

Topical Study #5

Yardeni Research, Inc.

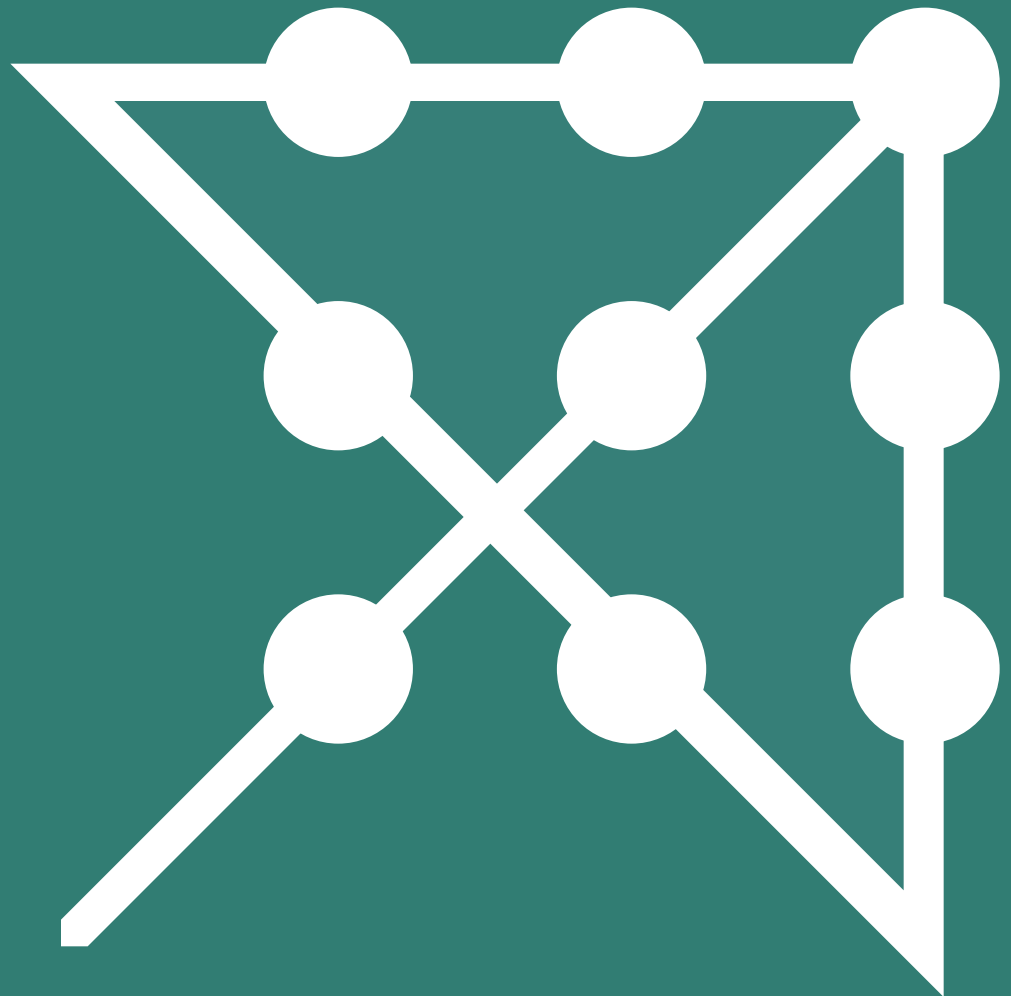
March 8, 2024

Dr. Edward Yardeni

516-972-7683

eyardeni@yardeni.com

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



thinking outside the box

Topical Study #5: Updated Charts

Figure 1.

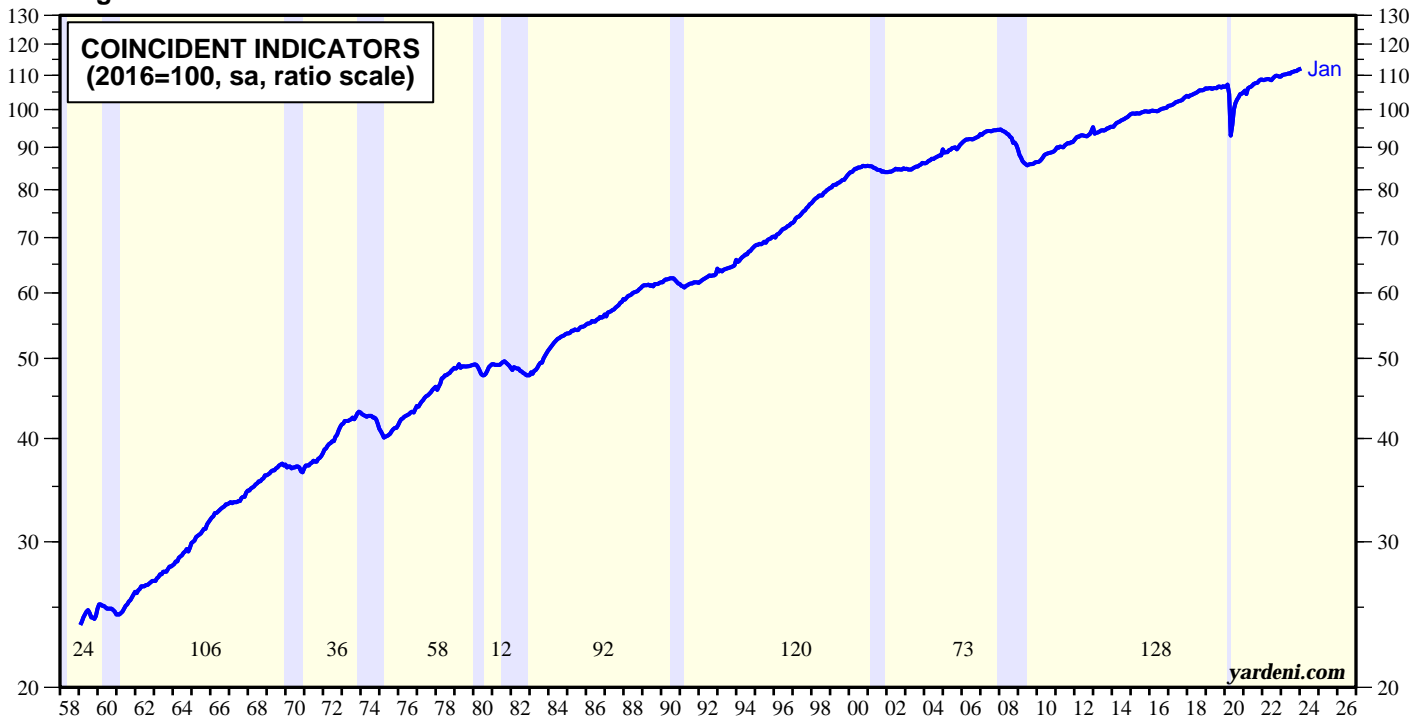
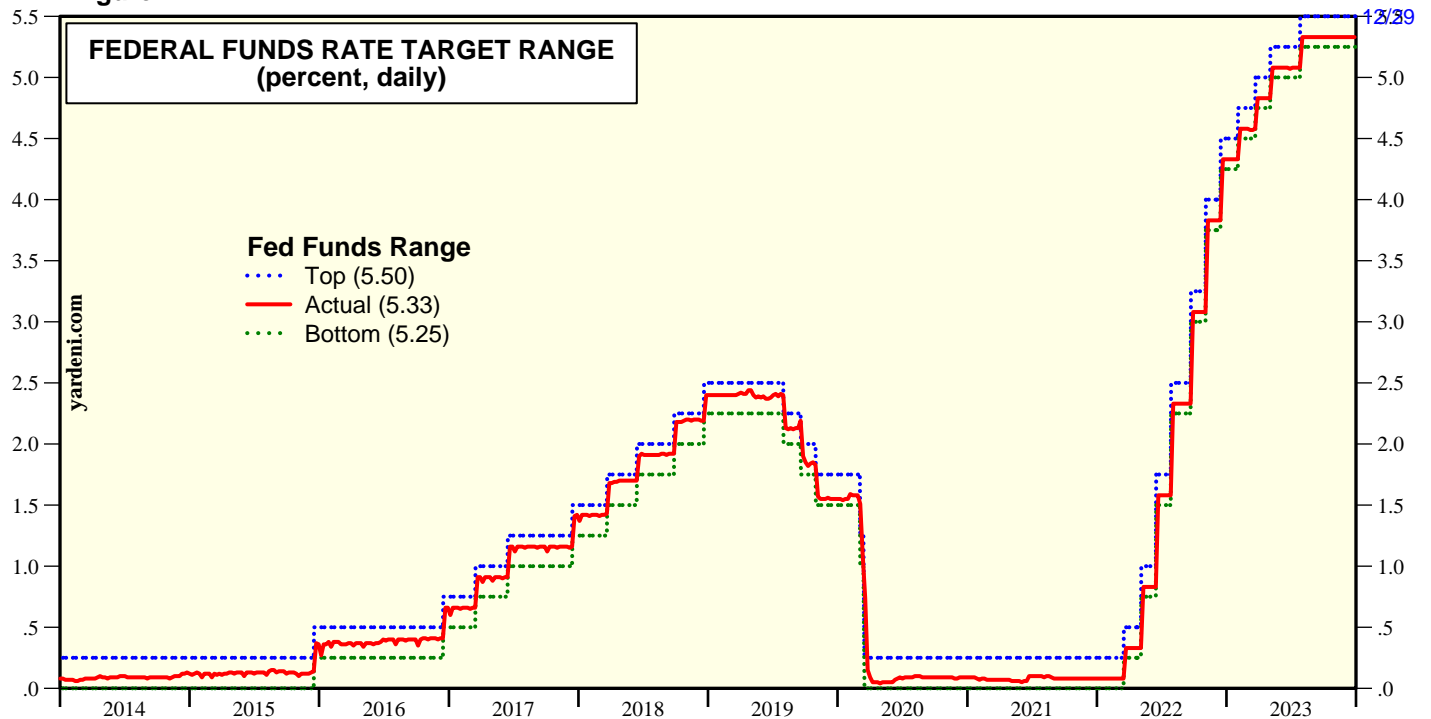
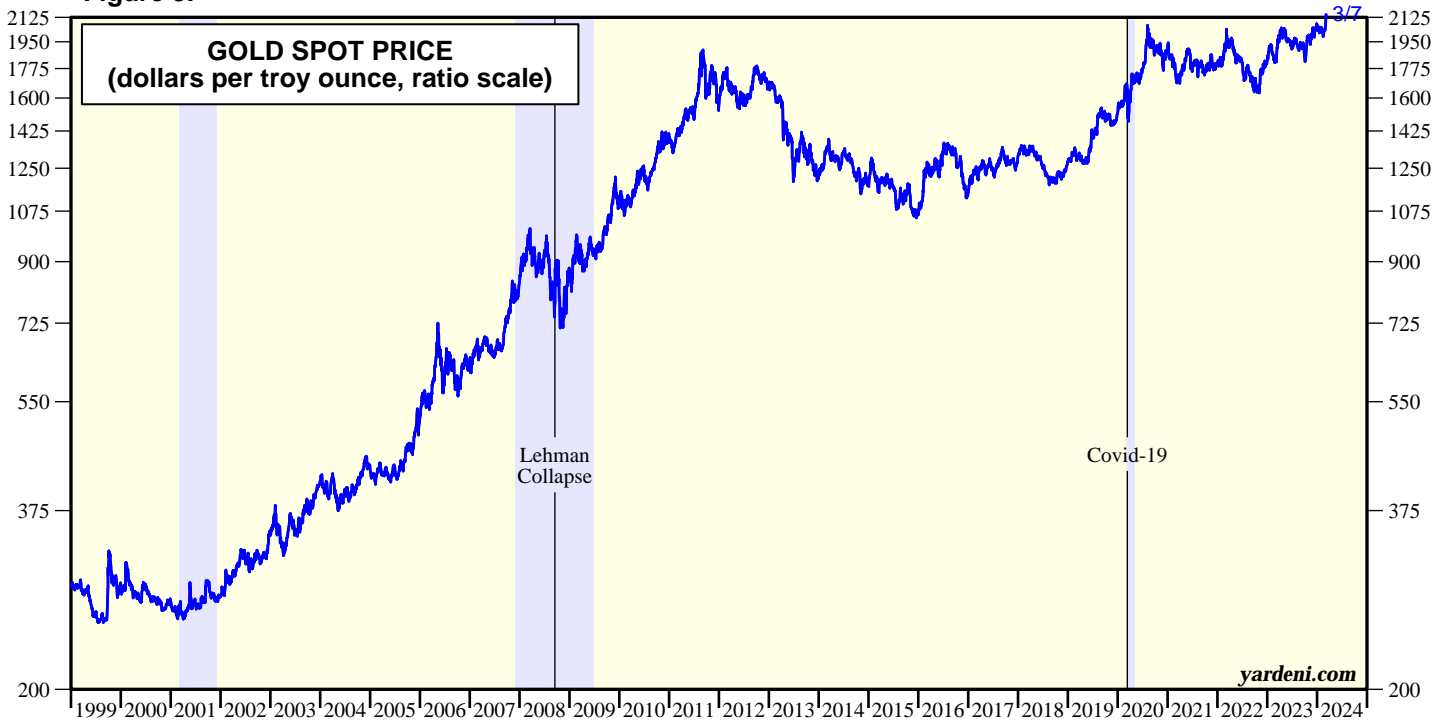


Figure 2.



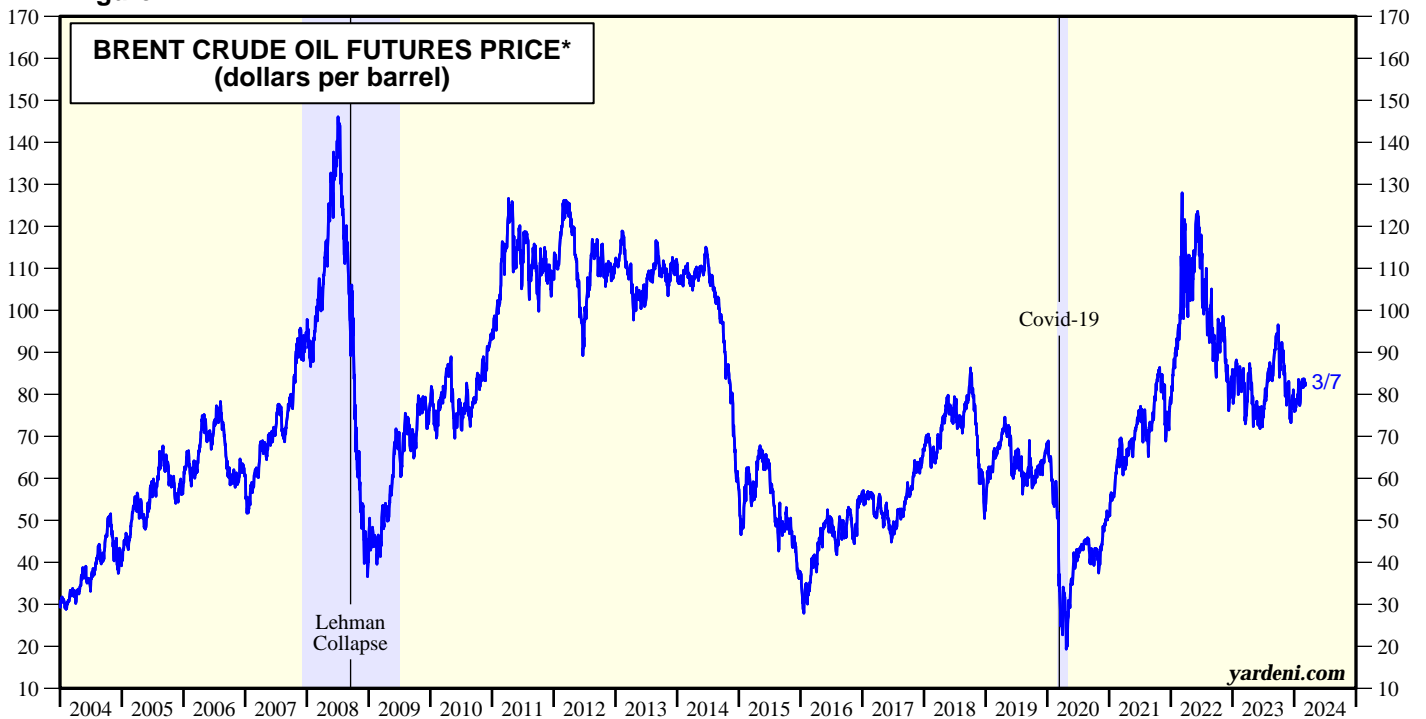
Topical Study #5: Updated Charts

Figure 3.



Shaded areas are recessions according to the National Bureau of Economic Research.
 Note: Lehman collapsed 9/15/2008. WHO declared global Covid-19 pandemic on 3/11/2020.
 Source: Wall Street Journal and Haver Analytics.

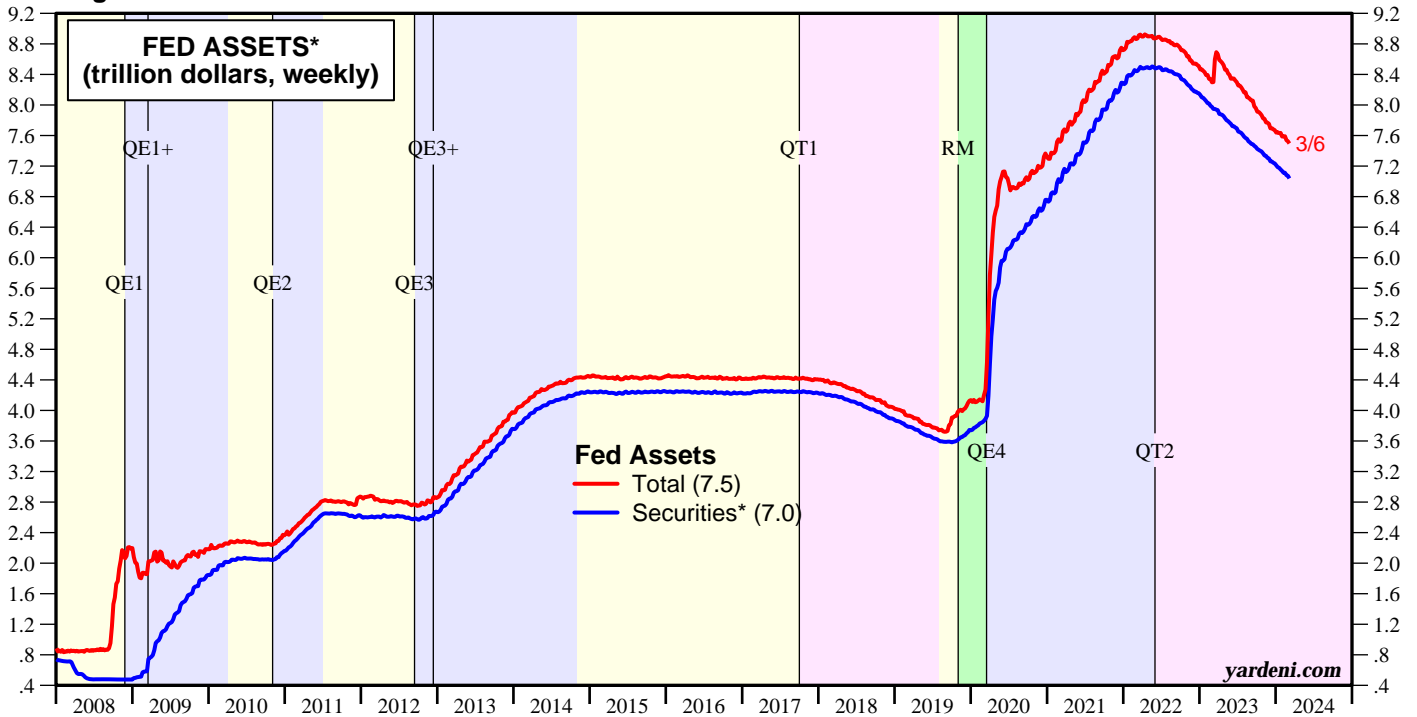
Figure 4.



* Nearby futures price.
 Shaded areas are recessions according to the National Bureau of Economic Research.
 Note: Lehman collapsed 9/15/2008. WHO declared global Covid-19 pandemic on 3/11/2020.
 Source: Haver Analytics.

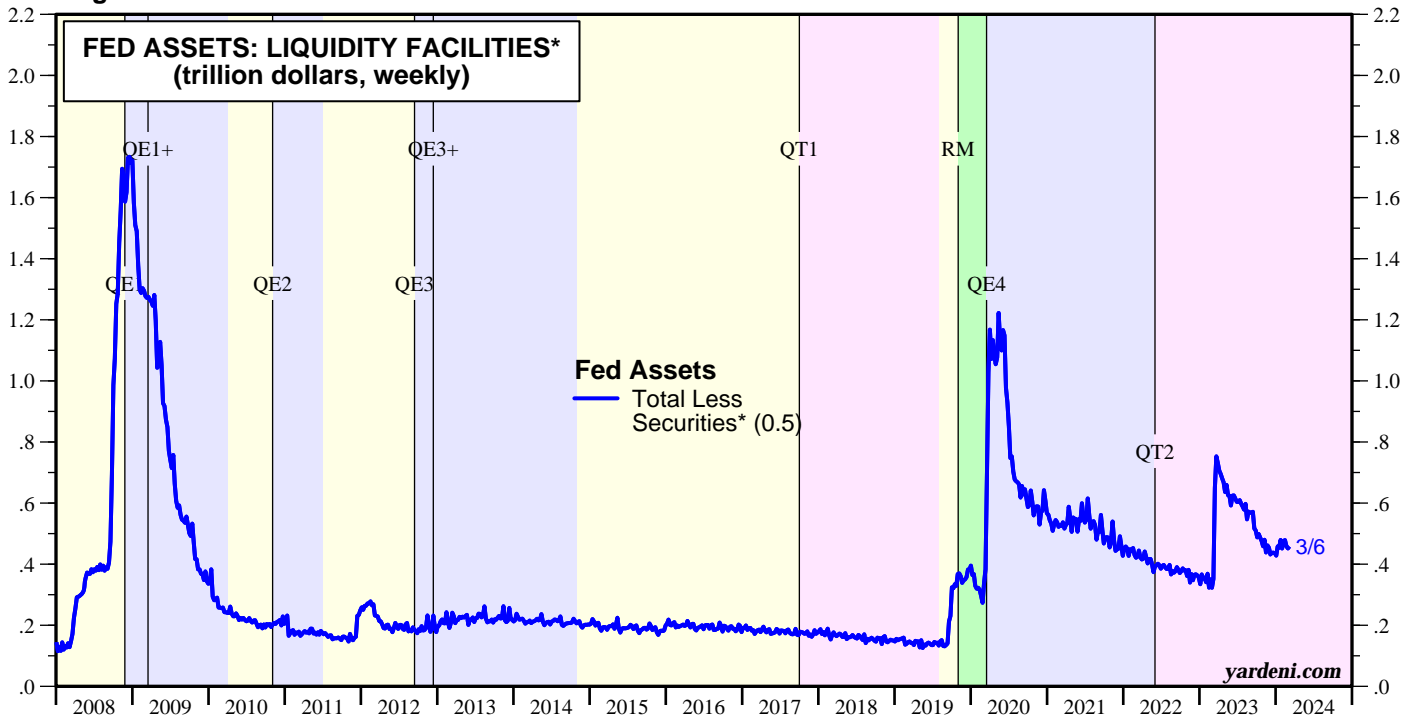
Topical Study #5: Updated Charts

Figure 5.



* Averages of daily figures for weeks ending Wednesday. Securities held by Fed include US Treasuries, Agency debt, and mortgage-backed securities. 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. QT1 (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). QT2 = balance sheet pared by \$95 billion per month. Source: Federal Reserve Board and US Treasury Department.

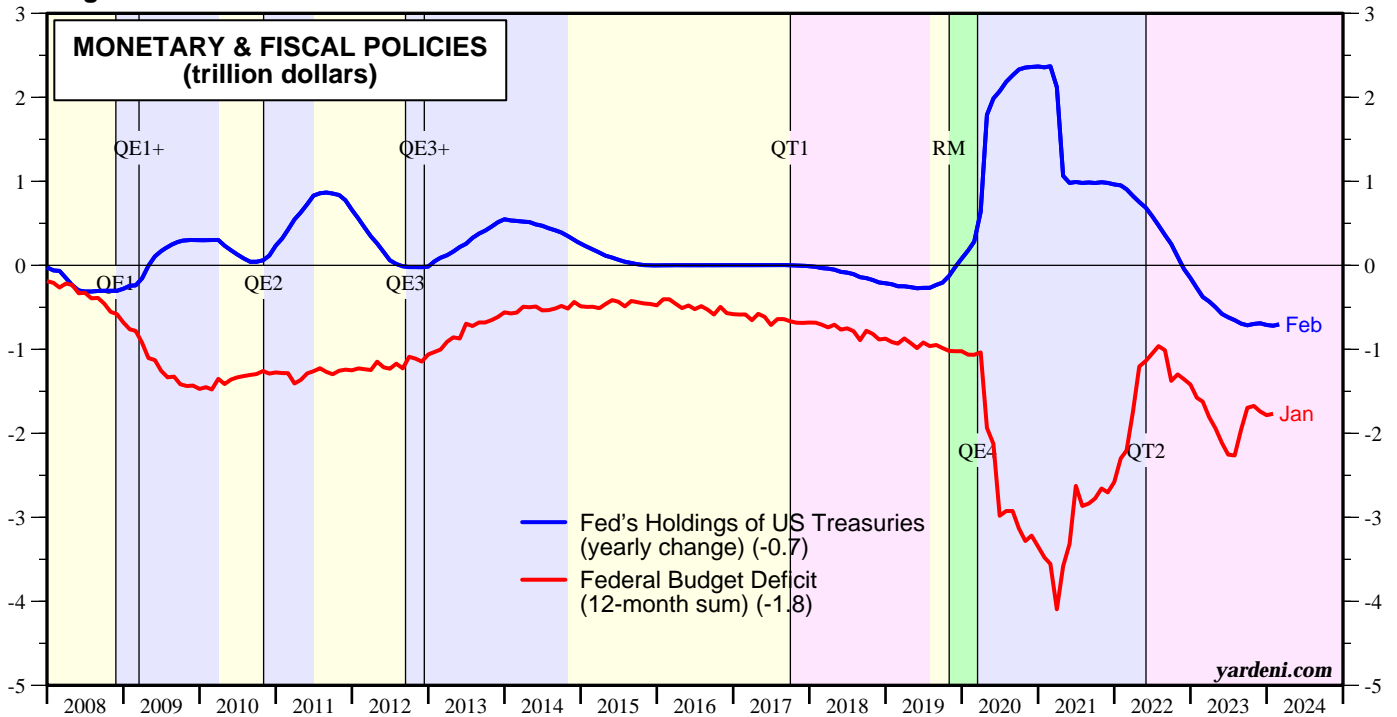
Figure 6.



* Averages of daily figures for weeks ending Wednesday. Securities held by Fed include US Treasuries, Agency debt, and mortgage-backed securities. 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. QT1 (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). QT2 = balance sheet pared by \$95 billion per month. Source: Federal Reserve Board and US Treasury Department.

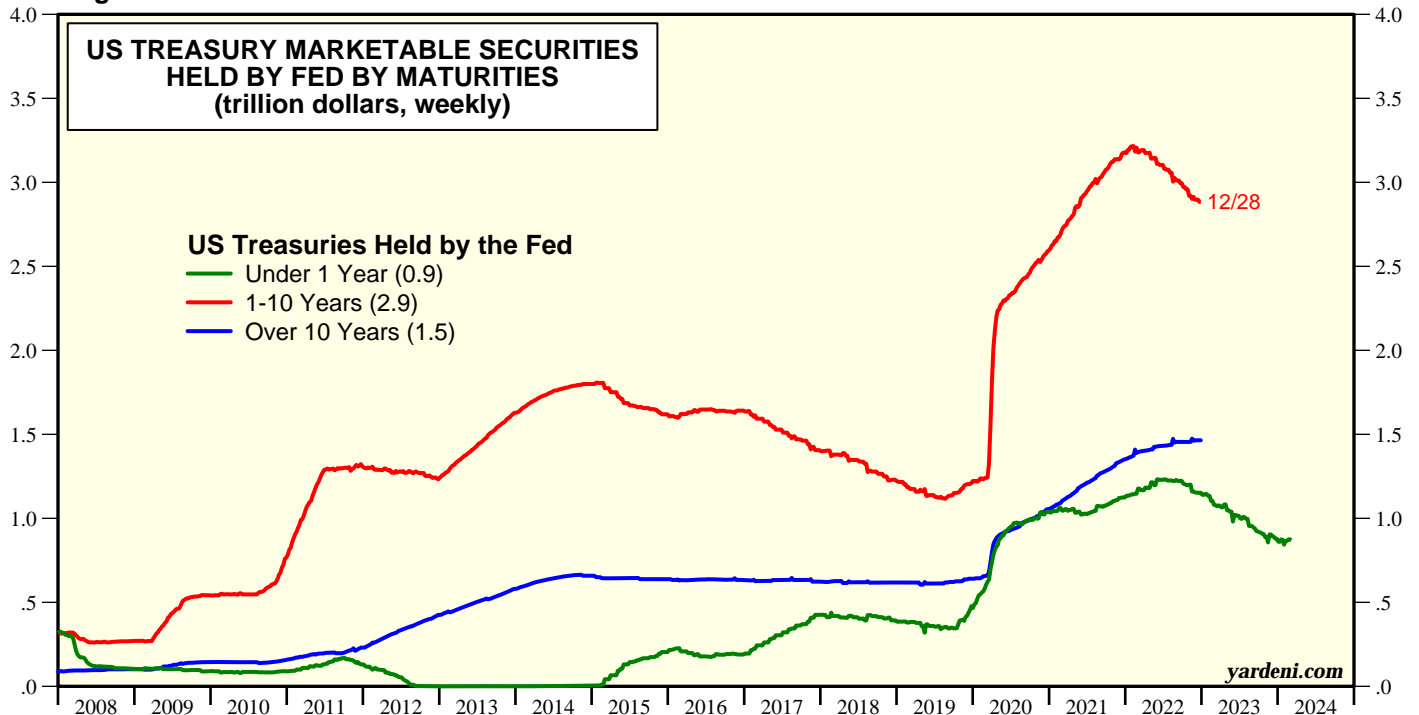
Topical Study #5: Updated Charts

Figure 7.



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. QT1 (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). QT2 = balance sheet pared by \$95 billion per month. Source: Federal Reserve Board and US Treasury Department.

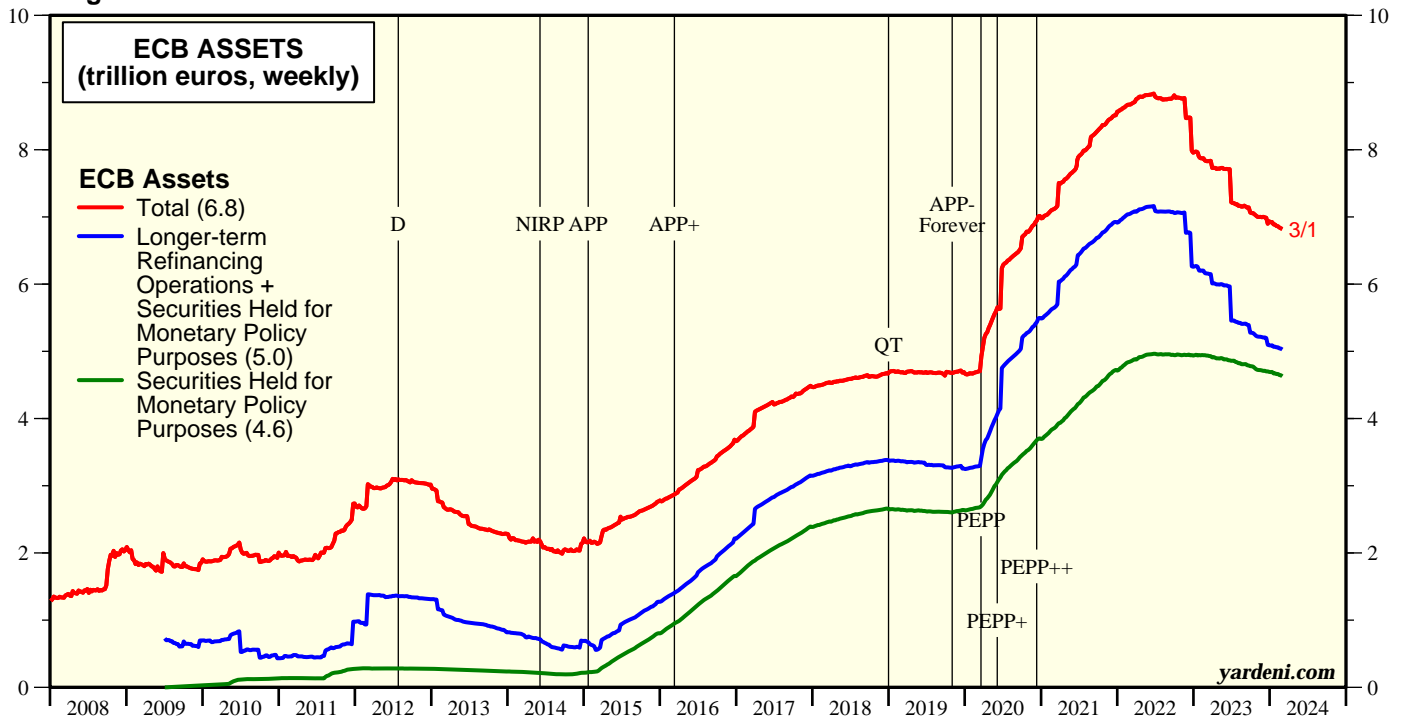
Figure 8.



Source: Federal Reserve Board, H.4.1 Table 2.

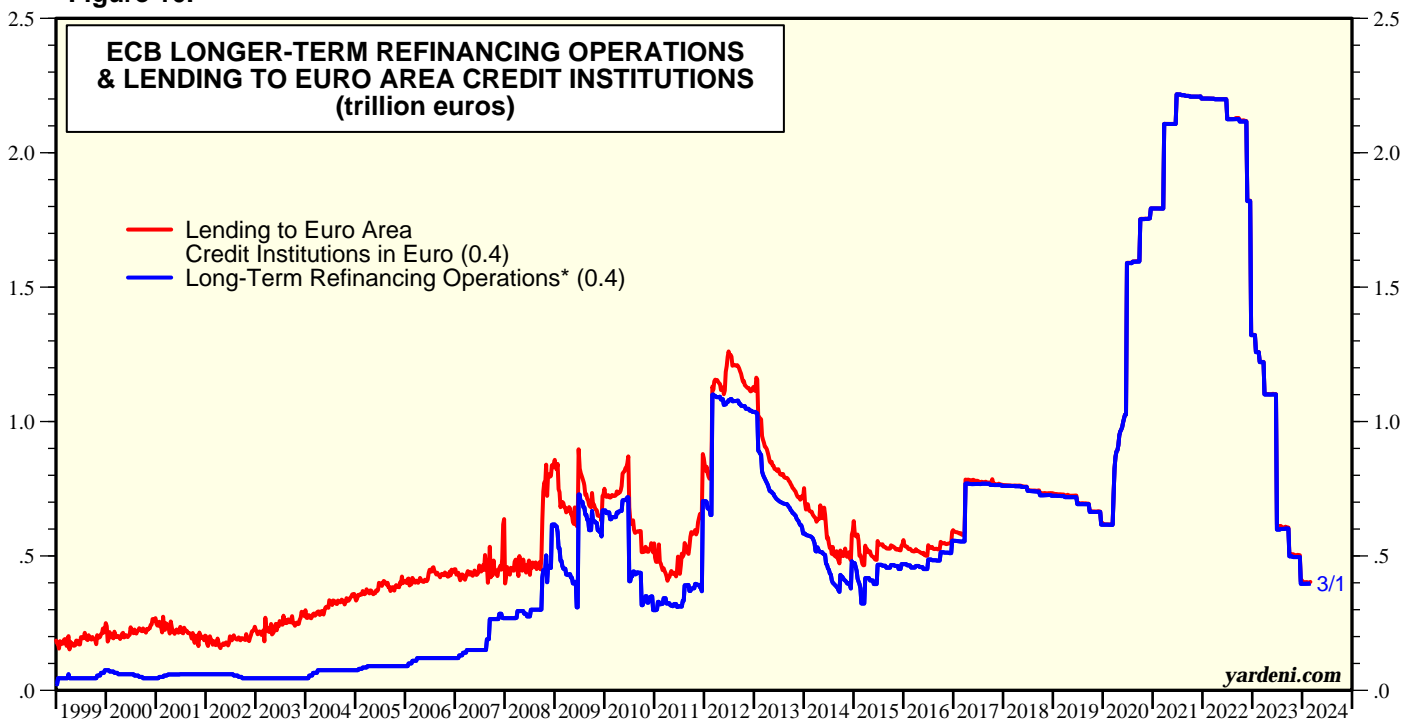
Topical Study #5: Updated Charts

Figure 9.



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.
 Source: European Central Bank.

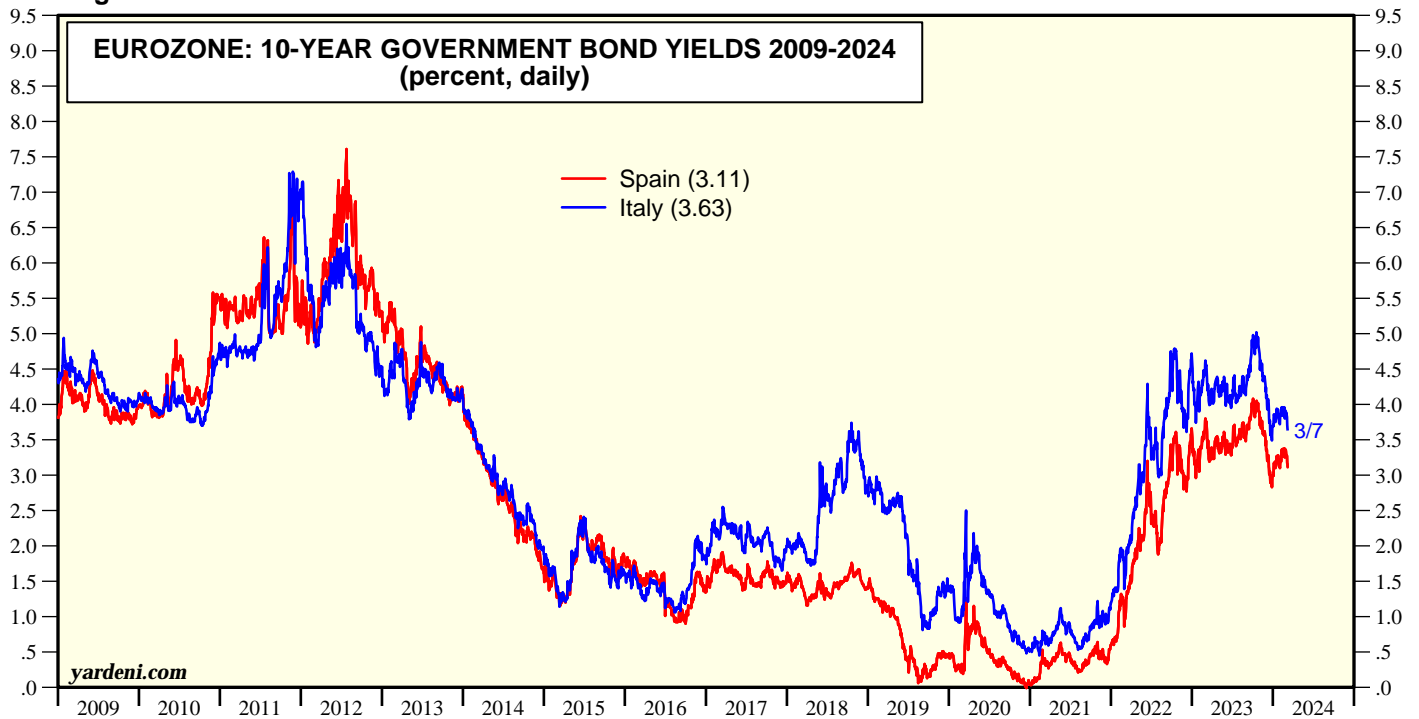
Figure 10.



* 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.
 Source: European Central Bank.

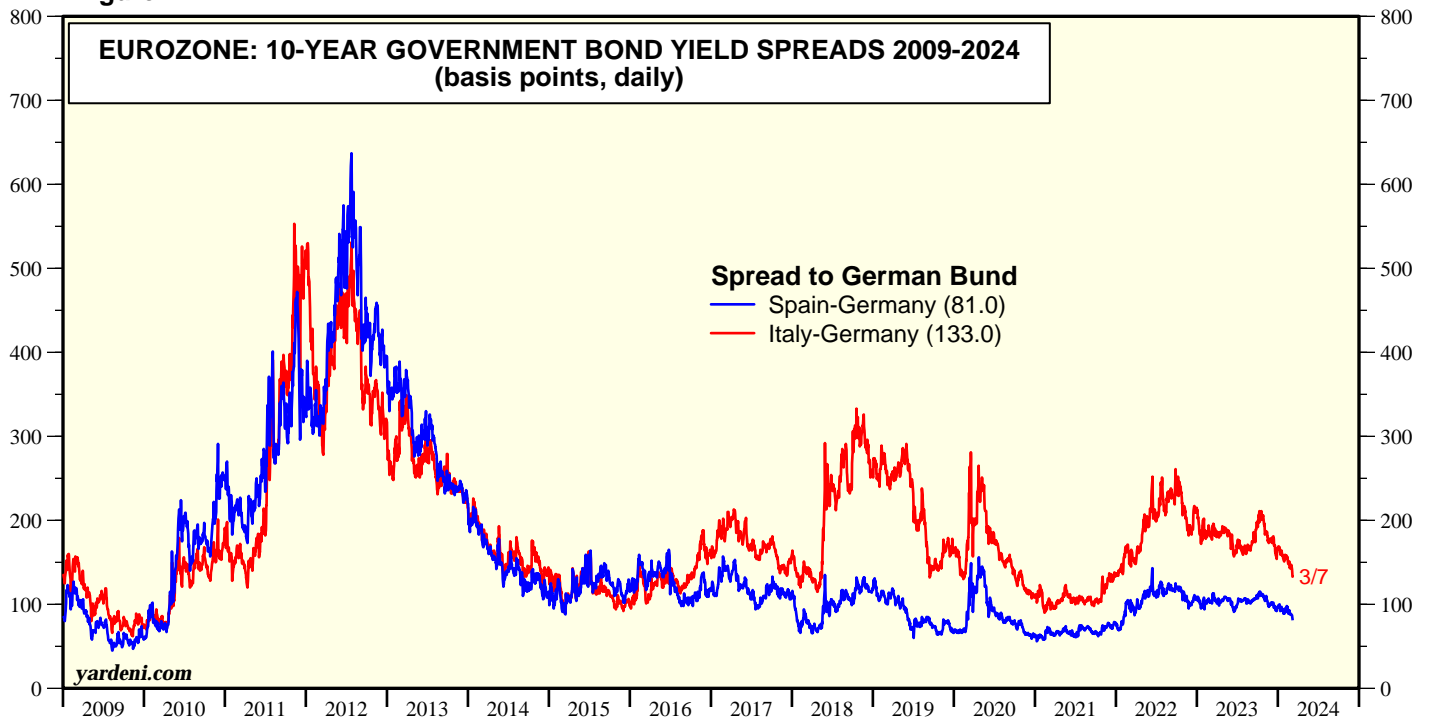
Topical Study #5: Updated Charts

Figure 11.



Source: Financial Times.

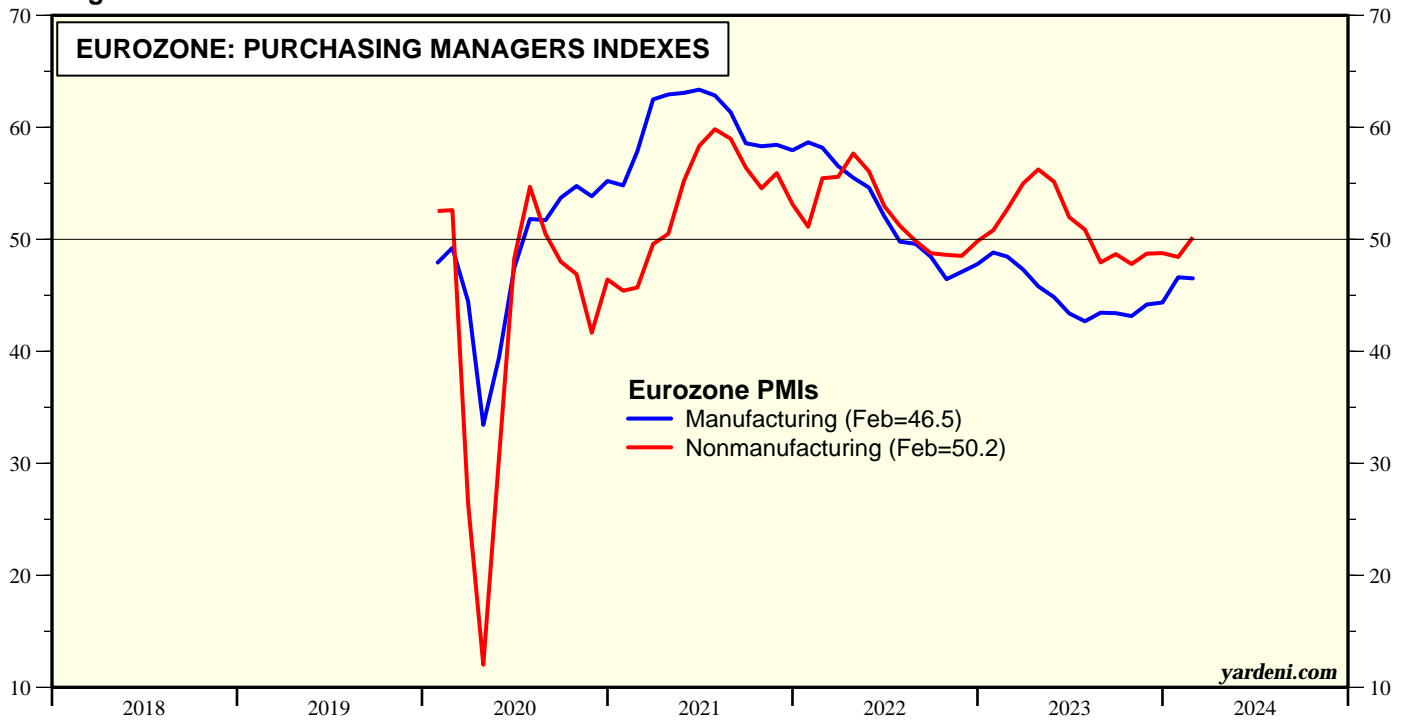
Figure 12.



Source: Haver Analytics.

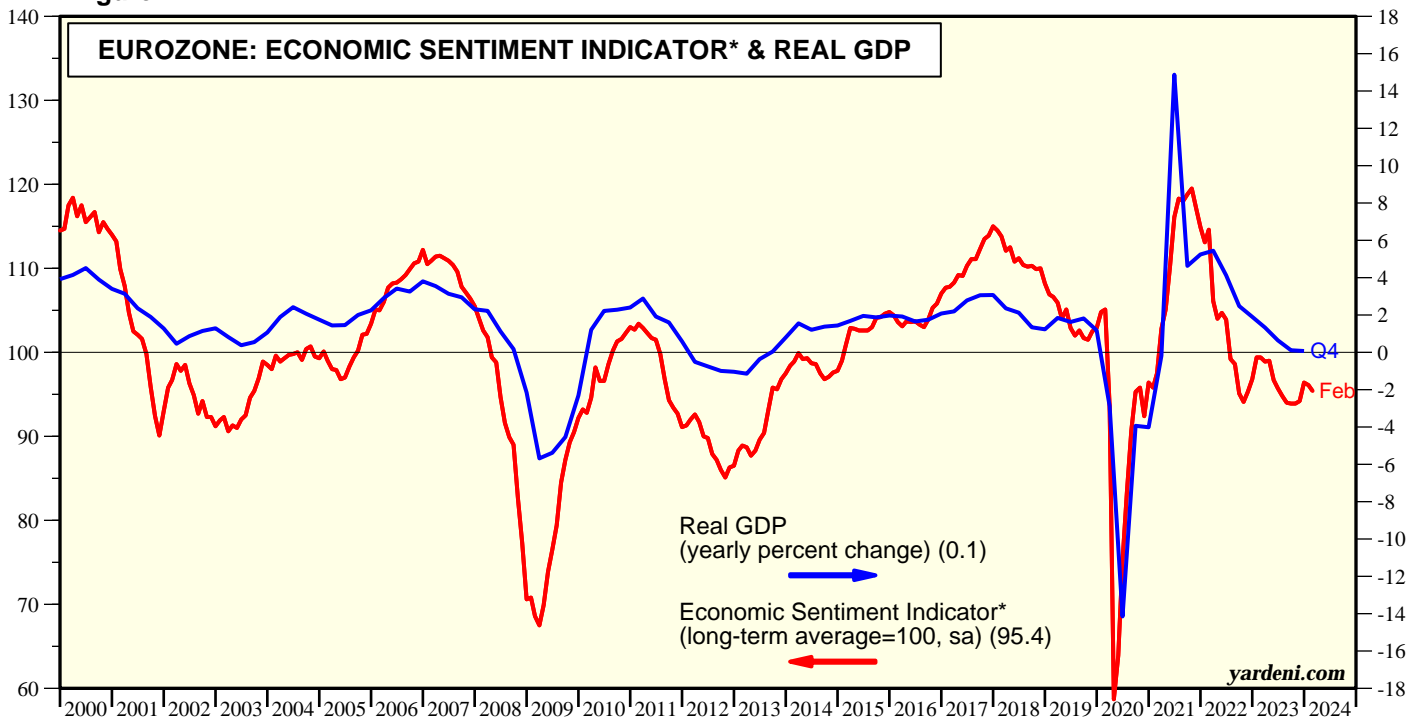
Topical Study #5: Updated Charts

Figure 13.



Source: Markit and Haver Analytics.

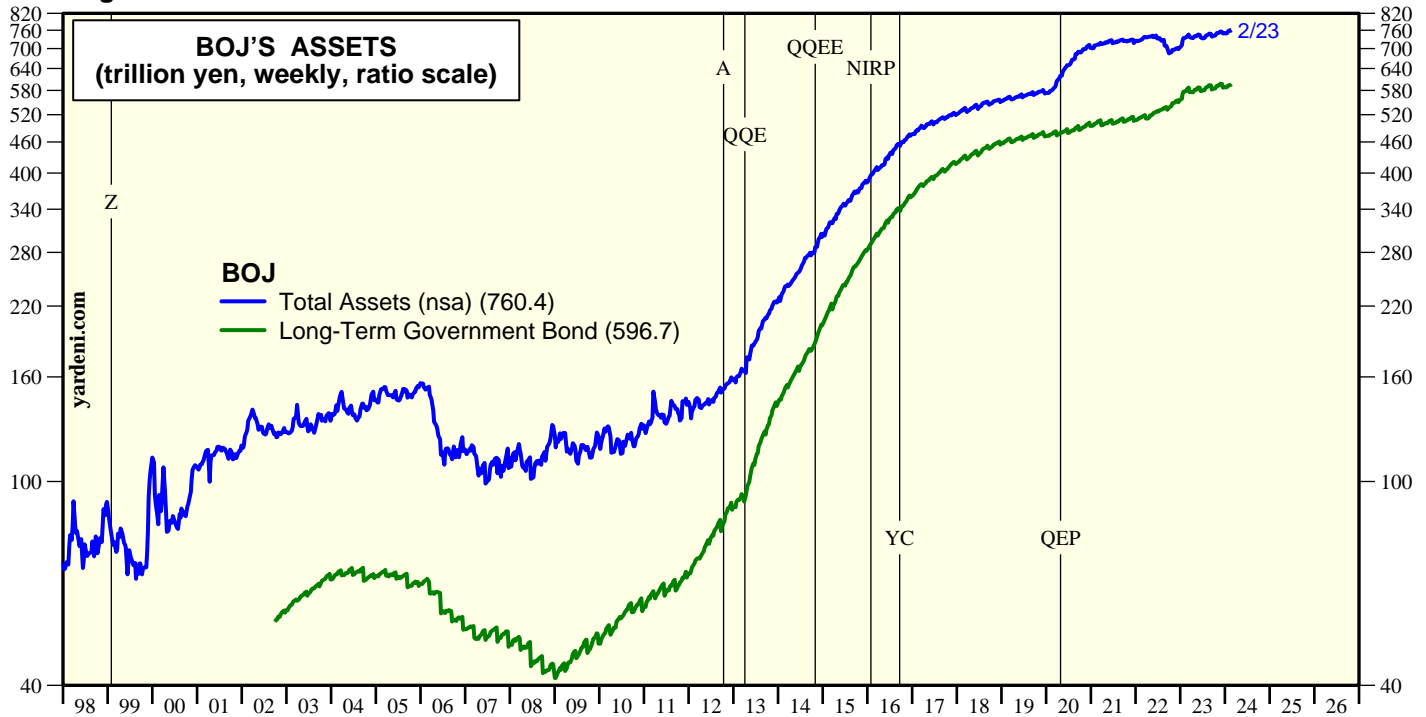
Figure 14.



* The overall economic sentiment indicator (ESI) is derived from the industrial (weight 40%), service (30%), consumer (20%), construction (5%), and retail trade (5%) confidence indicators.
Source: European Commission and Haver Analytics.

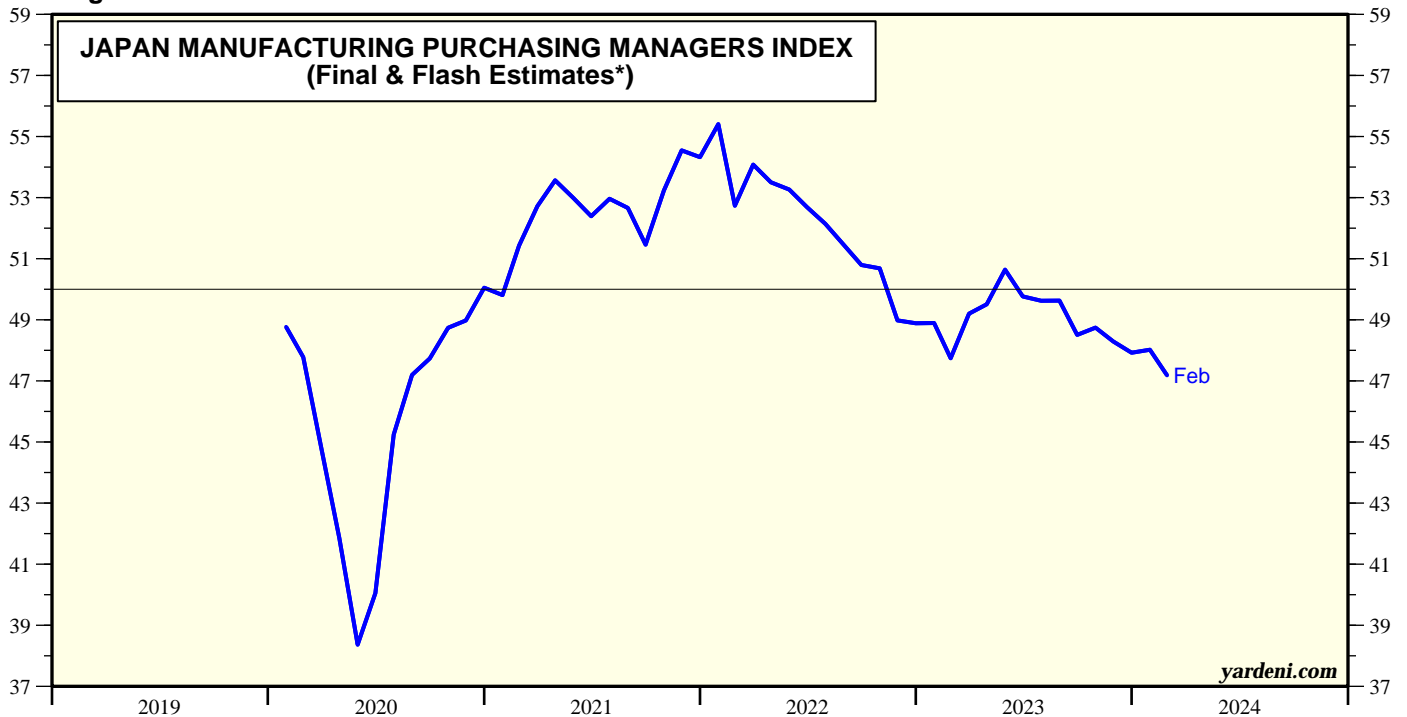
Topical Study #5: Updated Charts

Figure 15.



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.

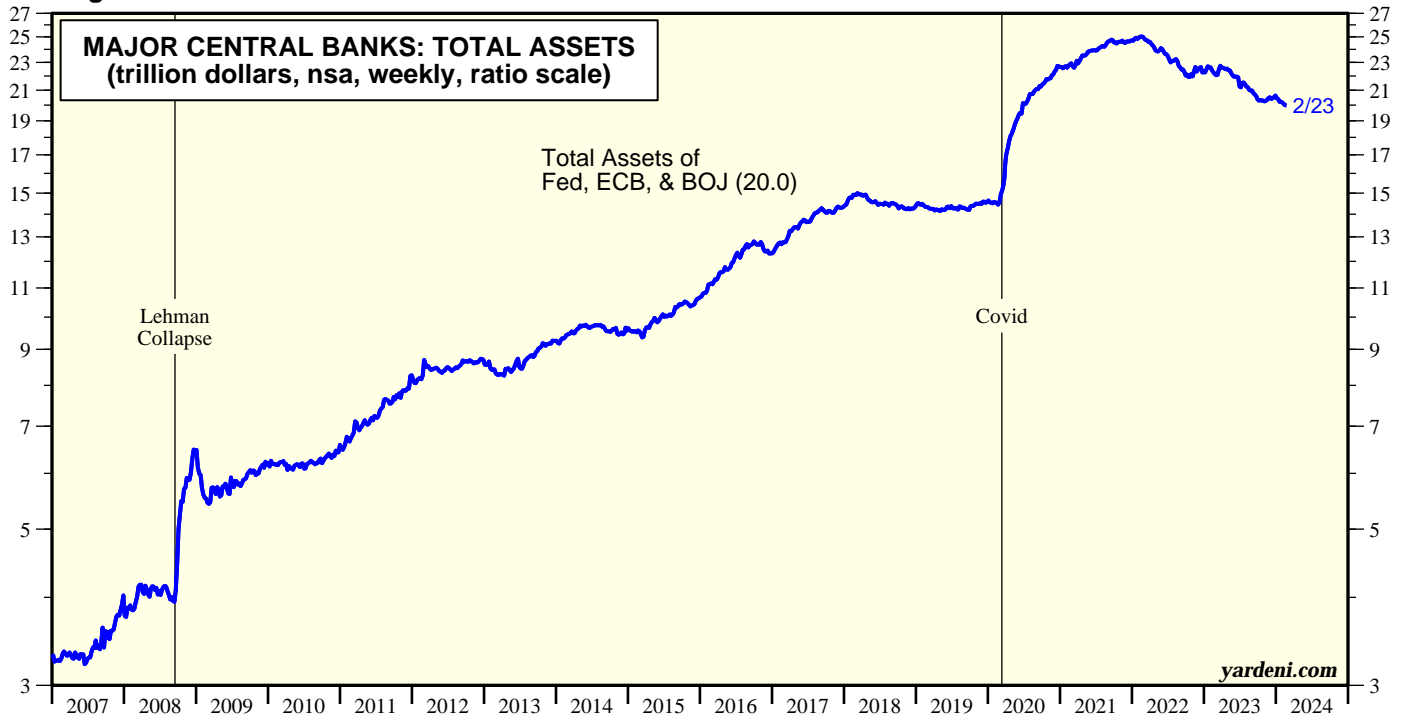
Figure 16.



* An index above (below) 50 indicates an increase (decrease) in activity.
Source: S&P Global and Haver Analytics.

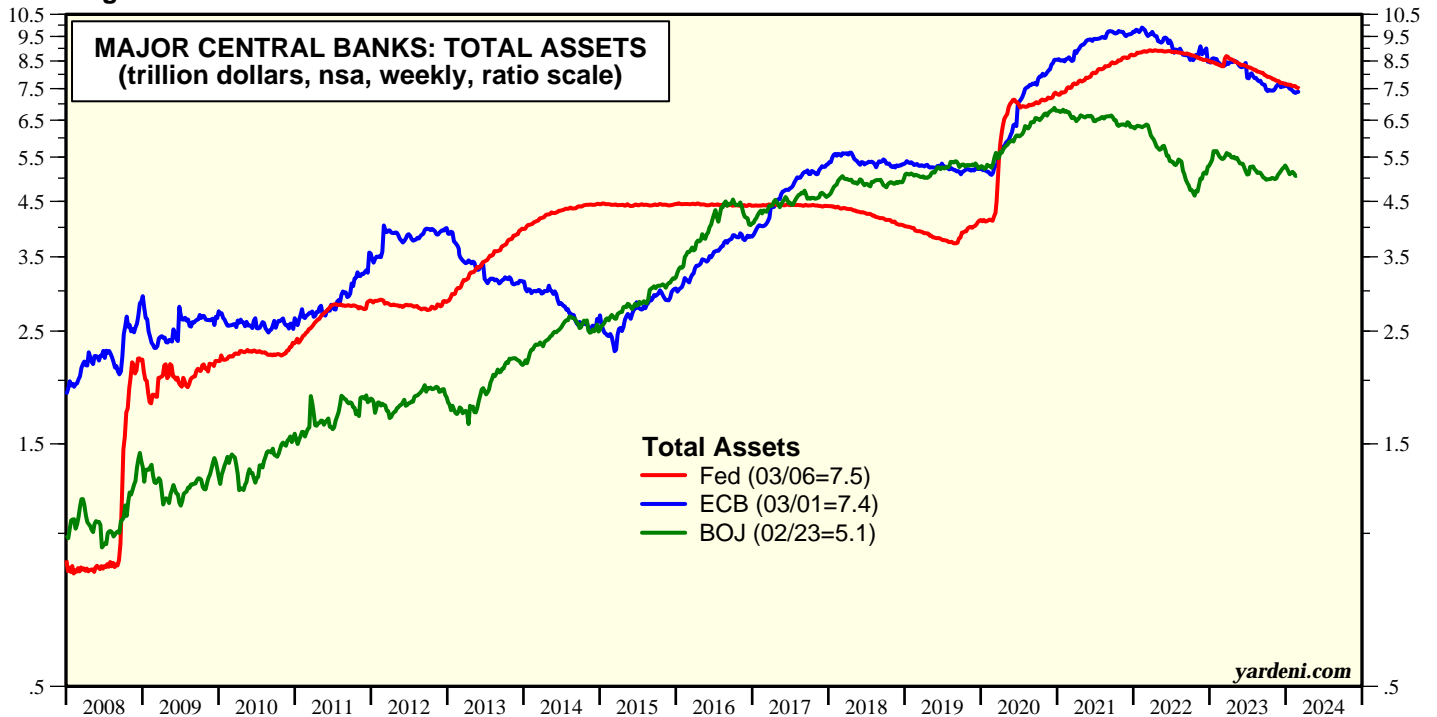
Topical Study #5: Updated Charts

Figure 17.



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

Figure 18.



Source: Haver Analytics.

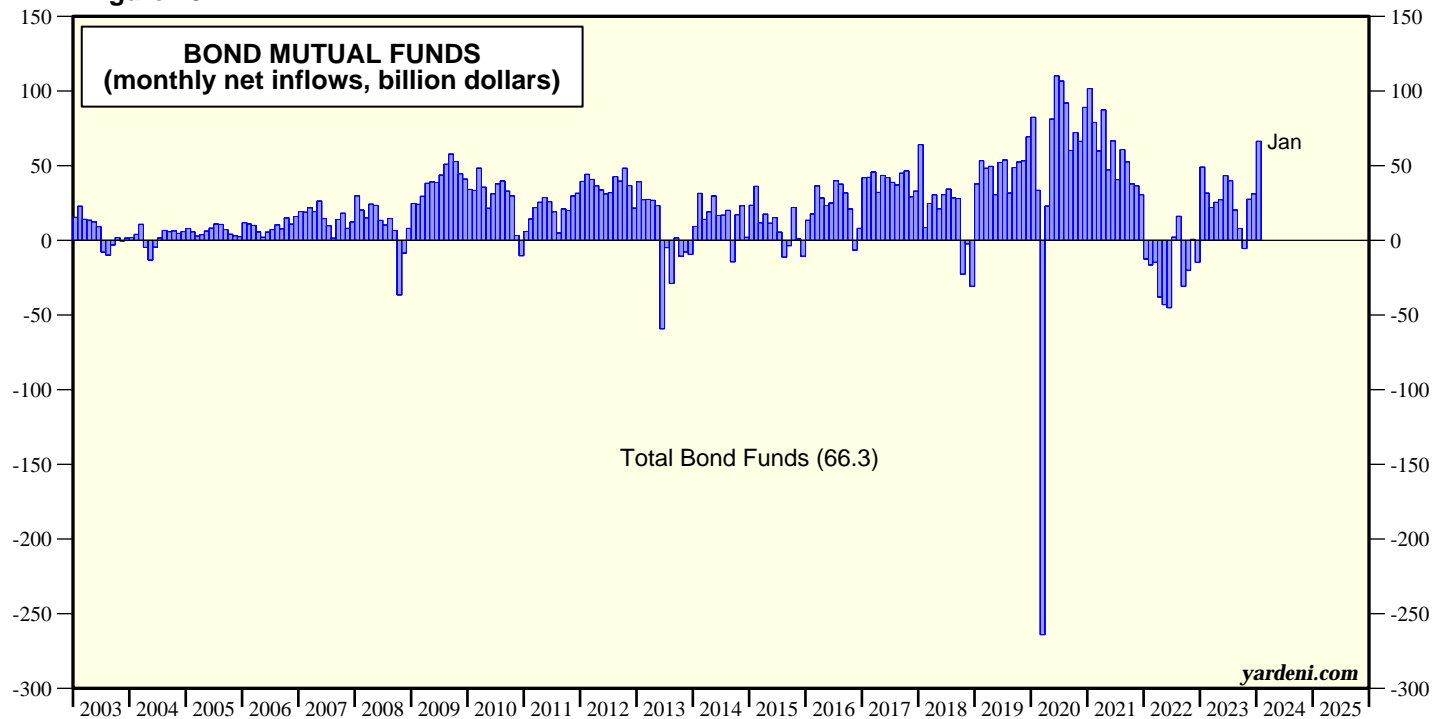
Topical Study #5: Updated Charts

Figure 19.



Note: Shaded areas are recessions according to the National Bureau of Economic Research.
Source: Bank of America Merrill Lynch and Federal Reserve Board.

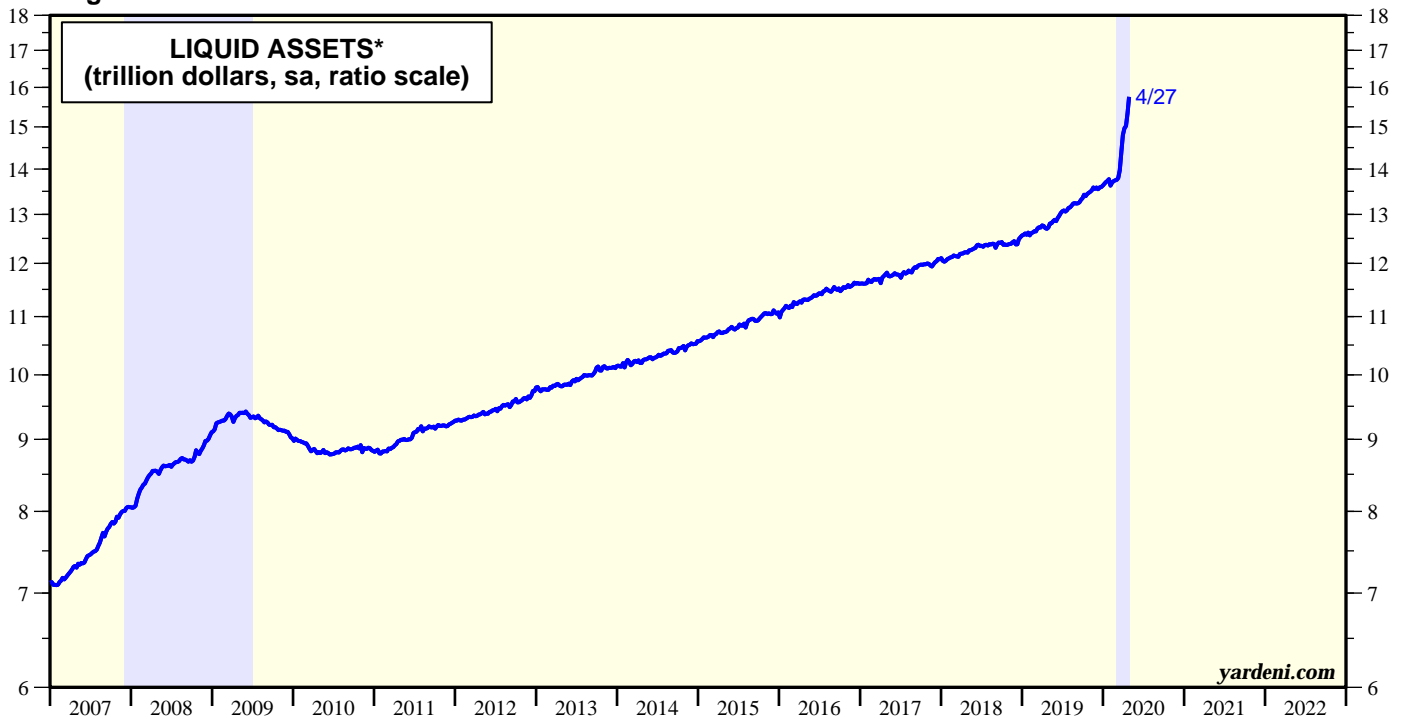
Figure 20.



Source: Investment Company Institute.

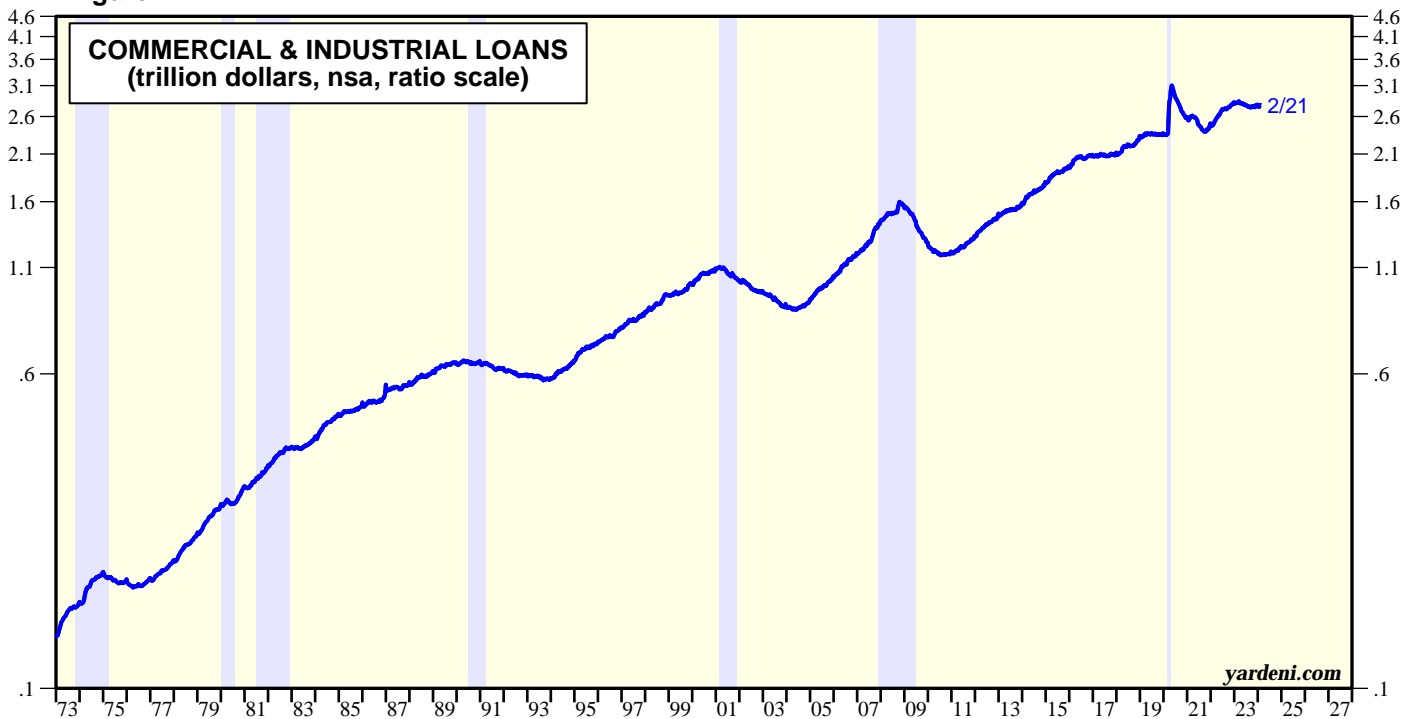
Topical Study #5: Updated Charts

Figure 21.



* Total savings deposits (including money market deposit accounts), small time deposits, and total money market mutual funds held by individuals & institutions.
 Note: Shaded areas are recessions according to the National Bureau of Economic Research.
 Source: Federal Reserve Board.

Figure 22.



Note: Shaded areas are recessions according to the National Bureau of Economic Research.
 Source: Federal Reserve Board.

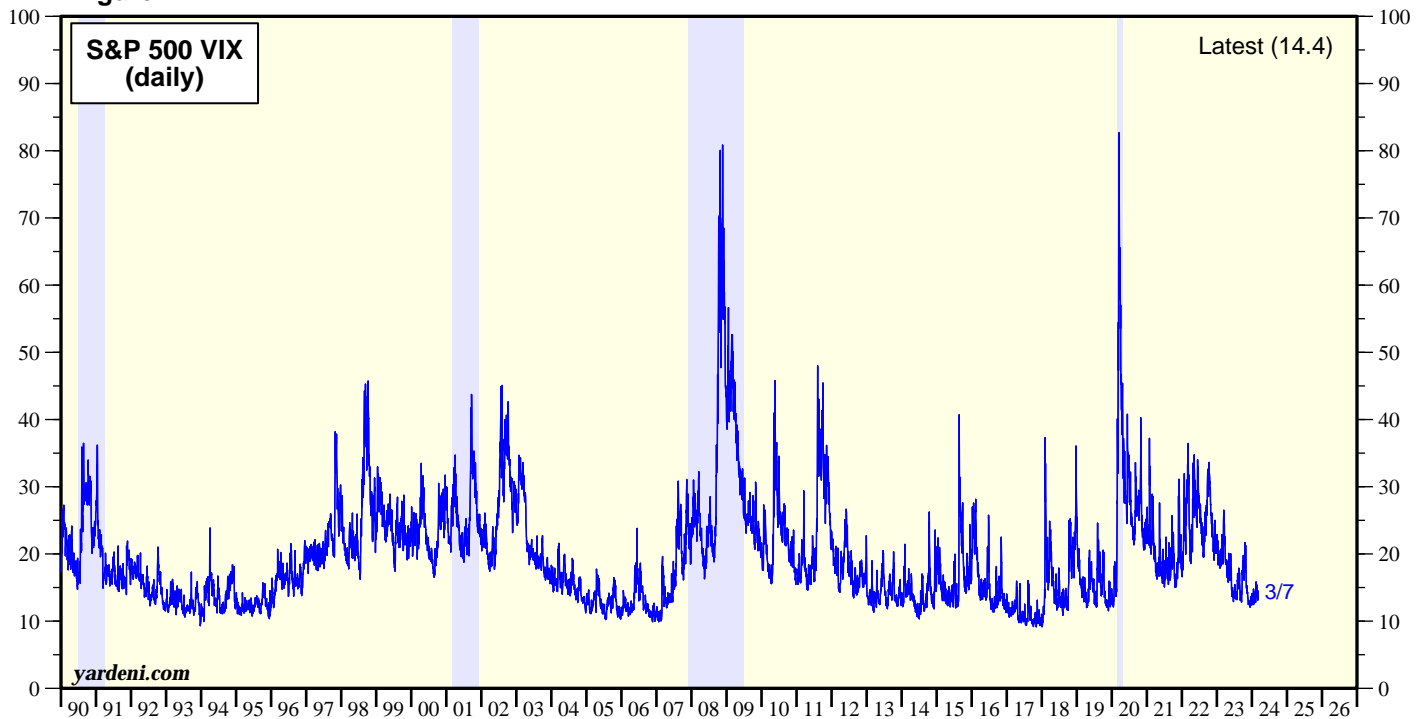
Topical Study #5: Updated Charts

Figure 23.



Note: Horizontal black lines are previous years' closing price index.
 Note: Shaded red areas are S&P 500 bear market declines of 20% or more. Yellow areas show bull markets.
 Source: Standard & Poor's.

Figure 24.



Note: Shaded areas are recessions according to the National Bureau of Economic Research.
 Source: Chicago Board Options Exchange.

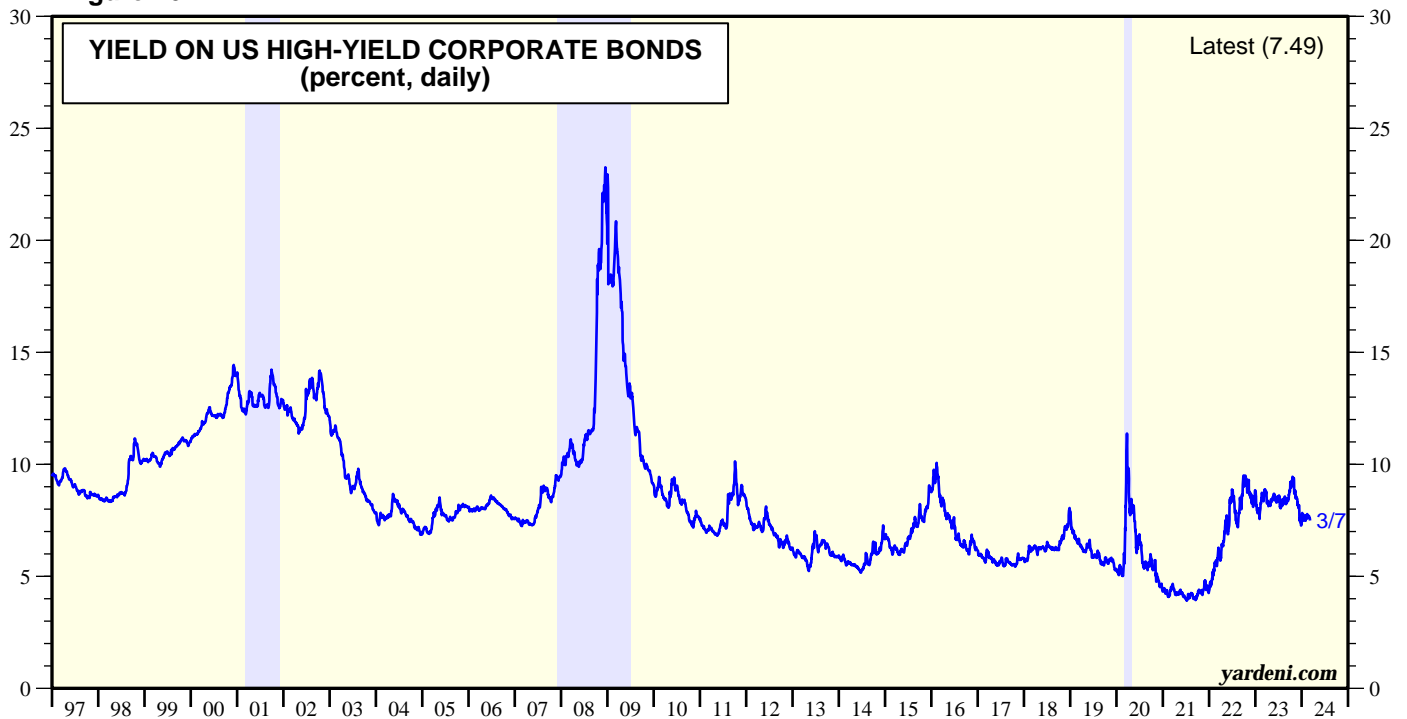
Topical Study #5: Updated Charts

Figure 25.



Source: Federal Reserve Board.

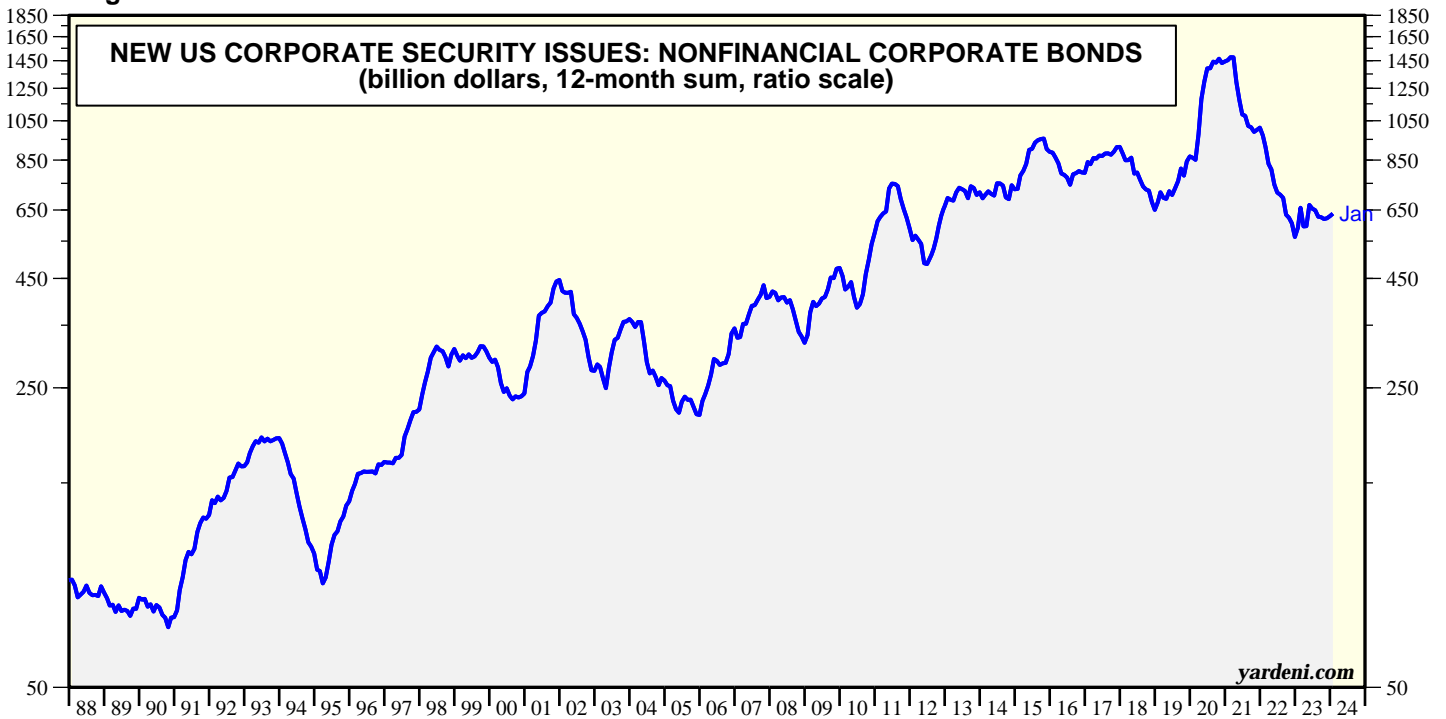
Figure 26.



Note: Shaded areas are recessions according to the National Bureau of Economic Research.
Source: Bank of America Merrill Lynch.

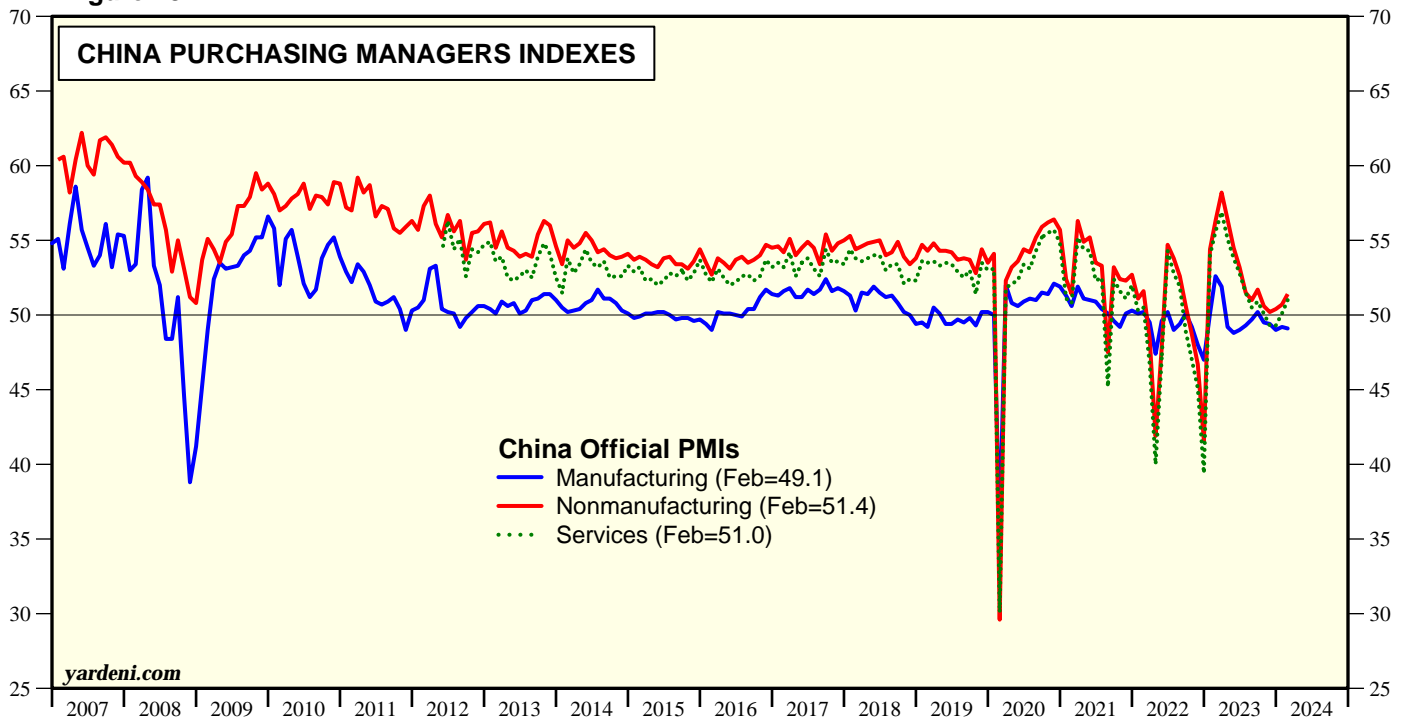
Topical Study #5: Updated Charts

Figure 27.



Source: Federal Reserve Board.

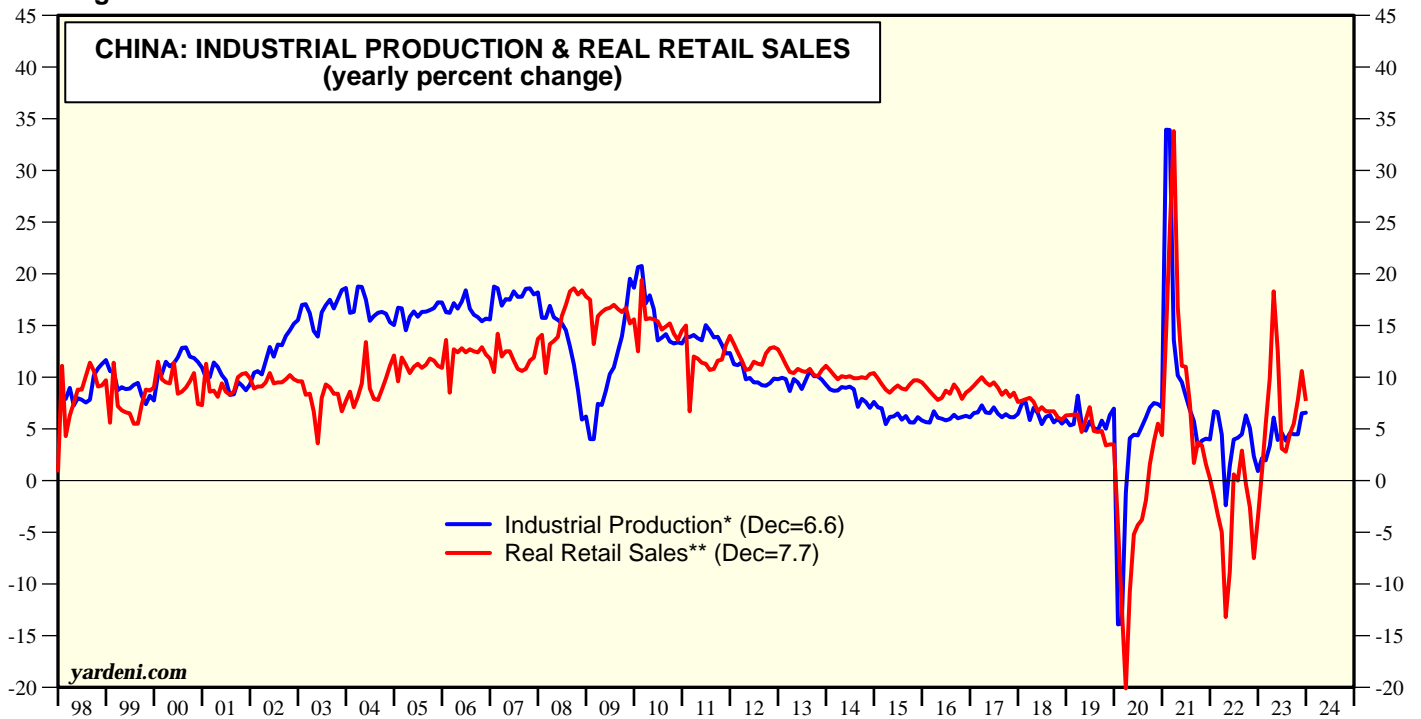
Figure 28.



Source: China Federation Logistics & Purchasing and Haver Analytics.

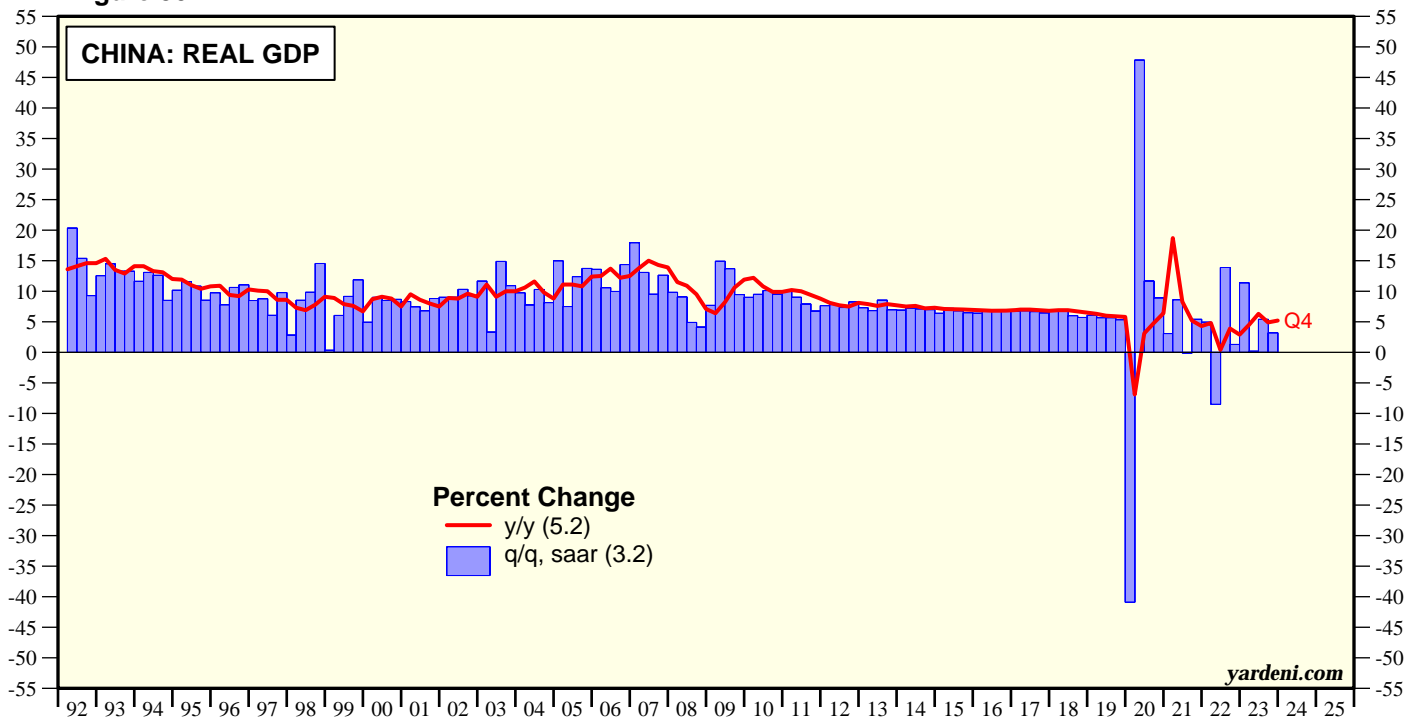
Topical Study #5: Updated Charts

Figure 29.



* Value added basis.
** Yearly percent change in retail sales minus yearly percent change in CPI.
Source: China National Bureau of Statistics.

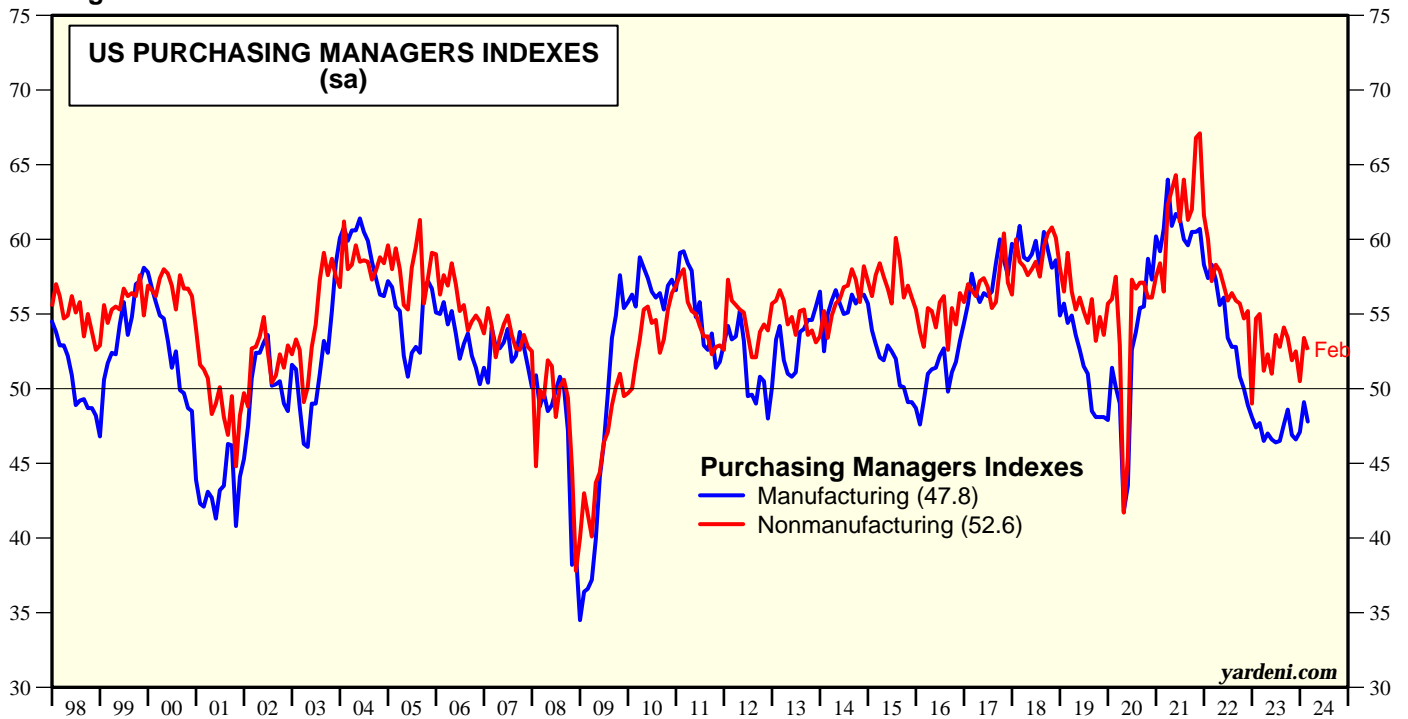
Figure 30.



Source: China National Bureau of Statistics and Haver Analytics.

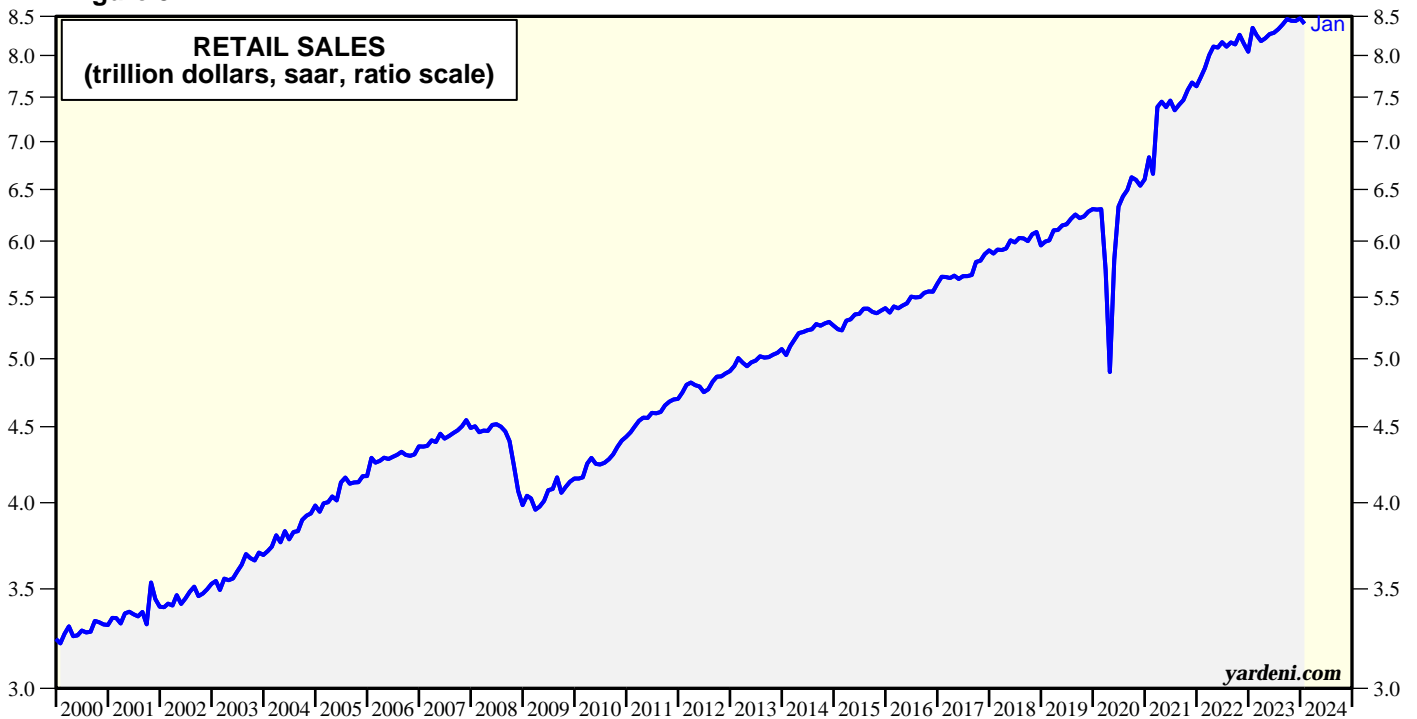
Topical Study #5: Updated Charts

Figure 31.



Source: Institute of Supply Management.

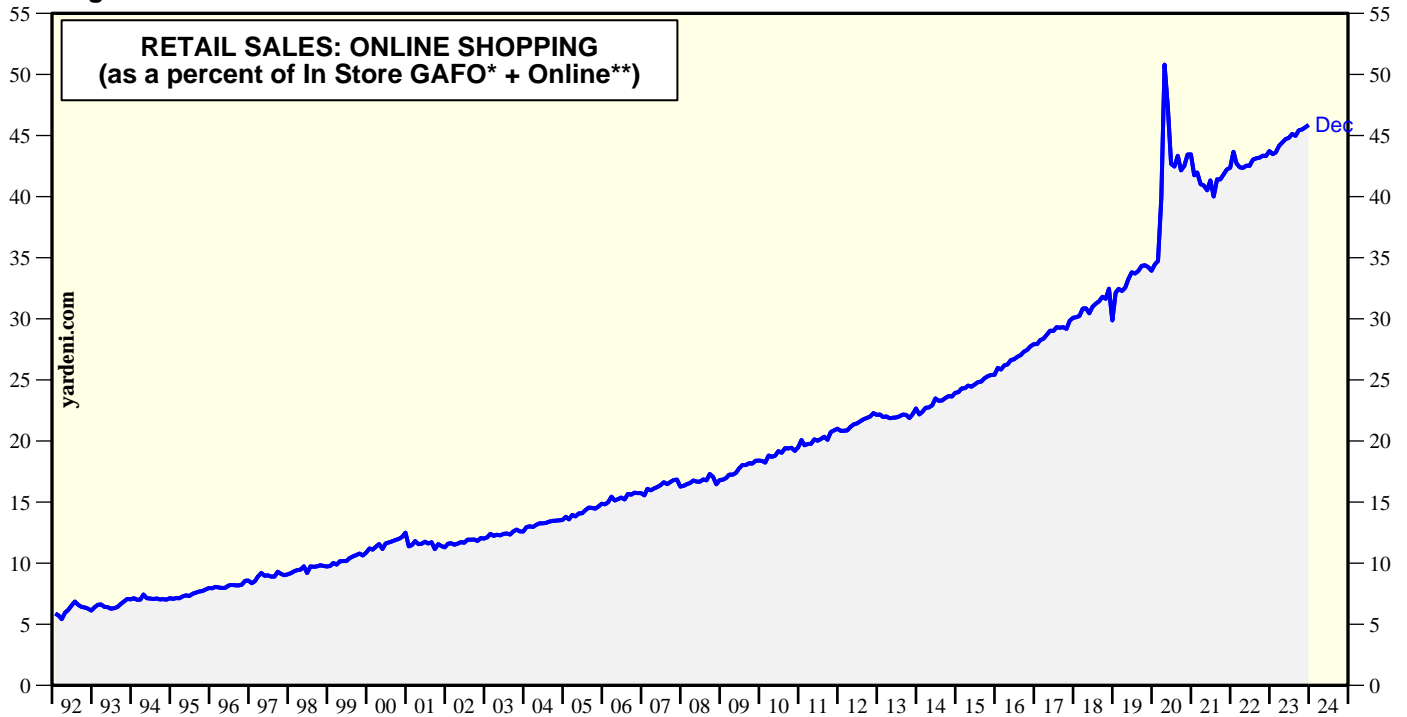
Figure 32.



Source: Bureau of the Census.

Topical Study #5: Updated Charts

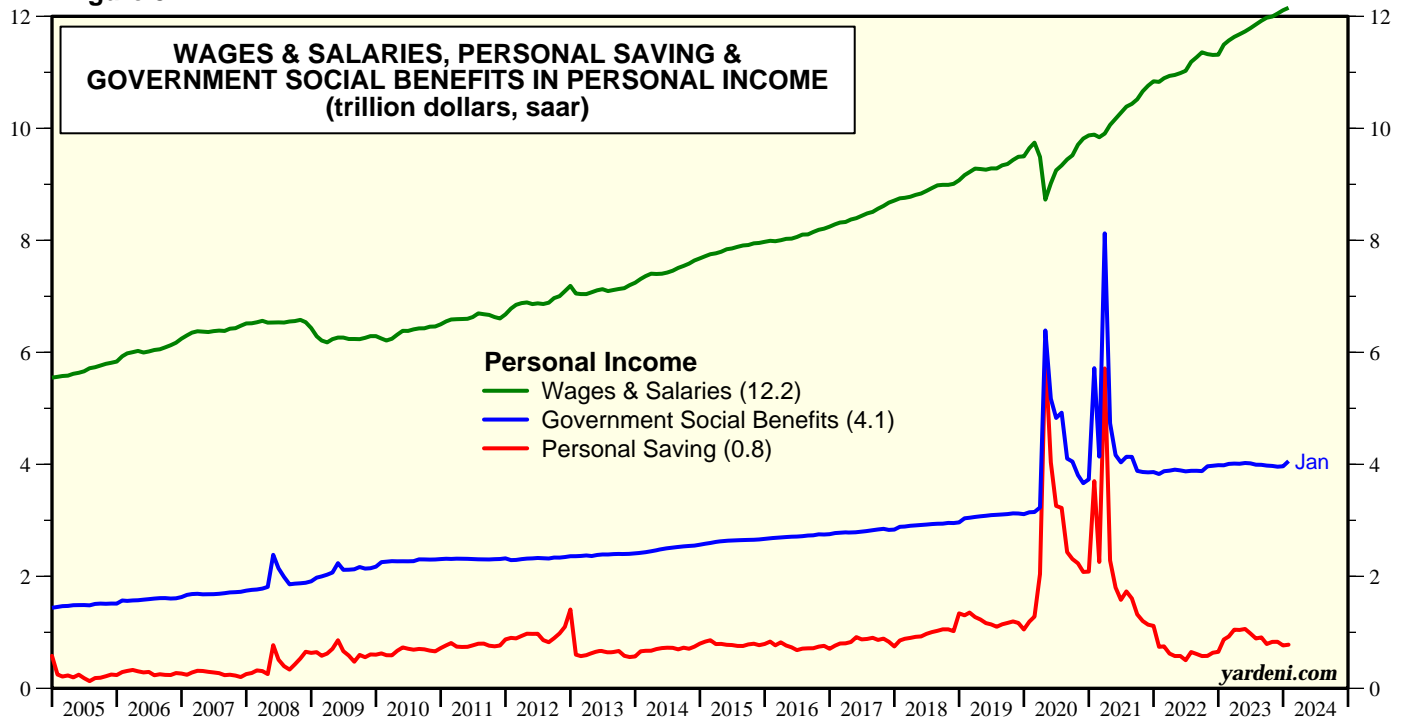
Figure 33.



* GAFO (general merchandise, apparel and accessories, furniture, and other sales) includes retailers that specialize in department-store types of merchandise such as furniture & home furnishings, electronics & appliances, clothing & accessories, sporting goods, hobby, book, and music, general merchandise, office supply, stationery, and gift stores.

** Electronic shopping and mail order houses.
Source: Census Bureau and Haver Analytics.

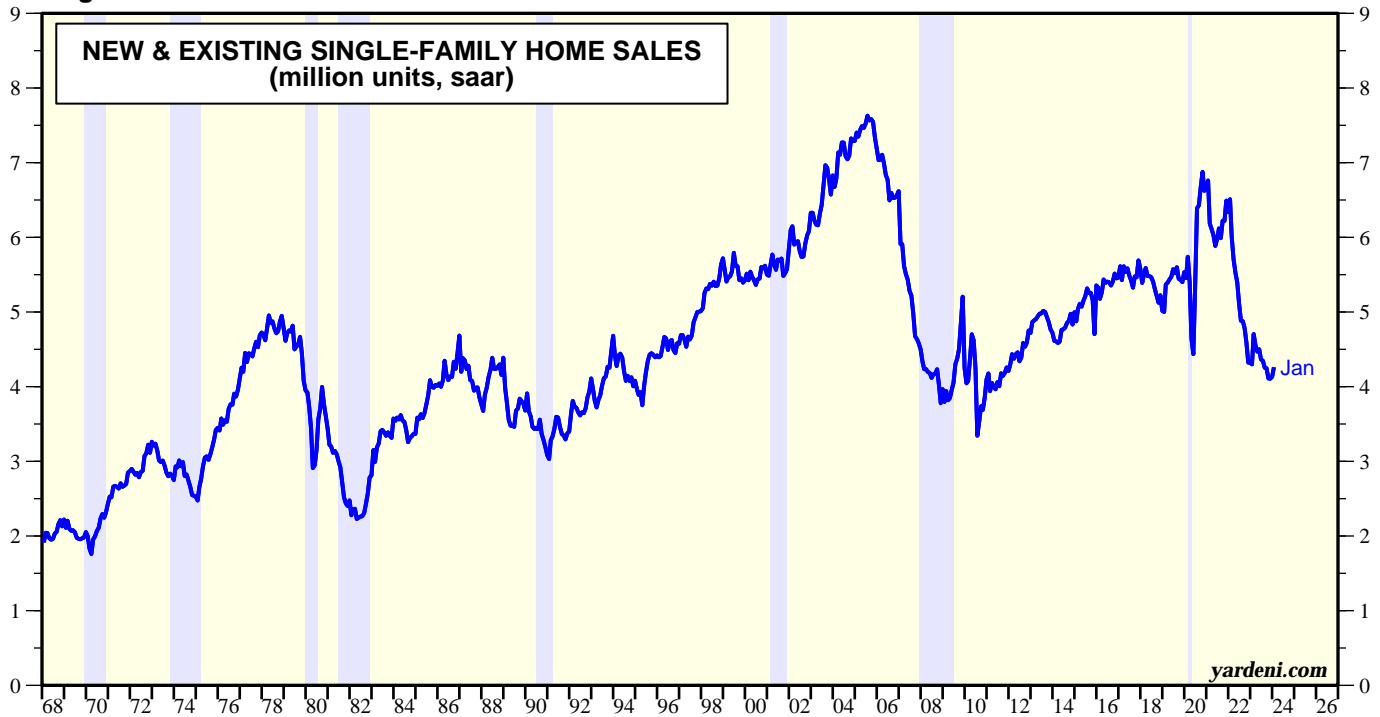
Figure 34.



Source: Bureau of Economic Analysis.

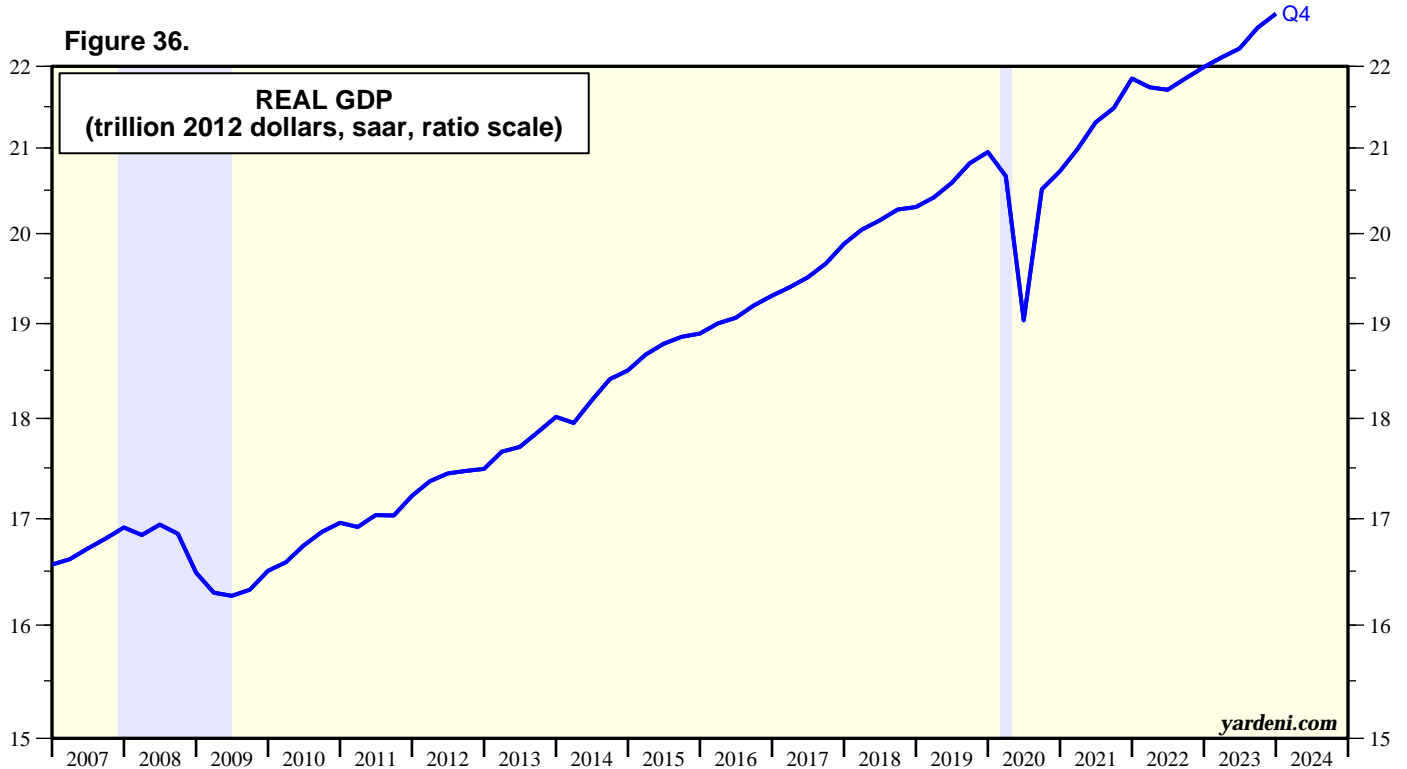
Topical Study #5: Updated Charts

Figure 35.



Note: Shaded areas are recessions according to the National Bureau of Economic Research.
Source: Census Bureau and National Association of Realtors.

Figure 36.



Note: Shaded areas are recessions according to the National Bureau of Economic Research.
Source: Bureau of Economic Analysis.

Topical Study #5: Updated Charts

Figure 37.

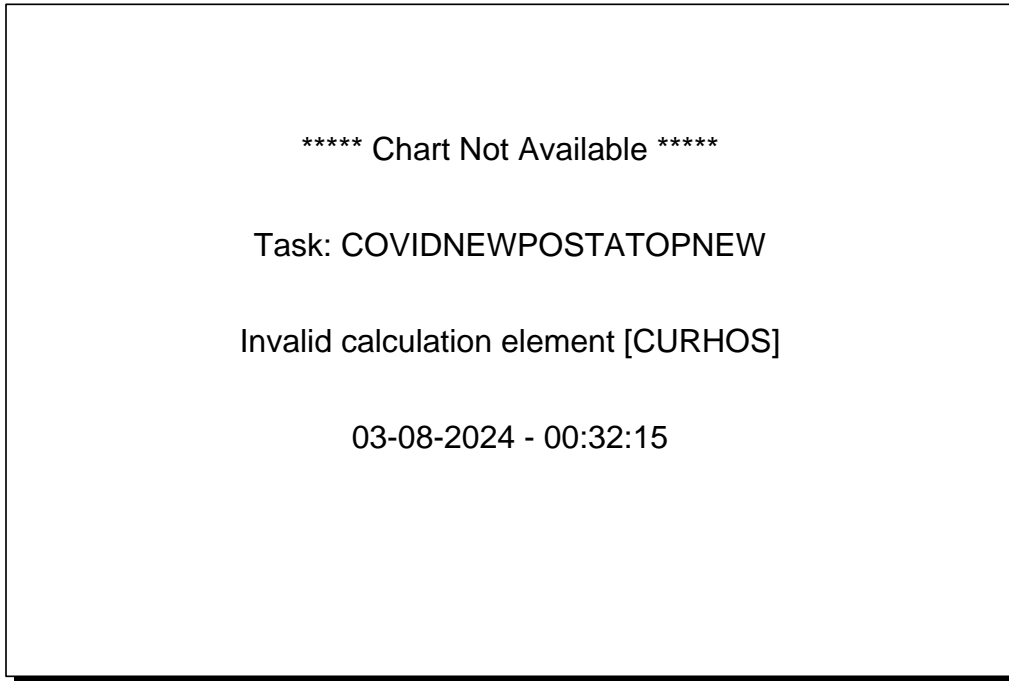
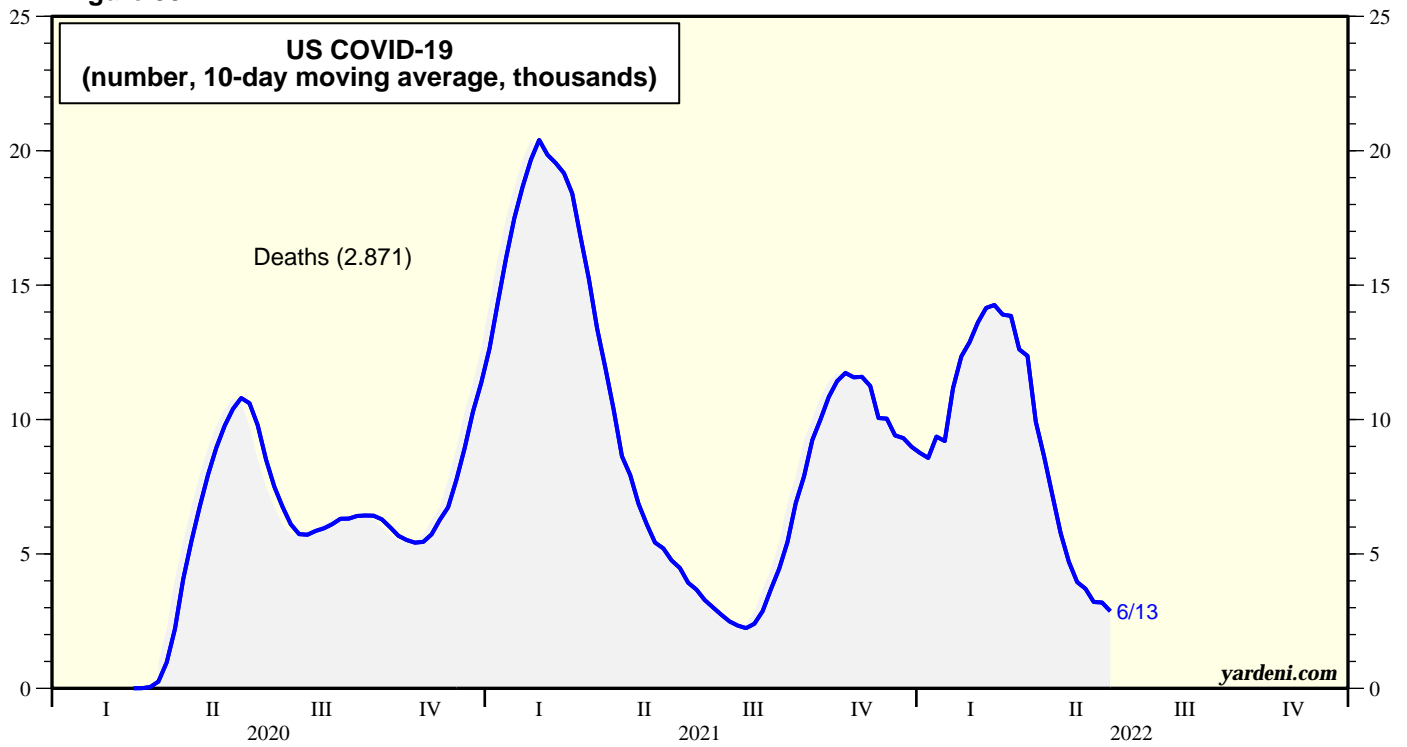


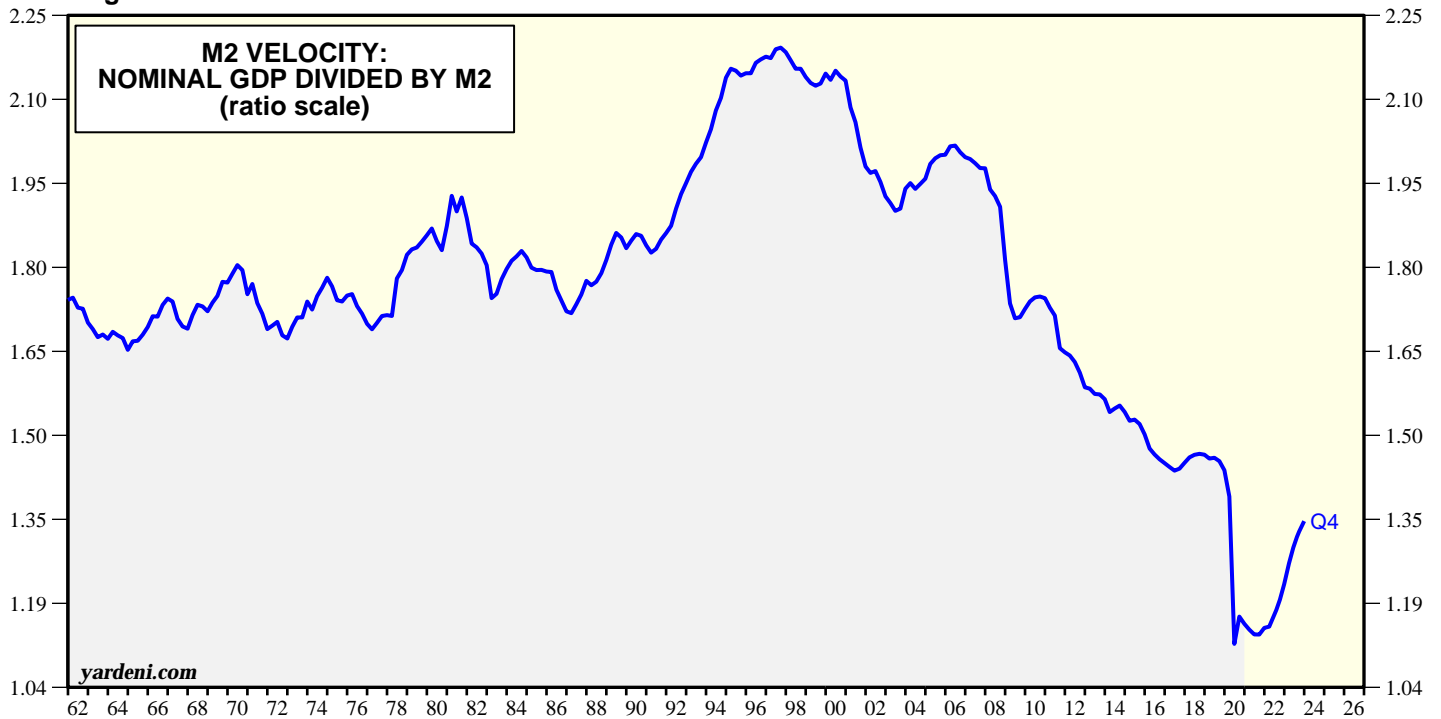
Figure 38.



Source: European Centre for Disease Prevention and Control.

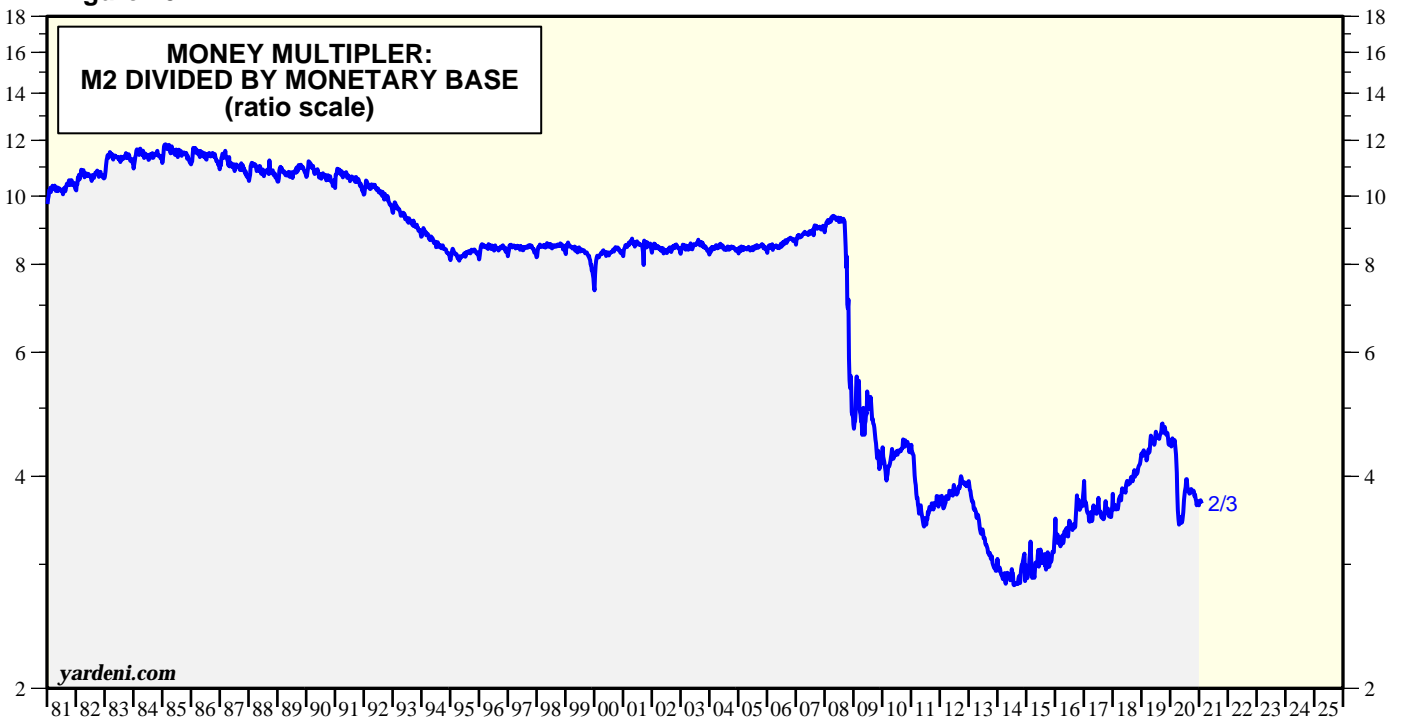
Topical Study #5: Updated Charts

Figure 39.



Source: Bureau of Economic Analysis and Federal Reserve Board.

Figure 40.



Source: Bureau of Economic Analysis and Federal Reserve Board.

Topical Study #5: Updated Charts

Figure 41.

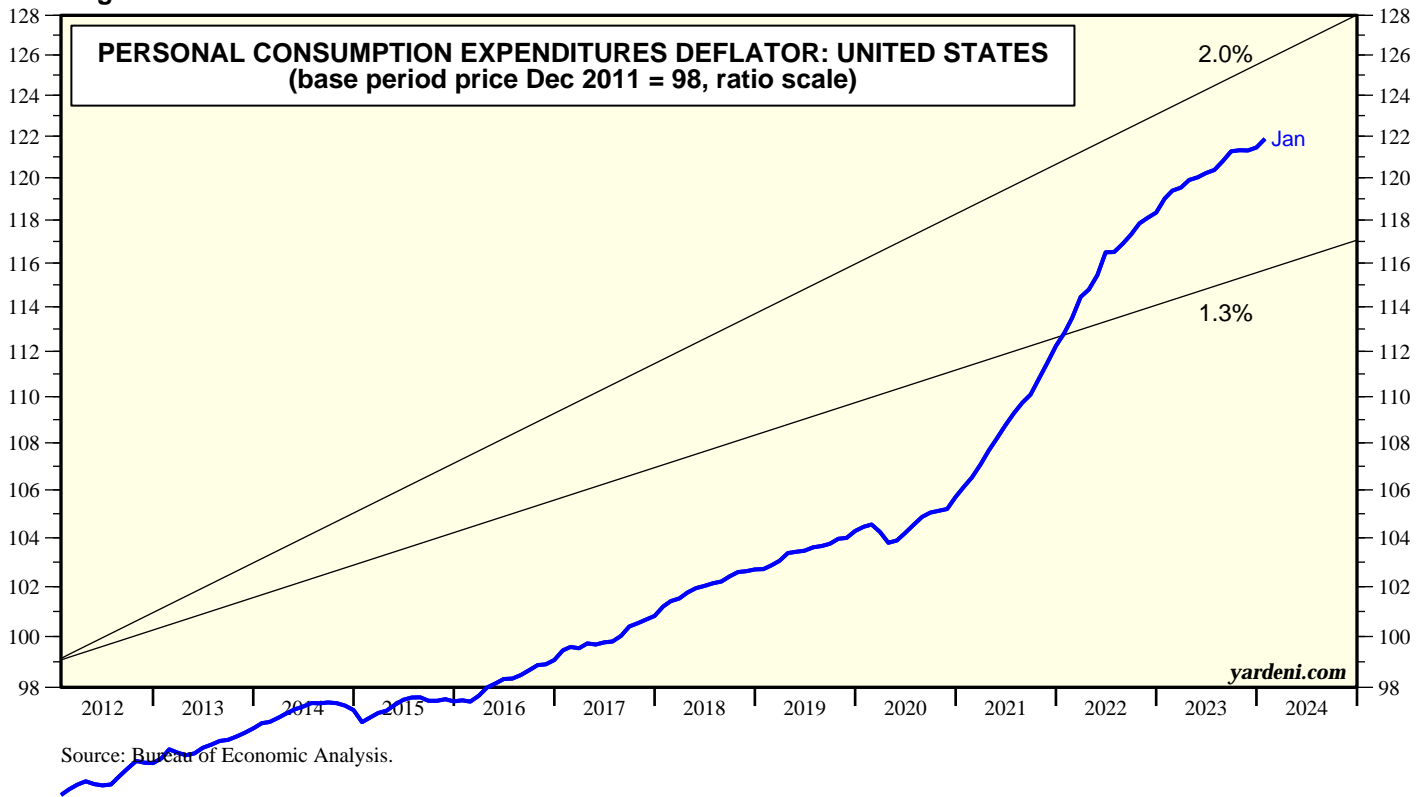
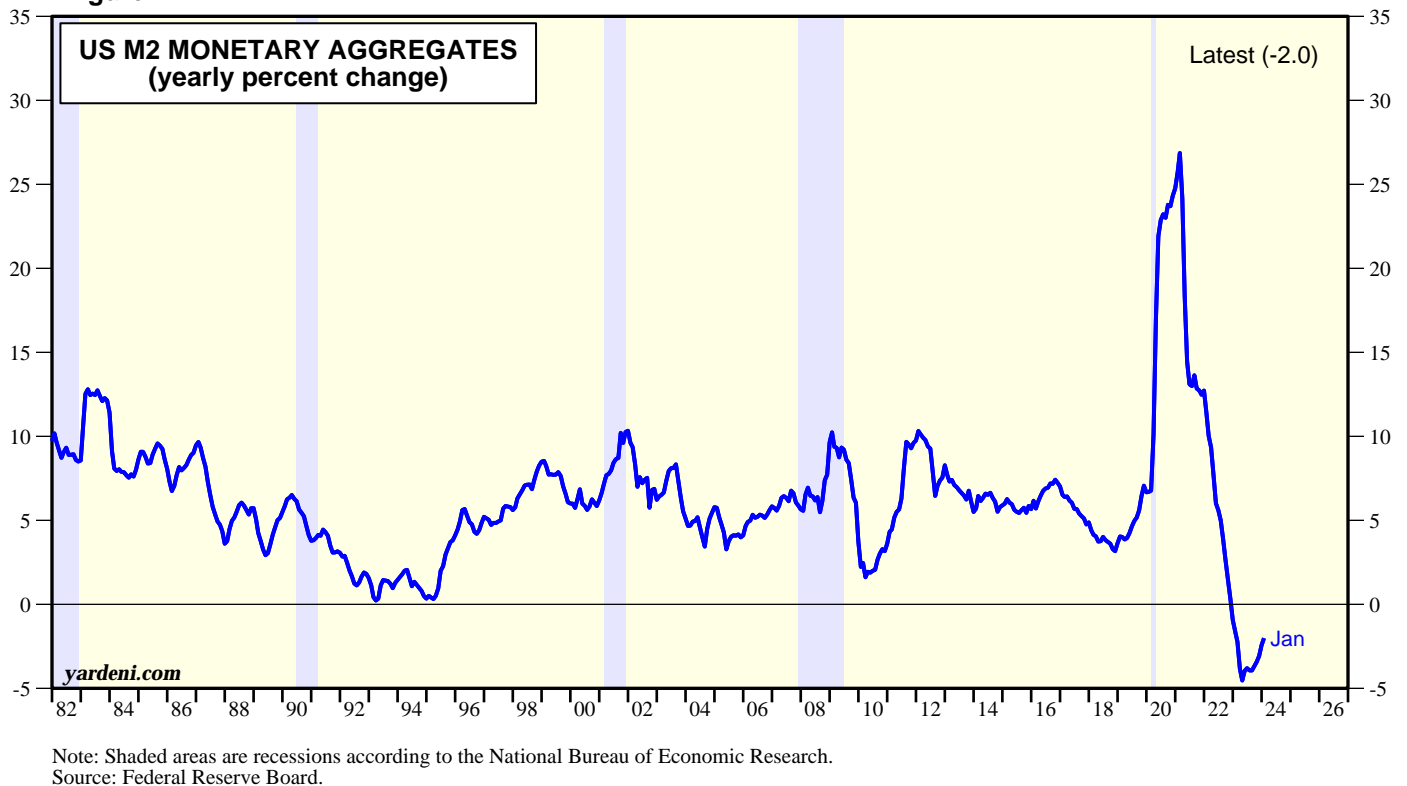
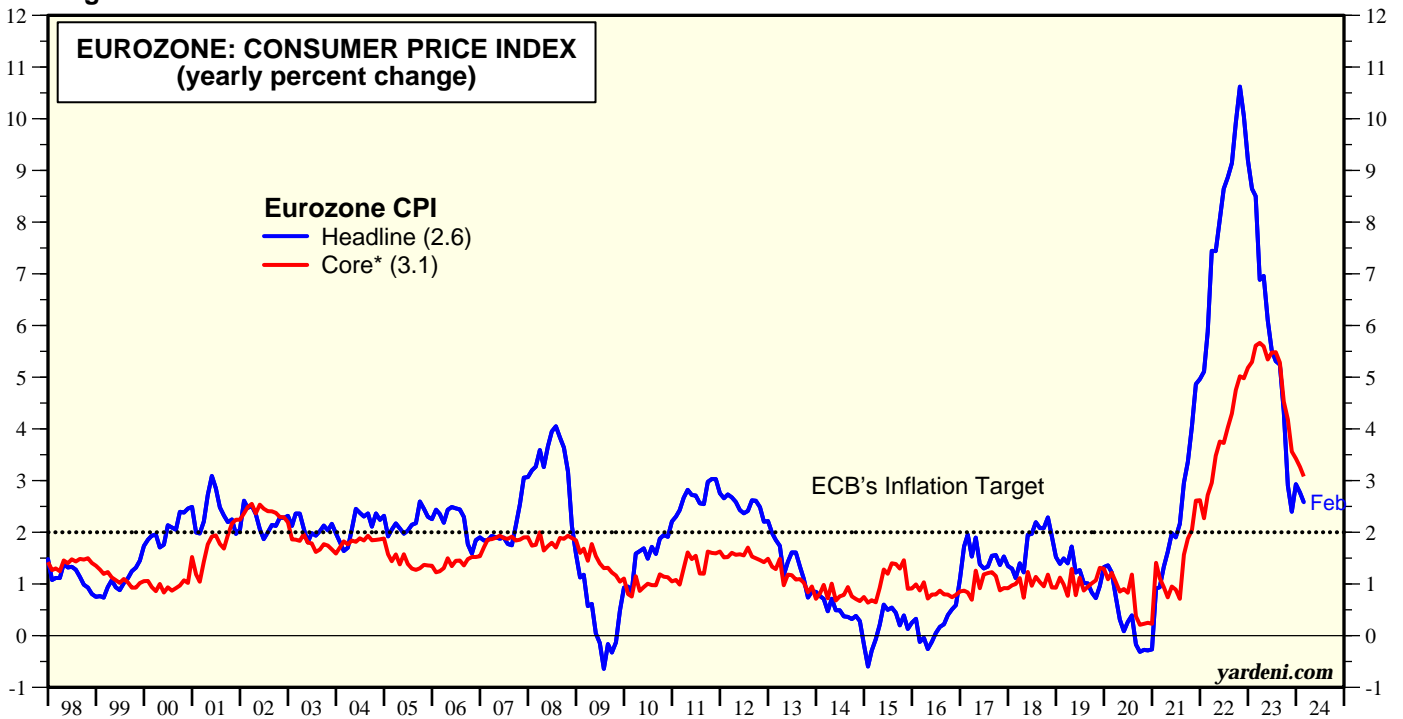


Figure 42.



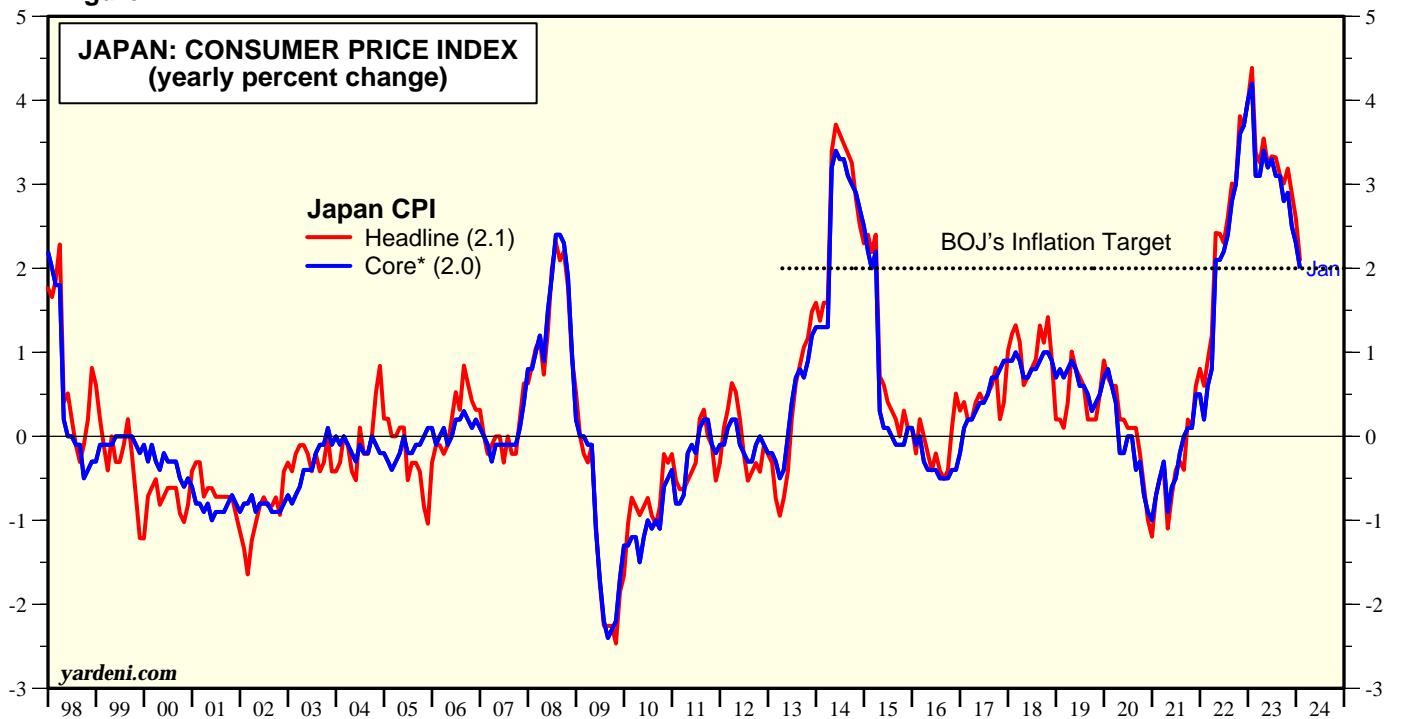
Topical Study #5: Updated Charts

Figure 43.



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

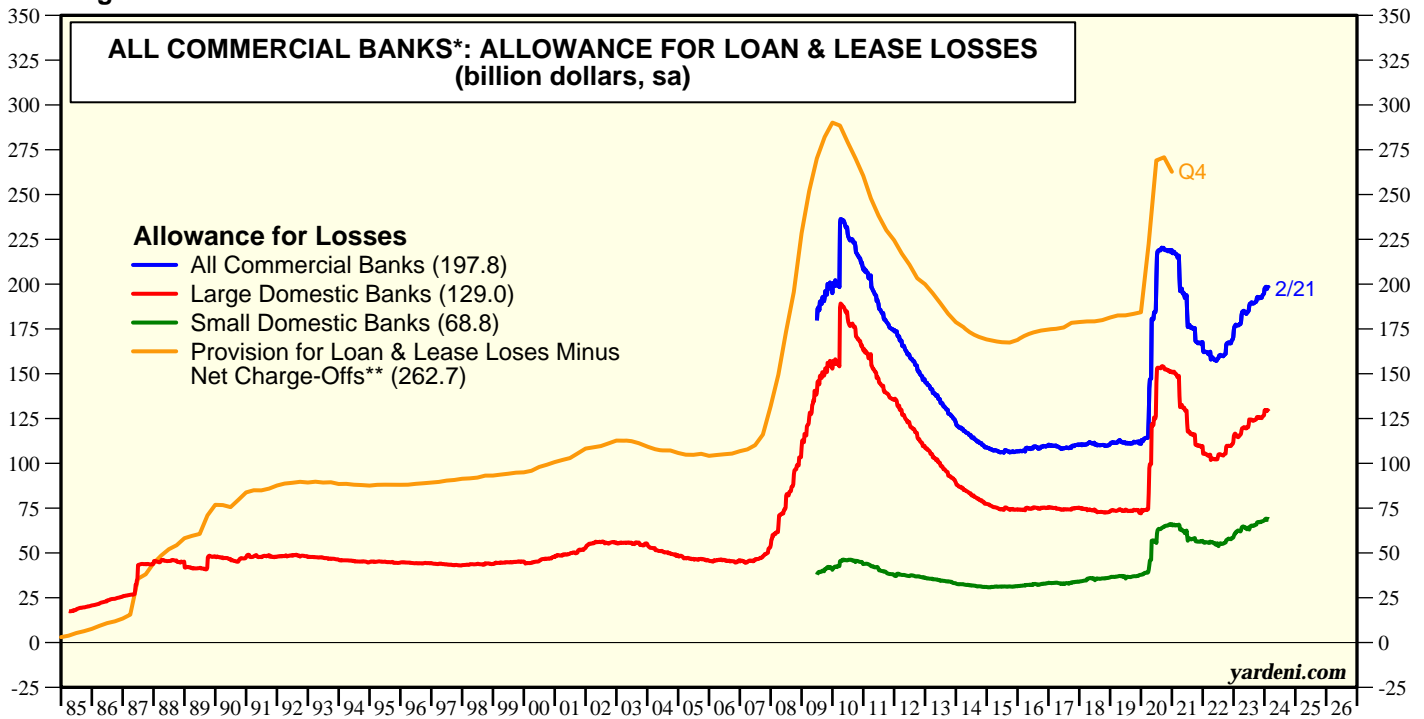
Figure 44.



* Excluding fresh food.
Source: Ministry of Internal Affairs and Communications.

Topical Study #5: Updated Charts

Figure 45.

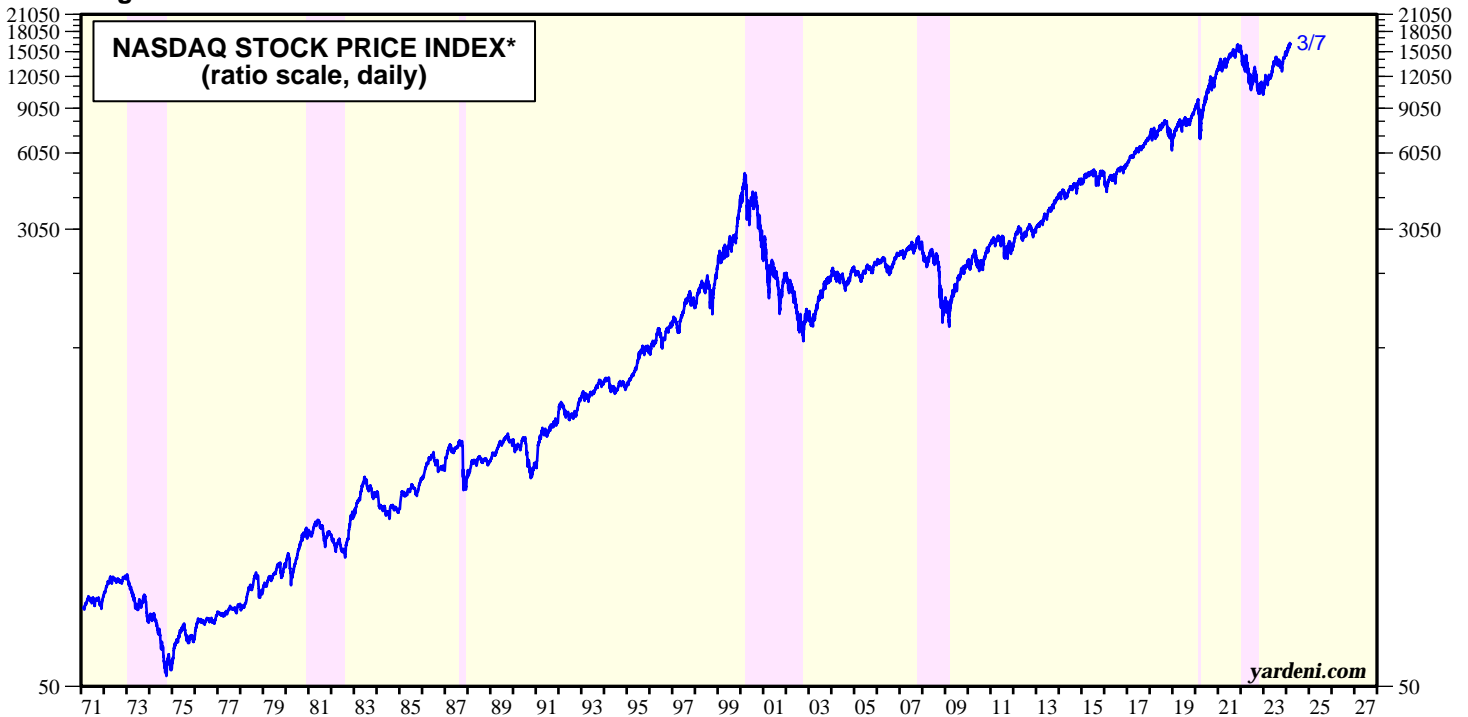


* Includes domestically chartered commercial banks and foreign-related ones.

** Cumulative change since 1984. All FDIC-insured financial institutions.

Source: Federal Reserve Board and Federal Deposit Insurance Corporation, Quarterly Banking Profile.

Figure 46.



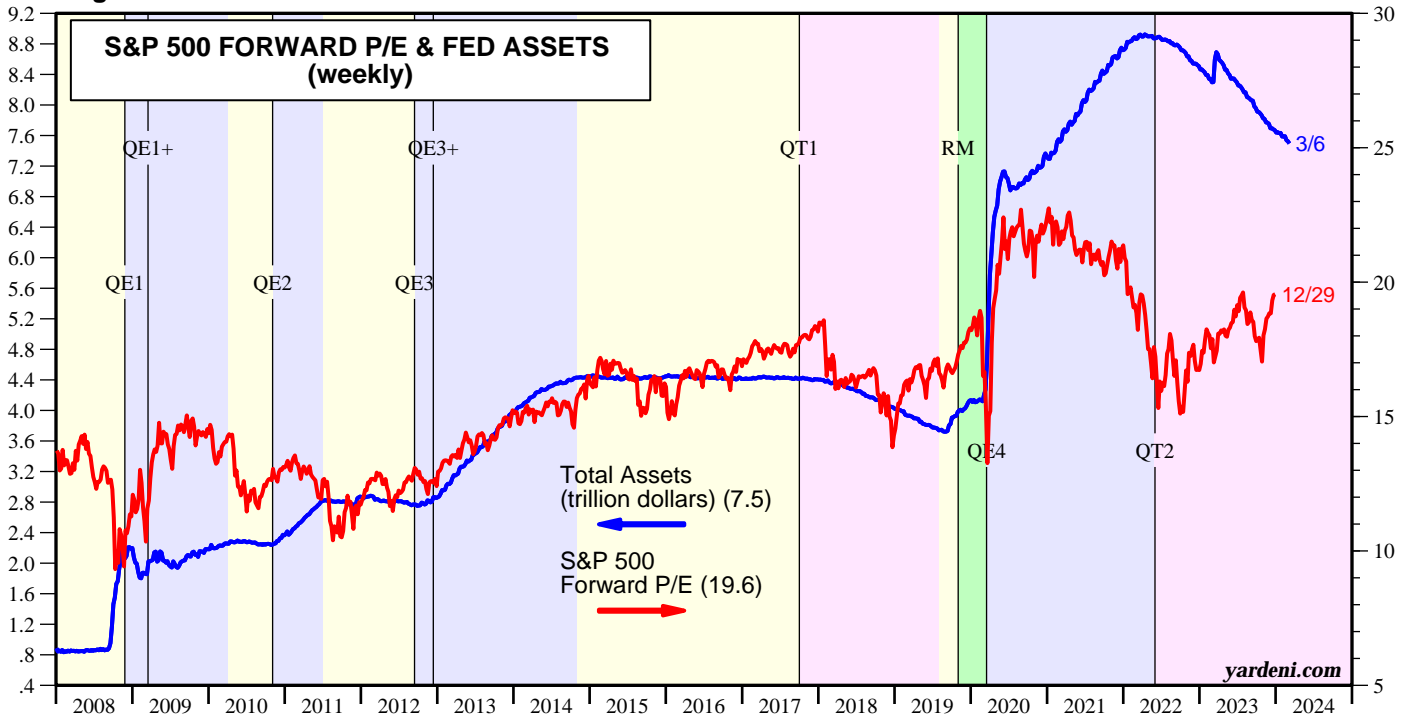
* Ratio scale.

Note: Shaded red areas are S&P 500 bear market declines of 20% or more. Yellow areas show bull markets.

Source: Wall Street Journal and Haver Analytics.

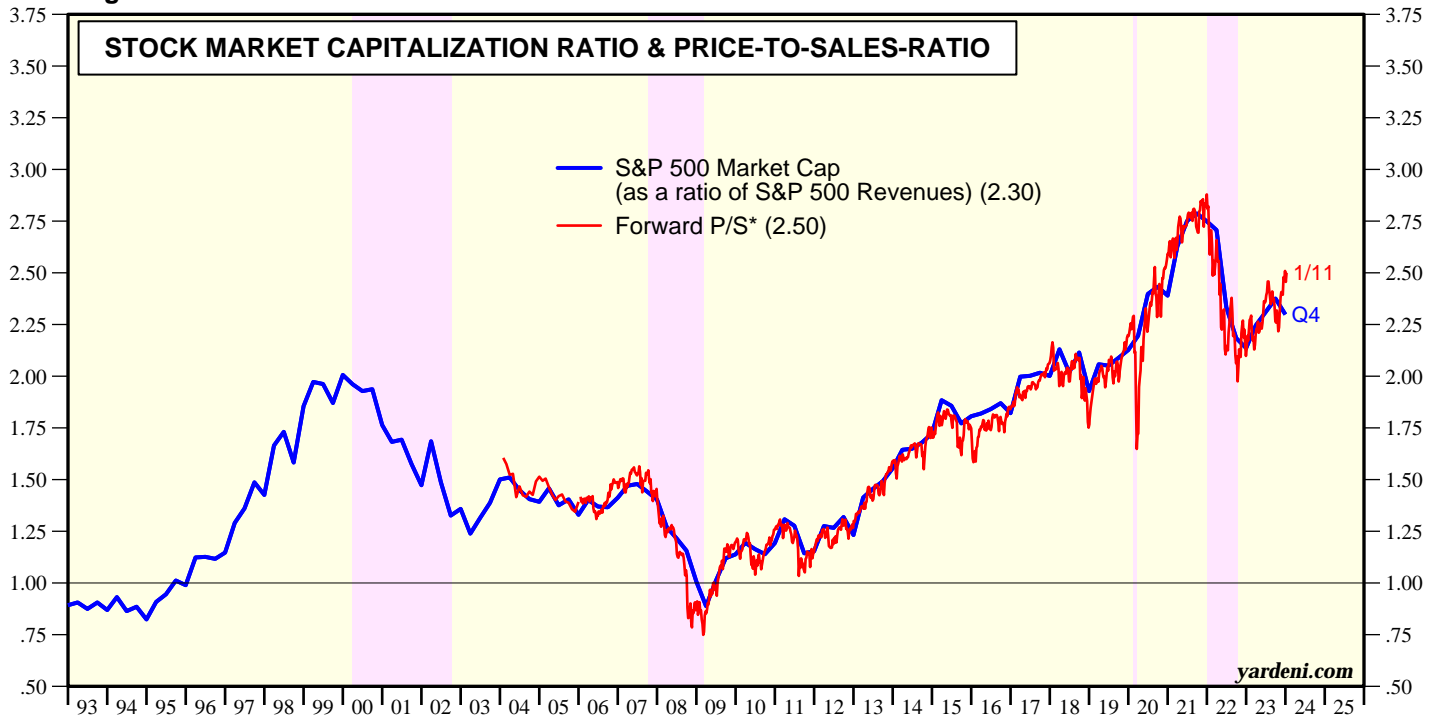
Topical Study #5: Updated Charts

Figure 47.



* Averages of daily figures for weeks ending Wednesday. Securities held by Fed include US Treasuries, Agency debt, and mortgage-backed securities. 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. QT1 (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). QT2 = balance sheet pared by \$95 billion per month. Source: Federal Reserve Board.

Figure 48.



* S&P 500 index divided by forward consensus expected revenues per share for S&P 500. Monthly through 2005, then weekly. Note: Shaded red areas are S&P 500 bear market declines of 20% or more. Yellow areas are bull markets. Source: I/B/E/S data by Refinitiv and Standard & Poor's.

Copyright (c) Yardeni Research, Inc. 2024. 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](#).