Chart-1a

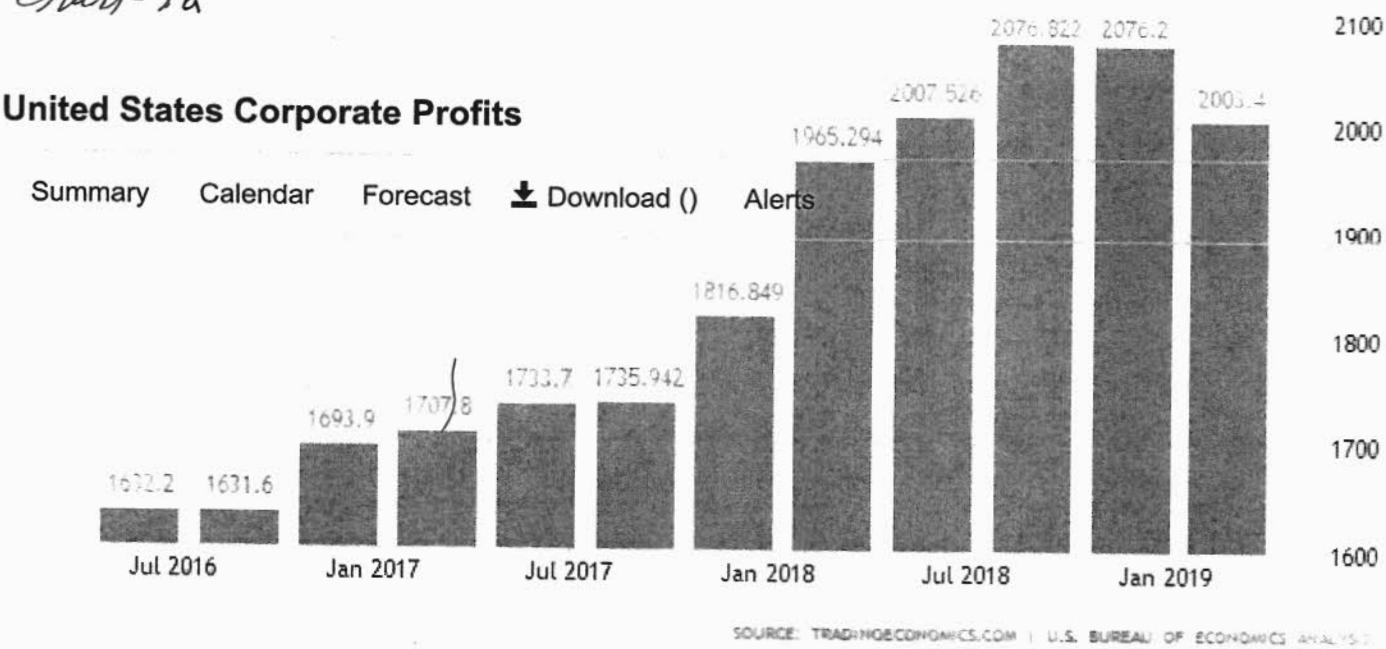


Chart-1b

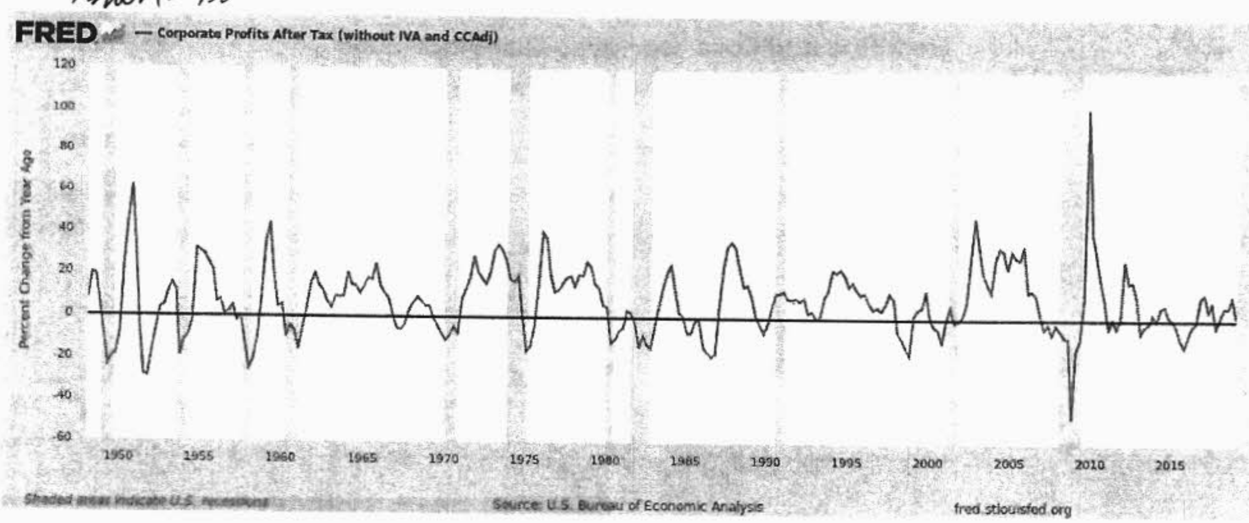


Chart - 2

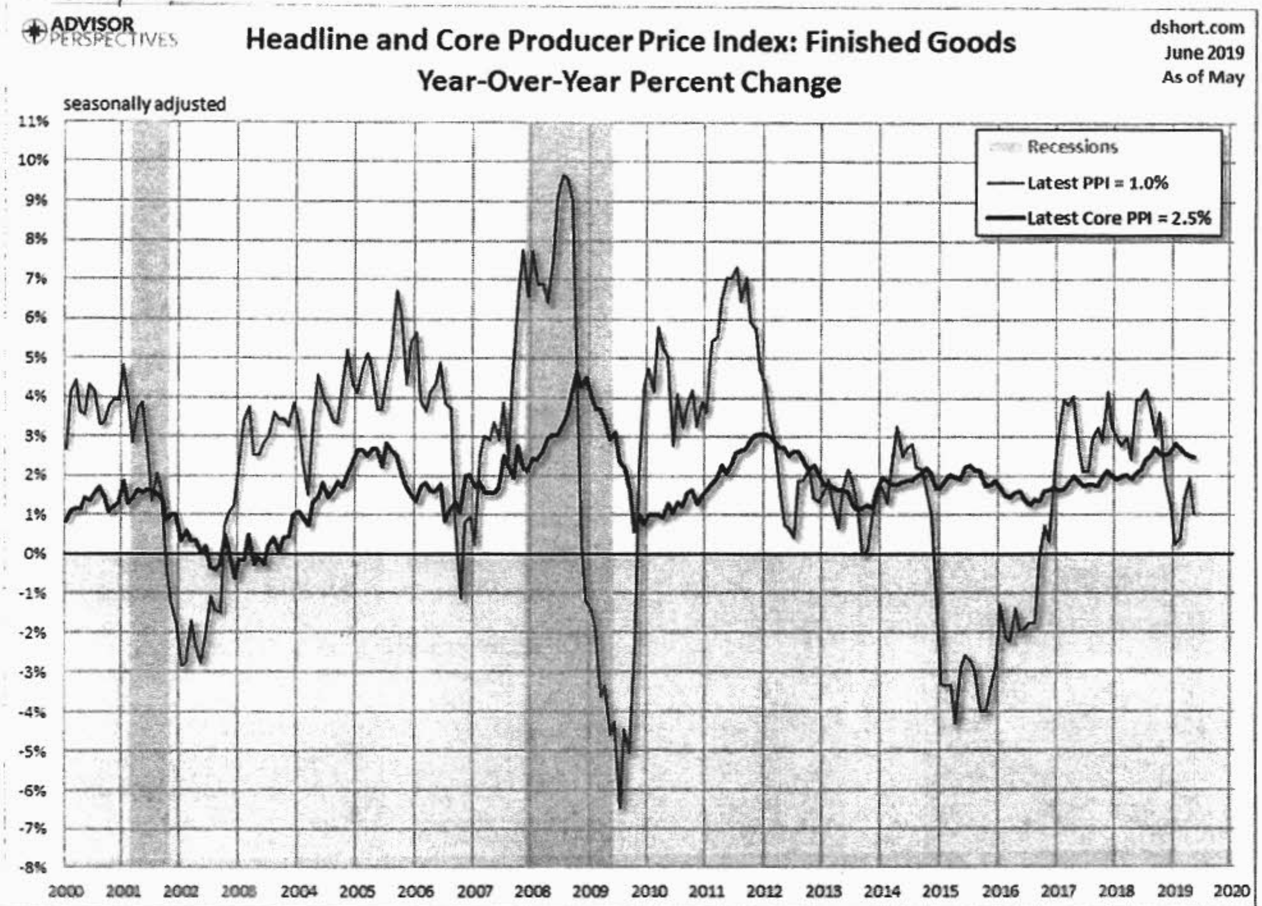


Chart - 3a

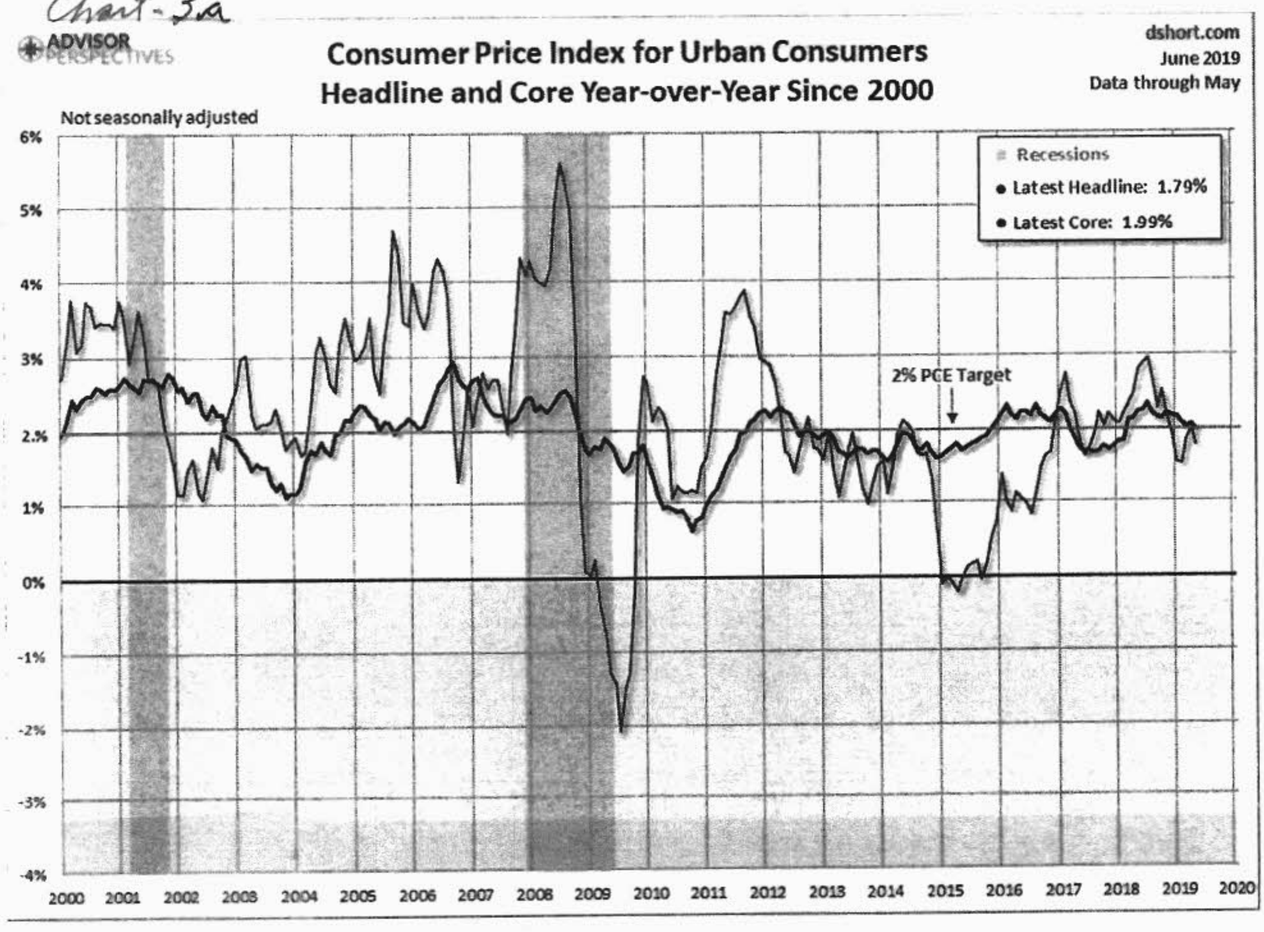
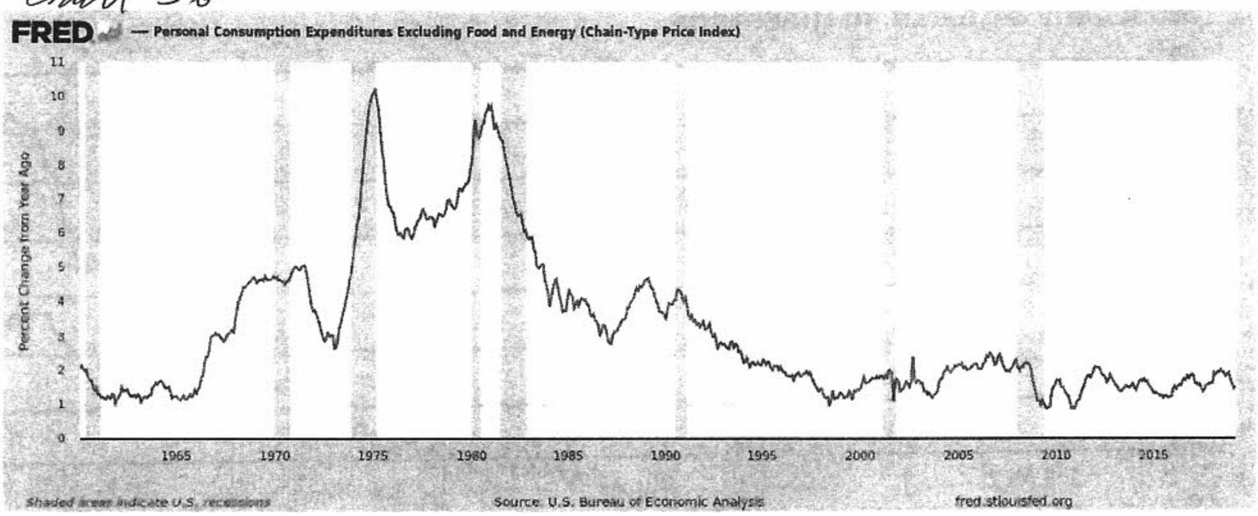
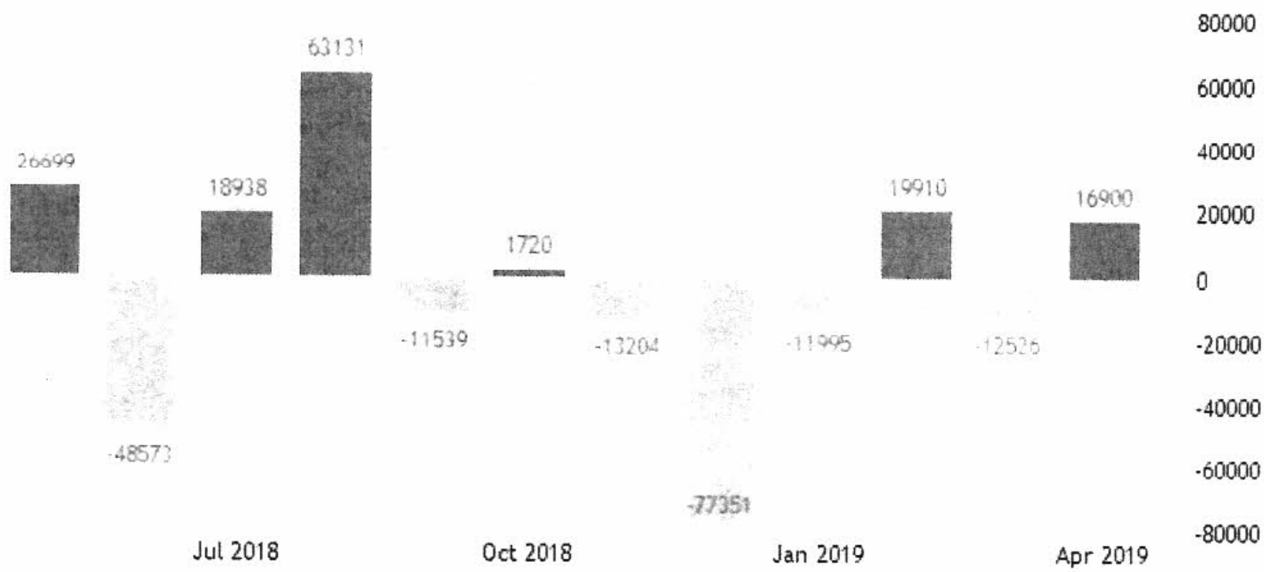


Chart-3b



Historical Data API

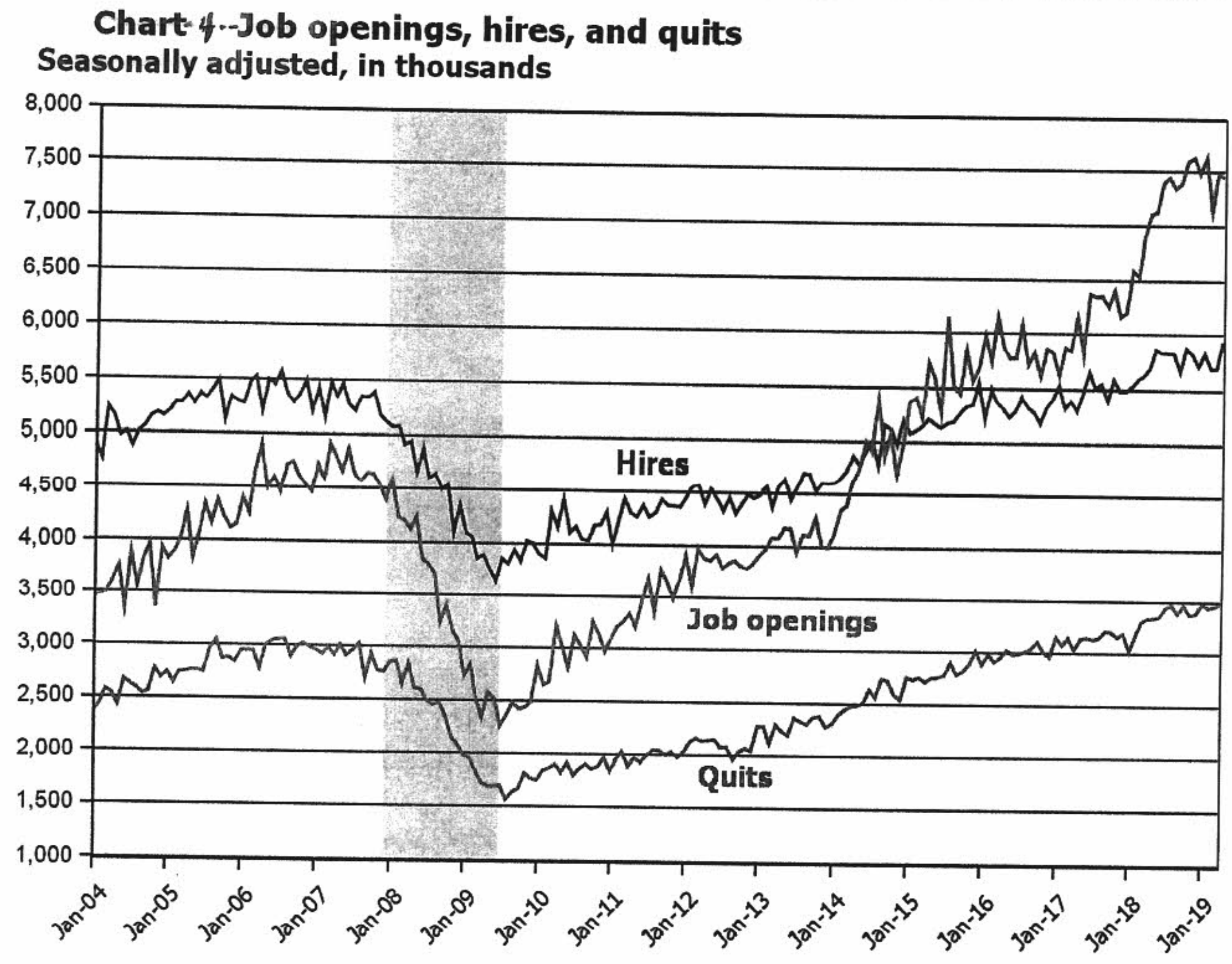
Foreign Bond Investment in U.S. Chart-3c



Feedback

SOURCE: TRADINGECONOMICS.COM | U.S. DEPARTMENT OF THE TREASURY

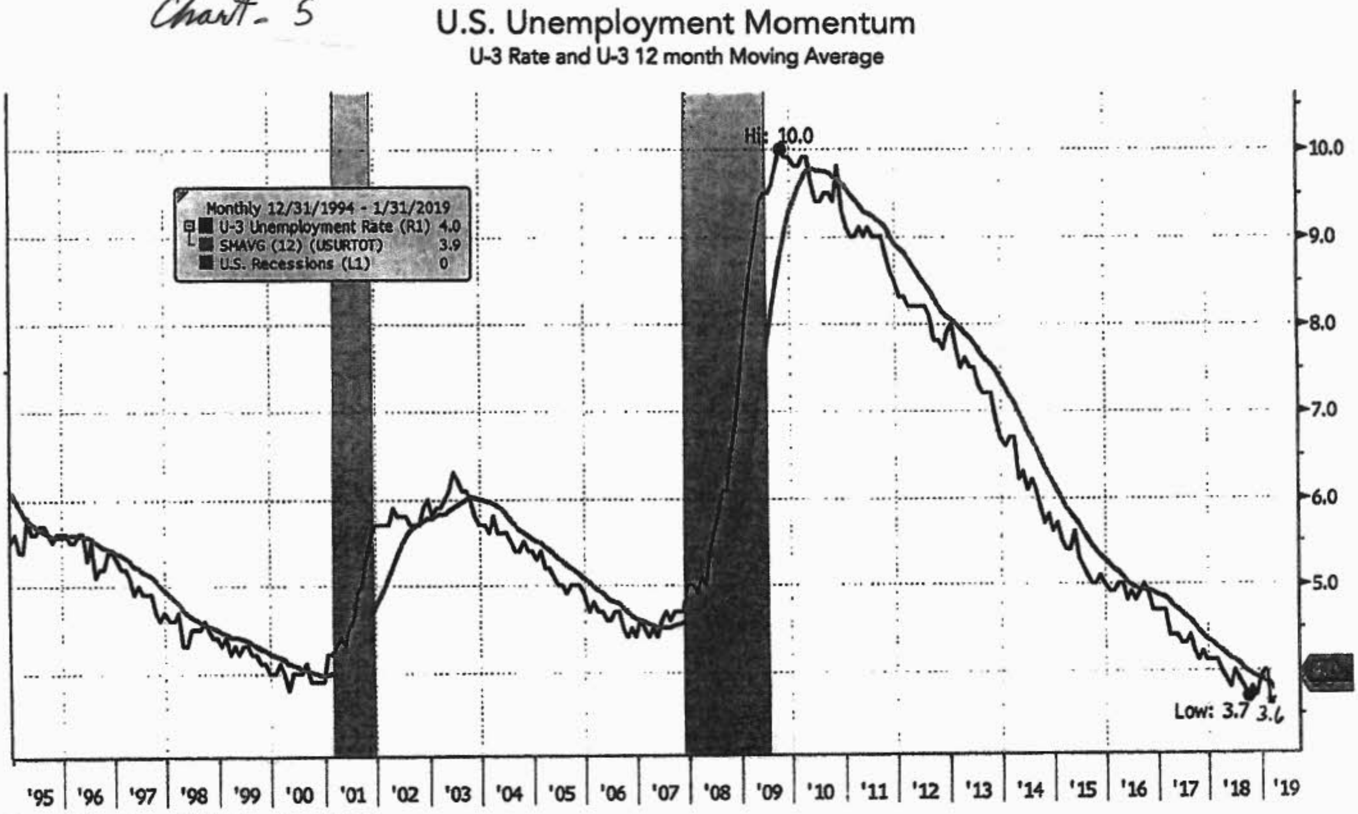
1Y 5Y 10Y MAX



Source: Bureau of Labor Statistics, Job Openings and Labor Turnover Survey, June 10, 2019.

Note: Shaded area represents recession as determined by the National Bureau of Economic Research (NBER).

Chart - 5



Source: Bloomberg, © Merk Investments LLC

Table - 1

RECESSION START	UE TURNED HIGHER	LEAD
1948.11	1948.06	5
1953.07	1953.07	0
1957.08	1957.04	4
1960.04	1960.03	1
1969.12	1969.06	6
1973.11	1973.11	0
1980.01	1979.07	6
1981.07	1981.04	3
1990.07	1990.04	3
2001.03	2001.01	2
2007.12	2007.03	8
AVERAGE		3.45

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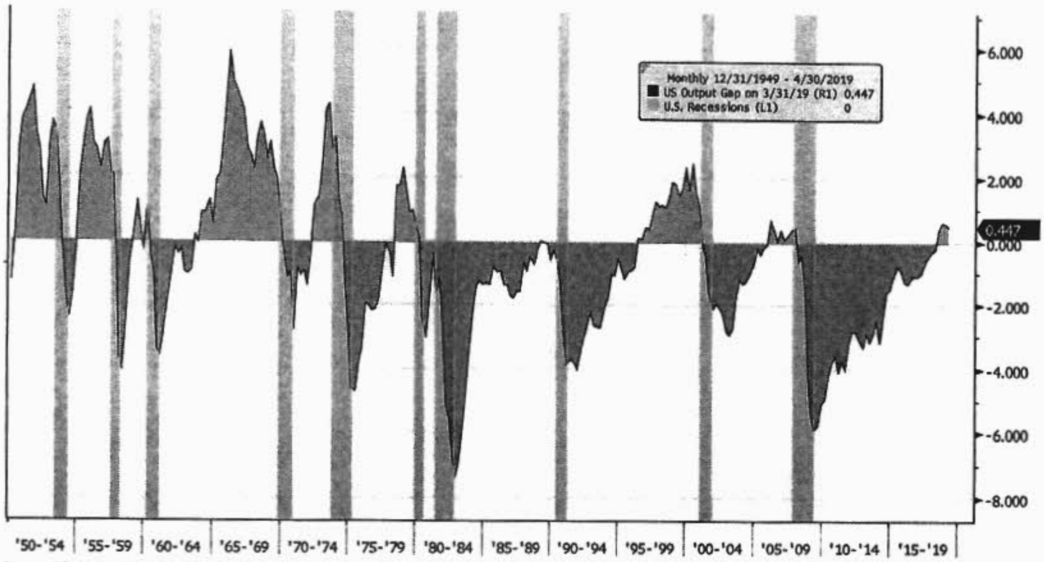
Chart-6

U.S. GDP Output Gap

Actual GDP minus Potential GDP (CBO est.)



Source: Bloomberg, © Merk Investments LLC

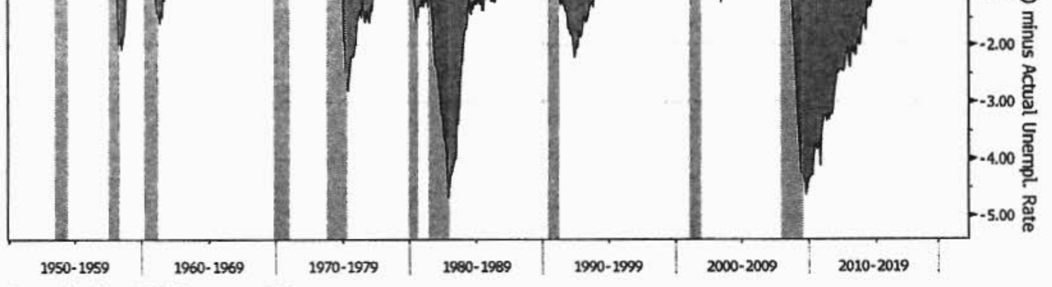
Analysis: Actual GDP is more than potential GDP (as estimated by the CBO), which suggests the expansion may be in its final stages. I'm currently incrementally negative on the business cycle outlook medium/longer term based on this picture. Chart Framework: I'd get incrementally positive medium/longer term around -2.0 on the chart, which would likely only be during or after a recession

MERK RESEARCH

Chart-7

U.S. Labor Market Capacity Utilization

Natural Rate of Unemployment (CBO est.) – Actual Rate of Unemployment



Source: Bloomberg, © Merk Investments LLC

Analysis: The estimated natural rate of unemployment is higher than the current unemployment rate (4.6% – 3.6%), meaning the U.S. economy is potentially running above capacity which likely increases the risk of a recession roughly 1-5 years out. Chart Framework: I'm currently incrementally negative on the business cycle outlook medium/longer term based on this picture, I'd get incrementally positive medium/longer term around 1.00 on the chart, which would likely only be during or after a recession. It's worth noting that despite the current picture above many other metrics seem to indicate that some slack remains in the labor market

Chart-8

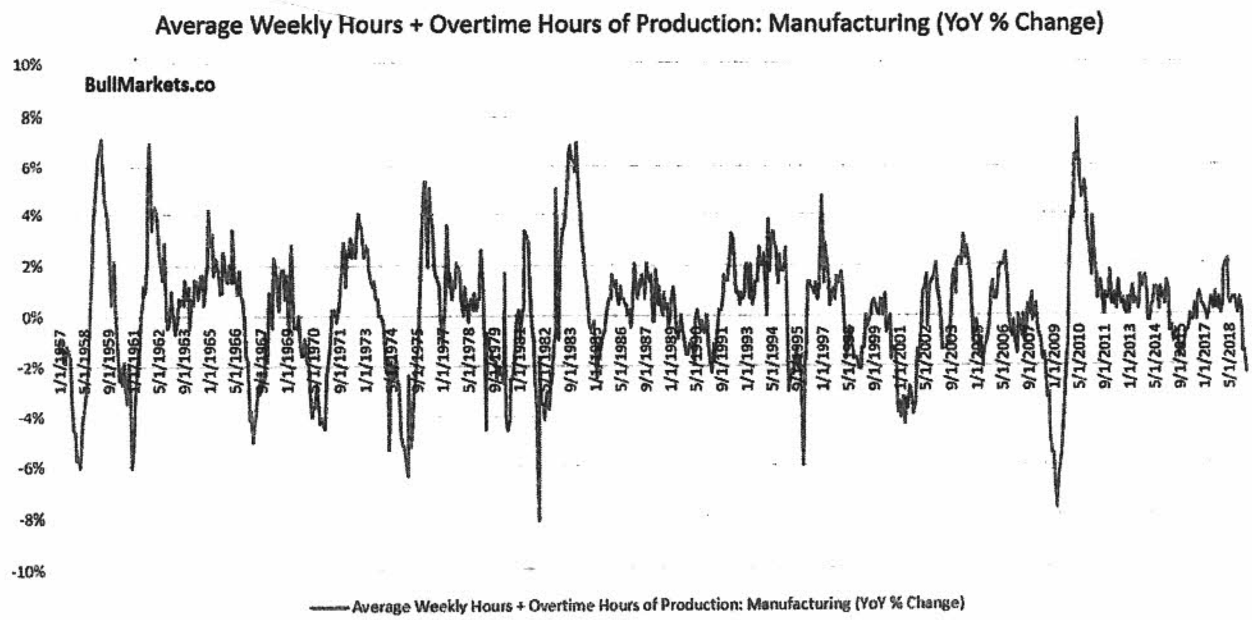


Chart-9

Historical

U.S. Manufacturing Growth Slows To Decade Low

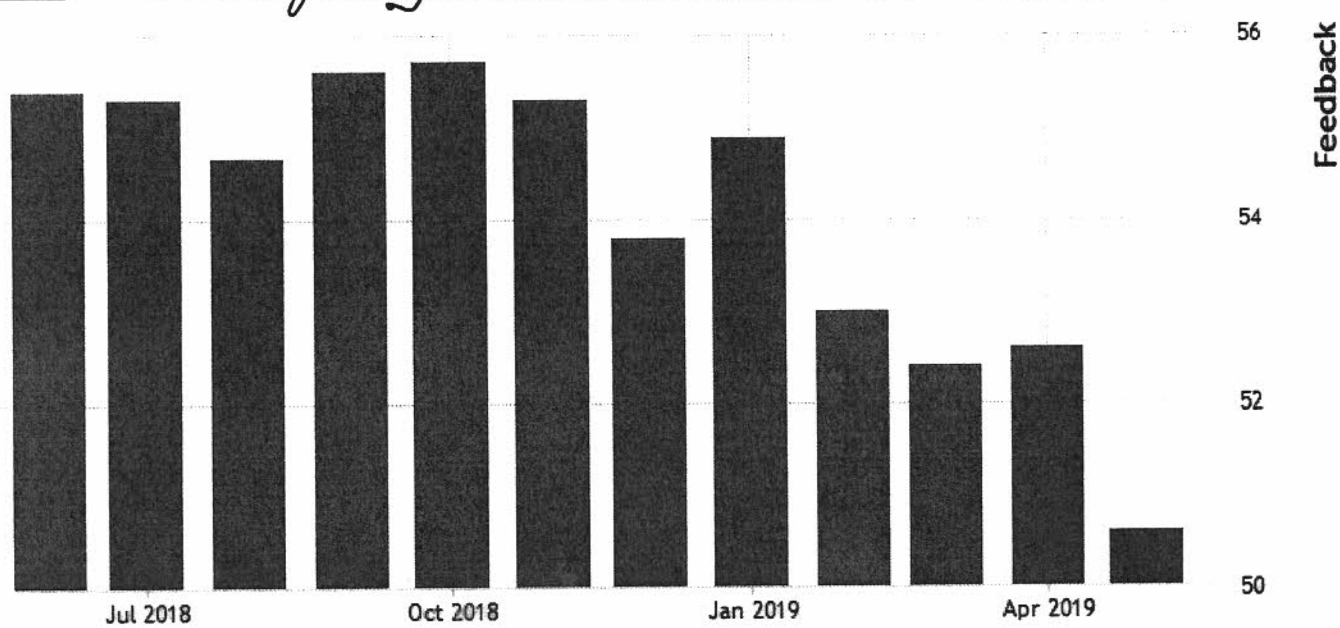
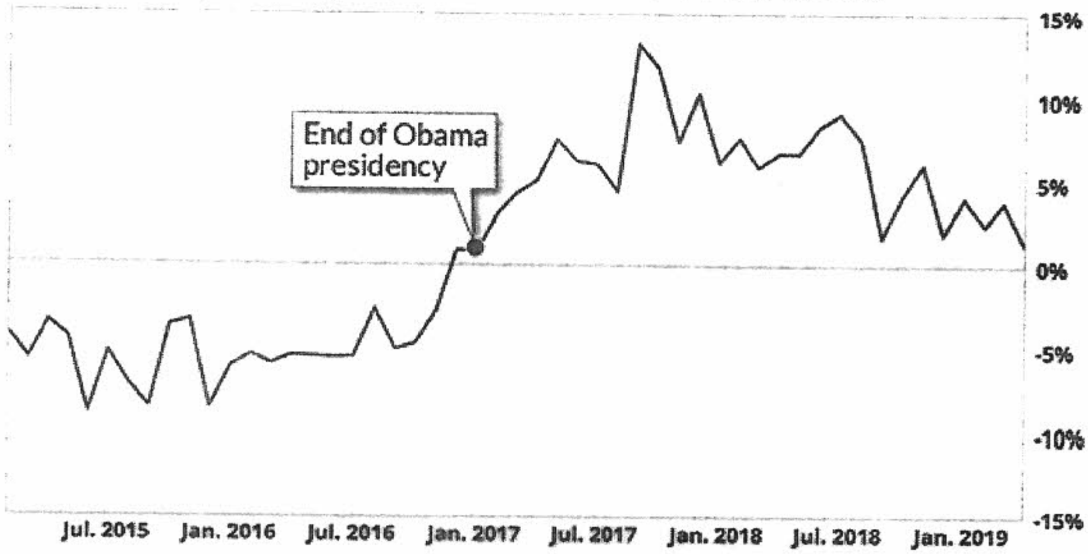


Chart-10

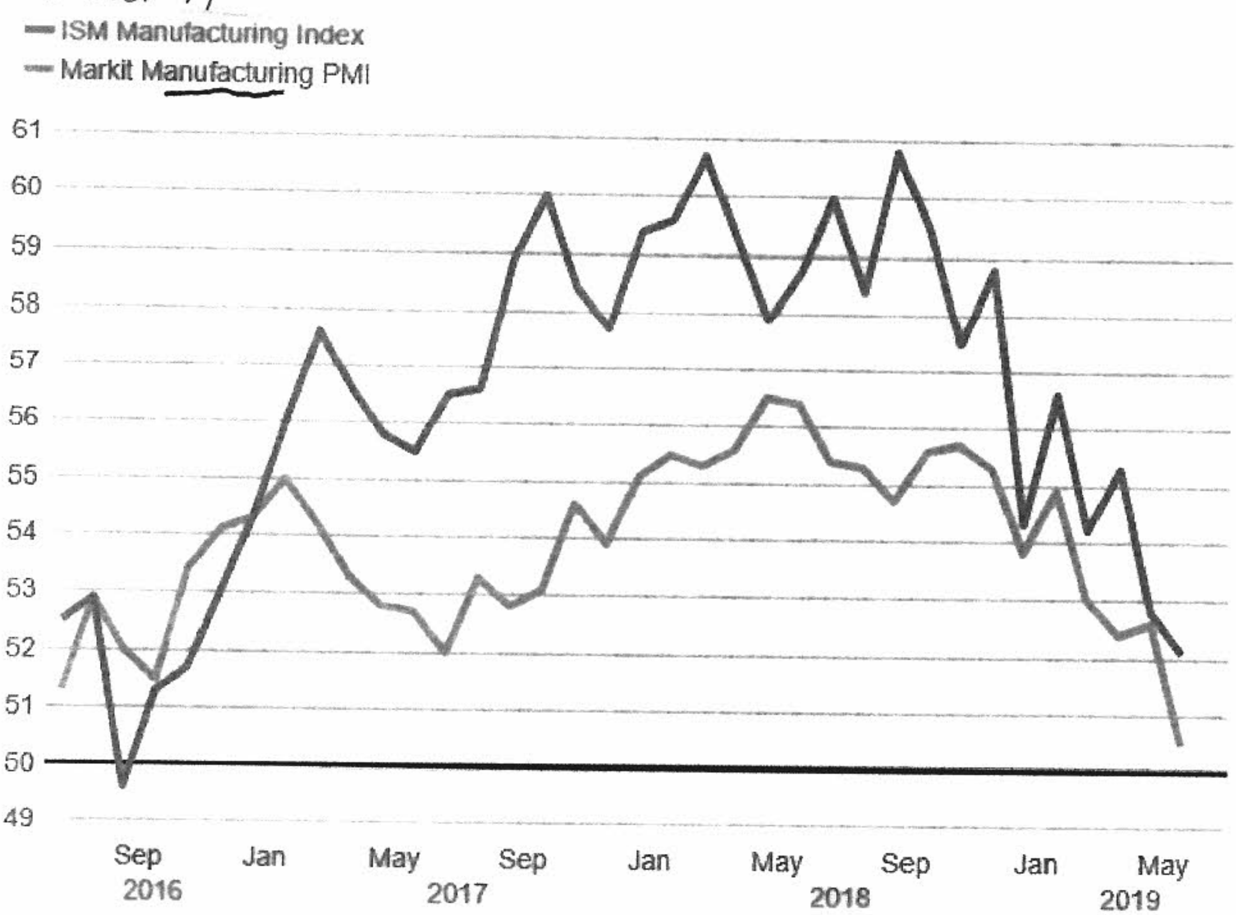
Core capital-goods orders

Change from previous year, orders minus defense and aircraft



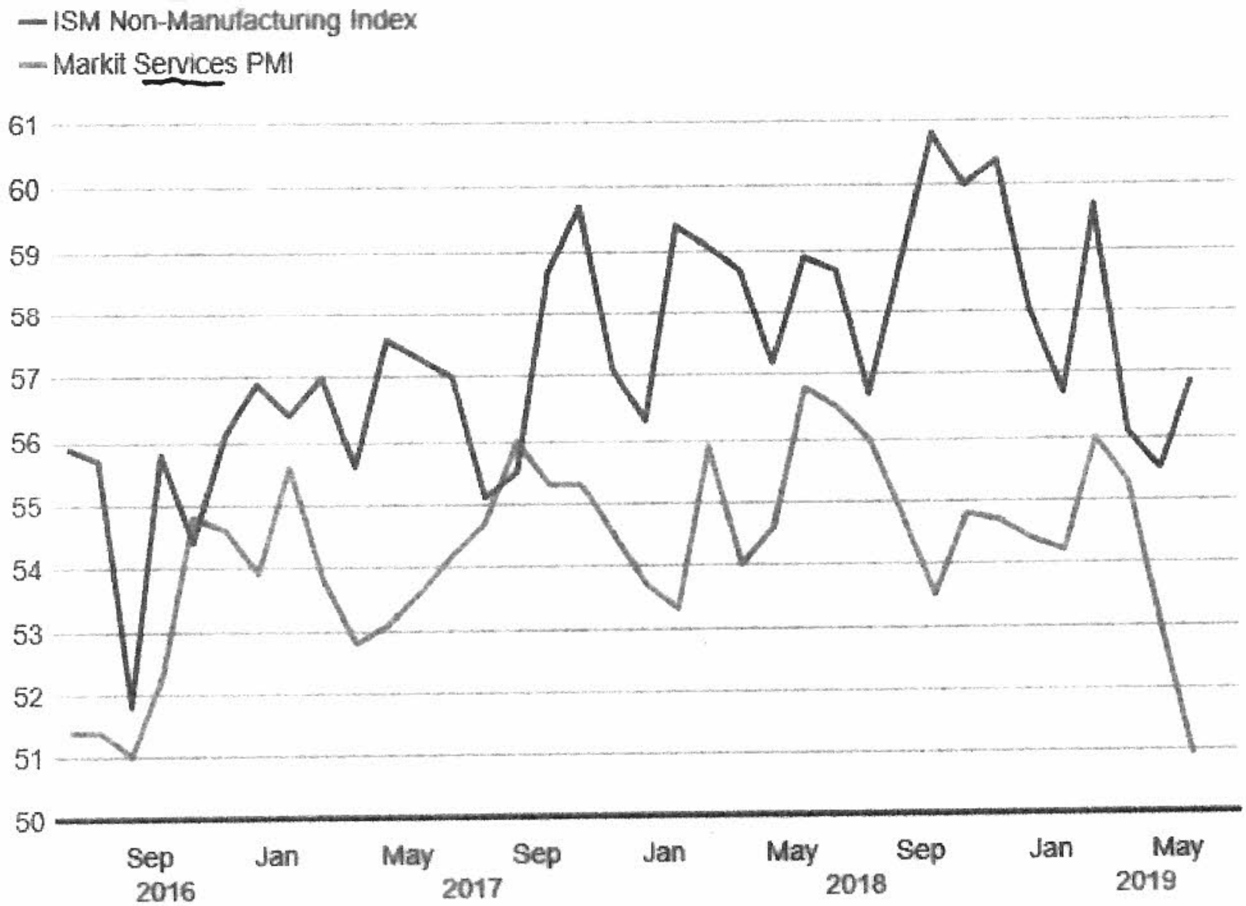
Source: Commerce Department via FRED

Chart-11



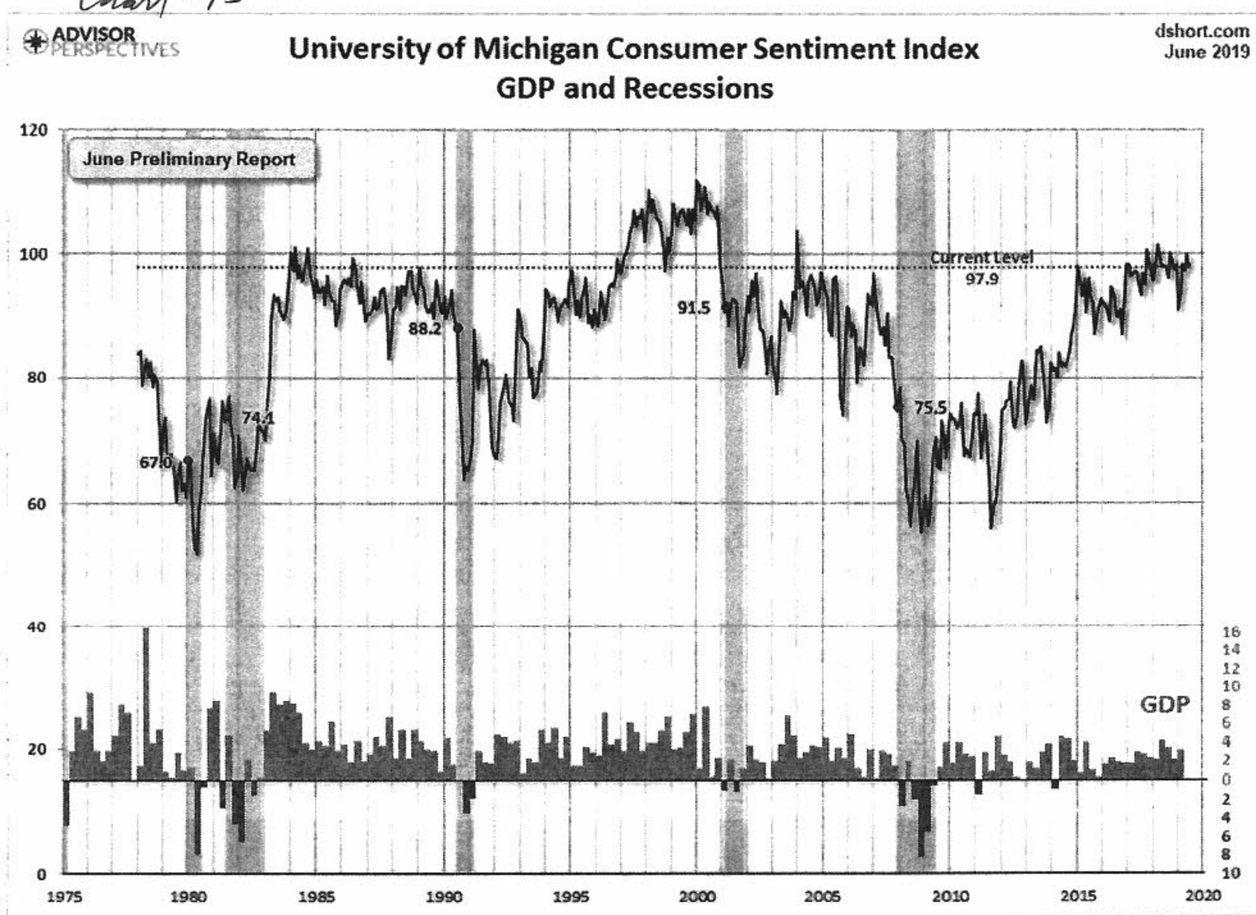
Source: Charles Schwab, Macrobond, Institute for Supply Management (ISM), IHS Markit as of 6/7/2019

Chart- 12

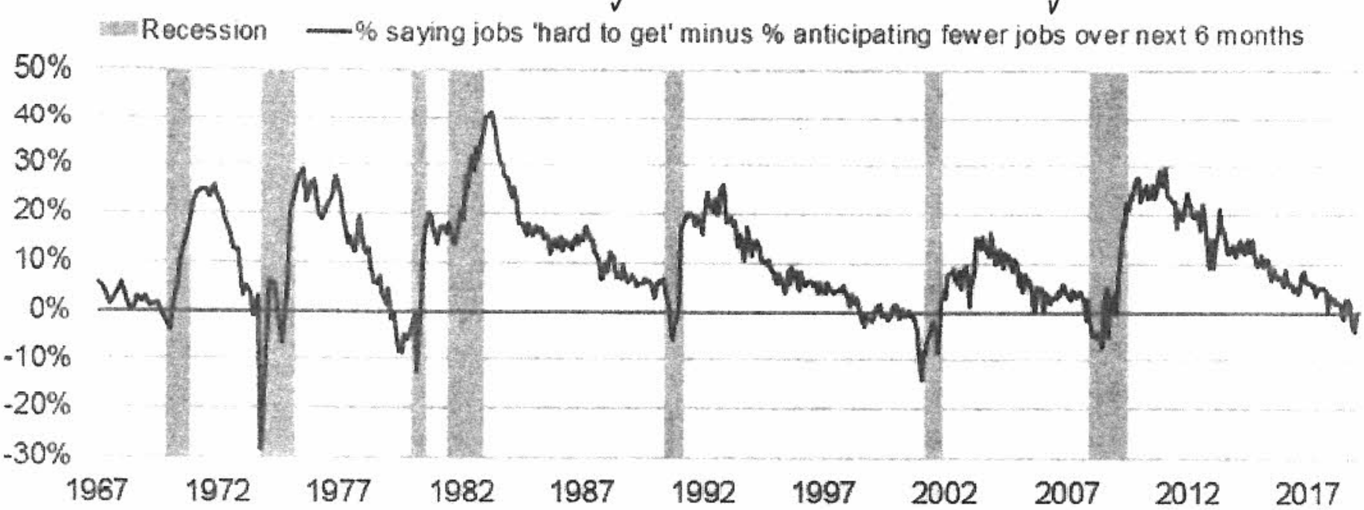


Source: Charles Schwab, Macrobond, Institute for Supply Management (ISM), IHS Markit as of 6/7/2019

Chart- 13



Consumer Confidence Jobs Survey *Chart-14*



Source: Charles Schwab, FactSet, The Conference Board, as of March 31, 2019.

Chart-15

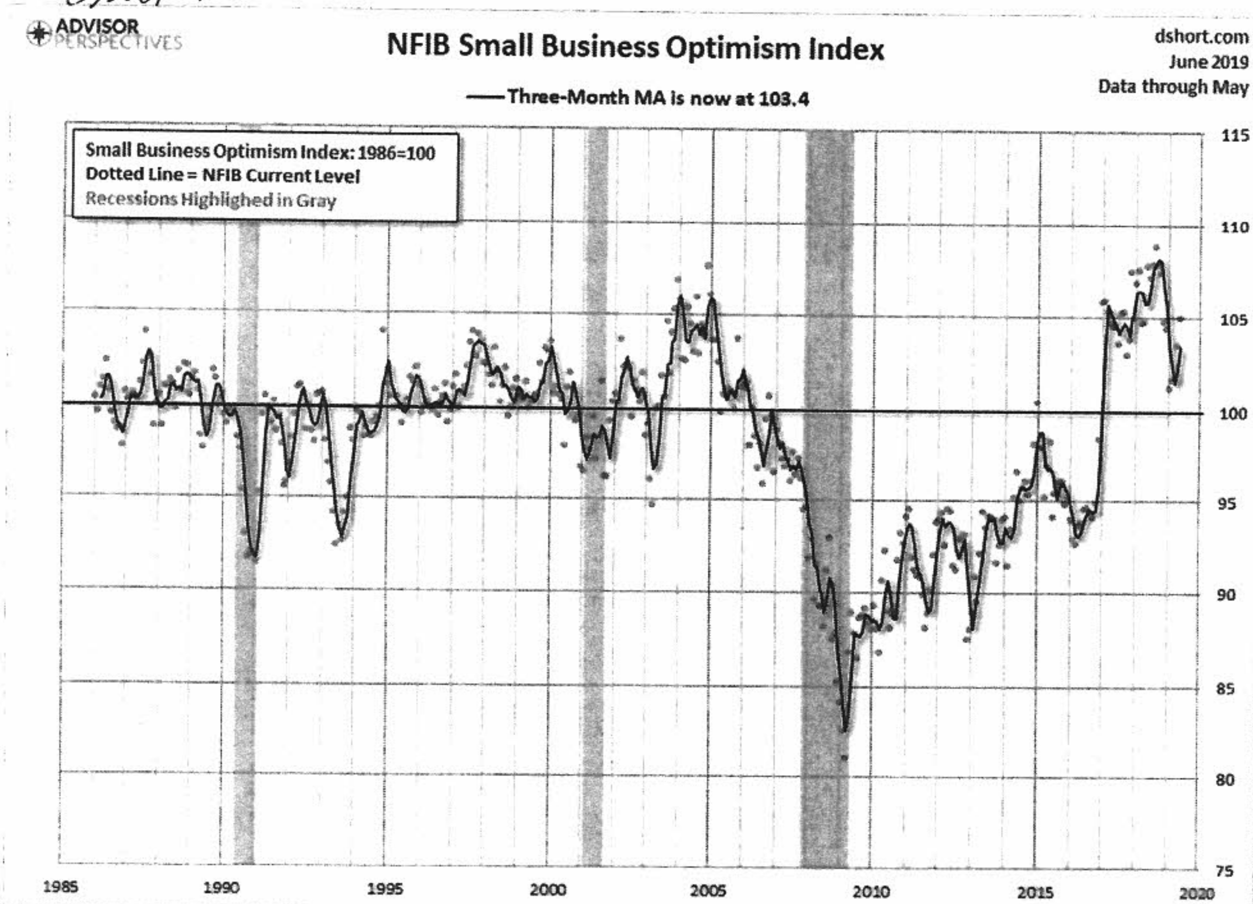


Chart - 16

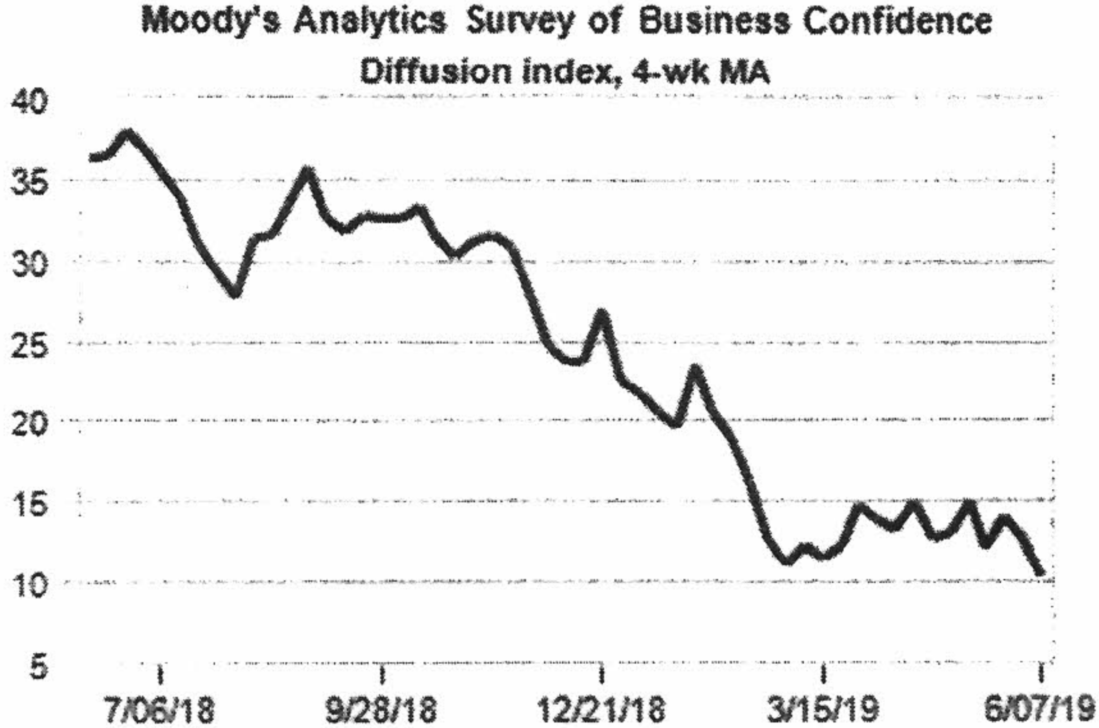


Chart - 17

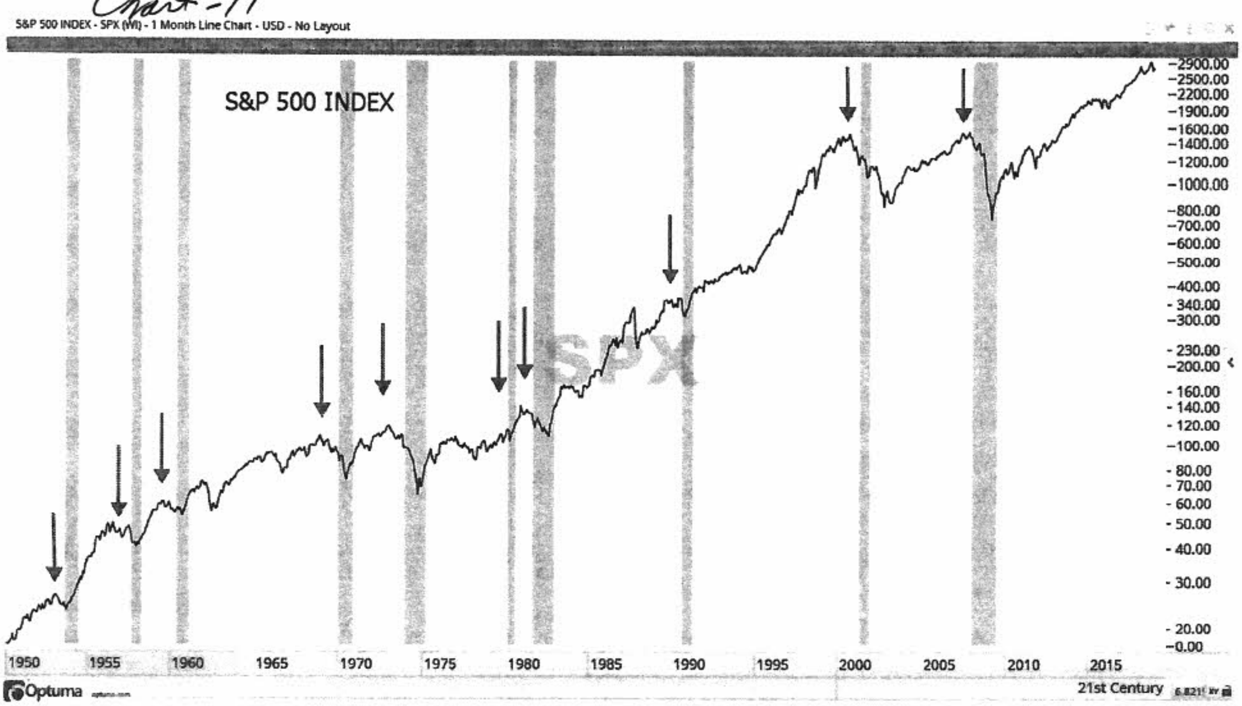
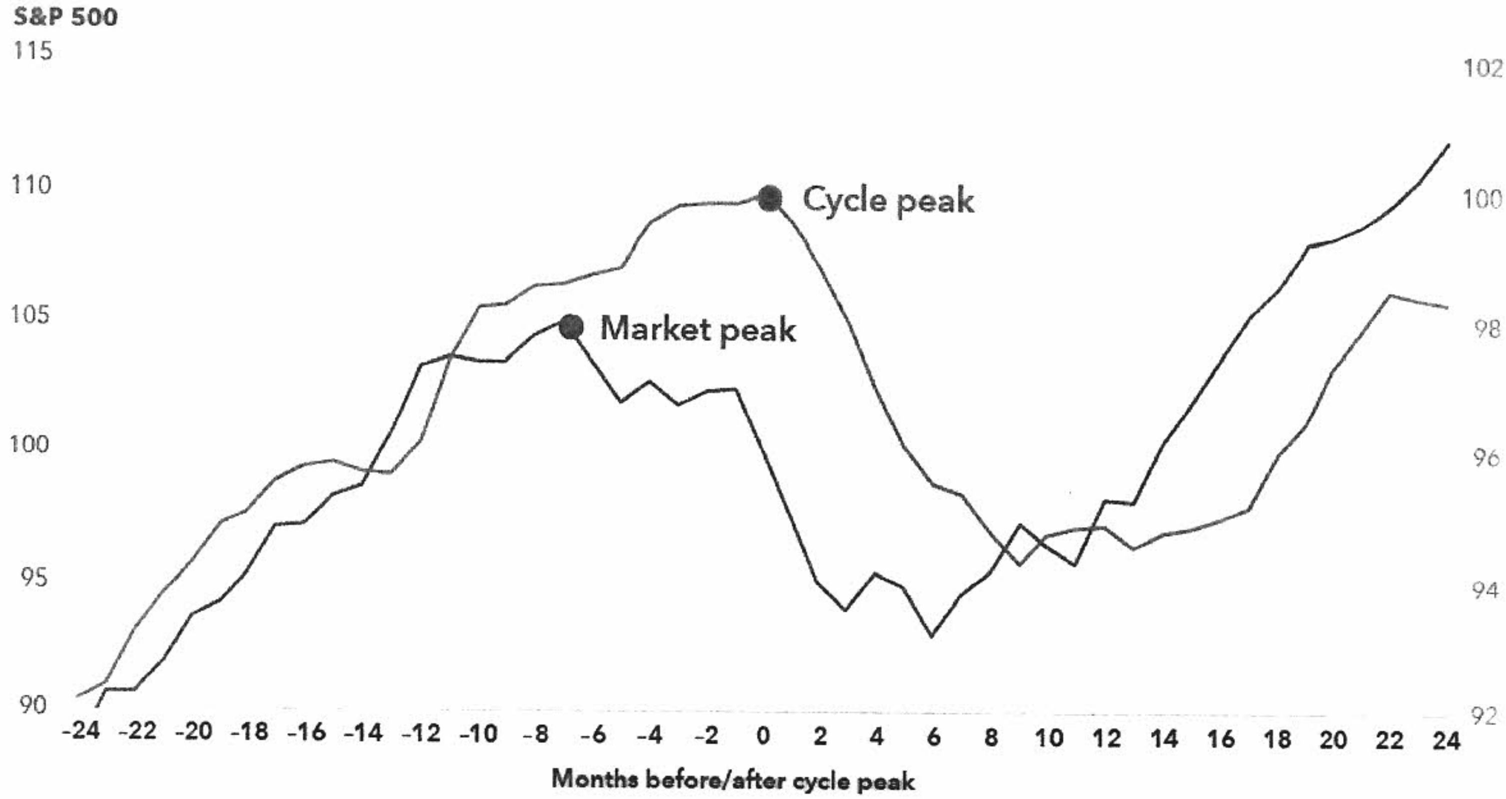


Chart - 18

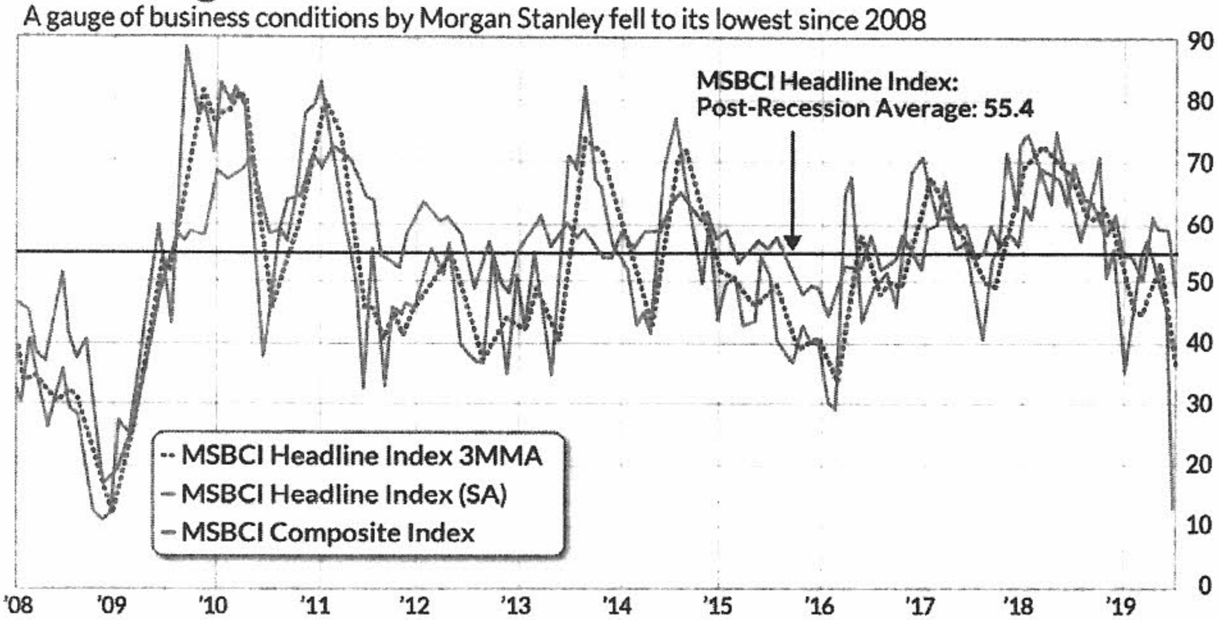


Sources: Capital Group, Federal Reserve Board, Haver Analytics, National Bureau of Economic Research, Standard & Poor's. Data reflects the average of all cycles from 1950 to present, indexed to 100 at each cycle peak.

Chart - 19

Tumbling business conditions

A gauge of business conditions by Morgan Stanley fell to its lowest since 2008



Source: Morgan Stanley Research

Chart-20

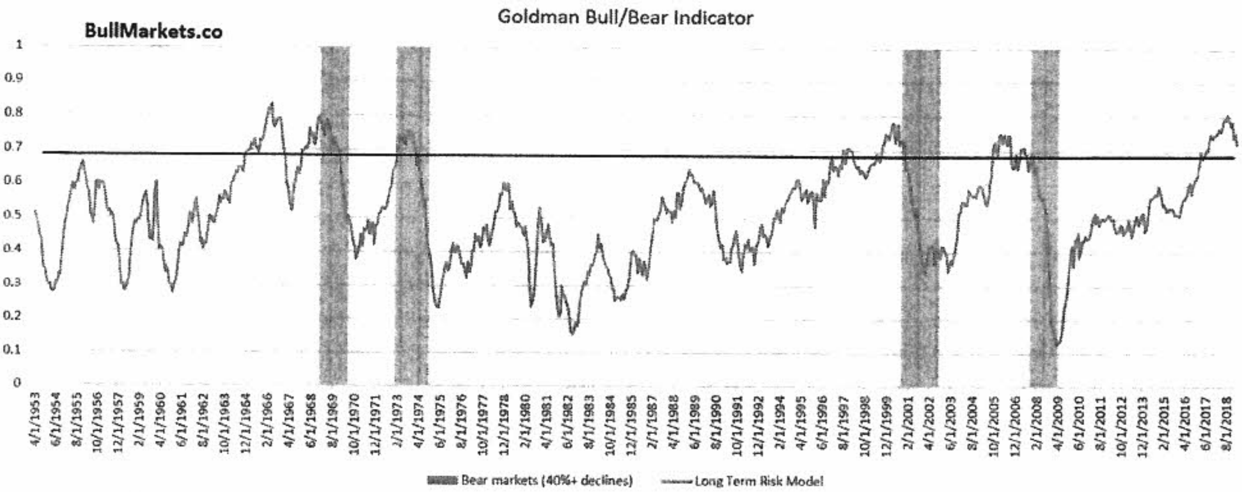


Chart-21

Probability of US Recession Predicted by Treasury Spread*
Twelve Months Ahead (month averages)

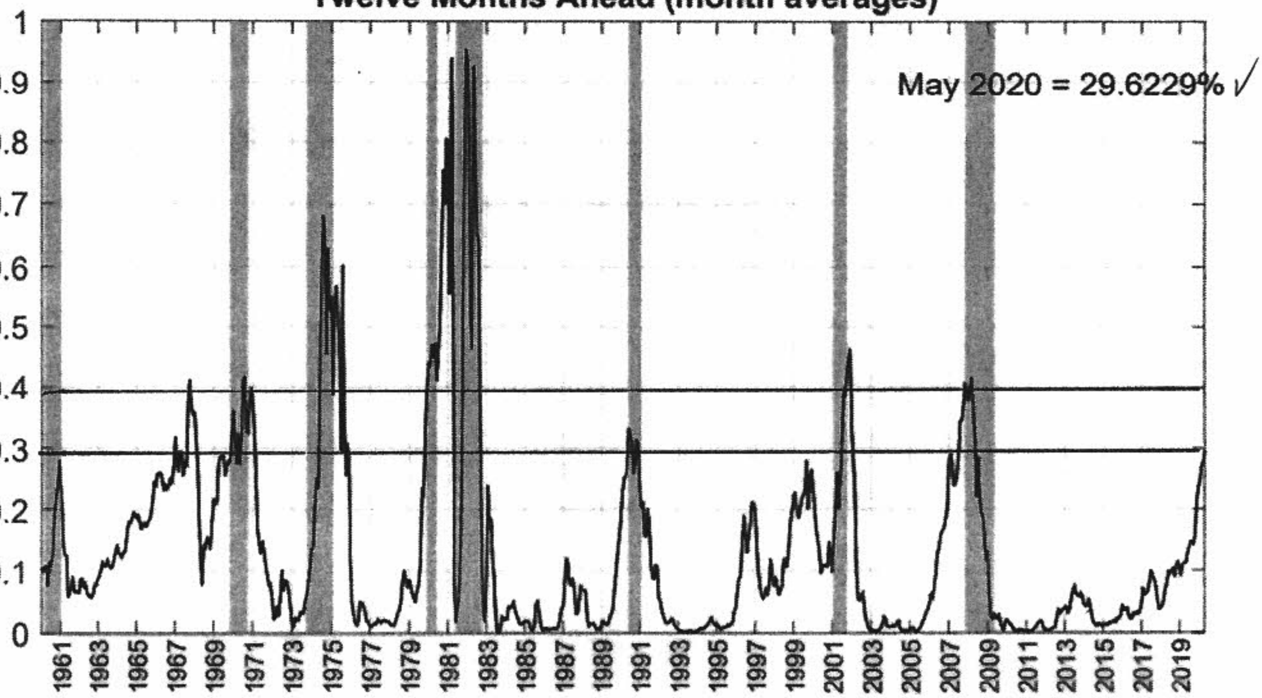
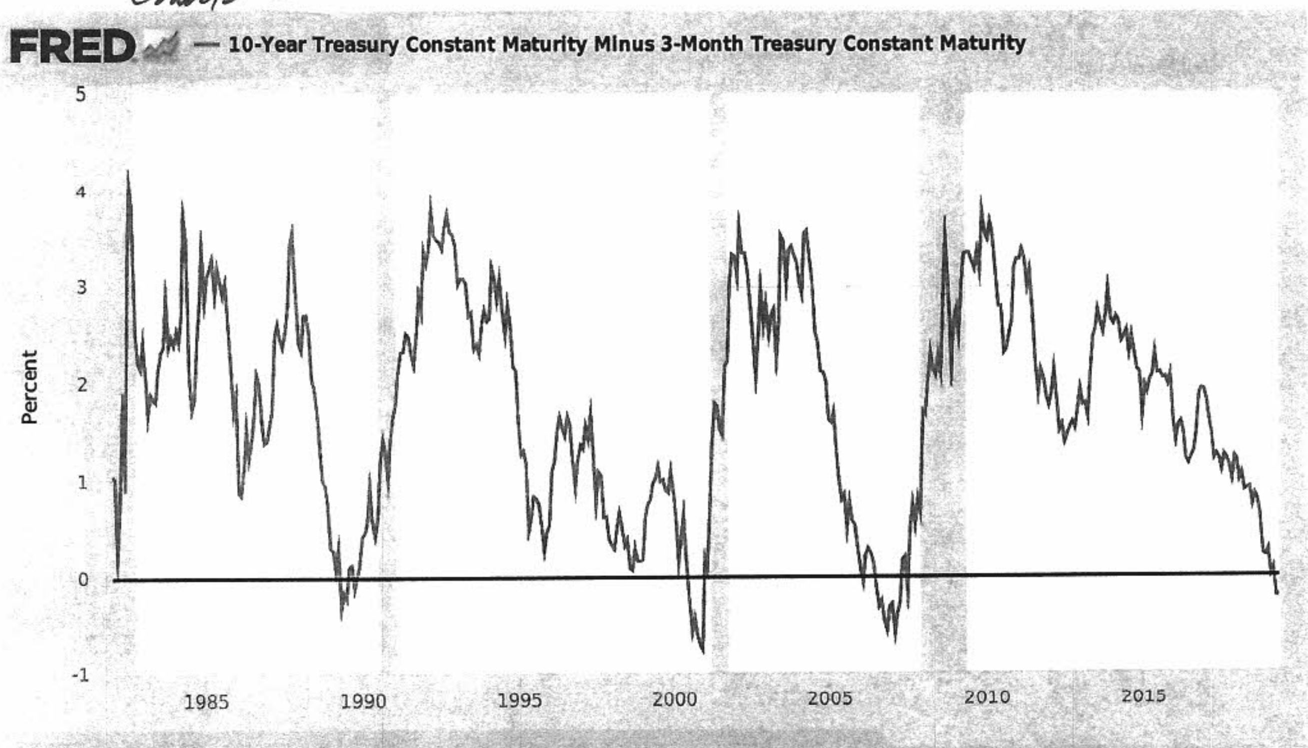


Chart 22



Shaded areas indicate U.S. recessions Source: Federal Reserve Bank of St. Louis myf.red/g/o8Je

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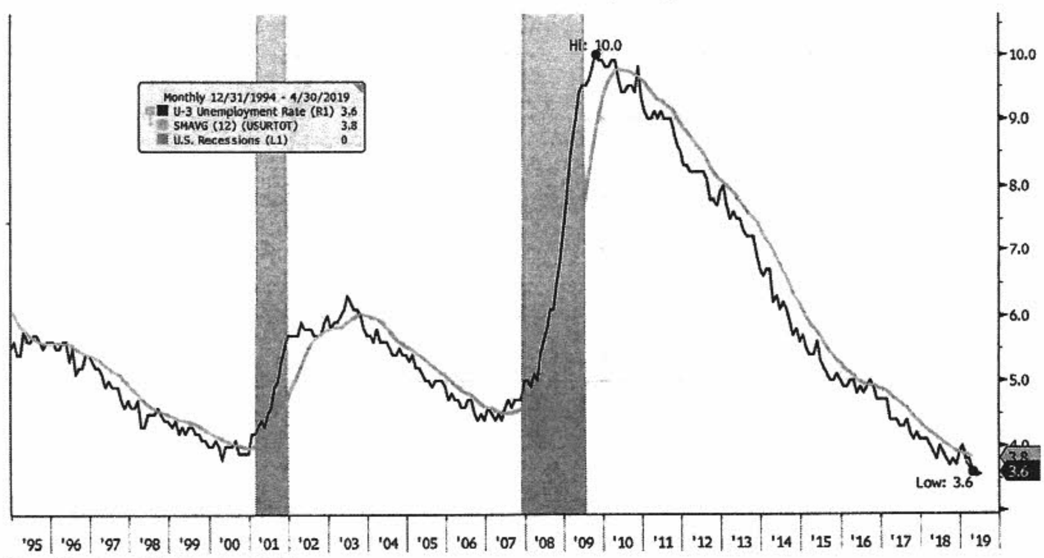
Chart - 23

U.S. Unemployment Momentum

U-3 Rate and U-3 12 month Moving Average



Source: Bloomberg, © Merk Investments LLC

Analysis: The unemployment rate fell to 3.6% (a new cycle low), and is below the 12-month moving average (labor force participation rate ticked down– not shown). Chart Framework: I'd get incrementally negative on the business cycle outlook if the unemployment rate moved above its 12m MA while the labor force participation rate trended lower.

Chart - 24

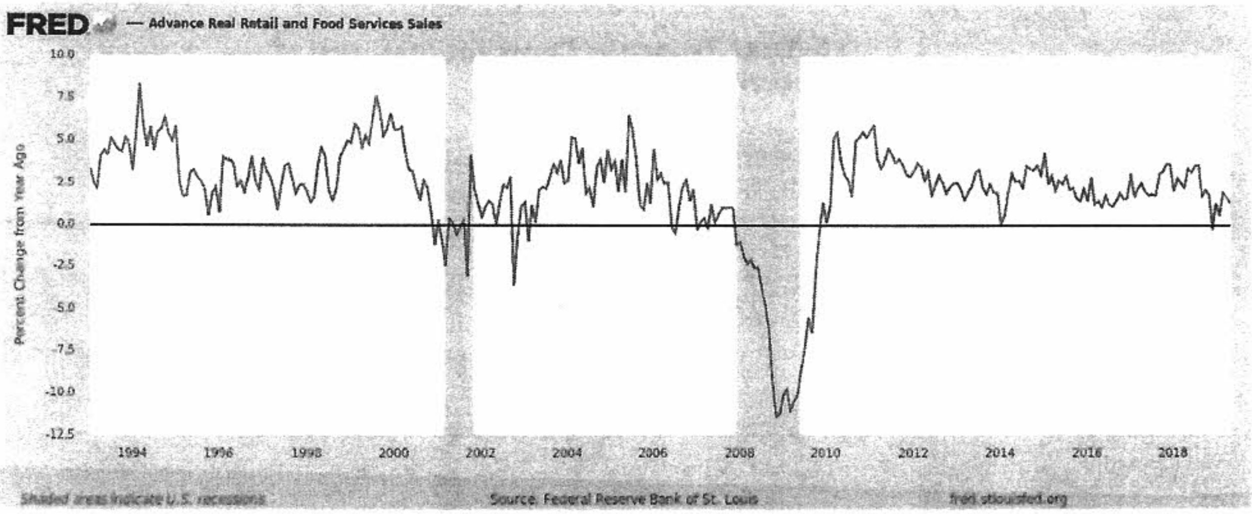


Chart - 25

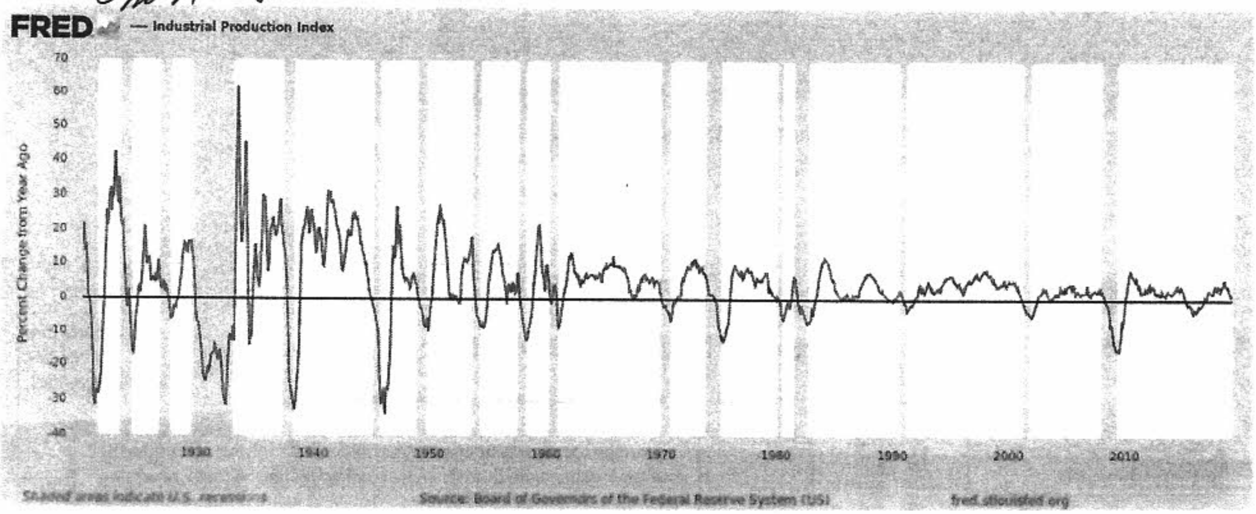


Chart - 26

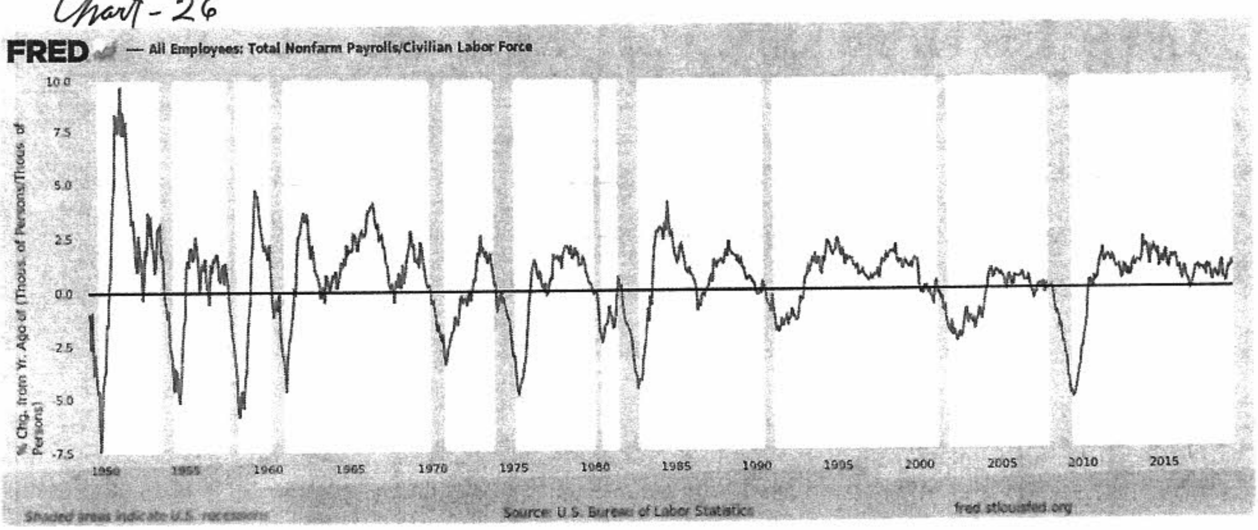
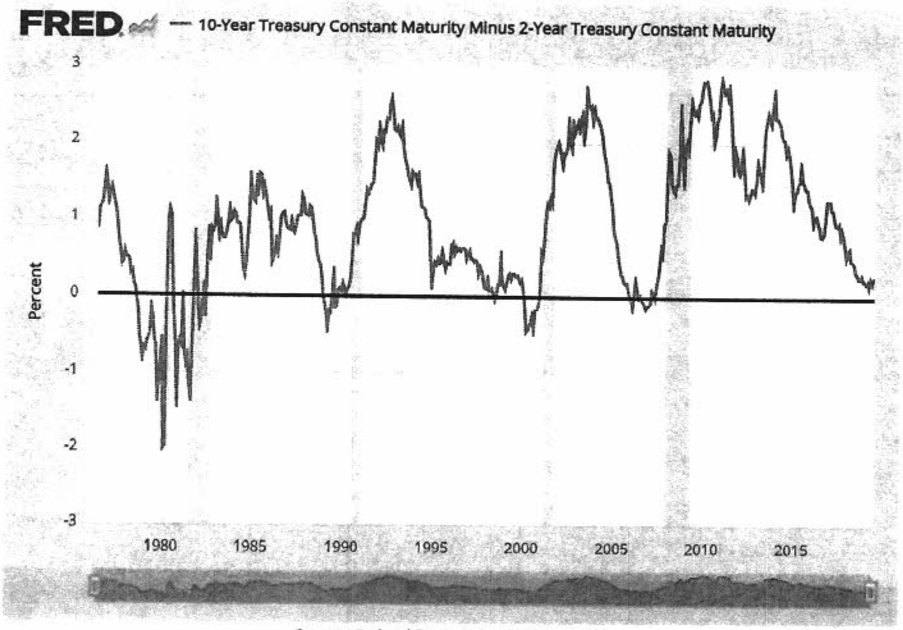


Chart -27

10-Year Treasury Constant Maturity Minus 2-Year Treasury Constant Maturity



Source: Federal Reserve Bank of St. Louis

Chart 28

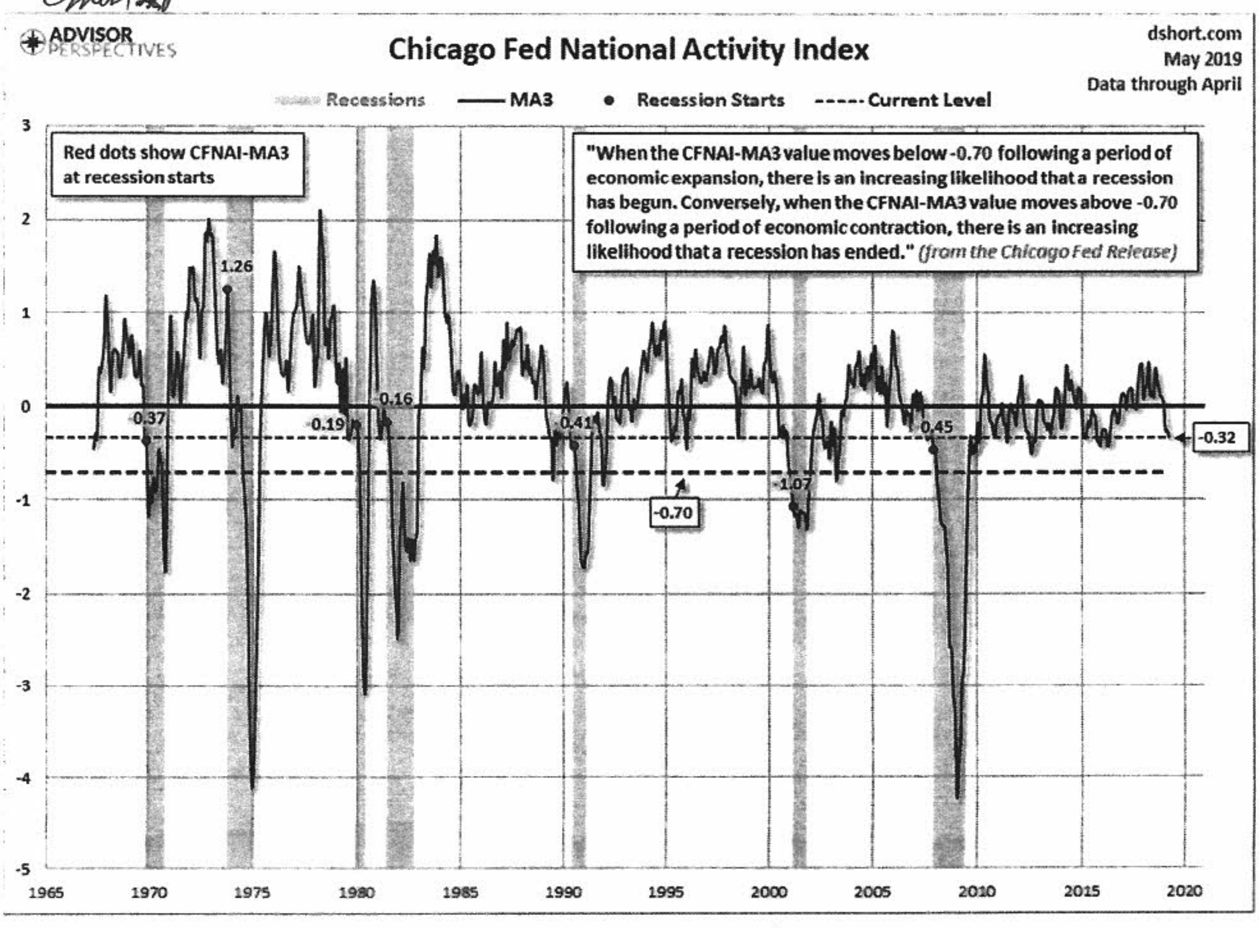
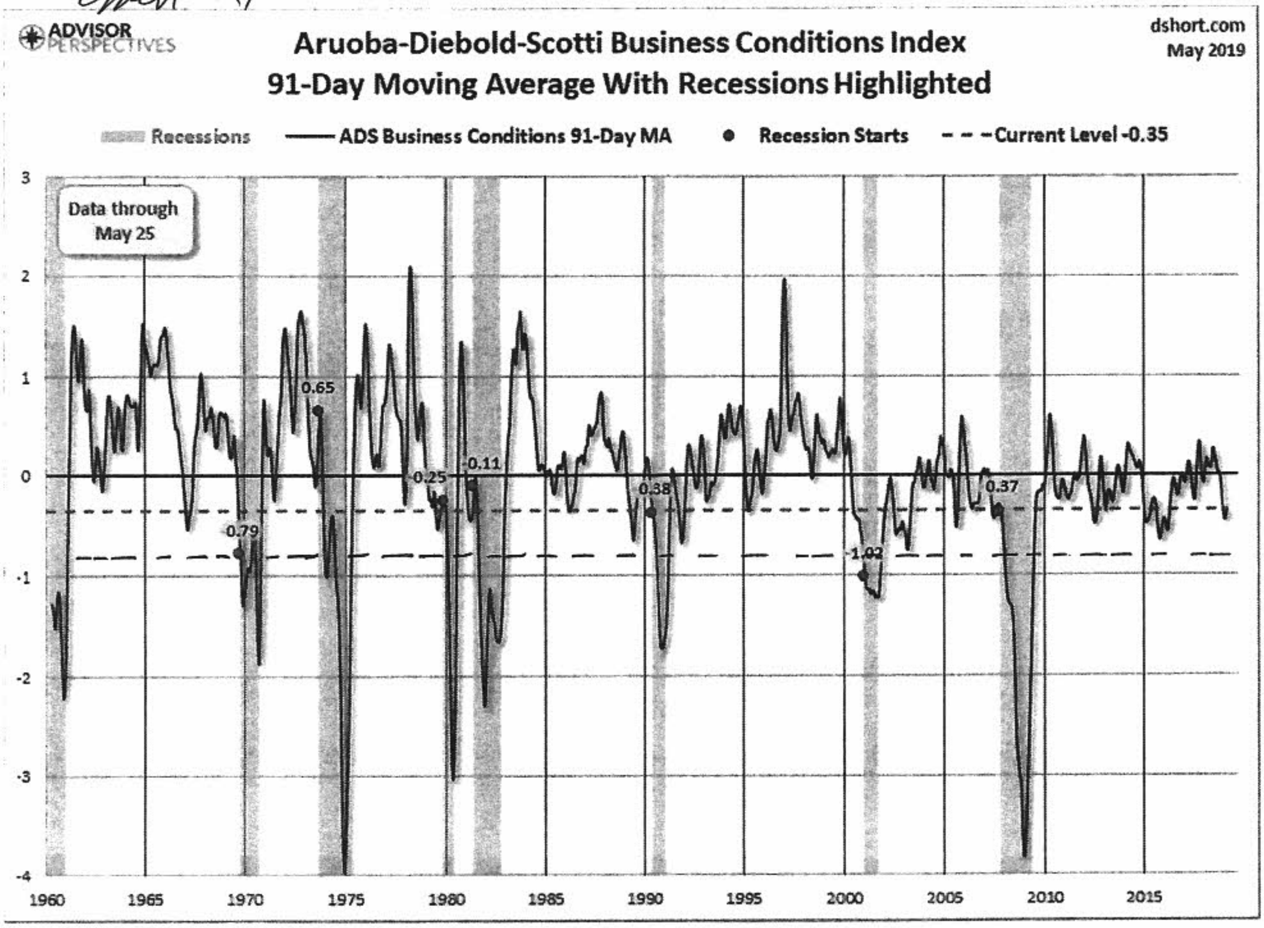


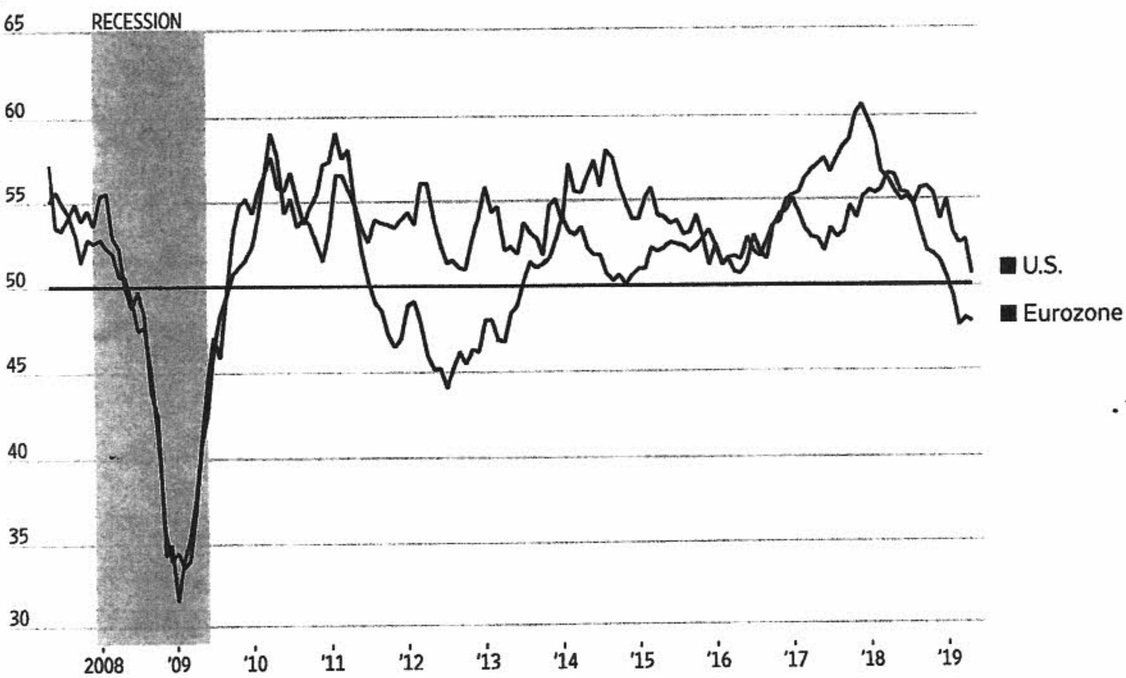
Chart - 29



-.80

Chart - 30

Manufacturing activity in the ...



Note: Above 50 indicates expansion, below 50 contraction.
Source: IHS Markit

Chart- 31

Germany Factory Orders

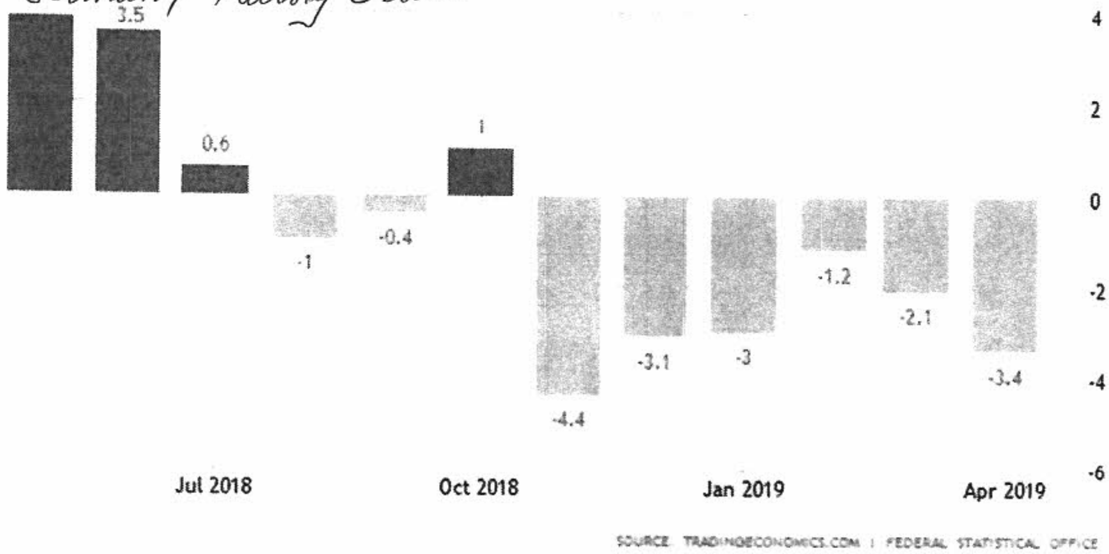


Chart - 32 World trade growth has slumped

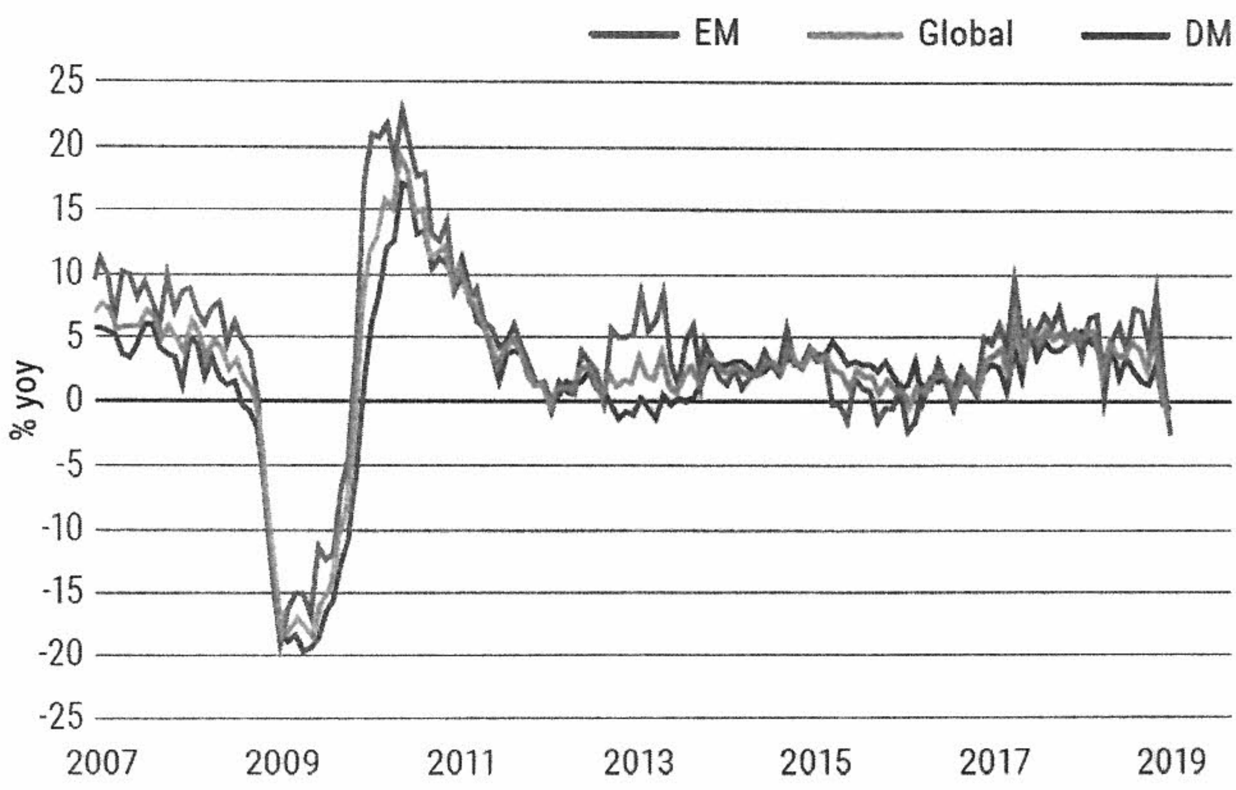
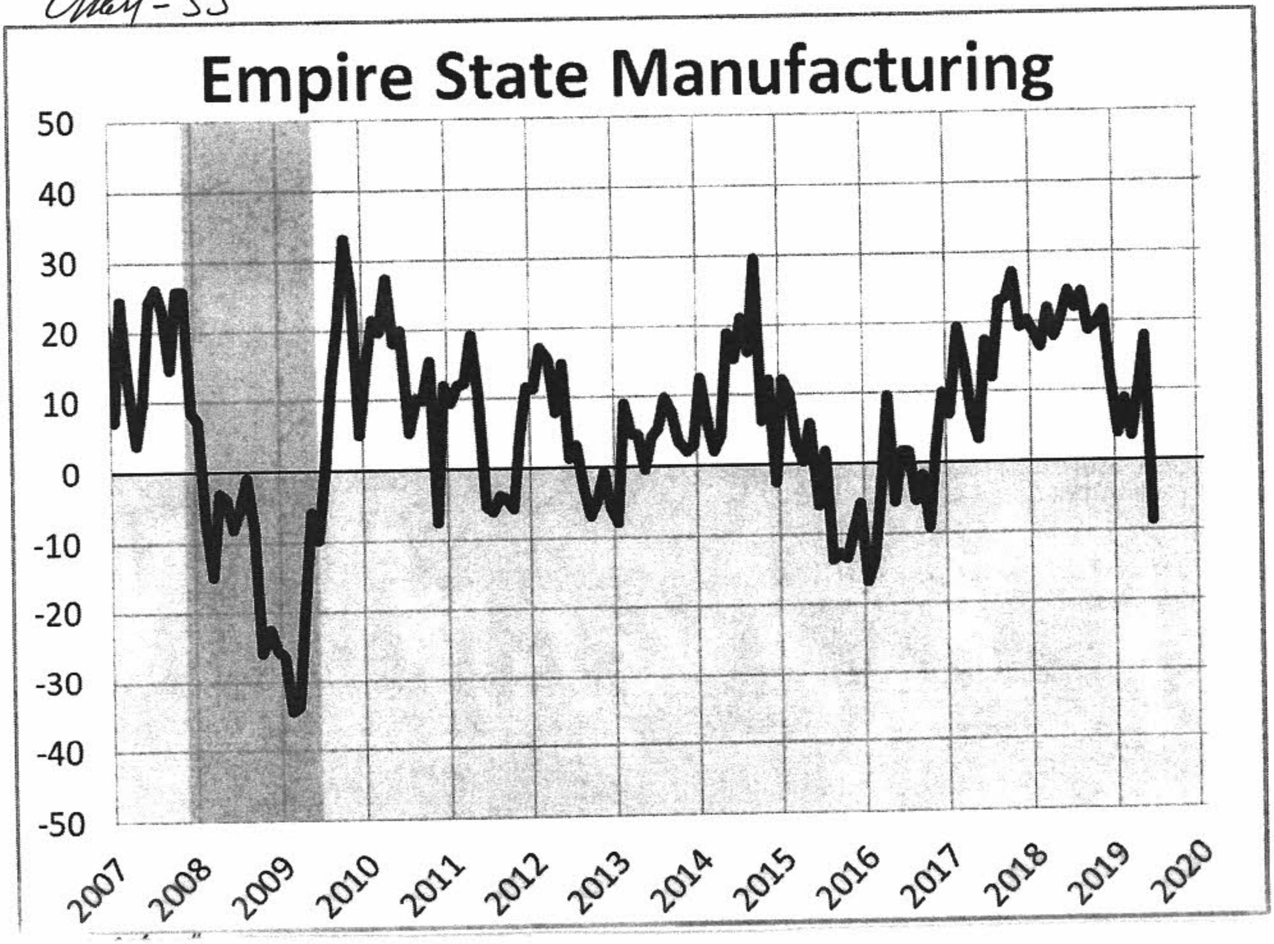


Chart - 33


Empire State Manufacturing
50
40
30
20
10
0
-10
-20
-30
-40
-50
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020