Observations on Japan's Pension Reforms of 2004

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How was the policy problem presented?

→Current and projected growing cashflow shortfall in the national pension system

- Revenue from contributions not rising fast enough
  (due to low fertility, low earnings growth)

versus

- Rapidly rising benefit payments to pensioners
  (due to high benefits, early retirement, and more elderly due to baby boom and longer lifetimes)

→Projections suggested need to raise taxes/contributions or cut benefits (or both)

How was the problem framed? (as of 2004)

→What was the size of the problem?

Cashflow focus: To keep couples' replacement rate constant,

- EP contribution rate would have to rise from 13.58% to 25.9%
- NP contribution would have to rise from ¥13,300/mo to ¥29,500/mo
- More general govt revenue too (unclear exactly how much and over what time period?)

→Timing of the problem?

Different writers vary: some take 5-year, some 95-year perspective; few look at infinite horizon

What was the policy response? (as of 2004)

Boost Revenue:

- ✓ Boost EE/ER contributions
  - EPS contrib. up from 13.58%→18.30%, over 12 years (by 2017)
- ✓ Boost govt subsidy "from 1/3 to ½" by 2009
  - Can express as % of GDP or payroll?
- ✓ Require Pension Reserves pay 2.2% real pa

Cut Benefit Growth Rate and Levels:

- ✓ Immediately & in future with "macroeconomic" indexing
- → Seek to keep 'stylized' married couple replacement rate ~50%

Issues to raise

- Aggregate assumptions: Need more sensitivity analysis
  - What if wage growth and TFR too high?
  - Is real return sustainable? What if dips and stays low for some time?
  - Choice of discount rate? (maybe too high?)

- Projections:
  - Time horizon for measurement
  - Why not stochastic simulation?
  - Need to be able to do distributional analysis (different lifetime earnings patterns)

Other points:

- Where is the rest of the govt subsidy coming from?
- What's economic responsiveness to:
  - Reduced benefits
  - Higher payroll and other taxes
  - Declining workforce/aging population

→Labor force/retirement response?

→Evasion?

Key Accounting Concern:

- Many government budgets do not report all relevant liabilities:
  - Traditional public goods (e.g. “bricks and mortar”) can be enumerated and accounted for;
  - But governments increasingly have long-term liabilities (e.g., Social Security, national health obligations, etc.);
  - And these tend not to be recognized as government obligations.

➔Thus ‘official’ public debt dramatically understates long-term pension (and health) liabilities

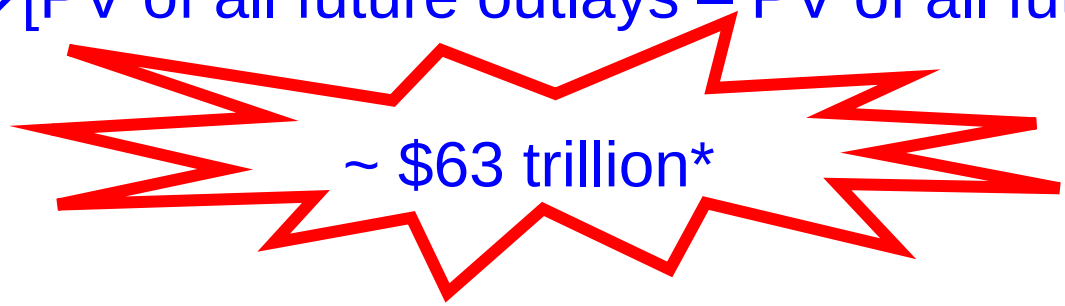
Example: "Official" US public debt dwarfed by long-term government liabilities

US government's true **Fiscal Imbalance** (FI):

→Debt held by public, ~$4.4 trillion

+

→[PV of all future outlays – PV of all future revenue]



**Includes projected Social Security and Medicare payments in excess of dedicated revenue streams*

US Assumptions:

- ✓ Real annual discount rate: r = 3.6% (with sensitivity analysis)
- ✓ Real annual per-capita productivity: g = 1.7% (with sensitivity analysis)
- ✓ Real growth of health care costs in excess of productivity to 2080: h = 1.0%*
  - 2080–2100: excess growth reduced linearly to 0
  - 2100+: 0 excess growth
- ✓ Open system liabilities (infinite horizon now adopted by Trustees at SSA)
  - *Rationale:* Nation plans to be around in perpetuity

* VERY conservative: 1980–2001 actual diff = 2.3%; double-digit growth this year expected to continue

Should Govts report these liabilities?

→NO:

- Govt promises are only implicit, unlike explicit debt
- Govt promises can be changed at any time
- Govt promises are not guaranteed

→YES, but limit to computations to finite horizon

- Nobody knows the future
- Assumptions too variable

→YES:

- These are obligations like public debt
- US Social Security administration now adopting this for SS and Medicare
- Of course, with sensitivity analysis

Why stop with SS and Medicare?

- Sen. Lieberman devising a law to implement for all government programs

Can US Deal with the $63 Trillion? Options include…

- Boost federal income taxes by 68% *immediately* and *forever*
  - Assumes no labor supply or saving reductions, and that money is saved and invested prudently
- Boost payroll tax from 15.3% to >32%
  - And remove tax ceiling but don't credit benefits
- Confiscate all physical capital assets in the U.S.
  - Though is insufficient!
- Slash Social Security and Medicare promises by more than half

Other comments on Japan's methodology

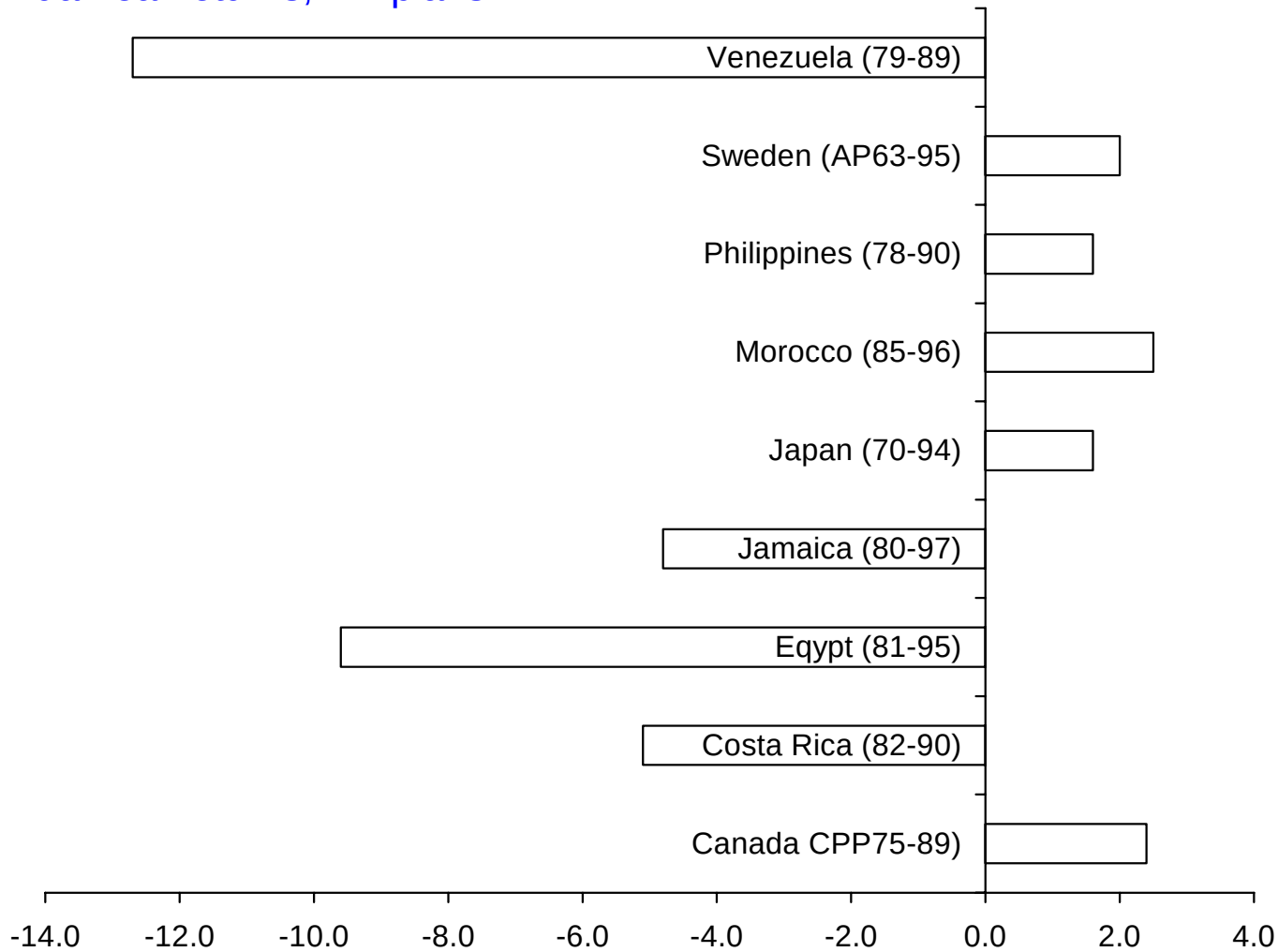
- Applaud Japan's step forward to solving this important and long-term problem (better than the US!)
- Also support computing public pension debt in perpetuity
- Why call adjustment a "macroeconomic" indexation?
  - Focuses on demographic factors
  - Not on economic factors

Need to start now on longer term solution

- If this will work over a 20 year time horizon – what takes its place?
  - Capital markets want to know
  - And so do retirees and workers!
- What is to be done, when the adjustment mechanism proves inadequate?
- What to do when healthcare system runs out of money???

Beware…funding does not guarantee good investment performance!

Annual real returns, DB plans



Iglesias and Palacios (1999)

What might the future hold?

More resistance to tax hikes;

More resistance to benefit cuts;

More debate over the Reserve Fund

(how quickly to draw down, how to invest);

More debate over investments:

- ✓International diversification?
- ✓New types of assets?
- ✓Socially responsible investments?

More demands for transparency and simplicity.

Thank you!

For more information:

- Wharton's Pension Research Council:

http://prc.wharton.upenn.edu/prc/prc.html

- Books and working papers:

http://rider.wharton.upenn.edu/~prc/publication.html

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