Lunch Seminar on the Japanese Economy at the Maison Franco-Japonaise

Income Inequality in Japan from Historical and Comparative Perspectives
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Today's Talk

Part 1. Income Inequality in Japan from Historical Perspectives
   – Is today's Japan "equal society"?
   – If so, since when?
   – How did it happen?
   New findings from Moriguchi and Saez (2006).

Part 2. Income Inequality in Japan from Comparative Perspectives
   – Is Japan's historical experience unique?
   – What can other countries' experience tell us?
   Recent findings from high income studies in major OECD countries by Atkinson, Piketty, Saez et al. (2006).
Income Inequality in Japan: What We Know

♦ Japan widely perceived as "equal society."
  OECD income distribution studies
  - Sawyer (1976)
  - Atkinson et al. (1995)

♦ Is income inequality rising in Japan?
  - Tachibanaki (2001): "Equal society is a myth."
  - Ohtake (2005): "Increase in inequality due to demographic change, not due to structural change."
# Income Inequality in OECD Countries in the late 1980s

## Table A: Income Before Tax & Transfers

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Gini Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ireland</td>
<td>1987</td>
<td>0.461</td>
</tr>
<tr>
<td>Sweden</td>
<td>1987</td>
<td>0.439</td>
</tr>
<tr>
<td>U.K.</td>
<td>1986</td>
<td>0.428</td>
</tr>
<tr>
<td>France</td>
<td>1984</td>
<td>0.417</td>
</tr>
<tr>
<td>U.S.</td>
<td>1986</td>
<td>0.411</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1982</td>
<td>0.407</td>
</tr>
<tr>
<td>Germany</td>
<td>1984</td>
<td>0.395</td>
</tr>
<tr>
<td>Finland</td>
<td>1987</td>
<td>0.379</td>
</tr>
<tr>
<td>Canada</td>
<td>1987</td>
<td>0.374</td>
</tr>
<tr>
<td>Italy</td>
<td>1986</td>
<td>0.361</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1987</td>
<td>0.348</td>
</tr>
<tr>
<td>Japan</td>
<td>1989</td>
<td>0.317</td>
</tr>
<tr>
<td>Belgium</td>
<td>1988</td>
<td>0.273</td>
</tr>
</tbody>
</table>

Source: Nishizaki et al. (1998)

## Table B: Income After Tax & Transfers

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Gini Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>1986</td>
<td>0.347</td>
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<tr>
<td>Switzerland</td>
<td>1982</td>
<td>0.346</td>
</tr>
<tr>
<td>Ireland</td>
<td>1987</td>
<td>0.341</td>
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<tr>
<td>U.K.</td>
<td>1986</td>
<td>0.323</td>
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<td>Italy</td>
<td>1986</td>
<td>0.321</td>
</tr>
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<td>France</td>
<td>1984</td>
<td>0.311</td>
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<tr>
<td>Canada</td>
<td>1987</td>
<td>0.305</td>
</tr>
<tr>
<td>Japan</td>
<td>1985</td>
<td>0.298</td>
</tr>
<tr>
<td>Sweden</td>
<td>1987</td>
<td>0.281</td>
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<td>Germany</td>
<td>1984</td>
<td>0.277</td>
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<td>Netherlands</td>
<td>1987</td>
<td>0.266</td>
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<tr>
<td>Belgium</td>
<td>1988</td>
<td>0.260</td>
</tr>
<tr>
<td>Finland</td>
<td>1987</td>
<td>0.255</td>
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Source: Kokumin Seikatsukyoku (1999), Chapter 3; Atkinson et al. (1996), Table 4-10.
Income Inequality in Japan, 1955-2005

Gini Coefficient

EES/FIES
PLCS1
PLCS2
IRS
HHS

Income Inequality in Japan, 1890-2005

![Graph showing Gini coefficients for various data sources over time]
Income Inequality in Japan, 1890-2005
What We Don't Know

♦ No data between 1940 and 1955.

♦ Pre-1940 data only for selected years.

♦ Can not compare the levels of pre-1940 series and post-1955 series due to data discontinuity.

♦ Japan became an "equal society" by 1970 — but how?

♦ Little knowledge on high income groups.
High Income Studies using Income Tax Statistics


♦ Construct long-run, homogenous, and continuous top income shares series using income tax statistics.

♦ Precise data on the level and composition of the high-end of income distribution (not available in household surveys).

♦ Document the evolution of income concentration over many decades.

♦ Facilitate international comparison of the experience of major economies — France, U.K., U.S., Netherlands, Sweden, etc.
Studying Japan


♦ Income tax statistics published every year since 1887 to date.

♦ Because Japan's modern economic growth started circa 1886, the data span the entire process of industrialization.

♦ Investigate the relationships between economic growth and income inequality.
Real Income per Capita in Japan, 1885-2002
Methodology

♦ Income before tax (wages & bonuses; business, farm & self-employed incomes; interest, dividends & rents, but exclude capital gains).

♦ Top income groups (10%, 1%, 0.1%, 0.01%) defined relative to total number of adults.

♦ Top 1% income share
  = incomes accrued to top 1% income earners / total personal income.

  § Due to high level of income tax exemption before 1940, less than 5% of adults filed income tax returns in Japan.

  § "Reported income" subject to tax evasion & avoidance.

  § Due to numerous tax reforms and revisions, need careful adjustments to create homogenous series.
Top 1% and Next 4% Income Shares in Japan, 1886-2002
Decomposition of Top 1% Income Share in Japan, 1886-2002
Top 0.1% Income Share with Capital Gains in Japan

[Graph showing income share from 1886 to 2002 with two lines representing 'Without Capital Gains' and 'With Capital Gains'.]
Top 0.01% vs. Top 1-0.5% Estate Sizes in Japan, 1905-2002
# Top Estate Compositions in Japan: 1935, 1950, and 1987

<table>
<thead>
<tr>
<th>Year</th>
<th>Agricultural Land</th>
<th>Residential Land</th>
<th>Houses &amp; Structures</th>
<th>Business Assets</th>
<th>Stocks</th>
<th>Fixed Claim Assets</th>
<th>Other Assets</th>
</tr>
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<tbody>
<tr>
<td>1935</td>
<td>22.5%</td>
<td>13.8%</td>
<td>8.4%</td>
<td>3.9%</td>
<td>25.9%</td>
<td>22.6%</td>
<td>2.9%</td>
</tr>
<tr>
<td>1950</td>
<td>11.8%</td>
<td>15.1%</td>
<td>37.3%</td>
<td>13.5%</td>
<td>4.8%</td>
<td>12.1%</td>
<td>19.7%</td>
</tr>
<tr>
<td>1987</td>
<td>20.6%</td>
<td>43.6%</td>
<td>3.7%</td>
<td>0.8%</td>
<td>10.2%</td>
<td>11.7%</td>
<td>9.5%</td>
</tr>
</tbody>
</table>
Historical Explanations (1):
High Income Concentration in 1886-1938

♦ Top 1% income group receiving 18% of total income in 1900-38.
♦ Top 0.1% income group receiving 8% of total income in 1900-38.
♦ Capital income component roughly 40% of top 1% income before 1938.

Reasons (Yazawa 1992; Okazaki 2000):

1) Concentration of land ownership to “absentee landlords.”
2) Large shareholders receiving high dividends.
3) Large year-end bonuses paid to CEOs.
4) Primogeniture with low estate tax rates.
5) Low marginal income tax rates.
Historical Explanations (2):
Income De-concentration during WWII

♦ Top 1% income share fell from 20% to 7% in 1938-45.
♦ Top 0.1% income share fell from 9% to 2% in 1938-45.
♦ Collapse of capital income component in top 1% income in 1938-45.
♦ Top 1% wage income share fell from 8% to 3% in 1935-44.

Reasons (Nishida 2003; Okazaki 2000; Yazawa & Minami 1993):

– 1938 General Mobilization Act (regulation on land rents, dividends, wages and bonuses in 1939-45)
– Increases in income tax rates in 1938-45.
– Wartime inflation in 1938-45.
– War destruction in 1944-45.
Historical Explanations (3):
Impact of U.S. Occupational Reforms (1947-52) Reconsidered

- Occupational policies:
  - Land reform in 1947-50,
  - *Zaibatsu* dissolution in 1946-48,
  - Property tax in 1946-51.

- Considered to be major causes of income equalization (Minami 1995).

Then why no impact on top income shares?

Explanations:
- Discontinuity in data? Tax reforms in 1940, 1947, 1950, but unlikely to produce large enough bias.
- Occupational reforms largely continuation of wartime policies (Dore 1985; Gordon 1985; Okazaki 2000; Moriguchi 2000).
- Played big role in (not income but) wealth redistribution.
Historical Explanations (4):
Why Did Not Top Income Shares Recover after WWII?

- Top 1% income share remains stable at 8% in 1950-2002.
- Top 0.1% income shares remains at 2% in 1950-2002.
- Top 1% "wage income" share remains at 7% in 1970-2002.

Reasons: Changes in institutional infrastructure after WWII:
- Primogeniture abolished in 1947,
- Progressive estate tax since 1950,
- Progressive individual & corporate income tax since 1950,
- Restrictive land and house lease laws since 1941,
- Tax-exempted savings for the middle class since 1963,
- Change in corporate governance (bank finance, cross shareholding),
- Change in human resource management (enterprise unions, internal promotion, joint consultation).
Marginal Income Tax Rates in Japan, 1886-2002

Marginal Tax Rate

- Highest Statutory MTR
- Top 0.01% MTR
- Top 0.1% MTR

Year:
- 1886
- 1890
- 1894
- 1898
- 1902
- 1906
- 1910
- 1914
- 1918
- 1922
- 1926
- 1930
- 1934
- 1938
- 1942
- 1946
- 1950
- 1954
- 1958
- 1962
- 1966
- 1970
- 1974
- 1978
- 1982
- 1986
- 1990
- 1994
- 1998
- 2002

Marginal Tax Rate (%)
Japan's Experience in Comparative Perspectives

♦ Top income shares series constructed by the similar methods:
  • France (Piketty 2003)
  • U.S. (Piketty and Saez 2003)
  • Canada (Saez and Veall 2005)
  • U.K. and Australia (Atkinson and Leigh 2004)
  • Netherlands (Atkinson and Salverda 2005)
  • Switzerland (Dell, Piketty, and Saez 2006)
  • Sweden (Roine and Waldenstrom 2006)
  • Japan (Moriguchi and Saez 2006)
Top 0.1% Income Shares in France, U.K., and U.S., 1900-2005
Top 0.1% Income Shares in Anglo-Saxon Countries, 1900-2005

- Japan
- U.S.
- U.K.
- Canada
- Australia
Top 0.1% Income Shares in Netherlands, Sweden, and Switzerland, 1900-2005
Is Japan's Experience Unique?

♦ In most OECD countries, income concentration was once extremely high, and then fell dramatically during 1910-1945.

♦ Decline in top income shares during WWII seen in all participating countries (including winners), but was most dramatic in Japan.

♦ Top income shares have increased sharply since 1980 in Anglo-Saxon countries (but remained low elsewhere). Rise in executive compensation in the U.S. considered to be major driving force.
Main Results & Conclusions

♦ Income concentration in Japan was high throughout the 1885-1938 period, then declined dramatically during WWII.

♦ Collapse of top capital income during WWII was the primary reason for the income de-concentration. Wage income concentration also fell sharply during WWII.

♦ Postwar institutional reforms made the one-time income de-concentration irreversible. Both capital income and wage income became much more equally distributed after WWII.

♦ Japan achieved two "economic miracles" under very different social, legal, and institutional settings. No clear relationships between income inequality and economic growth.

♦ The process of income de-concentration driven mainly by large historical shocks (wars, depressions) that destroyed wealth or triggered government intervention. Important policy implications for developing countries.