Effectiveness of Fiscal Policy, 
the case of Japan: 
Fresh water, salt water and real water

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Outline

• Overview
• (1) Japanese Fiscal Situation Overview
  – (1.1) Debts are very large
  – (1.2) Fiscal Deficits are still large (unsustainable)
• (2) Stimulus package
• (3) Supplementary budget
• (4) Fiscal reaction function
• (5) Effectiveness Debate
• (6) Personal View for the current situation
(1.1) Gross Government debt

General Government Gross Financial Liabilities Per cent of nominal GDP

- Japan3
- United States
- United Kingdom
- Germany2
- France
- Italy
- Canada
Gross vs. Net

• Broda and Weinstein
  – Japan has large net asset
  – In “net” the Japanese fiscal situation is not bad (see next table)

• Rebut:
  – What is assets that are deducted? Mostly the GPIF (pension fund), 150 trillion yen (30% GDP)
  – It had increased rapidly in the past 15 years
Net Liabilities are smaller, but...
(1.2) Fiscal deficits are large

General Government Gross Financial Liabilities Per cent of nominal GDP

-14.0 -12.0 -10.0 -8.0 -6.0 -4.0 -2.0 0.0 2.0 4.0 6.0


Japan United States United Kingdom Germany France Italy Canada
(2) How big was fiscal stimulus in the 1990s?

- Stimulus, Total (1992-2000), Y130 trillion
- Stimulus, Total (2001-2008), Y57 trillion

- But this is the total of program values, includes non-central-government-budget items, repackaging of already budgeted items, etc

- Pure incremental central government budget (*real water*) may be much less
<table>
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<tr>
<th>Fiscal Year</th>
<th>Prime Minister</th>
<th>Total Size (trillion yen)</th>
<th>Major items (trillion yen)</th>
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<td>1992–2000</td>
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<td>1992–2008</td>
<td>TOTAL 186.1</td>
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(3) Supplementary budget

• Technically it is mid-year correction of budget
  – Natural disaster
  – Other unforeseen budget items
  – Keynesian fine-tuning
(4) Fiscal Reaction Function

- Forecast growth > potential growth
  - Initial budget size becomes large
- Forecast error, negative at mid-year
  - Large supplementary budget
- Large supplementary budget (if effective)
  - Large negative is prevented
- Very difficult to solve endogeneity, causality, and effectiveness
  - Weak economy $\rightarrow$ large stimulus package
  - Large stimulus package $\rightarrow$ economy recovers from weakness
  - Moreover, effectiveness of other factors and policies, esp. monetary policy and exchange rate
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<tr>
<th>Year</th>
<th>Supplementary Budget</th>
<th>Stimulus Package</th>
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(5) Effectiveness Debate

• Assessment of Stimulus package of the 1990s
  – What would be a counterfactual?
• Linkage to the literature
Were fiscal policy effective?

• “Effective” camp (Posen): Keynesian (salt water) tradition
  – Mamizu (real water) was in general not large
  – When mamizu was large, effects of fiscal policy was large
  – They prevented the economy from melting down
  – Proof in mistake: April 1997 (fiscal contraction → recession)
  – Shopping voucher plan, 1999, limited success because it was tax rebate (-T) and not public spending (G)
  – Multiplier $\Delta G > -\Delta T$

• “Not Effective” camp: Fresh water (RBC) tradition
  – Very low multiplier
    • Financial sector was weak, so that fiscal policy could not “multiply”
    • Encourage wrong allocation of labor and capital to low productive sector (dynamic inefficiency)
  – Ricardian effect (household’s C reaction to G), esp. when Debt became large
  – Risk from large fiscal deficits (concern for sustainability)
  – Effects of April 1997 were not large, but appeared large due to Financial crisis that occurred in the fall
How much was real water?

• **Real water** = incremental spending
  – Proxy, supplementary budget size
    • It may contain unexpected built-in-stabilizer extra spending and plugging holes of shortfall in revenues

• Cyclically adjusted deficits
  – difficult to obtain

• Recall on “Mamizu”
What happened in April 1997?

- Fiscal contraction of 7 trillion yen
  - Consumption tax increase by 2% point (5 trillion yen)
  - Repeal of income tax cut (2 trillion yen)
- “Effective” camp would say, it was a tremendous contractionary effect
- “Ineffective” camp would say, effects were temporary and the economy went down due to banking crisis and Asian currency crisis.
Shopping voucher “experiment”, 1999 and helicopter of 2009

• Shopping voucher (experiment)
  – 0.7 trillion yen was distributed to families with children and with elderly (20,000 yen per eligible person)
  – Voucher was distributed April 1999, and expire in six months—which had to be spent—in participating stores in the municipality.

• Helicopter Plan 2009
  – 12,000 yen per person (Ages 19-64)
  – 20,000 yen per person (Ages 0-18 and 65-)
  – Cash payment
  – Budgeted from taking down reserves in the special account for Fiscal Loan and Investment Program
  – More than 70% of surveyed persons are against this plan
Multiplier of voucher, study 1

- Study (1): Survey, June-July 1999
  - Did you buy something extra? Or more expensive items than otherwise? By how much?
  - Additional expenditure was estimated as 32%. I.e., multiplier=0.32.
  - If this can be applicable to helicopter plan of 2009, 2 trillion, would result in increase of 0.64 trillion yen, mere 0.12% of GDP.
Multiplier of voucher, study 2

- Household Expenditure Statistics, individual responses (confidential)
  - Study of consumption pattern, differentiating
    - Families with kids received 20,000 yen per child
    - Families without a kid did not receive cash
  - Multiplier was estimated as 0.2 – 0.3, but overtime lowered to 0.1
  - Caution 1. Families with low assets had higher multiplier. (liquidity constraint)
  - Caution 2. Multiplier overtime was much lower. Semi-durable goods were purchased within the six months, that would have been purchased in the following months anyway.
  - Examination of retail sales show a similar pattern. An increase might have been 0.1.
  - If this can be applicable to the helicopter plan of 2009, 2 trillion would result in an increase of 0.2 trillion yen, or 0.04% GDP

(6) Personal view: What to do?

• Increased fiscal spending when the growth rate is projected to be negative (like now)
• Government spending should be targeted to areas that increase productivities (growth) in the future.
  – Environment
  – Medical and Long-term Care
  – Agriculture
  – Education
Reform, subsidy, and growth

• Environment
  – Subsidies for research and implementing alternative energy

• Medical and Long-term Care
  – Acute crisis, understaffed hospitals
  – Take advantage of globalization

• Agriculture
  – Productivity is low, and reform is needed
  – But, reform (such as abolition of cultivation restriction) would drive rice prices down
  – Promote scale economies and help transition
  – Take advantage of globalization

• Education
  – Skill mismatch due to rigid education system: need reform
  – Take advantage of globalization
Conclusion

• Debates are not conclusive on effectiveness
  – Effectiveness during normal times is not high
  – Effectiveness during a crisis is more or less a consensus
• Japanese experiences of fiscal stimulus in the 1990s provide some (but not much) lessons to current situations in Japan and other countries
• Multipliers may differ significantly from one form of polity to next
• Dynamic perspective is important
• Debt level matters in effectiveness of deficit spending
• Very little room for Japan in 2009
• END