

# Chart Collection for Morning Briefing

Yardeni Research, Inc.

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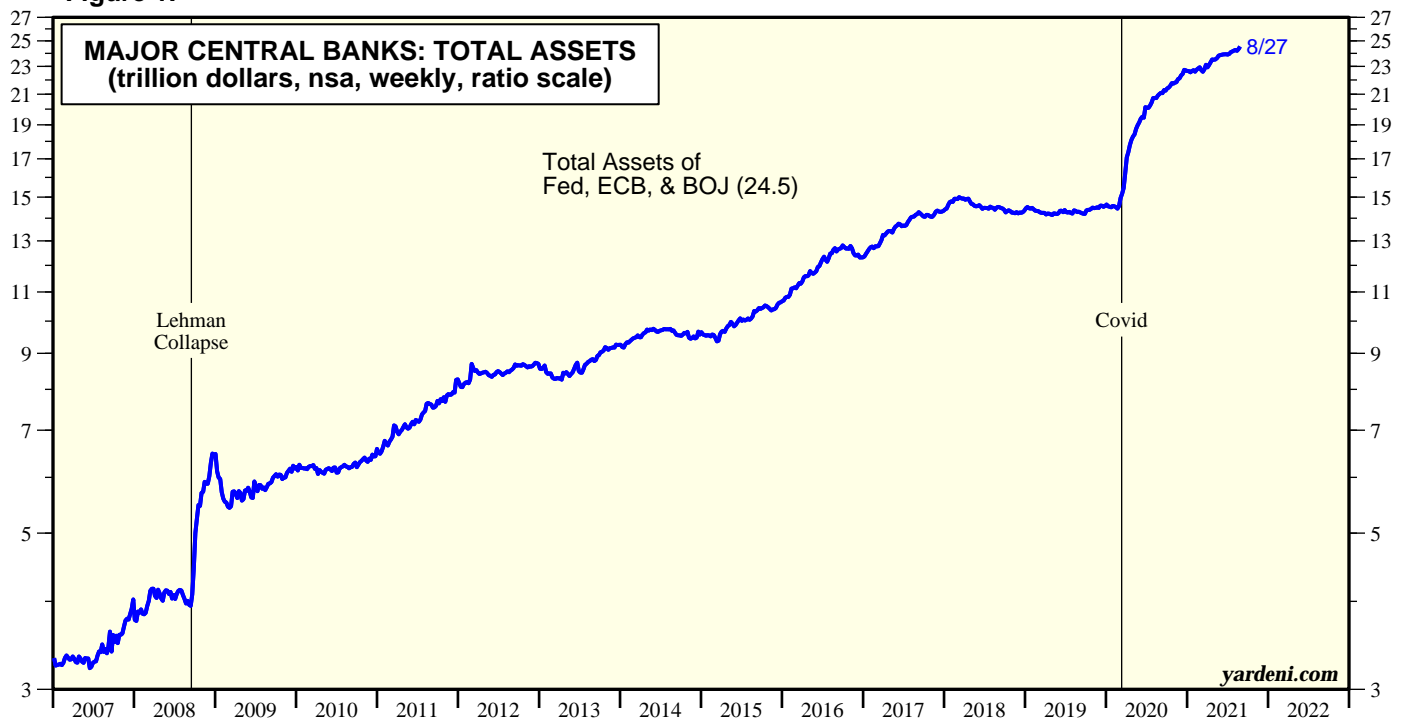
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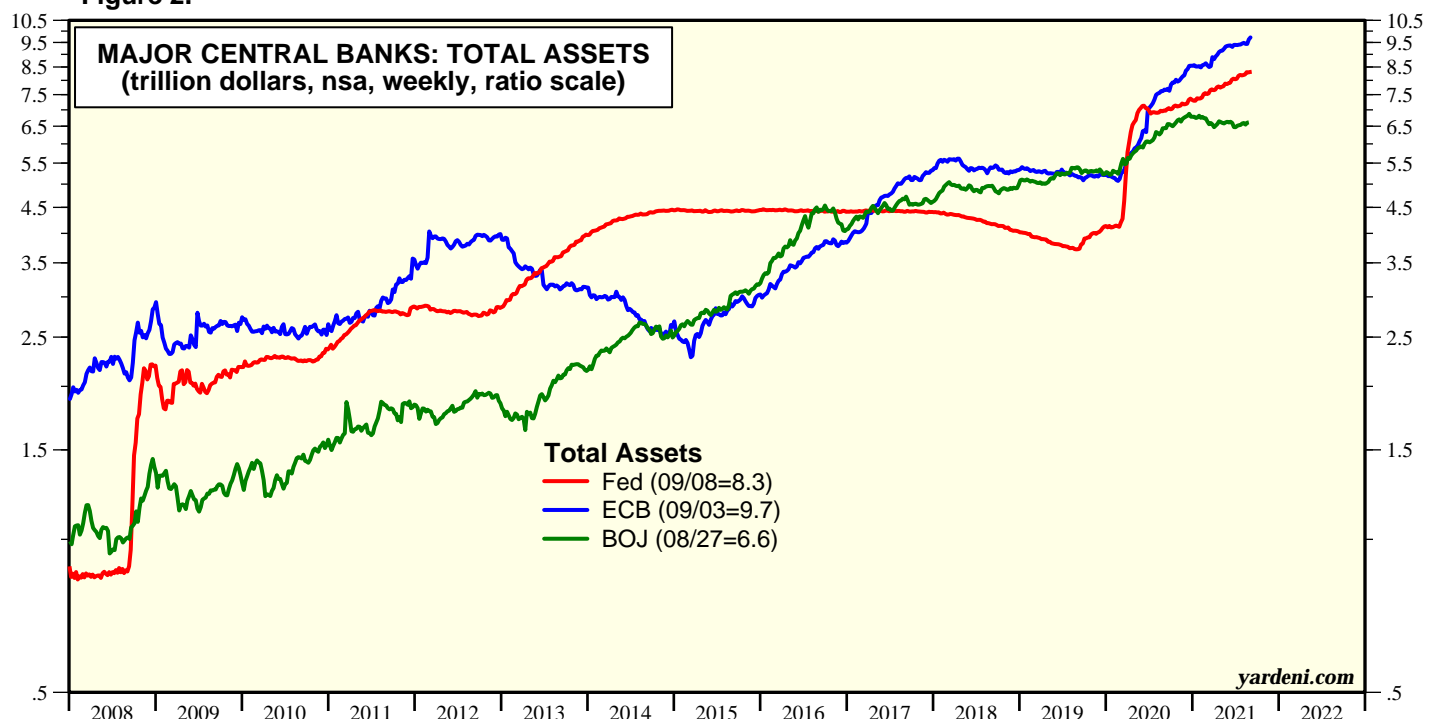
*thinking outside the box*

Figure 1.



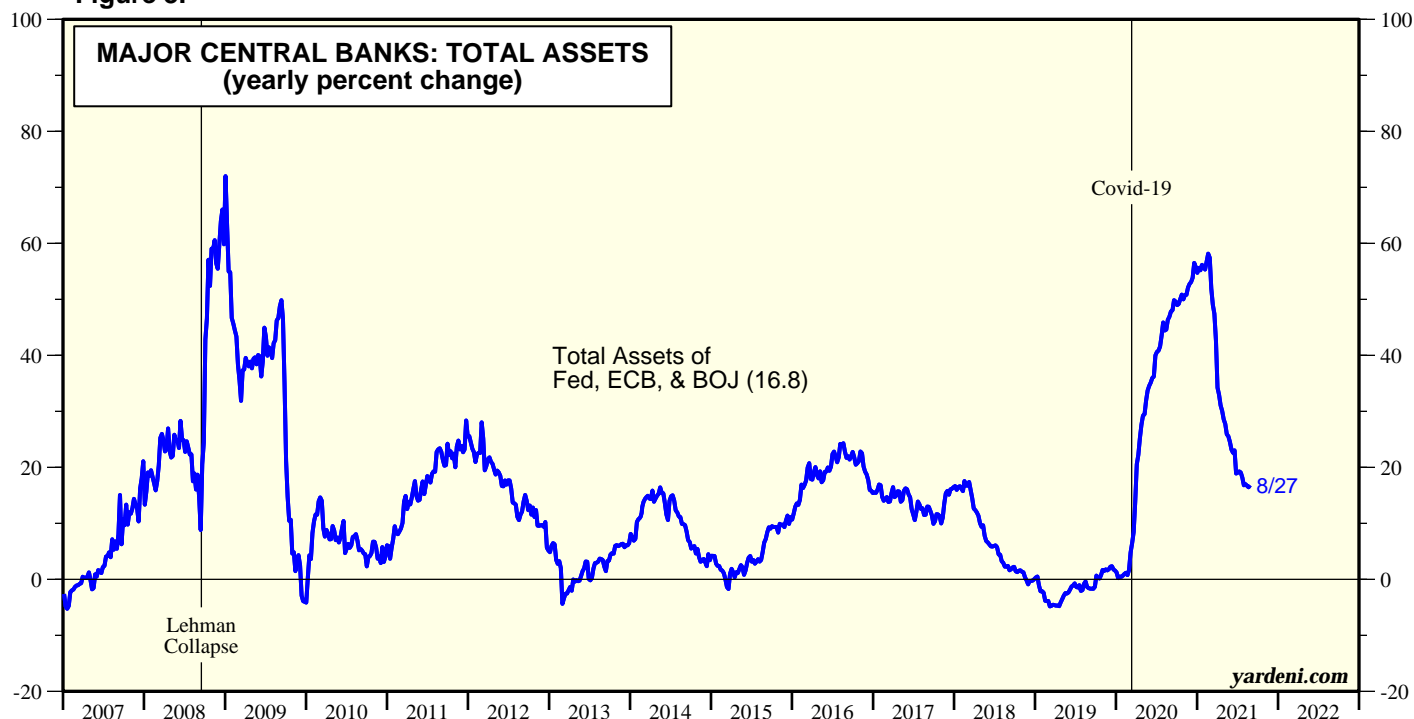
Note: Lehman collapsed 9/15/2008. WHO declared global Covid-19 pandemic on 3/11/2020.  
Source: Haver Analytics.

Figure 2.



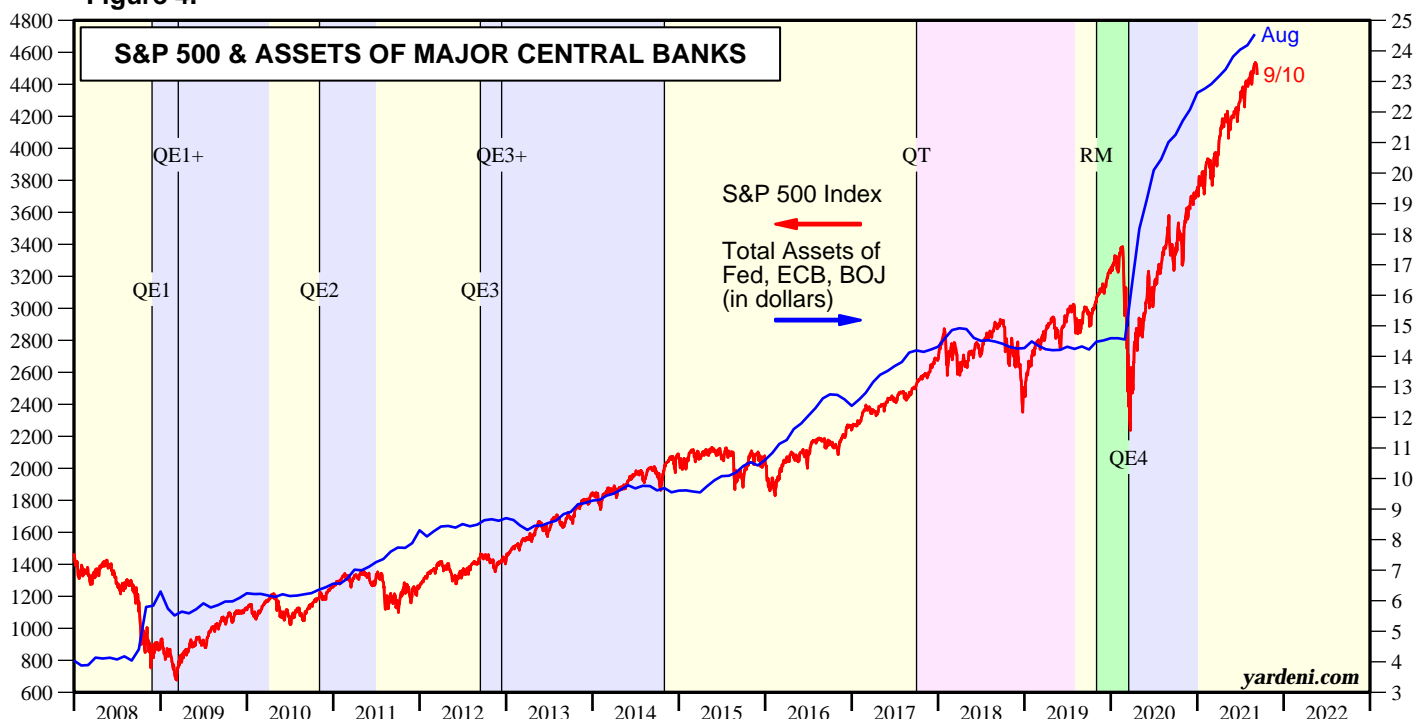
Source: Haver Analytics.

Figure 3.



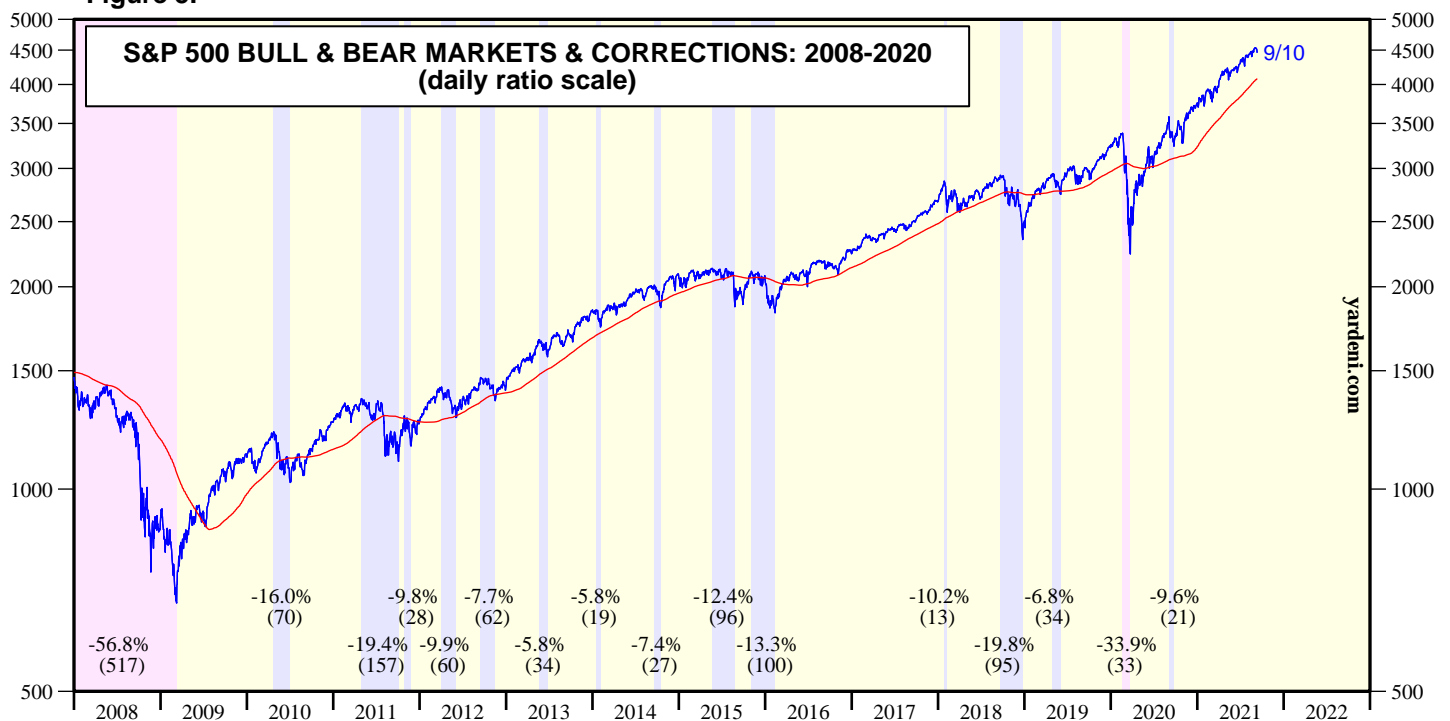
Note: Lehman collapsed 9/15/2008. WHO declared global Covid-19 pandemic on 3/11/2020.  
Source: Haver Analytics.

Figure 4.



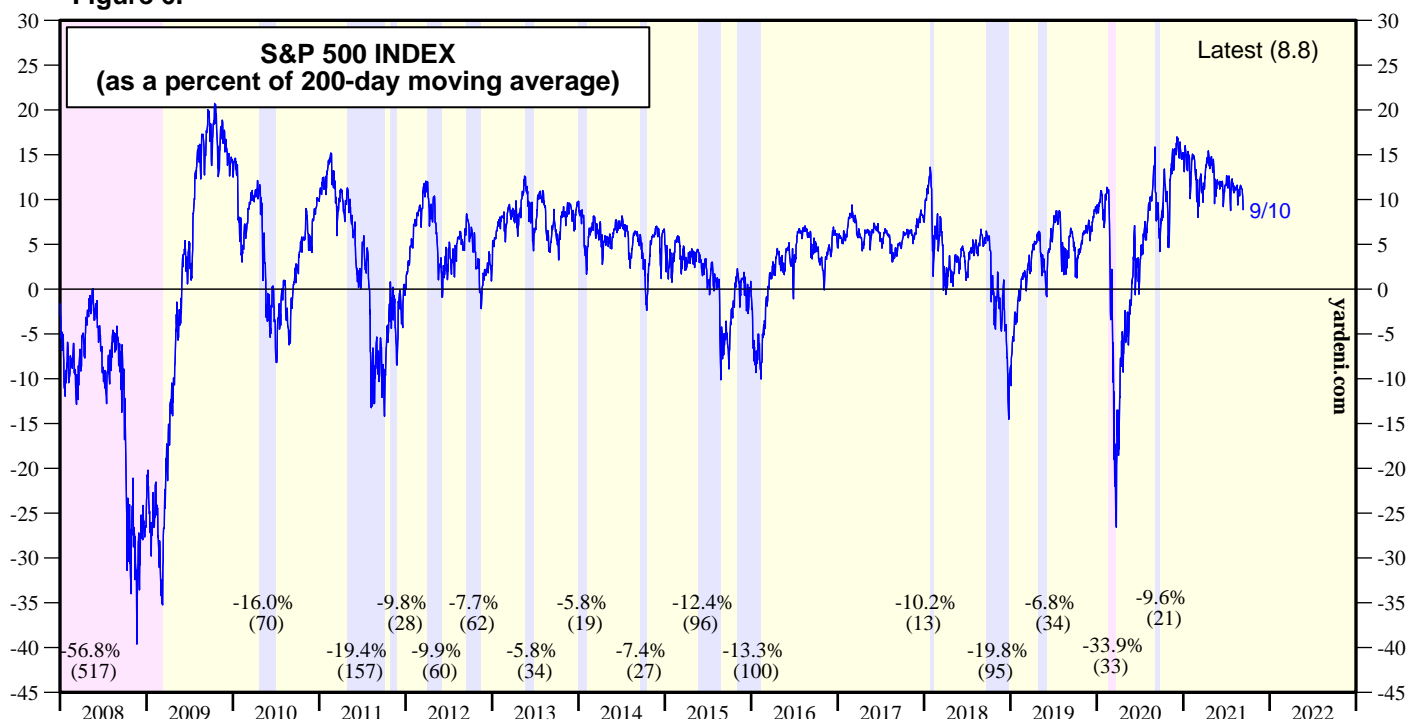
Note: QE1 (11/25/08-3/31/10) = \$1.24tn in mortgage securities; expanded (3/16/09-3/31/10) = \$300bn in Treasuries. QE2 (11/3/10-6/30/11) = \$600bn in Treasuries. QE3 (9/13/12-10/29/14) = \$40bn/month in mortgage securities (open ended); expanded (12/12/12-10/1/14) = \$45bn/month in Treasuries. QT (10/1/17-7/31/19) = balance sheet pared by \$675bn. RM (11/1/19-3/15/20) = reserve management, \$60bn/month in Treasury bills. QE4 (3/16/20-infinity).  
Source: Federal Reserve Board, Standard & Poor's and Haver Analytics.

**Figure 5.**



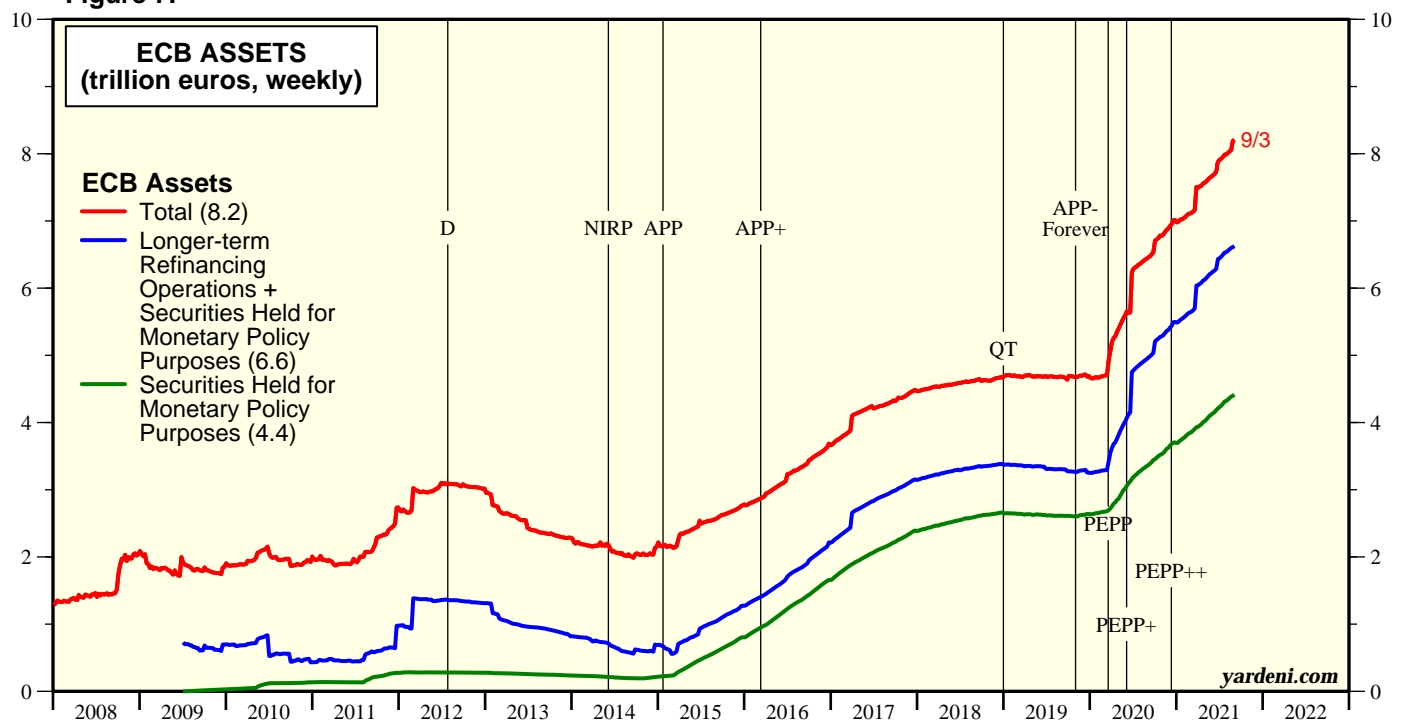
Note: Corrections are declines of 10% or more, but less than 20%, while minor ones are 5%-10% (all in blue shades). Bear markets are declines of 20% or more (in red shades). Number of calendar days in parentheses.  
Source: Standard & Poor's.

**Figure 6.**



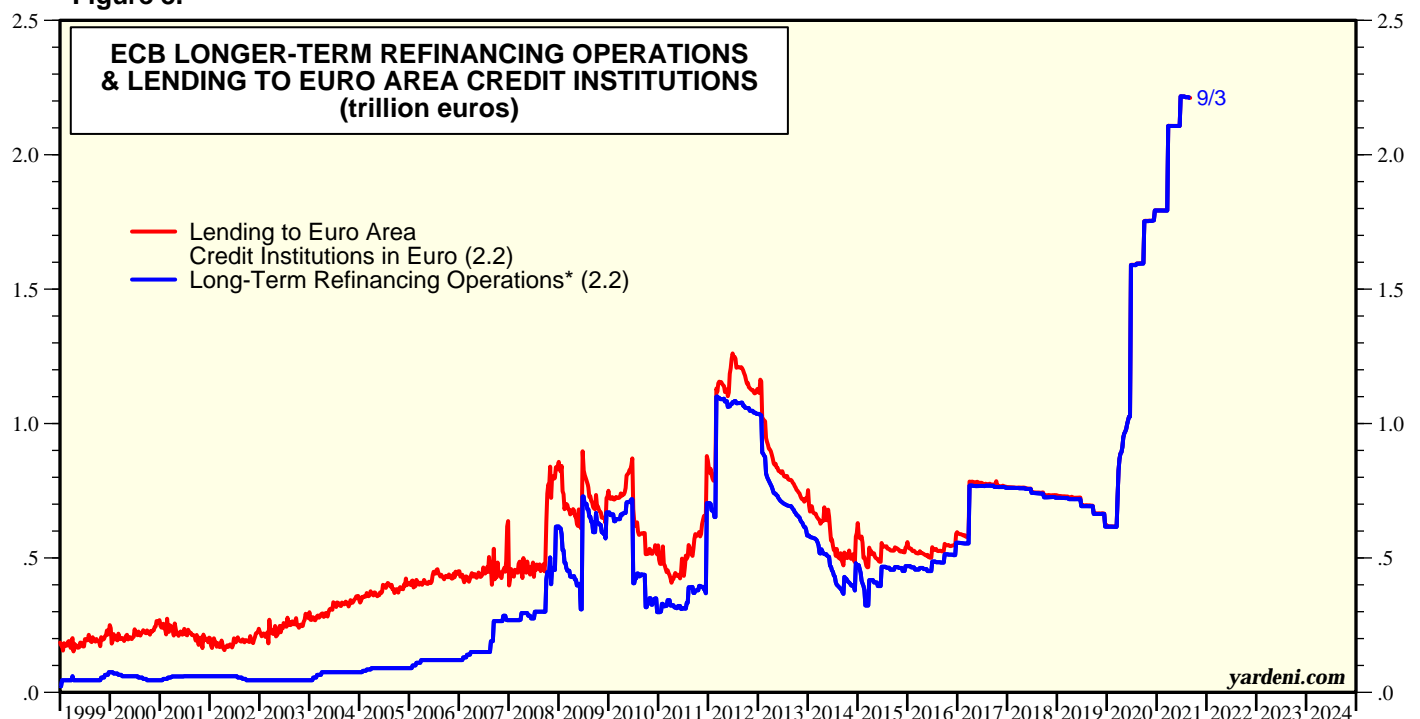
Note: Corrections are declines of 10% or more, while minor ones are 5%-10% (all in blues shades). Bear markets are declines of 20% or more (in red shades). Number of calendar days in parentheses.  
Source: Standard & Poor's.

**Figure 7.**



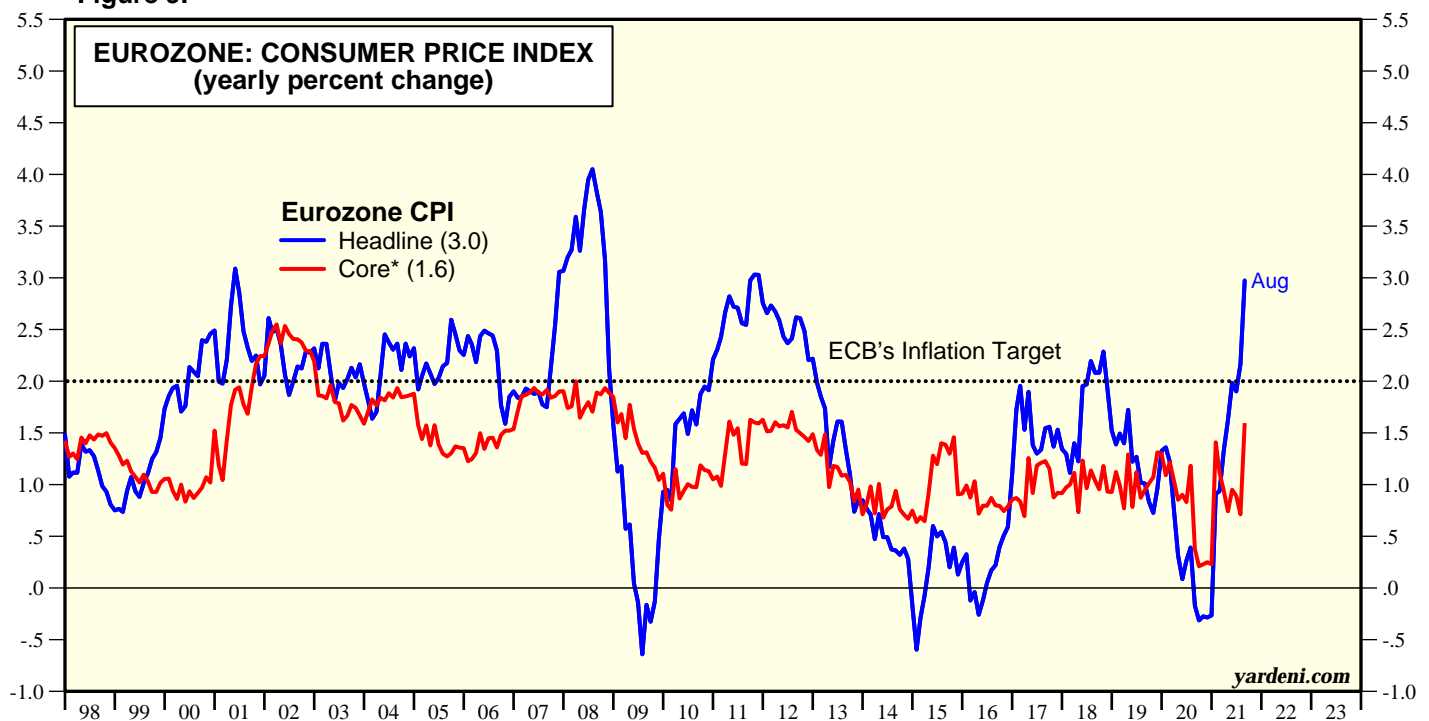
D = ECB President Mario Draghi pledged to do "whatever it takes" to defend the euro (7/26/12). NIRP = negative interest-rate policy (6/5/2014). APP (1/22/15). APP+ = expansion and extension of APP (3/10/16, corporate bond purchases started 6/1/16). QT (12/31/18). APP-Forever (11/1/19) 20 billion euros per month. PEPP (3/18/20) 750 billion euros open-ended asset purchases. PEPP+ (6/4/20) expanded by 600 billion euros. PEPP++ (12/10/20) another 500 billion euros in purchases.

**Figure 8.**



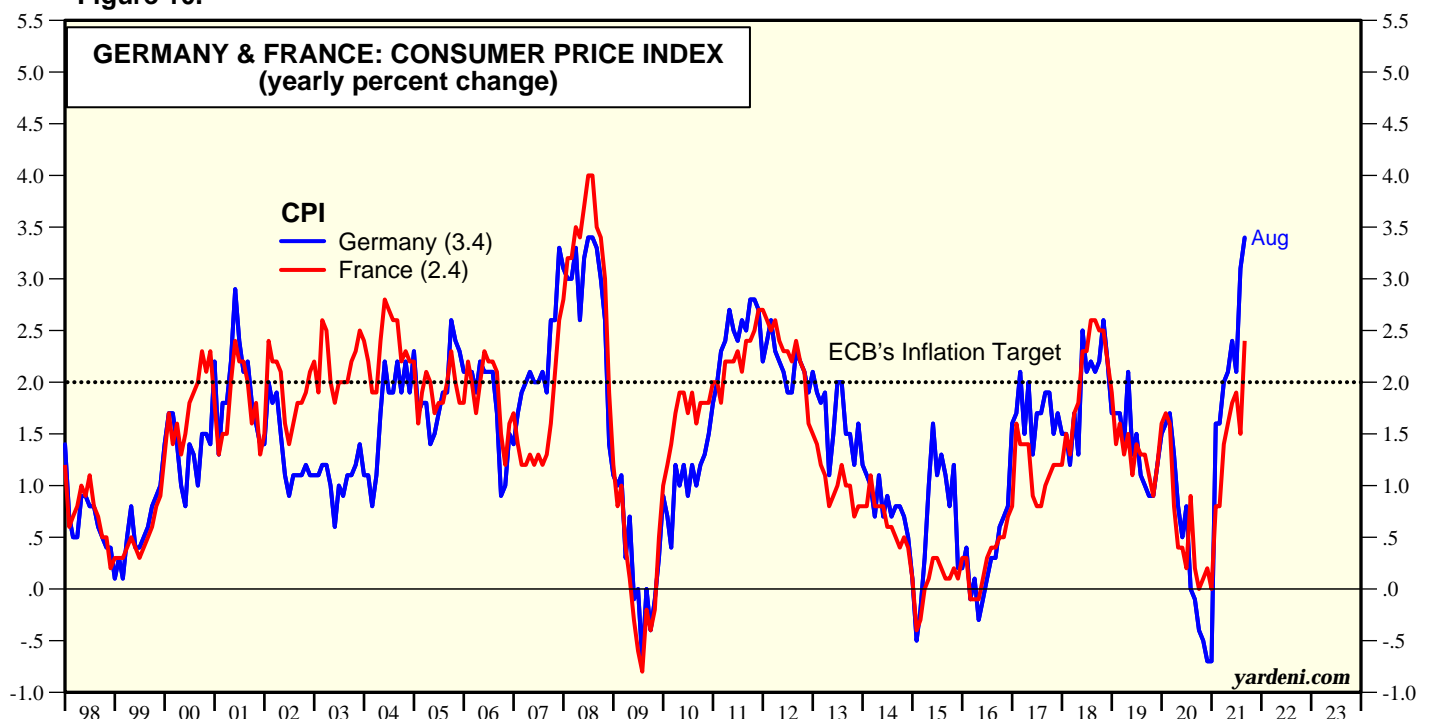
\* LTROs provide low interest-rate funding to Eurozone banks with sovereign debt as collateral on the loans. The loans are offered monthly by the ECB and are typically repaid in three months, six months, or one year.

Figure 9.



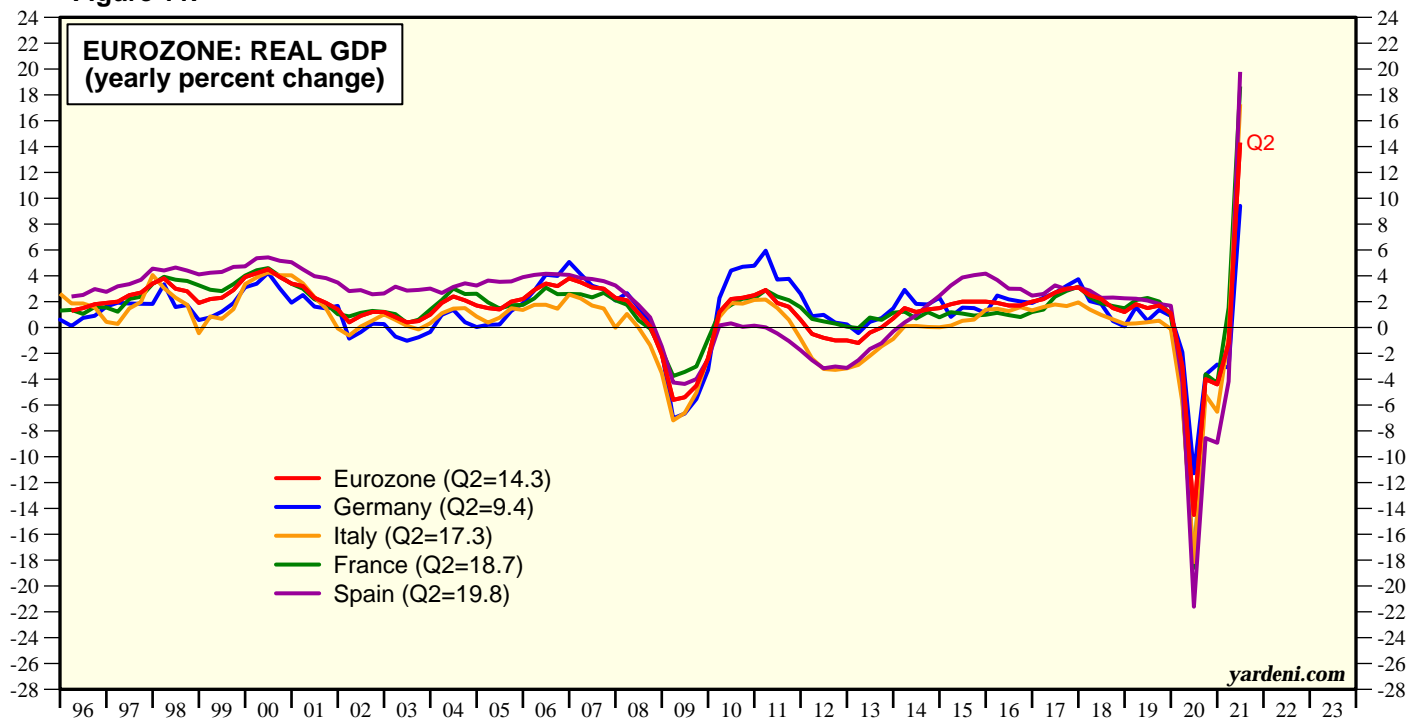
\* Excluding energy, food, alcohol, and tobacco.  
Source: Statistical Office of the European Communities.

Figure 10.



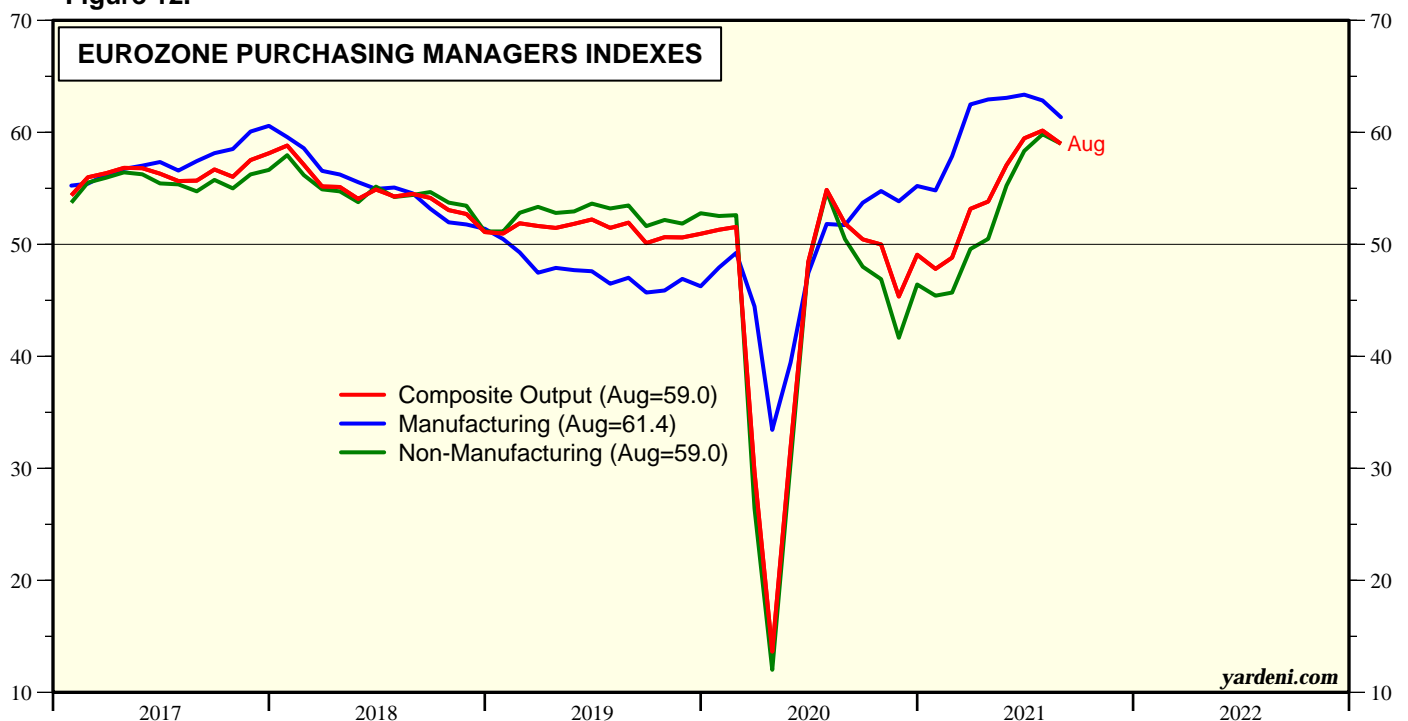
Source: Statistical Office of the European Communities.

Figure 11.



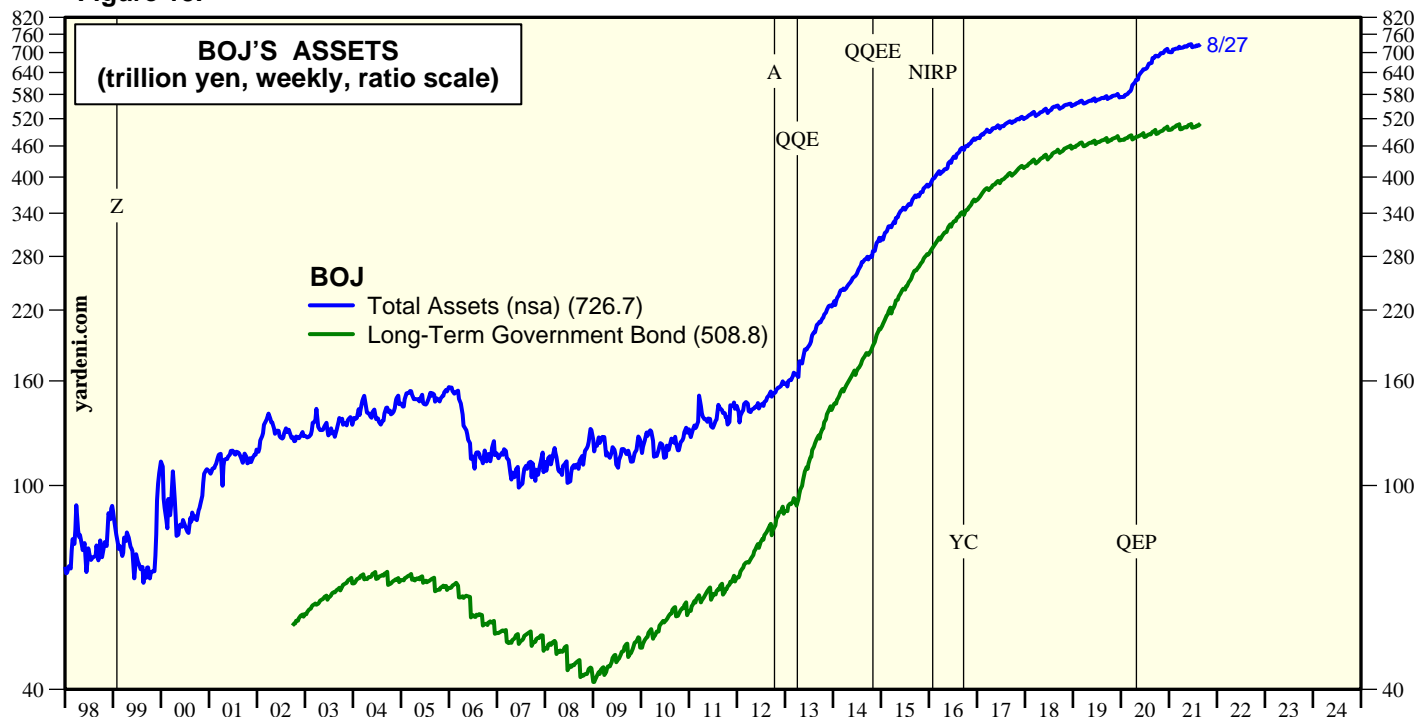
Source: Haver Analytics.

Figure 12.



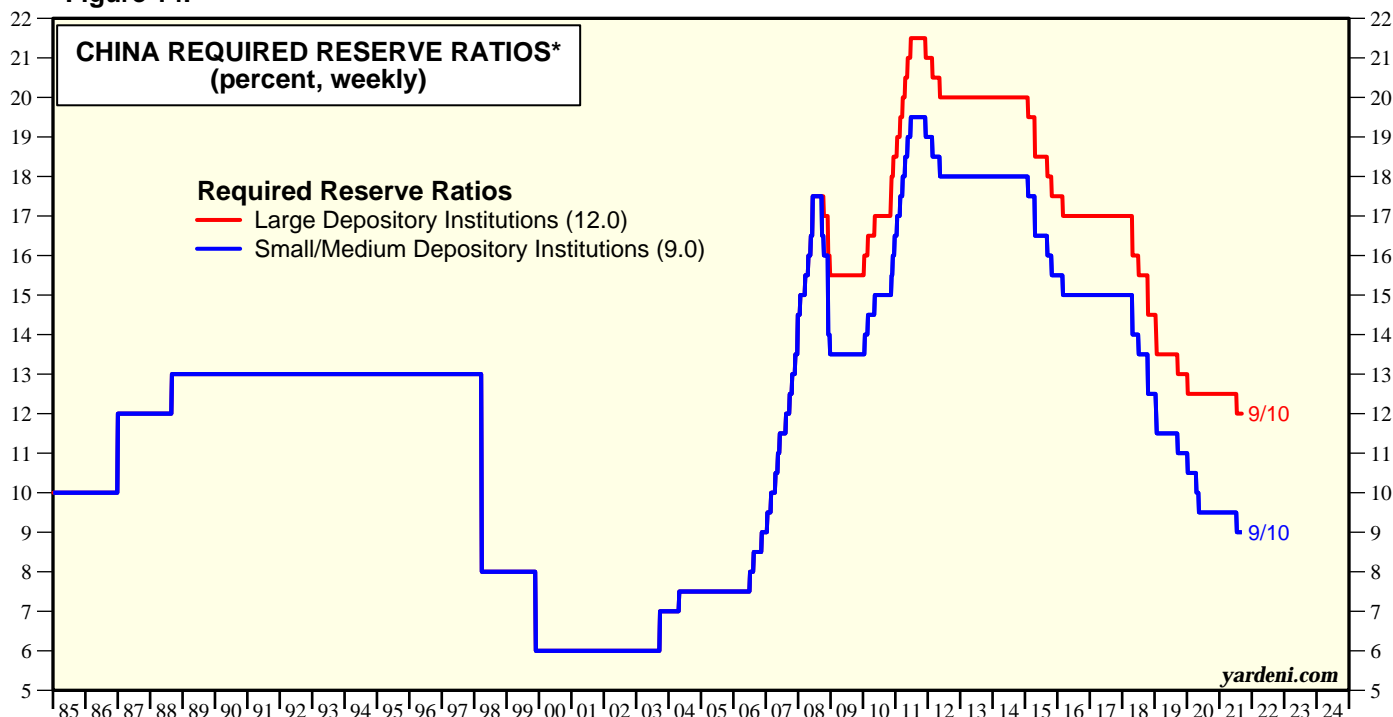
Source: Markit and Haver Analytics.

Figure 13.



Note: Z (2/12/99) = Zero interest-rate policy. A (10/12/12) = Markets start to anticipate Abenomics. QQE (4/4/13) = Quantitative and Qualitative Easing. QQEE (10/31/14) = expanded and extended version of QQE. NIRP (1/29/16) = Negative interest-rate policy. YC (9/21/16) = Yield curve targeting. QEP (4/27/20) = Unlimited QE during pandemic.  
Source: Bank of Japan.

Figure 14.



\* 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.



Figure 15.

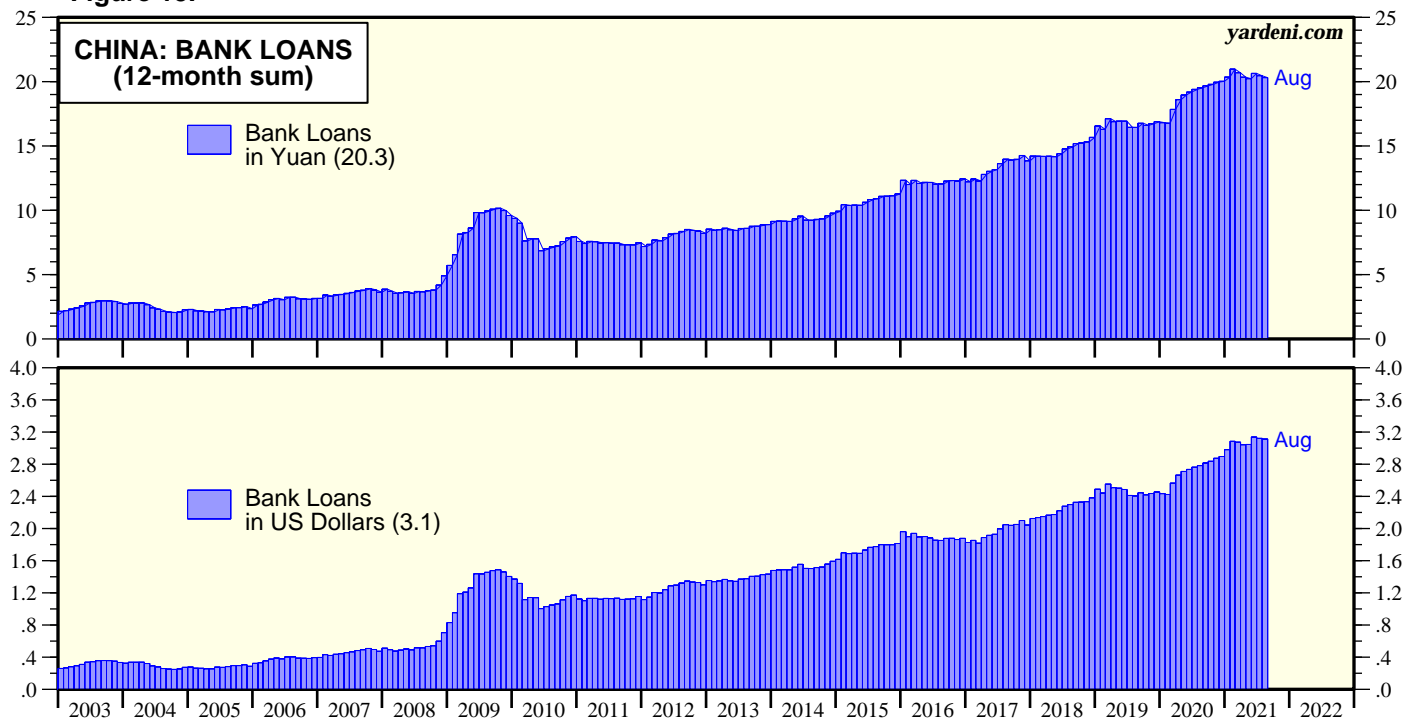
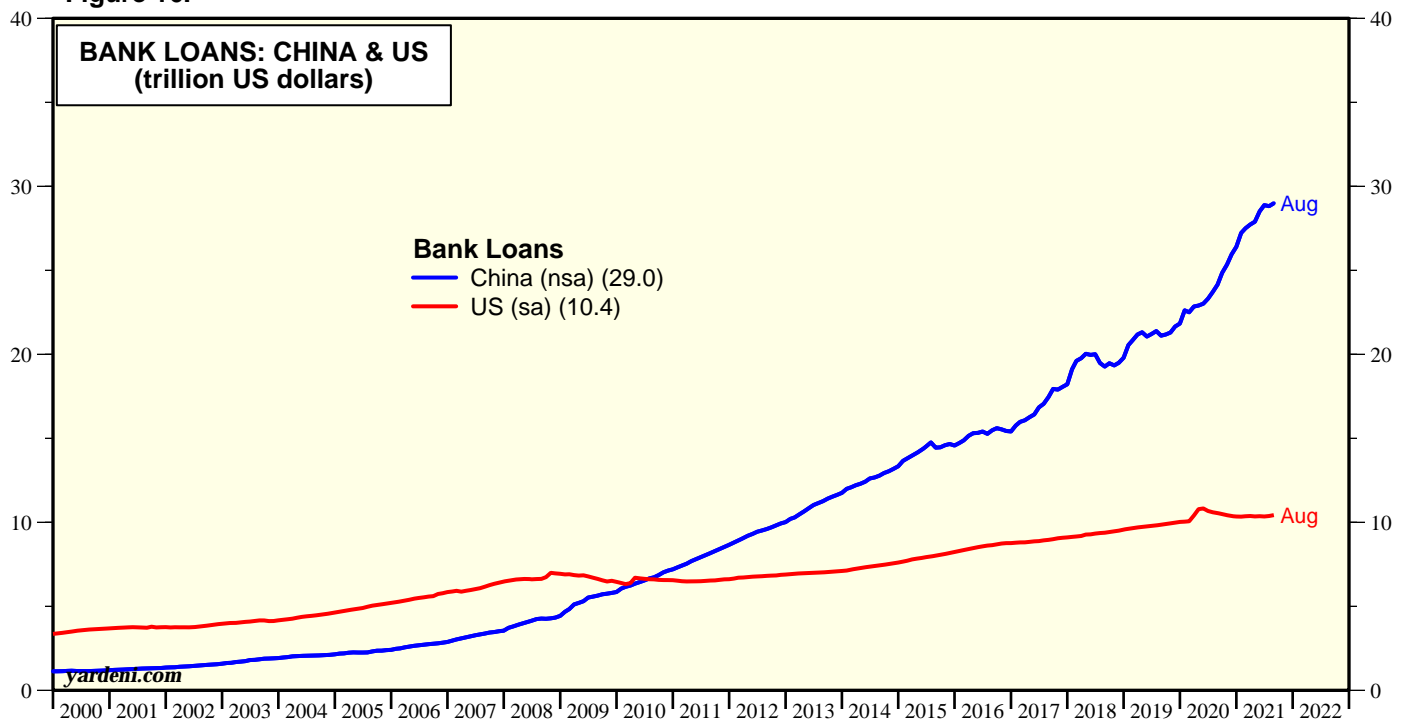


Figure 16.



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