## **Chart Collection for Morning Briefing**

Yardeni Research, Inc.

January 10, 2017

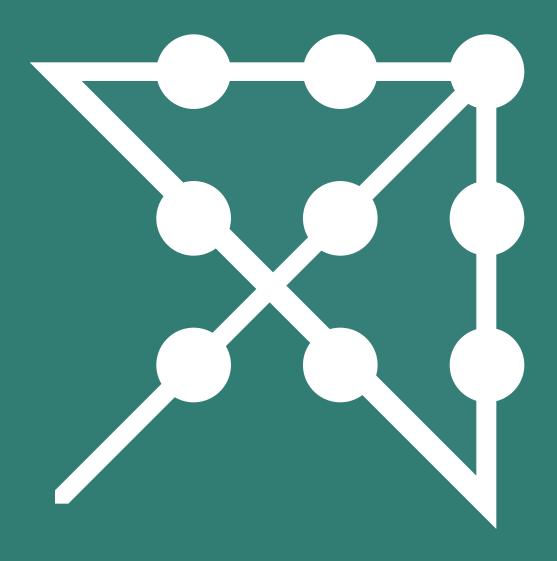
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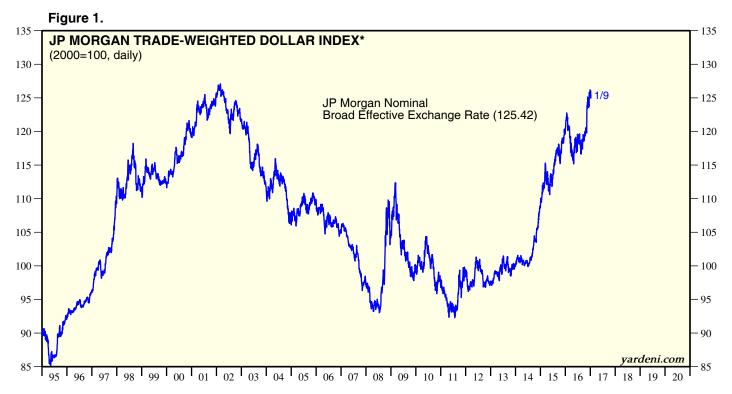
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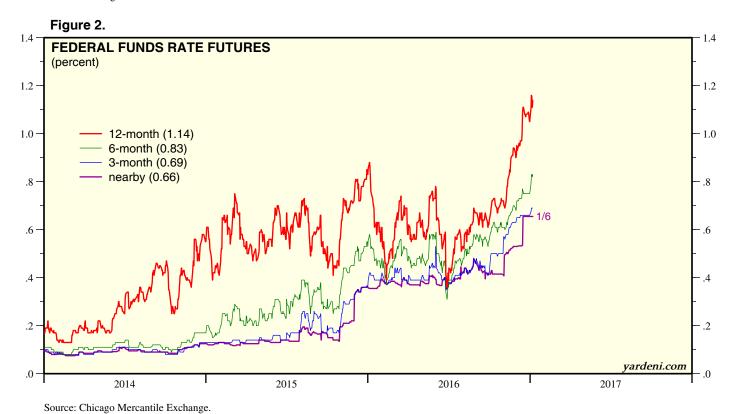
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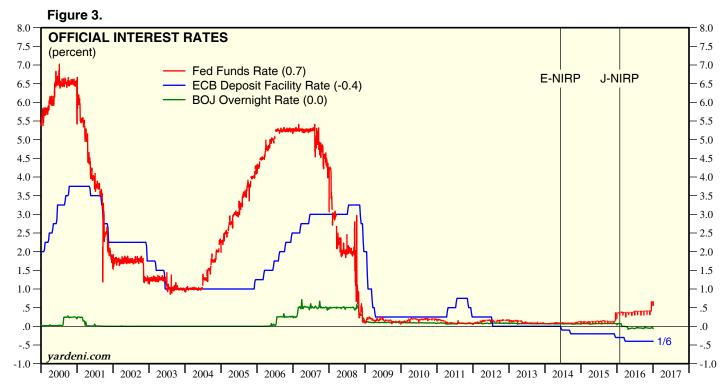


thinking outside the box

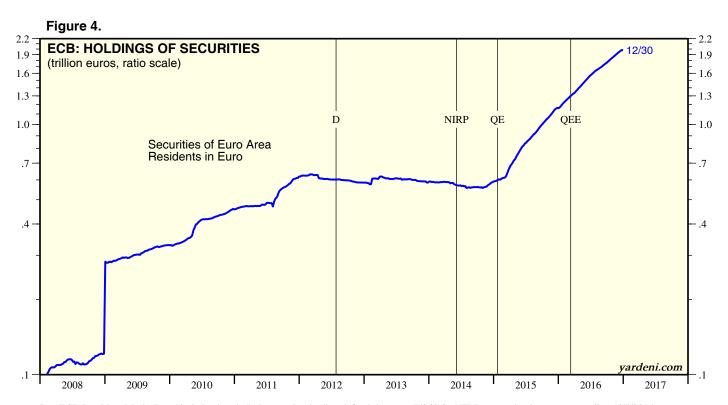


<sup>\*</sup> Argentina, Australia, Brazil, Bulgaria, Canada, Chile, China, Colombia, Croatia, Czech Rep., Denmark, Ecuador, Egypt, Hong Kong, Hungary, India, Indonesia, Israel, Japan, Korea, Kuwait, Malaysia, Mexico, Morocco, New Zealand, Nigeria, Norway, Pakistan, Panama, Peru, Philippines, Poland, Romania, Russia, Saudi Arabia, Singapore, South Africa, Sweden, Switzerland, Taiwan, Thailand, Turkey, Ukraine, UK, Uruguay, US, Venezuela, Vietnam, & Euro Area. Source: JP Morgan.

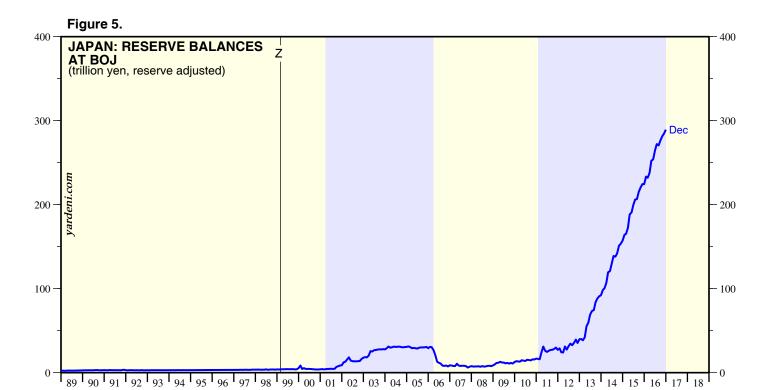




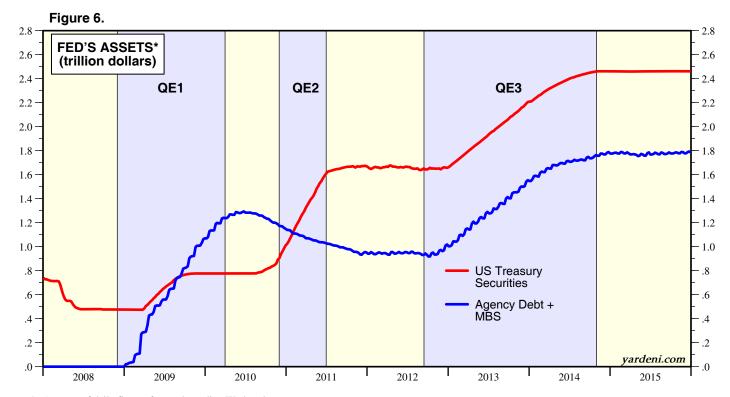
Note: E-NIRP and J-NIRP are when ECB and BOJ first introduced negative interest rates. Source: Federal Reserve Board and Haver Analytics.



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). Source: European Central Bank.



Z = Zero Interest Rate Policy. Note: Blue shade is Quantitative Easing Policy. Source: Bank of Japan.



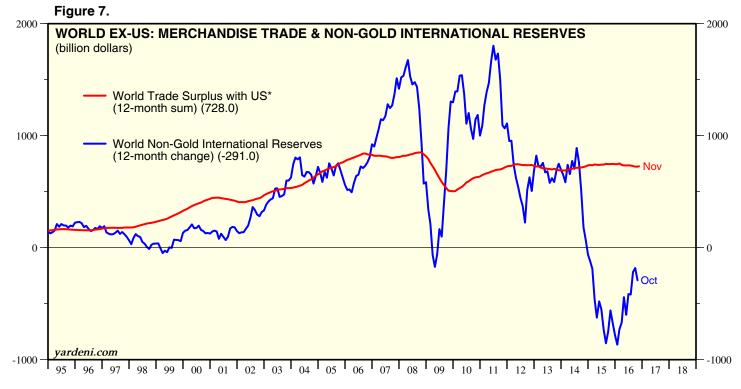
<sup>\*</sup> Average of daily figures for weeks ending Wednesday.

Note: QE1 (11/25/08) = Fed starts buying \$1.24tn in mortgage securities. QE1 expanded (3/16/2009) = Fed starts buying \$300bn in Treasuries.

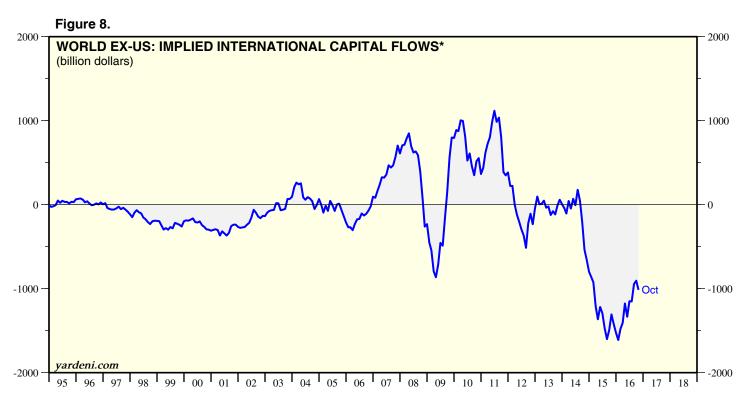
QE2 (11/3/10) = Fed starts buying \$600bn in Treasuries. QE3 (9/13/12) = Fed starts buying \$40bn/month in mortgage securities (open ended).

QE3 expanded (12/12/12) = Fed starts buying \$45bn/month in Treasuries.

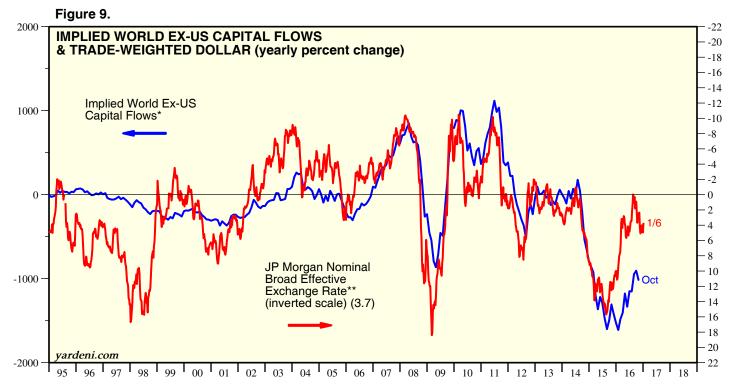
Source: Federal Reserve Board.



US trade deficit multiplied by -1.0.
 Source: International Monetary Fund.



<sup>\* 12-</sup>month change in non-gold international reserves minus 12-month sum of the merchandise trade surplus with US (i.e., US trade deficit multiplied by -1.0). Source: International Monetary Fund.



<sup>\* 12-</sup>month change in non-gold international reserves minus 12-month sum of the merchandise trade surplus (deficit). US trade deficit multiplied by -1.0.

\*\* Countries include Argentina, Australia, Brazil, Bulgaria, Canada, Chile, China, Colombia, Croatia, Czech Republic, Denmark, Ecuador, Egypt, France,
Germany, Hong Kong, Hungary, Japan, India, Indonesia, Israel, Italy, Korea, Kuwait, Malaysia, Mexico, Morocco, New Zealand, Nigeria, Norway, Pakistan,
Panama, Peru, Philippines, Poland, Romania, Russia Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey,
United Kingdom, Ukraine, Uruguay, Venezuela, Vietnam, and United States. Source: International Monetary Fund (IMF) and JP Morgan.



<sup>\*</sup> Argentina, Australia, Brazil, Bulgaria, Canada, Chile, China, Colombia, Croatia, Czech Republic, Denmark, Ecuador, Egypt, France, Germany, Hong Kong, Hungary, Japan, India, Indonesia, Israel, Italy, Korea, Kuwait, Malaysia, Mexico, Morocco, New Zealand, Nigeria, Norway, Pakistan, Panama, Peru, Philippines, Poland, Romania, Russia Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, United Kingdom, Ukraine, Uruguay, Venezuela, Vietnam, and United States. Source: International Monetary Fund and JP Morgan.

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