannes Mongardini, Hou Wang (2016) „Reflsting Japan: Time to Get Unconventional?”, *IMF Working Paper*, WP/16/157

**Jaką propozycję sformułowali
Posen i Blanchard?**

- The government should **force** the issue (of accelerating the rate of wage growth).
- It should require annual **indexation (of at least 3 percent)** and should **delay promised permanent cut in corporate tax** until companies raise wages across Japan.

Adam Posen (2017). „Japan’s solution to raise wages by 10%”, Financial Times, 2 December

- Given the insufficient transition of monetary expansion, for whatever reason, **more direct measures are required to get inflation in Japan.**
- What is **needed** is a jump-start to a **wage-price spiral** of the sort feared from the 1970s

Olivier Jean Blanchard, Adam S. Posen (2015). “Getting serious about wage inflation in Japan”, Nikkei Asian Review, 15 December

**Czy na pewno dobrze rozumiemy
dlaczego inwestycje firm są zbyt małe,
by wykorzystać gromadzące się w
gospodarce oszczędności?**

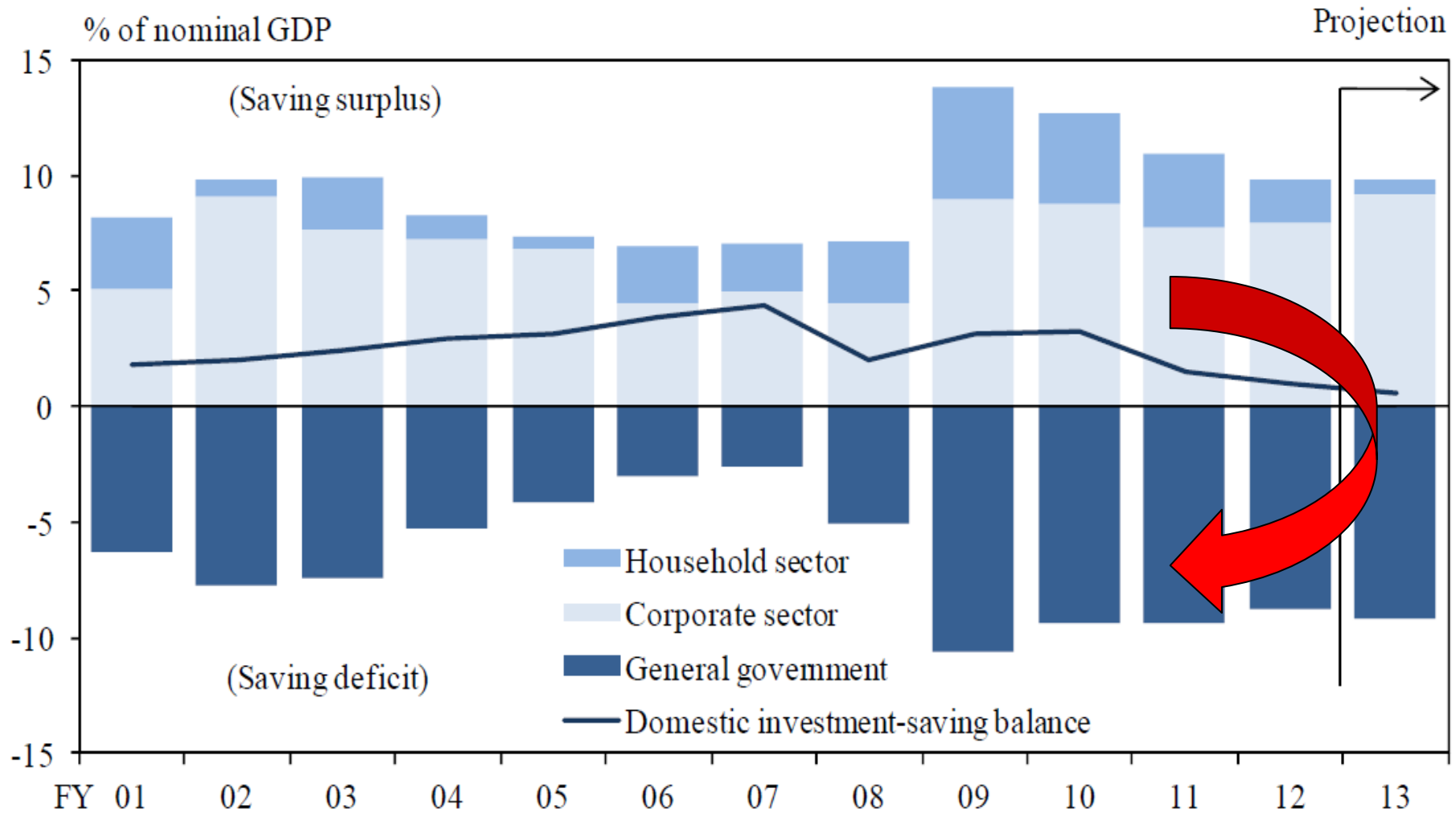
- The corporate saving glut may be more related to a perceived paucity of profitable investment opportunities than to a surge in corporate caution.
- Such a development is consistent with the concerns about secular stagnation.
- But what is causing this paucity of investment opportunities must be the subject of future research

Joseph W. Gruber, Steven B. Kamin (2015) „The Corporate Saving Glut in the Aftermath of the Global Finance Crisis”, <https://www.imf.org>

Główna lekcja z doświadczeń Japonii



Investment-Saving Balance



Haruhiko Kuroda (2015) „Dealation, the Labor Market, and QQE, Remarks at the Economic Policy Symposium Held by the Federal Reserve Bank of Kansas City, 23 August

Komentarz Maasakiego Shirakawy

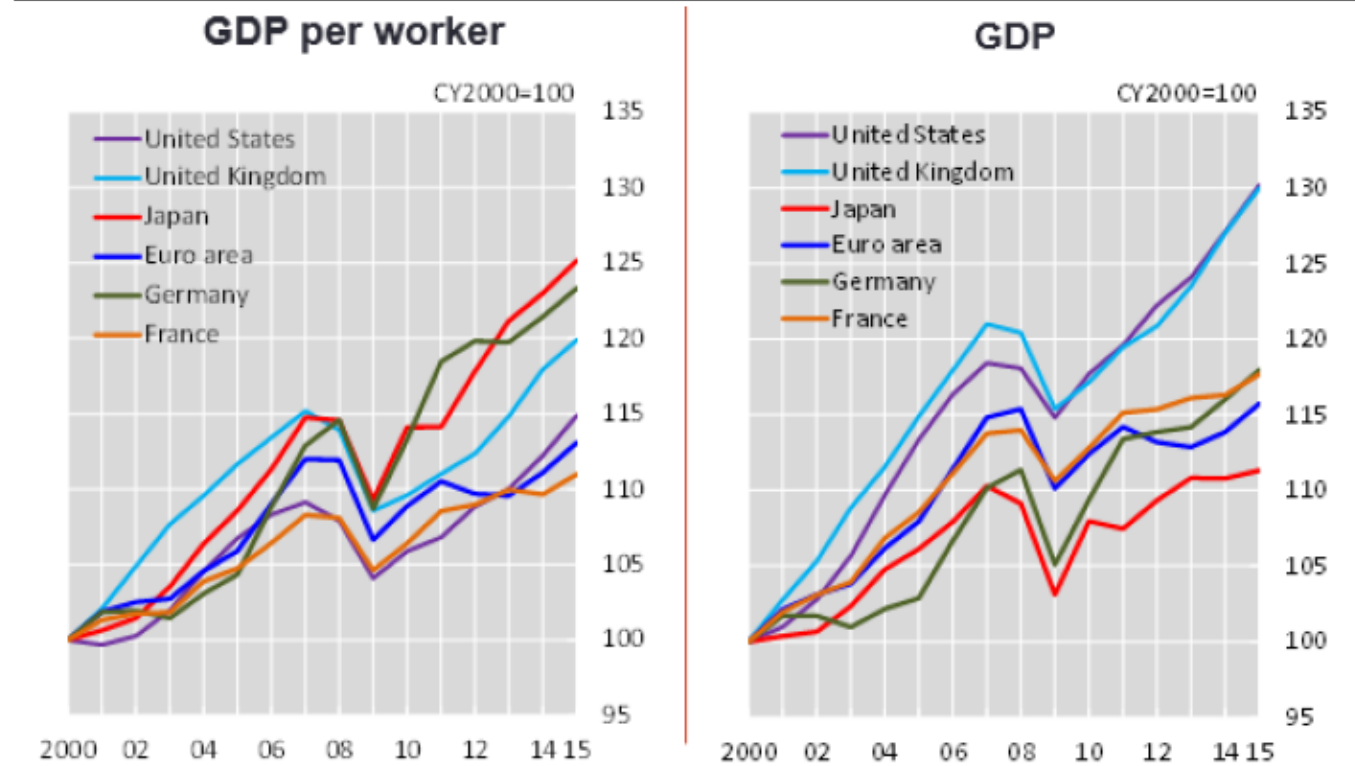
- In the 1990s, when Japan was muddling through its burst of bubble, I was still of the view that once deleveraging is complete, the economy would return to a path of reasonably high growth rates.
- In retrospect, such an optimistic view was quite naive. **I was unaware of the significant effects of demographic changes.**

Masaaki Shirakawa comments on: Charles Goodhart, Manoj Pradhan (2017) „Demographics will reverse three multidecade global trends”, BIS Working Papers, No. 656

Szczypta optymizmu

The impact of the decline in the working age population

Graph 22



Sources: OECD; Eurostat.

Massaki Shirakawa comments on: Charles Goodhart, Manoj Pradhan (2017) „Demographics will reverse three multidecade global trends”, BIS Working Papers, No. 656