

Minutes of the December 4th, 2020 Financial Advisory Roundtable (FAR) Meeting

Present:

- FAR Members: Viral Acharya, Hayley Boesky, John Cochrane, Bennett Golub, Robin Greenwood, Ralph Koijen, Deborah Lucas, Srini Ramaswamy, Antoinette Schoar, Til Schuermann, Jeremy Stein
- FRBNY: Jaison Abel, Ozge Akinci, Pablo Azar, Gianluca Benigno, James Bergin, Stein Berre, Nina Boyarchenko, Jonathan McCarthy, Nicola Cetorelli, Rajashri Chakrabarti, Marco Cipriani, Adam Copeland, Richard Crump, Marco Del Negro, Dianne Dobbeck, Keshav Dogra, Fernando Duarte, Michael Fleming, Linda Goldberg, Jan Groen, Matthew Higgins, Beverly Hirtle, Tom Klitgaard, Anna Kovner, Donghoon Lee, Kyle Lee, Michael Lee, Sandra Lee, Haoyang Liu, David Lucca, Dina Maher, Jim Mahoney, Antoine Martin, Jonathan McCarthy, Meg McConnell, Susan McLaughlin, Paolo Pesenti, Laura Pilossoph, Matthew Plosser, Joao Santos, Asani Sarkar, Argia Sbordone, Moritz Schularick, Or Shachar, Daleep Singh, Kevin Stiroh, Lawrence Sweet, Andrea Tambalotti, Katherine Tilghman Hill, Giorgio Topa, Desi Volker, John Williams, Nathaniel Wuerffel, Emily Yang

Agenda:

The Financial Advisory Roundtable considered the consequences of increased Treasury supply. The meeting began with two presentations from roundtable members on the implications of expanded Treasury supply for different components of the global financial system.

These presentations were followed by an open discussion focusing on the topics listed in the meeting agenda:

1. What are the implications of growing Treasury supply for different parts of the global financial system, including the international role of the U.S. dollar?
2. Are there potential effects on the shape of the Treasury yield curve in general, and the components of long rates in particular?
3. Does the maturity structure of the Treasury supply play a role?

Treasury Supply from a Historical Perspective

The discussion began with a historical perspective on the recent levels of Treasury supply. FAR members noted that the U.S. government debt-to-GDP ratio has continued to rise in the past decade. Government debt, financed through the issuance of Treasuries, has increased dramatically in the last year to combat the negative effects of the COVID-19 Pandemic. As a result, public debt levels have reached very high levels, rivaling historic maximums that were reached during World War II.

It was noted that there are several differences in the circumstances relative to historical experiences. While public debt typically declined in the recovery period following most recessions, public debt has not dropped during the recovery period following the Great Recession. In addition, in the decades after World War II, the United States experienced high growth rates and budget surpluses. In contrast, the United States has had sustained deficits and low growth rates since the Great Recession.

Understanding the Term Structure

FAR members discussed several key determinants of the term structure, and its relation to Treasury supply. From a theoretical perspective, determinants of term structure can be summarized in a variant of the so-called “expectations hypothesis”. Expanding on the classical expectations hypothesis that links forward rates to expectations about future spot rates, FAR members noted that compensation for bearing interest rate risk additionally affects the Treasury term structure, as well as supply and demand factors that move the term structure away from that driven by the two prior, more fundamental factors.

FAR members also explored existing analyses on the term structure through the lens of a supply and demand framework. Several members highlighted the demand elasticity in Treasury markets as a key factor, and referred to studies that have examined the impact of Quantitative Easing (QE) announcements on term spreads and credit spreads. These studies generally find that increases in the supply of Treasuries are more readily absorbed by investors than other securities, since a substantial amount of new Treasury issuance is purchased by the foreign official sector.

At the same time, it was also cautioned that elasticities could be sensitive to much larger increases in the supply. One limitation of extrapolating from estimates based on historical data is that demand elasticities depend on scale. A FAR member pointed to the spread between AAA private bonds and Treasuries as a measure of the “specialness” of Treasuries. As the debt-to-GDP ratio rises, greater substitutability has been documented between Treasuries and AAA corporate bonds. This suggests that the special treatment of Treasuries could diminish as the supply of Treasuries increases.

A Consolidated View of the Government Balance Sheet

As a precursor to assessing the conditions of the Treasury market, FAR members emphasized that it is important to take into account contemporaneous policies by the Federal Reserve to evaluate the net quantity of debt available in the market. . Federal Reserve purchases transform the maturity of assets held by the private sector, as the Federal Reserve has historically bought longer-maturity securities, such as Treasuries and mortgage backed securities, while issuing central bank reserves, which are short-maturity (overnight) instruments.

FAR members highlighted that, after the Great Recession, the Treasury initially expanded the supply of public debt through short-term maturity issuance, but switched to longer maturity issuance, partially offsetting the QE efforts. One FAR member observed that this is consistent with the Treasury’s objectives to finance debt at the lowest cost, and to minimize fiscal risk. Longer term maturities are preferred when the debt-to-GDP ratio rises, as it lowers the exposures to funding risks associated with the auction process.

Overall, in the last year, the Fed purchased more Treasuries than the net increase in supply of notes and bonds. While these purchases are large relative to the new supply of Treasuries, FAR members reflected that these levels were not large relative to the daily trading volume of Treasury notes and bonds, which was about \$346 billion for a similar timeframe.

Sustainability of Debt

Many FAR members observed that markets have absorbed the increased Treasury supply with relative ease. This is consistent with recent studies that suggest that Treasury prices may not be very sensitive to increasing supply. Notably, while Treasury issuance has dramatically increased as a result of the pandemic response, the increase in Treasuries net of Fed purchases has been more gradual. It was also pointed out that debt increases were accompanied by increases in savings, which may continue to support investor demand for Treasury securities. The close proximity to the zero lower bound improves the cost-risk tradeoffs on fixed rate and inflation-linked issuance compared to floating rates.

FAR members discussed market expectations as a driving factor. One FAR member observed that the inflation average target adopted by the Fed has led the market to believe that the Fed will be intentionally behind the curve when raising rates, and there's an expectation of an accommodative regime. This is the underlying premise for why the market is sanguine. If investors believe there will be a turnaround in accommodative policy, then markets might react negatively.

FAR members noted the events in March earlier this year suggests that Treasury markets are susceptible to short-term droughts in demand. Other members commented on the importance of better understanding the microstructure of Treasury markets. With the amount of Treasuries being supplied, it is important to understand how institutional and market making constraints can have an effect on Treasury prices. It was noted that strengthening the "plumbing" of the Treasury markets could avoid the temporary disruptions developing into longer-term market dislocations. A FAR member pointed out that understanding institutional and market constraints is particularly relevant for markets when public debt levels are very high.

FAR members discussed broader concerns over growing unfunded and contingent liabilities of the U.S. government, in relation to the sustainability of government debt. In relation to pandemic-related expenditures, it was noted that contingent liabilities have indeed grown, for example, in the form of loans, guarantees, and other liquidity injections. The U.S. government, however, has employed relatively modest support through contingent liabilities, relative to European peers such as Germany or Italy. A broader, and pre-existing concern may be with respect to the unfunded and contingent liabilities of the U.S. government. Measures that account for unfunded and contingent liabilities of the U.S. suggest that the debt-to-GDP ratio has surpassed 500 percent. These increases in liabilities have not dampened investor demand for long-dated Treasury assets. This attenuates concerns over debt increases associated with Pandemic relief. This does however raise questions on whether investors are currently overlooking long-term sustainability, and whether such attitudes may switch.

Sudden Stops and Learning from Historical Experiences

In further discussion of the debt-to-GDP ratio, FAR members observed that the key metric is the level of debt service payments relative to GDP. This level is low if interest rates remain low, as they have in the U.S. and Japan. However, if interest rates rise unexpectedly, the cost of servicing the debt will increase, triggering either further increases in debt, taxes or inflation in order to continue to make debt

payments. Other FAR members observed that long-term interest rates may not give an “early warning” of expected increases in short-term rates, and that short-term rates may rise unexpectedly.

Some FAR members observed two adverse outcomes arose when developing countries reached high debt-to-GDP ratios. One outcome is a form of financial repression, in which the government implicitly or explicitly requires financial institutions to hold domestic government debt. This has resulted in a lack of private sector growth and productivity, with a crowding out of investment in the private sector. The second outcome relates to the potential for central bank overreach in their support for government programs. A possibility noted was a ratcheting of inflation expectations, and other disruptions in sovereign credit, such as credit downgrades.

FAR members reflected on how these lessons apply to developed economies, using Japan as example. While Japan’s debt-to-GDP ratio has reached 240 percent, it has retained high demand for sovereign debt and has maintained low inflation, with the Japanese Yen trading in a narrow range compared to foreign currencies.

In further discussion, FAR members brought up the United States in 1971 and the United Kingdom in recent decades as examples of developed countries that have had debt crises. One FAR member pointed out that a key difference between Japan and other developed countries is its relatively small consumer credit debt market, which would typically act as a substitute for government securities.