Chart Collection for Morning Briefing

Yardeni Research, Inc.

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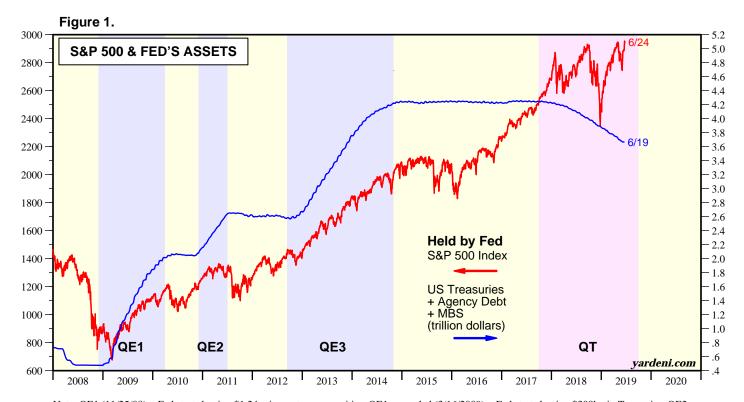
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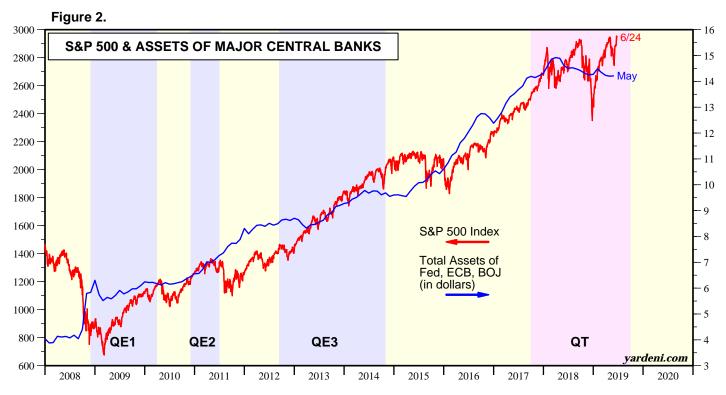
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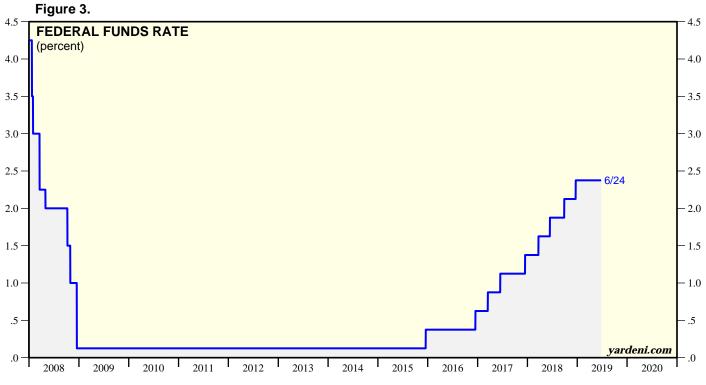
thinking outside the box



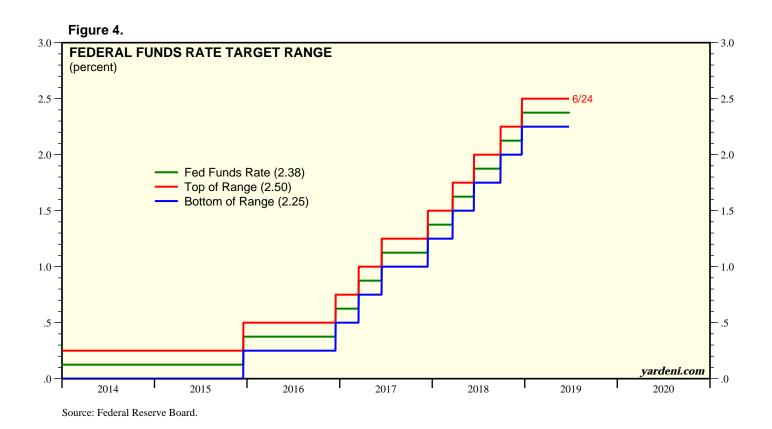
Note: QE1 (11/25/08) = Fed starts buying \$1.24tn in mortgage securities. QE1 expanded (3/16/2009) = Fed starts buying \$300bn in Treasuries. QE2 (11/3/10) = Fed starts buying \$600bn in Treasuries. QE3 (9/13/12) = Fed starts buying \$40bn/month in mortgage securities (open ended). QE3 expanded (12/12/12) = Fed starts buying \$45bn/month in Treasuries. Fed terminated QE net purchases (10/1/14). Fed reduced holdings (10/1/17-9/30/2019). Source: Federal Reserve Board and Standard & Poor's.

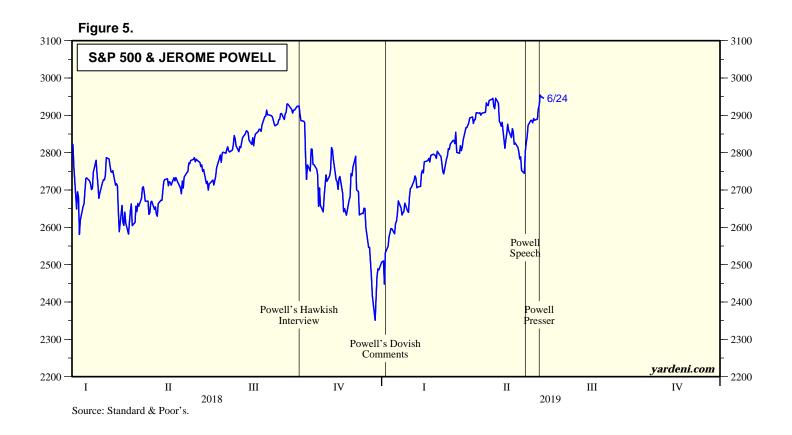


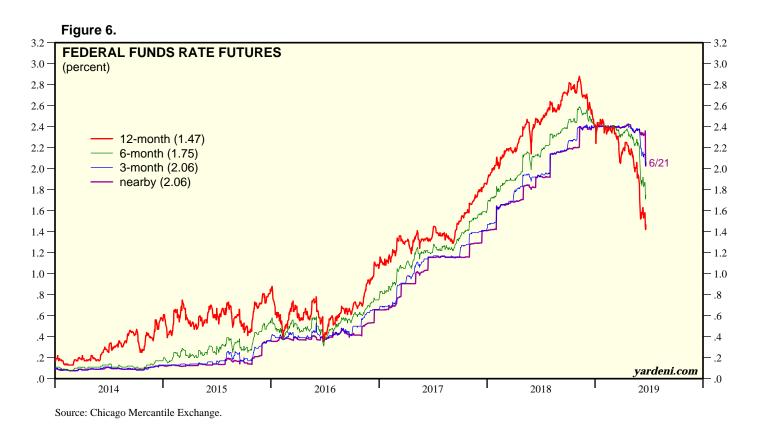
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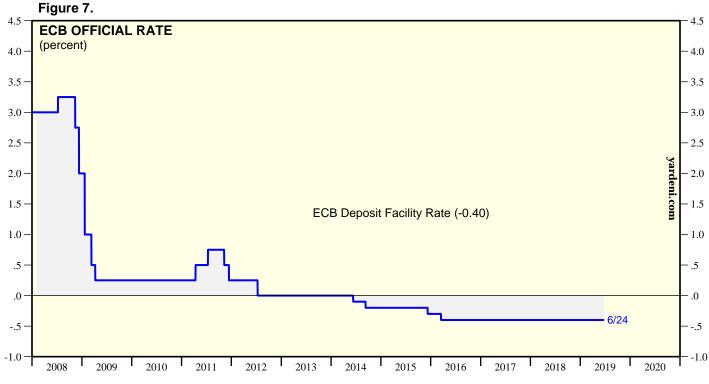


Source: Federal Reserve Board.

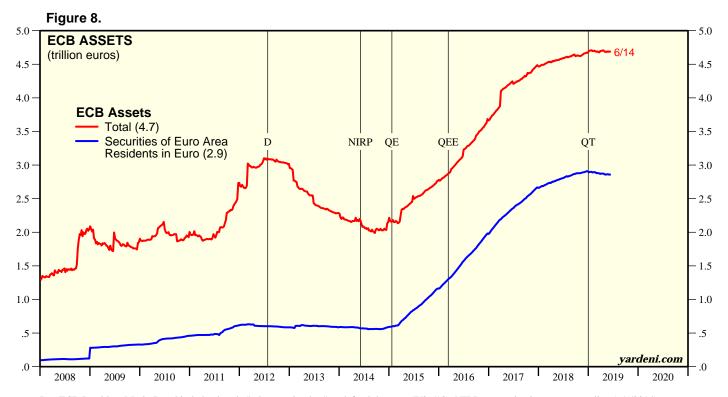




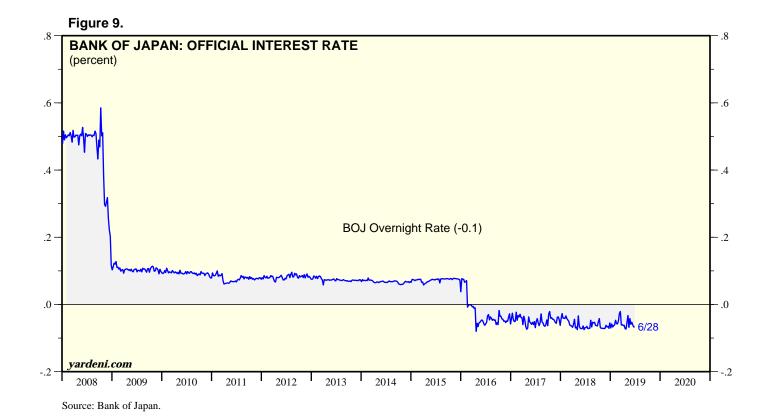


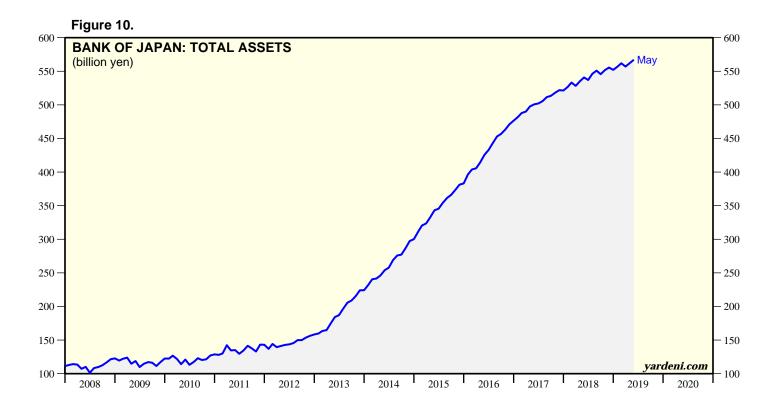


Source: European Central Bank.

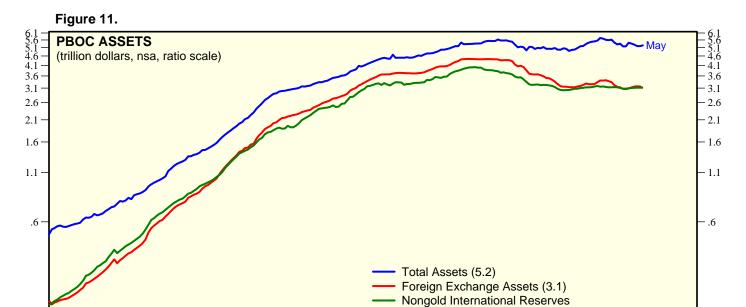


D = ECB President Mario Draghi pledged to do "whatever it takes" to defend the euro (7/26/12). NIRP = negative interest-rate policy (6/5/2014). QE (1/22/15). QEE = expansion and extension of QE (3/10/16), corporate bond purchases started 6/1/16). QT (12/31/2018) Source: European Central Bank.





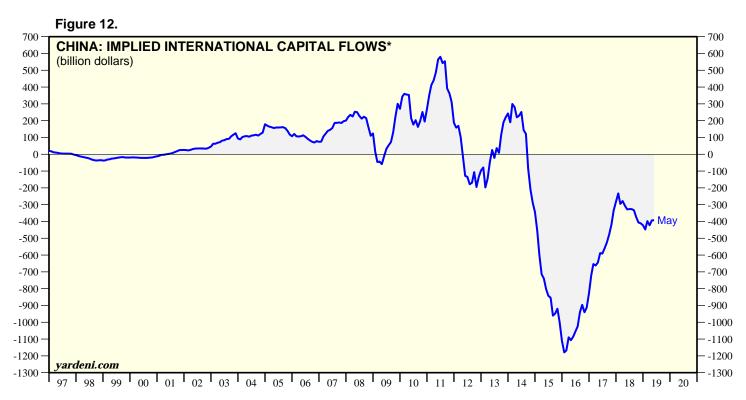
Source: Bank of Japan.



2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020

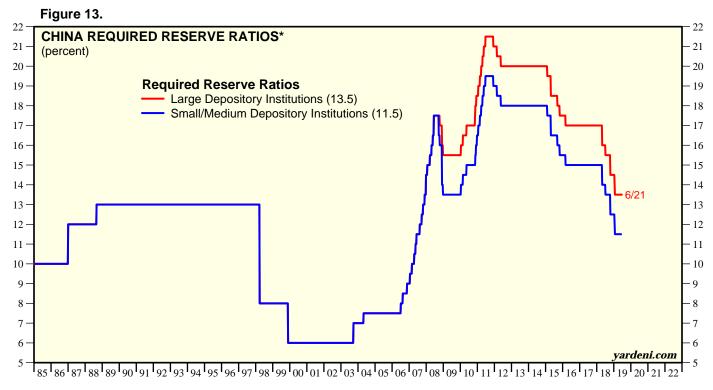
Held by China (IMF data) (3.1)

Source: People's Bank of China and IMF.

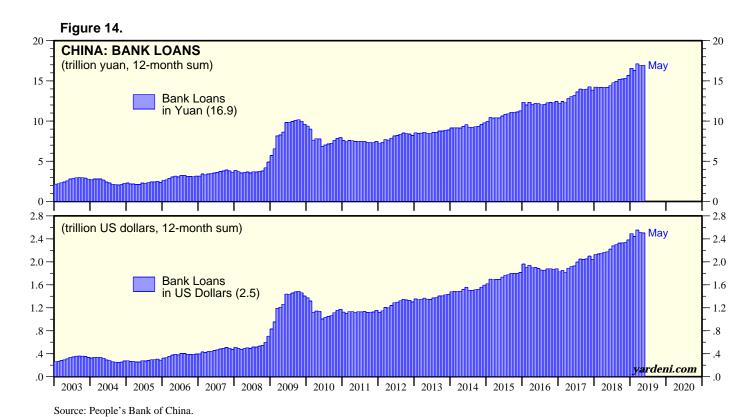


^{* 12-}month change in non-gold international reserves minus 12-month sum of the merchandise trade surplus (deficit). Source: China Customs and Haver Analytics.

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The PBOC announced a change in the Required Reserve Ratios in two steps and specified that it would drop 0.5% effective January 15, 2019 and to drop another 0.5% effective January 25, 2019. The rates were updated accordingly into the future. Source: People's Bank of China.



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