Implications of 2008 SNA Recommendations for the Measurement of Households’ Income and Savings

Masahiro Higo, Naoto Osawa, and Yoshiko Sato
Bank of Japan, Tokyo, Japan

The 60th ISI World Statistics Congress, Rio de Janeiro, Brazil, July 26-31, 2015
Issues with Financial Surplus/Deficit

- Financial surplus/deficit should reflect the real side of economy
  - eg, cash rich NFCs not spending enough capex; cash rich HHs saving too much during economic recovery
- However, are current methodologies adequate? Consistent with reality?
  - What implications with 2008 SNA?

Note: as a ratio to nominal GDP
Source: BOJ
2008 SNA Recommendations that affect households’ income and savings

- Employment-related pension schemes
- Investment funds
- Standardized guarantees
- Employment stock options
Employment-related pension schemes

• 2008 SNA recommends...

• ...Record different schemes separately
  Defined Benefit (DB) vs Defined Contribution (DC)

• ...Record DB scheme on an accrual basis
Challenges: DB Pension Schemes

• **No aggregate data** available on pension entitlements to DB schemes in Japan

  ➔

  – use disclosed assets/liabilities data on an **accrual basis** by individual listed companies in financial statements; and

  – use **aggregate assets data** on all listed and unlisted companies to estimate aggregate liabilities
Estimation Method: Pension Entitlements to DB Schemes

<table>
<thead>
<tr>
<th>Listed Companies</th>
<th>All Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td><strong>Liabilities</strong></td>
</tr>
<tr>
<td>(c) Pension Assets</td>
<td>(a) Pension Liabilities (on an accrual basis)</td>
</tr>
</tbody>
</table>

- Individual data available from financial statements disclosed by individual listed companies.
- Aggregate data available from Trust Bank and Life Insurance Associations.
- Gross-up

\[ \text{all companies' pension liabilities} = \frac{(b)\text{all companies' pension assets}}{(c)\text{listed companies' pension assets}} \times (a)\text{listed companies' pension liabilities} \]
Impacts of Revisions: DB Pension Entitlements

(An illustration)

Applying the accrual accounting to even unlisted companies' pension liabilities would raise pension entitlements by 20-30 trillion yen from the current level of about 100 trillion yen.

Given fast aging population in Japan,
1) the retired generations' withdrawal; and
2) the current working generations' contributions at a slower pace than the past working generations' would reduce pension entitlements in the transaction flow of some 2-3 trillion yen annually.
Investment Funds

• 2008 SNA recommends...

• ...Retained earnings of investment funds to be recorded as investors’ income; and
  – Retained earnings = investment income that funds receive and reinvest without distributing to investors

• ...Imputed as if distributed to and reinvested by investors
Challenges: Investment Funds

• No aggregate data available on retained earnings in Japan

• A Peculiar Issue in Japan, unrelated to 2008 SNA: distributions include capital gains and the principle, which should not be recorded as HHs’ income in SNA

  – Use individual fund-level data disclosed in the financial statement

  – Refer to Osawa (2015) for details
Investment Funds Sector’s Retained Earnings and Distributions

Note: concept of income in SNA = income gains, excluding capital gains and the principal (withdrawal of capital).
Financial Deficit of Investment Funds Sector in Japan

-- A peculiar issue regarding IFs in Japan, given the role of conduits

IFs pay out more distributions than income gains, thus financed by capital gains and the principal.

That should be recorded as dissaving by households, given IFs’ role as investment vehicles or conduits.

Source: BOJ
Estimated Impacts on Household Sector's Financial Surplus

Note: Preliminary figures for Fiscal Year 2013 (trillion yen) with GDP ratio in parentheses.
Final Remarks

• Given aggregate data limitations, the BOJ makes use of **publicly disclosed data**
  – with the principle of minimizing the reporting burden...
  – but...at the expense of estimation accuracy and data coverage to some extent.

• Still, implementing **2008 SNA** makes financial statistics more applicable and adequate.

• The revised FFA is to be released in **1H 2016**.
References


The End

Corresponding Author: Naoto Osawa, Bank of Japan
naoto.oosawa@boj.or.jp