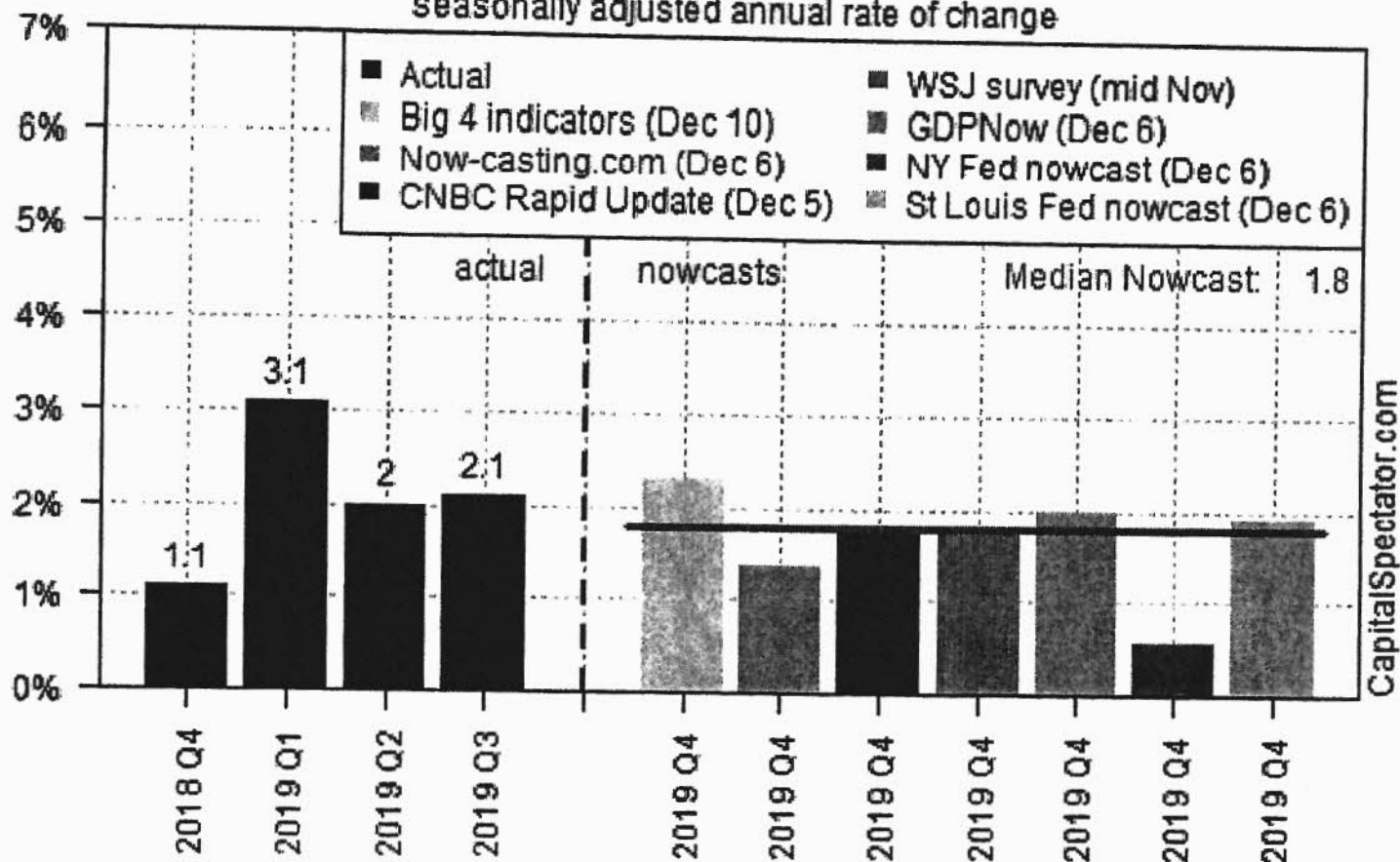


Chart-1a

US Real GDP Change: Actual vs. Expectations for Q4:2019

seasonally adjusted annual rate of change



Sources: bea.gov, wsj.com, now-casting.com, cnbc.com, CapitalSpectator.com, frbatlanta.org, newyorkfed.org, stlouisfed.org

Chart-1b

Evolution of Atlanta Fed GDPNow real GDP estimate for 2019: Q4

Quarterly percent change (SAAR)

GDPNow™

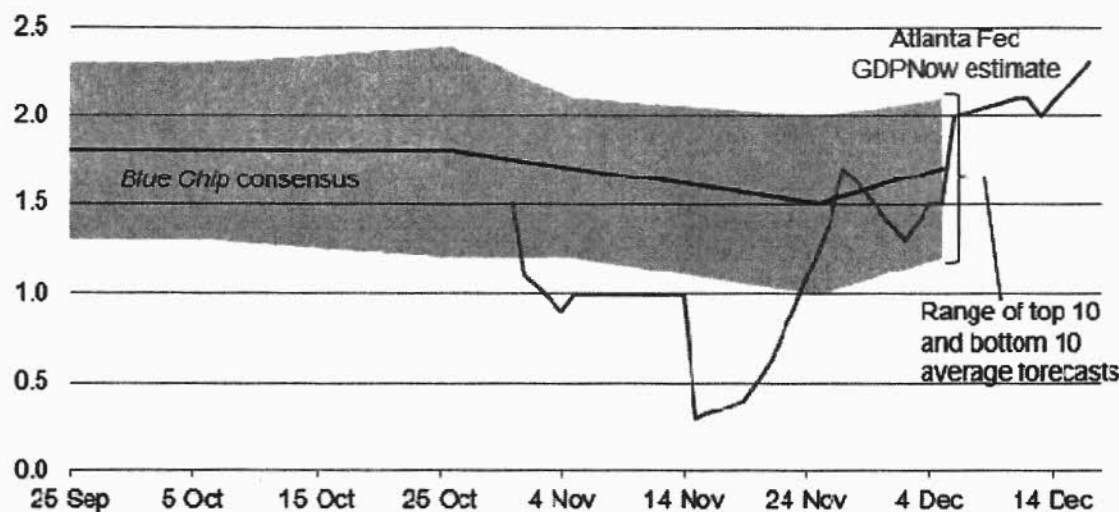
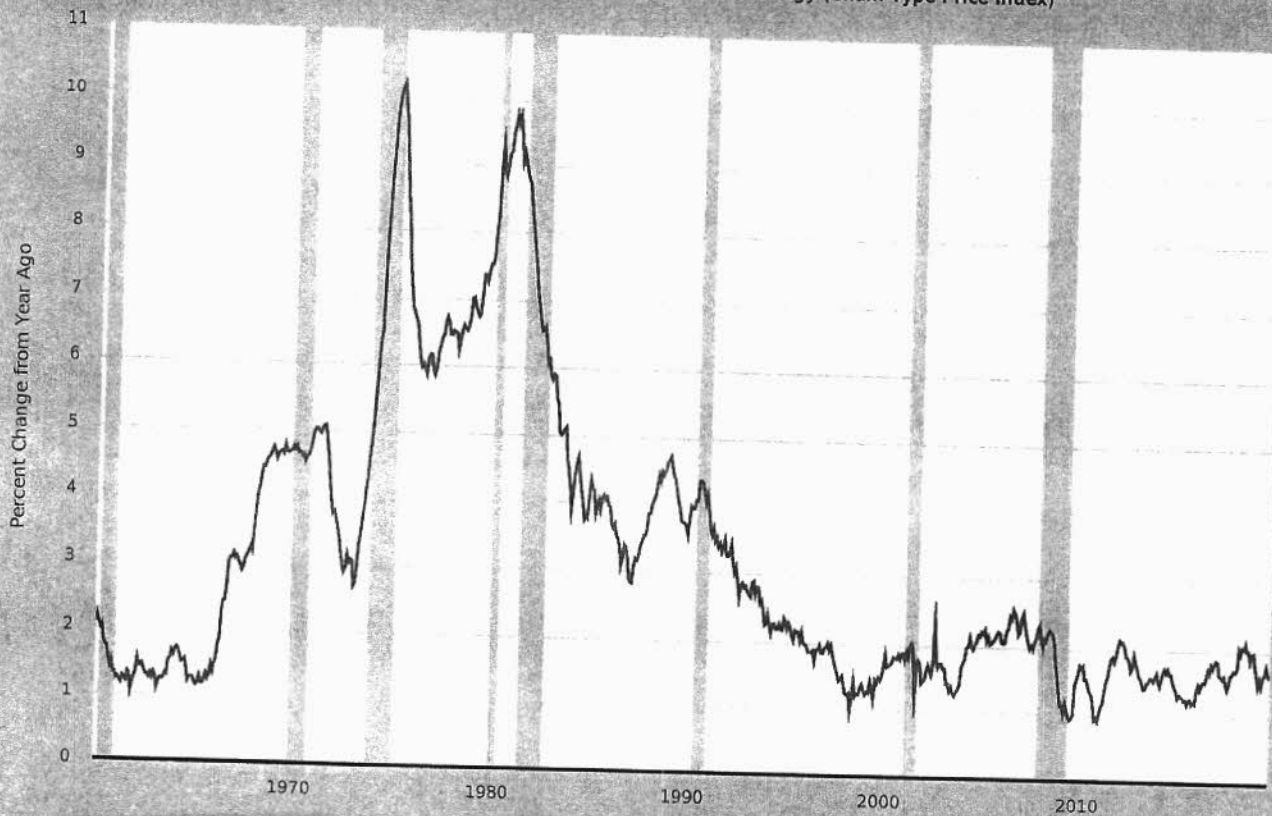


Chart-9

FRED

— Personal Consumption Expenditures Excluding Food and Energy (Chain-Type Price Index)



Shaded areas indicate U.S. recessions

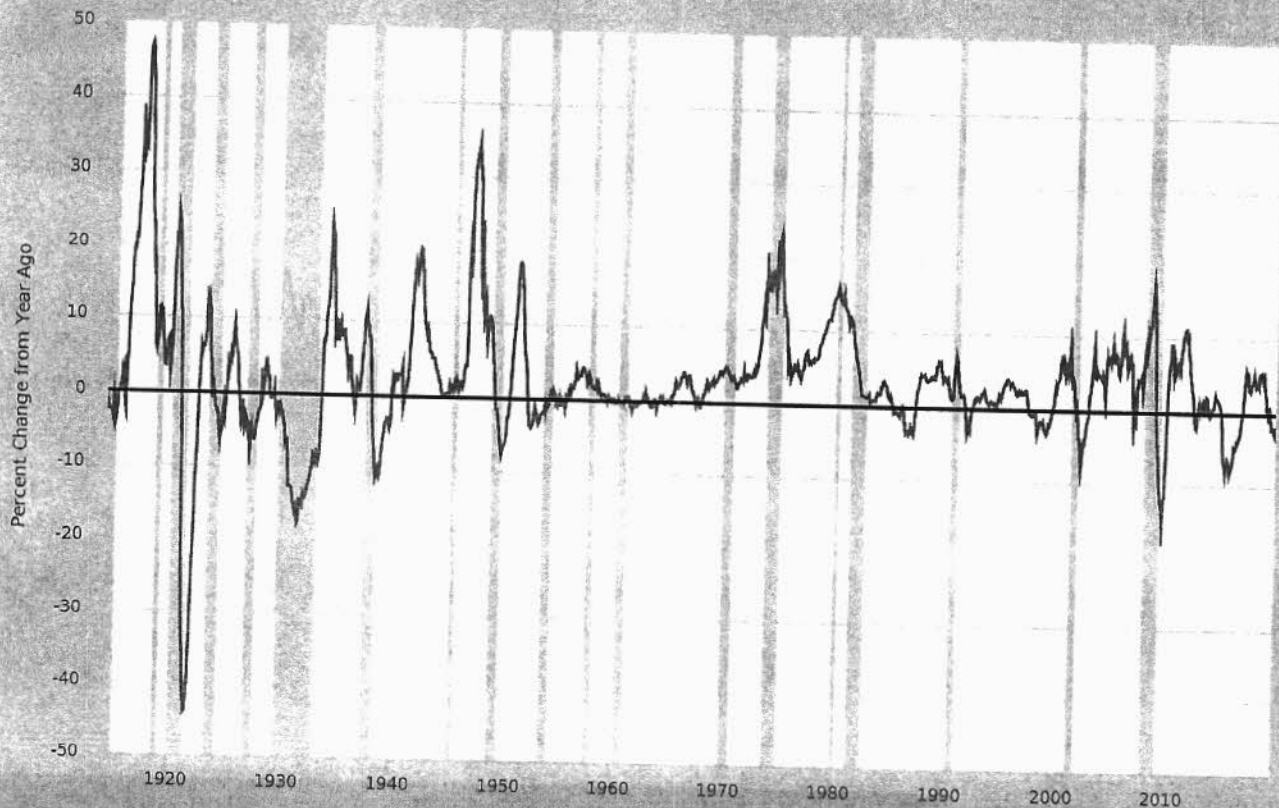
Source: U.S. Bureau of Economic Analysis

fred.stlouisfed.org

Chart-10

FRED

— Producer Price Index for All Commodities



Shaded areas indicate U.S. recessions

Source: U.S. Bureau of Labor Statistics

fred.stlouisfed.org

Chart-11

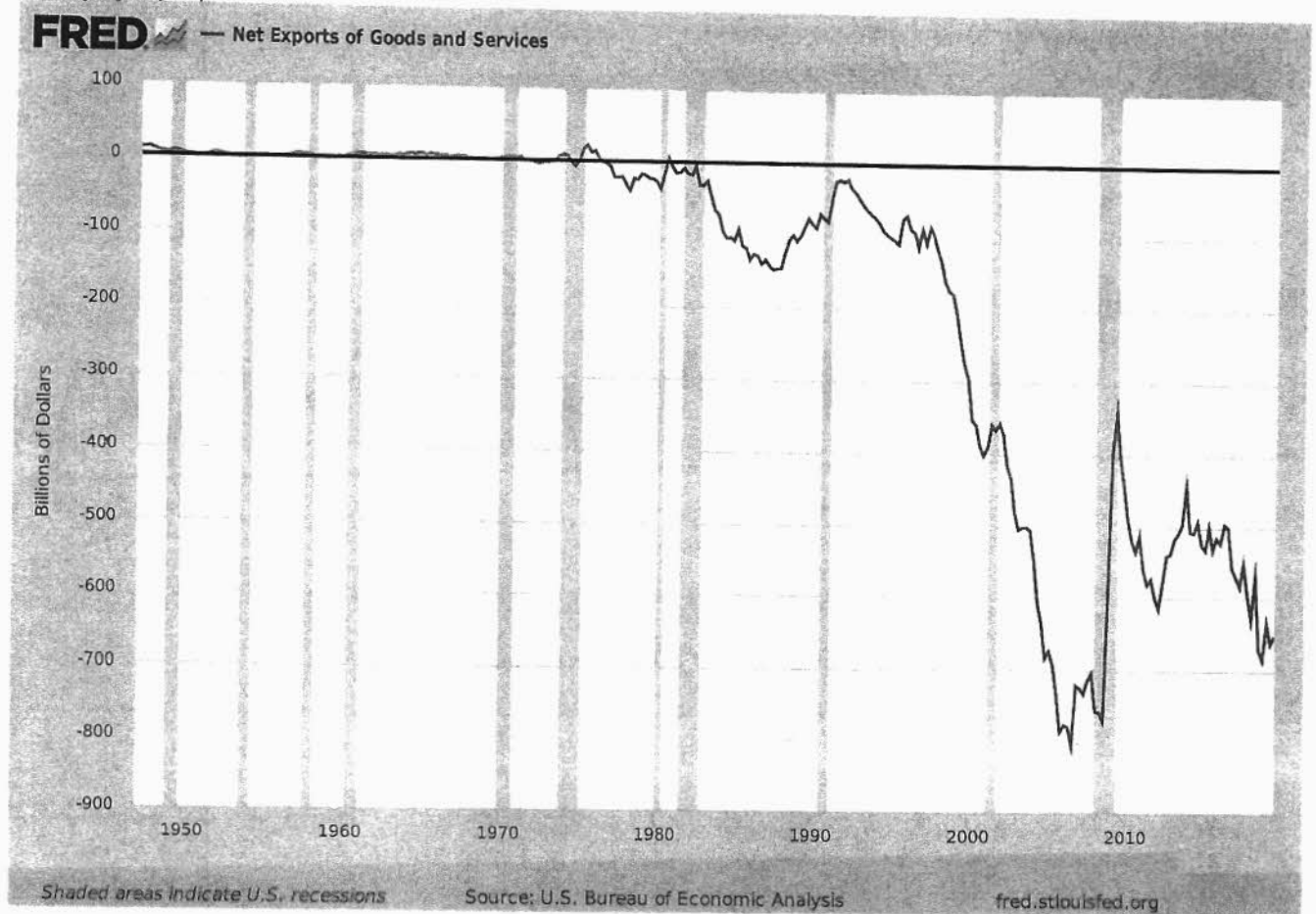


Chart-12

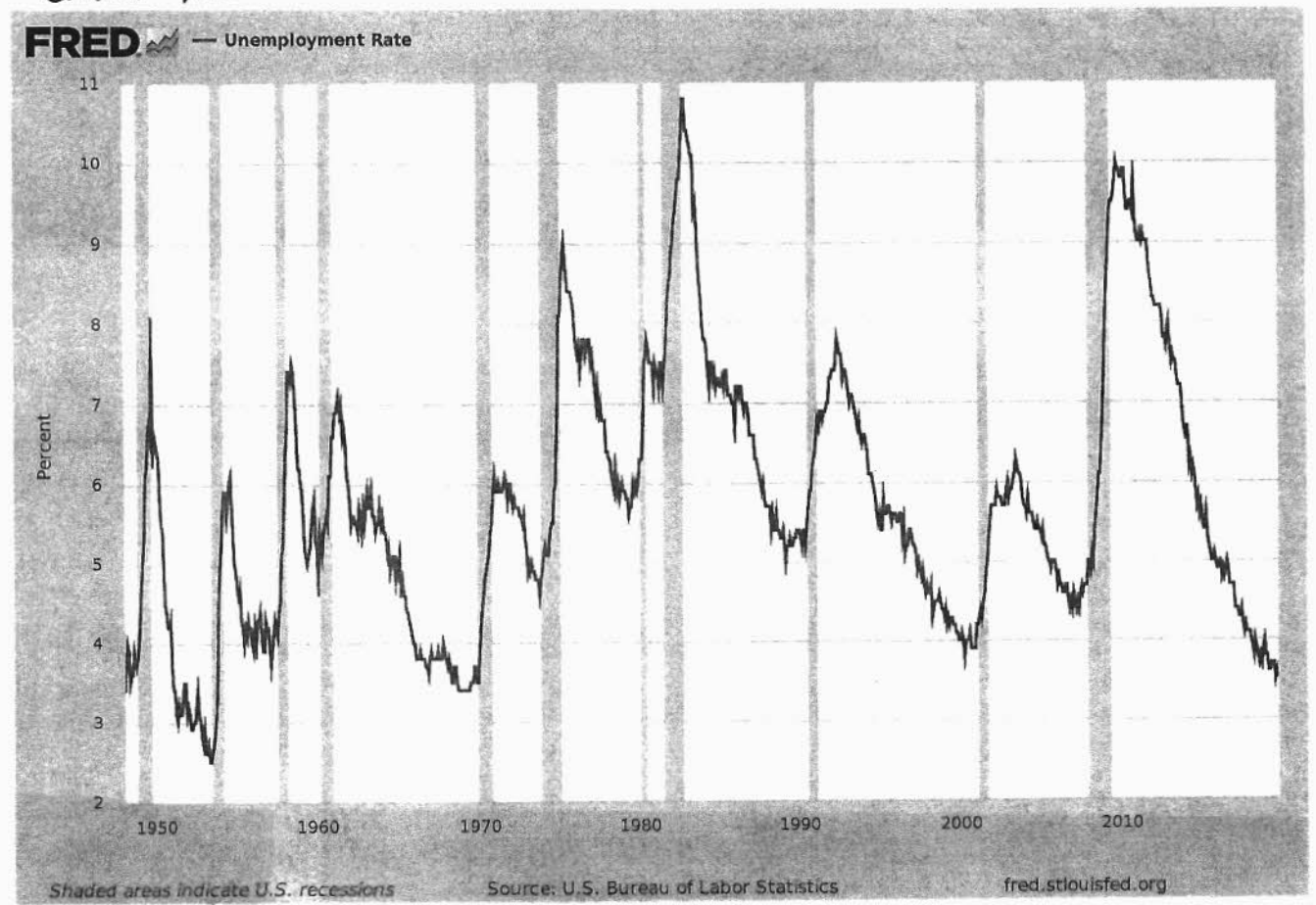


Chart-13

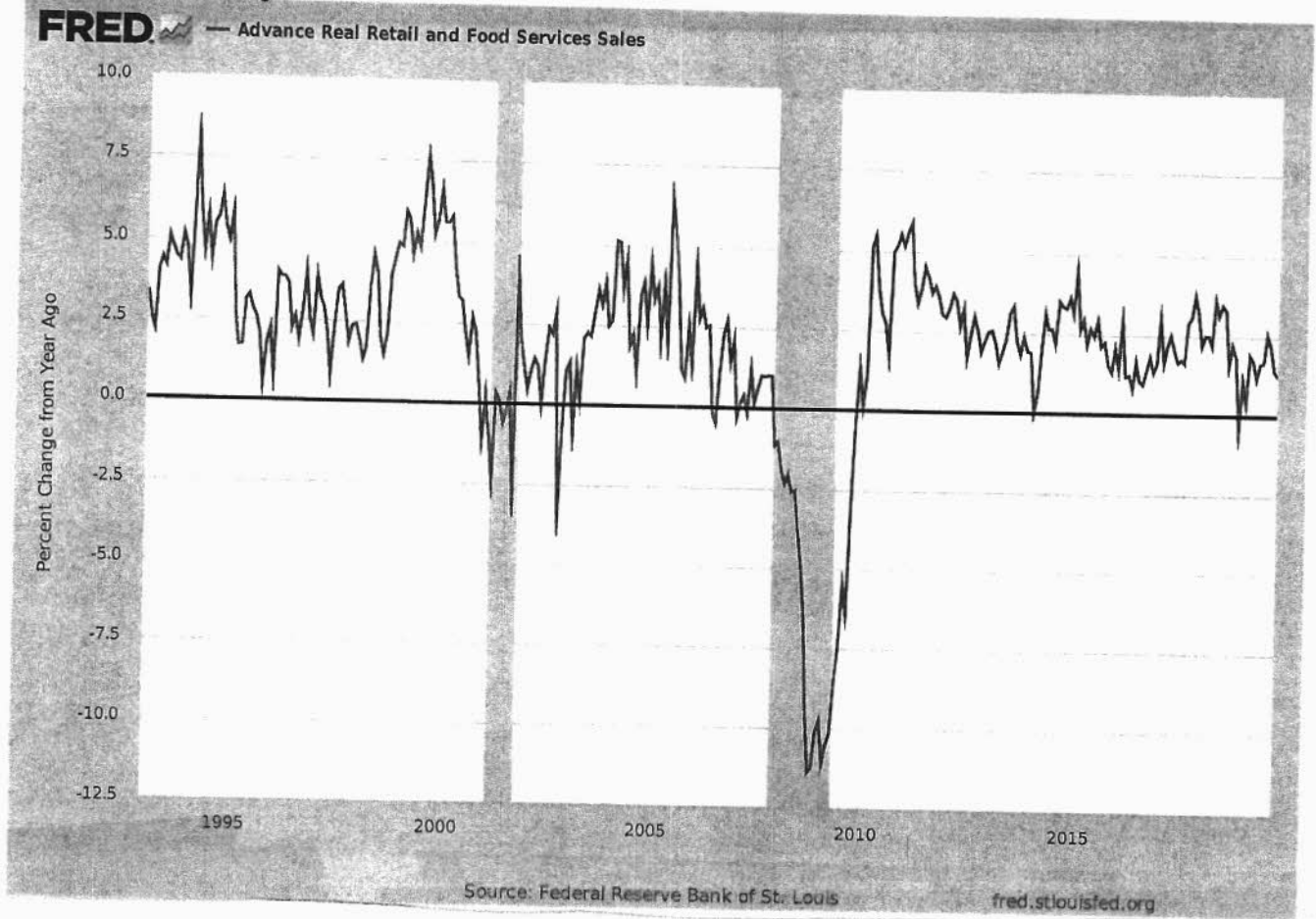


Chart-14

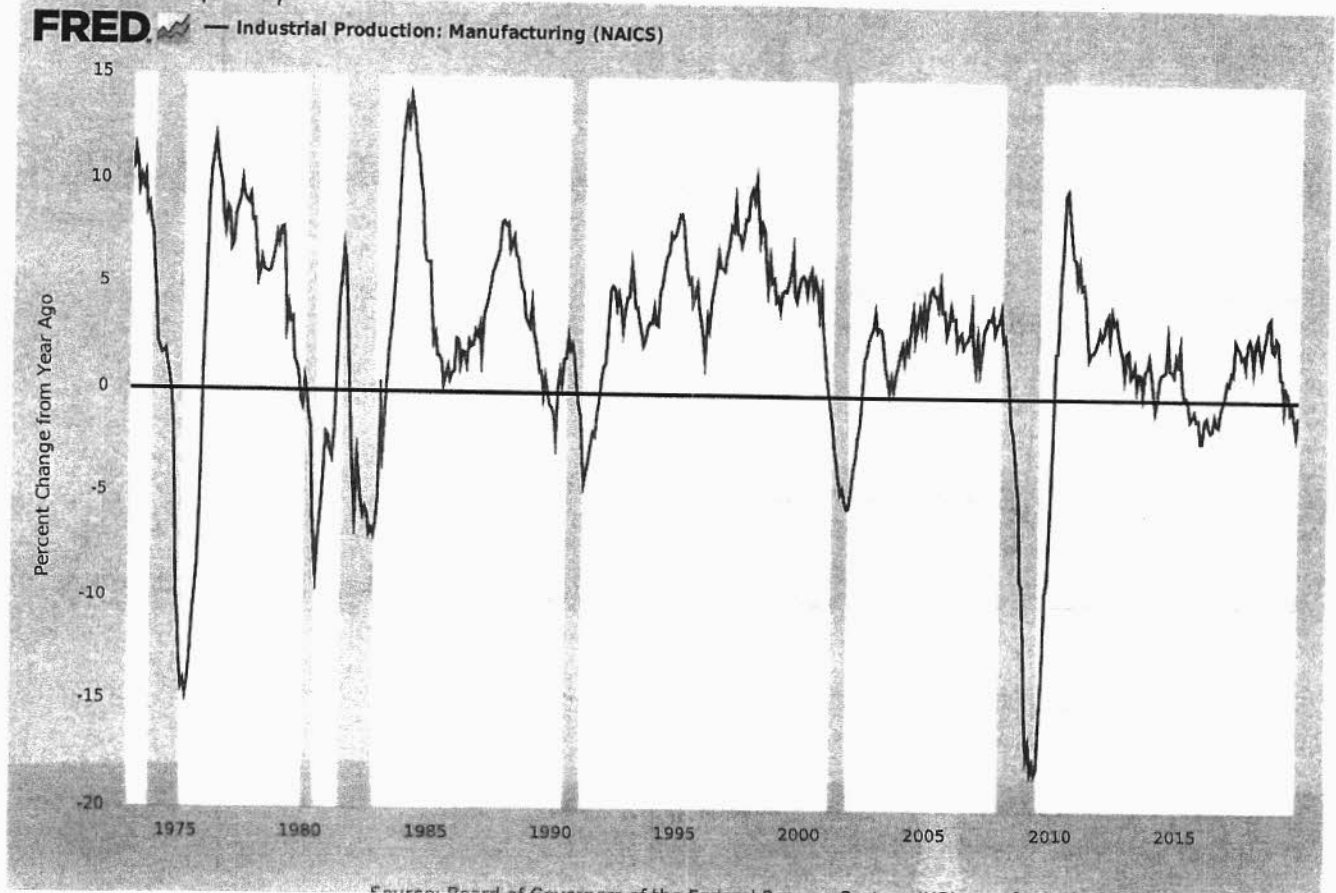


Chart-15

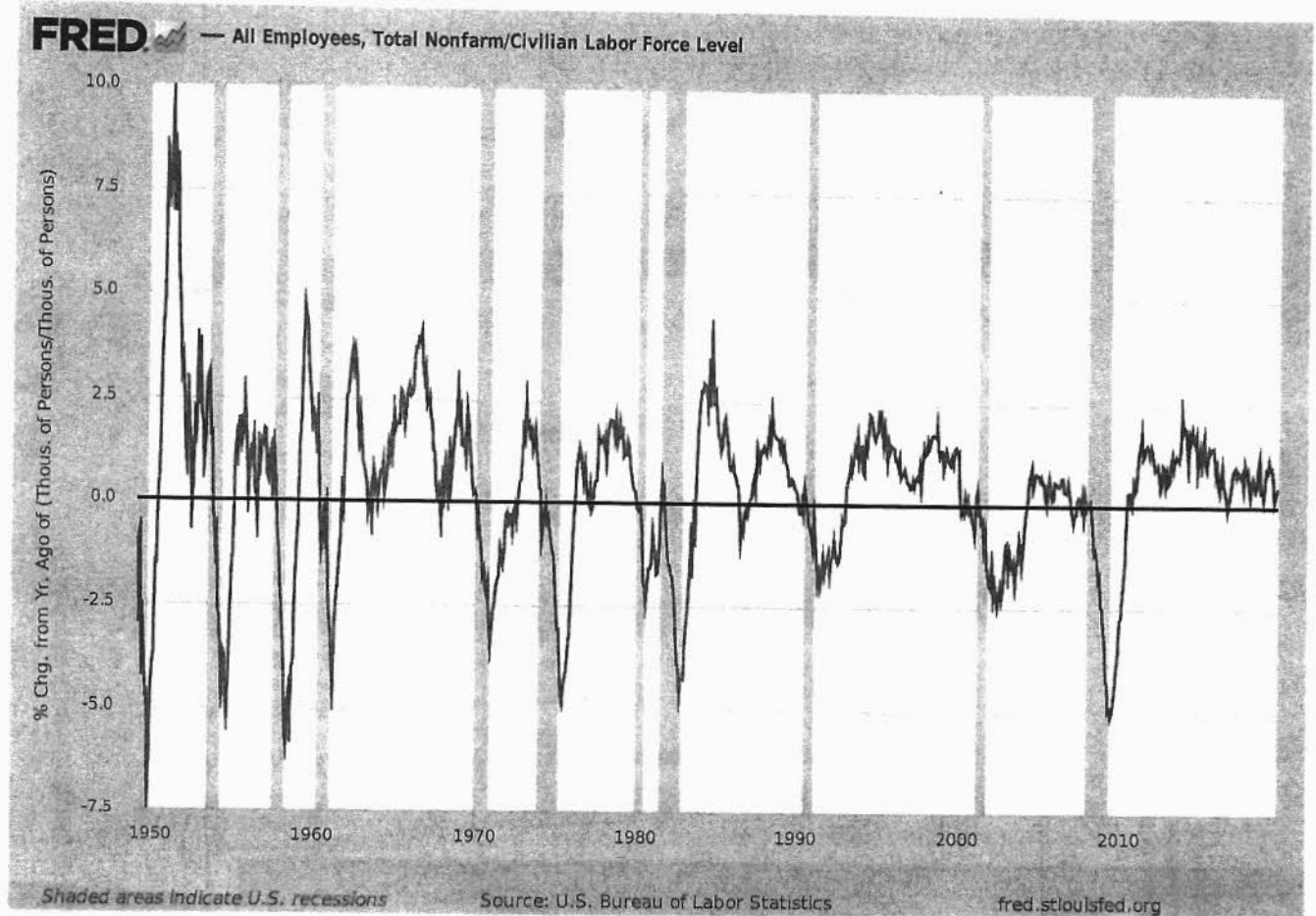


Chart-16

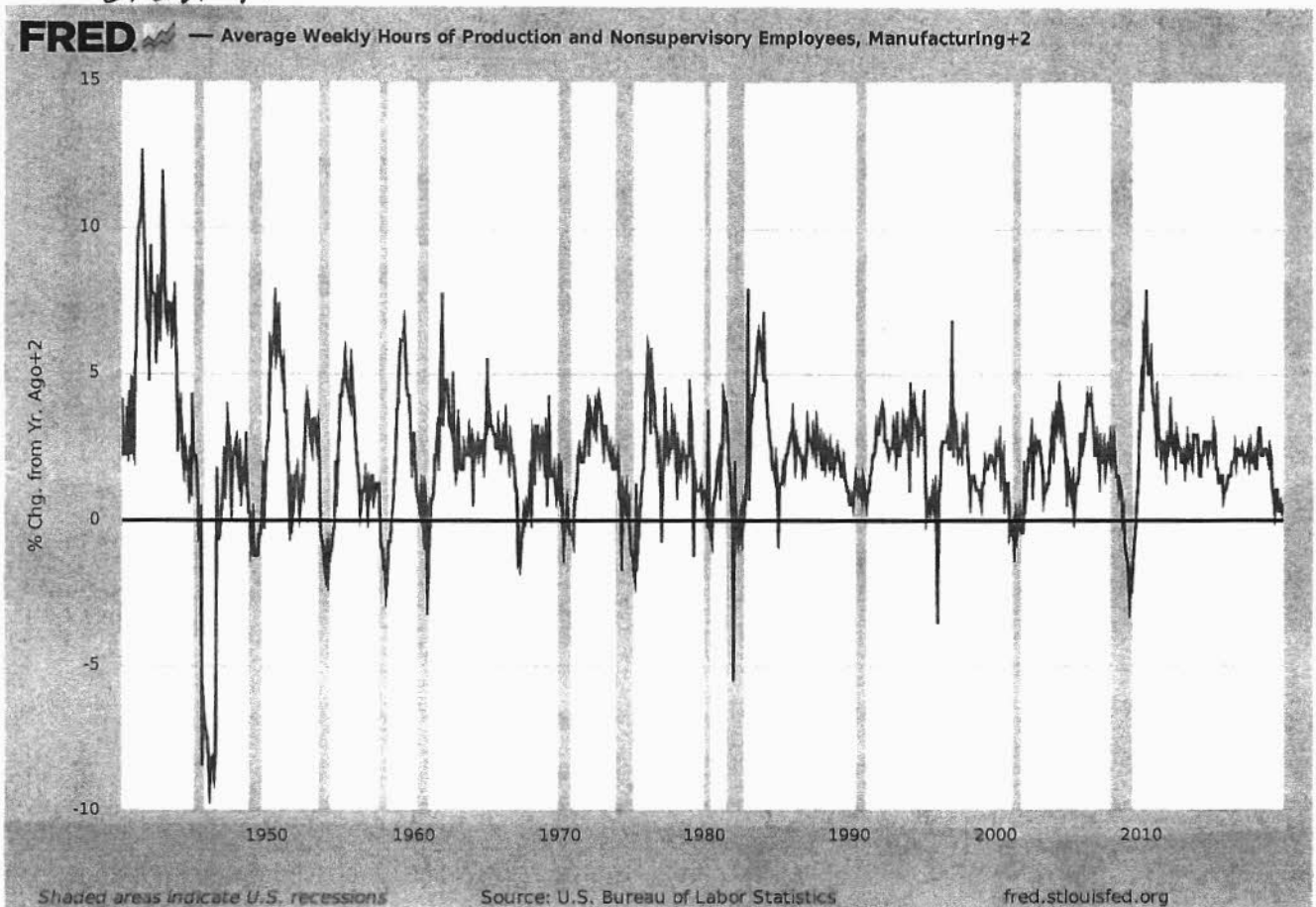
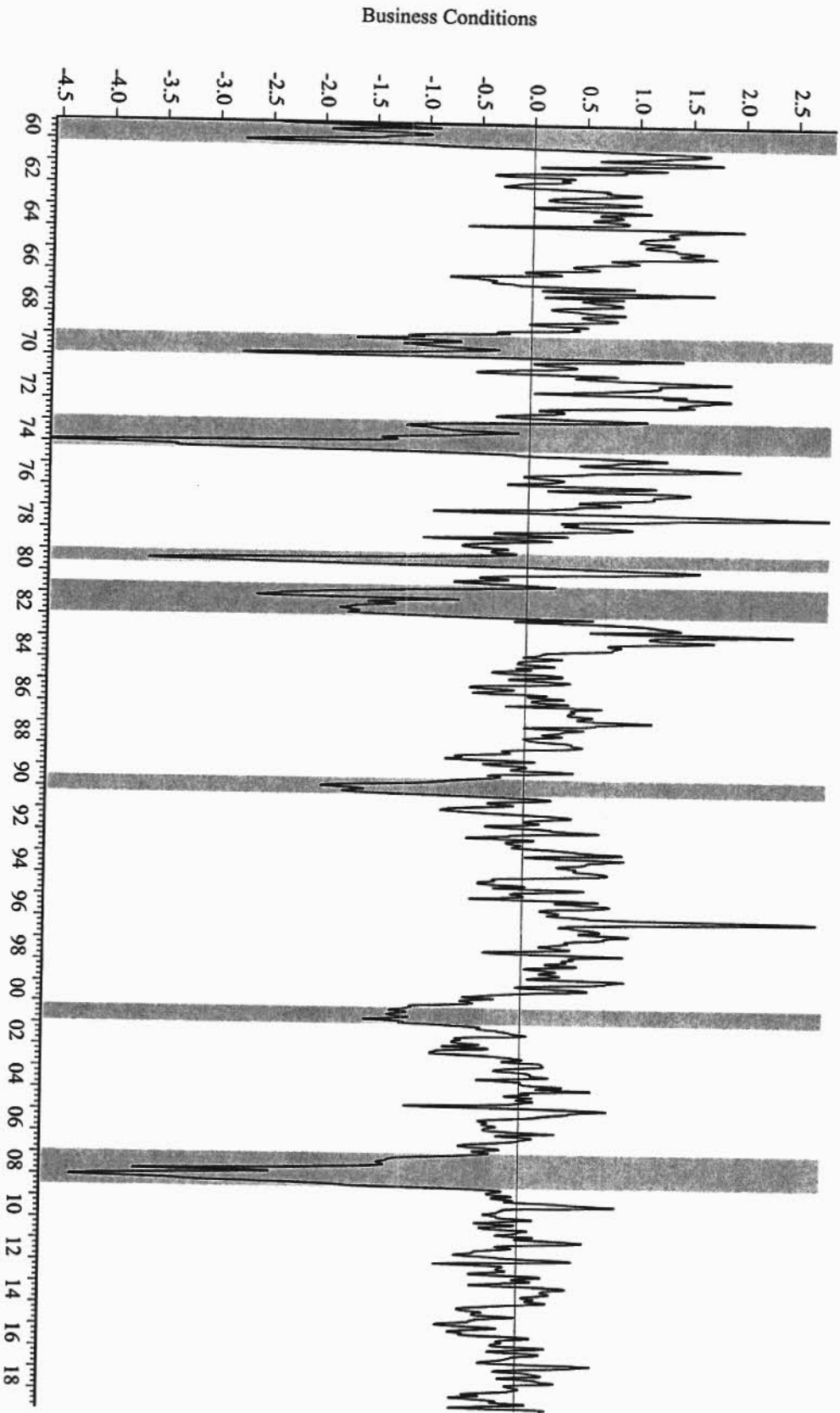


Chart 17

Aruba-Diebold-Scotti Business Conditions Index (3/1/1960 - 12/14/2019)



Note: We construct the ADS Index using the latest data available as of December 19, 2019. This includes (1) initial jobless claims through the week ending December 14, 2019, (2) payroll employment through November 2019, (3) industrial production through November 2019, (4) real personal income through October 2019, (5) real manufacturing and trade sales through September 2019, and (6) real GDP through the third quarter of 2019. Gray shading indicates NBER-designated recessions. The limits used on the y axis reflect the minimum and maximum values of the index over its entire history.

Chart-18

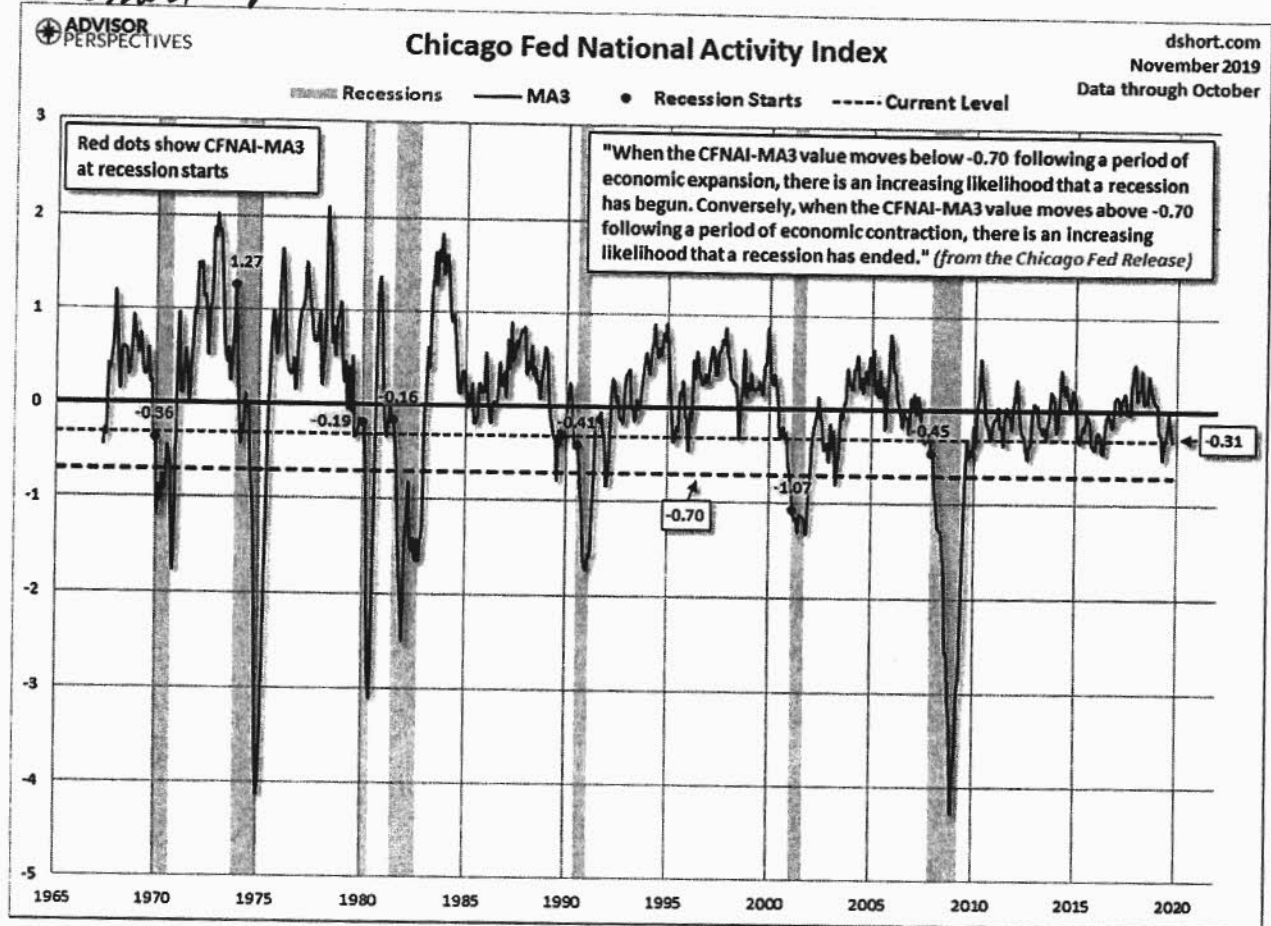


Chart-19

