Some Comments on John Cochrane's "A New Structure for U.S. Federal Debt"

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Proposal

Issue two types of federal debt instruments, both perpetual and tax free:

a floating daily-rate coupon instrument that maintains a value of $1

a fixed-rate coupon instrument--$1 per period

Claims: increases liquidity by massively increasing the outstanding quantity of bonds that are perfect substitutes, reduces roll-over risks, allows retail investors to invest cheaply, increases provision of money-like assets, which confers important efficiency and financial stability benefits…

Other features: allow government to lower coupons if necessary, allow various types of swaps, …

Discussion

Two areas of discussion:

1. The discussion of the floating-rate instrument is perhaps not complete. For instance, one needs to consider the situation if the government is at risk of default.

2. Can we achieve something like the perpetual floating-rate note today? Yes, via Segregated Balance Accounts.

Floating-rate instrument, quotes from Cochrane:

"The Treasury allows investors to freely exchange this debt for bank reserves at the Fed, and thus to bank accounts and to cash."

"This debt becomes electronic, interest-paying money."

"Fixed-value floating-rate debt is default-free and therefore run-free in a way that the U.S. government is uniquely able to provide."

"The value of this debt is always $1.00 per bond. That value is guaranteed by a Treasury commitment always to buy or sell such debt at a price of $1.00. If a bank delivers $1.00 of reserves to the Treasury, the Treasury issues one bond, and vice versa."

"[I]t is natural for the Treasury to benchmark the floating rate to the interest that banks receive on reserves at the Federal Reserve…it clearly preserves the understanding that the Fed is in charge of short-term interest rate policy."

Questions

Cochrane states that floats and reserves are convertible one to one. Questions:

How is this one-to-one conversion implemented in practice? Does he have in mind a standing facility? Who manages it -- the central bank or the Treasury?

If everyone can invest in Treasuries but only banks can invest in reserves, how is the yield on Treasuries “benchmarked” to the interest rate paid on reserves?

While in normal times the answers to these questions may not matter much, in some circumstances, such as when default is a possibility, they do.

Close to default, the arrangement breaks down

Even if the central bank sets the rate on floating-rate notes, a difference between them and reserves is that reserves are nominally default free by definition, while floating-rate notes are not. If there is an epsilon of default risk, it is difficult to see how the Treasury can offer exactly the same return as the central bank offers on reserves.

For example, assume a debt ceiling…

Suppose, contrary to all good sense, that Congress agrees to tax and spend a certain amount, but then, unexpectedly, refuses to authorize the issuance of debt that is necessary to carry out the laws reflecting past tax and spending decisions (don't worry, this is only a hypothetical scenario).

In that scenario, we would see a divergence between the rate of interest on reserves—reserves are not subject to a Congressional debt limit—and the yield on the floating-rate note. Were the yields set to be the same, there would be a run on the Treasury, in which holders of floating-rate notes would exchange them for $1 of bank reserves.

A necessary dichotomy

The following arrangement for Cochrane's floating-rate notes would be feasible—is this what Cochrane has in mind?:

Notes are convertible into reserves, one-for one.

The Federal Reserve determines the interest rate paid on reserves.

The floating-rate paid on Treasury notes is determined in a daily auction.

The design of that auction could be one in which Treasury issues notes daily, or one that the Treasury arranges for both its own issuance, while including other sellers to participate, with Treasury always announcing the net issuance for the day, along with the offer curves of private sellers.

The dichotomy, continued

Under this arrangement, the Fed maintains interest rate control, and the rate on the Treasury's floating rate note could be below the interest paid on reserves (as reserves are only available to banks, so the note may be the more liquid instrument, as we see in the current environment) or above the rate of interest paid on reserves, if default risks are high.

An important issue is the design of the Treasury's auction that determines the rate paid on the floating-rate note.

The dichotomy, continued

Too much to say that the Treasury notes replace money—while very close to money, they lack the complete circularity of reserves always being worth $1.00:

> *Cochrane*: “The floating rate is paid daily, by incrementing the number of bonds in the investor’s account. The full equivalence of fixed-value debt with reserves means there is no reason to daily send reserves to a separate bondholder’s bank account.”
>
> “The Treasury allows investors to freely exchange this debt for bank reserves at the Fed, and thus to bank accounts and to cash.”

However, it is the conversion into reserves that preserves the value of the note at $1, not the manner by which interest on the notes is credited to investors’ accounts.

If notes rely on reserves to maintain their value at $1, as Cochrane describes, it must be that, at times during which default is threatened, the rates paid on Treasury notes must be higher than the rate paid on reserves, or there will be a run on Treasuries.

Can other implementations achieve the same end?

Consider Garratt, Martin, McAndrews and Nosal, 2015 "*Segregated Balance Accounts*".

SBAs are a Fed liability, but one with many of the features that Cochrane's proposal is attempting to embody.

Cochrane points out that the Fed, dealing directly only with banks cannot provide a widely circulating instrument.

SBAs may be a way to provide such an instrument by

- Creating a technology for banks to segregate reserves from the rest of their (risky) assets
- Creating the legal environment that would allow banks to collateralize their borrowing from nonbanks with reserve balances

SBAs

With an SBA: A bank and a bank customer establish a special bank account at the Fed. The bank account has unique features:

- Owned by the commercial bank
- Controlled by the bank customer
- Restricted to invest solely in reserves at the Fed, earning interest for the commercial bank at the rate paid on reserves.

Any bank would be able to establish such accounts, and the accounts are perfectly safe. Interest to be paid to the customer is agreed to by the bank and customer. With 7000 banks and no risks involved, pricing would be competitive.

Narrow bank ***accounts***, rather than narrow banks.

SBAs

With SBAs, (large) nonbanks in the economy would have access to an electronic currency that pays interest, which is competitively supplied by banks, and, like currency, is freely convertible into and out of bank deposits.

So the amount of SBAs would be determined by agents in the economy, much like currency. SBAs would, like Cochrane's floating rate notes, reduce the incentives to needlessly economize on the use of money, provide nonbanks a run-free and perfectly safe form of money, and have financial stability benefits.

Unlike Cochrane's floating-rate notes, not useful as a means of exchange, and possibly not as seamlessly available to both large and small investors. Not controlled by Treasury.

Monetary and fiscal policy

Cochrane's proposal is an innovative and thought-provoking plan.

In implementation, I've pointed out subtle ways in which the current proposal has an inherent contradiction, but which can be overcome by making sure that the Fed is in control of interest rate policy, and allowing the Treasury security to be determined at auction, relative to the interest paid on reserves by the Fed.

Given that the Fed would remain a central feature of the landscape in this proposal, other questions related to the interaction between the Fed's actions, on rates, for example, and fiscal policy remain important ones to consider. For example, I pointed out that the interest rate on the floating note may be below the rate paid on reserves. So, to hope to break even, the Fed would have to hold some of the fixed-coupon securities, exposing it to risk of loss on its balance sheet.