# The Japanese Economy Past, Present, and Future

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Tsutomu Miyagawa (Gakushuin Univeristy)

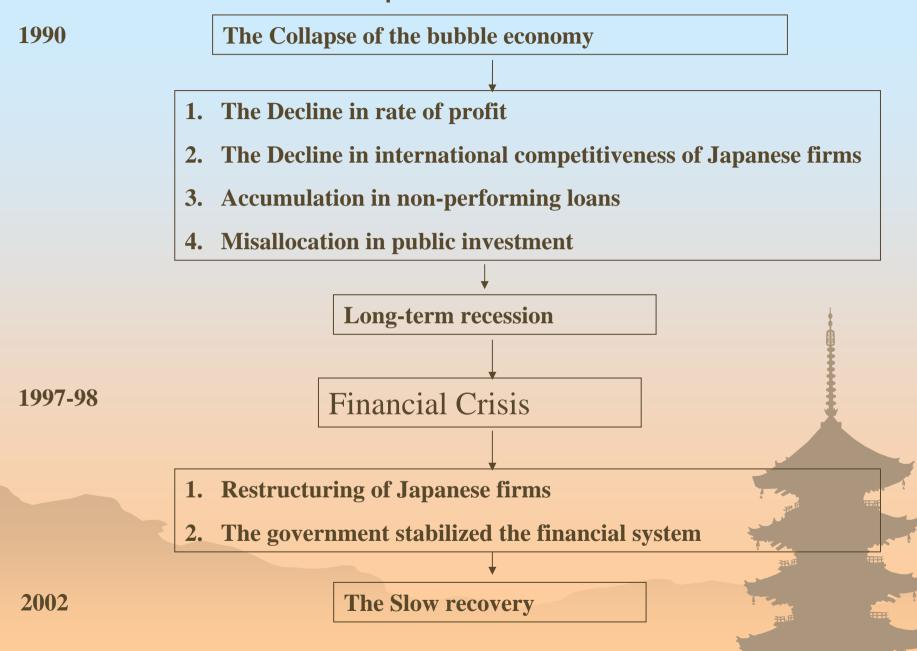
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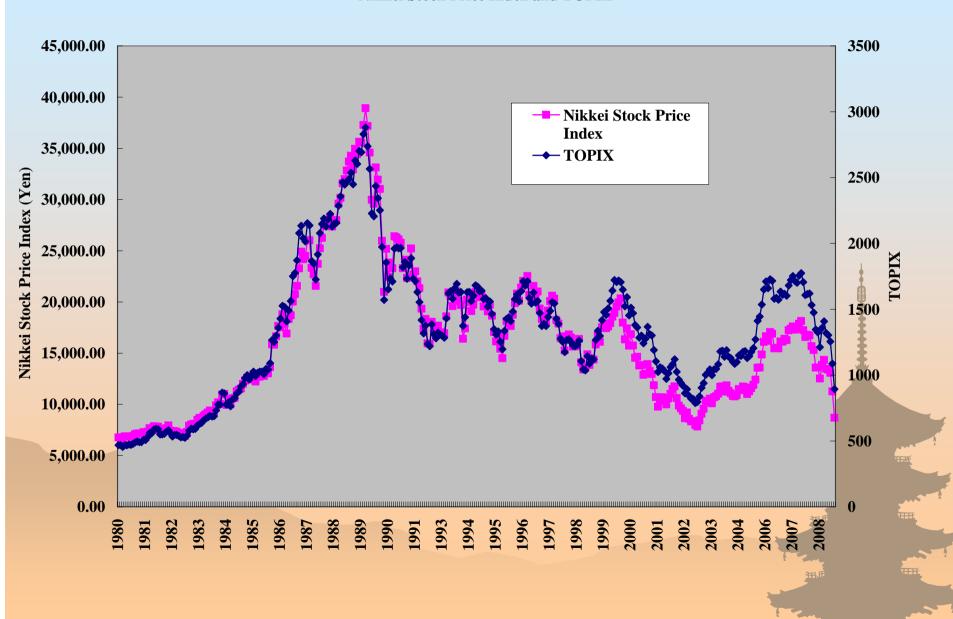
### 1. The 'Lost Decade' in Japan

- After the collapse of the bubble economy in 1990, the 'Lost Decade' in Japan began
- Annual economic growth in Japan in the 1990s was 1%, while in the US it was 3%.
- Not only the U.S., but East Asian countries such as China and Korea also recorded higher growth rates than Japan.

#### **Japan's Lost Decade**



#### **Nikkei Stock Price Index and TOPIX**



#### Business Cycles in Japan

|               | GDP   | Private<br>consumption | Private capital formation | Public capital formation | Net exports |
|---------------|-------|------------------------|---------------------------|--------------------------|-------------|
| 1980:1-1983:1 | 2.46  | 2.84                   | 0.21                      | -0.53                    | 15.66       |
| 1983:1-1985:2 | 3.61  | 3.07                   | 8.48                      | -4.96                    | 17.10       |
| 1985:2-1986:4 | 3.44  | 3.12                   | 8.47                      | 3.65                     | -17.18      |
| 1986:4-1991:1 | 5.36  | 4.42                   | 11.99                     | 3.05                     | -8.05       |
| 1991:1-1993:4 | 0.32  | 2.40                   | -10.38                    | 11.75                    | 4.49        |
| 1993:4-1997:1 | 2.93  | 2.81                   | 6.24                      | -1.74                    | -5.14       |
| 1997:1-1999:2 | -0.55 | -1.02                  | -2.35                     | 4.02                     | 13.54       |
| 1999:2-2000:4 | 2.81  | 1.12                   | 12.64                     | -12.60                   | 13.73       |
| 2000:4-2002:1 | -2.45 | 0.71                   | -10.83                    | 0.03                     | -5.25       |
| 2002:1-2008:1 | 2.17  | 1.42                   | 4.38                      | -7.29                    | 34.59       |

Note 1. Economic and Socila Research Institute, Cabinet Office, the Gvernmant of Japan, System of National Accounts

Note 2. Figures indicates annual growth rate

Note 3 Economic recessions are expressed in white cells. Economic booms are expressed in blue cells.

# Why has the Japanese economy stagnated for so long?

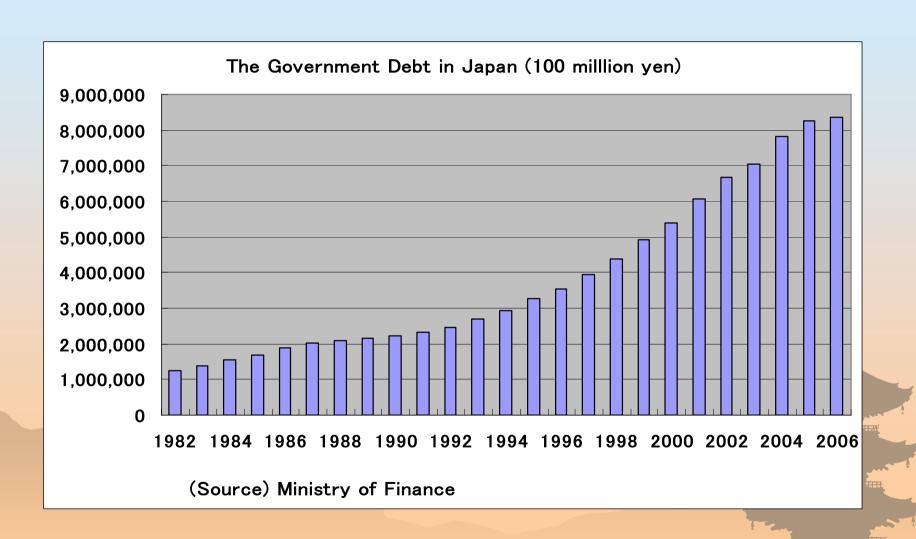
### I Mismanagement of macroeconomic policies

- Inappropriate fiscal policies
- Inappropriate monetary policies

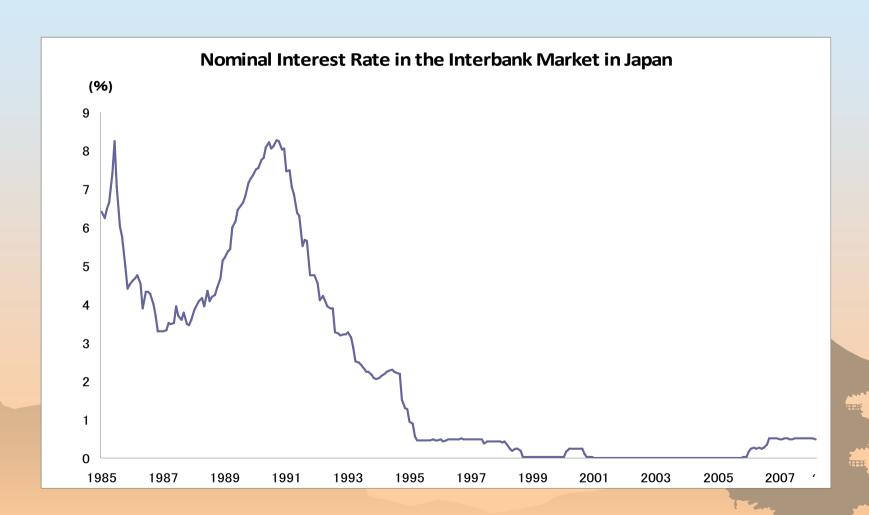
### II Productivity slowdown

- Dysfunctional financial intermediation system due to the huge non-performing loans.
- The traditional Japanese industrial structure did not fit the post IT revolution structure.
- Technology levels in Korea and China have caught up Japan

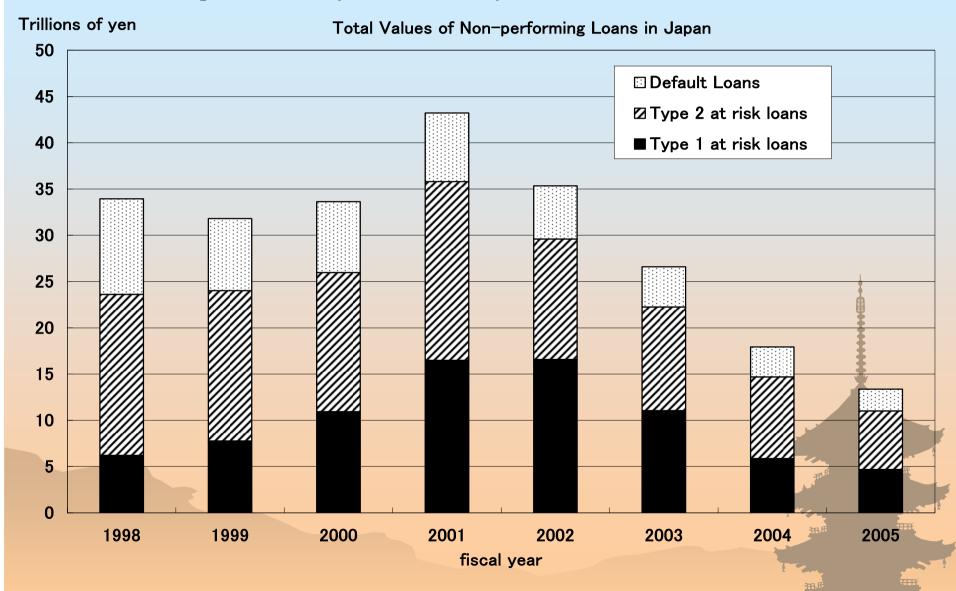
### The government debt in Japan has grown since 1990. In 2006, it was over 800 trillion yen which is 1.6 times the GDP.



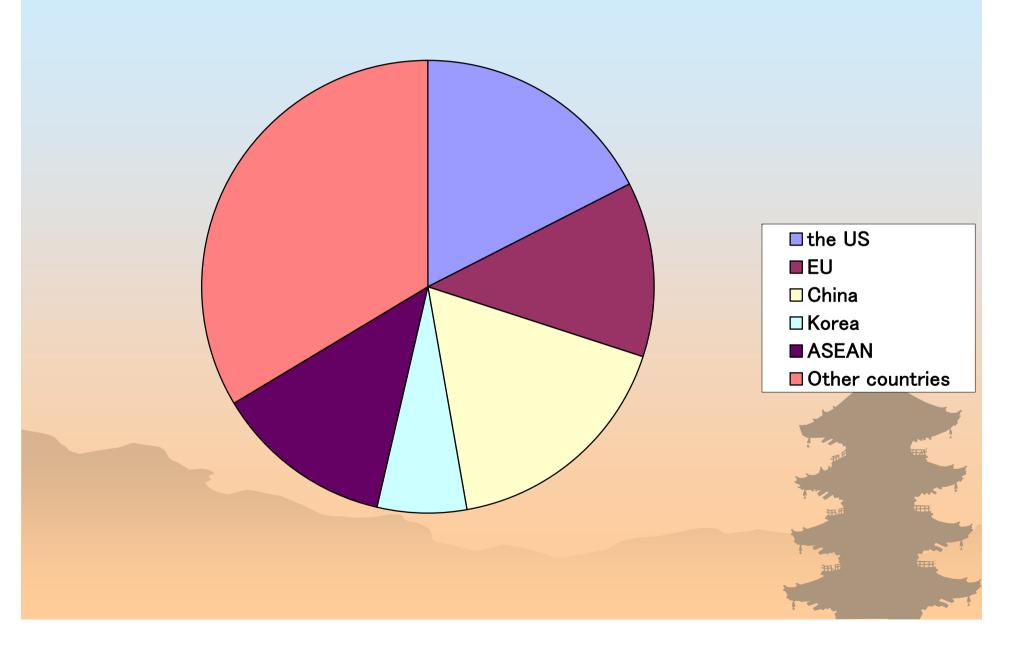
The Bank of Japan maintained zero interest rate policy from 1999. However, the policy did not stop deflation. Many economists criticized the BOJ for not taking inflation target policy.



The Japanese non-performing loans started to decline after 5 years passed from financial crisis, as the Japanese economy recovered slowly.



#### Share of Trade with Japan by Country (2006)



# 2. The Effects of Globalization and the ICT Revolution on the Japanese Economy (1)

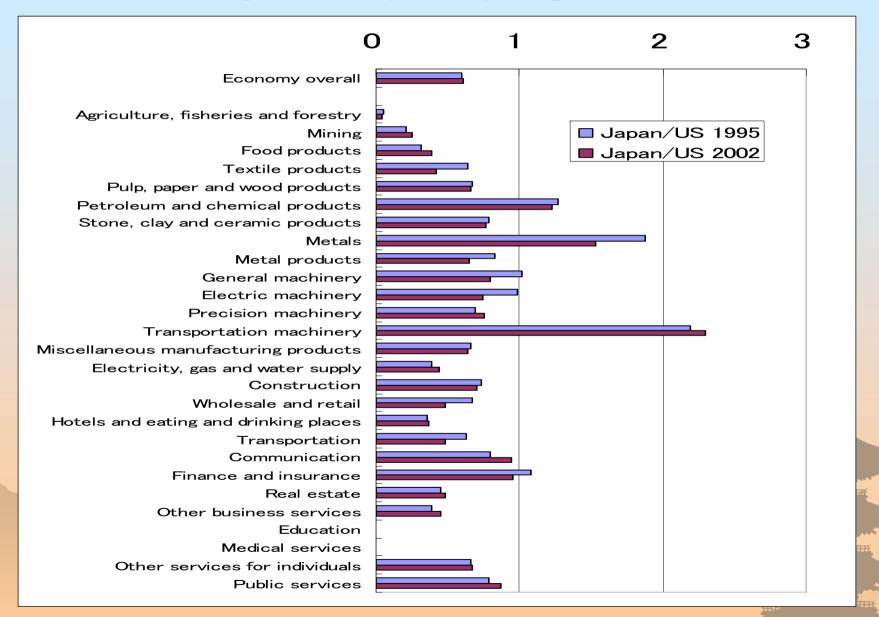
- Although the Japanese economy has recovered since 2002, its economic growth rate is still lower than those in other developed countries.
- There are two factors behind slow economic growth in Japan; one is the decline in labor input due to the slow population growth, the other is low productivity growth (especially, low productivity in the service sector).

#### **Economic Growth for the Market Sector in Japan, the US, and the Major EU Economies**

| Country   | Gross value added | Contribution of    | Contribution of      | Contribution of TFP growth |  |  |  |  |
|-----------|-------------------|--------------------|----------------------|----------------------------|--|--|--|--|
| Country   | growth            | labor input growth | capital input growth |                            |  |  |  |  |
|           | 1980-95           |                    |                      |                            |  |  |  |  |
| Japan     | 3.9               | 0.4                | 2.0                  | 1.5                        |  |  |  |  |
| Korea     | 9.5               | 2.2                | 5.6                  | 1.8                        |  |  |  |  |
| Germany   | 1.9               | -0.2               | 1.2                  | 0.8                        |  |  |  |  |
| France    | 1.8               | -0.1               | 0.7                  | 1.2                        |  |  |  |  |
| UK        | 2.5               | -0.3               | 1.2                  | 1.5                        |  |  |  |  |
| Italy     | 1.9               | 0.3                | 0.8                  | 0.8                        |  |  |  |  |
| US        | 3.0               | 1.2                | 1.1                  | 0.7                        |  |  |  |  |
| 1995-2005 |                   |                    |                      |                            |  |  |  |  |
| Japan     | 1.0               | -0.5               | 1.1                  | 0.5                        |  |  |  |  |
| Korea     | 4.8               | 0.7                | 5.1                  | -0.9                       |  |  |  |  |
| Germany   | 1.0               | -0.4               | 1.0                  | 0.4                        |  |  |  |  |
| France    | 2.4               | 0.7                | 0.9                  | 0.8                        |  |  |  |  |
| UK        | 3.2               | 0.8                | 1.5                  | 0.9                        |  |  |  |  |
| Italy     | 1.2               | 0.8                | 1.0                  | -0.7                       |  |  |  |  |
| US        | 3.7               | 0.7                | 1.3                  | 1.7                        |  |  |  |  |

Source: EU KLEMS Database, March 2008.

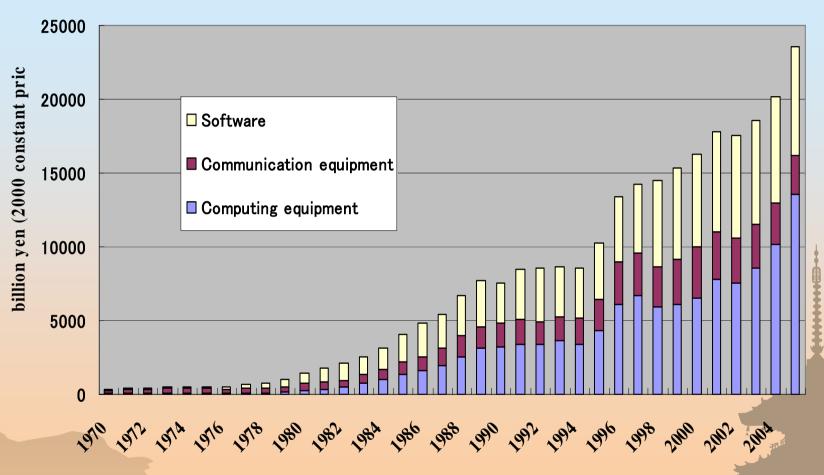
#### Labor productivity by Industry in Japan and the US



# 2. The Effects of Globalization and ICT Revolution on the Japanese Economy (2)

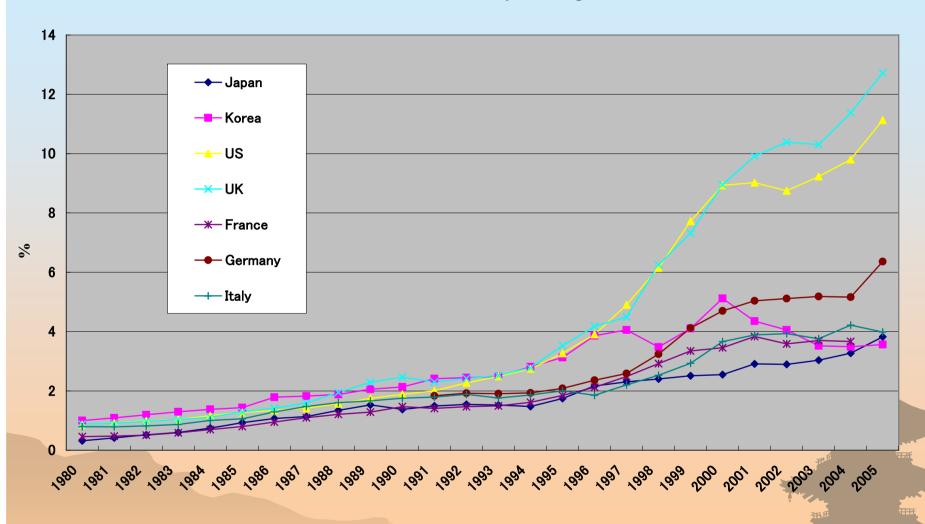
- Why has the productivity growth in Japan been slower than that of other developed countries?
  →slower accumulation in ICT assets.
- The Japanese ICT investment stood at 23.5 trillion yen, accounting for 18% of total investment.
- However, Japan's ICT investment/GDP ratio was the lowest among the countries here for much of the 1990s and 2000s.

#### ICT Investment in Japan



Source: JIP 2008 Database

#### ICT Investment/GDP Ratio in the Major Developed Countries



#### **Contributions of ICT Capital Service Input Growth to the Economic Growth (%)**

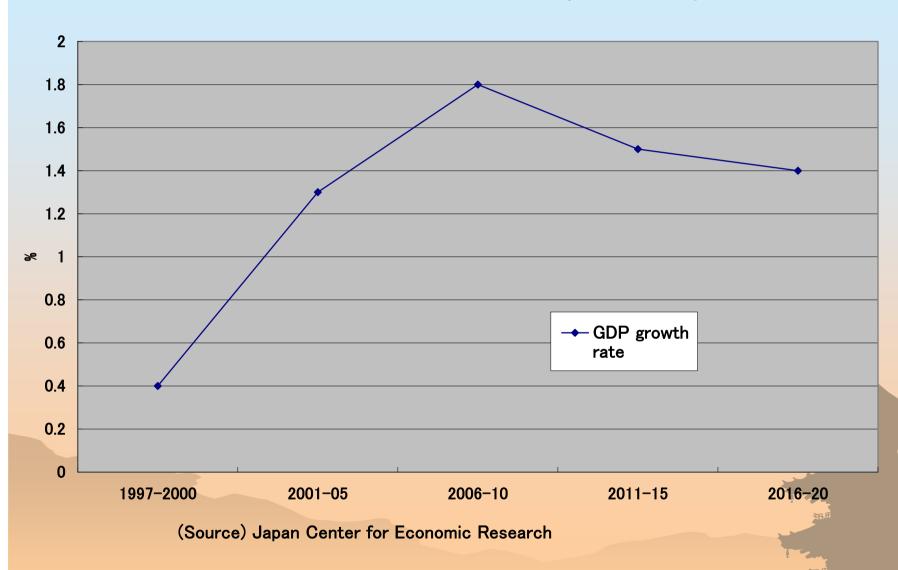
|  | 2000-2005 |       |      |        |         |       |      |
|--|-----------|-------|------|--------|---------|-------|------|
|  | Korea     | Japan | US   | France | Germany | Italy | UK   |
| Market economy total                         | 0.75      | 0.41  | 0.85 | 0.50   | 0.34    | 0.13  | 1.23 |
| Electrical machinery, post and communication | 1.18      | 0.47  | 1.59 | 0.03   | 0.25    | 0.15  | 3.78 |
| Manufacturing, excluding electrical          | 0.36      | 0.22  | 0.65 | 0.19   | 0.12    | 0.06  | 0.59 |
| Other goods producing industries             | 0.07      | 0.03  | 0.69 | 0.37   | 0.03    | 0.06  | 0.22 |
| <b>Distribution services</b>                 | 0.28      | 0.10  | 0.83 | 0.63   | 0.21    | 0.07  | 0.90 |
| Finance and business services                | 2.44      | 1.50  | 0.89 | 0.79   | 0.99    | 0.34  | 2.33 |
| Personal and social services                 | 0.26      | 0.07  | 0.74 | 0.45   | 0.10    | 0.12  | 0.60 |

Source: EU KLEMS Database March 2008 and KIP Database.

# 3. The Strategies for Revitalizing the Japanese Economy (1)

- Many economists estimate the potential growth rate in the Japanese economy to be 2%.
- Assuming 2% economic growth, the Japanese government can sustain the social security system and lower national debt.
- However, with the current economic system and economic policies, the Japanese economy cannot grow at 2%.→According to the economic forecast by Japan Center for Economic Research (one of the most respected economic think-tanks in Japan), the economic growth rate in the medium term will be around 1.5%.
- In addition, the global financial crisis in 2008 will discourage the growth rate further.

#### The Midium-term Forecast of the Japanese Economy



# 3. The Strategies for Revitalizing the Japanese Economy (2)

- How can we revitalize the Japanese economy and attain 2% economic growth in the long run?
- We cannot expect an increase in labor input due to the decline in population.
- Then, our economic growth rate will depends on productivity growth.

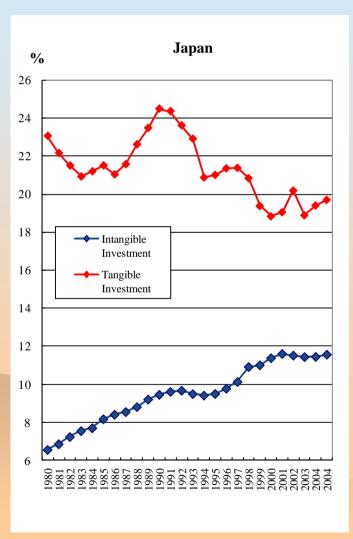
# 3. The Strategies for Revitalizing the Japanese Economy (3)

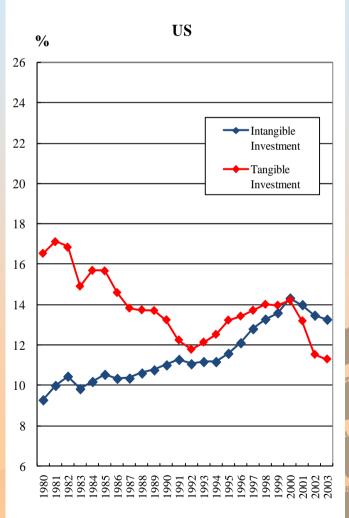
- To improve productivity growth in Japan, the followings are required;
- (1) The promotion of ICT investment (particularly, in the service sector).
- (2) The accumulation in intangible investment as well as tangible investment associated with ICT facilities → changing the accounting system and financial system to evaluate accumulation in human capital and organizational reform.
- (3) The fostering of the venture business.

|       |                            | Total intnagible investment | Computerized information | Innovative property | Economic competencies |
|-------|----------------------------|-----------------------------|--------------------------|---------------------|-----------------------|
| Japan | All industries (2000-05)   | 11.5                        | 2.2                      | 5.9                 | 3.4                   |
|       | Manufacturing<br>(2000-05) | 17.3                        | 2.1                      | 11.2                | 4.0                   |
|       | Service<br>(2000-05)       | 9.5                         | 2.4                      | 3.6                 | 3.6                   |
| US    | All industries (1998–2000) | 11.7                        | 1.7                      | 4.6                 | 5.4                   |
| UK    | All industries (2004)      | 10.9                        | 1.7                      | 3.2                 | 6.0                   |

(Source) Fukao et al (2008)

### Intangible and Tangible Investment in Japan and the US





Thank you for listening to my presentation. I hope that you enjoy your stay in Kyoto!

