

GCFP Policy Brief

The Economics of Government Investment Policies
and Why They Cannot Undo Fiscal Imbalances

Deborah Lucas, MIT¹

Against a backdrop of increasingly unsustainable government debt burdens in the U.S. and globally, there has been renewed interest in using government investment policies to reduce fiscal imbalances. Should these policies be expected to work? My short answer is an unequivocal “no.” The reasons why are explained in this policy brief. The recent proposal by Senators Cassidy and Kaine to shore up Social Security with a new investment fund is also analyzed.

1. When can government investments improve the fiscal situation?

Government investments can be fiscally beneficial when they are used as vehicles to diversify and save. Natural resource-rich countries like Norway and Kuwait use their Sovereign Wealth Funds (SWFs) to save a portion of oil revenues for the benefit of future generations.² Such SWFs typically diversify a government’s natural resource wealth by investing in domestic and international financial and real assets, including stocks, bonds and real estate. As well as storing wealth for future generations, the investment fund provides fiscal space that can be used as a buffer for emergency spending needs or to offset commodity price shocks that erode government revenues.

Government investments in real assets that provide “positive externalities” but that the private sector finds unprofitable to invest in, such as critical infrastructure or basic research, may promote higher productivity and economic growth. However, the fiscal benefits, such as higher tax revenues from higher GDP, are indirect and likely to be small.

In sum, government investments can be fiscally beneficial when they provide a means of saving and diversifying government wealth. Secondly, government funding for growth-enhancing projects that otherwise would not be undertaken may modestly increase fiscal resources.

¹ Sloan Distinguished Professor of Finance, and Director of the MIT Golub Center for Finance and Policy (GCFP). Any views expressed are those of the author and do not reflect those of the GCFP.

² Texas and Alaska similarly have SWFs to save a portion of oil and gas revenues for future generations.

2. The fiscal effects of creating a SWF for the U.S.—An economic perspective

Unlike countries that invest government surpluses in a SWF to save and diversify, the U.S. federal government is in a negative net worth position. The only way a nation with negative net worth can fund a newly created SWF or similar investment vehicle is by issuing debt, raising taxes, or selling existing assets. I will focus on debt financing, which appears to be the most likely scenario for funding a U.S. SWF.

Simultaneously issuing government debt and buying assets whose returns are risky, such as stocks and corporate bonds, is, at best, a value-neutral transaction.³ The economic logic is simple. For instance, if the government issues additional debt of \$1 trillion to fund the purchase of \$1 trillion of stocks, the net value of the two transactions is zero. The government's balance sheet is larger because both assets and liabilities have increased by \$1 trillion, but government net worth is unchanged. The situation is illustrated graphically in Annex 1.

Fiscal neutrality is the best-case scenario because history suggests that government-controlled companies tend to be significantly less profitable than their private sector counterparts.⁴ Continuing vigilance and political willpower would be required to protect the funds from political interference and diversion to other than their intended uses. Furthermore, managing an investment portfolio entails significant trading and compensation costs.

A balance sheet analysis is the most direct way to show that creating a SWF does not reduce the size of fiscal imbalances. However, supporters of the idea generally focus on expected cash flows, and it is important to understand why cash flows tell an incomplete story about fiscal effects. Although adding a highly leveraged stock portfolio to the government's balance sheet yields a positive net return on the invested funds on average, it also increases the risk of net losses. The higher average return on assets that entail risk is the market-determined compensation investors receive for assuming greater risk. That risk is costly to the government as well. For the government, losses on stock market investments are most likely to occur during economic downturns when fiscal resources are

³ Similar to a debt-funded asset purchase, a tax-funded asset purchase or one that is funded by the sale of existing assets is at best a value-neutral transaction. The government exchanges one asset (e.g., tax revenues) another (a new financial or real investments) of equal value. Secondarily, the transactions may reduce the net worth of the government because higher taxes discourage work and investment, and because the government investments may be managed less efficiently than if they remained under private control.

⁴ International Monetary Fund. (2020). "State-Owned Enterprises: The Other Government," Chapter 3, Fiscal Monitor, April

scarce. Ultimately the risk is a cost to taxpayers and the public, who effectively serve as uncompensated equity holders in all risky government investments.

3. The fiscal effects of creating a SWF for the U.S.—Misperceptions and their causes

The conclusion that borrowing money to invest in risky assets would not improve the government's fiscal situation and possibly would worsen it is a fairly uncontroversial one among economists. Nevertheless, several recent initiatives, including an executive order by the Trump administration to create a plan for a SWF, and a bipartisan proposal by several senators to create a Social Security investment fund, suggest that many policymakers believe otherwise.

What leads policymakers to think that these schemes could significantly increase fiscal resources? Important contributors to the misperceptions are government accounting rules and conventions that insert a wedge between the budgetary effects of investment policies and economic reality. The core problem is that in budgeting for investments, the cost of market risk to the government is generally ignored. Cash basis accounting and the lack of recognition of opportunity costs also play a part.⁵

Turning back to government purchases of risky assets financed with debt, the purported fiscal benefits of this strategy rely on a sort of budgetary alchemy. Governments typically use their own borrowing rate to discount expected cash flows from investments, even when investors discount those cash flows at much higher rates that reflect the cost of bearing the associated risk. For example, consider an investment of \$1,000 in a stock that on average returns 10% per year in dividends and that is expected to be sold in 10 years for \$1000. The investment would appear to be immediately worth \$1,487 to the government if it is valued by discounting the expected cash flows at the government's 4% borrowing rate. The higher average return on stocks over government debt is treated as a free lunch, and the government has a money machine that can close any fiscal deficit, at least on paper.⁶

The distortions caused by budgetary rules that favor risky investments could be corrected if there were the political will to do so. The most straightforward fix would be to apply the same fair value accounting principles that are used by the private sector to account for government investments.

⁵ For a more complete explanation of why market risk is a cost to the government and the distortions caused by current government accounting conventions see: Deborah Lucas, "Valuing the Cost of Government Credit Support: The OECD Context" Economic Policy July 2014 pp. 553–597.

⁶ Analyses that add up the expected net returns and treat the sum as a gain to offset deficits have a similar flavor.

4. An analysis of Cassidy-Kaine (C-K) proposal

To buttress Social Security, Senators Cassidy and Kaine have proposed the creation of a new \$1.5 trillion investment fund invested in stocks, bonds, and other assets, to be funded by Treasury borrowing. The returns on the investments would be allowed to accumulate in the fund over 75 years, at which time the Treasury would be paid back for covering the shortfall between Social Security revenues and benefits over that time. The idea is that the higher average returns on the investment fund's private sector assets would fill a significant portion of the projected shortfalls.

To understand the real effects of this proposal on the government's fiscal capacity, it is helpful to break it into two parts. The first part is the Treasury's issuance of an additional \$1.5 trillion in debt to create a new investment fund holding risky assets. The second part is the Treasury loan to the Social Security system and the accompanying authority granted to continue paying current law benefits for 75 years.

The effects of the first part of the proposal —Treasury borrowing money and investing it in risky assets—is identical to that of creating a federal SWF that was analyzed earlier. The same conclusion holds: A debt-funded investment in risky assets does not improve the government's fiscal position, and it could make it worse. The appearance of a gain depends on treating the risk premium on risky assets as a sure thing. When the cost of the additional investment risk is figured in, the appearance of any financial benefit disappears.

The bottom line is that creating an investment fund does not increase the government's net worth, no matter the investment horizon. Hence, it does not create real resources that can be used to shore up the Social Security system.

The second part of the proposal involves transactions between federal entities, and new authority to continue paying current law benefits. A loan from Treasury to the Social Security system is a loan from the government to itself that has no direct real effects on government spending or revenues. However, the authority for Treasury to fund Social Security system shortfalls has the effect of pushing into the far future the date when benefits would be cut without Congressional action. That reduced pressure on Congress could have real fiscal consequences by delaying legislative adjustments to taxes or benefits that are needed to bring the system into true fiscal balance.

The complex accounting surrounding the Social Security Trust Fund complicates understanding the economic and fiscal consequences of any reform plan that involves it. Fundamentally, the Trust Fund is an accounting mechanism that tracks the government's remaining spending authority to pay Social Security benefits. On a consolidated basis, Social Security payroll taxes add to federal revenues from other sources (income taxes,

etc.), and Social Security payments add to other expenditures. Whenever consolidated revenues exceed consolidated expenditure, there is net government savings and government net worth rises. Conversely, when consolidated expenditures exceed revenues, government net worth falls. Only legislation that changes Social Security payroll taxes or benefits has a real effect on the government's total net worth, and hence on its fiscal capacity.⁷

Whether the Social Security Trust fund, or another fund created on its behalf, holds riskier or safer assets does not change fiscal capacity for the same reasons that creating a SWF does not change it—borrowing money to invest in risky assets, or rebalancing an existing asset portfolio to hold riskier assets, are largely neutral transactions.

However, the Trust Fund balance, and the rate of return it is credited with, do have a real effect on the amount of standing authority that exists to pay Social Security benefits. Currently, the assets attributed to the Trust Fund are Treasury bonds. The interest earnings accruing to the Fund are linked to the average rate on Treasury debt held by the public. If instead the Fund were credited with earnings on a portfolio of riskier assets, on average its balances would grow faster and they would be more variable.

If Congress wanted to increase existing budget authority for the payment of future Social Security benefits, and to do that via the rate of return credited to Trust Fund balances, it could accomplish it without any actual government investments in risky securities. Rather, it could change the rules for crediting returns to the Trust Fund, for instance linking them to the returns on the S&P 500 instead of to returns on Treasury debt. If it wanted to shield the fund from the accompanying market volatility, it could put a floor on the rate of return that it is credited with. Effectively, the government would be writing financial derivative contracts with itself, changing accounting outcomes but causing no real fiscal effects beyond perhaps slowing action to address growing fiscal imbalances. Like the Cassidy and Kaine proposal and related ideas that have been put forth in the past like carving out private accounts, the Trust Fund would last longer and the day of reckoning for the Social Security system would be postponed. However, the fundamental imbalances in the Social Security system and in the overall federal budget would remain unaddressed.

⁷ The mechanics of the Trust Fund are quite different than those of a private sector investment fund. Trust Fund balances increase in any year that revenues (payroll taxes plus interest credited) exceed benefits paid out, and conversely, balances fall in years where benefits exceed revenues. Any Social Security cash surpluses or deficits are absorbed by Treasury. Surpluses (deficits) increase (decrease) the monies Treasury has available to cover the government's other expenses. Therefore, a surplus (deficit) decreases (increases) the debt that Treasury issues to the public by approximately the same amount that it increases the Trust Fund balance.

5. Hidden losses from investments in State-Owned Enterprises (SOEs)

Understanding the fiscal effects of investments in SOEs has become increasingly important with the renewed interest in industrial policy in the U.S. and elsewhere, and with the growth of China. SOEs comprise a large and growing share of the global economy. According to the IMF, the assets of the largest non-financial SOEs topped \$45 trillion in 2018 and represented 20% of assets of the world's largest 2,000 largest non-financial firms.

My recent research suggests that SOEs are often an unrecognized fiscal drag on governments because of unrecognized financial subsidies.⁸ The reliance on accounting profits as a proxy for economic profits has caused perceptions of the profitability of SOEs to be overestimated, significantly in some cases. For example, our analysis of the Tennessee Valley Authority (TVA), one of the largest SOEs in the US, reveals losses to the U.S. government on order of \$500 million per year over the last two decades, in sharp contrast to TVA's financial statements that report consistent profitability.

The root cause again is the lack of recognition of market risk. Interestingly, this isn't the fault of government accounting rules per se because most SOEs use the same financial reporting standards, GAPP or IFRS, as their private sector peers. Instead, the fundamental problem is that accounting profitability overstates economic profitability, whether for an SOE or for a private sector firm. Accounting profits will be positive, even if its stock holders receive a rate of return that is far below what could be earned on a similarly risky private sector investment. Accounting profits are positive as long as the firm is able to meet its fixed obligations to other claimants. Economic profitability requires returns that are commensurate with the risk borne by stock holders. Confusion about whether a firm is operating profitably is less common in the private sector, where managers get additional information on whether they are creating value from their stock prices.

These unrecognized losses from SOEs are a slow bleed of fiscal resources from governments. The bleed is unlikely to be staunched as long as it is invisible. Here too there is a practical solution. The bias in the information that policymakers receive would be removed if accounting profitability were replaced with a measure like Economic Value Added as the standard metric for assessing the adequacy of SOE returns.

⁸ See "Measuring Financial Subsidies to SOEs: An Asset Return Based Framework with an Application to TVA" (2025) by Deborah Lucas, Márcio G. P. Garcia and Tiago C. C. Solberg, MIT Working Paper, available at https://mitsloan.mit.edu/sites/default/files/inline-files/ValuingSubsidiesSOEs_16.pdf.

6. The disconnect between economic and budgetary effects of asset sales

Investing involves selling assets as well as buying them. The Trump Administration is considering a number of significant sales of government assets, most notably selling the mortgage giants Fannie Mae and Freddie Mac, federal lands, and student loans.

Clearly, in assessing whether to retain or sell an asset, policymakers need accurate information about its fiscal consequences--whether the proposed sale will add to or subtract from government wealth. As for asset purchases, government accounting rules in the U.S. often cause the budgetary effect of a sale to be significantly different than its economic effect, frequently showing a gain when there is a loss, and sometimes vice versa.

In most competitive market transactions, including those involving the government, purchases and sales of financial assets neither create nor destroy value. The seller relinquishes an asset in exchange for cash of equal value, and vice versa for the buyer. However, certain government asset sales may generate economic value, and therefore provide fiscal benefits, such as when the asset sold can be used more efficiently by the buyer. Government asset sales can also have fiscal costs, for instance, when the negotiated sales price for a piece of land is lower than what would be obtained for in a competitive auction.

The two main culprits that distort policymakers' and the public's perceptions about the true profitability of government asset sales are the use of cash accounting for financial instruments and the failure to mark the value of government assets to market before they are sold. Another way to describe the problem is the absence of depletion accounting.

To give a stark example, if the government owns a forest whose lumber is worth \$1 million at market prices, and the government cuts it down and sells the wood for \$200,000, the true economic cost to the government is a loss of \$800,000. However, the budget would record the transaction as a gain of \$200,000, with no offset for the foregone value of the trees.

A rule change that would align the budgetary and economic effects of government asset sales would be to require that all assets exceeding some threshold be marked to market (or an approximation thereof) prior to sale, and that the gain or loss be measured relative to that benchmark. Assets sold at fair value would properly be recorded as having no impact on the government's finances. Adjusting accounting rules to reflect economic reality is particularly important in the current moment, with the large number of significant asset purchases and sales being contemplated.

Annex 1: How a debt-funded SWF would affect the U.S. Government Balance Sheet

In September of 2024, the U.S. government’s balance sheet published by Treasury showed net worth of -\$39.9 trillion. This book value balance sheet does not include liabilities like future Social Security obligations, nor does it include the value of assets like future tax collections. Nevertheless, there is general agreement that the U.S. is in a negative net worth position. The simplified version of the 2024 balance sheet shown in Figure 1 is the starting point of this analysis.

Figure 1:

United States Government Balance Sheet as of 9/30/24	
(\$ billions)	
Assets	Liabilities
Cash \$1,178	Federal debt
Loan receivables \$1,751	\$28,339 + \$1,000
Property, plant & equipment \$1,313	Federal employee and veteran benefits \$15,033
Other \$1,420	Other \$2,174
	
	Total Liabilities
	\$45,546 + \$1,000
Sovereign Wealth Fund	
\$1,000	Equity -\$39,884
.....	
Total Assets \$5,662	
+ \$1,000	

Consider a government purchase of \$1 trillion in risky assets that will be held in a newly created SWF, financed by issuing an additional \$1 trillion in Treasury bonds. Figure 2 show the balance sheet immediately after the purchase. Both assets and liabilities increase by \$1 trillion, but equity or net worth stays the same.

Figure 2:

United States Government Balance Sheet as of 9/30/24

Assets		Liabilities	
Cash	\$1,178	Federal debt	\$28,339 + \$1,000
Loan receivables	\$1,751	Federal employee and veteran benefits	\$15,033
Property, plant & equipment	\$1,313	Other	\$2,174
Other	\$1,420		
		Total Liabilities	\$45,546 + \$1,000
			
Sovereign Wealth Fund	\$1,000	Equity	-\$39,884
.....			
Total Assets	\$5,662		
	+ \$1,000		