Japan-U.S. Economic Relations:
What We Can Learn from Each Other

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of the Embassy of Japan in Washington D.C.

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Chart 1

Cherry Blossoms and Dogwoods

Dogwoods Sent from the U.S. to Japan as a Gift in Return (Original Trees)

Cherry Blossoms Sent as a Gift from Japan to the U.S.

Source: Tokyo Metropolitan Engei High School.
Chart 2

Share of Countries in World Nominal GDP

- **U.S.**: 22.9%
- **China**: 9.4%
- **Japan**: 8.7%
- **Others**: 43.6%

Total nominal GDP: $63 trillion (CY2010)

Source: Cabinet Office.

Chart 3

Japan and U.S. Trade Relations

**Shares in Japan's Exports by Country**
- **China**: 19%
- **U.S.**: 15%
- **Others**: 37%

Total exports: $0.8 trillion (CY2010)

**Shares in U.S. Exports by Country**
- **Canada**: 19%
- **Mexico**: 13%
- **China**: 7%
- **Japan**: 5%

Total exports: $1.3 trillion (CY2010)

Sources: Ministry of Finance; U.S. Department of Commerce.
### Chart 4

#### iPhone Production Costs

<table>
<thead>
<tr>
<th>Components</th>
<th>Major suppliers</th>
<th>Amount of money per unit (U.S. dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAND Flash Memory</td>
<td>Toshiba, Samsung (Korea), Hynix (Korea)</td>
<td>19.2</td>
</tr>
<tr>
<td>DRAM</td>
<td>Elpida, Samsung (Korea)</td>
<td>9.1</td>
</tr>
<tr>
<td>Display</td>
<td>Toshiba, Sharp, LG (Korea), Chimei (Taiwan)</td>
<td>23.0</td>
</tr>
<tr>
<td>Application Processor</td>
<td>Samsung (Korea)</td>
<td>15.0</td>
</tr>
<tr>
<td>Camera Module</td>
<td>Sony</td>
<td>17.6</td>
</tr>
<tr>
<td>Bluetooth/WLAN and other communication equipment</td>
<td>Murata, Qualcomm (U.S.), Avago (U.S.), Broadcom (U.S.), TriQuint (U.S.)</td>
<td>30.0</td>
</tr>
<tr>
<td>Battery</td>
<td>Sony, TDK, Samsung (Korea), LG (Korea)</td>
<td>5.9</td>
</tr>
<tr>
<td>Mechanical/Electro-Mechanical</td>
<td>Ibiden</td>
<td>33.0</td>
</tr>
</tbody>
</table>

Cost of other components 35.1

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cost of all components</td>
<td>187.9</td>
<td></td>
</tr>
<tr>
<td>Manufacturing cost</td>
<td>8.0</td>
<td></td>
</tr>
<tr>
<td>Gross profit margin</td>
<td>453.1</td>
<td></td>
</tr>
<tr>
<td>Retail price</td>
<td>649.0</td>
<td></td>
</tr>
</tbody>
</table>

Note: The costs and prices are for the iPhone4S (16GB) in 2011. The retail price is SIM-free and without contracts. Sources: iSuppli; Nikkei Electronics.

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### Chart 5

#### Japan and U.S. Investment Relations

**Japan's Outward Direct Investment Position by Country**

- U.S. 30%
- Netherlands 9%
- Others 43%
- China 8%
- U.K. 5%
- Australia 5%

**Japan's Inward Direct Investment Position by Country**

- U.S. 34%
- Others 25%
- Netherlands 17%
- France 9%
- Singapore 6%
- France 5%

**U.S. Inward Direct Investment Position by Country**

- Others 31%
- U.K. 20%
- Japan 11%
- Netherlands 10%
- Canada 10%
- Germany 9%
- France 8%

**Share of Foreign Holdings of U.S. Treasury Securities**

- Others 40%
- U.K. 6%
- China 26%
- Japan 20%
- Taiwan 3%
- Brazil 4%

Sources: Bank of Japan; U.S. Department of Commerce; U.S. Department of the Treasury.
Chart 6

Effects of Rapid Population Aging in Japan

Real GDP Growth Rate

Real GDP Growth Rate per Capita

Real GDP Growth Rate per Working-Age Person

Note: A working-age person is one between the ages of 15 and 64 years.
Sources: World Bank; Haver.

Chart 7

Long-Term Developments of GDP in Japan and the United States

Real GDP per Capita

Real GDP

Note: Units of real GDP are in 1990 Geary-Khamis U.S. dollars.
Source: Madison statistics.
Comparison of Real GDP between Japan and the United States

**Chart 8**

**Ratio of Real GDP per Capita**
*(Japan/United States)*

**Ratio of Real GDP**
*(Japan/United States)*

Note: Units of real GDP are in 1990 Geary-Khamis U.S. dollars.
Source: Madison statistics.

**Chart 9**

**Japan's Real GDP Growth Rate**

Note: Data up to 1980 are based on the 68SNA (System of National Accounts) while those from 1981 are based on the 93SNA.
Source: Cabinet Office.
Chart 10

Effective Exchange Rates

Nominal Effective Exchange Rates

Real Effective Exchange Rates

Note: Rates are based on the narrow indices.
Source: BIS.

Chart 11

Real Estate Prices and Real GDP after the Bursting of a Bubble
(Japan: 1990=100, United States: 2006=100)

Real Estate Prices

Real GDP

Note: Figures for real estate prices in Japan are treated as those in the previous year (e.g. Jan 1, 2011⇒2010).
Sources: Ministry of Land, Infrastructure, Transport and Tourism; Haver; Cabinet Office; BEA.
Chart 12
Scale of Asset Price Bubbles

Japan

United States

Note: Ratios are derived from the cumulative sum of capital gains and losses from each year.
Sources: Cabinet Office; FRB; BEA.

Chart 13
Pace of Write-Offs by Financial Institutions and Distributions of Agents Incurring Losses

Subprime-Related Losses of Major Financial Institutions in the U.S. and in Europe

Losses of Major Financial Institutions in Japan from Write-Offs of Nonperforming Loans

Note: Numbers in parentheses are the number of financial institutions. Losses related to subprime loans in Europe and the U.S. are the accumulated amount since 2007/Q2. Losses from write-offs of NPLs in Japan are the accumulated amount since March 1993.
Sources: Cabinet Office; FSA; BEA; Bloomberg.
Chart 14

ABCP Vehicles Sponsored by Banks

Note: These bank-sponsored vehicles are those rated by Moody's.
Source: C. Arteta, M. Carey, R. Correa, and J. Kotter (2010).

Chart 15

Demographic Changes in Japan and the United States

Note: Working-age population means the population aged between 15 and 64 years.
Chart 16

GDP of Japan, the United States, and China

Real GDP Growth

Nominal GDP

Note: Nominal GDP are values by the IMF (values were converted into dollars using market exchange rates).
Sources: Cabinet Office; IMF.

Chart 17

Real Estate Price and Dependency Ratio

Japan

United States

Ireland

China

Note: The inverse dependency ratio is the ratio of the working-age population (people aged 15-64) to the dependent population (sum of people aged less than 15 and those aged 65 and over).
Sources: Nishimura, Kiyohiko G., "Macro-Prudential Policy Framework from an Asian Perspective," Speech at ADBI-FSA Conference in Tokyo, September 30, 2011; and other works.
Operation *Tomodachi* by the U.S. Military Forces following the Great East Japan Earthquake

Sources: U.S. Marine Corps; U.S. Navy.

### Chart 19

The Bank's Conduct of Monetary Policy

**Pursuing Powerful Monetary Easing by Implementing a Comprehensive Monetary Easing Policy**

1. **Conduct of a virtually zero interest rate policy**
   - The Bank adopts a virtually zero interest rate policy by maintaining the target for the uncollateralized overnight call rate at "around 0 to 0.1 percent."

2. **Purchases of financial assets through the Asset Purchase Program**
   - The Bank aims at further enhancing powerful monetary easing by encouraging a decline in longer-term market interest rates and a reduction in various risk premiums through the purchase of various types of financial assets.
   - The Bank established the Asset Purchase Program with a total size of about 35 trillion yen, and the size of the Program has been repeatedly expanded thereafter (currently about 65 trillion yen).

3. **Clarification of the policy time horizon**
   - For the time being, the Bank will aim to achieve the goal of 1 percent inflation in terms of the year-on-year rate of increase in the consumer price index (CPI) through the pursuit of powerful monetary easing, by conducting its virtually zero interest rate policy and by implementing the Asset Purchase Program mainly through the purchase of financial assets.

**Providing Support to Strengthen the Foundations for Economic Growth**

- Through "the fund-provisioning measure to support strengthening the foundations for economic growth," the Bank provides long-term (maximum duration of four years) funds at low rates (currently 0.1 percent per annum) to financial institutions carrying out lending or investment in support of strengthening the foundations for Japan's economic growth.
- In addition to the basic fund-provisioning arrangement in the measure, the Bank has established special rules for a new U.S. dollar lending arrangement, those for ABL (asset-based lending), and those for small-lot investments and loans.
Chart 20

Financial Conditions in Japan and the United States

Notes: 1. Long-term interest rates, corporate bond interest rates, and mortgage rates are the averages of 2012/Q1.
2. Loan rates and expected rates of inflation are those of 2011/Q4.
Sources: Japan Housing Finance Agency; Freddie Mac; Bank of Japan; FRB; Consensus Forecasts; Bloomberg.