

Housing (Land Price) Bubbles, Government  
Responses, and Economic/Corporate  
Adjustments in Japan

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# Issues to be Discussed Today

## 1. Land price bubbles in Japan

The emergence of the land price bubble in the late 1980s

## 2. The collapse of bubble

The cause of the “burst” of the bubble, understood from the policy appraisal  
(The discussions in the first and second parts are mainly based on Asako (2012))

## 3. Fiscal policy and corporate sector’s response in the post-bubble periods

The explanation of fiscal policy in the 1990s, and the subsequent policy effects on corporate investment

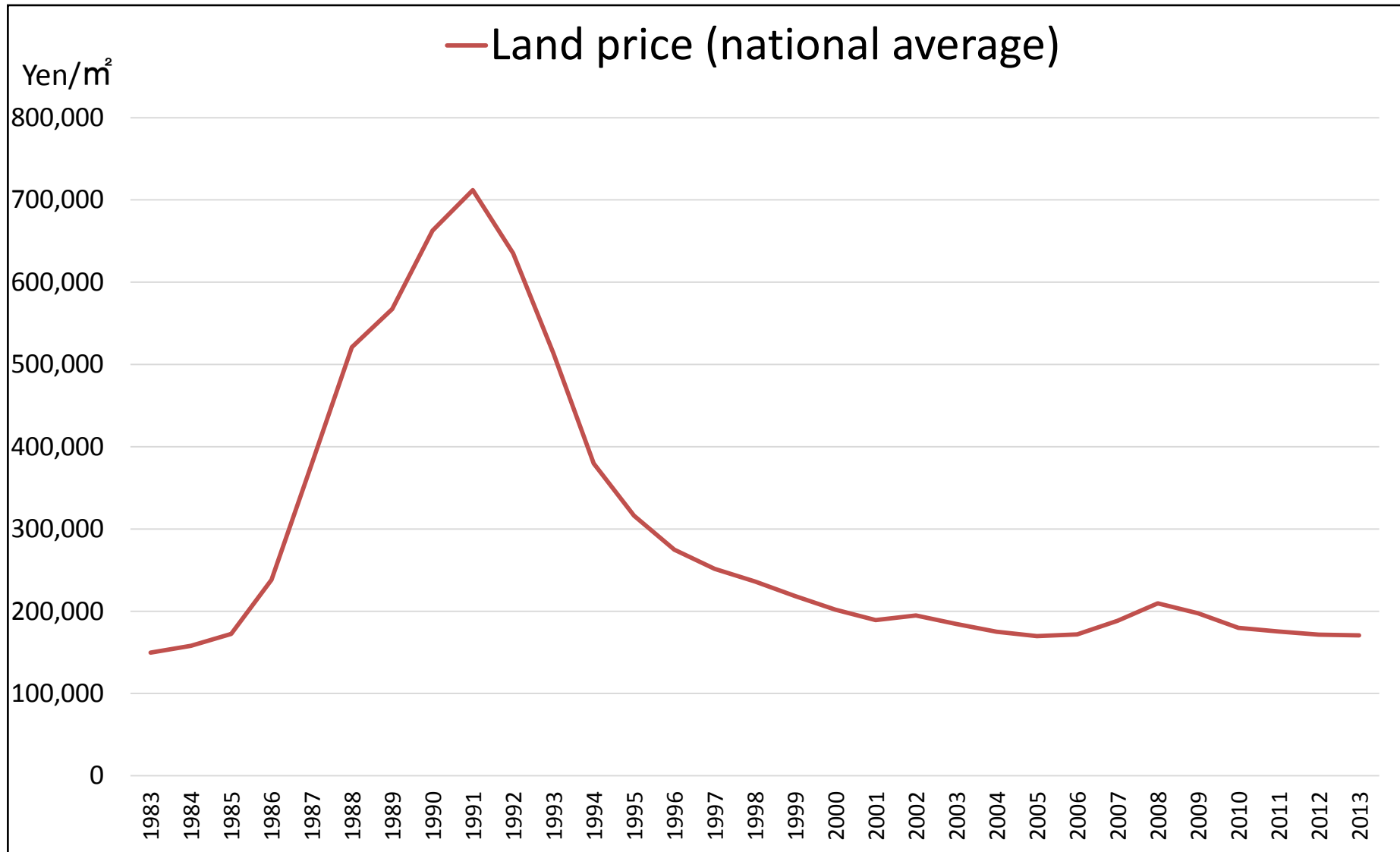
## 4. Concluding Remarks

# 1. Land Price Bubbles in Japan

- Land prices in Japan (Figure 1) during the second half of the 1980s were the highest in two decades.
  - The gap between actual and theoretical land prices were particularly wide during 1986–1989 (Economic Survey of Japan, 1988 and 1989).
- Too high relative to the levels consistent with market fundamentals (land prices = bubble!)

# Figure 1. Land Prices in Japan

(Source: <http://www.chika-data.com/>)

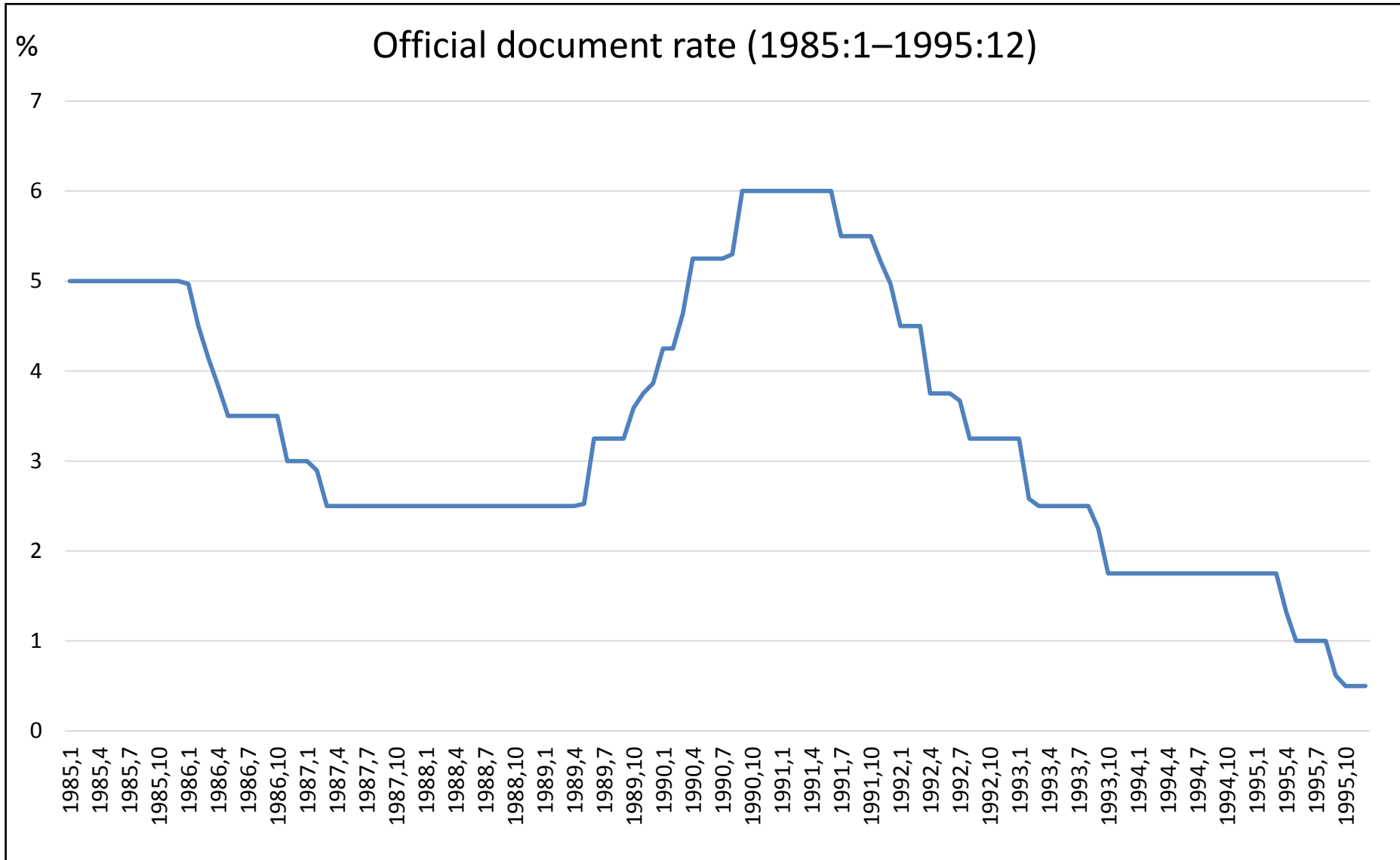


# The Cause of Bubbles

- One possible reason: easy monetary policy by the Bank of Japan (BOJ).
  1. The official document rate: dropped five times beginning in January 1986.
  2. It remained at 2.5 % for 27 months from February 1987 to May 1989.  
(See Figure 2)
- These “excessive” monetary loosening policies were one cause of the “bubble” in the late 1980s in Japan (Asako (2000) and Asako (2012)).

# Figure 2. Official Document Rate (BOJ)

(Source: Nikkei NEEDS)



## 2. The Collapse of the Bubble

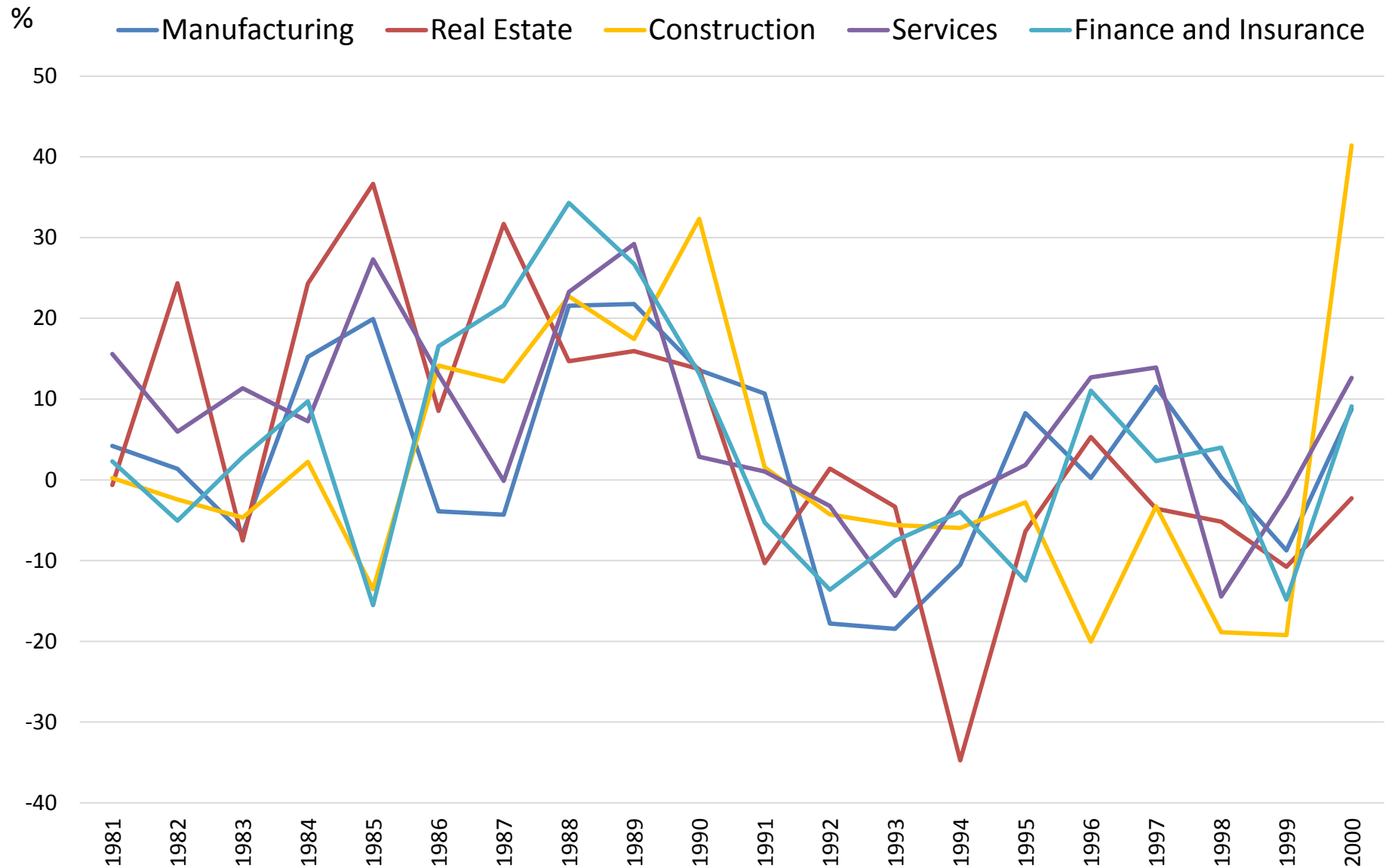
- The concern around the bubble: both the Japanese government and BOJ adopted certain austerity measures (Asako (2012)).
  1. Raising the official document rate (see also Fig.2)
  2. Imposing quantitative restrictions on real estate lending
  3. Announcing a series of reforms in the land-tax system (e.g., the introduction of land-value tax)
  4. Expanding the designation of districts where regulates the land transactions.

- These tightening policies led the bubble to burst!
    1. The impact of the bubble burst became strongly apparent in 1992, when land prices were drastically falling (Figure 1).
    2. It led to the possibility of credit uncertainty in financial institutions holding large volumes of loans secured by land.
    3. Negative wealth effects were caused by a sharp fall in the land prices.
- Private demand, especially corporate investment, fell in the beginning of the 1990s (Figure 3).



# Figure 3. The Movement of Corporate Investment

(Source: SNA, Percentage changes from previous year, including the construction in progress)



# 3. Fiscal Policy in the 1990s

- Expansionary fiscal policy was implemented in almost every year of the 1990s (Table 1).
- In most cases, public investment (public capital formation) was employed.

(Public Finance Act: prohibits the issue of deficit bond in principle, conditionally admits the issue of construction bond)

- Usually, public investment has two effects on the corporate (private) investment.
  1. Crowding in effects: stimulate the corporate sector investment.
  2. Crowding out effects: decrease it.

Which effect is observed?

Table 1. Chronology of Economic Stimulus Packages and Tax Cuts in the 1990s (Miyazaki (2010))

| Stimulus packages    | Tax cuts             |  |
|----------------------|----------------------|--|
| Date of announcement | Date of announcement | Date of implementation                                 |
| August 1992          |                      |  |
| April 1993           | April 1993           | December 1993 & June 1994                              |
| September 1993       |                      |  |
| February 1994        | February 1994        | July 1994 & December 1994                              |
|                      | September 1994       | January 1995, June 1995, & December 1995               |
| April 1995           | December 1995        | June 1996 & December 1996                              |
| September 1995       |                      |  |
|                      | December 1997        | February 1998, June 1998, December 1998, and June 1999 |
| April 1998           | April 1998           | August 1998  |
| November 1998        |                      |  |
| November 1999        |                      |  |

Table 2. Previous Studies on Crowding in/out effect in Japan  
(Kozuka et al. (2012))

| Study by                        | Estimation Method | Sample periods                                | Results   | Study by                    | Estimation Method | Sample periods                                  | Results   |
|---------------------------------|-------------------|---|-----------|-----------------------------|-------------------|---|-----------|
| Mitsui et al. (1995)            | Simulation        | FY1957-1987<br>FY1957-FY1970<br>FY1971-FY1987 | In<br>Out | Nakazato and Konishi (2004) | VAR (5 variables) | 1981Q2-2001Q1                                   | Out       |
| Economic Planning Agency (1998) | VAR (6 variables) | 1970Q3-1989Q4<br>1970Q3-1997Q1                | Out       | Kitaura and Nagumo (2004)   | VAR (7 variables) | 1981Q2-2003Q3<br>1981Q2-1992Q2<br>1992Q3-2003Q3 | Out       |
| Kamoi and Tachibanaki (2001)    | VAR (6 variables) | 1975Q1-1990Q4<br>1985Q1-1998Q4                | In<br>Out | Fujii (2008)                | VAR (4 variables) | 1978Q1-2005Q2                                   | Out       |
| Ihori et al. (2003)             | VAR (6 variables) | 1960Q1-1989Q4<br>1990Q1-1999Q4                | ?<br>Out  | Hatano (2008)               | VECM              | FY1955-FY2004                                   | In        |
| Nakazawa et al. (2001)          | VAR (7 variables) | 1980Q1-2001Q4                                 | ?         | Eguchi and Hiraga (2009)    | VAR (5 variables) | 1969Q1-2008Q1                                   | Out       |
| Kawade et al. (2004)            | VAR (6 variables) | 1975Q1-1988Q4<br>1989Q1-2002Q4                | In<br>?   | Kato (2010)                 | VAR (6 variables) | 1980Q1-1991Q1<br>1991Q2-2008Q1                  | In<br>Out |

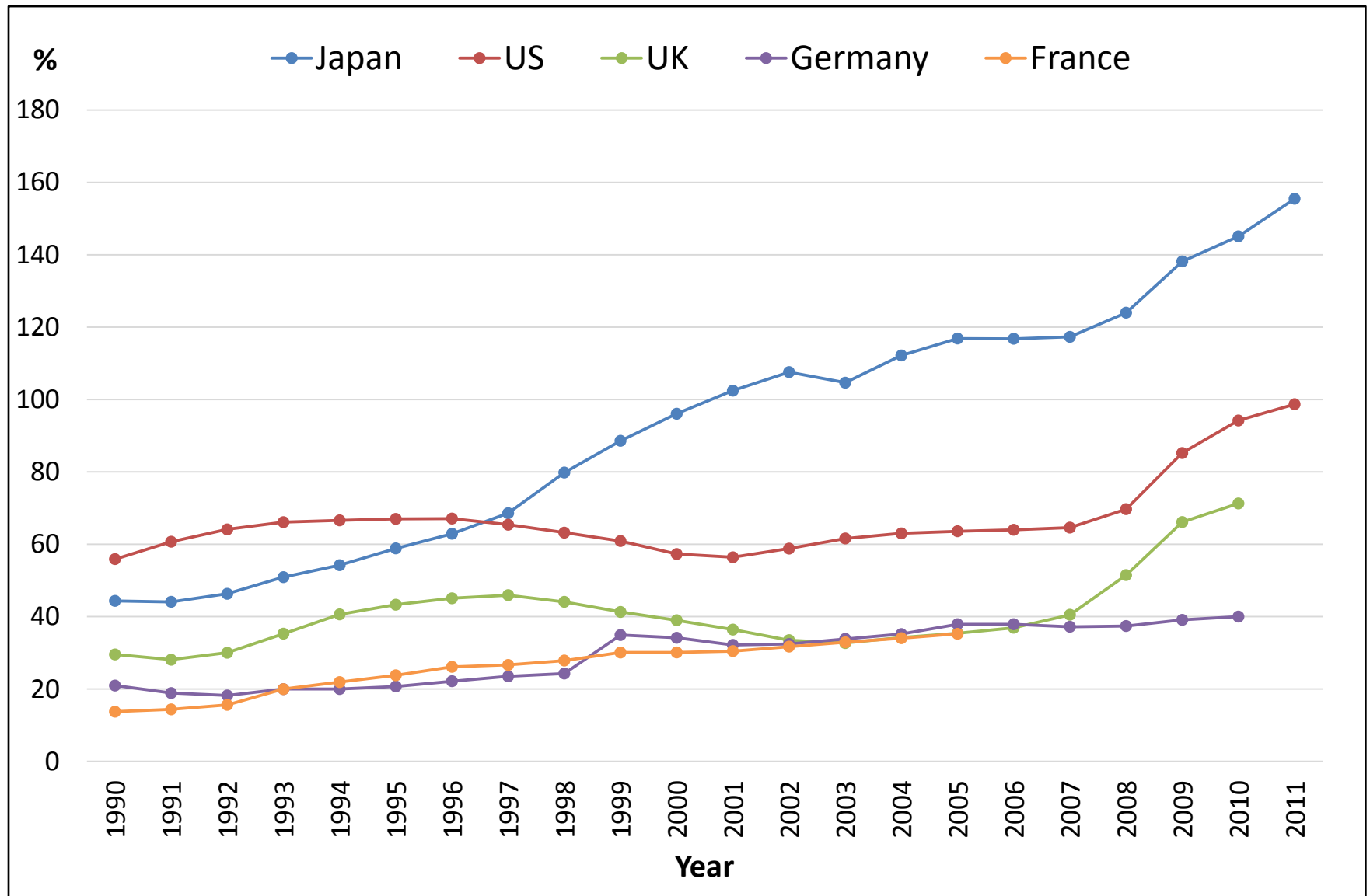
# Evidence from Some Previous Studies

- Crowding out effect: observed in most cases in Japan. (Table 2)
  - In particular, this is prominent in cases that include the 1990s in the sample periods.
  - Miyazaki (2010): A mixed VAR/event study approach (narrative approach) is used for investigation.
  - To capture policy effects, Miyazaki (2010) uses dummy variables to capture policy changes, following the chronology shown in Table 1.
    1. Throughout the 1990s, negative responses of private investment to the fiscal expansion were observed.
    2. In particular, in the late 1990s, investment, especially nonresidential investment, decreased.
- Crowding out effects were definitely observed in the 1990s!

# 4. Concluding Remarks

1. We discussed the generating and bursting process of land price bubbles in the late 1980s in Japan.
2. In addition, we presented the results of past research on Japanese fiscal policy in the post-bubble periods.
3. Policy effects: not positive for corporate investment (private capital formation)
4. Fiscal policy in the 1990s: inadequate for stimulating the corporate sector incentive and resulted in a large amount of debt outstanding (Figure 4).

Figure 4. Comparison of Government Debt Outstanding, as a proportion of GDP among Some Developed Countries (Source: Ministry of Finance, Japan)



# Message (I)

- Monetary loosening policies sometimes may cause asset price bubbles (affirmed by lessons from the late 1980s in Japan).
  - The austerity measures deployed in rapid sequence contributed to the bubble burst.
- Policymakers may be required to deal with the bubble boom “gradually” if they confirm evidence of a bubble developing.
- (If not, the policy maker will make the same mistake the Japanese government did...)



# Message (II)

- Public investment: often part of the stimulus packages implemented after the 2008 global financial crisis.  
→ It has asymmetric effects on private investment.
- The government should carefully craft policy based on the movement of public and private investment.

# References

## (Some Papers and Books Referred in the Slide)

- Asako, K., 2000. Macro anteika seisaku to nihon keizai (Macro stabilization policy and the Japanese economy). Iwanami Shoten (in Japanese).
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- Miyazaki, T., 2010. The effects of fiscal policy in the 1990s in Japan: A VAR analysis with event studies. Japan and the World Economy 22 (2), pp.80-87.