Comment on “What about Japan?” by Chien, Cole, and Lustig

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What is new about Chien, Cole, and Lustig's paper? (1)

- They extend the scope and scale of primary fiscal balance by considering **returns on risky investment by the consolidated government**.

- They pay serious attention to a phenomenon that the consolidated government earns huge amounts of capital gains through heavily leveraged positions, about half of which are funded by BOJ at near-zero interest rates.
  - In particular, **the foreign exchange fund special account** within the central government, and
  - **the social security funds** within the general government.

What is new about Chien, Cole, and Lustig's paper? (2)

- They point out that there are **two types of participation constraints**, by which the consolidated government is allowed to finance risky investment at extremely low interest rates.
  - Households are kept from participating in domestic and foreign risky asset markets maybe for transaction costs.
  - Commercial banks are kept from investing in foreign long-term bonds maybe for regulatory reasons.

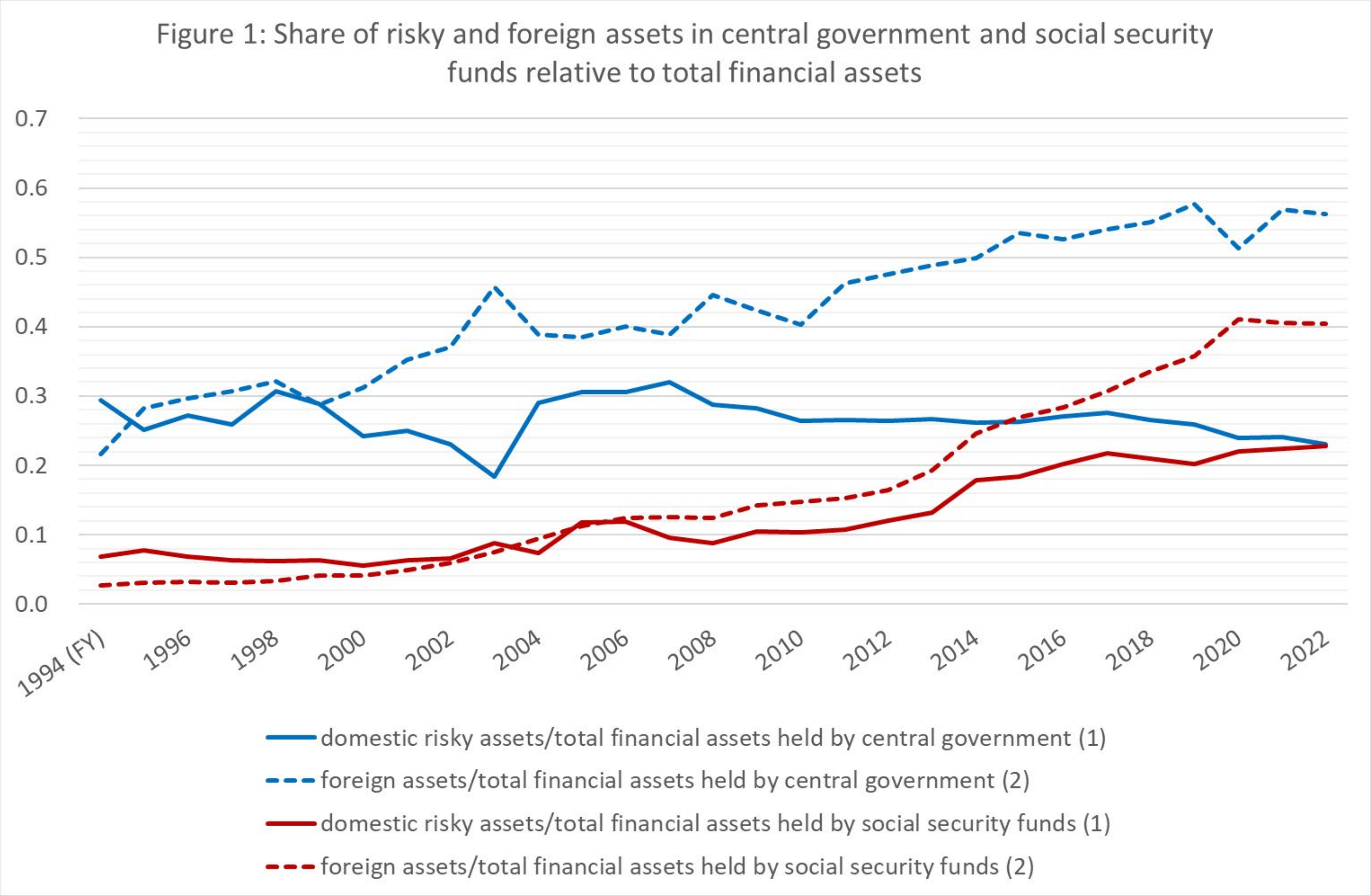
- They demonstrate that **as real rates decline**, the consolidated government expands a fiscal space by taxing less financially sophisticated households.

My remarks concern…

- They propose a new measure of primary fiscal balance, but they do not treat extended (market-based) one explicitly.

- Here, I construct time-series of **market-based primary fiscal balance**, and examine their findings and implications using my constructed data.

The foreign exchange fund special account and the social security funds indeed hold huge positions of risky assets such as equity and foreign assets.



A careful look at not the past decade (2012FY-), but the past three decades (1994FY-)!

- Japan's fiscal policy benefited from the $r \lesssim g$ region and asset market booms, resulting from extremely low interest rate policy in the past decade, but not necessarily in the past three decades.

average	real GDP growth	real weighted-average JGB yield
1994-2000	1.4%	**3.7%**
2001-2010	0.6%	**1.8%**
2011-2020	**0.3%**	**0.5%**
2021-2023	**1.9%**	-1.3%
1994-2023	1.4%	**3.5%**

Extension of primary fiscal balance

- Conventional primary fiscal balance
  - $\boldsymbol{\Delta D = -(T - G) + r^D D}$
  - If $g > r^D$, then D/Y is sustainable even with $T - G < 0$.
  - However, $g > r^D$ is not a long-run case for the Japanese economy.

- Extension of primary fiscal balance treats risky asset-holding explicitly
  - $\boldsymbol{\Delta D = -\left[\left(\hat{T} + r^A A\right) - \left(\hat{G} + \Delta A\right)\right] + r^D D}$
  - Even if $g < r^D$ and $\hat{T} - \hat{G} < 0$, then D/Y is still sustainable with $\left[\left(\hat{T} + r^A A\right) - \left(\hat{G} + \Delta A\right)\right] > 0$.

Market-based primary fiscal balance (1)

- $\boldsymbol{G}$ always includes $\boldsymbol{\Delta A}$ (net asset purchases) as government expenditure.

- $\boldsymbol{T}$ usually includes **realized** $\boldsymbol{r^A A}$ as government revenue, but not **unrealized** $\boldsymbol{r^A A}$ (capital gains/losses).

  - Thus, $\boldsymbol{\left[\left(\hat{T} + r^A A\right) - \left(\hat{G} + \Delta A\right)\right] = (T - G) + r^A_{unrealized} A}$

Market-based primary fiscal balance (2)

- Conventional primary fiscal balance
  - $\boldsymbol{T - G = \left(\widehat{T} + r^{A}_{realized}A\right) - G}$ has been negative in the past three decades, and it may continue to be negative in coming decades in Japan.

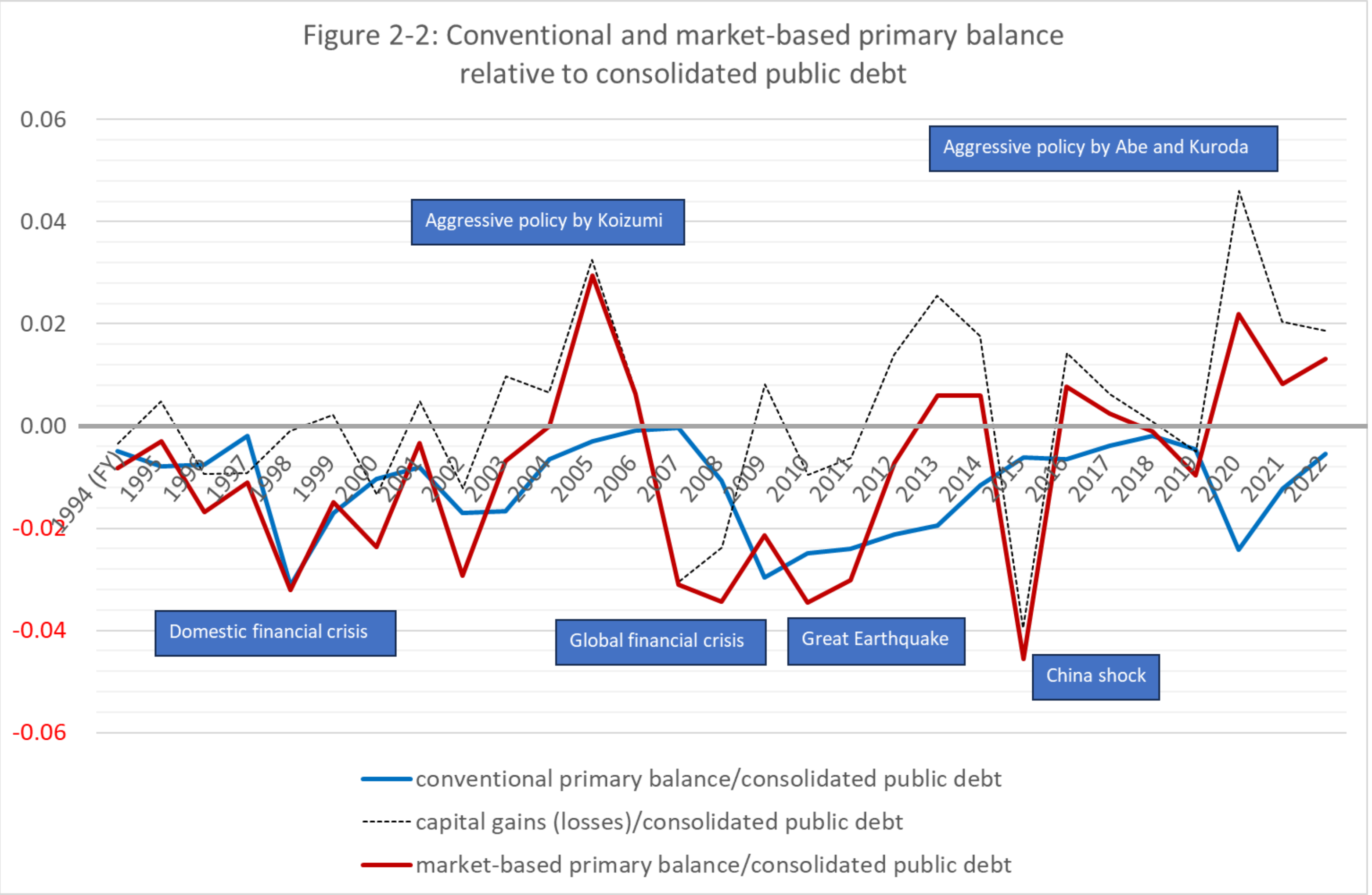
- Market-based primary fiscal balance
  - $\boldsymbol{(T - G) + r^{A}_{unrealized}A}$ is not necessarily negative.

Constructing time-series of market-based primary fiscal balance

- Let us obtain $r^{A}_{unrealized}A$ (capital gains/losses) from BOJ flow of funds, tables of reconciliation between flows and stocks for the consolidated government.
  - The flow tables are valued on a transaction basis, while the stock tables are marked to the market. Thus, a difference between the two tables represent unrealized returns.

- Consolidated public debt is computed for the general government, BOJ, and public financial institutions, with cross-holding of government bonds among the three categories cancelled out.

Large capital gains changed conventional primary balance from negative to positive, but large capital losses deepened fiscal deficit.



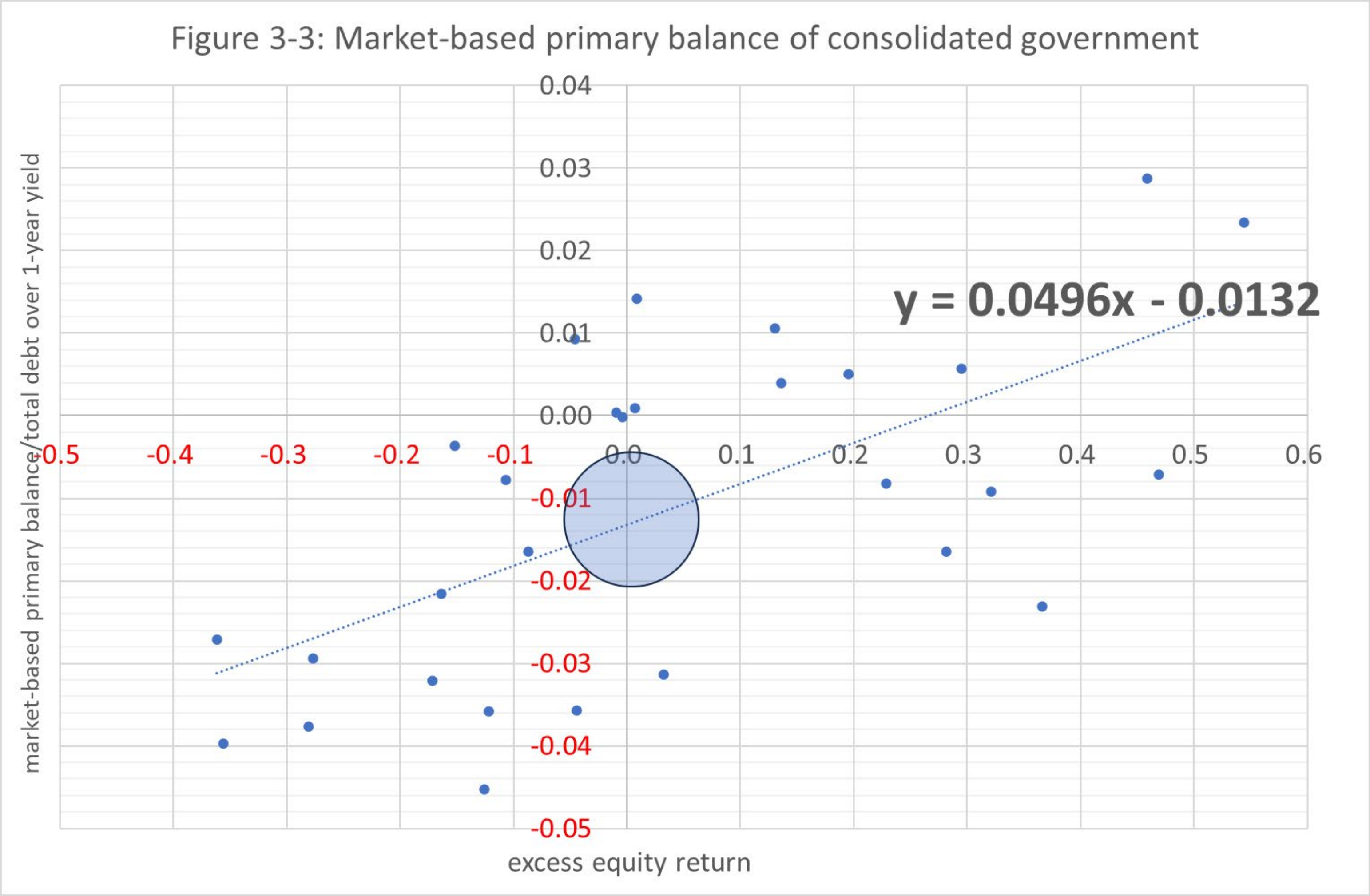
A more careful look at the data…

- Excess returns on consolidated public debt are defined as over 1-year JGB yield.

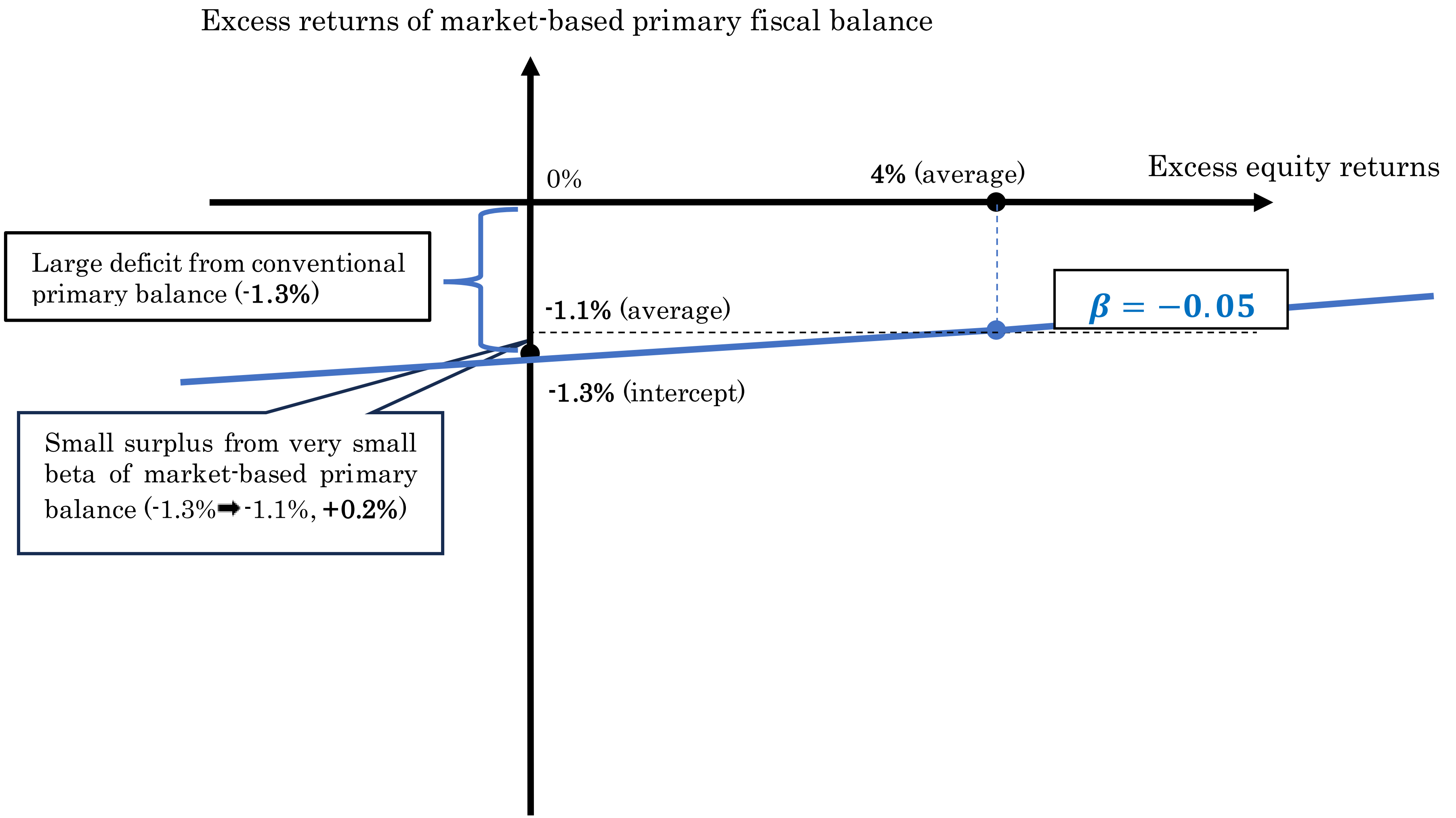
- According to average behavior (1994-2022)

1994-2022	average	standard deviation
excess equity return	**+4.0%**	**25.0%**
excess return on conventional primary fiscal balance/consolidated public debt	-1.4%	1.0%
excess return on market-based primary fiscal balance/consolidated public debt	**-1.1%**	**2.0%**

What we find from a beta regression is <u>significant, but slightly positive beta</u> with a <u>largely negative intercept</u>.



The consolidated government has been forced to bear negative excess returns on their debt positions on the average, despite holding huge amounts of domestic and foreign risky assets.



Lessons from the inclusion of unrealized capital gains/losses in computing primary fiscal balance for the consolidated government (1)

- Important to distinguish between
  - a phase of asset market booms, which were accompanied by low interest rate policy, and
  - a phase of asset market slumps, which were caused by domestic and global financial crises, large-scale natural disaster, and China shocks.

- In the boom phase with declining real interest rates,
  - Huge capital gains from risky asset investment improved Japan's fiscal positions remarkably.
  - But inequality became grievous between those holding risky assets and not holding them.

Lessons from the inclusion of unrealized capital gains/losses in computing primary fiscal balance for the consolidated government (2)

- In the long-run, however, capital gains are almost cancelled out by capital losses.
  - Thus, the consolidated government still faces large deficit from conventional primary fiscal balance on the average.
  - Whether Japan's fiscal policy is sustainable or not remains unsolved, given $r > g$ in the long-run.
- I completely agree with the authors' **'financial repression' interpretation** of the current state of Japan's fiscal and monetary policy.
  - Those who hold bank deposits only are currently and heavily taxed under financial repression.

My final comment: We are still trapped in financial repression even after a negative interest rate policy and YCC were lifted last March.