Chart Collection for Morning Briefing

Yardeni Research, Inc.

December 11, 2019

Dr. Edward Yardeni

516-972-7683 eyardeni@yardeni.com

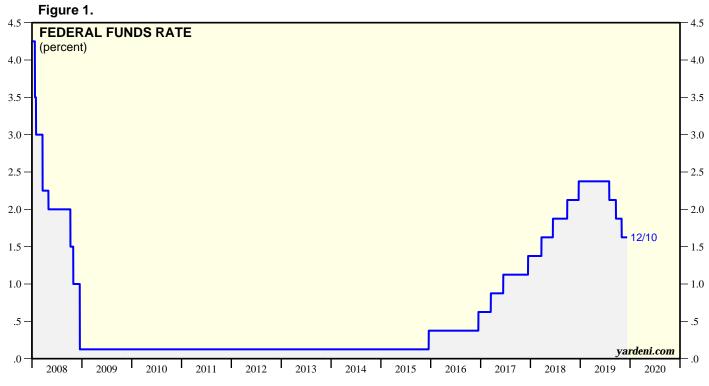
Mali Quintana

480-664-1333 aquintana@yardeni.com

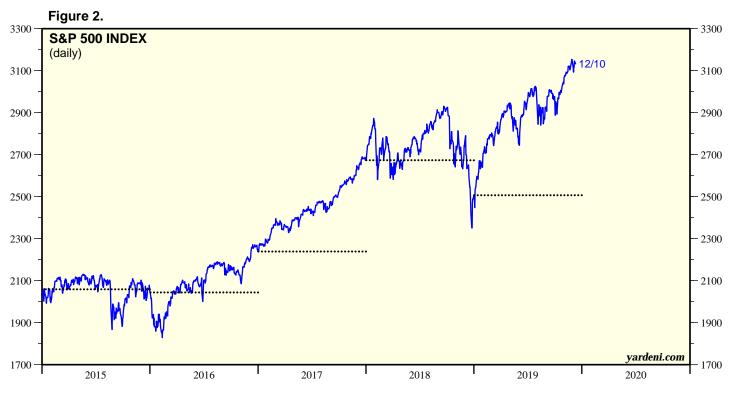
Please visit our sites at www.yardeni.com blog.yardeni.com



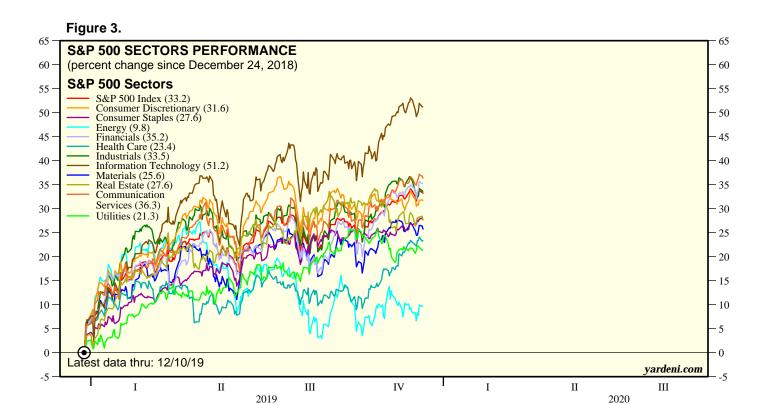
thinking outside the box

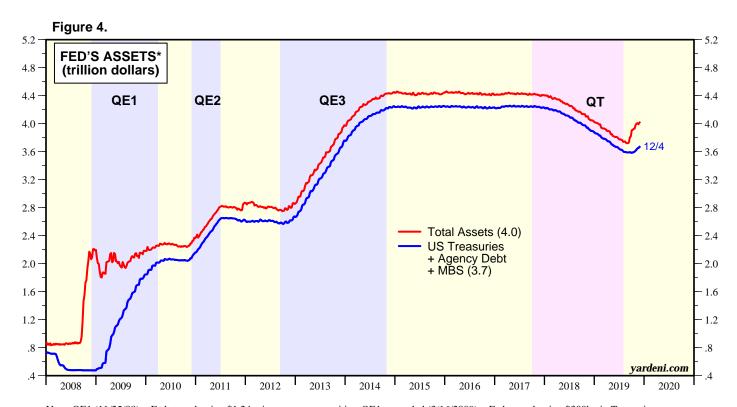


Source: Federal Reserve Board.



Note: Dotted lines show previous years' closing prices. Source: Standard & Poor's.





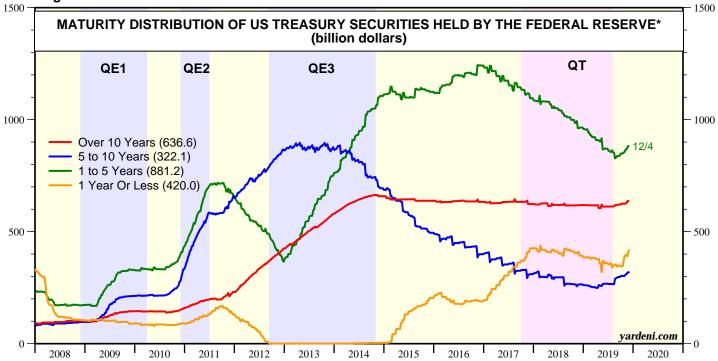
Note: QE1 (11/25/08) = Fed starts buying \$1.24tn in mortgage securities. QE1 expanded (3/16/2009) = Fed starts buying \$300bn in Treasuries. QE2 (11/3/10) = Fed starts buying \$600bn in Treasuries. QE3 (9/13/12) = Fed starts buying \$40bn/month in mortgage securities (open ended). QE3 expanded (12/12/12) = Fed starts buying \$45bn/month in Treasuries. Fed terminated QE net purchases (10/1/14). QT (10/1/17-7/31/19) = Fed pared holdings.

Source: Standard & Poor's.

pared holdings.

* Fed data are averages of daily figures for weeks ending Wednesday. Source: Federal Reserve Board.

Figure 5.

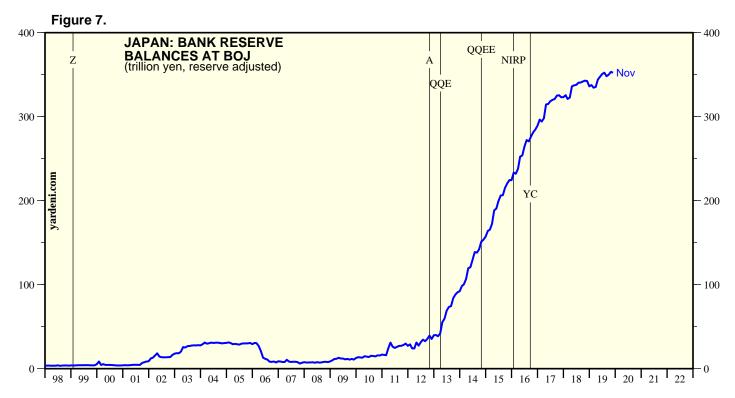


Note: QE1 (11/25/08) = Fed starts buying \$1.24tn in mortgage securities. QE1 expanded (3/16/2009) = Fed starts buying \$300bn in Treasuries. QE2 (11/3/10) = Fed starts buying \$600bn in Treasuries. QE3 (9/13/12) = Fed starts buying \$40bn/month in mortgage securities (open ended). QE3 expanded (12/12/12) = Fed starts buying \$45bn/month in Treasuries. Fed terminated QE net purchases (10/1/14). QT (10/1/17-7/31/19) = Fed pared holdings.

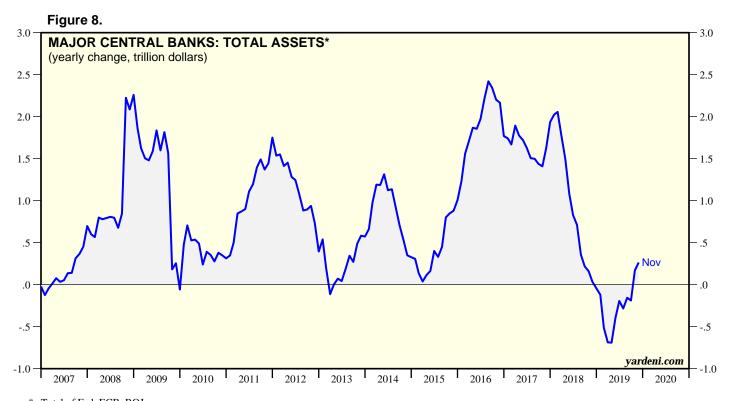
Fed data are averages of daily figures for weeks ending Wednesday. Source: Federal Reserve Board.



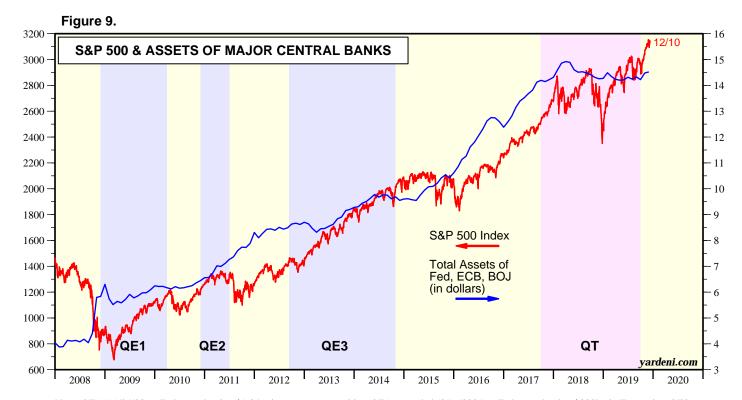
D = ECB President Mario Draghi pledged to do "whatever it takes" to defend the euro (7/26/12). NIRP = negative interest-rate policy (6/5/2014). QE (1/22/15). QEE = expansion and extension of QE (3/10/16, corporate bond purchases started 6/1/16). QT (12/31/18). QE2 (11/1/19). Source: European Central Bank.



Note: Z = Zero Interest Rate Policy. A = Markets start to anticipate Abenomics. QQE is Quantitative and Qualitative Easing. QQEE is the expanded and extended version of QQE. NIRP = Negative interest rate policy. YC = Yield curve targeting. Source: Bank of Japan.



^{*} Total of Fed, ECB, BOJ. Source: Haver Analytics.



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, Standard & Poor's and Haver Analytics.

Copyright (c) Yardeni Research, Inc. 2019. All rights reserved. The information contained herein has been obtained from sources believed to be reliable, but is not necessarily complete and its accuracy cannot be guaranteed. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness, or correctness of the information and opinions contained herein. The views and the other information provided are subject to change without notice. All reports and podcasts posted on www.yardeni.com, blog.yardeni.com, and YRI's Apps are issued without regard to the specific investment objectives, financial situation, or particular needs of any specific recipient and are not to be construed as a solicitation or an offer to buy or sell any securities or related financial instruments. Past performance is not necessarily a guide to future results. Company fundamentals and earnings may be mentioned occasionally, but should not be construed as a recommendation to buy, sell, or hold the company's stock. Predictions, forecasts, and estimates for any and all markets should not be construed as recommendations to buy, sell, or hold any security--including mutual funds, futures contracts, and exchange traded funds, or any similar instruments.

The text, images, and other materials contained or displayed on any Yardeni Research, Inc. product, service, report, email or website are proprietary to Yardeni Research, Inc. and constitute valuable intellectual property. No material from any part of www.yardeni.com, blog.yardeni.com, and YRI's Apps may be downloaded, transmitted, broadcast, transferred, assigned, reproduced or in any other way used or otherwise disseminated in any form to any person or entity, without the explicit written consent of Yardeni Research, Inc. All unauthorized reproduction or other use of material from Yardeni Research, Inc. shall be deemed willful infringement(s) of this copyright and other proprietary and intellectual property rights, including but not limited to, rights of privacy. Yardeni Research, Inc. expressly reserves all rights in connection with its intellectual property, including without limitation the right to block the transfer of its products and services and/or to track usage thereof, through electronic tracking technology, and all other lawful means, now known or hereafter devised. Yardeni Research, Inc. reserves the right, without further notice, to pursue to the fullest extent allowed by the law any and all criminal and civil remedies for the violation of its rights.

The recipient should check any email and any attachments for the presence of viruses. Yardeni Research, Inc. accepts no liability for any damage caused by any virus transmitted by this company's emails, website, blog and Apps. Additional information available on request.