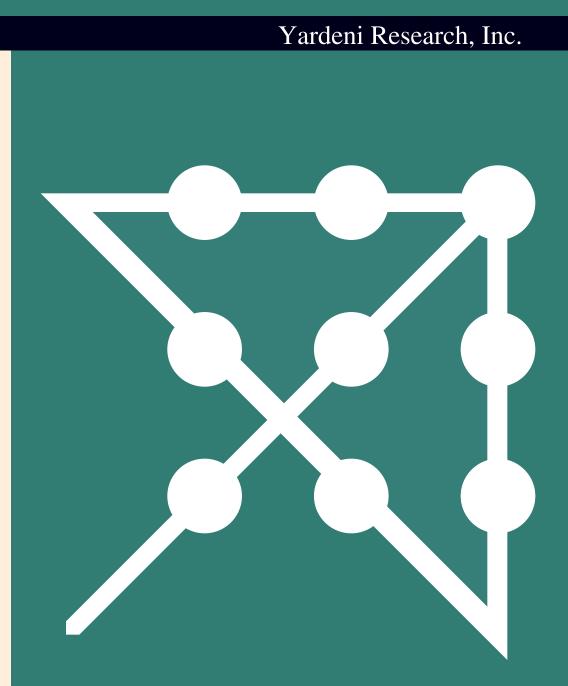
Predicting the Markets Chapter 11 Charts: Predicting Commodities



thinking outside the box

February 25, 2018

Dr. Edward Yardeni Chief Investment Strategist

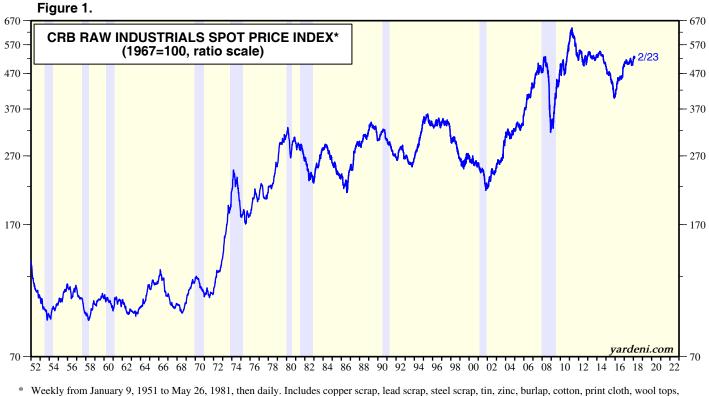
> Mali Quintana Senior Economist info@yardenibook.com

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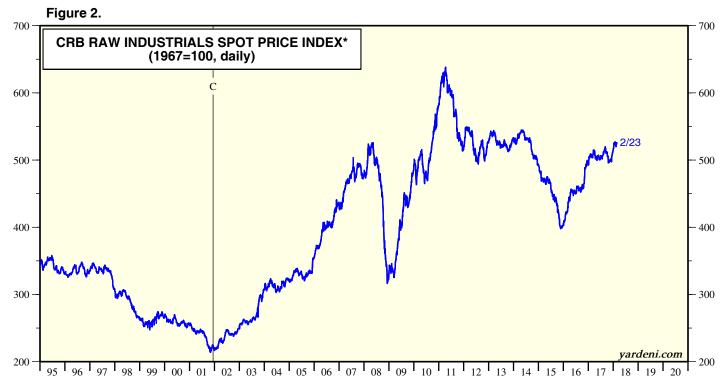
Table Of Contents

Predicting Commodities

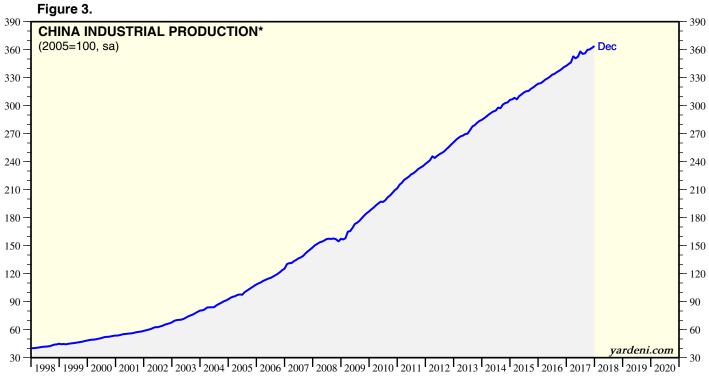
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* Weekly from January 9, 1951 to May 26, 1981, then daily. Includes copper scrap, lead scrap, steel scrap, tin, zinc, burlap, cotton, print cloth, wool tops, hides, rosin, rubber, and tallow.
Note: Shaded areas denote recessions according to the National Bureau of Economic Research.
Source: Commodity Research Bureau.

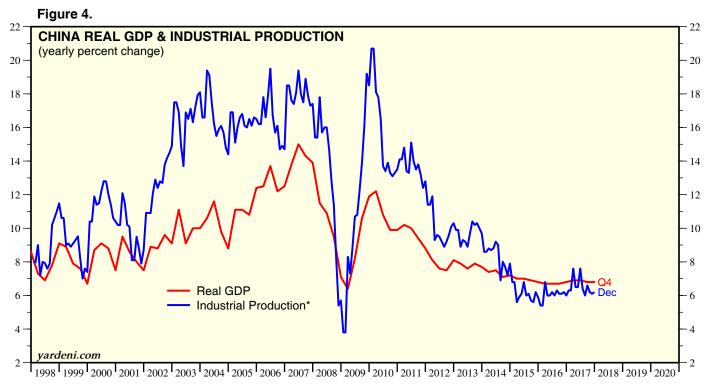


* Includes copper scrap, lead scrap, steel scrap, tin, zinc, burlap, cotton, print cloth, wool tops, hides, rosin, rubber, and tallow. Note: C = China joined World Trade Organization on December 11, 2001. Source: Commodity Research Bureau.

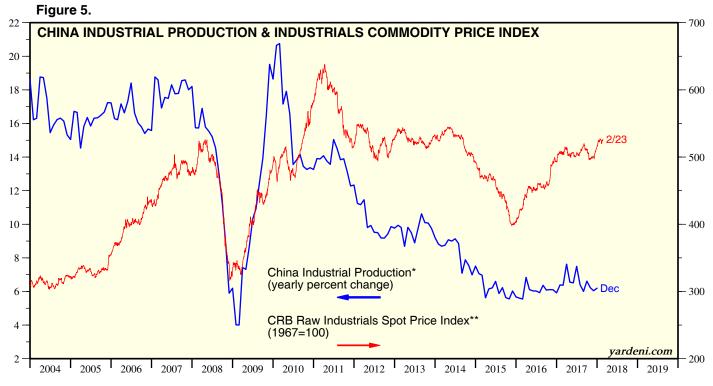


* Value added basis.

Source: China National Bureau of Statistics and Haver Analytics.

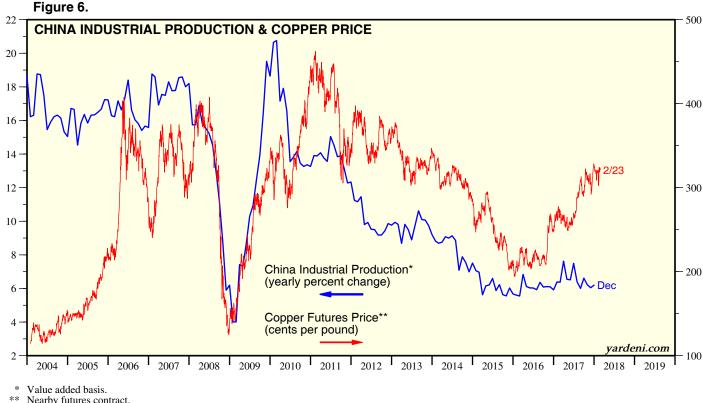


* Value added basis. Source: Haver Analytics.

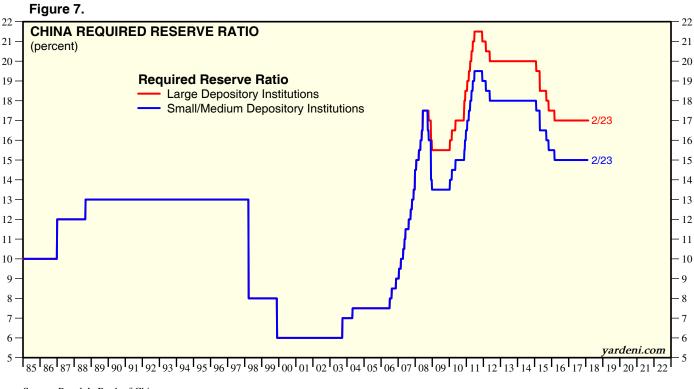


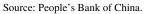
* Value added basis.

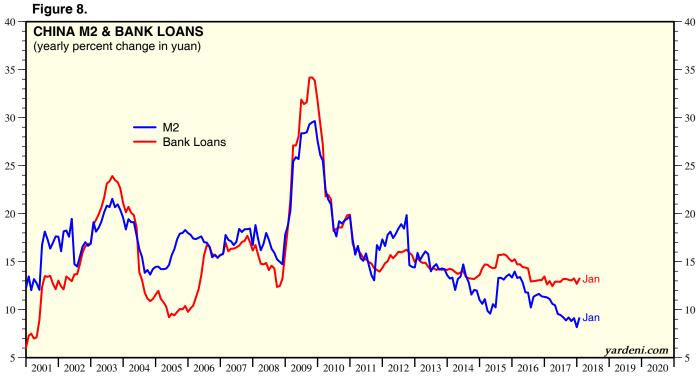
** Includes hides, tallow, copper scrap, lead scrap, steel scrap, zinc, tin, burlap, cotton, print cloth, wool tops, rosin, rubber, hogs, steers, lard, butter, soybean oil, cocoa, corn, Kansas City wheat, Minneapolis wheat, and sugar. Source: Commodity Research Bureau and Haver Analytics.



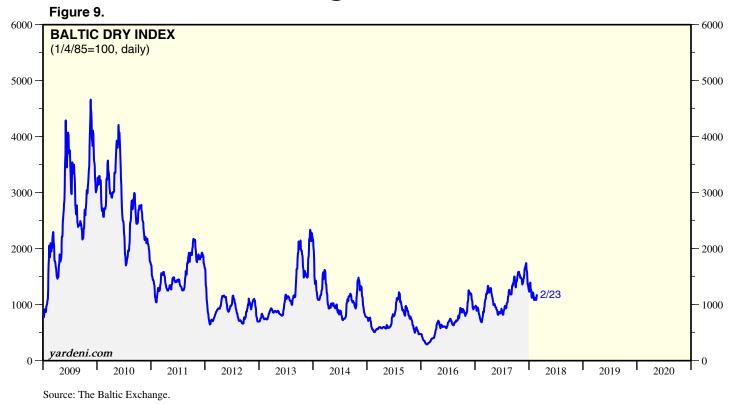
** Nearby futures contract. Source: Haver Analytics.





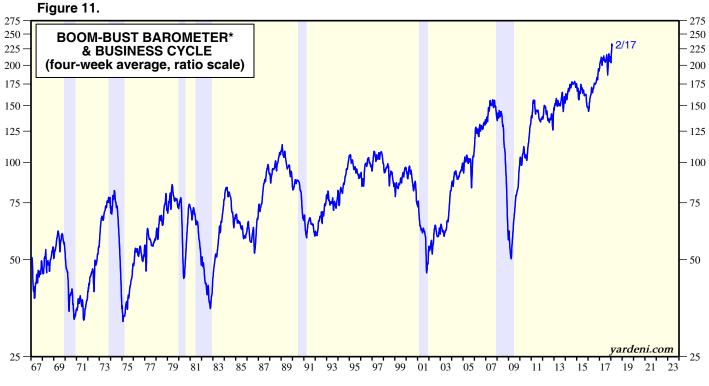


Source: People's Bank of China.



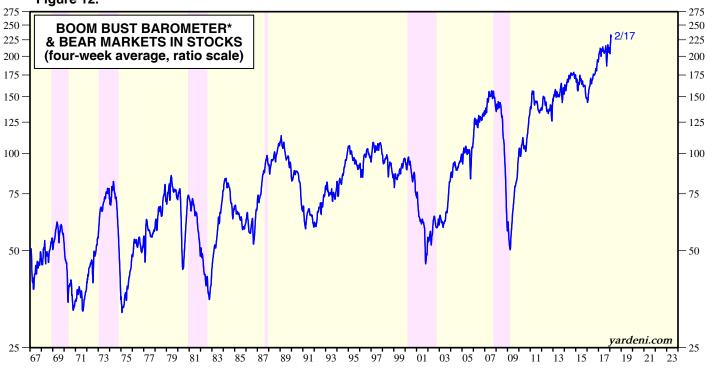


 * Includes copper scrap, lead scrap, steel scrap, tin, zinc, burlap, cotton, print cloth, wool tops, hides, rosin, rubber, and tallow.
 ** Nearby futures contract. Source: Commodity Research Bureau and Haver Analytics.

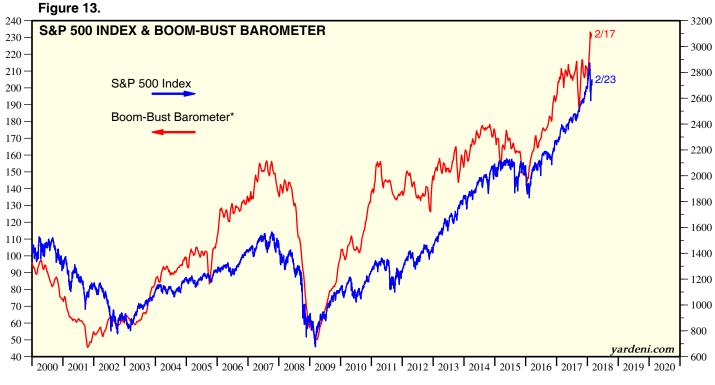


* Weekly average of CRB raw industrials spot price index divided by initial unemployment claims, showing four-week average. Note: Shaded areas denote recessions according to the National Bureau of Economic Research. Source: Commodity Research Bureau and Bureau of Labor Statistics.





* Weekly average of CRB raw industrials spot price index divided by initial unemployment claims, four-week average, showing four-week average. Note: Shaded red areas denote S&P 500 bear market declines of 20% or more. Yellow areas show bull markets. Source: Commodity Research Bureau and Bureau of Labor Statistics.



CRB raw industrials spot price index (weekly average) divided by weekly initial unemployment claims, showing four-week moving average. Source: Commodity Research Bureau, Bureau of Labor Statistics, and Standard & Poor's. *

Figure 14.



Time-weighted average of consensus estimates for the current year and next year. CRB raw industrials spot price index (weekly average) divided by weekly initial unemployment claims, showing four-week moving average. **

Source: Commodity Research Bureau, Bureau of Labor Statistics, and Thomson Reuters I/B/E/S.

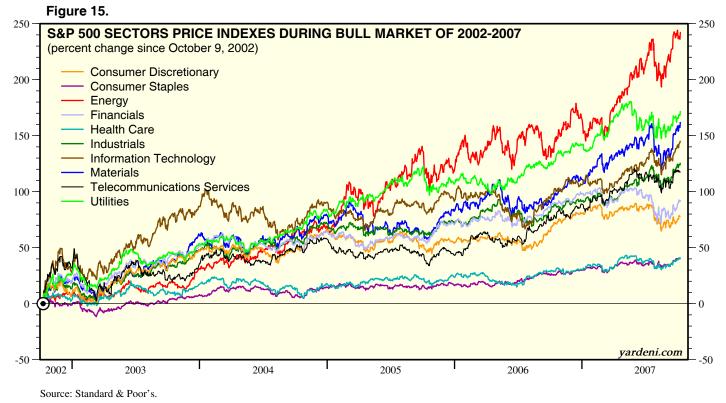
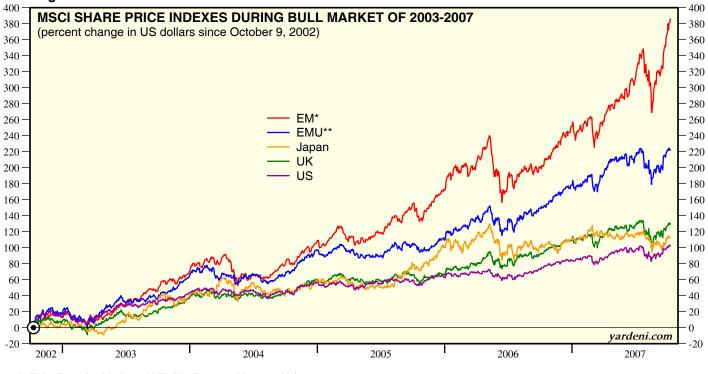
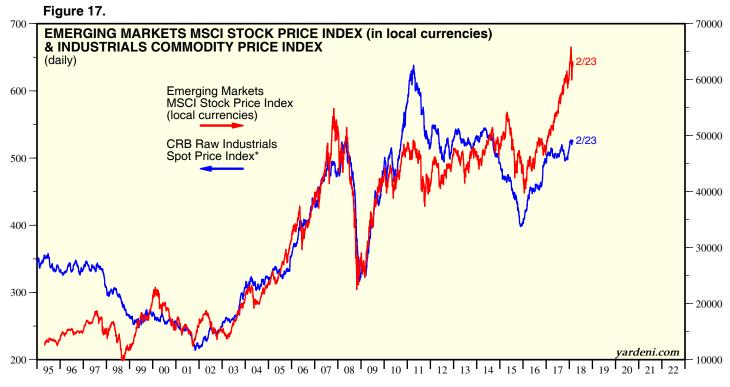


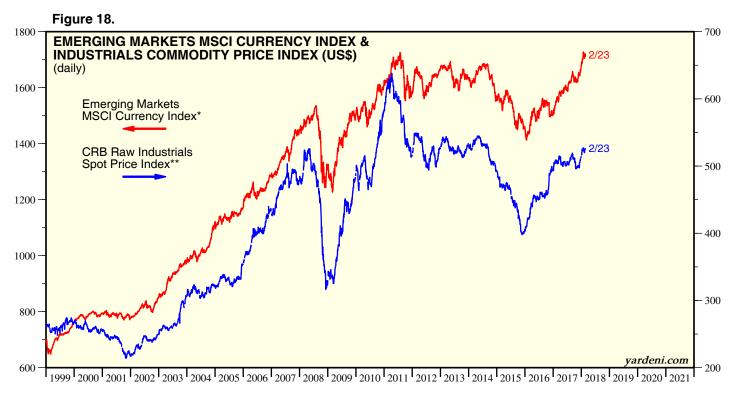
Figure 16.



* EM = Emerging Markets. ** EMU = European Monetary Union. Source: MSCI.



* Includes copper scrap, lead scrap, steel scrap, tin, zinc, burlap, cotton, print cloth, wool tops, hides, rosin, rubber, and tallow. Source: MSCI and Commodity Research Bureau.

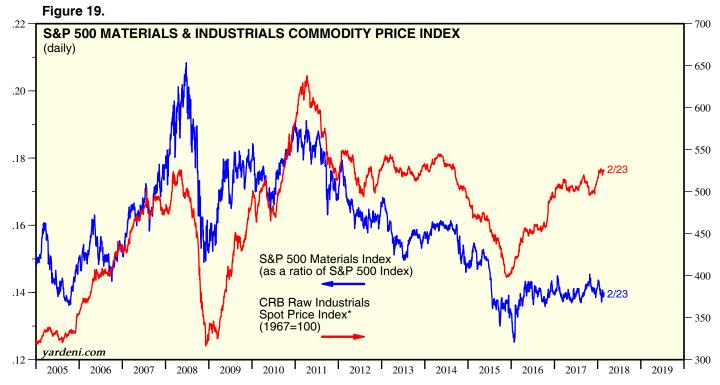


* Includes Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Peru, Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey, and United Arab Emirates.

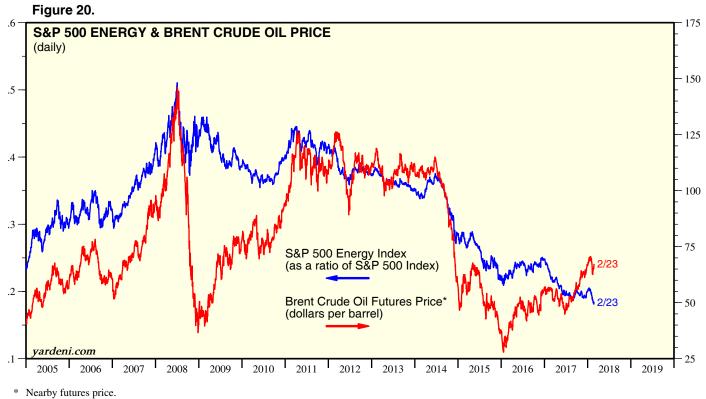
** Includes copper scrap, lead scrap, steel scrap, tin, zinc, burlap, cotton, print cloth, wool tops, hides, rosin, rubber, and tallow. Source: MSCI and Commodity Research Bureau.

Page 9 / February 25, 2018 / Chapter 11 Charts: Predicting Commodities

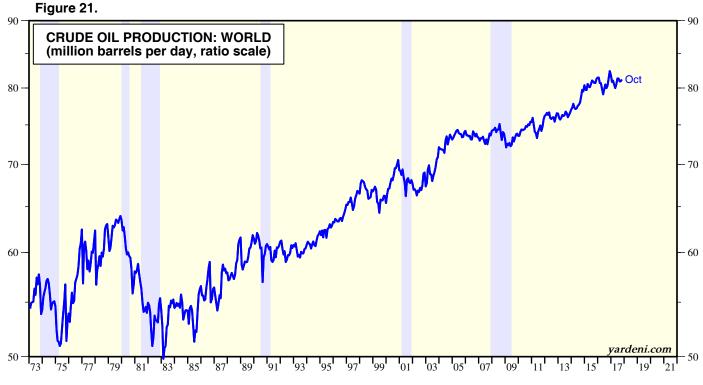
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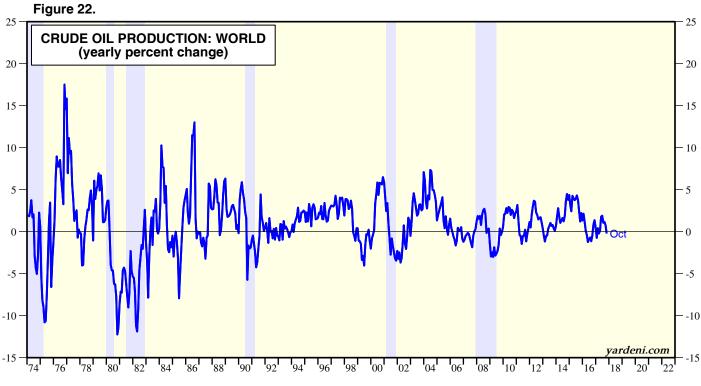
* Includes copper scrap, lead scrap, steel scrap, tin, zinc, burlap, cotton, print cloth, wool tops, hides, rosin, rubber, and tallow. Source: Standard & Poor's and Commodity Research Bureau.



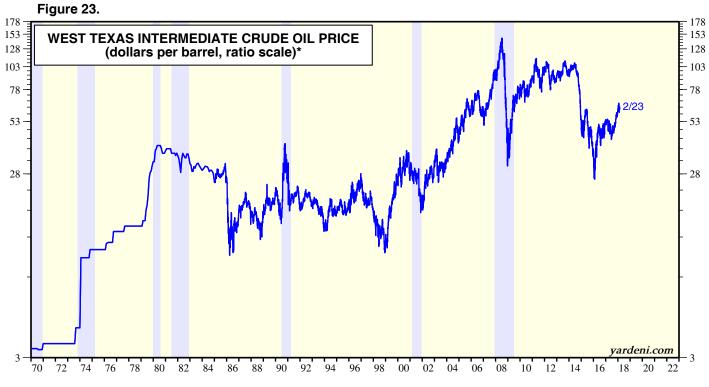
Source: Standard & Poor's and the Financial Times.



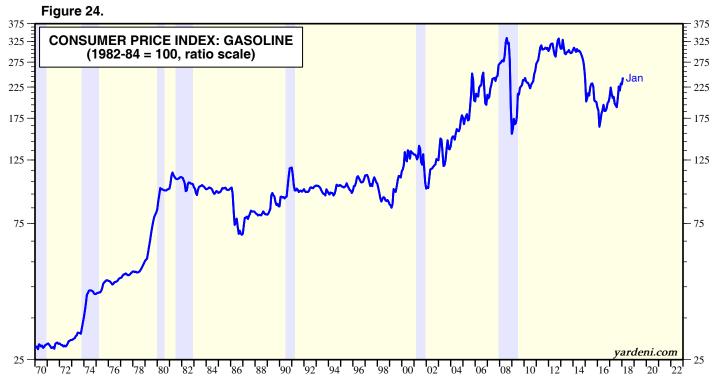
Note: Shaded areas denote recessions according to the National Bureau of Economic Research. Source: Energy Information Administration.



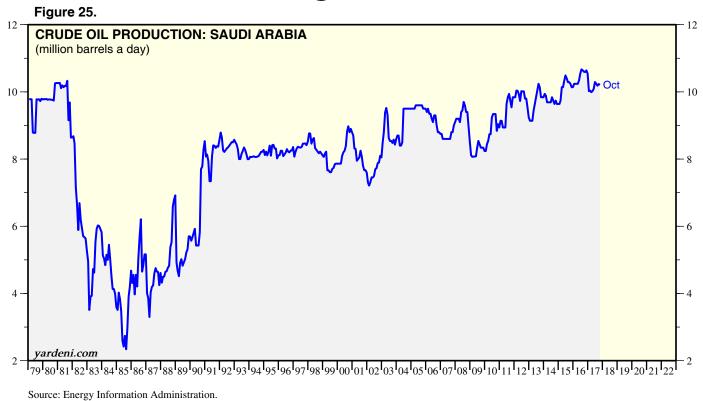
Note: Shaded areas denote recessions according to the National Bureau of Economic Research. Source: Energy Information Administration.

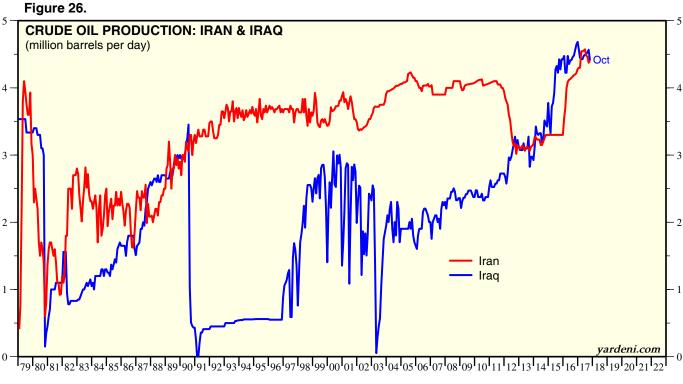


^{*} Monthly from 1946 to 1984, then daily. Note: Shaded areas denote recessions according to the National Bureau of Economic Research. Source: Haver Analytics.

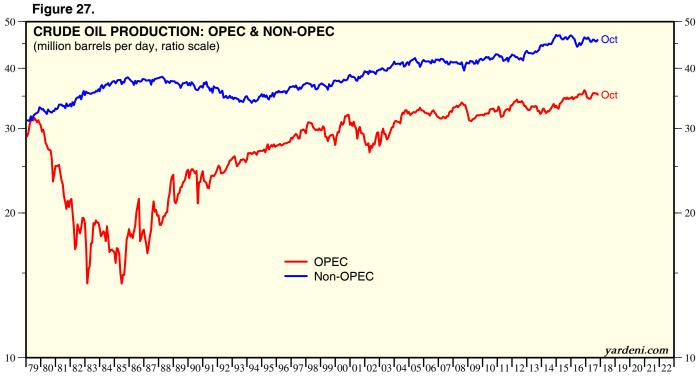


Note: Shaded areas denote recessions according to the National Bureau of Economic Research. Source: Bureau of Labor Statistics.

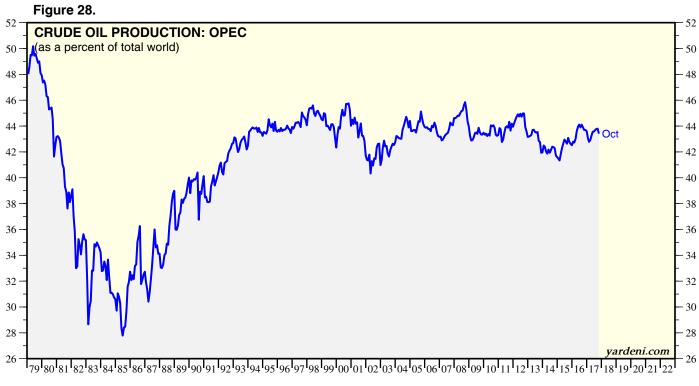




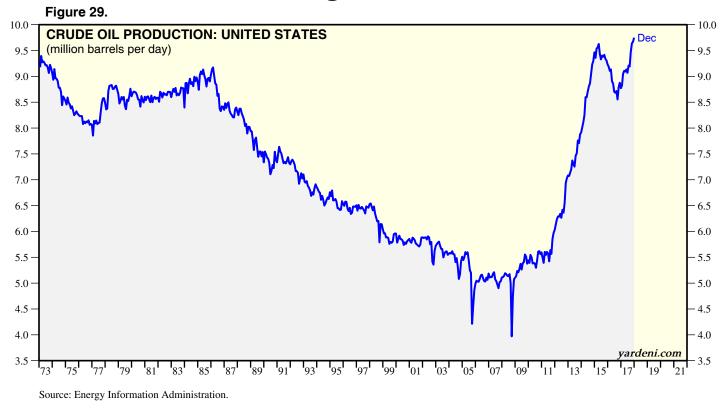
Source: Energy Information Administration.

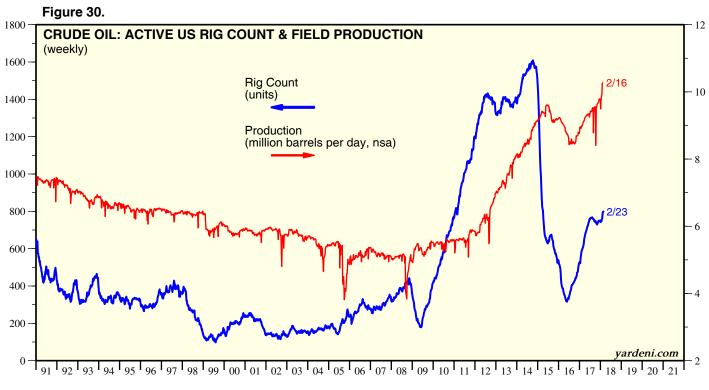


Source: Energy Information Administration.

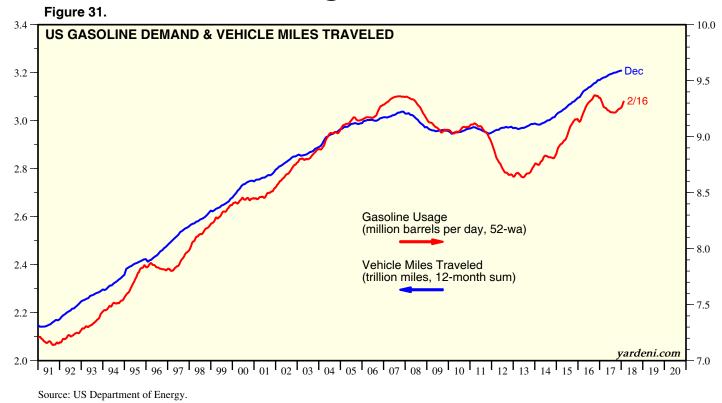


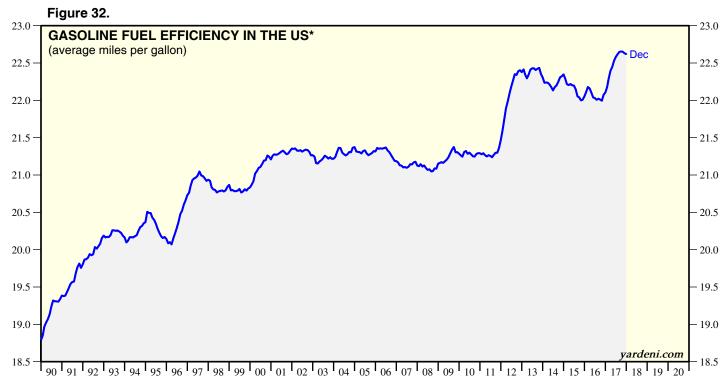
Source: Energy Information Administration.



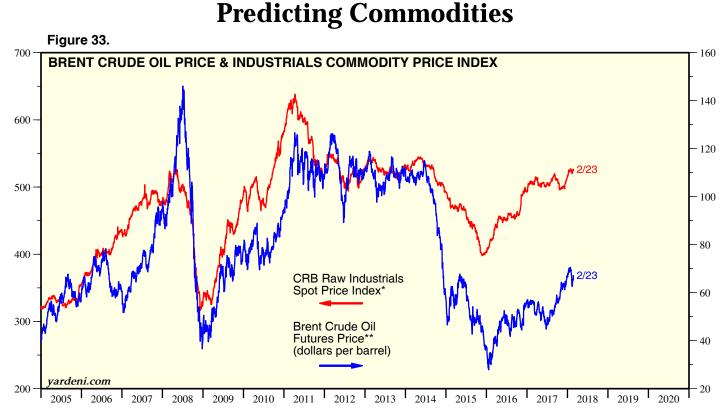


Source: Baker Hughes Inc. and US Department of Energy.

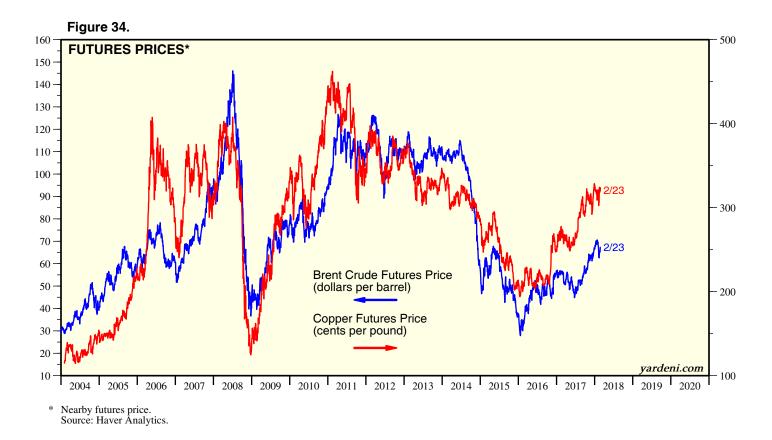




* Vehicle miles traveled (billion miles, 12-month sum) divided by Gasoline usage (billion barrels per day, 52-wa) Source: US Department of Energy.

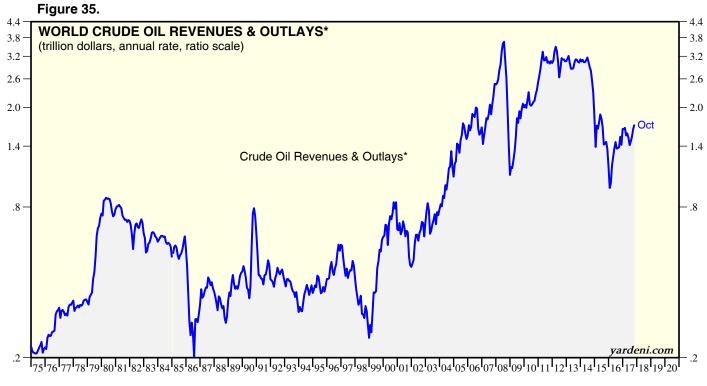


* Includes copper scrap, lead scrap, steel scrap, tin, zinc, burlap, cotton, print cloth, wool tops, hides, rosin, rubber, and tallow.
 ** Nearby futures price.
 Source: Commodity Research Bureau and Haver Analytics.



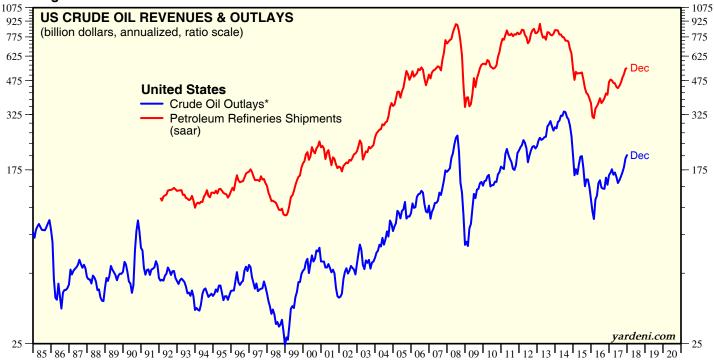
Page 17 / February 25, 2018 / Chapter 11 Charts: Predicting Commodities

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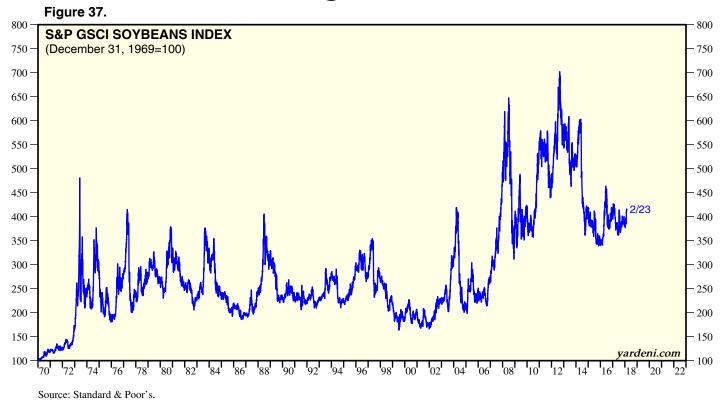


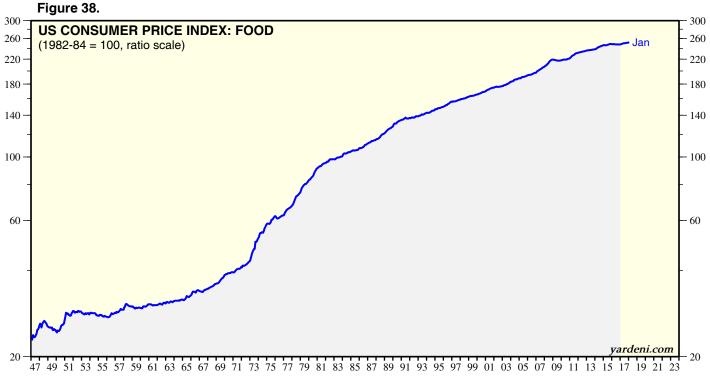
* Monthly crude oil production (in mbd) times 365 days times dollar price of a barrel of Brent crude oil. Note: West Texas Intermediate Spot Price from 1975 TO 1984, Brent Crude oil price thereafter. Source: Energy Intelligence Administration.

Figure 36.

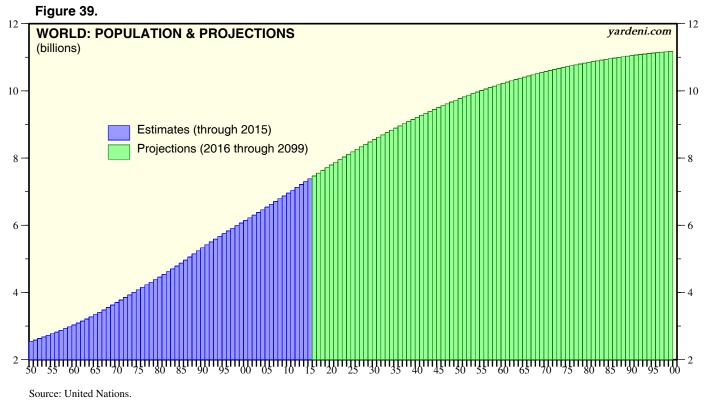


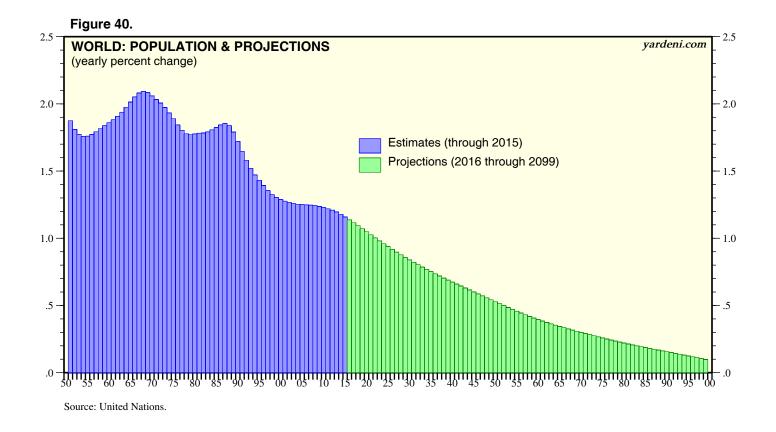
* Monthly crude oil production (in mbd) multiplied by 365 days and the price of a barrel of West Texas Intermediate crude oil. Source: Energy Intelligence Administration.



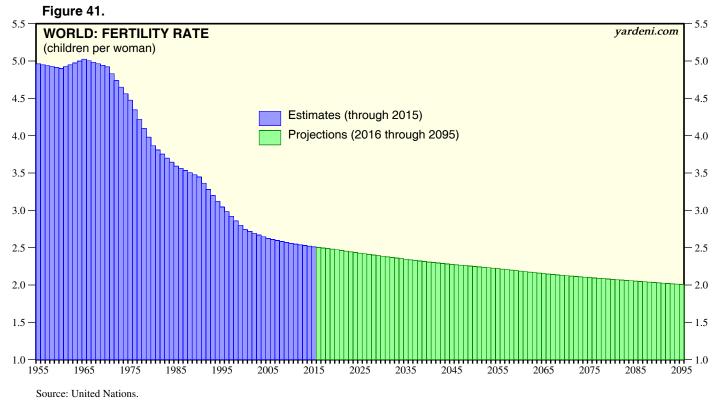


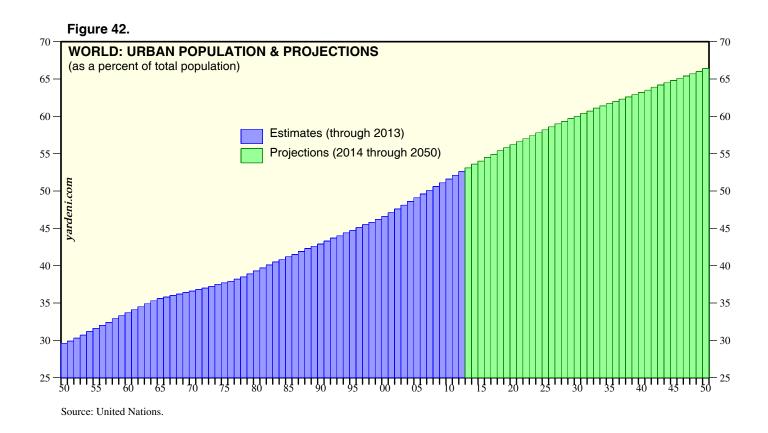
Source: Bureau of Labor Statistics.

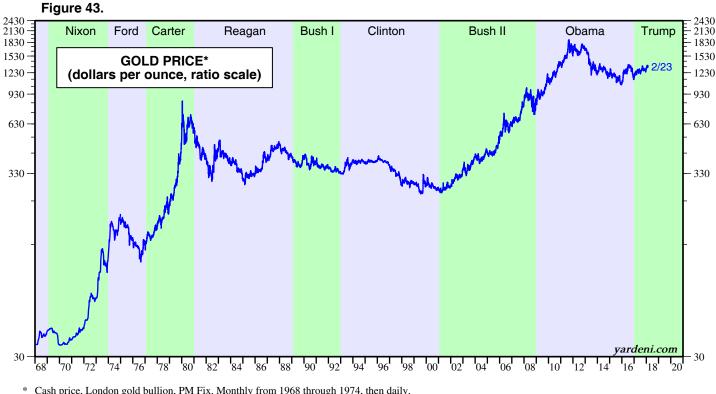




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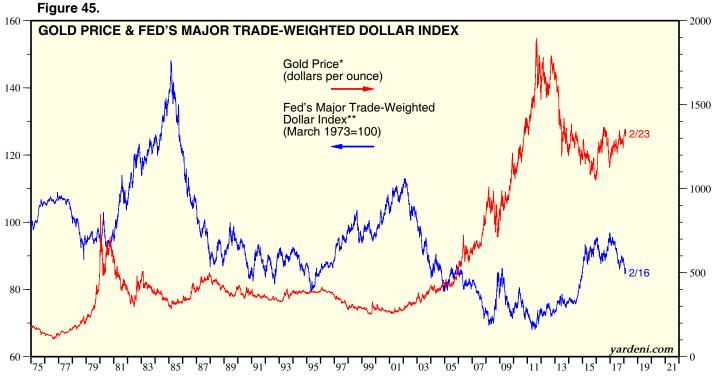




* Cash price, London gold bullion, PM Fix. Monthly from 1968 through 1974, then daily. Source: The Wall Street Journal and Haver Analytics.



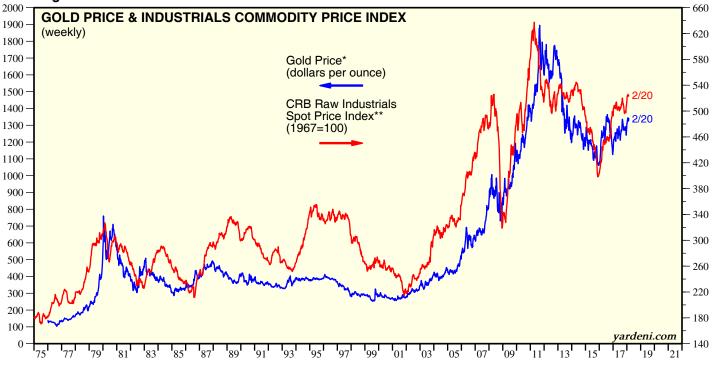
Cash price. London gold bullion, PM Fix. Source: Bureau of Labor Statistics, The Wall Street Journal, and Haver Analytics.



*

Cash price, London gold bullion, PM Fix. Index is the weighted average of the foreign exchange rates of the US dollar against the Euro Area, Canada, Japan, United Kingdom, Switzerland, ** Australia, and Sweden. The Euro Area includes Germany, France, Italy, Netherlands, Belgium/Luxembourg, Ireland, Spain, Australa, Finland, Portugal, & Greece. Source: Federal Reserve Board, The Wall Street Journal, and Haver Analytics.

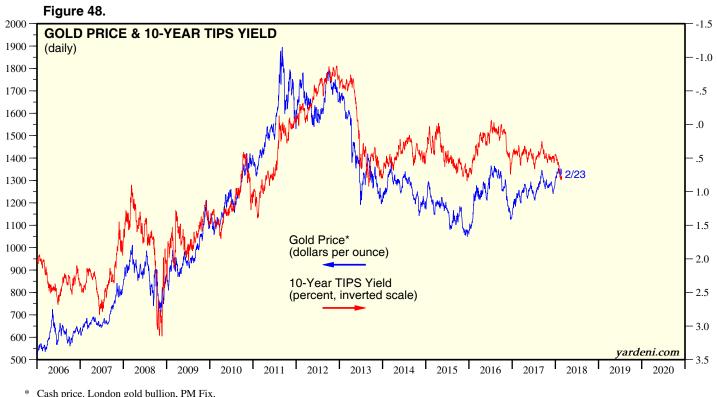
Figure 46.



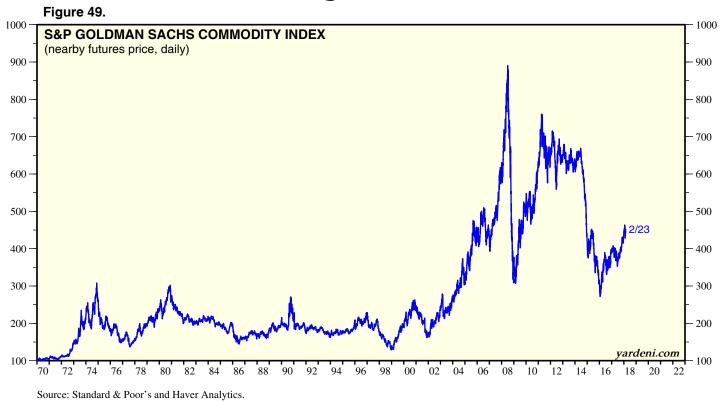
Cash price London gold bullion, PM Fix. ** Includes copper scrap, lead scrap, steel scrap, tin, zinc, burlap, cotton, print cloth, wool tops, hides, rosin, rubber, and tallow. Source: Commodity Research Bureau, The Wall Street Journal, and Haver Analytics..

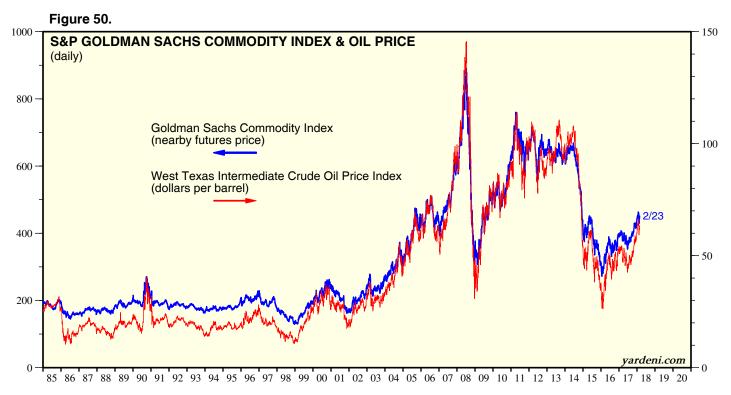


200-day moving average Note: D = On July 26, 2012, ECB President Mario Draghi pledged to do "whatever it takes" to defend the euro. A = On April 4, 2013, Bank of Japan implemented "Abenomics" monetary policy. Source: The Wall Street Journal and Haver Analytics.



Cash price. London gold bullion, PM Fix. Source: Federal Reserve Board, The Wall Street Journal, and Haver Analytics.





Source: Standard & Poor's and Haver Analytics.

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