## **Chart Collection for Morning Briefing**

Yardeni Research, Inc.

July 28, 2020

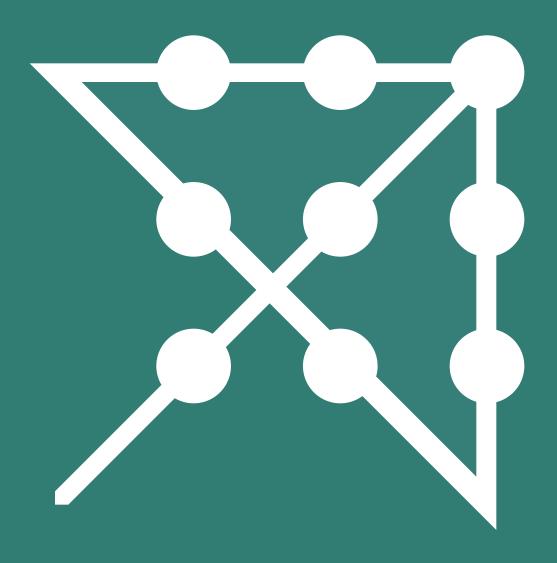
## Dr. Edward Yardeni

516-972-7683 eyardeni@yardeni.com

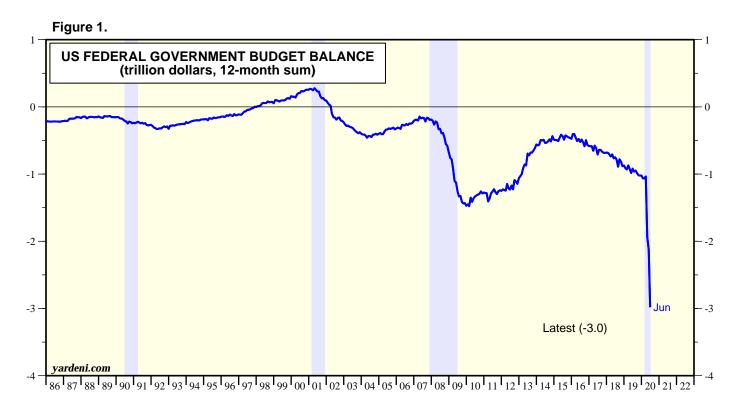
## Mali Quintana

480-664-1333 aquintana@yardeni.com

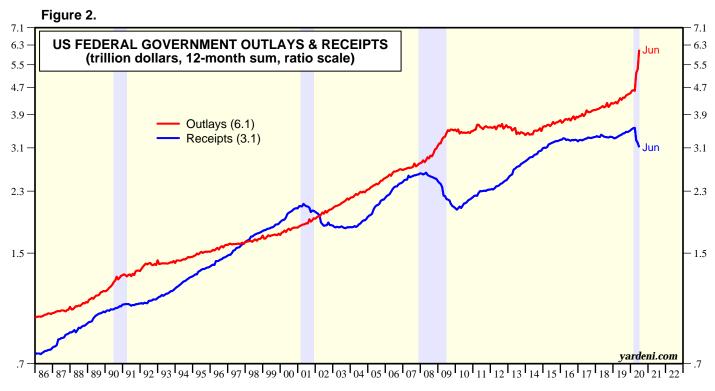
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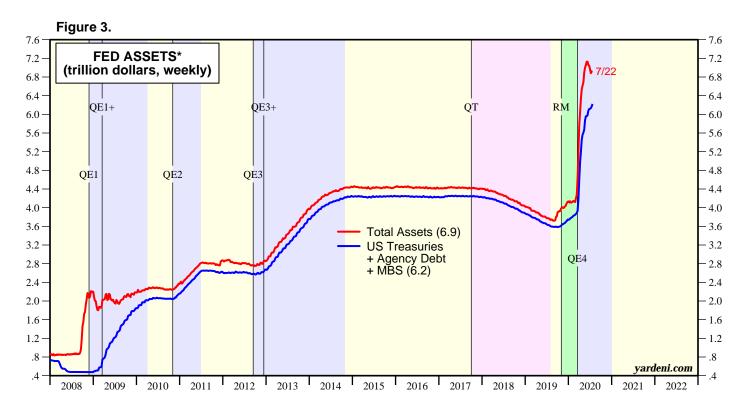
thinking outside the box



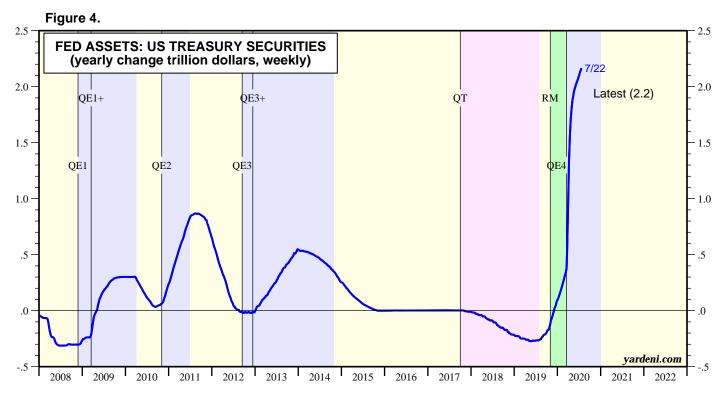
Note: Shaded areas denote recessions according to the National Bureau of Economic Research. Source: US Treasury Department.



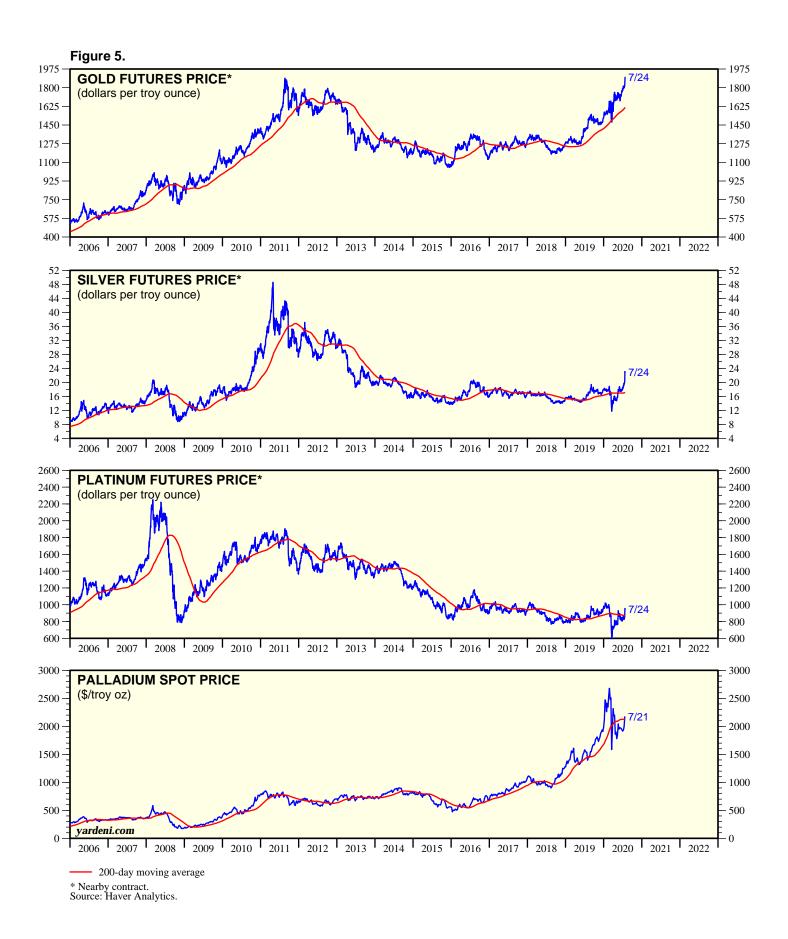
Note: Shaded areas denote recessions according to the National Bureau of Economic Research. Source: US Treasury Department.

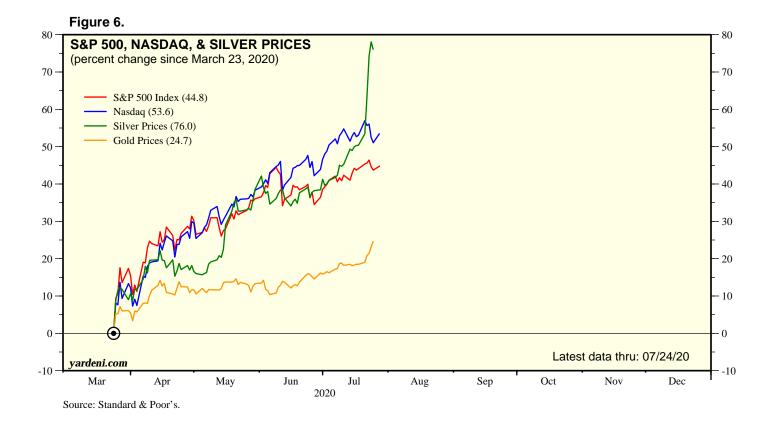


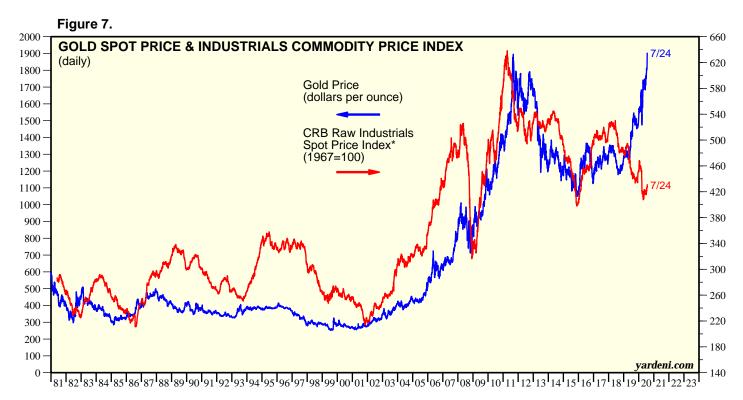
Note: QE1 (11/25/08-3/31/10) = \$1.24tn in mortgage securities; expanded (3/16/09-3/31/10) = \$300bn in Treasuries. QE2 (11/3/10-6/30/11) = \$600bn in Treasuries. QE3 (9/13/12-10/29/14) = \$40bn/month in mortgage securities (open ended); expanded (12/12/12-10/1/14) = \$45bn/month in Treasuries. QT (10/1/17-7/31/19) =balance sheet pared by \$675bn. RM (11/1/19-3/15/20) =reserve management, \$60bn/month in Treasury bills. QE4 (3/16/20-1) Fed data are averages of daily figures for weeks ending Wednesday. Source: Federal Reserve Board.



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 (3/16/20-1) infinity). Source: Federal Reserve Board.



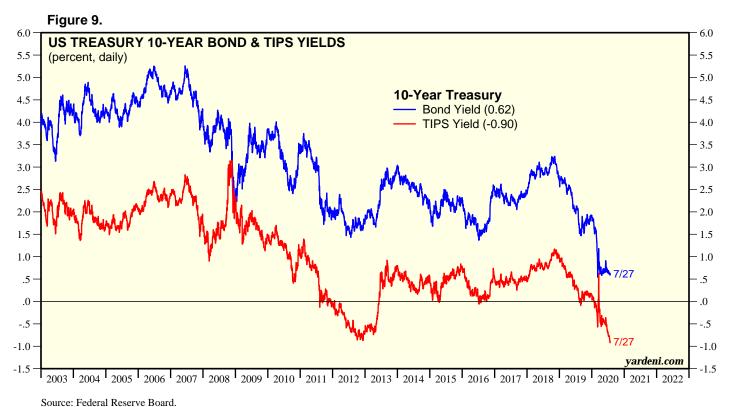


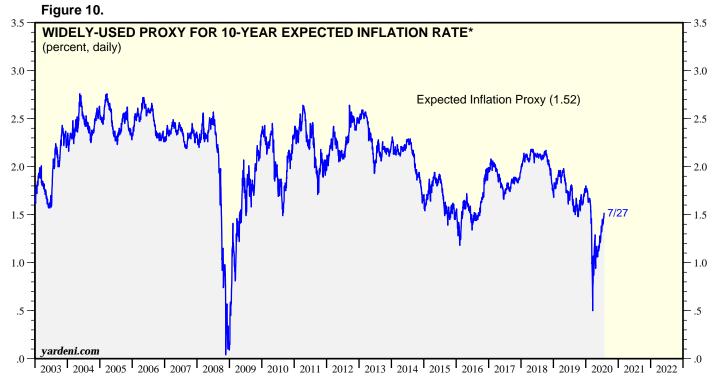


<sup>\*</sup> Includes copper scrap, lead scrap, steel scrap, tin, zinc, burlap, cotton, print cloth, wool tops, hides, rosin, rubber, and tallow. Source: Haver Analytics and Commodity Research Bureau.

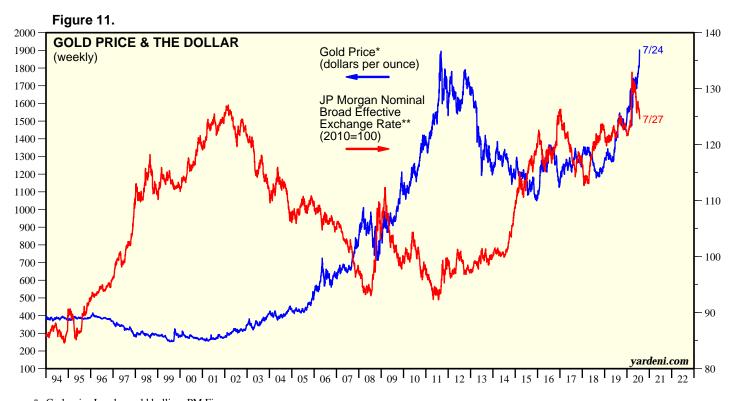


Source: Federal Reserve Board, Wall Street Journal, and Haver Analytics.





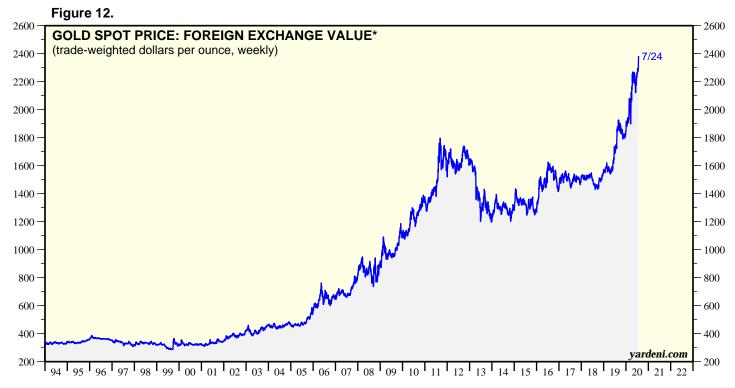
Nominal 10-year US Treasury bond yield minus 10-year TIPS yield.
 Source: Federal Reserve Board.



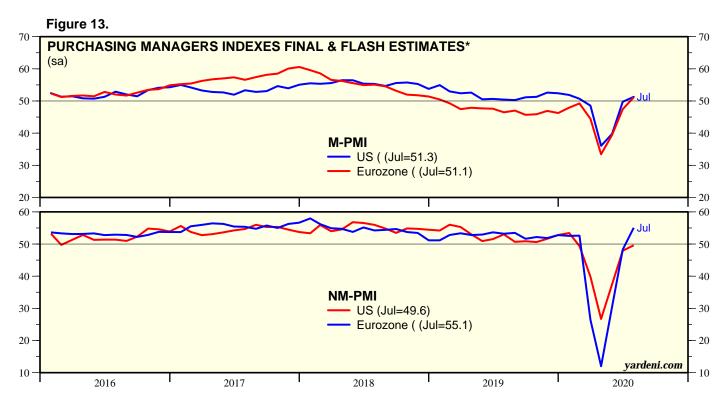
<sup>\*</sup> Cash price London gold bullion, PM Fix.

\*\* 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.

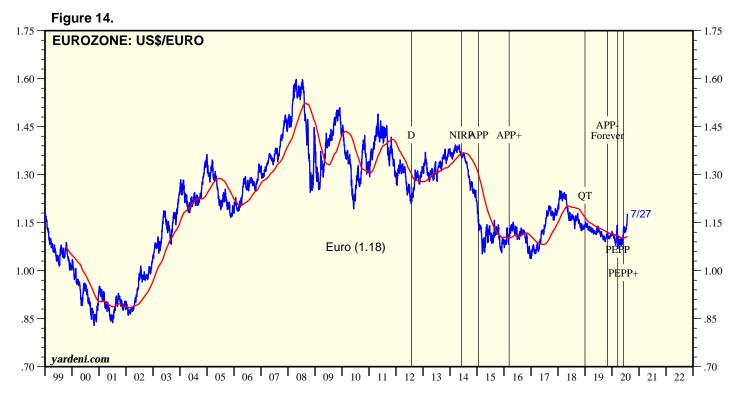
Source: Haver Analytics and JP Morgan.



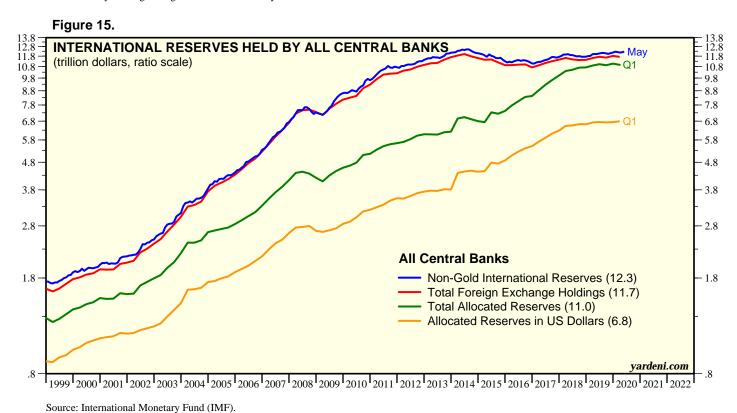
\* Using JP Morgan trade-weighted dollar. Source: Haver Analytics and JP Morgan.

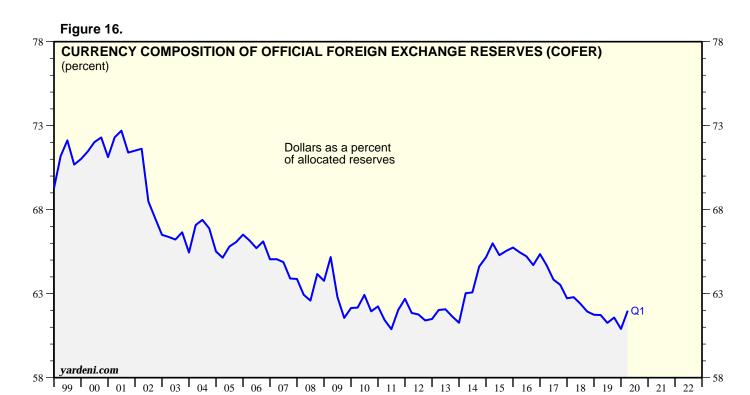


<sup>\*</sup> Manufacturing (M-PMI), and Non-Manufacturing (NM-PMI). Source: IHS Markit and Haver Analytics.

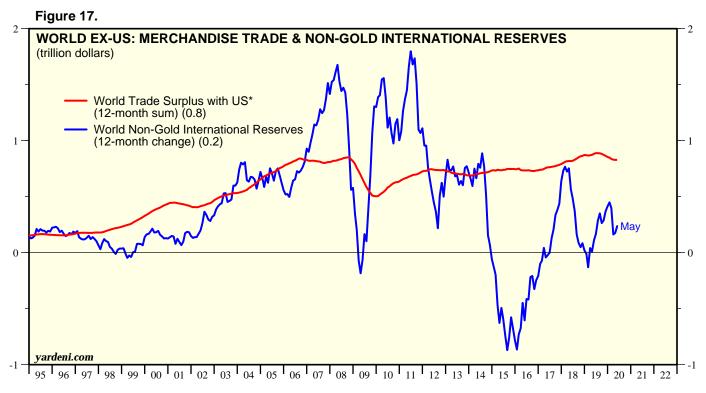


D = ECB President Mario Draghi pledged to do "whatever it takes" to defend the euro (7/26/12). NIRP = negative interest-rate policy (6/5/2014). APP (1/22/15). APP+ = expansion and extension of APP (3/10/16, corporate bond purchases started 6/1/16). QT (12/31/18). APP-Forever (11/1/19) 20 billion euros per month. PEPP (3/18/20) 750 billion euros open-ended asset purchases. PEPP+ (6/4/20) expanded by 600 billion euros. 200-day moving average. Source: Haver Analytics.

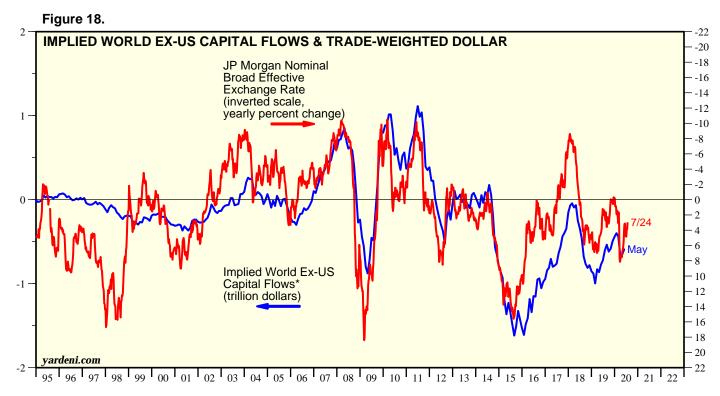




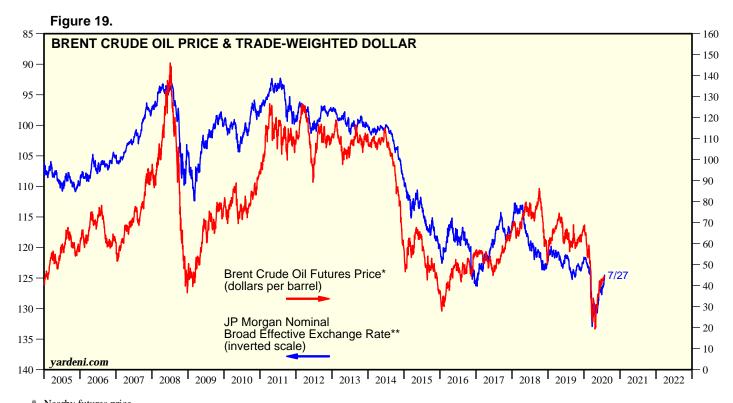
Source: International Monetary Fund (IMF).



<sup>\*</sup> US trade deficit multiplied by -1.0. Source: International Monetary Fund.



\* 12-month change in non-gold international reserves minus 12-month sum of the merchandise trade surplus (deficit). US trade deficit multiplied by -1.0. Source: International Monetary Fund and JP Morgan.



<sup>\*</sup> Nearby futures price.

\*\* 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: JP Morgan and Haver Analytics.

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