

Predicting the Markets Webcast: Predicting Inflation

Yardeni Research, Inc.

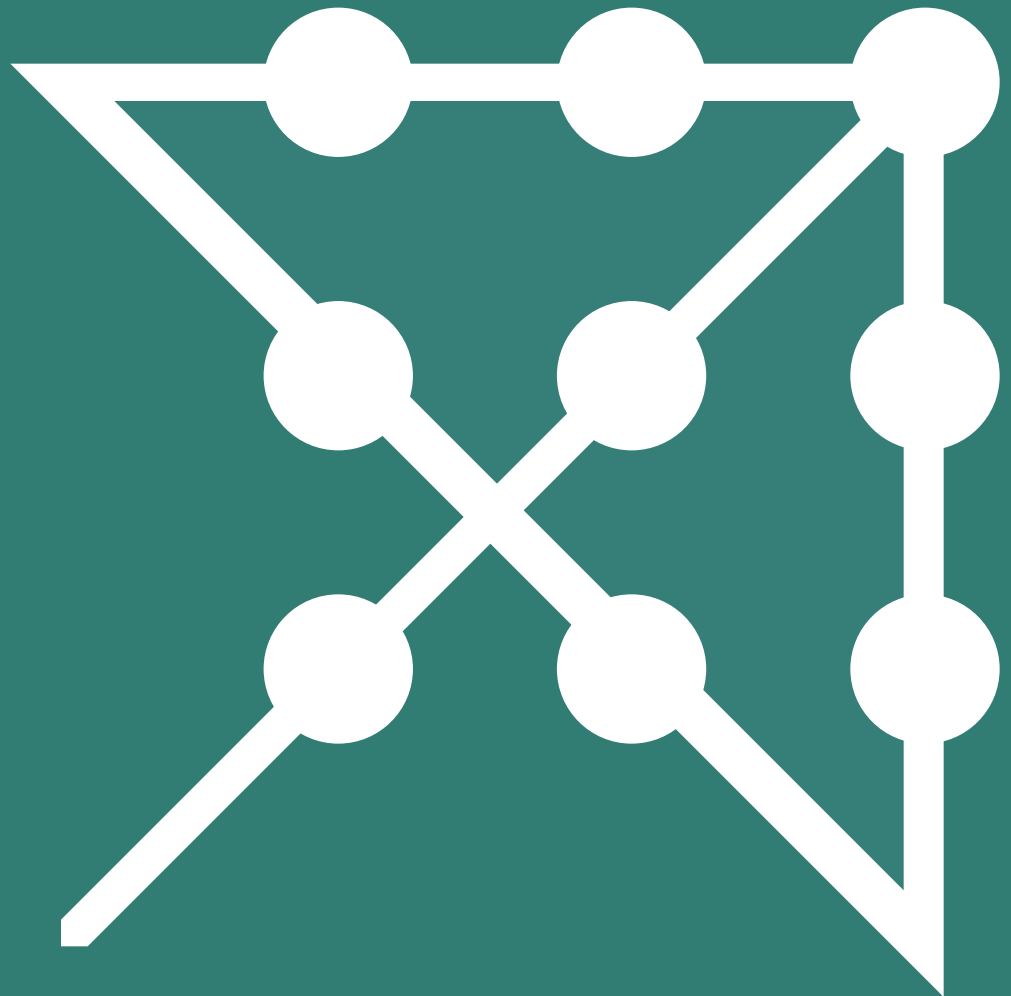
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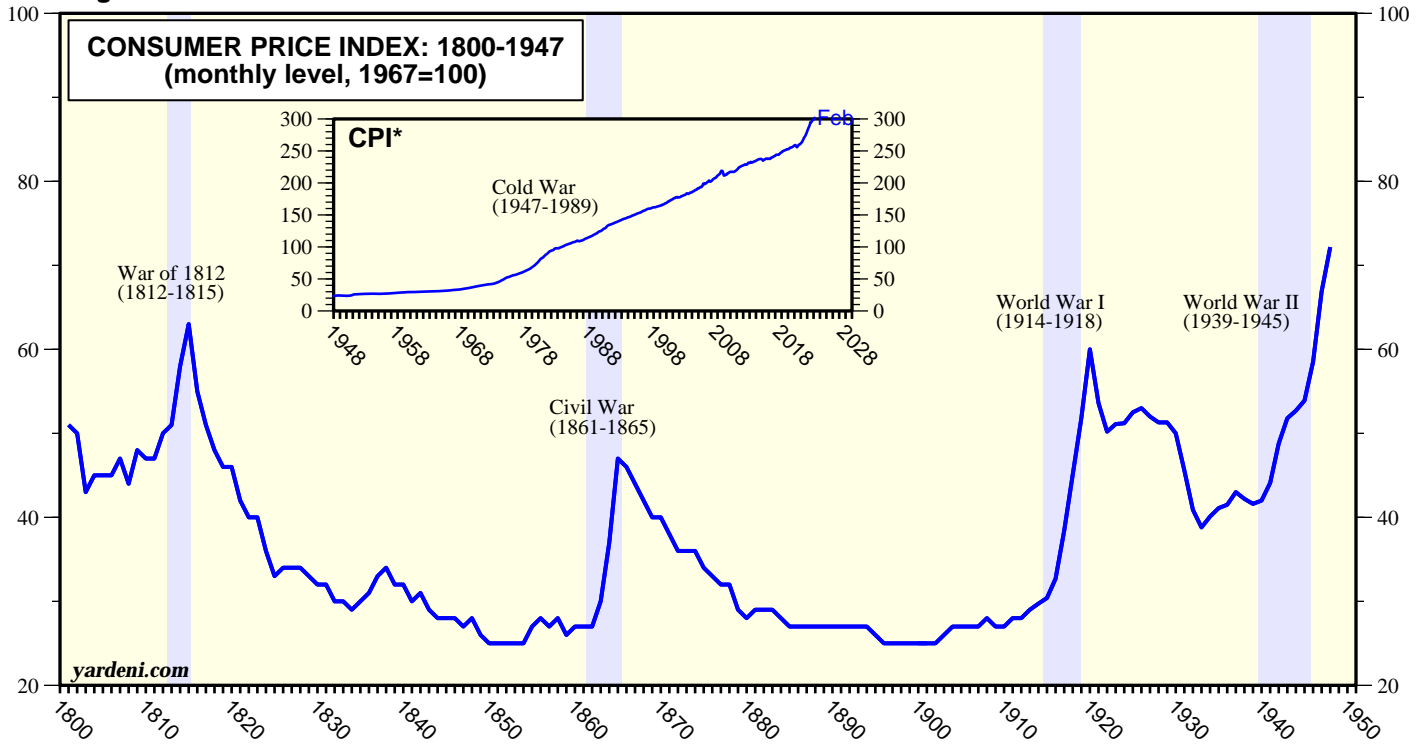
thinking outside the box

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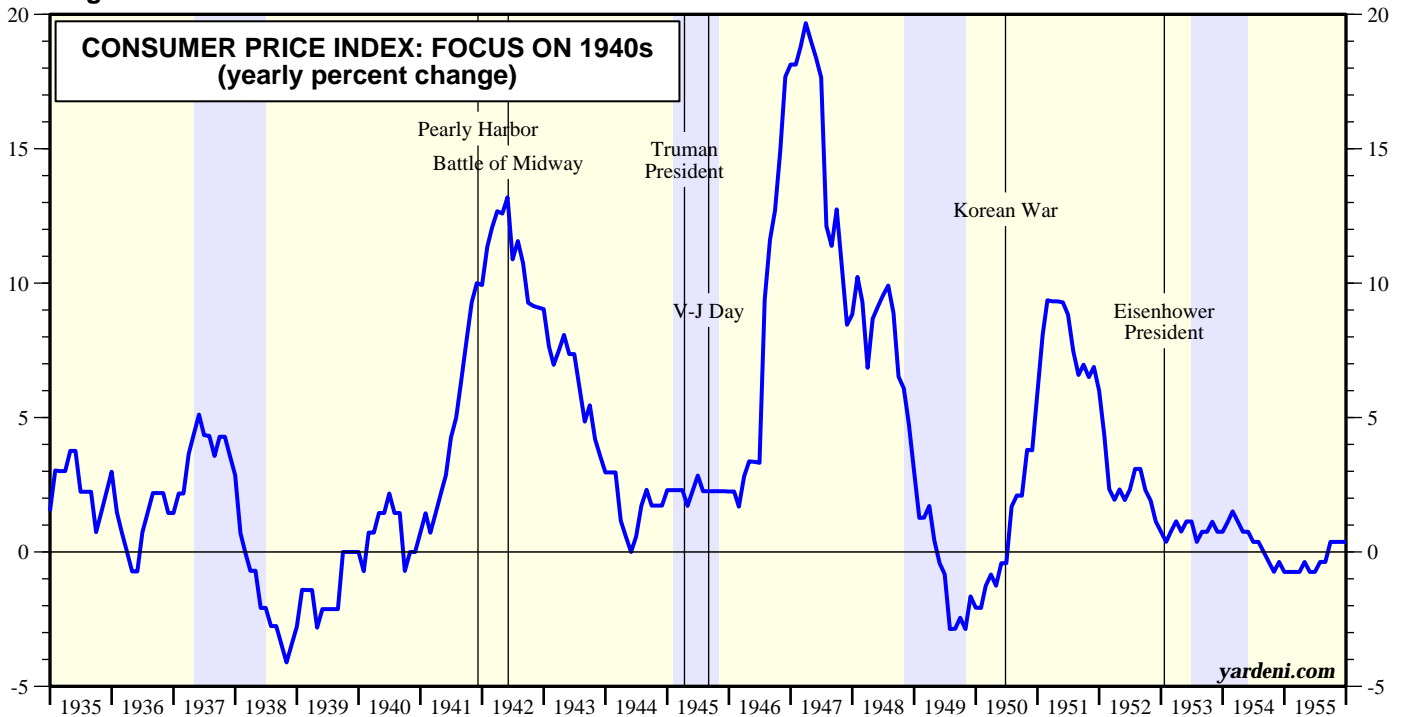
History of Inflation

Figure 1.



* 1982-84=100.
Note: Shaded areas are wartimes.
Source: Census Bureau, Historical Statistics of the United States.

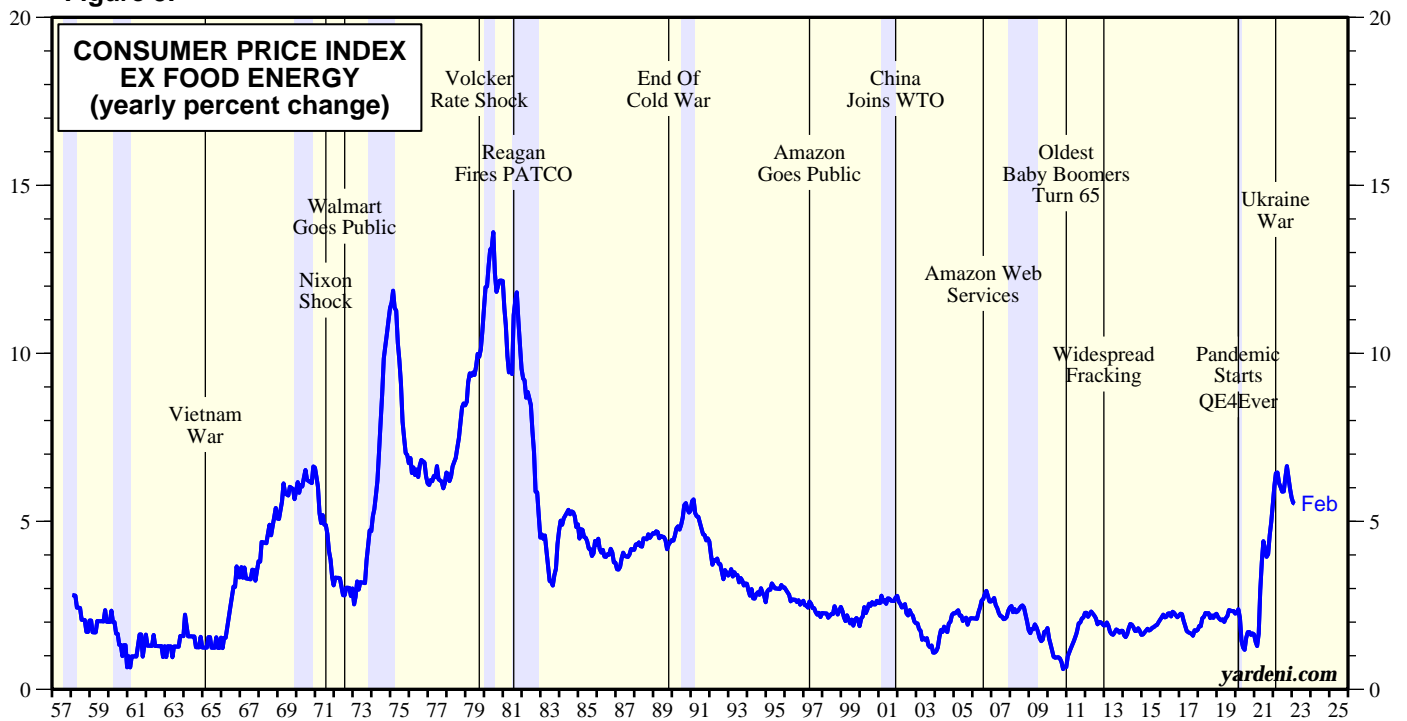
Figure 2.



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

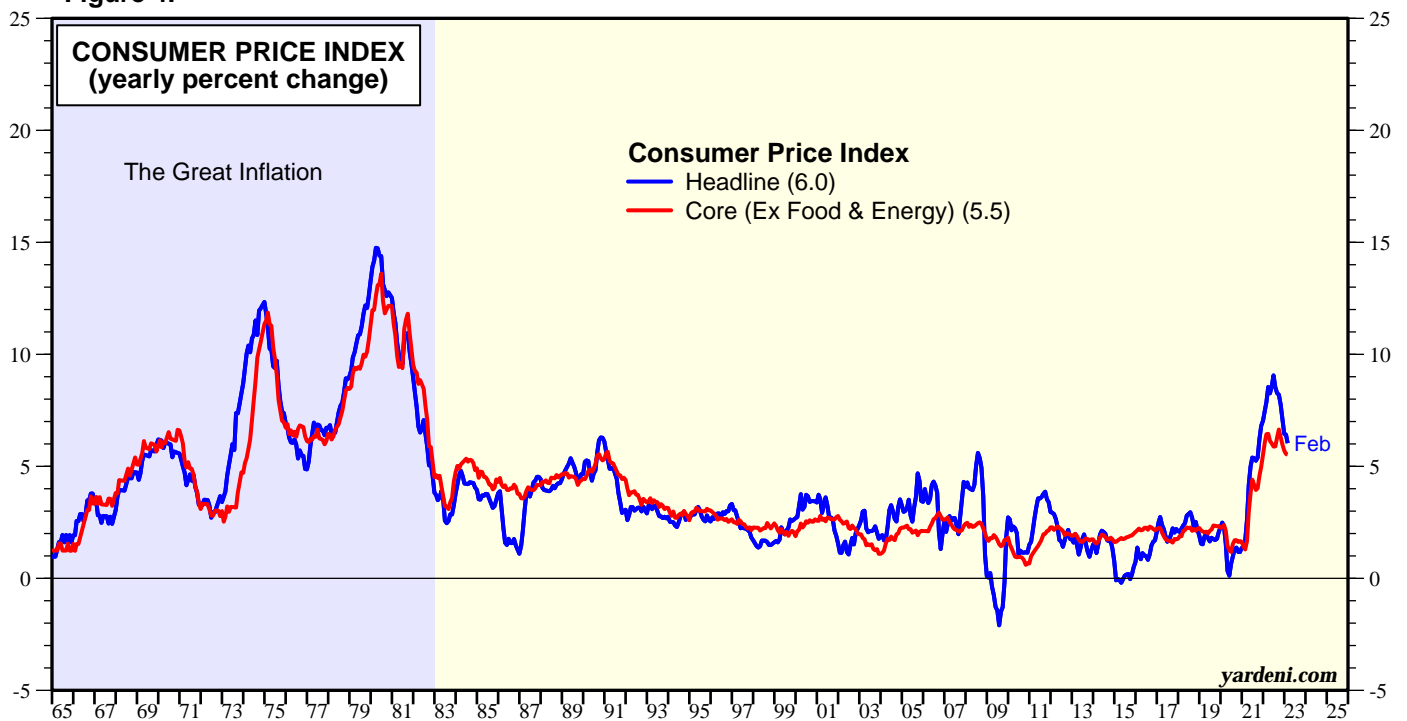
History of Inflation

Figure 3.



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

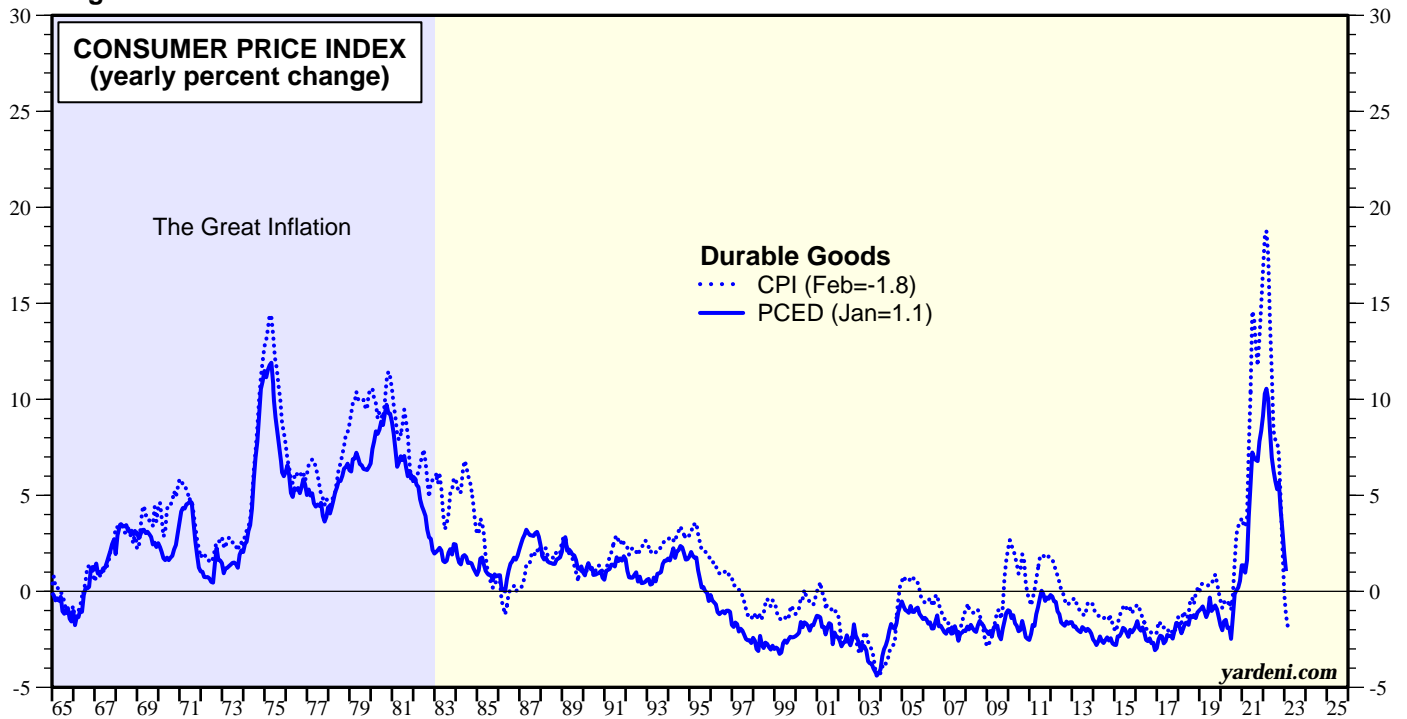
Figure 4.



Source: Bureau of Labor Statistics.

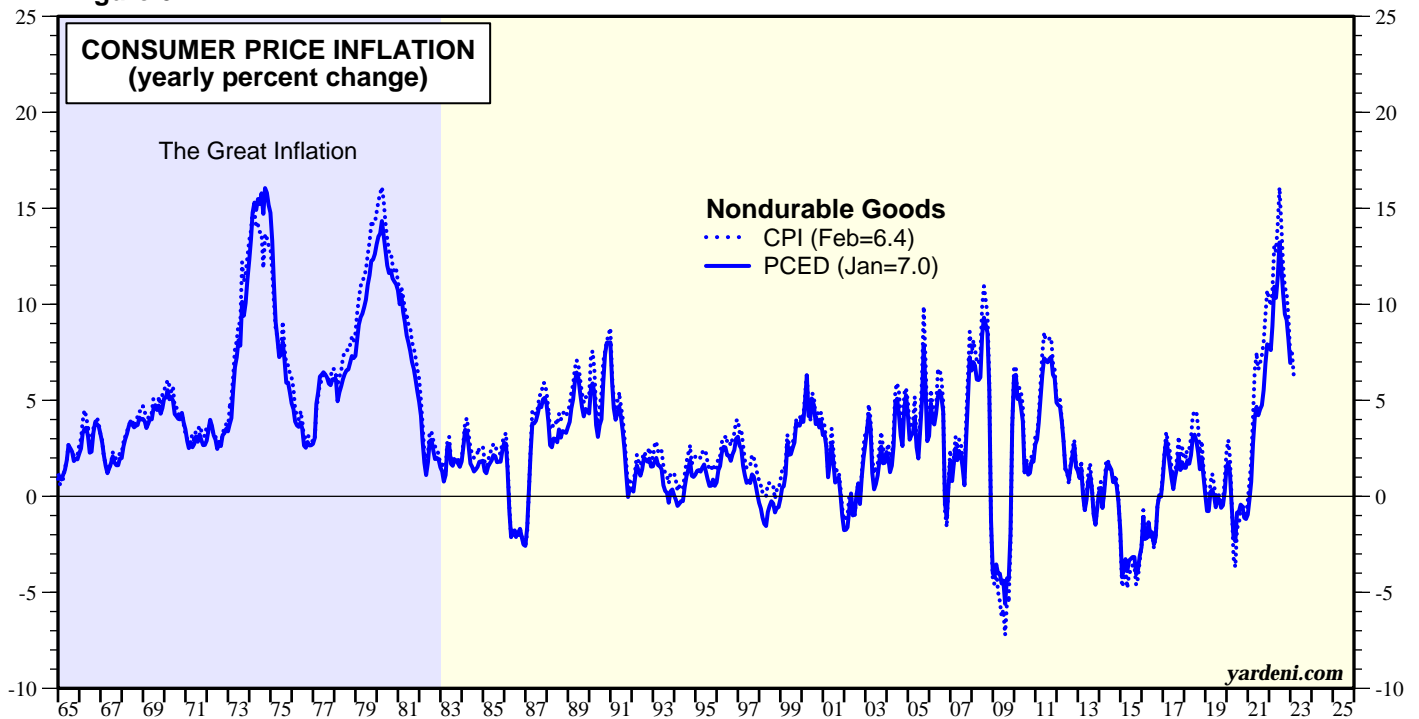
History of Inflation

Figure 5.



Source: Bureau of Economic Analysis and Bureau of Labor Statistics.

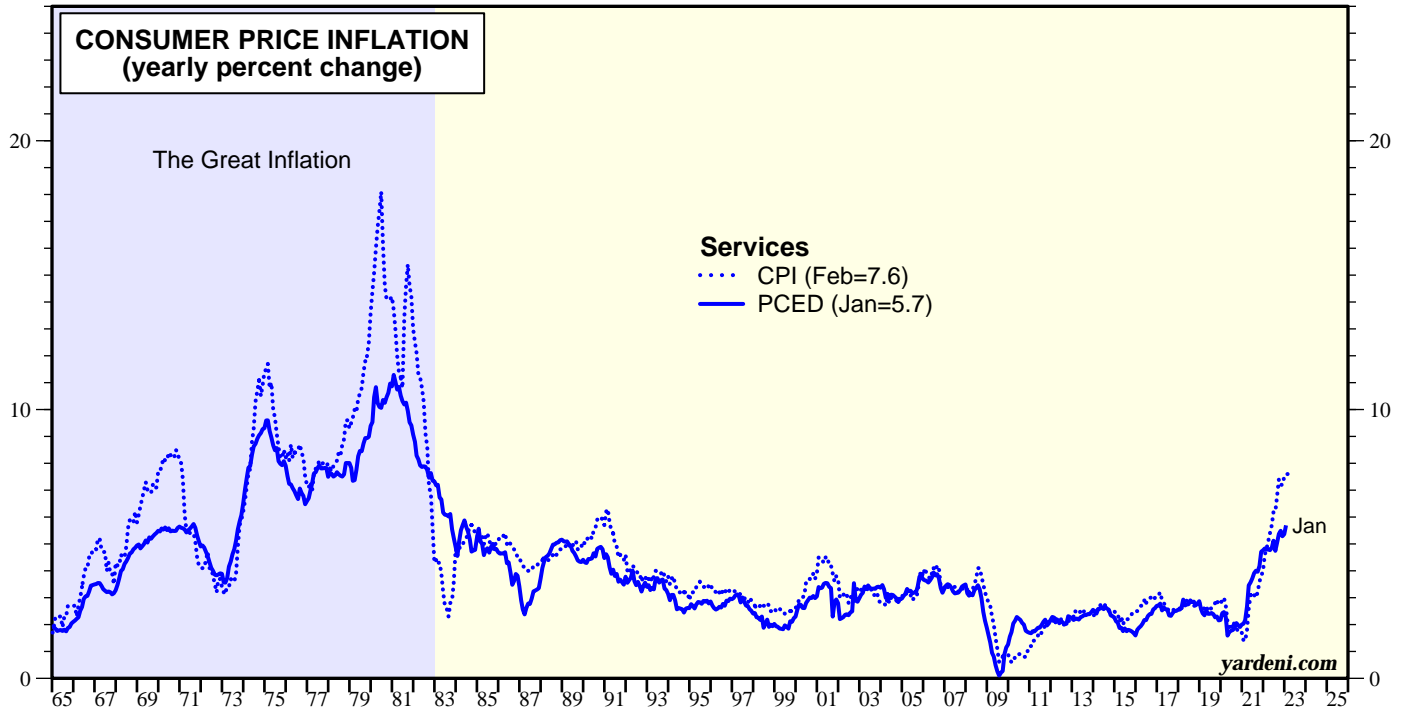
Figure 6.



Source: Bureau of Economic Analysis and Bureau of Labor Statistics.

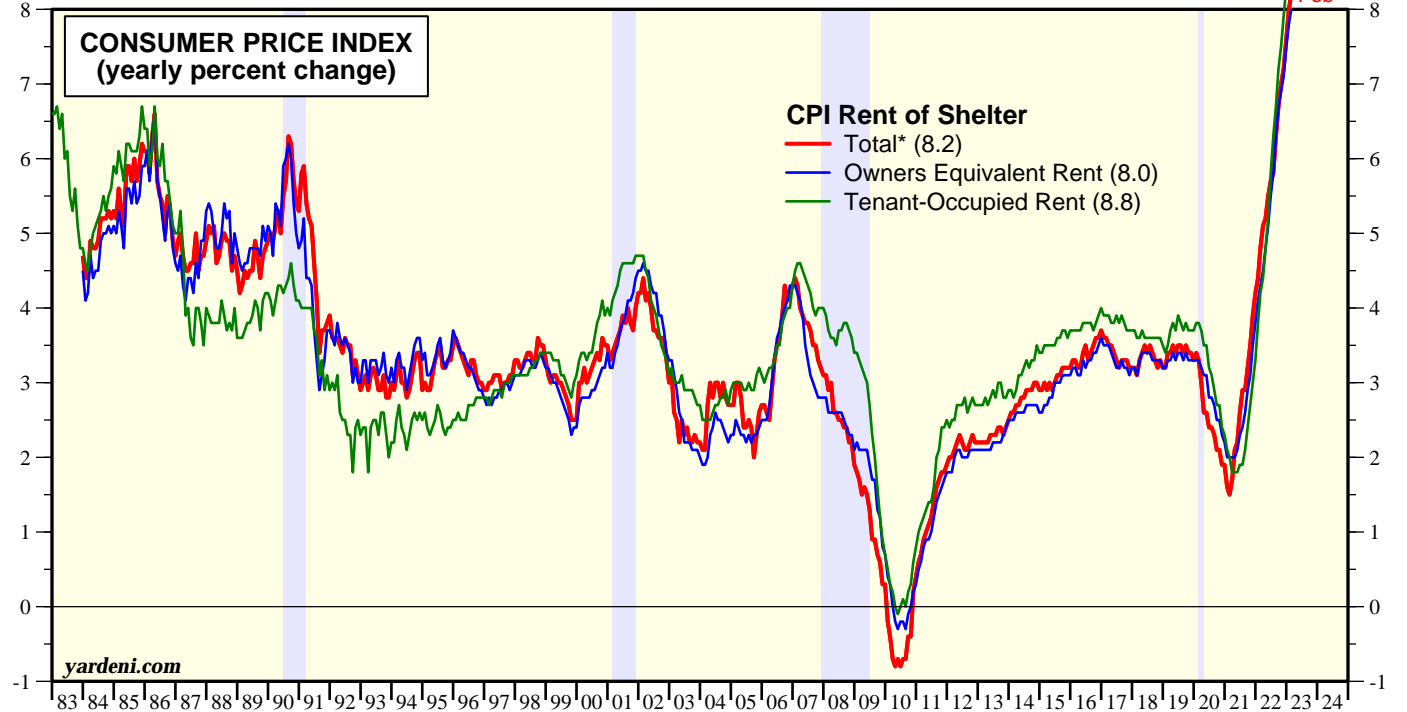
History of Inflation

Figure 7.



Source: Bureau of Economic Analysis and Bureau of Labor Statistics.

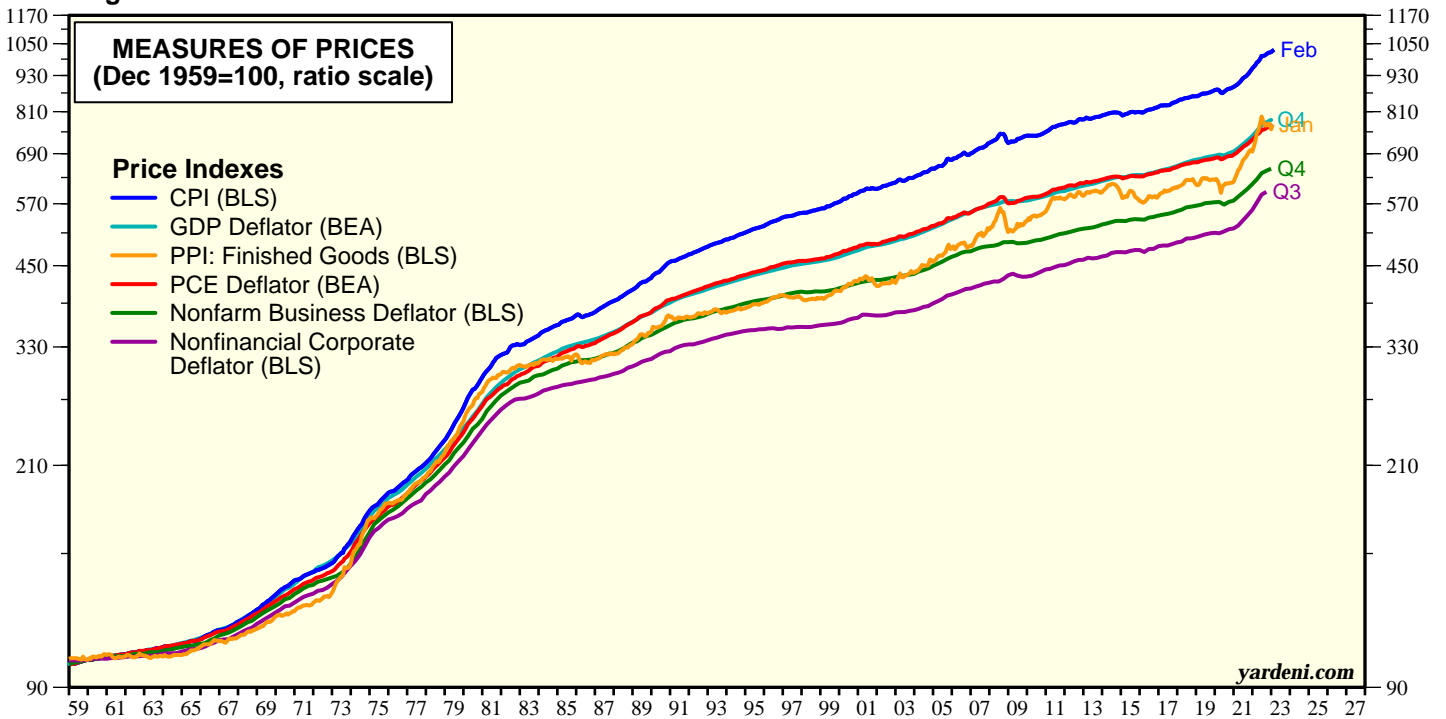
Figure 8.



* Includes owners' equivalent rent, tenant-occupied rent, and lodging away from home.
 Note: Shaded areas are recessions according to the National Bureau of Economic Research.
 Source: Bureau of Labor Statistics.

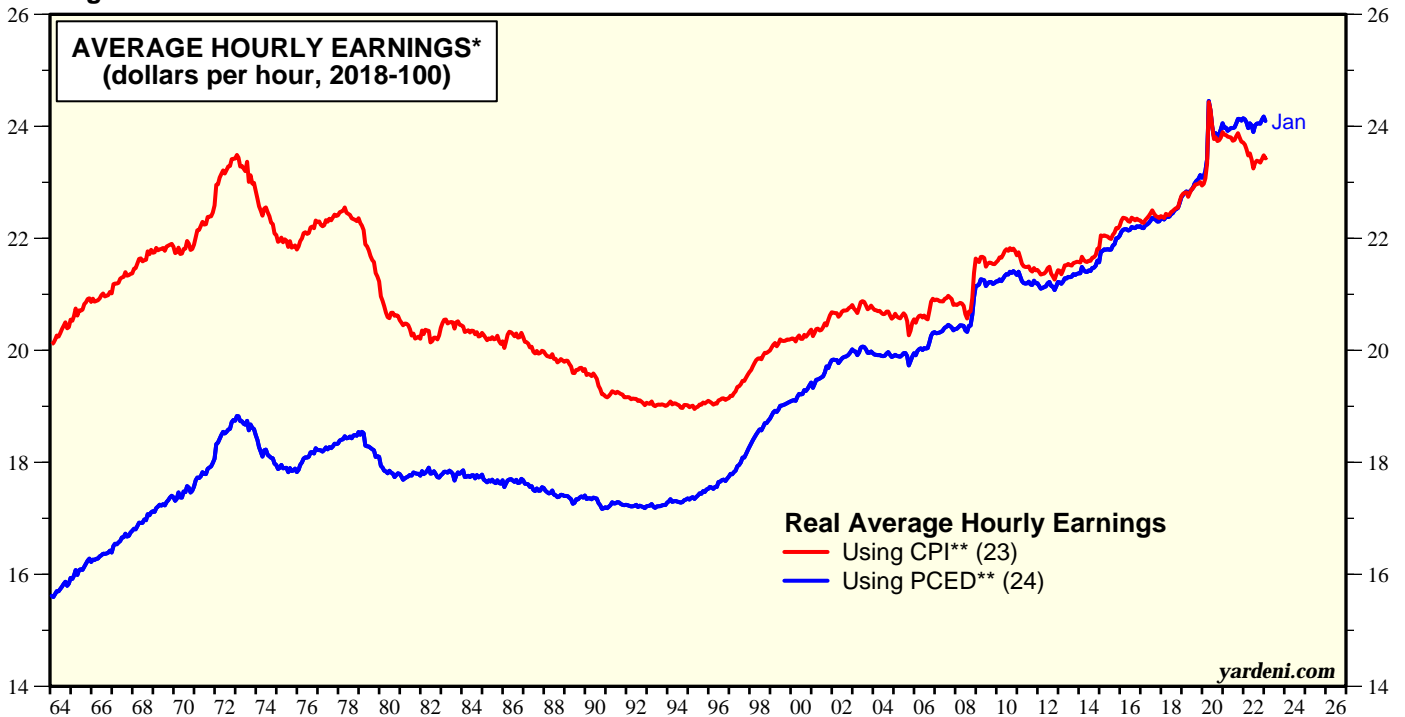
Measuring Prices

Figure 9.



Source: Bureau of Labor Statistics and Bureau of Economic Analysis.

Figure 10.



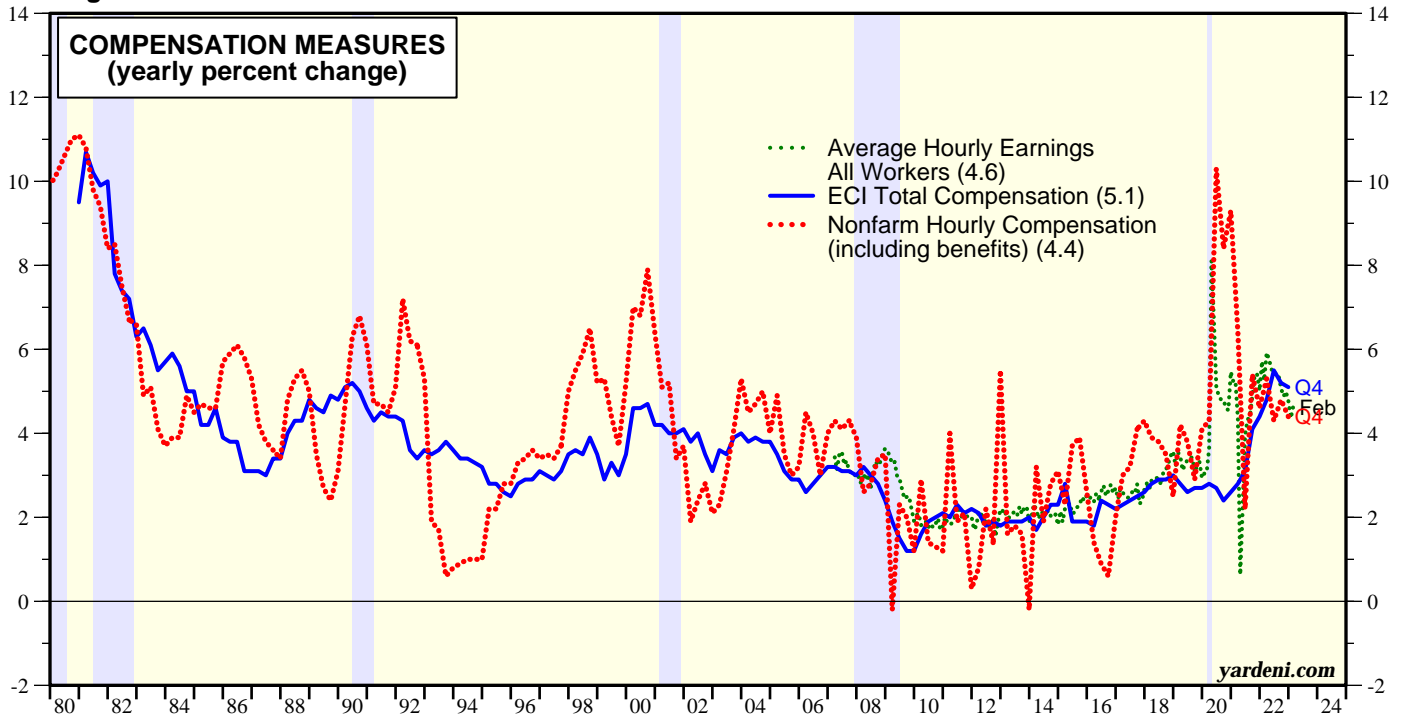
* Production and non-supervisory workers.

** CPI and PCED divided by their respective January 2018 values.

Source: Bureau of Economic Analysis and Bureau of Labor Statistics.

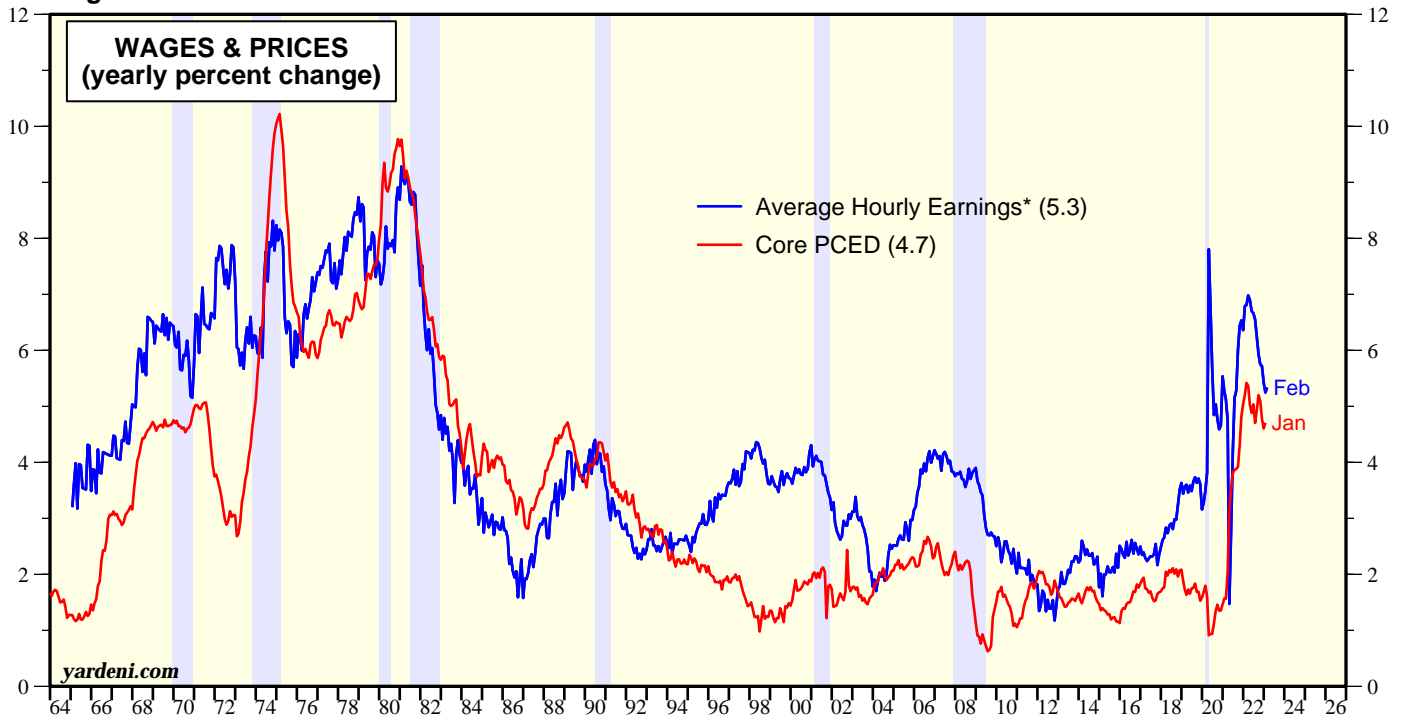
Measuring Wages

Figure 11.



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

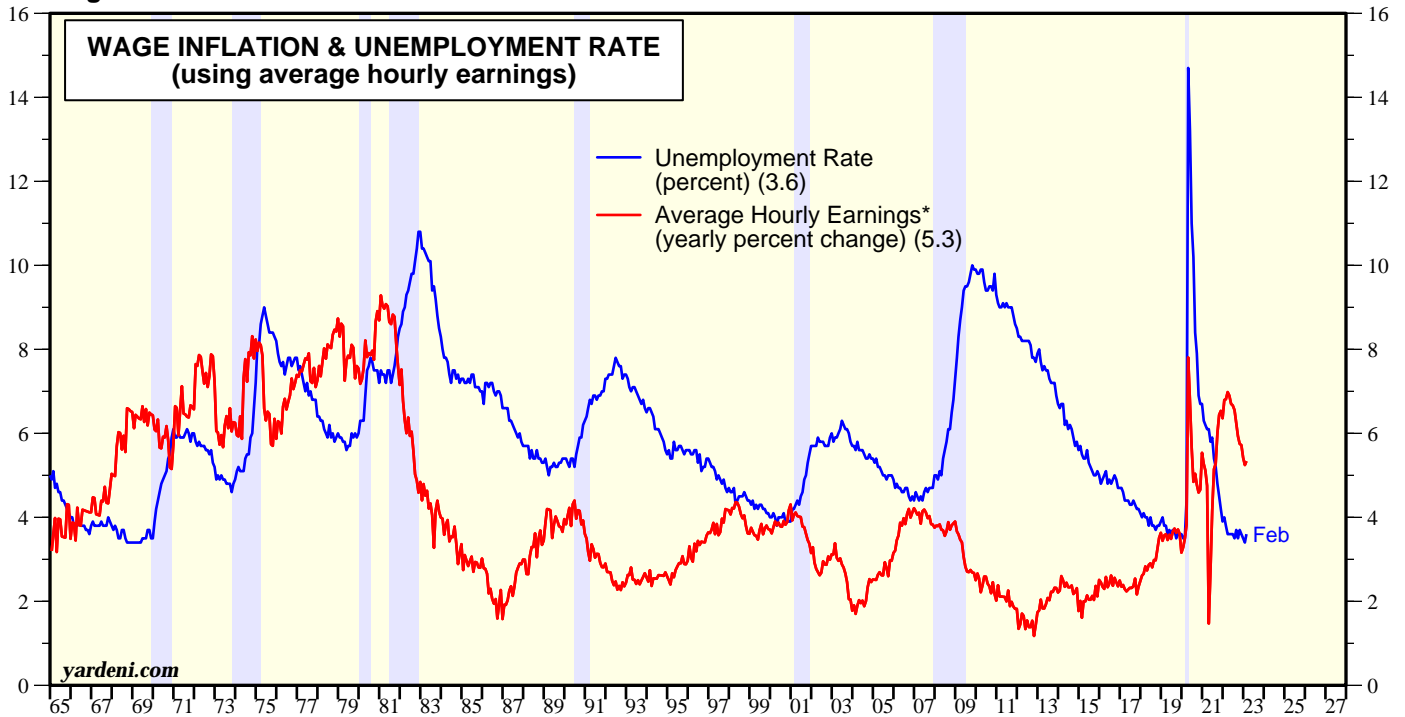
Figure 12.



* Production & nonsupervisory workers
Note: Shaded areas denote recessions according to the National Bureau of Economic Research.
Source: Bureau of Labor Statistics.

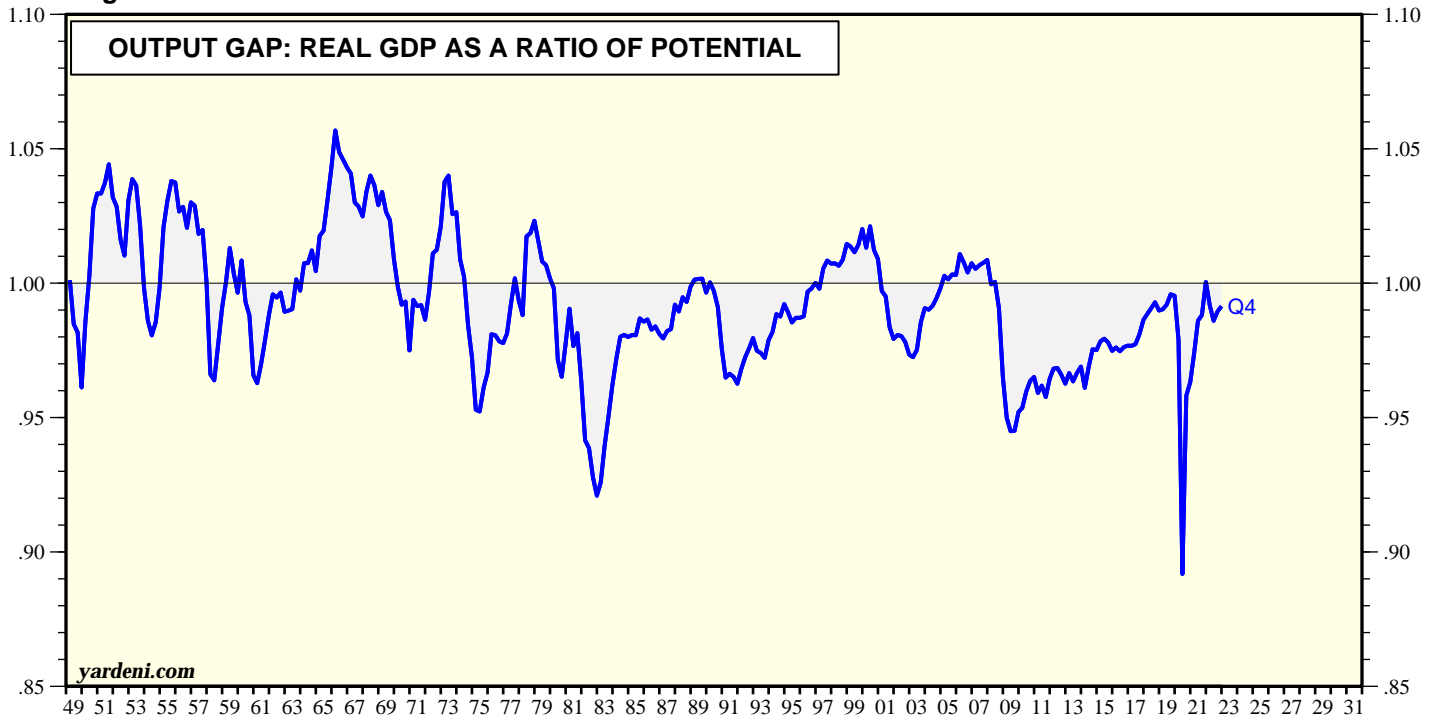
Modeling Inflation: Phillips Curve & Output Gap

Figure 13.



* Production & nonsupervisory workers in private sector.
 Note: Shaded areas denote recessions according to the National Bureau of Economic Research.
 Source: Bureau of Labor Statistics.

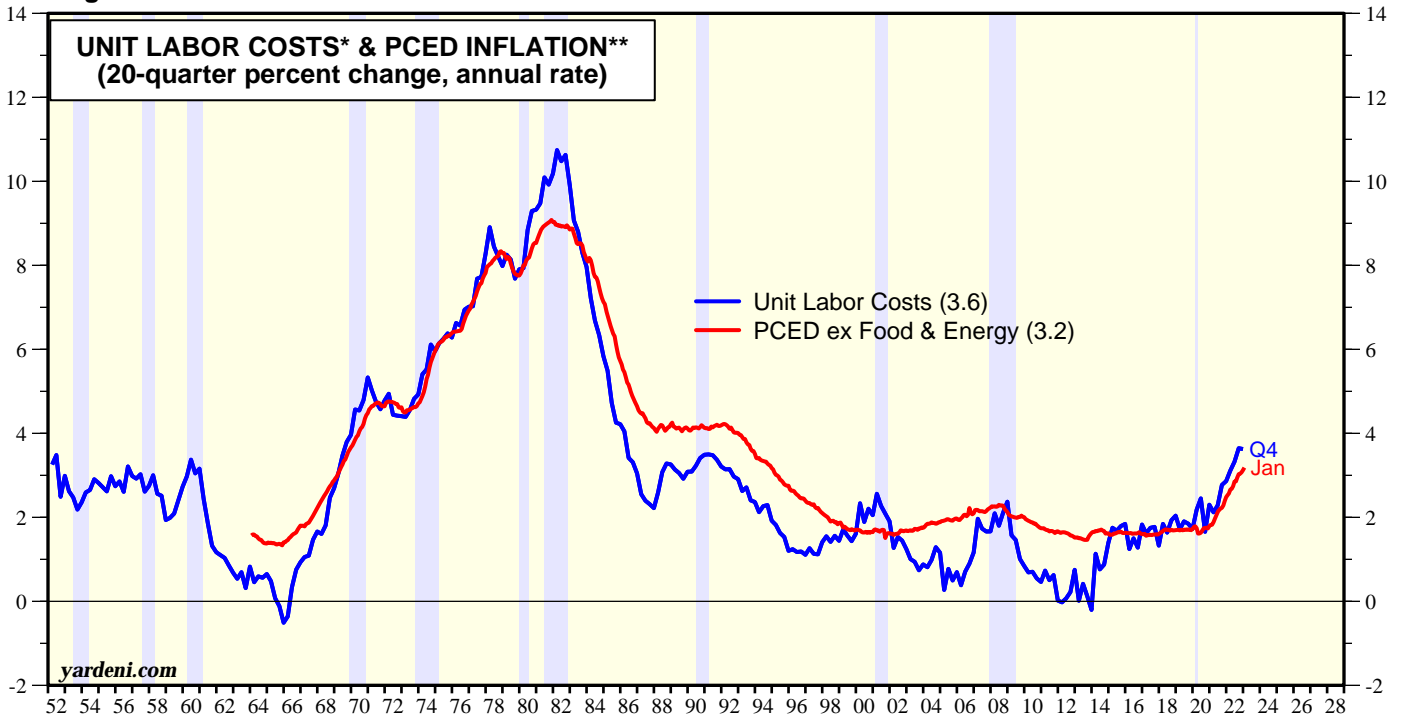
Figure 14.



Source: Congressional Budget Office and Bureau of Economic Analysis.

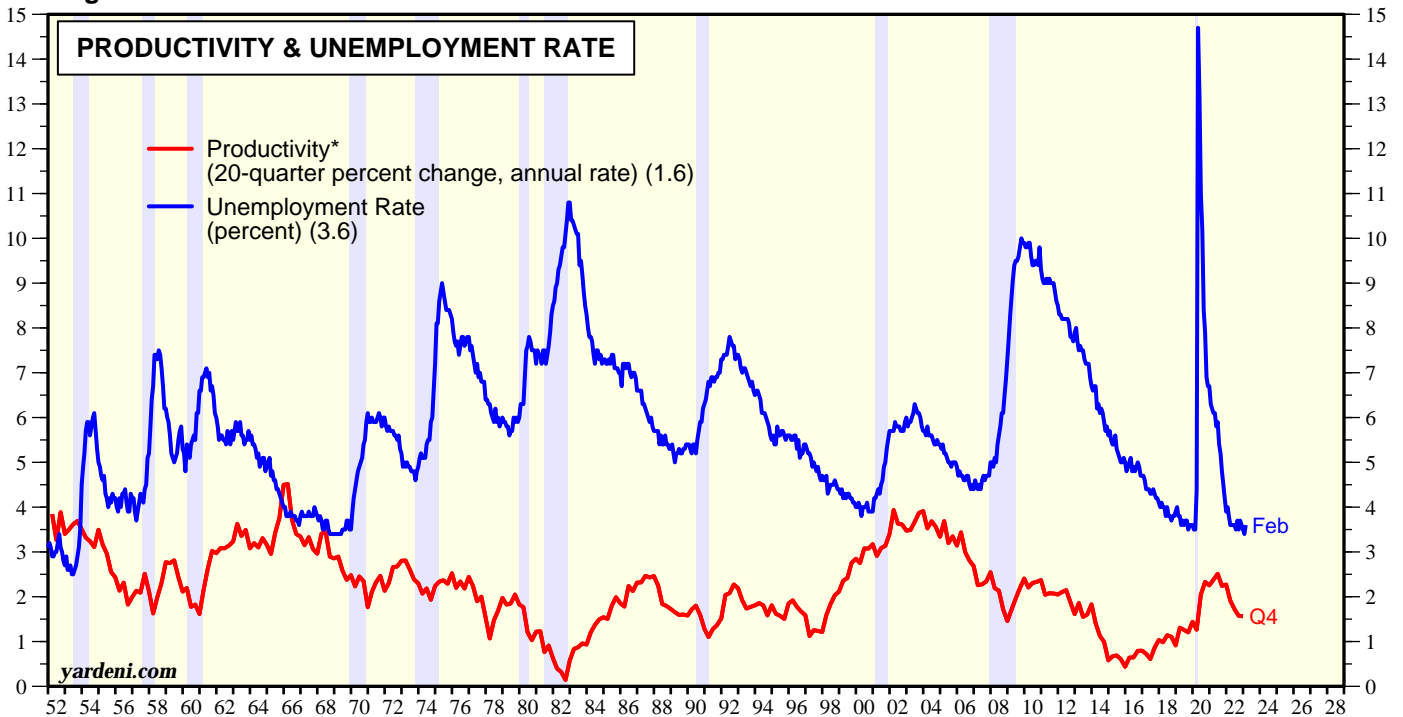
Modeling Inflation: Productivity

Figure 15.



* Nonfarm business hourly compensation divided by productivity.
 ** PCED = personal consumption expenditures deflator.
 Note: Shaded areas are recessions according to the National Bureau of Economic Research.
 Source: Bureau of Labor Statistics.

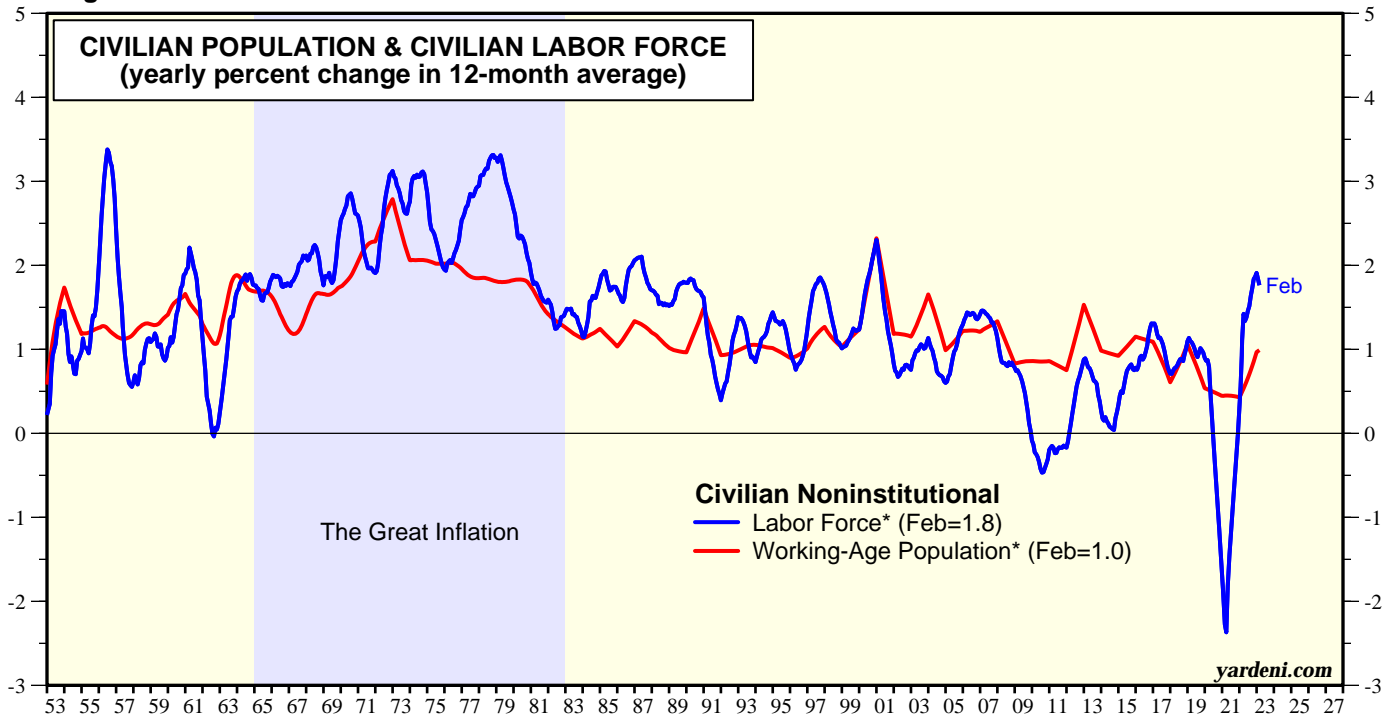
Figure 16.



* Nonfarm business.
 Note: Shaded areas are recessions according to the National Bureau of Economic Research.
 Source: Bureau of Labor Statistics.

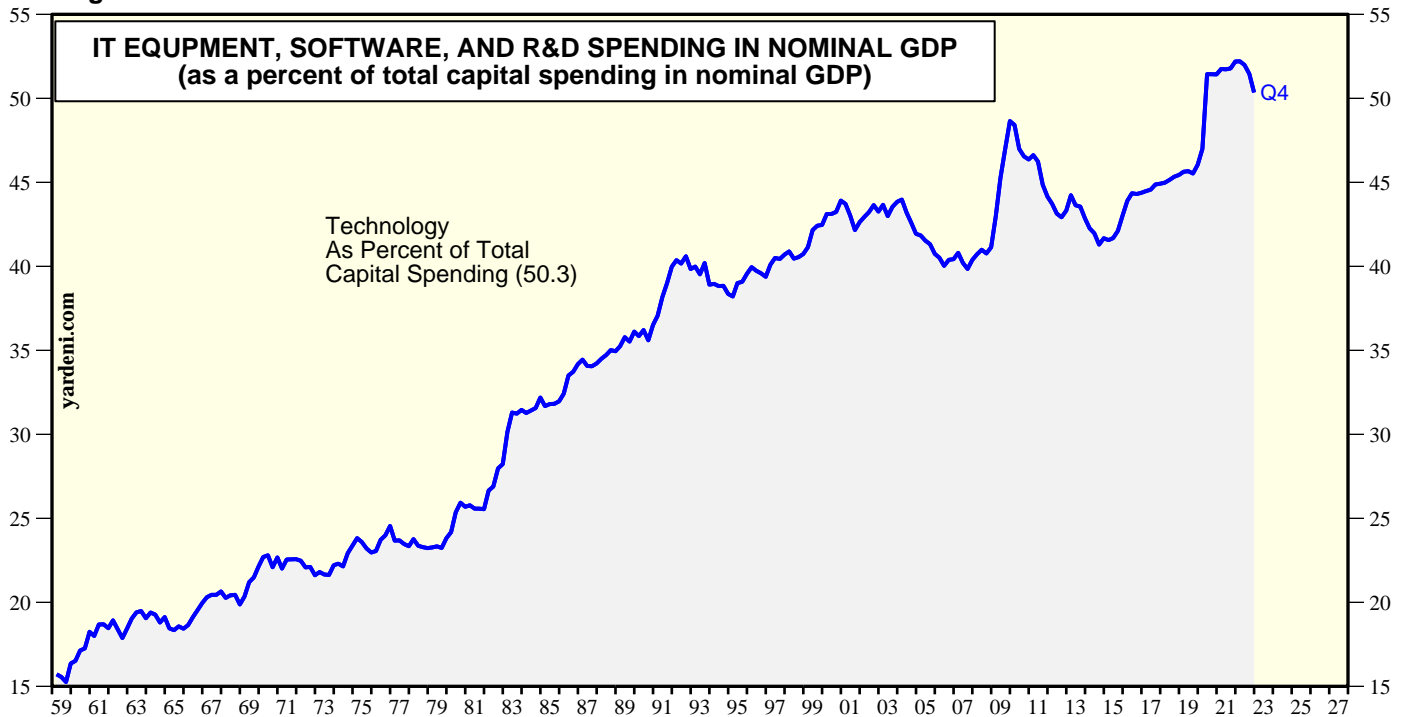
Modeling Inflation: Technology

Figure 17.



* 16 years & older.
Source: Bureau of Labor Statistics.

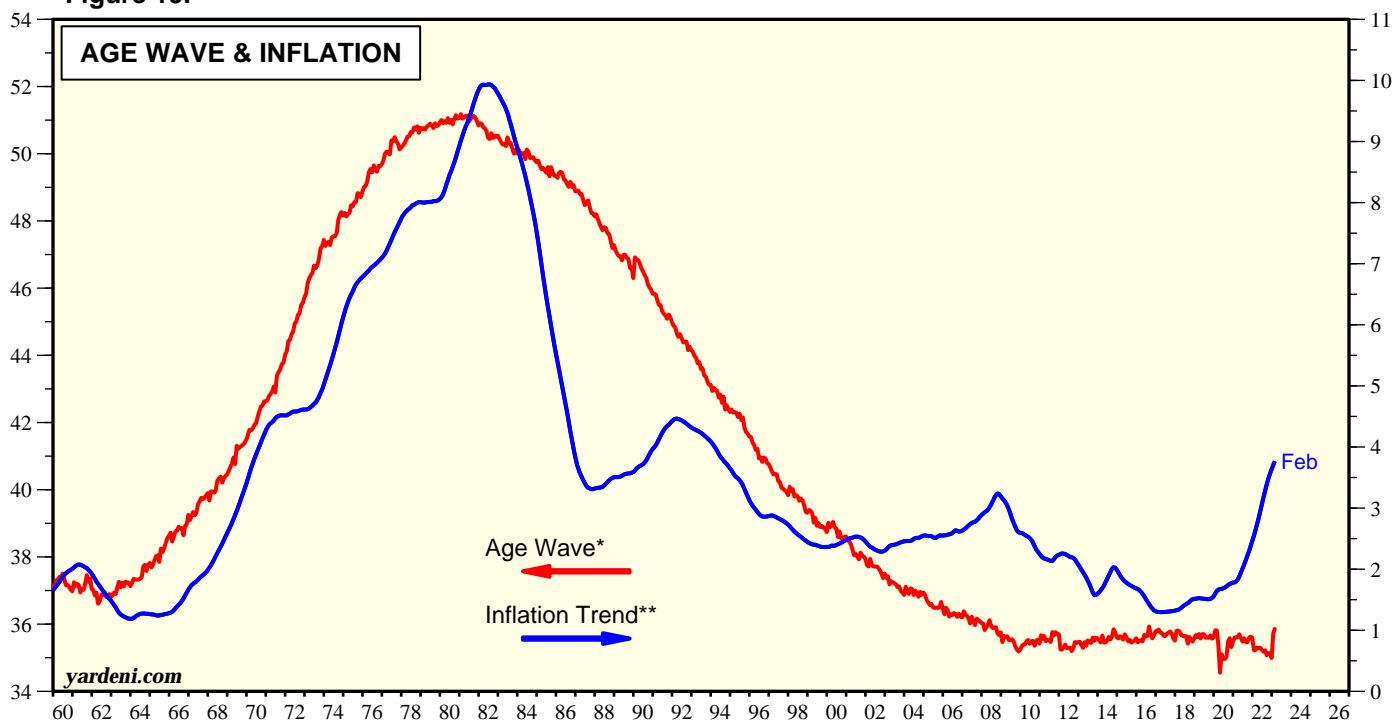
Figure 18.



Source: Bureau of Economic Analysis.

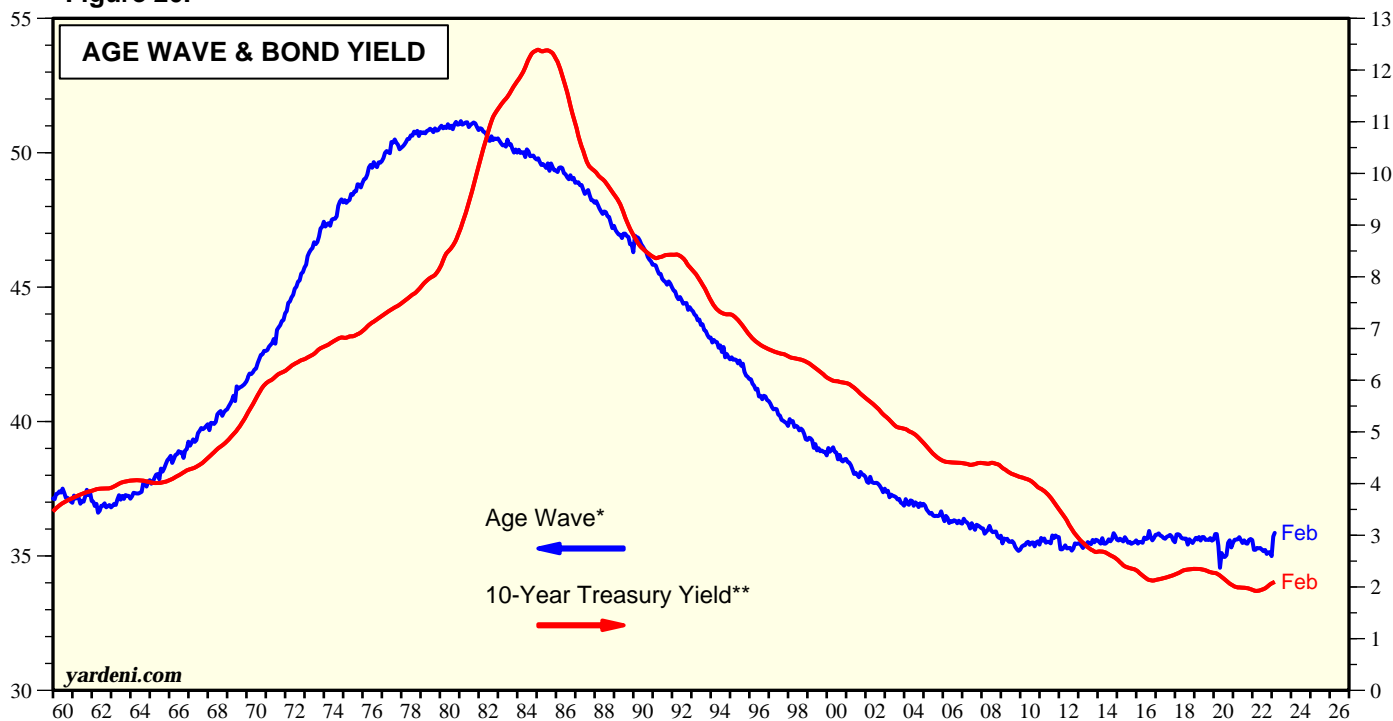
Modeling Inflation: The Age Wave

Figure 19.



* Percent of labor force 16-34 years old.
 ** Five-year moving average of yearly percent change in CPI.
 Source: Bureau of Labor Statistics.

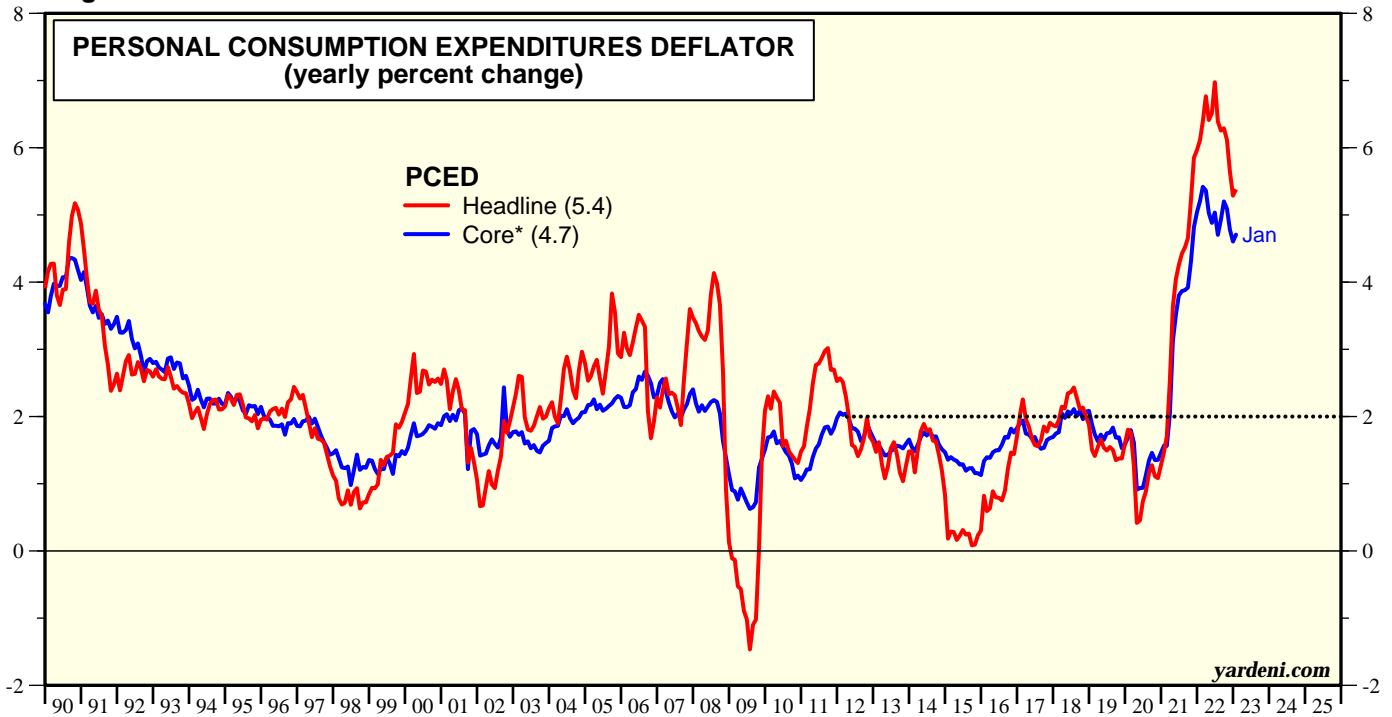
Figure 20.



* Percent of labor force 16-34 years old.
 ** Five-year moving average of ten-year government bond yield.
 Source: US Department of Labor, Bureau of Labor Statistics and Board of Governors of the Federal Reserve System.

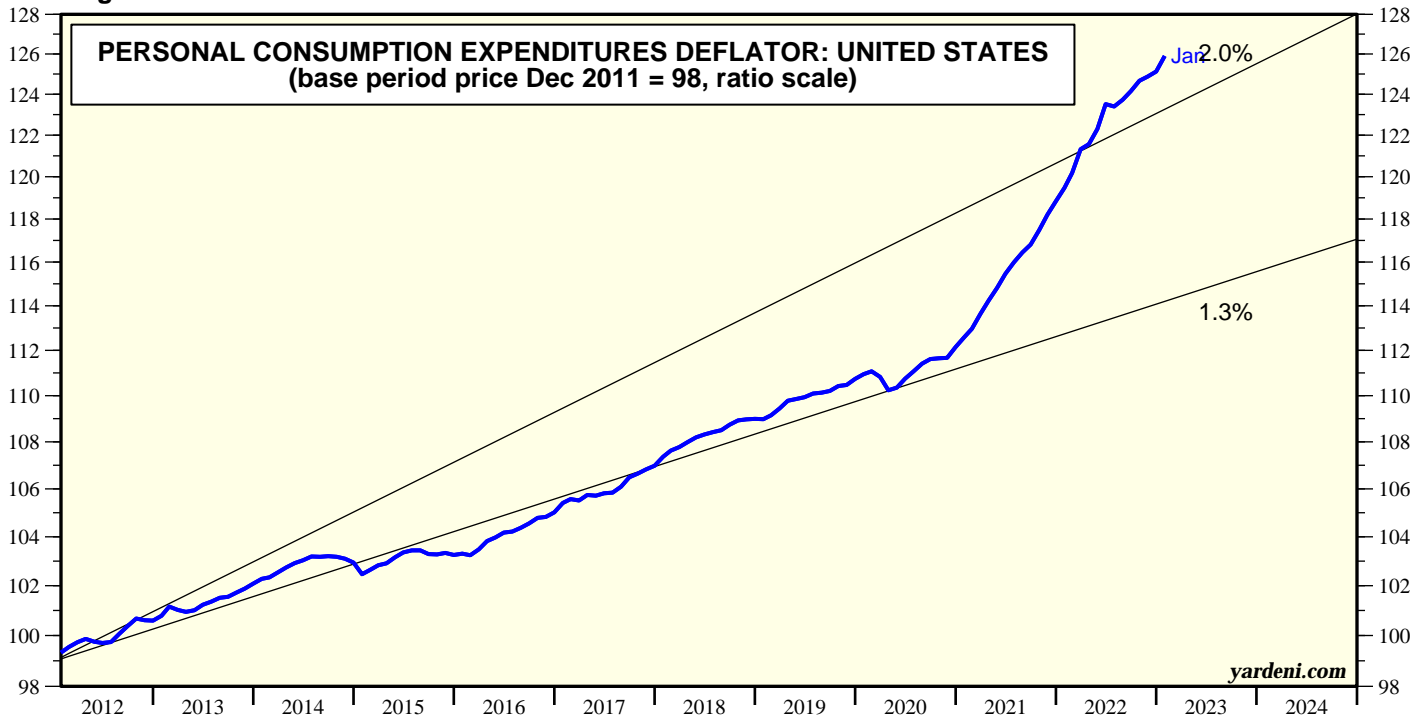
Monetary Policy & Inflation Targeting

Figure 21.



* Excluding food and energy prices.
 Note: Dotted line is the Fed's official target set during January 2012.
 Source: Bureau of Economic Analysis.

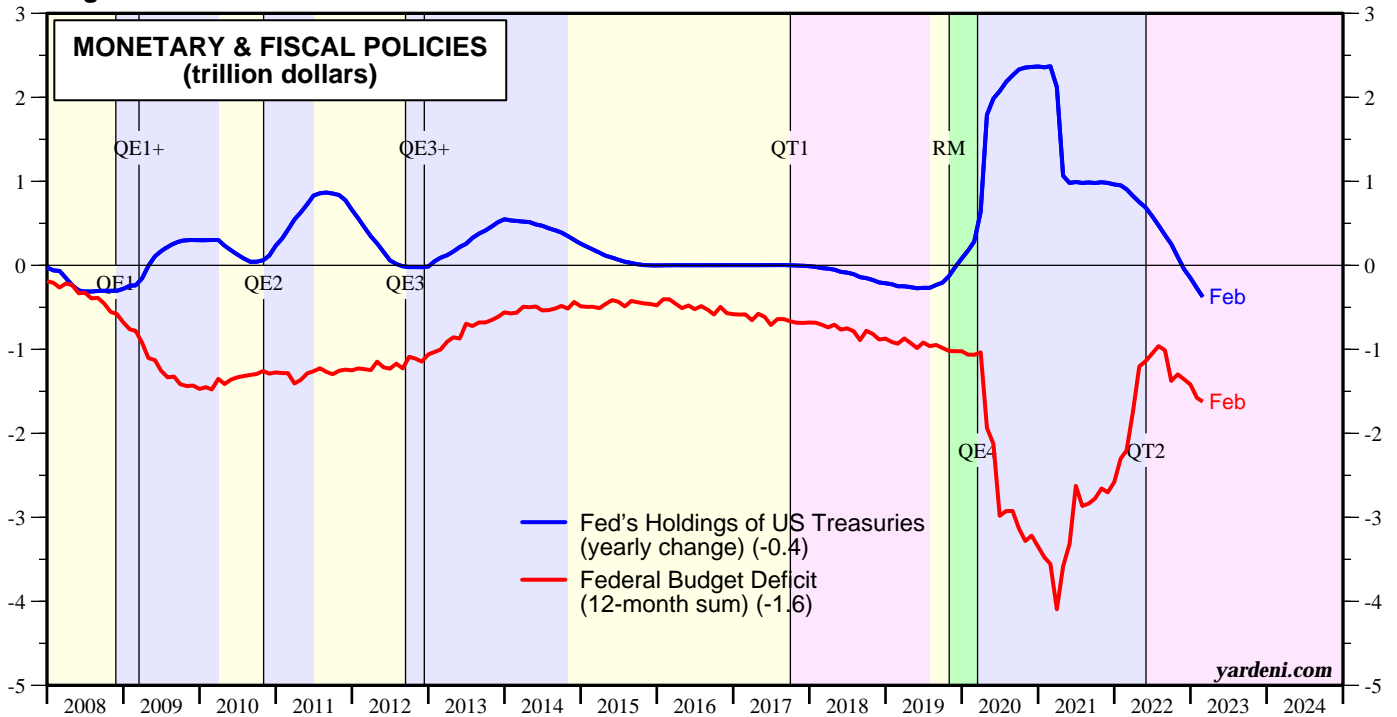
Figure 22.



Source: Bureau of Economic Analysis.

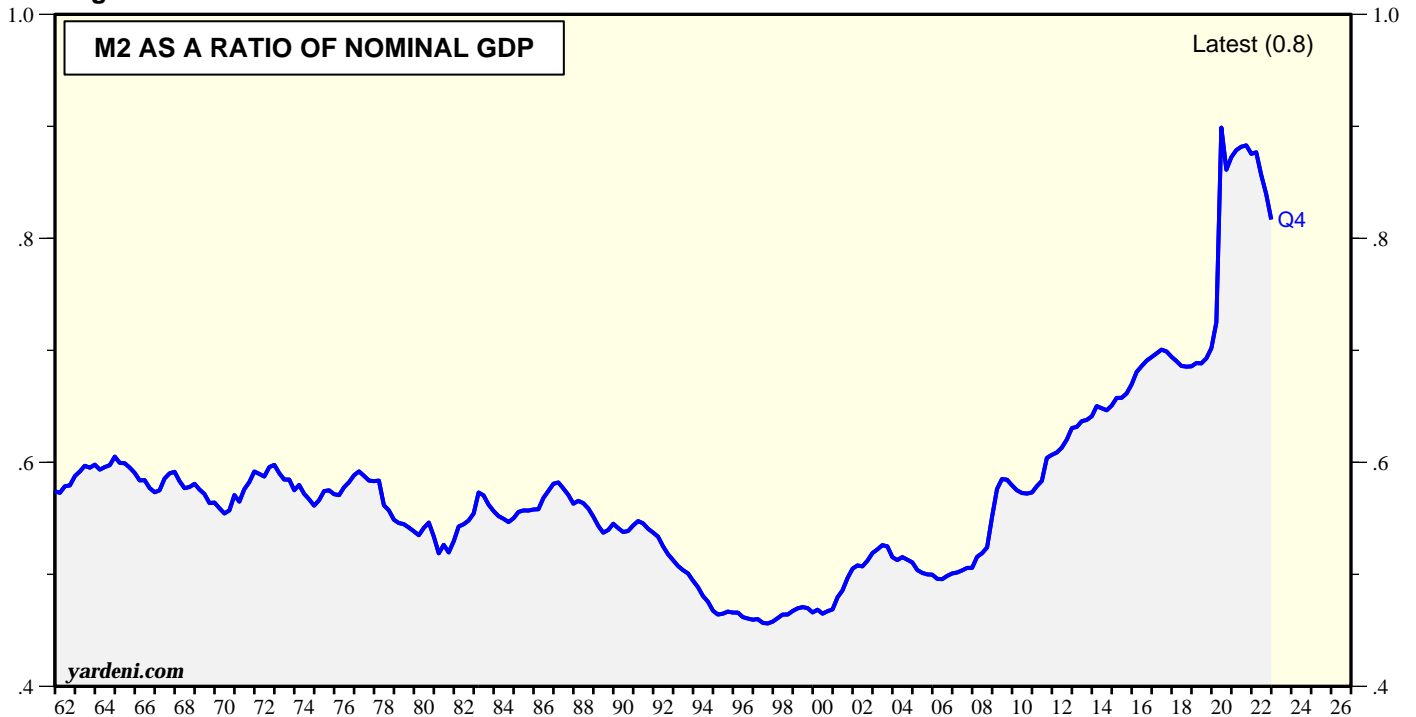
Modern Monetary Theory vs Deflation

Figure 23.



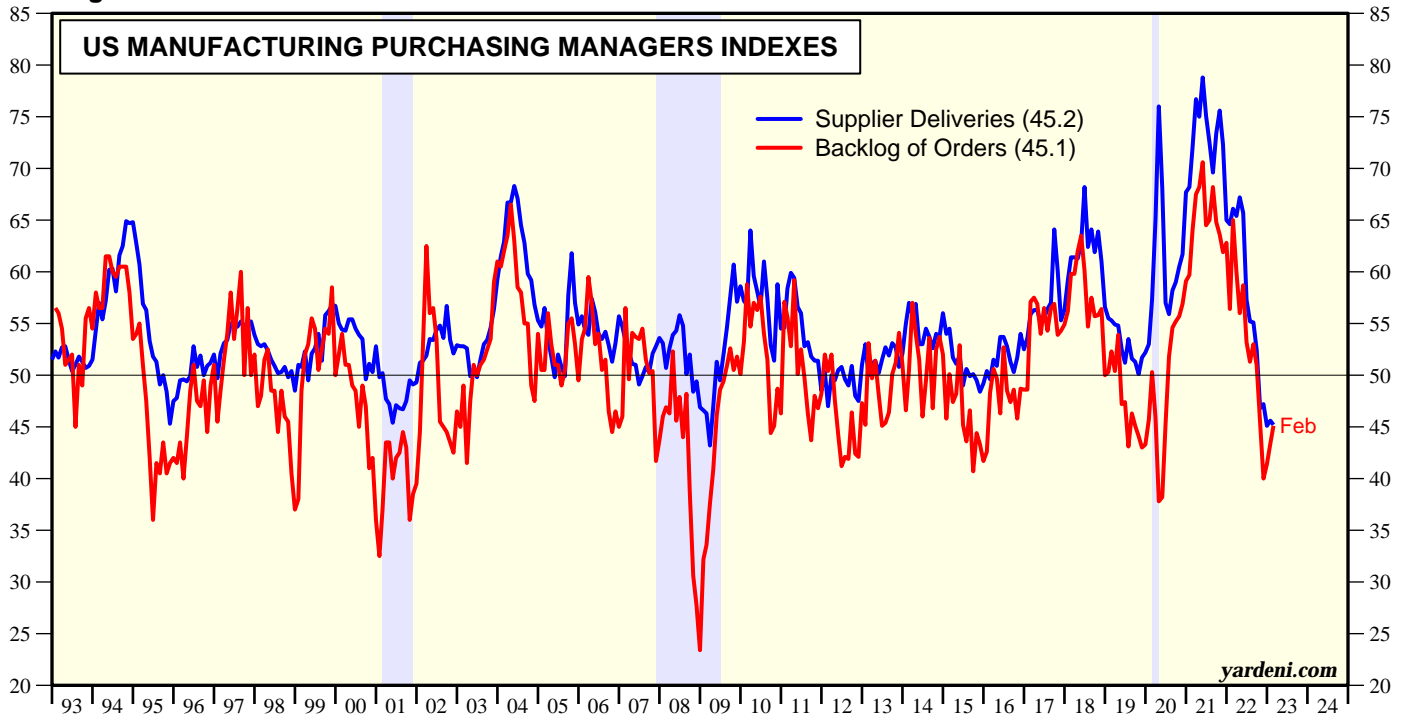
Note: QE1 (11/25/08-3/31/10) = \$1.24tn in mortgage securities; expanded (3/16/09-3/31/10) = \$300bn in Treasuries. QE2 (11/3/10-6/30/11) = \$600bn in Treasuries. QE3 (9/13/12-10/29/14) = \$40bn/month in mortgage securities (open ended); expanded (12/12/12-10/1/14) = \$45bn/month in Treasuries. QT1 (10/1/17-7/31/19) = 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 24.



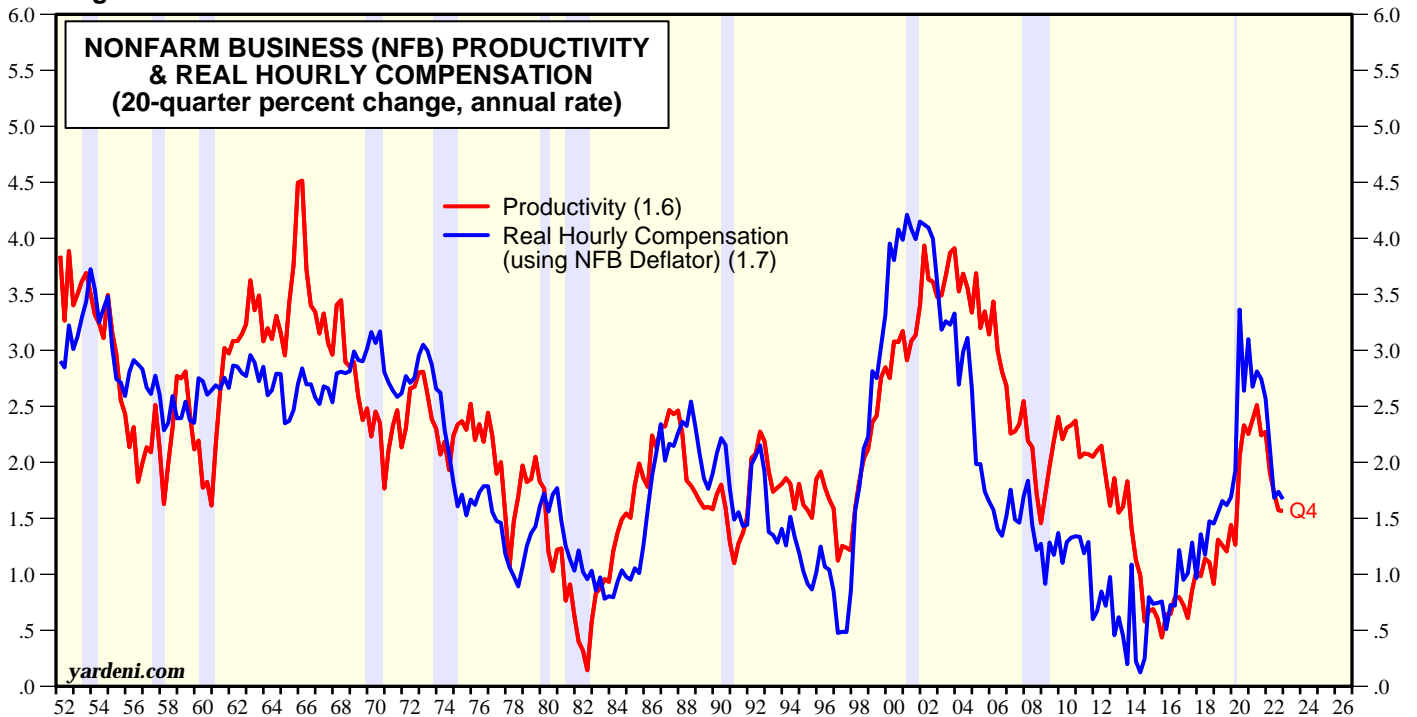
Great Inflation 2.0 or Roaring 2020s?

Figure 25.



Note: Shaded areas are recessions according to the National Bureau of Economic Research.
Source: Institute for Supply Management.

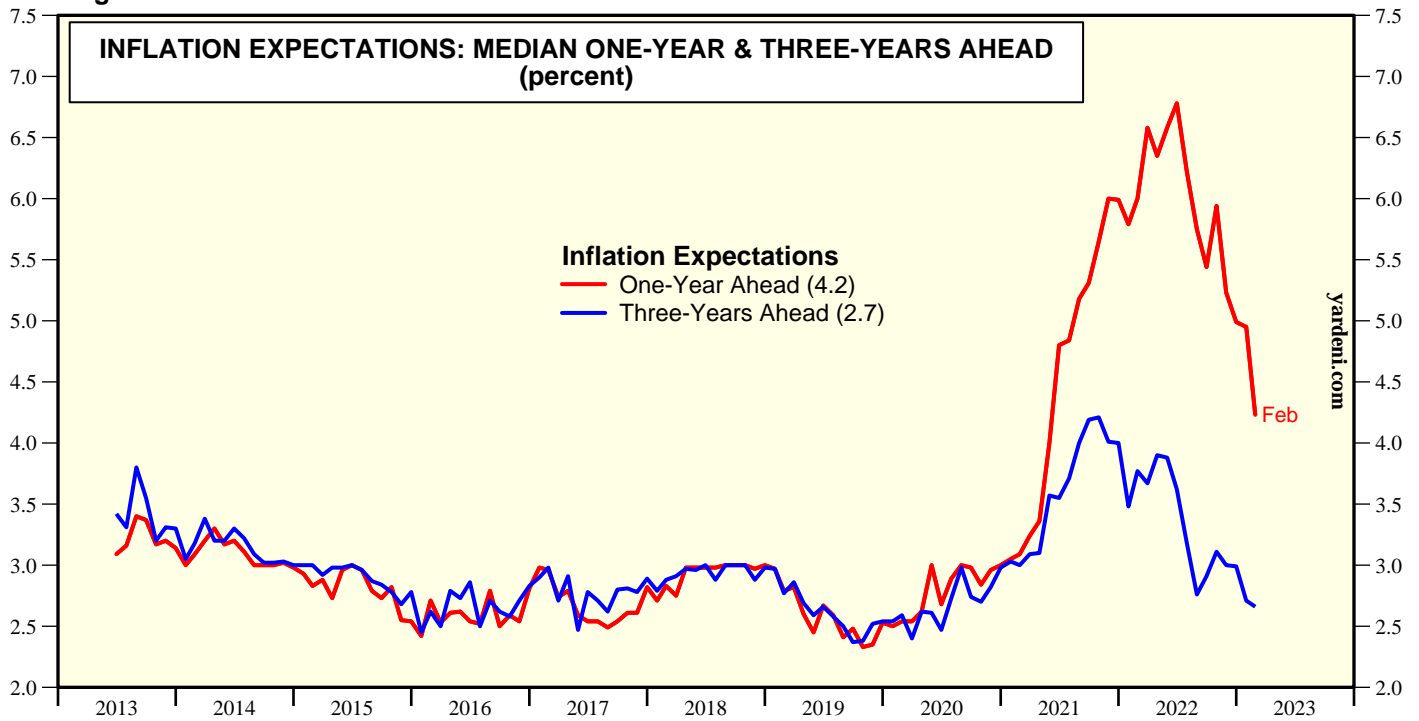
Figure 26.



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

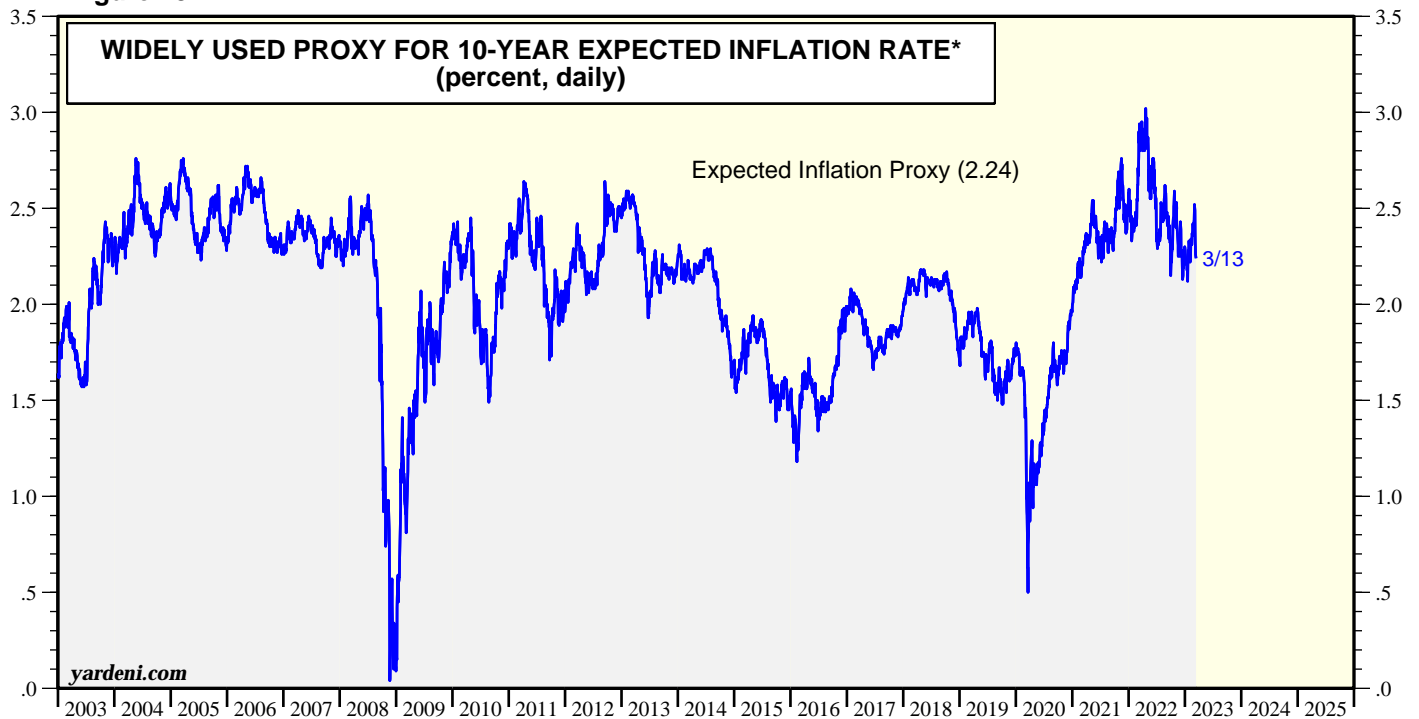
Inflationary Expectations

Figure 27.



Source: Federal Reserve Bank of New York.

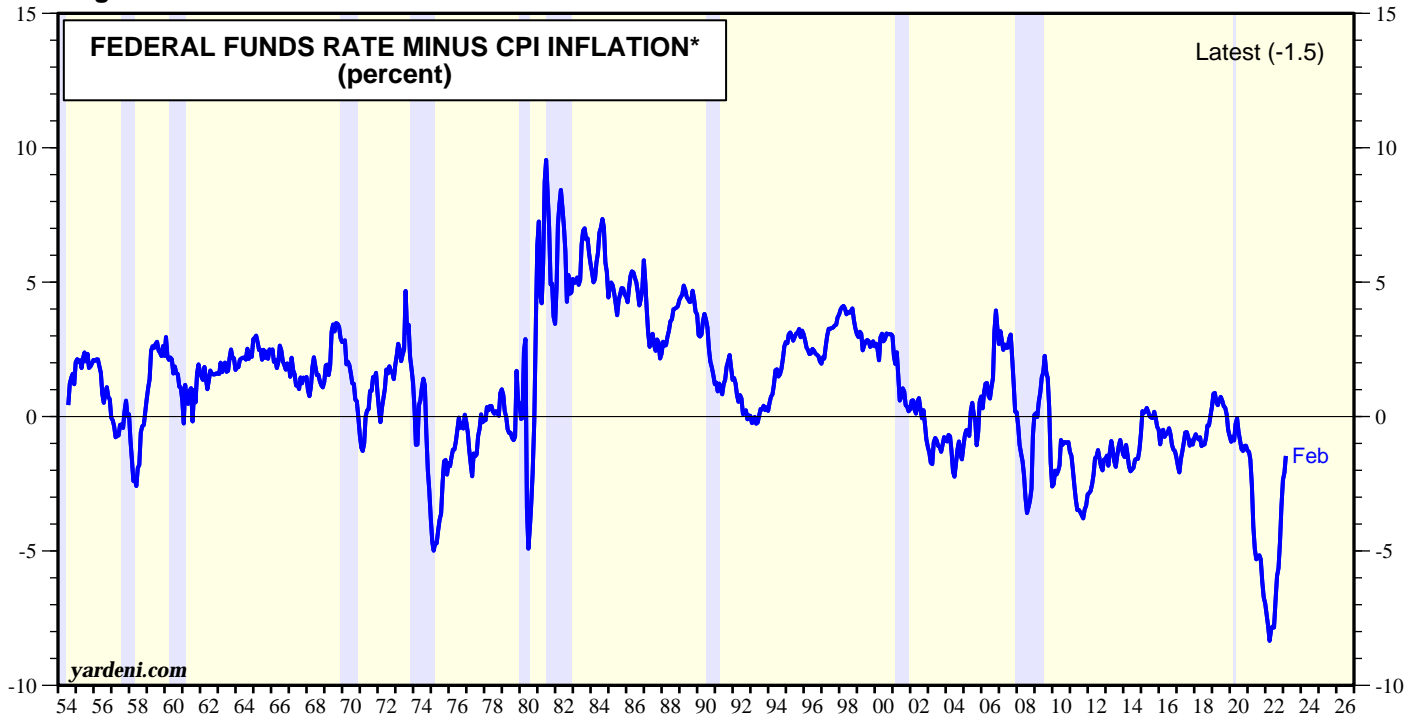
Figure 28.



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

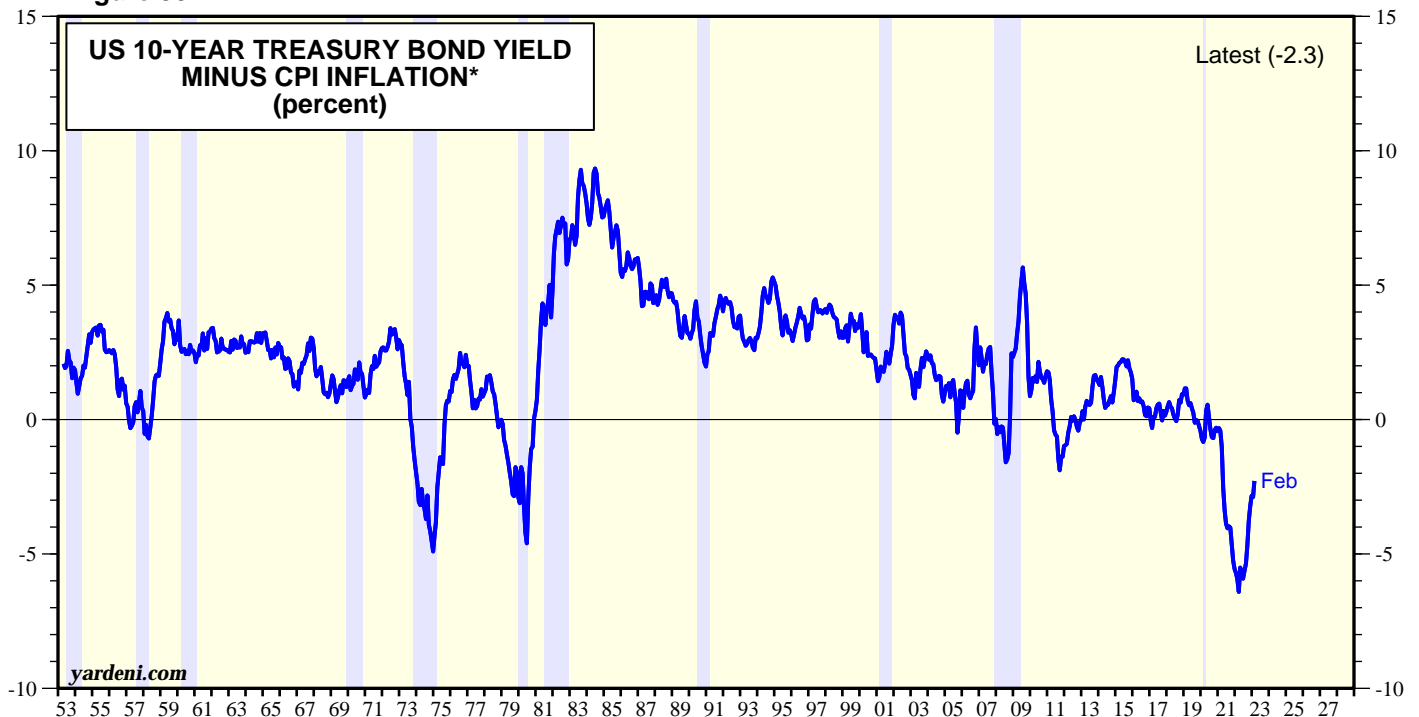
Inflation-Adjusted Interest Rates

Figure 29.



* Yearly percent change in CPI.
 Note: Shaded areas are recessions according to the National Bureau of Economic Research.
 Source: Board of Governors of the Federal Reserve System and Bureau of Labor Statistics.

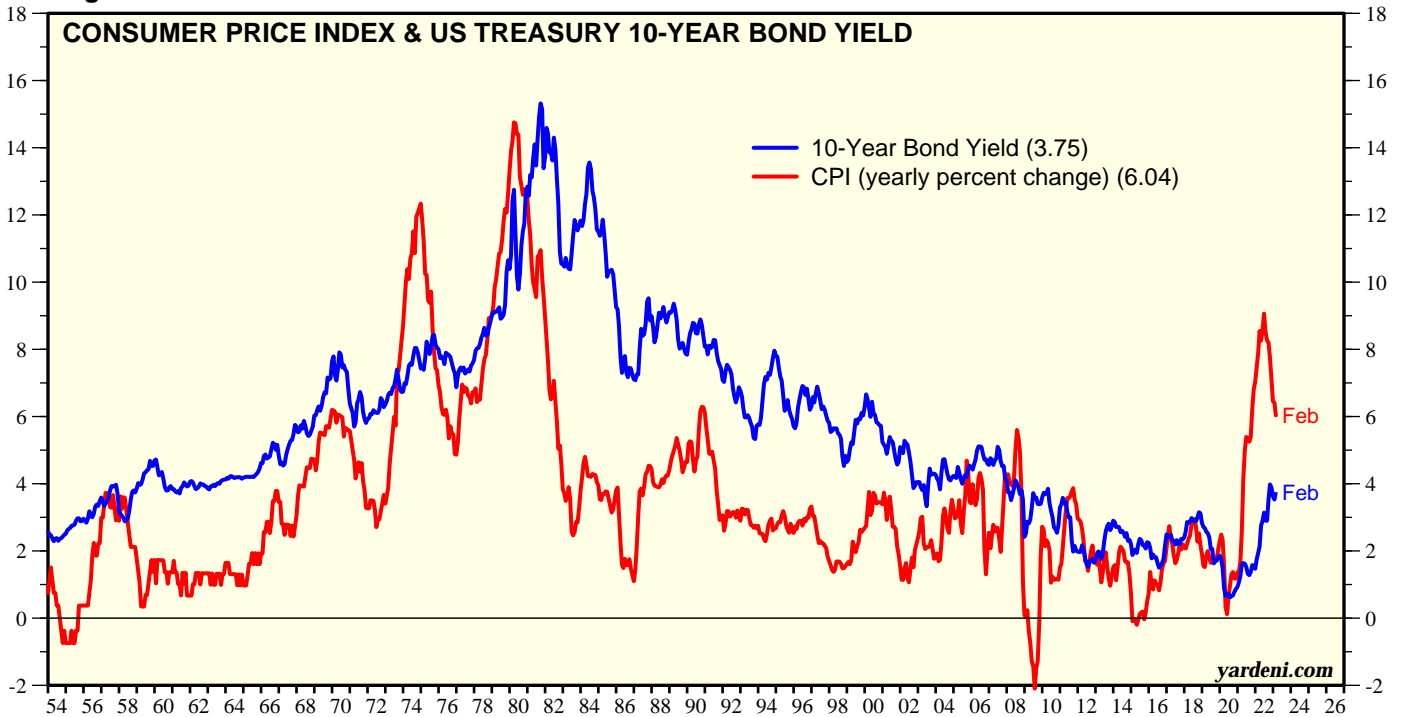
Figure 30.



* Yearly percent change in CPI.
 Note: Shaded areas are recessions according to the National Bureau of Economic Research.
 Source: Board of Governors of the Federal Reserve System and Bureau of Labor Statistics.

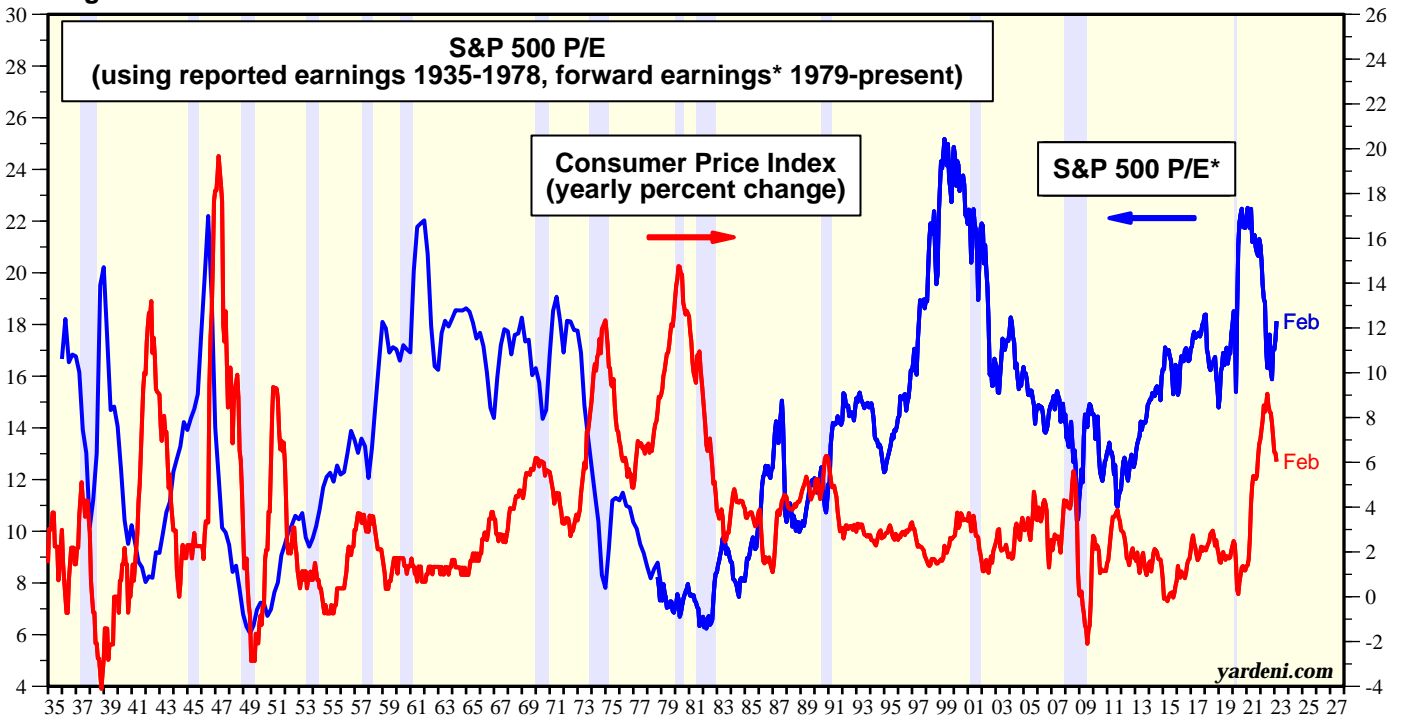
Inflation, Bonds & Stocks

Figure 31.



Source: Federal Reserve Board and Bureau of Labor Statistics.

Figure 32.



* Four-quarter trailing sum of reported earnings through 1978, then time-weighted average of analysts' consensus estimates for S&P 500 operating earnings per share for current year and next year. Monthly from January 1979.

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

Source: I/B/E/S data by Refinitiv and Standard & Poor's.

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