Do Central Bank Balance Sheets Matter?

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Outline

In a frictionless economy, the central bank balance sheet does not matter

Friction I: incomplete markets

Friction II: Political economy of central bank independence

Application to current policy situations

Concluding suggestions

Only the government's unified balance sheet matters

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- The private sector should care only about the unified balance sheet.

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- Might this make the central bank's balance sheet matter?
- It might, but Neil Wallace in his "Modigliani-Miller theorem for open market operations" showed that if fiscal policy is held constant, the central bank balance sheet has no influence on anything, even interest rates.

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- The profits and losses of the central bank then affect only the amount and timing of debt issue, not the stream of primary surpluses or deficits, which remains fixed.
- The central bank changes the mix of assets and liabilities the government offers to the public, but with the primary surplus stream fixed, the private sector can trade to the same allocation of risks that prevailed before any change in the balance sheet.

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- Widespread fear of default is therefore something like the opposite of a complete markets environment.
- So of course interventions like the balance sheet expansions of 2008-9 have an effect, and Wallace's argument does not apply.

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- After 2009 in the US, balance sheet expansion has not been mainly motivated by an attempt to reduce long rates despite short rates being near the zero floor.
- For this to succeed requires significant violation of Wallace's assumption that private markets can undo the effects on private risk-sharing opportunities of Fed asset purchases.
- This attempt may have had a small effect — estimates suggest perhaps 20 basis points.
- My own view is that its most important effects are likely to have been through its signaling of Fed views to market participants.

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- Perhaps less widely recognized is the fact that in order to control the price level with its policy instruments, the central bank requires fiscal backing.
- That is, the requirement is not just that the treasury not complain about interest changes; the treasury and the legislature must take fiscal actions in response to interest rate changes.

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- The assumption of this kind of fiscal response is called "passive" fiscal policy, and it is the standard assumption in macroeconomic models (though not in Wallace's).
- Backing is not directly threatened by central bank balance sheet expansion, though the large national debts of many countries could raise problems for backing.

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- The recent balance sheet expansions in central banks, because they lengthened asset maturity or involved purchase of otherwise risky assets, increased the risk of balance sheets showing negative net worth at market value.
- This could threaten the principle of non-interference.

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- DPV(remittances) can be negative, which is where recapitalization is required.
- But because non-interest-bearing currency is a non-trivial part of the balance sheet, usually assets are considerably more than interest-bearing liabilities.
- If target inflation is positive, seignorage ($\dot{M}/P$) is positive on average.
- Thus central banks can and do go for long periods paying positive remittances while their net worth at market value is negative.

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4. Assets plus present value of seignorage on current policy track fall below interest-bearing liabilities.(Must either obtain funds from the treasury, or change the policy track to one implying more seignorage.)
5. Central bank capital grows so large that fiscal authorities can't resist a raid.

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- Macro Del Negro and I have calibrated a simple, but nonetheless dynamic and general equilibrium, model of the US economy and the Fed balance sheet.
- We conclude that there is some chance that the Fed would encounter a level 1 or 2 problem — assets below all liabilities in value, or even zero remittances for a while with current accounting practices.

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- We conclude that there is some chance that the Fed would encounter a level 1 or 2 problem — assets below all liabilities in value, or even zero remittances for a while with current accounting practices.
- Our calculations suggest that it is quite unlikely that a capital injection would be required.

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- If markets were confident that the intervention would work, and that the ECB had fiscal backing, such an intervention would probably not result in balance sheet problems.
- But the question of fiscal backing for the ECB is uncertain, with northern-tier countries resisting any action that might lead to resources flowing from the Euro zone as a whole to distressed economies.
- As a result concerns about the balance sheet are a significant factor in European monetary policy making.

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- Balance sheet expansion as part of a lender of last resort operation is justifiable and effective.
- Very substantial expansions can have, once the crisis has passed, only minor effects on the economy or on the effectiveness of monetary policy.
- Expanded balance sheets do eventually raise the risk of a balance sheet problem that could impinge on central bank independence.
- So once the need for lender of last resort actions has passed, an orderly reduction of the balance sheet makes sense.