## **Chart Collection for Morning Briefing**

Yardeni Research, Inc.

October 3, 2023

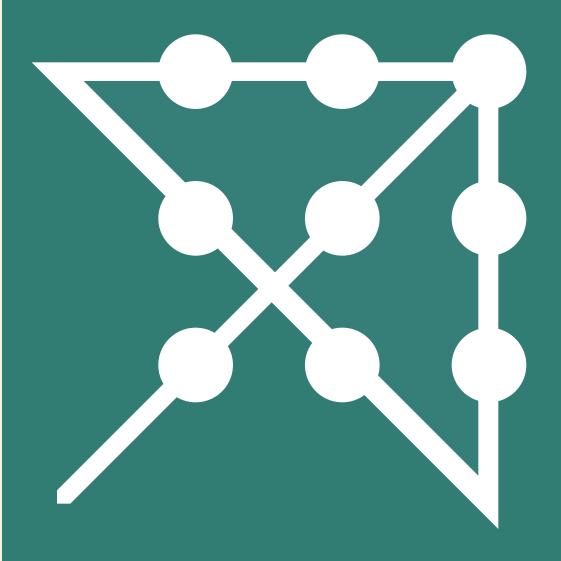
## Dr. Edward Yardeni

516-972-7683 eyardeni@yardeni.com

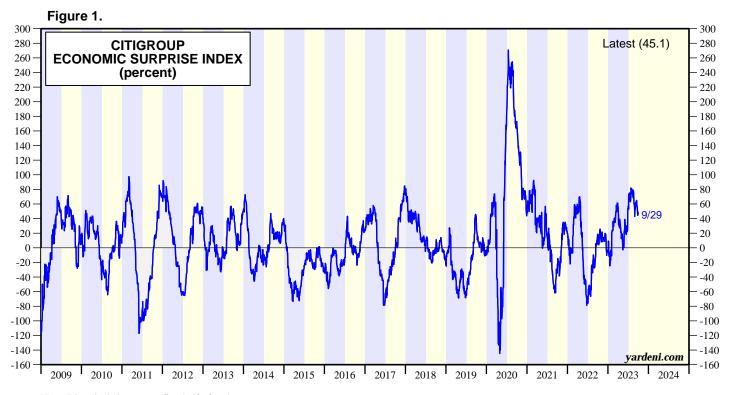
## Mali Quintana

480-664-1333 aquintana@yardeni.com

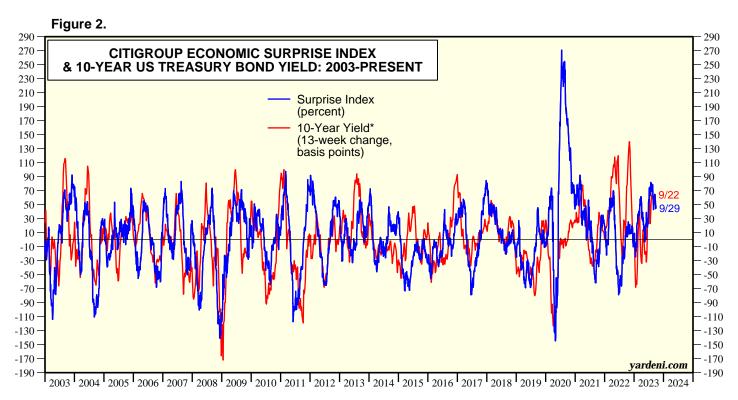
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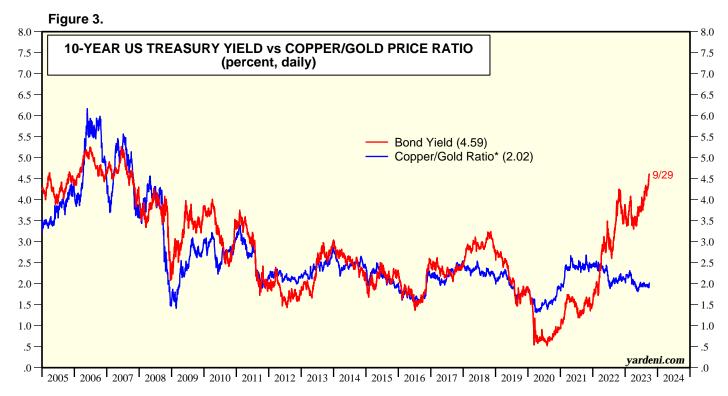
thinking outside the box



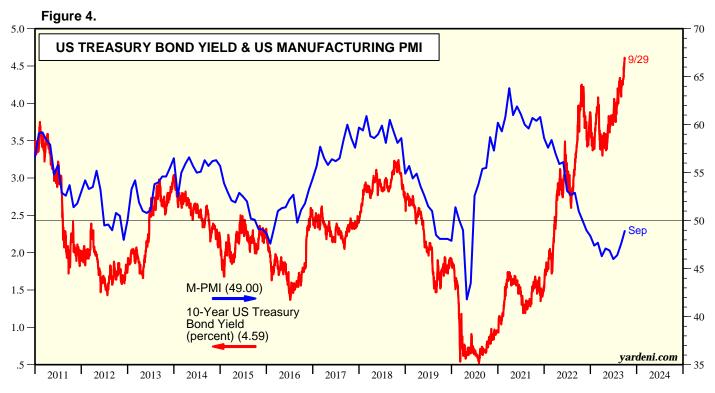
Note: Blue shaded areas are first half of each year. Source: Citigroup.



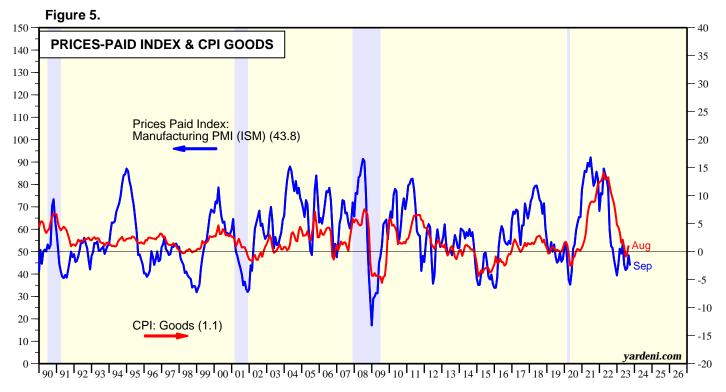
\* Average for the week ending Friday. Source: Federal Reserve Board and Citigroup.



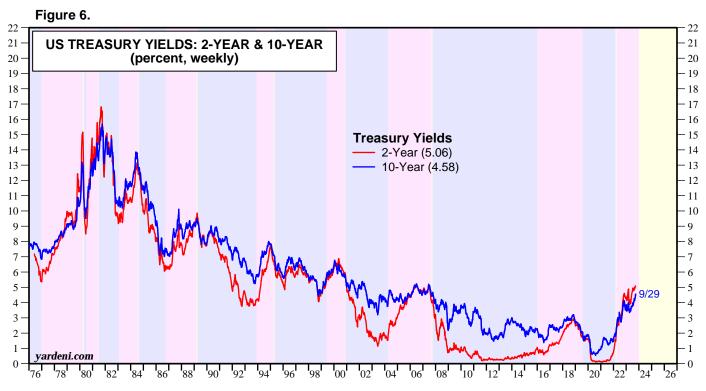
Nearby futures price of copper (in dollars, not cents) divided by nearby futures price of gold multiplied by 1000. Source: Federal Reserve Board and Haver Analytics.



Source: Federal Reserve Board and Institute for Supply Management.

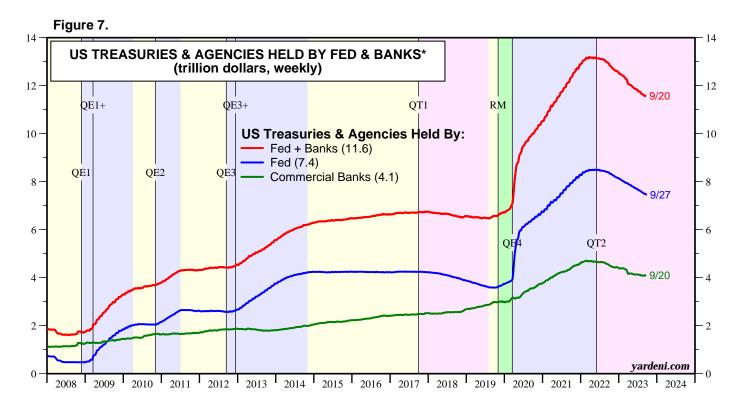


Note: Shaded areas are recessions according to the National Bureau of Economic Research. Source: Institute for Supply Management and Bureau of Labor Statistics.

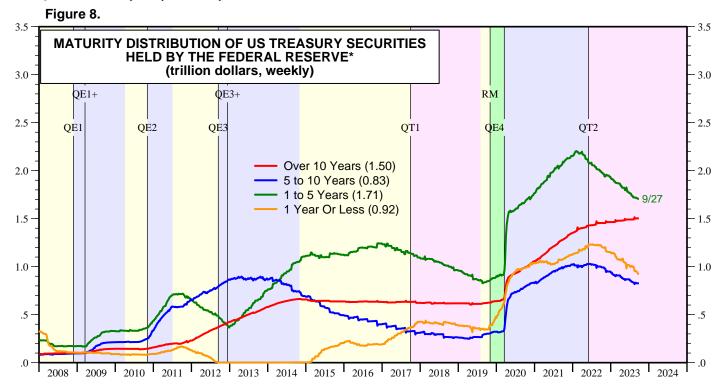


Note: Blue shaded areas are periods of monetary easing between cyclical peaks and troughs in the federal funds rate. Red shaded areas are monetary tightening periods.

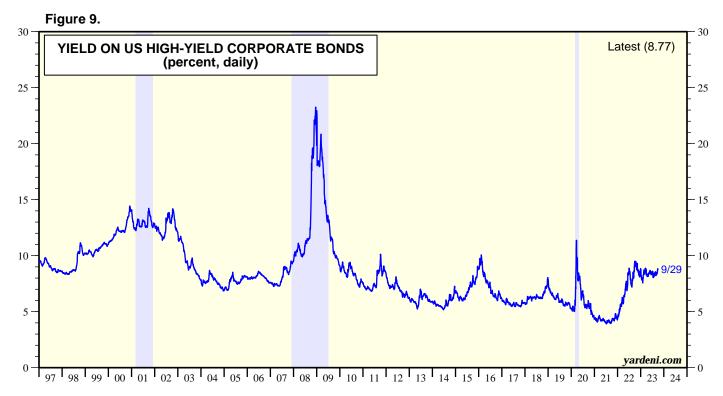
Source: Federal Reserve Board.



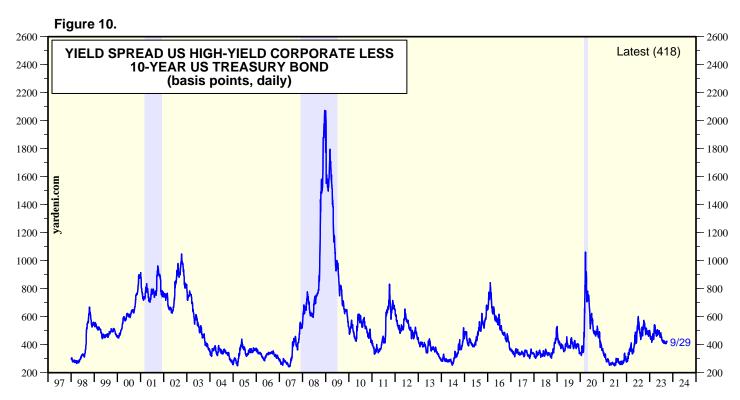
\* Averages of daily figures for weeks ending Wednesday. Securities held by Fed include US Treasuries, Agency debt, and mortgage-backed securities. Note: QE1 (11/25/08-3/31/10) = \$1.24tn in mortgage securities; expanded (3/16/09-3/31/10) = \$300bn in Treasuries. QE2 (11/3/10-6/30/11) = \$600bn in Treasuries. QE3 (9/13/12-10/29/14) = \$40bn/month in mortgage securities (open ended); expanded (12/12/12-10/1/14) = \$45bn/month in Treasuries. QT1 (10/1/17-7/31/19) = balance sheet pared by \$675bn. RM (11/1/19-3/15/20) = reserve management, \$60bn/month in Treasury bills. QE4 (3/16/20-infinity). QT2 = balance sheet pared by \$95 billion per month. Source: Federal Reserve Board.



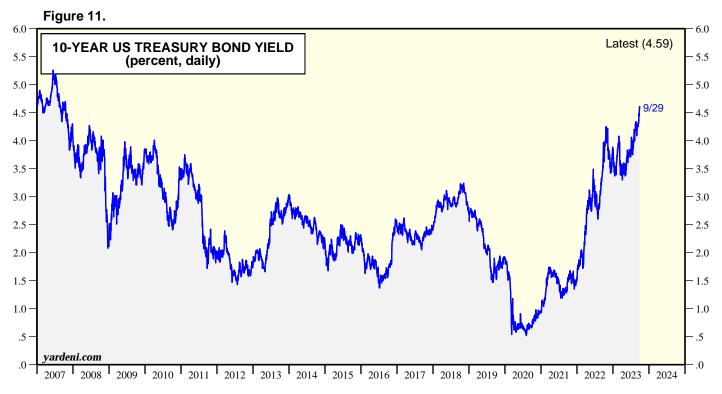
Week ending Wednesday. Securities held by Fed include US Treasuries, Agency debt, and mortgage-backed securities. Note: QE1 (11/25/08-3/31/10) = \$1.24tn in mortgage securities; expanded (3/16/09-3/31/10) = \$300bn in Treasuries. QE2 (11/3/10-6/30/11) = \$600bn in Treasuries. QE3 (9/13/12-10/29/14) = \$40bn/month in mortgage securities (open ended); expanded (12/12/12-10/1/14) = \$45bn/month in Treasuries. QT1 (10/1/17-7/31/19) = balance sheet pared by \$675bn. RM (11/1/19-3/15/20) = reserve management, \$60bn/month in Treasury bills. QE4 (3/16/20-infinity). QT2 = balance sheet pared by \$95 billion per month. Source: Federal Reserve Board (H.4.1, Table 2) and US Treasury Department.



Note: Shaded areas are recessions according to the National Bureau of Economic Research. Source: Bank of America Merrill Lynch.



Note: Shaded areas are recessions according to the National Bureau of Economic Research. Source: Bank of America Merrill Lynch and Federal Reserve Board.



Source: Federal Reserve Board.

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