JAPAN’S ECONOMIC PERFORMANCE: Relevance for the United States

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U.S. – Japan Comparison

• Since the financial crisis, the US economic situation has taken on many of the characteristics of Japan.
  – Monetary policy tool is exhausted
    • Short-term interest rate at lower bound
    • Quantitative easing largely ineffectual
  – Huge fiscal stimulus (deficits) cannot be sustained
  – Dysfunctional political system

• Are U.S.–Japan headed for stagnation?
Japan Faces Major Challenges

• Working-age population will fall by 20% between 2000 and 2030
• Increased pension and health care cost of aging population
• Large budget deficits
  – Budget deficit 10% of GDP in 2012
  – Net debt of 135% of GDP
• Added burden of the earthquake and tsunami – nuclear power shortages
Age Distribution of Japanese Population

- **Working-age Population (15-64)**
- **Children (<15)**
- **Aged (65+)**

The graph shows the percentage of the population in different age groups from 1950 to 2090. The actual data is represented by the blue line, while the projected data is represented by the green line for children and red line for the aged. The graph highlights the increase in the percentage of the aged population and the decrease in the percentage of working-age population over time.
Japan has addressed many of these problems

• Scaled back pension program in a series of reforms over past decade
  – Offsets most of future demographic trend
  – Large proportion of Japanese work past retirement age

• Health care costs remain low relative to GDP
  – 8% versus 15% in United States
  – Strong price controls

• Budget deficit cut to 2% of GDP prior to financial crisis, but back up in recent years
Fundamental Problem is the Economy

• After its 1990 crisis, Japan’s GDP growth slowed from 5% to 1% p.a.—two lost decades.
• If growth does not improve, the burden of an aging society will be substantial
• Why has growth been so low?
• Will growth be low in the future?
• Growth is key to solving fiscal problems.
Japan’s Growth Slowdown: The Supply Side

• Slower GDP growth after 1990 reflects widespread slowdown in capital and labor inputs
  – Labor force and hours worked fell substantially
  – Reduced capital accumulation
  – Slower multi-factor productivity growth
  – Extends over two decades

• Future Growth in GDP ≈1.5%
  – Labor productivity 2% (similar to United States)
  – Labor force -0.5%
## Sources of Growth
Japan and the US

<table>
<thead>
<tr>
<th></th>
<th>Japan</th>
<th></th>
<th>United States</th>
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</thead>
<tbody>
<tr>
<td><strong>GDP Growth</strong></td>
<td>4.9</td>
<td>0.7</td>
<td>1.2</td>
<td>3.9</td>
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<td><strong>Contribution of:</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Labor Hours</td>
<td>0.4</td>
<td>-0.8</td>
<td>-0.7</td>
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<td>Capital</td>
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<td>1.0</td>
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<td>Multi-factor Productivity</td>
<td>2.7</td>
<td>0.5</td>
<td>1.5</td>
<td>1.3</td>
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</table>
Adjusting to Slower Growth

• Slower growth offset by shorter workweek.
  – Avoided large increases in unemployment.
  – Workweek now comparable to the United States.

• Japanese income inequality has increased significantly since 1990, but it is still below the United States.
Japan and US hours/worker, 1980-2010

Hours/year

Japan hours/worker

United States hours/worker
Japan’s Growth Slowdown: The Demand-Side

• Major collapse of domestic investment
  – Net investment (adjusted for depreciation) is negative.
  – Sharp declines in household and government saving.
  – Corporate saving exceeds corporate investment

• Japan has shifted from high-saving, high-investment (pre-1990) to low-saving low-investment.
## Japan Saving-Investment

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<tbody>
<tr>
<td><strong>% of national income</strong></td>
<td></td>
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<tr>
<td>Saving</td>
<td>16.6</td>
<td>13.2</td>
<td>5.9</td>
<td>1.3</td>
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<tr>
<td>Corporate</td>
<td>3.6</td>
<td>2.7</td>
<td>9.0</td>
<td>10.0</td>
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<tr>
<td>Household</td>
<td>10.9</td>
<td>8.9</td>
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<td>1.7</td>
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<tr>
<td>Government</td>
<td>2.1</td>
<td>1.6</td>
<td>-5.0</td>
<td>-10.4</td>
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<tr>
<td><strong>Investment</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>14.1</td>
<td>10.8</td>
<td>2.5</td>
<td>-2.1</td>
<td></td>
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<tr>
<td><strong>Current account</strong></td>
<td>2.5</td>
<td>2.8</td>
<td>3.9</td>
<td>3.5</td>
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<tr>
<td><strong>Statistical discrepancy</strong></td>
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<td>0.6</td>
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Wealth Losses

• Asset price bubbles in equities and housing during late 1980s.
• Nikkei index fell to half of its 1989 peak by 1995.
  – Currently, about $1/3^{rd}$ of 1989 value.
• Housing prices have fallen to 60% of 1991 peak value.
Japan - Competitiveness

• Historical strength has been in manufacturing exports
  – Export industries have had highest rate of productivity growth
  – Rapid innovation

• Domestic manufacturing and service industries lagged behind

• In 1990s,
  – Manufacturing productivity slowed
  – Service sector productivity accelerated
Japan - Competitiveness

• Japan faces increased international competition in manufacturing
  – China and Korea
  – Improvements in information technologies make it easier to outsource production

• Declining labor force in Japan
  – Without immigration, capital and technology will move to areas of available labor
  – Japanese firms will continue to be global leaders, but they will produce abroad.
Future Strengths

• Japan (3.3%) is third behind Finland (4%) and Sweden (3.6%) and above the U.S. (2.9%) in share of GDP devoted to R&D.

• Japanese education system ranks high in international tests on science and math.

• Japan is world’s largest creditor nation.
  – $3 trillion net investment position
  – Compare to -$2.5 trillion (debt) for United States.
  – Large net earnings on foreign investments.
Japan’s External Balance

![Graph showing Japan’s External Balance from 1980 to 2010. The graph compares Trade Balance, Capital Income, and Current Account balance over the years. The Y-axis represents Percent of GDP, and the X-axis represents Year. The graph highlights significant fluctuations in these balances throughout the period.](attachment:image.png)
Changing Trade Structure

• Shift away from Europe and North America toward Asia.
  – Asia trade is in intermediate goods that are ultimately embodied in exports to the United States and Europe.
  – Shift of assembly work to China

• Negative effects from Japan-China political disputes.
Hollowing Out

• Alternative definitions
  – Decline in industry share of GDP
    • Evident in Japan and G-7
  – Decline in industry share of employment
    • Evident in Japan and G-7
  – Loss mid-skill jobs
    • Less evidence
  – Offshoring of jobs
    • Evident in Japan and G-7

• Process is part of normal transition of high income economies out of manufacturing
# Percent of Total Employment in Manufacturing

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<tbody>
<tr>
<td>United States</td>
<td>24.7</td>
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<td>10.2</td>
<td>-14.5</td>
<td>-3.3</td>
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<tr>
<td>France</td>
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<td>-15.1</td>
<td>-4.4</td>
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<tr>
<td>Germany</td>
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<td>22.4</td>
<td>19.0</td>
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<tr>
<td>Japan</td>
<td>27.4</td>
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<tr>
<td>G-7</td>
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<td>16.7</td>
<td>13.1</td>
<td>-14.4</td>
<td>-3.6</td>
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</table>
Trade-weighted Real Exchange Rate, 1990-2012

Index

Year/Quarter


130
120
110
100
90
80
70
60
50
40
30
20
10
0

United States

China
Trade-weighted Real Exchange Rate, 1990-2012

Index

Year/Quarter

Euro

Yen
Abe Economics

• Fiscal Stimulus
  – $110 billion
  – Mostly infrastructure
  – Raise GDP by ≈ 2-2½%.

• Monetary Policy
  – Another round of quantitative easing
  – Raise inflation target to 2%

• Strong feeling of déjà vu
  – Repeating measures of past 20 years
  – Fiscal measures not sustainable, and
  – Fluctuate between stimulus and restraint.
  – Economic growth versus budget balance
  – Same conflict in the United States
Abe Economics (2)

• Policy measures do not address long-term structural problems in Japan’s economy.
  – Still a dual economy with very efficient tradable goods sector and inefficient nontradables.
  – Needs regulatory reforms that have been blocked for years.
  – Large surplus of corporate saving over investment

• Export promotion is not a viable policy for Japan
  – Weak global economy
  – Japan already has a large current account surplus.
  – Real exchange rate is near historical low.
  – Borders on beggar-thy-neighbor policy.