Discussion of "What about Japan?"
by Chien, Cole, and Lustig*

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1 Introduction

Chien, Cole, and Lustig study a central question for Japan, with implications for other advanced economies with large public balance sheets: how can Japan sustain very high public debt? Standard discussions of debt sustainability focus on gross government debt and on the comparison between the return on government debt and the growth rate of the economy. This paper shifts the focus to the consolidated public-sector balance sheet. In this balance sheet, the public sector not only issues liabilities but also holds large financial assets. These assets generate returns, and the spread between the return on public assets and the cost of public liabilities is central for evaluating Japanese debt sustainability.

A useful benchmark for interpreting the paper is the growing literature on fiscal policy when safe government borrowing rates are persistently below economic growth. Blanchard (2019) emphasizes that, if safe rates remain below growth, $r < g$, debt rollovers can be feasible and the fiscal costs of public debt are lower. Mehrotra and Sergeyev (2020) uses evidence from advanced economies to show that $r < g$ occurs frequently, but that this difference is also volatile. Following Bohn (1995), this literature also highlights that in stochastic environments debt sustainability depends on the state-contingent valuation of future fiscal variables rather than on deterministic debt valuation alone. Bassetto and Cui (2018) revisits the government valuation equation and the fiscal theory of the price level when the return on public debt can be below growth, distinguishing low rates due to dynamic inefficiency, liquidity premia, and the favorable risk profile of government debt. Reis (2020) sharpens the constraint by studying the empirically relevant case $r < g < m$, where m is the marginal product of capital: public debt can contain a premium associated with safety and liquidity, but the premium and the resulting fiscal space have an endogenous upper bound. Aguiar, Amador, and Arellano (2024) focuses on the welfare implications of debt policies in heterogeneous-agent economies with

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$r < g$ and shows that the feasibility of robust Pareto improvements depends on aggregate saving elasticities. Angeletos, Lian, and Wolf (2024) studies a complementary self-financing channel in New Keynesian environments with nominal rigidities and non-Ricardian households, showing that fiscal deficits can partly finance themselves through a demand-driven expansion of the tax base and through inflation that erodes the real value of nominal government debt. These papers make the low safe rate and the liquidity value of public debt central for fiscal space. In these frameworks, Japan's debt sustainability centers mainly on the comparison between the safe rate and growth and on the factors that determine these variables.

Chien, Cole, and Lustig depart from this approach. Their fiscal arithmetic is not that Japan can roll over debt because the return on government debt is below growth, $r_B < g$. It is that, once the public sector is consolidated, the government holds a large position in financial assets and earns a spread between the return on those assets and the cost of its liabilities. These asset returns can offset part of the debt costs when $r_A > r_B$.

The main idea is that Japan's fiscal position needs to be assessed from a consolidated government budget with assets and liabilities, with each asset carrying a specific return. The paper emphasizes that net debt is much lower in the consolidated public sector and that the public sector earns a spread between the return on assets and the cost of liabilities. Let B_t denote public-sector liabilities and A_t denote public-sector financial assets. Consolidated net debt is

$$ND_t = B_t - A_t.$$

Using the consolidated government budget constraint, the paper argues that deficits relative to output, $\frac{\text{deficit}}{Y}$, depend on the levels of assets and debt, as well as on return differentials. In a steady state, the fiscal arithmetic can be written as

$$\frac{r_A - r_B}{1+g}\frac{A}{Y} - \frac{r_B - g}{1+g}\frac{ND}{Y} = \frac{\text{deficit}}{Y},$$

where r_A is the return on assets, r_B is the return on liabilities, g is the growth rate of the economy, $\frac{A}{Y}$ is the asset-to-output ratio, and $\frac{ND}{Y}$ is the net-debt-to-output ratio. This expression makes clear the paper's central mechanism. A deficit can be financed by a sizable return differential on the asset position, $\frac{r_A - r_B}{1+g}\frac{A}{Y}$, or by a low return on safe debt relative to growth, $r_B < g$, which reduces the debt-service burden on net debt. If the public sector earns a large enough spread, $r_A > r_B$, asset returns can offset debt costs even when the traditional comparison between debt returns and growth is less favorable.

The balance-sheet magnitudes are large. The paper documents that in 2023, total consolidated public-sector liabilities were about 276 percent of GDP, total financial assets were about 181 percent of GDP, and net debt was about 94 percent of GDP. The return differentials are also large. Since 2013, the return on public-sector assets has been about $r_A = 5\%$, while the cost of public-sector liabilities has been about $r_B = 0.4\%$. These facts make the paper's main point compelling. The evaluation of government debt sustainability in Japan requires adding financial assets and return differentials to the analysis.

The paper is also relevant beyond Japan. Central-bank balance sheets have expanded substantially in other advanced economies. Federal Reserve financial assets are now close to 20 percent of GDP, while they were about 6 percent of GDP in 2006. Eurosystem financial assets are about 40 percent of GDP, while they were about 10 percent of GDP in 2006. These facts suggest that large public balance sheets are no longer a special feature of Japan. The question of how to evaluate public debt when the public sector also holds large assets has broader implications.

A central question for this discussion is what drives the return differentials. The paper's interpretation is that the public sector has engineered these differentials through financial repression and monetary policy. In this view, the government borrows short and cheaply, saves in high-return assets, and earns the spread between asset returns and funding costs. An alternative view is that part of the return differential reflects convenience yields from government debt and the franchise value of government debt. Government liabilities and deposits may provide liquidity services to households and financial institutions. If these liquidity services are valuable, investors are willing to hold government liabilities at low returns. This force can rationalize part of the same return differential emphasized in the paper.

In this discussion, I use a framework with government assets and debt based on Aguiar, Amador, and Arellano (2026). The framework organizes the findings of the paper under the interpretation that return differentials can reflect liquidity-based convenience yields. The model delivers three lessons. First, return differentials can arise because government debt provides liquidity services, not only because of financial repression. Second, aggregate consumption and inflation depend on net debt, $B - A$, rather than on gross debt alone. Third, taxes depend on debt, assets, equilibrium returns, and the convenience yield on government liabilities.

The numerical experiments illustrate these points. When debt rises together with assets, net debt rises by less and the responses of consumption and inflation are more muted. Financial assets improve fiscal space in the long run, but accumulating them is costly in the short run because taxes are needed to buy the assets. The redistribution effects also depend on the counterfactual policy. Old households benefit from higher returns, while young households prefer lower rates and lower net debt. These results suggest that a full evaluation of Japan's public balance sheet requires a structural framework and a quantification of financial repression relative to private demand for liquid government liabilities.

2 A framework with government assets and debt

I use a perpetual-youth model with government assets and debt in a New Keynesian environment based on Aguiar, Amador, and Arellano (2026). The model contains households, entrepreneurs, a fiscal government, and a monetary authority. Households save in liquid government bonds that provide liquidity benefits and in other assets. Entrepreneurs set prices subject to nominal rigidities. The fiscal government issues debt, holds financial assets, and levies taxes. The monetary authority follows an interest-rate rule.

The fiscal authority's flow budget constraint is

$$T(t) = r_B(t)B(t) - r_A(t)A(t) - \dot{B}(t) + \dot{A}(t),$$

where $T(t)$ is tax revenue, $B(t)$ is government debt, $A(t)$ is government assets, $r_B(t)$ is the return paid on government debt, and $r_A(t)$ is the return on non-liquid assets. Taxes fund interest service on the debt net of returns from financial assets, together with the net resources used to change debt and asset positions. This equation is useful for the discussion because it separates gross debt from assets and makes clear that the fiscal cost of public liabilities depends on the spread between r_A and r_B.

Households die and are born at rate λ. A cohort s at time t has preferences over consumption, labor, and liquidity given by

$$\int_t^\infty e^{-(\rho+\lambda)(\tau-t)} \left[\log c(s,\tau) + \psi \log(1 - l(s,\tau)) + \nu \log b(s,\tau)\right] d\tau.$$

The household budget constraint is

$$\dot{b}(s,t) + \dot{a}(s,t) = (r_B(t) + \lambda)b(s,t) + (r_A(t) + \lambda)a(s,t) + w(t)z(s,t)l(s,t) - T(s,t) - c(s,t).$$

Households have access to two assets. The liquid asset is government debt, $b(s,t)$, which provides liquidity services. The other asset is denoted by $a(s,t)$. I consider the case in which households hold positive liquid government debt and a negative position in the other asset, $b > 0$ and $a < 0$. Annuity markets are available, productivity $z(s,t)$ declines with age, and for simplicity economic growth is set to zero, $g = 0$.

Households choose consumption, labor, and the two types of assets to maximize lifetime utility. Their optimality conditions are

$$\begin{aligned}
\frac{\dot{c}(s,t)}{c(s,t)} &= r_A(t) - \rho, \\
\psi c(s,t) &= w(t)z(s,t)\left(1 - l(s,t)\right), \\
b(s,t) &= \frac{\nu}{r_A(t) - r_B(t)} c(s,t).
\end{aligned}$$

The last equation is the liquidity-demand condition. It shows that households are willing to hold government debt because it provides liquidity services. The presence of liquidity services implies a convenience yield on government debt and therefore $r_A(t) > r_B(t)$. In this environment, a return differential between public assets and government liabilities can arise from the demand for liquid government debt.

As shown in Aguiar, Amador, and Arellano (2026), aggregation delivers a simple expression for the dynamics of consumption. Consumption aggregates even though cohorts differ, as newborns have zero wealth and higher productivity. Aggregate consumption evolves according to

$$\frac{\dot{C}(t)}{C(t)} = r_A(t) - \rho + \alpha - \mu_\nu \frac{ND(t)}{C(t)},$$

where $\mu_\nu = \frac{(\rho+\lambda)(\alpha+\lambda)}{1+\psi+\nu}$ and aggregate government net debt is $ND(t) = B(t) - A(t)$. This condition shows that the dynamics of aggregate consumption depend on net debt and the equilibrium level of asset returns, $r_A(t)$.

In steady state, this natural real interest rate depends on the ratio of net debt to consumption:

$$r_A = \rho - \alpha + \mu_\nu \frac{B-A}{C}.$$

Thus, the natural rate increases with the ratio of government net debt to aggregate consumption. The return on government debt tends to be lower than this natural rate because of its liquidity services. The associated convenience yield depends on both the natural rate and the level of gross debt, as seen by aggregating the household optimality condition with respect to liquidity services, which in steady state gives

$$r_B = r_A - \nu \frac{C}{B}.$$

Using these steady-state conditions in the government budget constraint gives

$$T = r_B B - r_A A = r_A(B - A) - \nu C.$$

This expression says that taxes fund interest payments on net debt, $B - A$, at the natural rate of interest, net of the convenience revenue νC. It is interesting that here the interest cost of servicing net debt is the natural rate of interest, r_A, and not the low return on government debt, r_B. Moreover, in this framework, convenience-yield revenue reduces taxes, but it is independent of the level of debt; instead, it is constant and proportional to consumption.

The model in Aguiar, Amador, and Arellano (2026) also includes a standard New Keynesian production sector. Entrepreneurs produce differentiated goods and face Rotemberg costs of adjusting prices. Inflation satisfies a New Keynesian Phillips Curve,

$$\dot{\pi}(t) = [\hat{\rho} - g_Y(t)]\, \pi(t) + \hat{\kappa}\, [C^\star - C(t)]\,,$$

and monetary policy follows an interest-rate rule,

$$i(t) = \bar{\iota} + \theta_\pi \pi(t),$$

with $\theta_\pi > 1$, a zero inflation target, and $\bar{\iota}$ equal to the baseline equilibrium natural real rate. The New Keynesian block is not the main focus of the discussion, but it is useful because it allows government balance-sheet policy to affect consumption and inflation through equilibrium rates.

This framework rationalizes the return differential between assets and government debt as arising from the liquidity benefits and associated convenience yield of government debt. The paper instead interprets the return differential as a manifestation of financial repression and monetary policy strategies, such as yield curve control. These two views are not necessarily mutually exclusive. An important quantitative question is how much of the spread between r_A and r_B is generated by financial repression and how much is generated by demand for liquid government liabilities. This is an important open question for future work on debt sustainability.

3 Experiments with debt and assets

This section presents a few numerical experiments using the model to illustrate several of the paper's main points. The experiments compare an expansion of government debt only with an expansion of debt together with financial assets. This comparison is useful because debt is the same in both experiments, while assets differ. It isolates the role of net debt and the fiscal consequences of asset accumulation. The experiments show that, for aggregate consumption and inflation, only net debt matters, while for aggregate taxes, the dynamics of both net debt and gross debt matter. They also show that although financial assets reduce taxes and expand fiscal space in the long run, accumulating them is fiscally costly in the short run. Using financial assets therefore trades off a short-run fiscal cost for a long-run fiscal benefit.

3.1 Net debt and aggregate dynamics

The first result is that only net debt matters for the dynamics of consumption and inflation. In the debt-only experiment, gross debt rises and assets do not. In the debt-plus-assets experiment, gross debt follows the same path, but assets also increase. Because assets rise in the second experiment, net debt is lower.

Figure 1 illustrates this point. The first panel shows the paths of debt and assets. Debt is the same in both experiments, but assets increase in the experiment shown by the black solid line. The second and third panels show the responses of consumption and inflation. Consumption and inflation respond less when the increase in debt is accompanied by an increase in assets. These differences arise because, in the model, only net debt matters for consumption and inflation. The economy with increased assets has lower net debt and therefore features more muted responses in consumption and inflation.

This result formalizes one of the main points of the paper: the government's net debt matters more than gross debt. In the model, the consolidated balance sheet is important because assets change net debt and therefore change equilibrium outcomes. Gross public debt is not sufficient for understanding the aggregate implications of fiscal policy.

3.2 Fiscal space

The second result concerns fiscal space and taxes. Unlike the case of aggregate consumption and inflation, where only net debt matters, taxes depend on both the level of debt and the level of

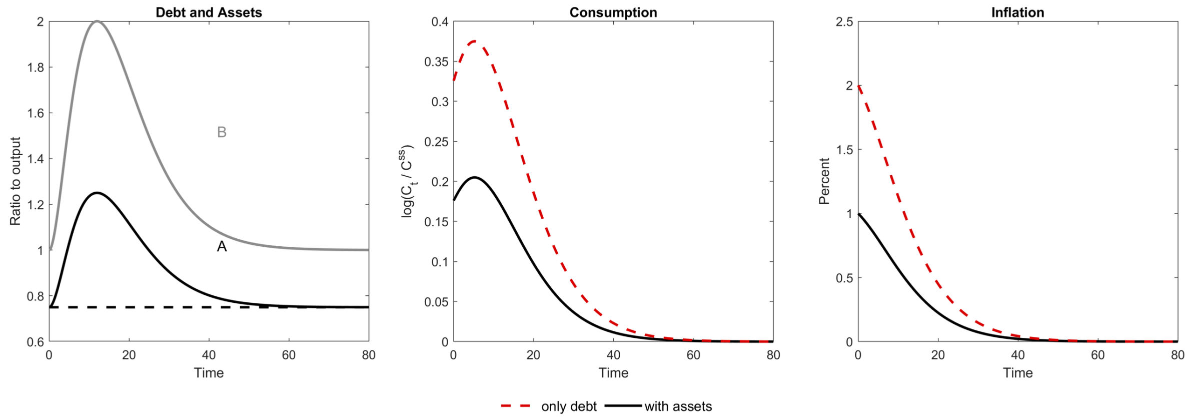

Figure 1: Net debt and aggregate dynamics. Debt is the same in both experiments, but assets increase in the experiment shown in the solid black lines. Consumption and inflation responses are more muted when the debt expansion is accompanied by an expansion of assets, because net debt is lower.

net debt. Using the aggregate demand function for government debt and the government budget constraint gives the following expression for taxes:

$$T(t) = r_A(t)[B(t) - A(t)] - \nu C(t) - \dot{B}(t) + \dot{A}(t).$$

Taxes are high when interest on net debt are high, $r_A(t)[B(t) - A(t)]$, when convenience revenue is low, $\nu C(t)$, and when the government either reduces debt or accumulates assets. Importantly, this equation shows that the transition path matters, since a high level of financial assets requires costly accumulation of those assets. Asset changes affect taxes directly through $\dot{A}(t)$ and indirectly through equilibrium returns and convenience yields.

Figure 2 shows the tax implications of the experiments. The left panel shows the difference in taxes between the economy with only a debt expansion and the economy that also expands assets. Early on, taxes are lower in the economy that only uses debt relative to the economy that also expands assets. Buying assets during the transition is fiscally costly and requires tax revenues. Later in the transition, in contrast, taxes are higher in the economy with only debt. A sizable stock of financial assets reduces the net debt burden and therefore lowers taxes in the economy with assets. This result qualifies the paper's argument that assets improve fiscal space for governments. The experiment shows that this is true in the long run. In the short run, however, accumulating assets has fiscal costs.

This point complements the fiscal-space argument in the paper. Financial assets and return differentials can expand the resources available to the government, but accumulating assets also affects the transition. A full evaluation of fiscal space therefore requires both the steady-state return differential and the dynamic path of taxes, assets, and rates.

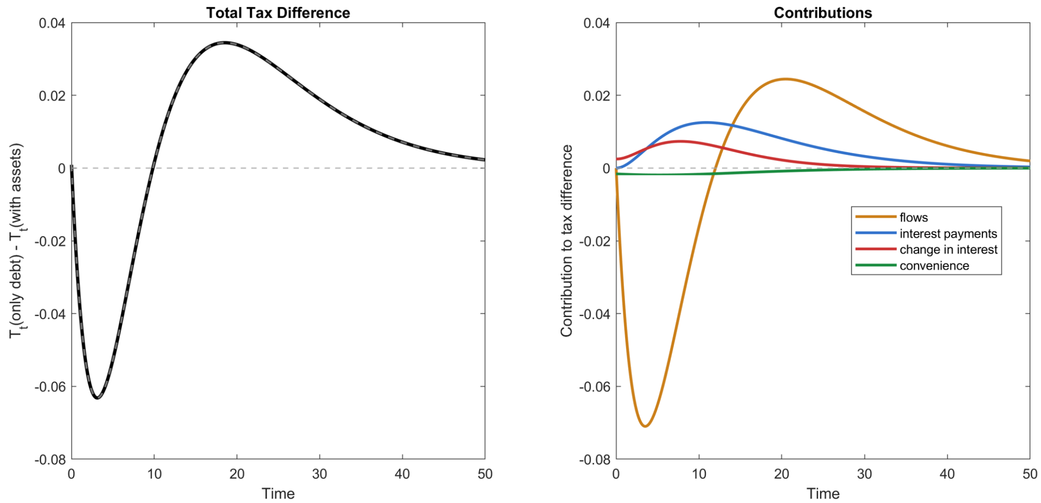

Figure 2: Fiscal space beyond the steady state. Tax paths differ in an expansion of only debt compared with an expansion of debt and assets. Financial assets increase taxes early in the transition, as taxes are required to accumulate assets.

3.3 Redistribution effects

The third result concerns redistribution. As highlighted in Aguiar, Amador, and Arellano (2026), the optimal level of interest rates differs between young and old households because wealth grows with age. Young households prefer low rates because they start with no wealth, which means that a low level of government net debt is best for them. Old households prefer larger net debt because they benefit from high returns on their wealth.

The model predicts that larger net debt benefits the old through higher equilibrium rates. This implies that older households prefer the economy with fewer assets. This result is consistent with the narrative in the paper that the old benefit from higher returns on their wealth, but the implications for debt point in a different direction. In the model, with equilibrium returns responding to fiscal policy, a higher return is achieved with higher net debt. In terms of the return differential, the model predictions contrast with the narrative in the paper. In the model, young and old households would like a zero return differential because they both want abundant liquidity.

Having a framework with endogenous returns on debt and assets that respond to fiscal policy is important for interpreting the distributional implications of the consolidated government budget constraint. The paper emphasizes that low-rate policies and balance-sheet positions have different effects across households, but its accounting is silent on how fiscal policy itself affects returns. Redistributive effects of gross and net debt positions can arise through their effects on equilibrium rates. Relatedly, welfare implications always depend on the counterfactual policy and on how that policy affects returns. In the model, the fact that the old prefer high returns means that a large fiscal asset position is not desirable for this group relative to the same gross debt without assets. The experiment highlights the importance of the counterfactual policy in assessing the distributional effects of policy.

4 Quantifying demand for government debt

A main point of the model of Aguiar, Amador, and Arellano (2026) is that private-sector forces can shape the aggregate demand for government debt. In the framework, households demand government debt as a savings vehicle for old-age income and because government debt provides liquidity services. In the context of Japan, these two demand factors have been important sources of demand. First, Japan's aging population has been an important source of savings demand. In 2024, for example, people aged 65 and older made up 30% of Japan's population, compared with 18% in the United States. Eggertsson, Mehrotra, and Robbins (2019) shows, using a quantitative overlapping-generations model, that aging dynamics have sizable implications for savings demand. Second, Japan's captive demand for deposits, which the paper convincingly emphasizes, has been another important source of demand. Such captive demand is consistent with return differentials arising from convenience yields and with the mechanisms presented in the model. However, this force may be changing with the recent increase in stock-market participation, especially through the expansion of Nippon Individual Savings Accounts.

The model's view of private-sector demand as a driver of return differentials contrasts with the paper's argument that the return differential arises from policy actions, namely central-bank policy and financial repression. Certainly, a large central-bank balance sheet can absorb government debt, reduce private-sector holdings of debt, and thereby lower government interest rates. Moreover, financial repression is an interesting and plausible mechanism, given its historical use. Payne and Szőke (2026) provides a useful reference point for a U.S. application based on a historical account of financial repression.

A more complete quantitative evaluation that integrates private-sector forces with policy factors would be useful for assessing debt sustainability. The same balance-sheet facts can be interpreted through the lens of financial repression or through the lens of convenience yields. A calculation that distinguishes between these explanations would strengthen the interpretation of the return differential.

5 Conclusion

The paper offers an interesting and convincing account of government debt sustainability in Japan. It presents a persuasive analysis of the importance of adding financial assets and return differentials to the evaluation of debt sustainability. At the same time, understanding the sources of the return differential, including policy interventions, liquidity demand, and deposits, should be an important next step. The paper leaves us with novel facts and many questions to wrestle with in future work.

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