Lessons from the Economic Growth in Post-war Japan

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(2014) (partly revised 2016, 17&18)
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Lessons from the Economic Growth in Post-war Japan

Introduction

My lecture is a success-and-failure story of Japan’s economy and economic policies. Since the subject is so large as to require a full year of my lectures at universities, what I can give you today is only a broad outline. But, I will try to introduce our experience as frankly as possible based on my own 50-year career in the Government of Japan, Bank of Japan, etc. so that you may find some suggestions for your own countries.

(Growth of the World Economy in the 20th Century)

(1) Though my lecture focuses on the Japanese economy after the 1950s, let us start from a slightly longer and broader viewpoint, so that we can share some common axes.

According to IMF’s “World Economic Outlook May 2000,” the world population increased by 4.7 billion (from 1.6 to 6.3 billion: quadrupled) during the last 100 years. As compared with the 800 million increases during the preceding 150 years (from 1750 to 1900), you can see how explosive was the population increase in the 20th century.

Fortunately enough, world production in real terms increased by 19 times. As a result, real production per capita increased by 4.7 times ($1,263→$5,973 at 1990 purchasing power parity by Angus Madison).

However, as you all know, the economic growth was not the same across the world. There were significant differences among countries and among periods.

(2) Chart 1 shows the growth of per capita GDP of each country in the 20th century with a breakdown of first and second halves of the century.
To be noted: these figures are in constant 1990 U.S. dollar equivalent terms of purchasing power parities by Angus Madison, and in that sense these are rather artificial or technical figures and are frequently revised.

Also, per capita GDP is not the only figure to measure the level of economy or the development stage, or the welfare of the people. It is just one of various statistical figures.

---

### Chart 1

**GROWTH OF PER CAPITA GDP IN 20TH.CENTURY**

<table>
<thead>
<tr>
<th>PERIOD</th>
<th>2000/1900 TIMES</th>
<th>1950/1900 TIMES</th>
<th>2000/1950 TIMES</th>
<th>ANNUAL GROWTH RATE 2000/1900</th>
</tr>
</thead>
<tbody>
<tr>
<td>WORLD</td>
<td>4.7</td>
<td>1.7</td>
<td>2.8</td>
<td>1.6%</td>
</tr>
<tr>
<td>TAIWAN</td>
<td>22.2</td>
<td>1.2</td>
<td>18.3</td>
<td>3.1%</td>
</tr>
<tr>
<td>JAPAN</td>
<td>18.2</td>
<td>1.7</td>
<td>11.0</td>
<td>2.9%</td>
</tr>
<tr>
<td>S.KOREA</td>
<td>16.8</td>
<td>1.0</td>
<td>16.3</td>
<td>2.9%</td>
</tr>
<tr>
<td>FINLAND</td>
<td>12.1</td>
<td>2.5</td>
<td>4.8</td>
<td>2.5%</td>
</tr>
<tr>
<td>ITALY</td>
<td>10.7</td>
<td>2.0</td>
<td>5.4</td>
<td>2.4%</td>
</tr>
<tr>
<td>CHINA</td>
<td>9.6</td>
<td>0.9</td>
<td>10.2</td>
<td>2.3%</td>
</tr>
<tr>
<td>CANADA</td>
<td>8.1</td>
<td>2.6</td>
<td>3.2</td>
<td>2.1%</td>
</tr>
<tr>
<td>BRAZIL</td>
<td>7.6</td>
<td>2.4</td>
<td>3.2</td>
<td>2.0%</td>
</tr>
<tr>
<td>FRANCE</td>
<td>7.2</td>
<td>1.8</td>
<td>3.9</td>
<td>2.0%</td>
</tr>
<tr>
<td>THAILAND</td>
<td>7.0</td>
<td>1.0</td>
<td>6.7</td>
<td>2.0%</td>
</tr>
<tr>
<td>U.S.</td>
<td>6.7</td>
<td>2.3</td>
<td>2.8</td>
<td>1.9%</td>
</tr>
<tr>
<td>GERMANY</td>
<td>6.1</td>
<td>1.4</td>
<td>4.5</td>
<td>1.8%</td>
</tr>
<tr>
<td>CHILE</td>
<td>5.3</td>
<td>2.0</td>
<td>2.7</td>
<td>1.7%</td>
</tr>
<tr>
<td>MEXICO</td>
<td>4.9</td>
<td>1.8</td>
<td>2.7</td>
<td>1.6%</td>
</tr>
<tr>
<td>CZECHOSLOVAKIA</td>
<td>4.9</td>
<td>2.0</td>
<td>2.4</td>
<td>1.6%</td>
</tr>
<tr>
<td>AUSTRALIA</td>
<td>4.8</td>
<td>1.7</td>
<td>2.9</td>
<td>1.6%</td>
</tr>
<tr>
<td>PERU</td>
<td>4.7</td>
<td>2.8</td>
<td>1.7</td>
<td>1.6%</td>
</tr>
<tr>
<td>U.K.</td>
<td>4.3</td>
<td>1.5</td>
<td>2.9</td>
<td>1.5%</td>
</tr>
<tr>
<td>INDONESIA</td>
<td>4.2</td>
<td>1.2</td>
<td>3.6</td>
<td>1.4%</td>
</tr>
<tr>
<td>HUNGARY</td>
<td>4.2</td>
<td>1.5</td>
<td>2.8</td>
<td>1.4%</td>
</tr>
<tr>
<td>NEW ZEALAND</td>
<td>3.7</td>
<td>2.0</td>
<td>1.9</td>
<td>1.3%</td>
</tr>
<tr>
<td>ARGENTINA</td>
<td>3.3</td>
<td>1.8</td>
<td>1.8</td>
<td>1.2%</td>
</tr>
<tr>
<td>F. U.S.S.R.</td>
<td>3.0</td>
<td>2.3</td>
<td>1.3</td>
<td>1.1%</td>
</tr>
<tr>
<td>INDIA</td>
<td>3.0</td>
<td>1.0</td>
<td>3.1</td>
<td>1.1%</td>
</tr>
<tr>
<td>PHILIPPINES</td>
<td>2.4</td>
<td>1.3</td>
<td>1.9</td>
<td>0.9%</td>
</tr>
<tr>
<td>MYANMAR</td>
<td>1.6</td>
<td>0.6</td>
<td>2.7</td>
<td>0.5%</td>
</tr>
<tr>
<td>AFRICA</td>
<td>2.6</td>
<td>1.7</td>
<td>1.6</td>
<td>1.0%</td>
</tr>
</tbody>
</table>


In constant 1990 US dollars at purchasing power parities

F.USSR stands for the area of former Soviet Union

To be noted: these figures are in constant 1990 U.S. dollar equivalent terms of purchasing power parities by Angus Madison, and in that sense these are rather artificial or technical figures and are frequently revised.

Also, per capita GDP is not the only figure to measure the level of economy or the development stage, or the welfare of the people. It is just one of various statistical figures.
Chart 1-2 is a graph of the figures in Chart 1 with a logarithmic scale.

Chart 1-2

Log scale

(3) Actual figures of the countries at each point in time are shown in Chart 2

**Chart 2 GDP per capita in the Selected Countries**

<table>
<thead>
<tr>
<th>Year</th>
<th>1900</th>
<th>1950</th>
<th>1975</th>
<th>1985</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>WORLD</td>
<td>1,262</td>
<td>2,138</td>
<td>4,119</td>
<td>4,767</td>
<td>5,973</td>
</tr>
<tr>
<td>Country</td>
<td>$</td>
<td>Country</td>
<td>$</td>
<td>Country</td>
<td>$</td>
</tr>
<tr>
<td>NEW ZEALAND</td>
<td>4,320</td>
<td>NEW ZEALAND</td>
<td>3,263</td>
<td>CANADA</td>
<td>14,158</td>
</tr>
<tr>
<td>AUSTRALIA</td>
<td>4,209</td>
<td>AUSTRALIA</td>
<td>7,218</td>
<td>FRANCE</td>
<td>13,101</td>
</tr>
<tr>
<td>U.S.</td>
<td>4,096</td>
<td>CANADA</td>
<td>7,047</td>
<td>GERMANY</td>
<td>13,034</td>
</tr>
<tr>
<td>GERMANY</td>
<td>3,139</td>
<td>GERMANY</td>
<td>6,847</td>
<td>NEW ZEALAND</td>
<td>12,976</td>
</tr>
<tr>
<td>FRANCE</td>
<td>2,849</td>
<td>FRANCE</td>
<td>6,221</td>
<td>AUSTRALIA</td>
<td>12,671</td>
</tr>
<tr>
<td>CANADA</td>
<td>2,765</td>
<td>ARGENTINA</td>
<td>4,987</td>
<td>UK</td>
<td>11,701</td>
</tr>
<tr>
<td>ARGENTINA</td>
<td>2,754</td>
<td>GERMANY</td>
<td>4,281</td>
<td>FINLAND</td>
<td>11,098</td>
</tr>
<tr>
<td>CHILE</td>
<td>1,950</td>
<td>FINLAND</td>
<td>4,131</td>
<td>JAPAN</td>
<td>10,973</td>
</tr>
<tr>
<td>CZECHOSLOVAKIA</td>
<td>1,720</td>
<td>CHILE</td>
<td>3,827</td>
<td>ITALY</td>
<td>10,558</td>
</tr>
<tr>
<td>ITALY</td>
<td>1,717</td>
<td>CZECHOSLOVAKIA</td>
<td>3,591</td>
<td>ARGENTINA</td>
<td>8,132</td>
</tr>
<tr>
<td>HUNGARY</td>
<td>1,682</td>
<td>ITALY</td>
<td>3,425</td>
<td>CZECHOSLOVAKIA</td>
<td>7,384</td>
</tr>
<tr>
<td>FINLAND</td>
<td>1,621</td>
<td>P U.S.</td>
<td>2,834</td>
<td>P U.S.</td>
<td>6,136</td>
</tr>
<tr>
<td>U.S.</td>
<td>1,218</td>
<td>HUNGARY</td>
<td>2,490</td>
<td>HUNGARY</td>
<td>5,805</td>
</tr>
<tr>
<td>MEXICO</td>
<td>1,157</td>
<td>PERU</td>
<td>2,263</td>
<td>MEXICO</td>
<td>4,408</td>
</tr>
<tr>
<td>JAPAN</td>
<td>1,135</td>
<td>MEXICO</td>
<td>2,085</td>
<td>CHILE</td>
<td>4,252</td>
</tr>
<tr>
<td>PHILIPPINES</td>
<td>1,033</td>
<td>JAPAN</td>
<td>1,873</td>
<td>BRAZIL</td>
<td>4,230</td>
</tr>
<tr>
<td>KOREA</td>
<td>850</td>
<td>BRAZIL</td>
<td>1,673</td>
<td>PERU</td>
<td>4,226</td>
</tr>
<tr>
<td>PERU</td>
<td>817</td>
<td>PHILIPPINES</td>
<td>1,283</td>
<td>TAIWAN</td>
<td>3,755</td>
</tr>
<tr>
<td>THAILAND</td>
<td>812</td>
<td>TAIWAN</td>
<td>1,123</td>
<td>S KOREA</td>
<td>3,131</td>
</tr>
<tr>
<td>TAIWAN</td>
<td>799</td>
<td>S KOREA</td>
<td>876</td>
<td>PHILIPPINES</td>
<td>2,077</td>
</tr>
<tr>
<td>INDONESIA</td>
<td>746</td>
<td>INDONESIA</td>
<td>874</td>
<td>THAILAND</td>
<td>1,871</td>
</tr>
<tr>
<td>BRAZIL</td>
<td>704</td>
<td>THAILAND</td>
<td>848</td>
<td>INDONESIA</td>
<td>1,531</td>
</tr>
<tr>
<td>MYANMAR</td>
<td>669</td>
<td>CHINA</td>
<td>614</td>
<td>CHINA</td>
<td>1,250</td>
</tr>
<tr>
<td>CHINA</td>
<td>652</td>
<td>INDIA</td>
<td>597</td>
<td>INDIA</td>
<td>900</td>
</tr>
<tr>
<td>INDIA</td>
<td>625</td>
<td>MYANMAR</td>
<td>393</td>
<td>MYANMAR</td>
<td>618</td>
</tr>
<tr>
<td>AFRICA</td>
<td>596</td>
<td>AFRICA</td>
<td>830</td>
<td>AFRICA</td>
<td>1,324</td>
</tr>
</tbody>
</table>

In 1990 US$ at PPP
This table contains almost infinite information, including the following:

a. At the beginning of the 20th century, UK was at the top, and so-called Western offshoots followed. Japan’s level was 90% of the world average, next to Mexico.

b. In 1950 Japan’s relative position returned to the level of 50 years before. It had once gone up, but it then went down because of the war.

c. So, Japan’s miraculous rapid growth started just 60 years or so ago, from below the world average of per capita GDP level.

d. China and South Korea followed Japan’s path with some time-lags.

e. The paths of the UK, Argentina, former Soviet Union and so on fluently tell the history of these countries.

(4) The features in the last 15 years of the 20th century is somewhat different. (Chart 3)

**Chart 3 Growth of GDP per capita from 1985 to 2000**
Japan was not a top runner any more. UK recovered a little bit by virtue of Mrs. Thatcher’s policy packages, and so on.

What I want you all to recall by my remarks so far is that Japan’s well-known miraculous economic growth is just a story of at most 35 or 40 years, and that any of your countries, even though today’s starting point may be behind, has the same chance, and it is upon your shoulders whether the chance is realized or not.

Actually, this story after getting into the 21th century shows further different features as in the next Slide P7. We shall look it back later.

(Overview of Japan’s Post-war Economic Growth)

Now, we shall have a quick overview over the post-war growth of Japan’s economy.

Chart 4 shows the path of Japanese economic growth since 1955.
The blue line shows each fiscal year’s index of real GDP as of 1955=100 (right scale: ex. the index of 2018 estimated is 1219)

Each pillar shows the rate of growth of real GDP over the previous fiscal year in percentage terms (left scale).

As you can notice at a glance there are broadly three phases.

The first phase is the rapid growth period from 1955 to 1970. After overcoming the turmoil of the direct post war period, the Japanese economy continued to grow by nearly 10% per year for 15 years. Real GDP quadrupled from 1955 to 1970. Looking precisely, there were two sub-stages in this rapid growth period. The 1st half is up to 1964 and the 2nd half is since 1965.

We did have business cycles in this period, but the fluctuation was happening at around a very high level.

Passing through the transitional period caused by the Nixon-shock (Aug. 1971) and the 1st oil crisis (Oct. 1973), the Japanese economy went into the 2nd phase: i.e. a steady growth period which lasted from 1975 until around 1986. Although the rate of growth has slowed down, nominal per capita GDP in dollar terms continued to rise relatively among G7 countries.
The 3rd phase is the period since 1987, the period of the crazy bubble economy (i.e. sharp increase of asset prices) and the aftermath (sharp fall of asset prices followed by the serious debt problem of enterprises and the accompanying banking crisis, causing deflationary pressure on the real economy).
I will introduce these points in more detail later.

Chart 5 shows the path of nominal per capita GDP growth with the comparison to U.S.

**Chart 5 Growth of Nominal per capita GDP ($U.S.)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Japan</th>
<th>U. S.</th>
<th>Japan/US (%)</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1955</td>
<td>259</td>
<td>2,436</td>
<td>10.6</td>
<td></td>
</tr>
<tr>
<td>1963</td>
<td>721</td>
<td>3,187</td>
<td>22.6</td>
<td>1964: IMF § 8 Status, OECD membership</td>
</tr>
<tr>
<td>1971</td>
<td>2,177</td>
<td>5,284</td>
<td>41.2</td>
<td>Nixon Shock 1 $ = ¥360 → ¥308</td>
</tr>
<tr>
<td>1973</td>
<td>3,809</td>
<td>6,369</td>
<td>59.8</td>
<td>Exchange Rates Floating, Overtook Italy &amp; U. K.</td>
</tr>
<tr>
<td>1986</td>
<td>16,344</td>
<td>17,736</td>
<td>92.2</td>
<td>1983, 4: Overtook France and West Germany</td>
</tr>
<tr>
<td>1987</td>
<td>19,731</td>
<td>18,695</td>
<td>105.5</td>
<td>Overtook U. S. (No. 1 among G7 Countries)</td>
</tr>
</tbody>
</table>

Nominal per capita GDP in 1955 was only $259, 10.6% of that of the U.S., and at the same level of Malaysia and Ghana at that time.

How this position relative to the U.S. went up.

The year 1964 was an epoch-making year during which Japan joined the OECD and obtained the status of an Article 8 country in the IMF, and the Olympic Games were successfully held in Tokyo. Rapid growth had continued and nominal per capita GDP surpassed 40% of that of the U.S. in 1971 and reached 60% in 1973.
In 1987, we finally overtook U.S. and continued to be top among the G7 until 1997.

Entering the 21st century, the next stage of this story began. We will come back to it in the last part of this lecture.

Three Points of this Lecture

My lecture today will tell you the following 3 points.

a. What were the policy-packages that contributed to such miraculous rapid growth?

b. How and why did the rapid growth come to an end?

c. What followed thereafter?
1. Backgrounds of the Rapid Growth

(1) Favorable Conditions and Macroeconomic Policies

It may not be fair to attribute the rapid growth only to policies and to neglect the favorable or lucky external and domestic environments.

One of the lessons learned from the past experiences was that competition for higher trade barriers may have been one of the causes of World War 2. This recognition led to the establishment of the free trade system and the GATT framework.

The free-trade policy of western developed countries after the War, no doubt, enabled Japan to achieve export-led growth. Also, the Cold War made the occupation policy by U.S. at that time more generous and favorable for Japan’s reconstruction. Those were the favorable international environments.

And domestically, such conditions as,

a. Strong and persistent demand for investment
   (34% of industrial equipment was lost during the war)

b. A large skilled and diligent labor force

c. Very low military burden

d. Significant technological development, which was largely supported by imports of new technology

e. The high household saving ratio was extremely favorable for reconstruction and development.

Certainly, we did have those favorable conditions. However, conditions did not lead to anything unless we took advantage of them. The most important factor in the backgrounds of the rapid growth was the economic policy packages at that time. Those are, in one phrase, “Growth-oriented Policy-packages based on Comprehensive Strategy and Economic Plans.” Among them, the macroeconomic policy of the combination of tight-fiscal and relatively loose monetary policy was most important. It was called “Easy Money Tight Budget” in Japan.
In order to understand the effect of the policy-mix of “easy money, tight budget”, I would like to briefly touch upon the pattern of business cycle at that time.

Since the potential demand level had always exceeded supply capacity (because of strong demand for investment), the balance of payments was the most severe restricting condition (poor foreign reserves).

So, the cycle of

Overheat → BP crisis → credit restriction → recession → BP improvement → removal of credit restriction → rapid recovery → overheating → BP crisis ...

Therefore, demand control policies should be directed to realize the optimal combination of demand for future growth under the strict restriction of the total demand level.

In such an economy,

a. Small government policy left the private sector more room to invest

b. Usually, private investments increase the supply-capacity more than government expenditures

c. So, in such a demand-excessive economy, small government policy promised higher economic growth than otherwise

Furthermore, among public expenditures in the small government policy, priority was given to investment in social infrastructure.

We had four BP crises—in 1953, 1957, 1961, and 1963 to 1964—and the years following each crisis are the bottoms of growth, as shown by Chart 6.

Since 1968, BP continued to be in surplus, and we were free from BP restriction.
(2) Features of Fiscal Policies

The important features of the fiscal policy during the rapid growth period are the following four points:

- Tight fiscal policy
- Small government
- Expenditure policies = infrastructures for growth prioritized
- Tax incentives for household savings and for equipment investments

(i) Tight Fiscal Policy

Fiscal discipline based on strict regulations on borrowing had worked until FY1974.

The Balanced Budget (No Debt) Principle had been kept until FY1964, and even after 1965, the Construction-Bond-Principle (only borrowing for financing investment is exceptionally allowed) was observed until FY1974.

Certainly, underwriting of government bonds by the Bank of Japan has been prohibited until now at least on the surface.
(ii) Small Government

The ratios of public expenditure and revenue to GDP or NI were very small as compared with the recent situation or by international comparison at that time (Chart 7).

**Chart 7-1 Ratio of Government Expenditure to GDP**

<table>
<thead>
<tr>
<th>Year</th>
<th>( (Ig + Cg)/GDP )</th>
<th>( (Social\ Security\ Transfer)/GDP )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>15.2</td>
<td>4.4</td>
</tr>
<tr>
<td>1965</td>
<td>17.2</td>
<td>5.5</td>
</tr>
<tr>
<td>1970</td>
<td>15.6</td>
<td>5.8</td>
</tr>
<tr>
<td>C. F. (1999)</td>
<td>(23.7)</td>
<td>(19.7)</td>
</tr>
</tbody>
</table>

**Chart 7-2 (Taxes + Social Security Contributions)/NI (%)**

<table>
<thead>
<tr>
<th></th>
<th>Japan</th>
<th>U. S.</th>
<th>U. K.</th>
<th>Germany</th>
<th>France</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>22.4</td>
<td>30.8</td>
<td>35.7</td>
<td>41.1</td>
<td>NA</td>
</tr>
<tr>
<td>1965</td>
<td>23.0</td>
<td>29.8</td>
<td>38.8</td>
<td>42.9</td>
<td>47.5</td>
</tr>
<tr>
<td>1970</td>
<td>24.3</td>
<td>33.6</td>
<td>49.2</td>
<td>45.1</td>
<td>47.8</td>
</tr>
<tr>
<td>C. F. (1997)</td>
<td>37.2</td>
<td>37.6</td>
<td>48.9</td>
<td>55.9</td>
<td>64.6</td>
</tr>
<tr>
<td>*</td>
<td>(44.9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Including fiscal deficit
(iii) Public Expenditure Policies

Even under the small-government principle, such public expenditures that would provide grounds for economic growth were treated with high priority.

(Examples of Priority Areas)
a. Public works: road-construction, flood-prevention, ports and airports, etc.
   (Share of paved roads: 7.4% (1965) → 30% (1975))
b. Education, science and technology
   (Higher education ratio: 10.3% (1960) → 32.7% (1973))
   (15+ Education ratio: 51.5% (1955) → 89.3% (1973))

“Priority areas” inevitably suggests “modest areas”
(Examples of Modest Areas)
a. Social security: around 5% of GDP as shown in previous Chart 7-1
b. Defense: remained less than 1% of GNP

To be noted: Political stability contributed to supporting such policy packages.

(iv) Tax Incentives

Also, the tax policies were designed to encourage household savings and to stimulate investment by enterprises, especially export-oriented or with advanced technology.

a. Income tax exemption for capital gains and small amount interest incomes
b. Lower tax rate for interest incomes in general
c. Accelerated depreciation for advanced equipment
d. Corporate tax exemption for R&D, etc.
(3) Monetary Policies and Flow of Funds

Then, we shall look at monetary policies or monetary conditions.

The characteristic features of monetary policies and flow of funds at that time can be summarized as follows:

a. Regulated interest rates at an artificially low level, accompanied by direct quantitative control of credit
b. Household savings (formed by a high saving ratio) channeled to the corporate sector mainly through bank loans (capital market underdeveloped)
c. So-called “over-loan and over-borrowing” (banks’ high dependency on BOJ as a result enabled the government to induce private bank lending to strategic areas)
d. Strict division of labor among various types of financial institutions
e. International capital movement severely restricted
f. Significant role by the “Fiscal Investment & Loan Program”
g. ¥360/$ fixed rate unchanged for 22years

Chart 8 shows the international comparison of household saving ratio and domestic investment ratio.

**Chart 8 International Comparison of Investment and Saving Ratios**

<table>
<thead>
<tr>
<th></th>
<th>Domestic gross capital formation per GDP (1951–60) %</th>
<th>Household saving ratio (1950–60) %</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAPAN</td>
<td>23.4</td>
<td>15.2</td>
</tr>
<tr>
<td>W. GERMANY</td>
<td>21.5</td>
<td>13.2</td>
</tr>
<tr>
<td>U.S.</td>
<td>16.5</td>
<td>7.4</td>
</tr>
<tr>
<td>FRANCE</td>
<td>17.1</td>
<td>6.1</td>
</tr>
<tr>
<td>U.K.</td>
<td>14.3</td>
<td>2.9</td>
</tr>
</tbody>
</table>

The reason for such a high saving ratio in Japan at that time is a mystery, especially when interest rates were often lower than CPI increases.

Many economists have tried to solve the mystery, and have suggested the following reasons:
a. The system of both annual and life-cycle wage payments
b. The public pension scheme was immature → need for self-help
c. The sense of virtue, encouragement to save by the government and BOJ
d. Consumer loans were underdeveloped

However, the ultimate reason seems to be the national character of traditional Japanese people. I will give you an anecdote about some elderly twin sisters.

The Story of 100-year-old Twin Sisters

• In the 1990’s there were 100-year-old twin sisters in central Japan whose names were Gold and Silver. They were quite healthy both in body and mind, and very popular because of their conversation with natural wit. TV programs featuring their everyday lives were very popular.
• Once a TV reporter asked Ms. Gold, “How will you spend the money you earned by appearing on TV today?”
• She answered, “I will save the money to prepare for when we get older”

The main framework of the flow of funds in the rapid growth period is illustrated by Chart 9.

Chart 9

Flow of Funds

Bank of Japan

BOJ Lending

Corporate Sector (over - borrowing)

Invest

Banking Sector (over - loan)

Loan

Capital Markets Underdeveloped

General Government (Self-sufficient)

Household Sector

Deposit
One of the important strategic measures that might be unique to Post-war Japan was the “Fiscal Investment and Loan Program,” on which another lecture will give you a more precise introduction. Chart 10 simply illustrates its framework.

![Fiscal Investment & Loan Program Chart](image)

This “Fiscal Investment and Loan Program” of Japan during the rapid growth period must be one of the best examples of successful strategic interventions by the government to provide a necessary platform for rapid growth.

2. End of the Rapid Growth

(1) Two External Shocks Coincided with the Maturity of Japan’s Economy

From a simple historical viewpoint, the end of the rapid growth of Japan must have been an inevitable consequence of the maturity of the Japanese economy itself. But unfortunately, it was triggered by two drastic external shocks, which made the history of Japanese economy far more painful.

Let us start from the external shocks. The first shock consisted of the changes in the international currency regime as follows:

- 1971 Nixon Shock and Smithsonian Agreement
- 1973 Floating rate system started
- Appreciation of the Japanese yen stirred fears of further appreciation, leading to inflationary policy packages

Then, the First Oil Crisis (1973) followed. That brought about serious depression and frantic price increases.

Domestic conditions, that is, the changes within the Japanese economy as the fruits of the rapid growth for many years (so to say maturity of the economy) can be listed as follows:

a. The accumulation of capital stock brought about decline in the rate of return on investment and the “over-borrowing” had been disappearing.

b. The change of the supply-demand structure from excessive demand to demand shortage brought about the need for fiscal stimulus. The balance of payments current account turned to continuous surplus.

c. Above all, people’s choices diversified. They became more and more demanding, and were not satisfied with just economic growth, but started pursuing welfare, a better environment, leisure, and so on.

As result of all those changes, fiscal discipline had to be abandoned. Inevitably, the flow of funds changed too.

(2) Deterioration of Fiscal Conditions

Fiscal changes are shown in Chart 11

17
Chart 11 **Path of Deterioration of Fiscal Conditions**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Government bond dependency (%)</th>
<th>Outstanding JGB per GDP (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>4.2</td>
<td>3.7</td>
</tr>
<tr>
<td>1971</td>
<td>12.4</td>
<td>4.8</td>
</tr>
<tr>
<td>1972</td>
<td>16.3</td>
<td>6.0</td>
</tr>
<tr>
<td>1975</td>
<td>25.3 Construction Bond Principle</td>
<td>9.8 Unsustainable</td>
</tr>
<tr>
<td>1978</td>
<td>31.3</td>
<td>20.4</td>
</tr>
<tr>
<td>1981</td>
<td>27.5</td>
<td>31.5</td>
</tr>
<tr>
<td>1984</td>
<td>24.8</td>
<td>39.9</td>
</tr>
<tr>
<td>c.f. 2012</td>
<td>48.9</td>
<td>149.2</td>
</tr>
</tbody>
</table>

*Note: Bond dependency means the ratio of new bonds issued to the total revenue of the budget in each fiscal year.*

(3) Changes in Flow of Funds

Naturally, those fiscal changes brought about changes in the flow of funds as follows:

a. Corporate-sector’s net borrowing decreased.
b. “Over-loan and over-borrowing” disappeared.
c. Public sector became the largest borrower.
d. International capital movement was gradually liberalized and expanded.

On the other hand,

a. Household savings remained at a high level.
b. Bank loans still continued to play a key role despite capital market development.
3 What Followed the End of the Rapid Growth

(1) Steady Growth Period and Pressures from Abroad

Now, I shall introduce you to the difficulties involved in exiting from the rapid growth stage based on our experience. This may be a story that some of you cannot relate to right now, but you can find some hints for your own economy that may be helpful in the future when you are graduating from the developing stage.

After overcoming the above mentioned external shocks, Japan's economy entered a steady growth period in approximately 1976. Since Japan was most successful in achieving energy efficiency, which meant productivity, among developed economies, the significant trade surplus still continued even under sharp appreciation of Japanese yen, bringing about persistent trade frictions against U.S. and European countries. The trade frictions aroused strong diplomatic pressures from Western countries not only on direct trade issues, but also on Japan's economic policy measures.

The pressures on economic policies could mainly be categorized as following two requests. The first was the request for expanding domestic demand (request for further fiscal stimulus). The second was for deregulation of domestic financial markets, the main issues of which were liberalizations of interest rates, international capital movements, and financial businesses.

As the second largest economic power in the capitalist world, Japan was expected to play a responsible role for the best of the whole world economy. So, we could not simply refuse these requests. We had to adapt our domestic policies in conformity with them, even against our will or sometimes at the expense of our own longer-term interests.

Nevertheless, all these measures turned out to be ineffective in reducing Japan's trade surplus, or international imbalances, and so finally, a direct multilateral realignment of exchange rates was agreed upon in September 1985. That was the Plaza Agreement, which you all know well.
In hindsight, those responses to the pressures from abroad, together with the economic performances after the Plaza Agreement, left serious aftereffects in the Japanese economy for which we have suffered even to now.

The most significant problem was the further explosive expansion of fiscal deficit. As we saw earlier in Chart 11, fiscal conditions had already been significantly aggravated since 1975 by the sharp fall of tax revenue caused by the first oil crisis. So, the latter half of 1970’s should have been the time to reduce fiscal deficit. Nevertheless, persistent pressures for fiscal stimulus from overseas enlarged the fiscal deficit furthermore. The typical example was the catch phrase at the Bonn Summit in 1978, “Japan’s economy is to be a locomotive of the world economy.”

(To be noted: Ironically, the massive issuance of government bonds contributed to developing the domestic bond market.)

The second issue was rather complicated. Deregulation and the opening-up of domestic financial markets in Japan proceeded very slowly, pushed by the overseas pressures. Deregulation of interest rates for bonds came first, as a result from the liberalization of international capital movement and the development of the Japanese government bond market. But the liberalization of deposit rates took many years, and the deregulation of financial businesses came eventually at last.

Such a crippled process of liberalizations caused distortions in financial markets.

(2) Emergence and Burst of the Bubble

a. After the Plaza Agreement, the value of the yen doubled within 27 months (¥240/$ → ¥120/$)

b. Partly reflecting such yen appreciation, bullish expectations for Japan’s future came to prevail. One of the typical examples may be the book “Japan as Number One” by Ezra Vogel 1979

c. Significant monetary easing continued for a long time due to the fear of further yen appreciation

d. Distortions in the financial markets because of the long
process of partial deregulation brought about many vicious side-effects.

According to my personal view, the most fundamental element to be noted was the fact that Japanese financial institutions at that time lacked the professional expertise necessary under globalization and liberalization.

All these elements paved the way for the so-called bubble economy and the aftermath.

The bubble (sharp and unsustainable rises of asset prices inconsistent with economic fundamentals) and its burst resulted in the banking crisis and the disastrous fiscal situation.

The symbolic features of the bubble economy (since the beginning of 1987 till the end of 1990) can be described as follows:

a. Rapid growth of bank lending (esp. land-related loans)  

b. Fanatic investment in real estate and stock  
   (Real estate investment in 2nd half of 1980's = 800% of 1st half)

c. Explosive rises of asset prices  
   (Total market value of land 1985: ¥1049 → 1990: ¥2,420 trillion)  
   (Total market value of stock 1985: ¥196 → 1989: ¥630 trillion)

d. Overheating of the real economy in the final stage  
   (Over-investment in manufacturing equipment, housing and durables)

Any bubble that mankind has ever experienced had burst, as John Kenneth Galbraith wrote. Japan's bubble introduced above was no exception.

The aftermath was miserable:

a. Sharp fall of asset prices  
   Nikkei stock index fell from the peak of ¥38,915 to the bottom of ¥7,607  
   Typical urban commercial land price fell to 15% of the
peak level.
b. Borrowing companies’ insolvency → Banks’ non-performing loans → Many banks failed → Serious financial crisis and credit crunch
c. Banks’ non-performing loans amounted to 20% of GDP
   180 financial institutions (including 20 banks) failed
d. Excessive debt, equipment and redundancy together with credit crunch and uncertainty about the future brought about long and serious depression (“Lost Two Decades”).

(3) Lost Two Decades as the Aftermath
To make the situation worse, the policy measures taken in the early stage after the burst of the bubble turned out to be completely wrong.
   a. Traditional macroeconomic policies introduced at an unprecedented magnitude were not only ineffective, but also left vicious aftereffects. The most serious was the explosive fiscal deficit as shown earlier in Chart 11. Also, the policy interest rate continued to be below 0.5% since September 1995, and 0% in most of the period since February 1999 until now, that has caused various distortions in the economy.
   b. Many years of painful sacrifice by borrowing companies and a large amount of public money were required to reconstruct the domestic financial system. For instance, public money amounting to 50 trillion yen (10% of GDP) was spent, of which 1/3 was unrecoverable.
   c. Delays in R&D and IT investment, job insecurity and increased inequality caused by companies’ cost-cuts led to weakening the competitiveness.

Nominal GDP was stagnated for more than two decades, as shown by Chart 12.
Chart12
As a natural consequence, the relative position of nominal per capita GDP among G7 countries stepped down again, and so did the ranking of ODA donors which had once been in the far top position.

Chart 13
After more than 10 years of trial and error, we seemed to have had finally recovered from the direct aftermath of the burst of the bubble in 2007, just before the Lehman Shock. However, in the meantime, the strength of Japan’s economy in the longer term seems to have been undermined.

The economic performance after the Lehman Shock in 2008 is an evidence of that. As compared with U.S. or European banks, Japanese banks suffered far less direct losses caused by subprime loans or securitized assets, because they had learned painful lessons through their own bad assets in the 1990’s. So, they became better at managing risk in their portfolios. Nevertheless, as for the real economy, the Japanese economy was most seriously hit among developed countries mainly because of the sharp fall in exports.

Looking back critically at the history of Japanese economy since the end of the rapid growth, I suppose that we must have made some fatal mistakes responding to the fundamental changes in both domestic and global economies during 1980s.
Having said so, I cannot think of any persuasive right policy measures which could have been accepted by Japanese society at that time.

There is a broad consensus now among economists concerning as to what brought about the bubble economy. For instance, banks' behavior, long lasting monetary ease, bullish expectation for the future of Japan’s economy, together with the belief in rising land price etc. But, most important was the prevailing social and political dynamics in Japan which inevitably led to those phenomena. In other words, Japanese people’s groundless over- self-confidence based on the success story of Japan’s rapid growth, by my wordings, “rapid growth hang-over”. In that sense, our mistakes could be interpreted as a kind of structural and mental, so inevitable outcome of our economic history.

Ironically enough, US and EU who had severely criticized or even laughed at Japanese bubble and the resultant financial crisis came to suffer from similar financial crises nearly 10 years after us, i.e. Lehman Shock and Euro crisis. It is a mystery why they did not learn lessons from our experiences.

“Tell both the common and the different aspects of these three financial crises” would be a good exam-question. I would write in my answer, “Japan’s case seems to be far more deeply rooted in her national character, and more complicated than others. So, it took far longer time to get out of the aftermath”.

(4) Not Rosy Prospects for Japan’s Economy

At any rate, the past is the past. More important is the prospects for the future. I must admit that they are not rosy. We shall investigate into some difficult conditions existing in the current domestic economy which should be taken into account to prophesy the future.

(i) Demographic Structure

The most serious and unavoidable problem is the rapid aging of the population, as shown in Chart 15. In 2000, the ratio of the working population to the population above age 65 was 3.6. This ratio will reach 1.8 in 2025 and 1.2 in 2050. Can you imagine a society in which one worker supports one pensioner?
(ii) Government Debt Accumulation

Confronting such rapid aging, wise taxpayers would have forced the government to maintain fiscal discipline and reduce the future public debt burden in preparation for future aging. Or, if taxpayers were not wise enough to do so, it would have been the duty of political leaders to educate people to be patient. But, the actual Japanese fiscal policy in the last two decades has been completely the opposite. The public debt-burden has increased sharply because of the gap between the tax revenue and public expenditure, even under unprecedentedly low interest levels, as shown in Chart 16.
(iii) Changes in the Public Expenditure Composition
In addition to the total debt accumulation, the composition of the expenditure by major policy fields is to be worried.
As shown in Chart 17, the ratios of social welfare and debt service to the annual budget were 18.4% and 4.9% respectively (total 23.3%) in 1975, whereas, those of public works and education, science and technology were 13.7% and 12.4% each (total 26.1%) in the same year. But, those non-productive expenditures such as social welfare and debt service grew far faster than the total budget because of the rapid aging and debt accumulation, at the expense of productive areas such as public works and education. In consequence, the total share of social welfare and debt service came to exceed half of the budget (52.7 %), and that of public works and education, science and technology fell to 12.4% in 2010.
Needless to say, those changes significantly weakened the positive function of public finance as a whole.
(iv) Human Resources and Employment
The most important key to the future may be human resources. But in this respect also I cannot be optimistic, considering the current employment structure. As result of nearsighted reaction by many enterprises during the lost decades, the share of so-called contingent employees to the whole employment jumped from 20% in 1990 to 35.2% in 2011. That brought about job-insecurity and demoralized youngsters.

(v) Damage due to the Earthquake
In addition to the above-mentioned structural problems, an unexpected disaster, the Great East Japan Earthquake and accompanying tsunami on March 11, 2011, suddenly attacked us.
According to the announcement by the government a few months after the disaster, direct damage was as follows:
- Casualties amounted to 28,311 (22,626 people deceased).
- 106,858 buildings lost, and 528,314 damaged
- Meltdown at Fukushima Nuclear Power Station
• Amount of the direct damage was calculated as 16.9 ¥trillion, equivalent to 3.6% of GDP.

We have almost recovered from the direct damage (except for the aftereffects of the meltdown at the nuclear power station), thanks to the nationwide efforts for 3 years and with a huge amount of both public money and private donations together with timely assistance from overseas, for which the government and people of Japan are very grateful.

However, some risks in the future, such as energy instability caused by the halting of nuclear power stations all around the country.

(5) ABENOMICS（Slide P45）(revised 2018)

Now I would like to touch upon the policy packages which were adopted 5 years ago and became well-known worldwide as “ABENOMICS”.

Confronting the long stagnant or deflationary economy above mentioned, Liberal Democratic Party headed by Mr. Abe fought the general election in December 2012 with the manifesto committed to new drastic policy packages and obtained a land-slide victory. Immediately after their victory, they announced so-called “ABENOMICS” whose outline is as in slide P45

The objective is clear i.e. “Escape from a bad deflationary or shrinking equilibrium by which Japanese economy has been imprisoned for nearly 20 years”. Then, the question is “how to?”

Their answer is by adopting the three-pronged strategy or three arrows as in the slide. Among these three arrows “2 flexible fiscal policy” and “3 growth strategy” are easy to understand. Under current severely deteriorated fiscal conditions, room for fiscal stimulus is limited, and as for “3 growth strategy”, effective panaceas are not so easy to find or to implement.
The most essential and controversial subject is the first arrow “Bold Monetary Policy”.
You may have more precise lectures on this subject by other lecturers, and perhaps it is not under my responsibility in this seminar. Still as a former executive director of BOJ who knows the inside of BOJ well, I would like to spare some time to briefly introduce you the historical backgrounds and to clarify BOJ’s philosophy. I hope that will be of some help for your further study on this interesting, epoch making and rather bold experiments.

(The Backgrounds and Prehistory of the Abe-Kuroda Monetary Policies):
As to find an answer to this basic question, so-called quantitative monetary ease seems to be a kind of fashion among developed central banks. Bank of Japan once experienced it for 5 years since March 2001 until March 2006, preceding U.S. FRB and ECB.

Any persuasive assessments on the effects of the quantitative ease at that time have not been found yet, but at least it was effective in mitigating the serious financial system instability at that time, and in flattening the yield curve (i.e. decline of longer-term interest rate) mainly by so-called “policy duration effect”. Nevertheless, expected effects on the real economy have remained unclear.

In the meantime, Japanese economy seemed to be recovered, supported by the rapid recovery in exports, reflecting the recovery of the world economy. So, Bank of Japan ended the quantitative ease, came back to the policy interest rate target again in March 2006, and then gradually raised the interest rate level from zero up to 0.5%.

Confronting the shocks to the Japanese domestic economy, Bank of Japan (governor Shirakawa at that time) started to lower the policy interest level, finally unto zero again in October 2010, and introduced de-facto quantitative ease in parallel, that was called “Comprehensive Monetary Easing”. The de-facto quantitative ease was enlarged step by step (for 10 times) seeming reluctantly from public eyes, arousing frustrations by the political world.

Towards the general election December 2012, Abe LDP flagged “Bold Monetary Policy” as one of the major campaign slogan and came to the power again after 3 years absence. January 22nd, 2013, soon after the start of Abe administration, the Government and the Bank of Japan announced a joint statement to introduce “Price Stability Target” of 2% CPI increase in year-to-year terms.

In order to achieve this target at the earliest possible time, the Bank of Japan announced to introduce so-called “open-ended purchasing method” That is a kind of an open market operation without time-limits.

Those were the backgrounds and the pre-history.

After new governor Mr. Kuroda’s appointment in March 2013, the Bank of Japan announced QQE (Slide P47 center column), on April 4th, 2013. That is to achieve the “2%” target within 2years, and to adopt the “monetary base control”, to make double the monetary base from 138 trillion yen to 270 within 2 years, by increasing governmental bond purchases and their maturity extension, together with by increasing ETF and J-REITs purchasing.

These measures are called “Quantitative and Qualitative Monetary Easing” (Slide P47)
Different from the previous quantitative ease, QQE this time is accompanied by a clear message or a philosophy. Needless to say, this is not same as a naïve classical textbook-like “Quantity Theory of Money”, for now it is a common understanding that Bank of Japan cannot control the quantity of the money directly, and that only operational monetary quantitative target it can directly control is the monetary base.

(Philosophy)

The first paragraph in Slide 47 is that the Bank of Japan firmly committed itself to the 2% inflation target within 2 years.

At the same time the Bank of Japan showed their decisive will to do anything they can do in achieving the commitment, by introducing the surprising and untraditional monetary ease. That is the second paragraph. And the bottom paragraph intends “policy duration effect”.

BOJ clarified, “Since Japanese firms and households have been long imprisoned in a bad deflationary or shrinking equilibrium, they need some strong shock for escaping from the deflationary equilibrium and shift to a different more desirable
equilibrium. The QQE was expected to address to the people’s expectation and implant inflationary expectation so that firms and households would decide their investment or consumption based on 2% inflationary expectation, or assumption”.

That was the BOJ’s philosophy.

No empirical or theoretical explanations, concerning the path on which the increase of monetary base will exert positive effects on real economy, can be found in BOJ’s statements other than the path through people’s expectation above mentioned.

(Effects)

At least, the effects on the depreciation of yen and on the stock price increases thereof were very significant up to the beginning of 2014, as shown in Slide P48.

Slide P48

Corporate profits have recovered and reached historically high level reflecting mainly Yen depreciation (Slide P49)

Slide P49
On the price front which seems to be most essential to the credibility of BOJ, CPI bottomed out in March 2013, and turned to be plus over the same month of previous year in May. The plus margin increased until April 2014 when consumption tax rate was raised from 5% to 8%.
(Slide P50 CPI Increase)
But this trend did not continue. From May 2014 on, the plus margin (excluding the direct increase reflecting tax rate change that was around 2%) continuously decreased, and back to around zero again in spring 2015. During a few months after the tax increase, that was due to the decline in demand following the front-loaded increase before tax increase, but since the end of the summer 2014, that was mainly due to the sharp fall in oil price.

No doubt, oil price fall is a very desirable external condition to Japan’s economy, but BOJ was worried about its negative impacts on their 2% CPI increase target they were committed. So, BOJ decided to enhance the monetary ease in the end of Oct.2014 (right column of Slide P47) in order to pre-empt manifestation of such risk and to maintain the improving momentum of expectation formation.

From Sep.2014, shortly before the QQE enhancement, depreciation of Yen resumed, and stock-price-rise followed, until around the summer 2015. However, those movements seemed to have ended and reversed at around Nov.2015. Meanwhile, CPI rise continued to decrease despite the modest rise of oil price. Considering such environments, BOJ (following the supplementary measures of Dec.2015) introduced negative interest rate policy on Jan.29,2016. (Slide P51)
The intention of the new policy is described as to lower the short end of the yield curve by slashing its deposit rate on current accounts into negative territory and will exert further downward pressure on interest rates across the entire yield curve, in combination with large-scale purchases of JGBs. In addition, this policy framework is expected to give BOJ room for additional monetary easing in future.

However, this time, the new surprise did not exert any positive effects on even Yen and stock-price, nor on the price front. Moreover, it was quite unpopular especially among banks which were worrying about the negative impacts on their profits.

Confronting these circumstances, BOJ announced to scrutinize the effects of the monetary policy so far and to sum up the result as “Comprehensive Assessment”. Sep 21st. 2016, BOJ announced the conclusion of the “Comprehensive Assessment”.

Based on this Assessment, New Framework for Strengthening Monetary Easing: “Quantitative and Qualitative Monetary
Easing with Yield Curve Control" was implemented. 
(2nd. Paragraph Slide P51)

BOJ said that the thinking behind the new framework can be summed up to be the following 3 points.

1. BOJ considers, as shown in the comprehensive assessment, improvements in economic activity and prices so far seem to be brought about mainly through the decline in real interest rates. So, it will seek for the decline in real interest rates by controlling short-term and long-term interest rates. That is called "Yield Curve Control". To achieve these objectives, new tools of market operations (fixed-rate purchase and funds-supplying) are introduced in addition to the existing combination of the negative interest rate and JGB purchases.

2. In order to raise inflation expectations in private sectors firmly, BOJ commits itself to "expanding the monetary base until CPI exceeds the price stability target of 2 percent and stays above the target in a stable manner." That is called "Inflation-overshooting commitment"

3. Finally, the new framework will widen the range of possible options for additional easing.

According to a BOJ watcher’s comment, “At the early stage of the QQE, BOJ thought that the quantitative ease and negative interest rate are contradictory because banks would not sell JGBs to the BOJ if the rate for excessive reserve were negative. However, the invention of the three-tier-reserve-system overcame the contradiction. So, BOJ introduced negative interest policy Jan. 2016 with this reserve system. That was effective but brought about another problem that the combination of the quantitative ease and negative interest rate was too effective and so the yield curve became too flat, in other words, longer-term interest rates became so lower (deeply minus) that banks’ profits were endangered. Learning lessons from these trials and errors, BOJ finally reached the yield curve control method in Sep. 2016.”

Traditional textbooks say that a central bank cannot control longer term interest rates directly, for they are decided by markets. However, the combination of negative short-term
interest and quantitative control enabled BOJ to control the both end of the yield curve.

Notwithstanding all these efforts or new policy tools inventions, CPI increase remained below 1% and the 2%-inflation target seems to be far beyond the horizon. After postponing the inflation target achievement time for six times, BOJ finally stopped committing specific time in its announcements since April 2018.

Meanwhile, the adverse side-effects of the excessively flat yield curve on banks’ profits became more and more serious.

Considering these circumstances, BOJ announced new policy measures titled “Strengthening the Framework for Continuous Powerful monetary Easing” on 31. Jul. (3rd paragraph Slide 51)

Despite the splendid title, the contents are empty and ambiguous. Only essential is adopting flexibility for the long-term interest rates level. So, it could be interpreted as a stealth tapering.

Those were the path of the unprecedented experiments so far.

Now more than 5 years have passed since the QQE was first introduced, and governor Kuroda entered his second 5-year-term. As you can see from my above-mentioned introduction, the QQE itself has evolved and the explanations by the Bank of Japan also changed from time to time. Still its effects on Japanese economy remain unclear and the policy evaluation of the QQE is very much controversial and diversified.

One thing clear is that the present policy cannot be continued forever. Sometime in the future we must get out of it. The most difficult question is the so-called exit-strategy of the QQE (that is how to finish it smoothly without causing serious turmoil in the financial markets, i.e. violent rise of bond rates). Both FRB and ECB have already entered this stage, but in Japan even honestly talking about tapering seems to be a kind of taboo for the moment. What I am afraid is that BOJ and the government may hesitate to enter the exit-stage at the necessary timing and continue Abenomics too long, causing another bubble and/or an unmanageable inflation.
(Current Economic Situation Slide P52)
So, though it is not clear how Abenomics would affect the future of Japanese economy, the newest summary of current Japanese economic situation is as in Slide P52.

Japanese current economy in general is in “Goldilocks” situation. Especially as for corporate profits and employment side (ex. the unemployment rate 2.4%, the active job opening-to-applicants ratio 1.62). The wording “expansion” was first seen for 9 years in 2017.

Still such “Goldilocks” situation is mainly supported by exports reflecting the current strong world economy, and no substantial improvements in longer term or fundamental conditions of Japanese economy itself have been seen yet.

Slide P52

Speaking more fundamentally, the most essential prescription for current Japanese economy shall be the growth strategy, the 3rd. arrow, however difficult it may be. An easy-going way to continue the present opium-like unsustainable fiscal and monetary demand creation policies too long is no good for the
longer-term revitalization of Japanese economy. That might even probably bring about another crisis, I am afraid. In my view as a former MOF official, fiscal reconstruction shall be the most fundamental and urgent requirement. Only patient and steady efforts should be the sole remedy.

(6) Lessons Implied
Now my story has come to an end. It’s up to you what lessons you may feel to learn from it. But, I would like to give you some hints by making three points
a. Interventions by the government are favorable for growth at some early stages of development, strictly provided that they are
   · Based on a consistent and comprehensive strategy
   · Directed at the right way for long-term sustainable growth in the specific country
   · Accompanied by firm political will to maintain macro-economic discipline (no populism)

But it is to be noted that the method and extent of the interventions by the government should differ according to the specific environment and the stage of the development of the country
b. The difficult question is “When and how to graduate?”
The macro and micro policy features should both evolve in line with the socio-economic development of the specific country. Policy packages which once very much contributed to the development of the country could become even harmful, if they are unthinkingly continued after significant progress in both the domestic and international environments.
c. Giving too much consideration to the exchange rate is sometimes harmful.

(Ending) Thank You for Listening
I sincerely hope that your stay in Japan will be fruitful and memorable, and that you will become best friends with Japan
in the future.

(Appendix)
At this seminar several years ago, a participant from Mexico asked me, “Why did the Japanese economy not go into hyper-inflation as Mexico did, during its rapid growth period under such demand excessive circumstances?”

It is a very good question. Find your own answer from my lecture!