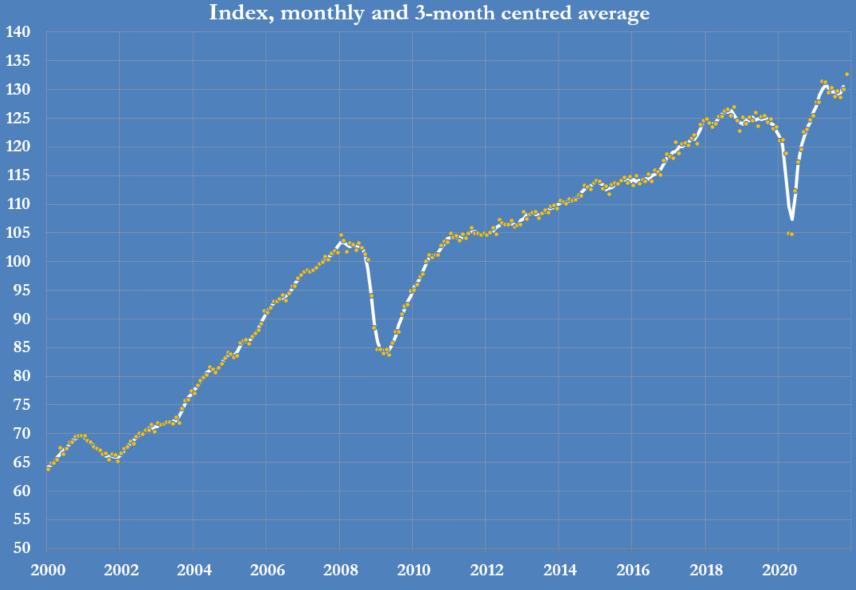
Global economy at the start of 2022 Selected indicators

JOHN KEMP REUTERS 26 Jan 2022

### Volume of World Trade, 2000-2021

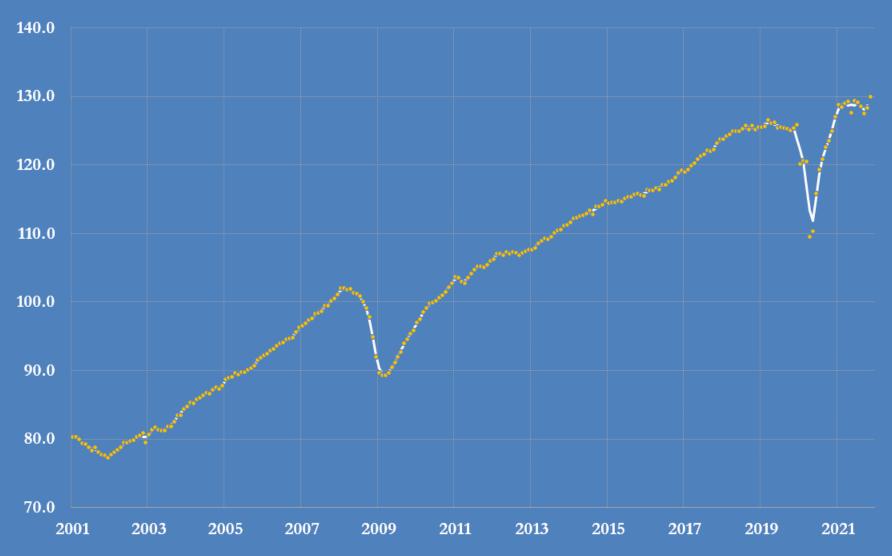


Source: Netherlands Bureau for Economic Policy Analysis, World Trade Monitor

Volume of World Trade, 1993-2021 percent change from prior year, monthly and three-month centred average



Global industrial production, 2001-2021 production-weighted index, monthly and three-month centred average



Source: Netherlands Bureau of Economic Policy Analysis, World Trade Monitor

### Global industrial production, 2001-2021 production-weighted

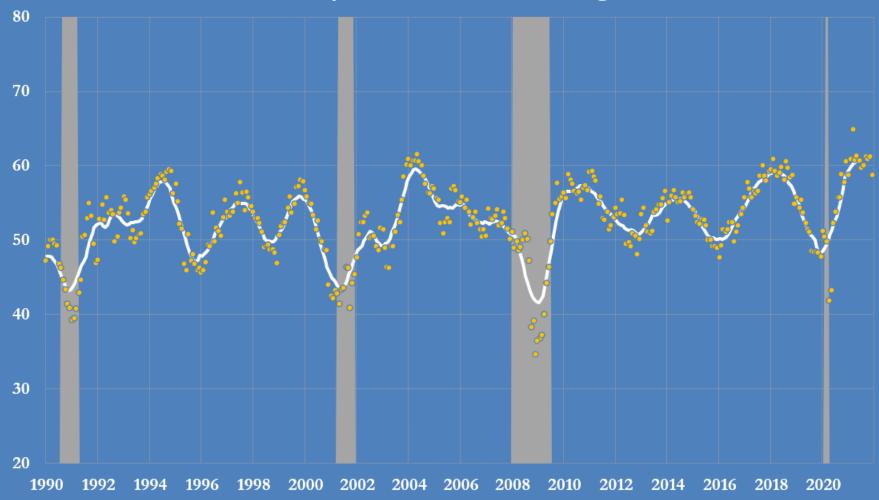
percent change from prior year, monthly and three-month centred average



Source: Netherlands Bureau of Economic Policy Analysis, World Trade Monitor

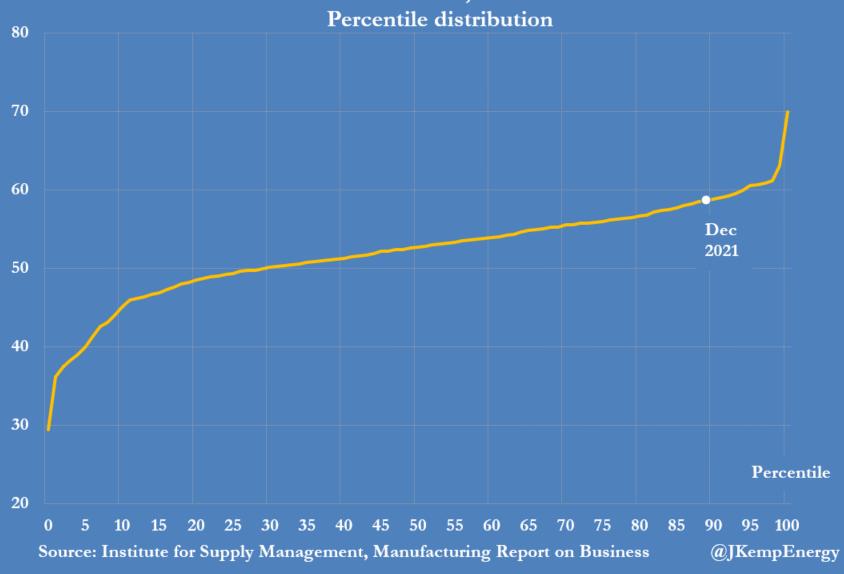
U.S. Purchasing Managers' Index, 1990-2021

Manufacturing, diffusion index, base = 50 Monthly and 12-month centred average



Source: Institute for Supply Management, Manufacturing Report on Business

U.S. Purchasing Managers' Index, 1980-2021 Diffusion index, base = 50

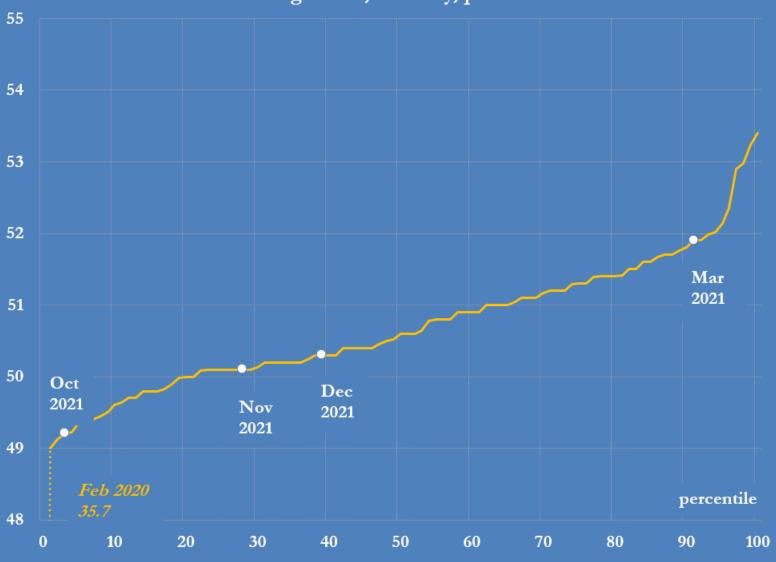


China purchasing managers' index, 2005-2021 Manufacturing sector, monthly and 3-month centred average



Source: China National Bureau of Statistics

China purchasing managers' index, 2011-2021 Manufacturing sector, monthly, percentile distribution

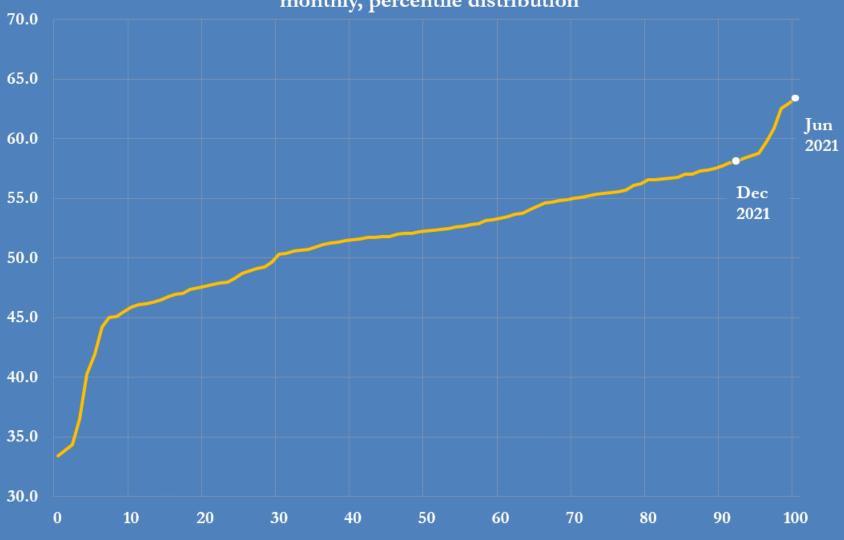


Source: China National Bureau of Statistics

Eurozone manufacturing purchasing managers' index, 2007-2021 Index base = 50, monthly and three-month average

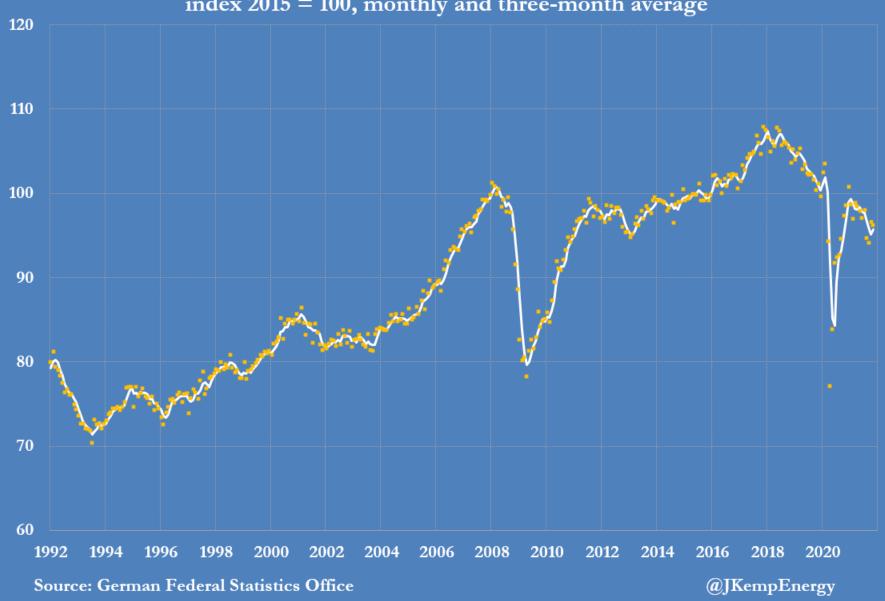


Eurozone manufacturing purchasing managers' index, 2006-2021 monthly, percentile distribution



Source: IHSMarkit

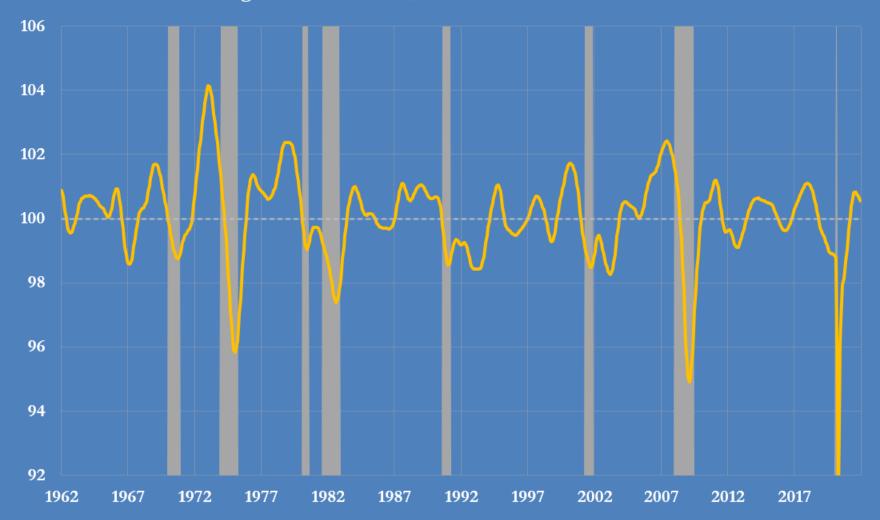
Germany industrial output, 1992-2021 index 2015 = 100, monthly and three-month average



Germany industrial output, 1992-2021 Percent change from prior year, monthly and three-month average



OECD Composite Leading Indicator, 1962-2021 Long-term trend = 100, NBER U.S. recessions shown

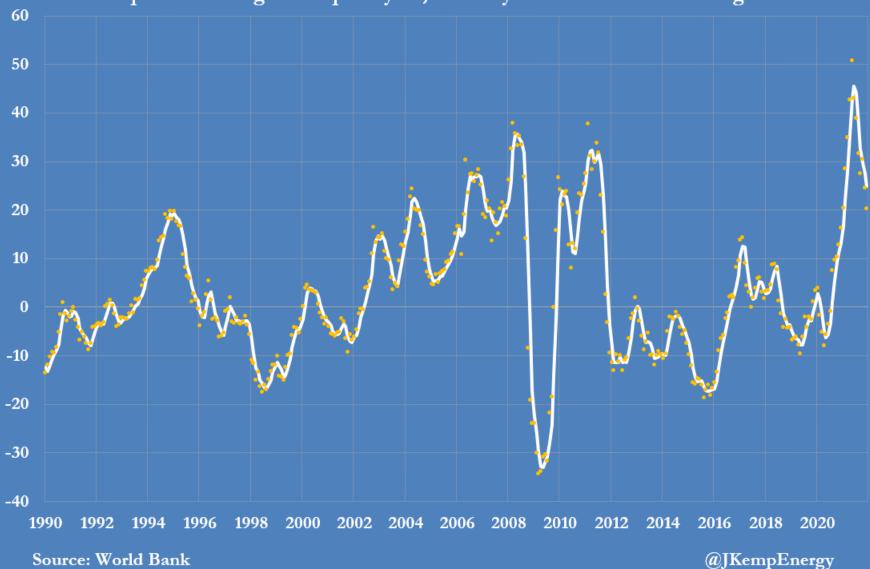


Source: OECD

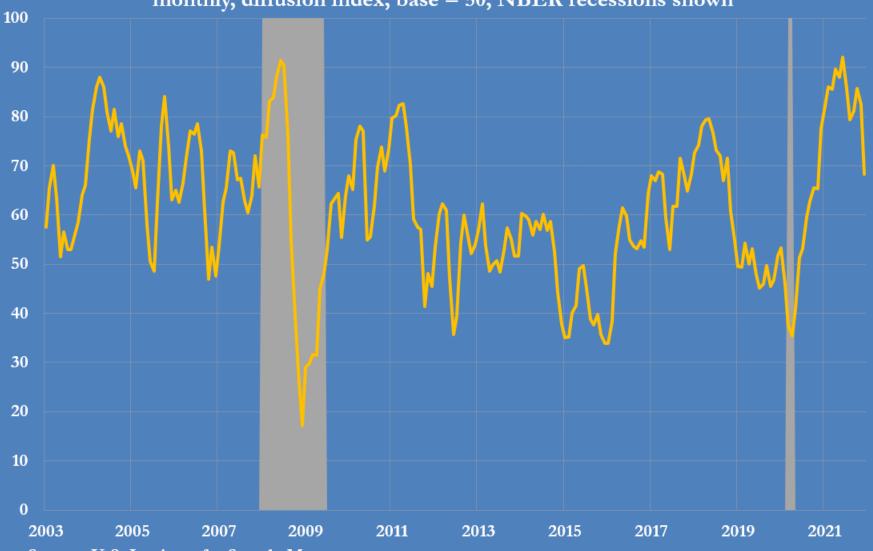
Non-energy commodity prices, 1990-2021 index, base 2010=100, monthly and three-month average



Non-energy commodity prices, 1990-2021 percent change from prior year, monthly and three-month average



U.S. ISM manufacturing prices paid index, 2003-2021 monthly, diffusion index, base = 50, NBER recessions shown

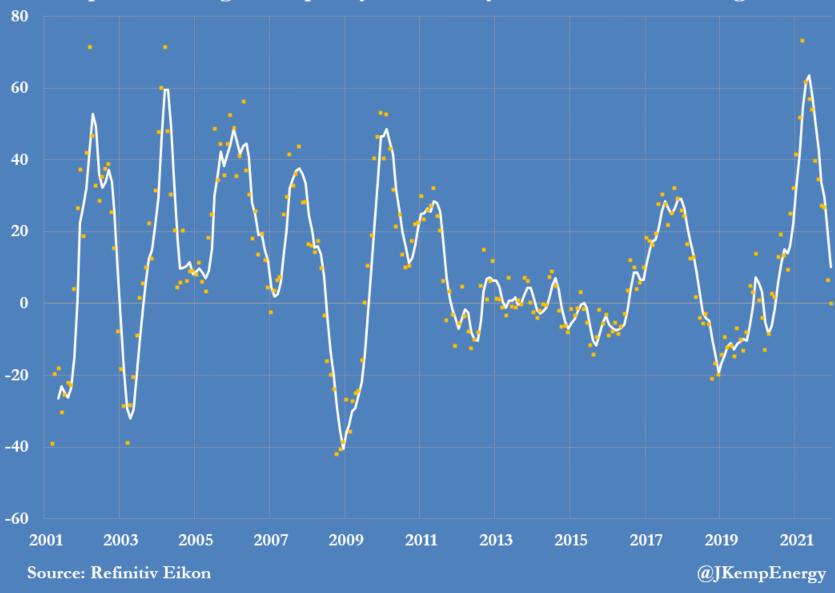


Source: U.S. Institute for Supply Management

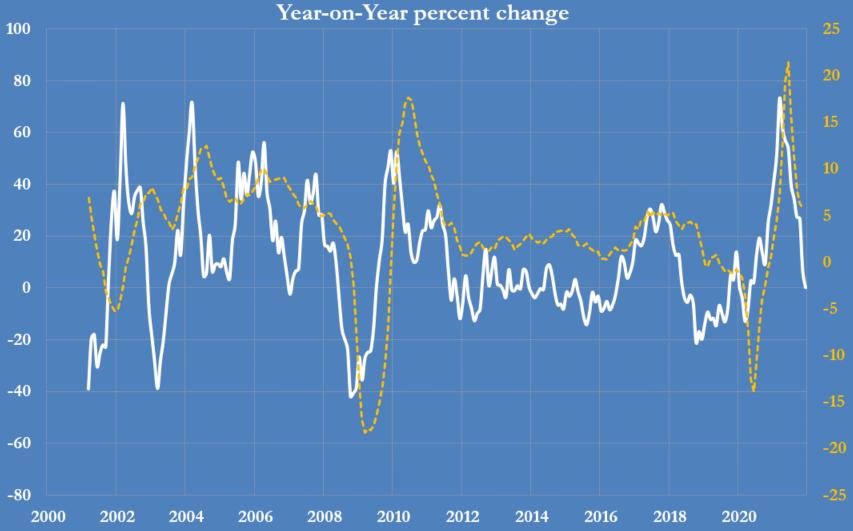
# South Korea's KOSPI-100 equity index, 2001-2021 end-month



South Korea's KOSPI-100 equity index, 2001-2021 percent change from prior year, monthly and three-month average



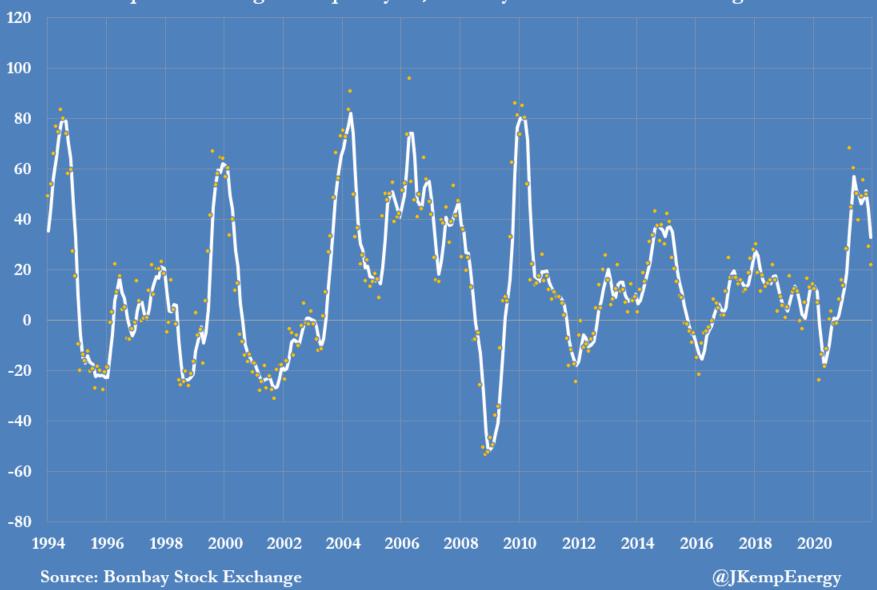
South Korea's KOSPI 100 equity index and world trade



---- World trade volumes (YoY percent change) (right-axis)

Source: CPB, Refinitiv Eikon @JKempEnergy

India's SENSEX equity index, 1994-2021 percent change from prior year, monthly and three-month average



China freight volume, 2011-2021 percent change from prior year, monthly and three-month average

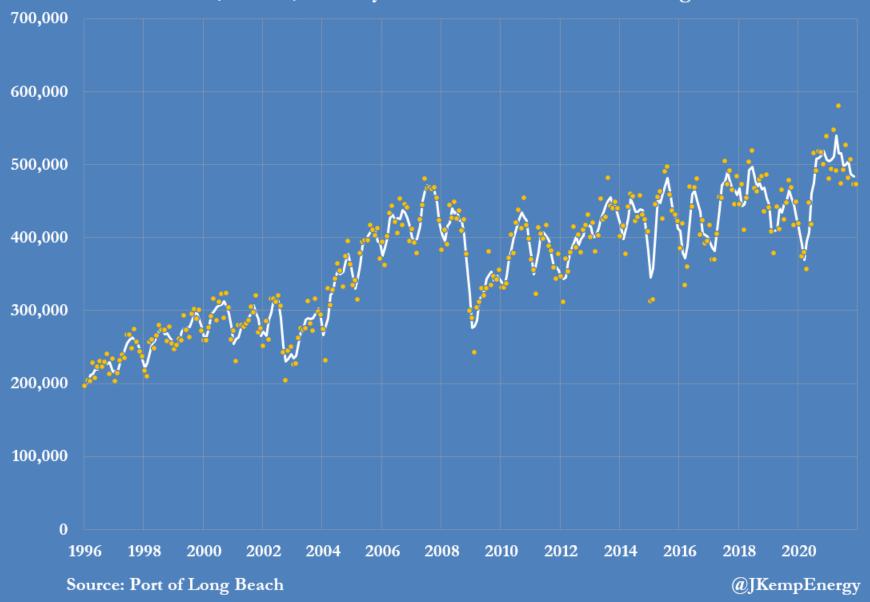


Hong Kong air freight volume, 1999-2021 Percent change compared with prior year, monthly and 3-month average

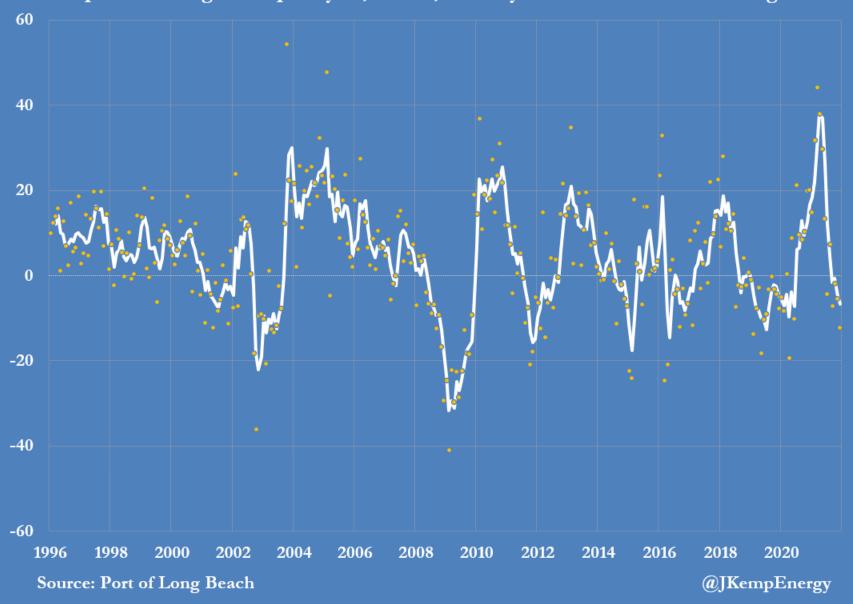


Source: Civil Aviation Department of Hong Kong Special Administrative Region @JKempEnergy

## Port of Long Beach container throughput, 1996-2021 TEUs, loaded, monthly and three-month centred average

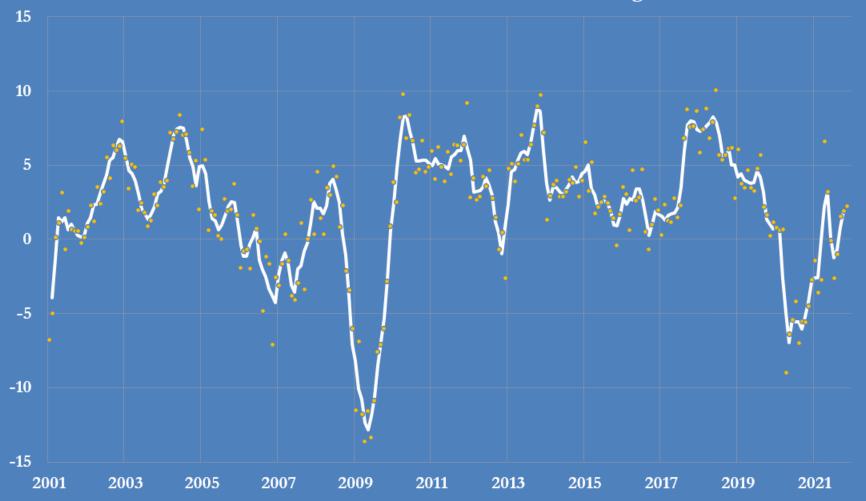


Port of Long Beach container throughput, 1996-2021 percent change from prior year, loaded, monthly and 3-month centred average



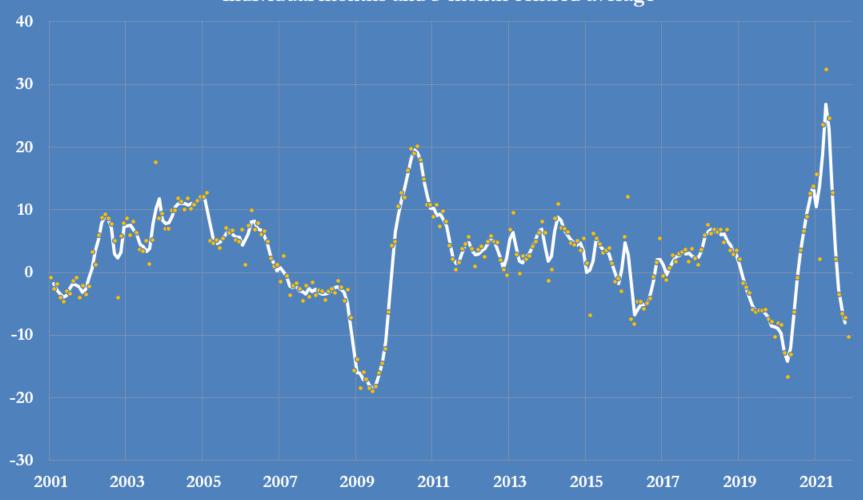
U.S. freight truck tonnage, 2001-2021

percent change compared with prior year individual months and 3-month centred average



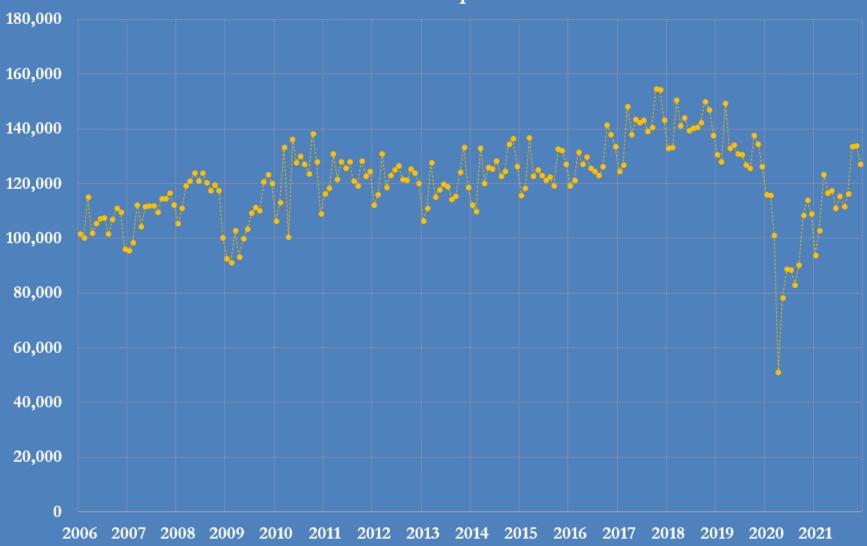
Source: American Trucking Associations via U.S. Bureau of Transportation Statistics

U.S. intermodal rail freight, 2001-2021 percent change compared with prior year individual months and 3-month centred average



Source: Association of American Railroads via U.S. Bureau of Transportation Statistics @JKempEnergy

# London Heathrow air freight volume, 2006-2021 metric tonnes per month



Source: Heathrow Airport Limited

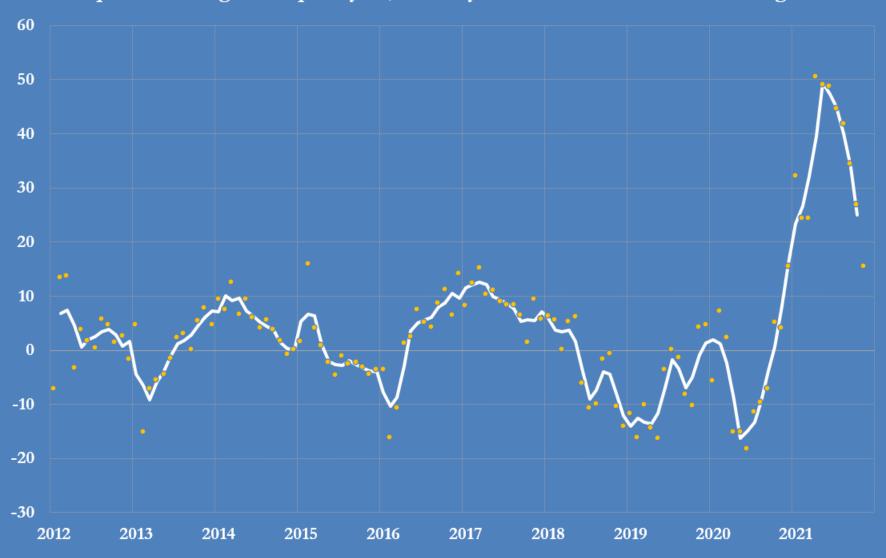
#### London Heathrow air freight volume, 2006-2021

percent change compared with prior year, monthly and 3-month centred average



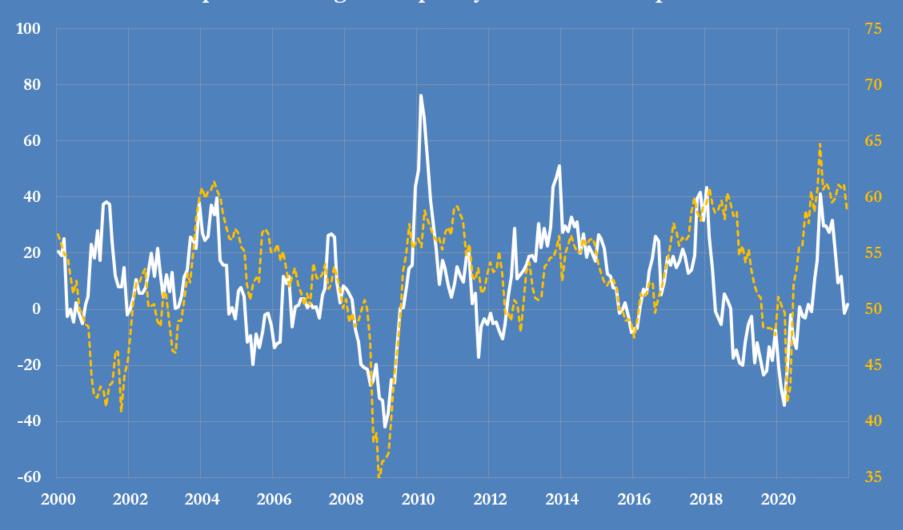
Source: Heathrow Airport Limited

Narita International Airport freight, 2012-2021 percent change from prior year, monthly and three-month centred average



Source: Narita International Airport Corporation

# 3M Corporation share price and ISM manufacturing index percent change from prior year for 3M share price

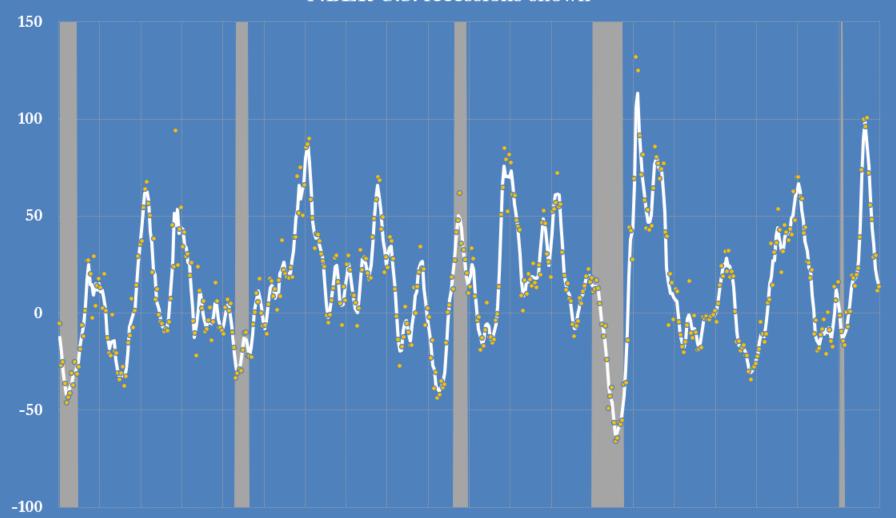


——L-Axis: 3M Corporation share price (12-month percent change)

---- R-axis: ISM composite manufacturing activity index

Sources: NYSE, ISM @JKempEnergy

Caterpillar Inc share price, 1982-2021
percent change from prior year, monthly and three-month centred average
NBER U.S. recessions shown

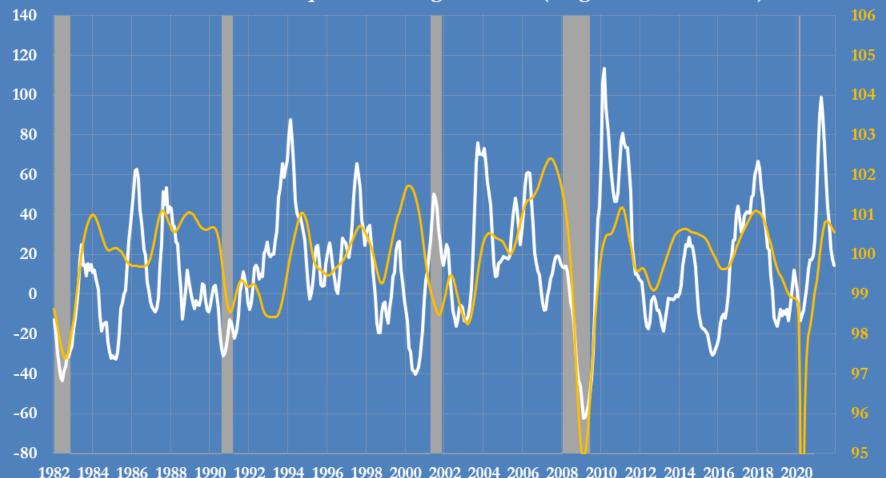


1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020

Source: New York Stock Exchange

#### Caterpillar Inc share price, 1982-2021

L-axis: percent change from prior year, three-month average R-axis: OECD composite leading indicator (long-term trend = 100)

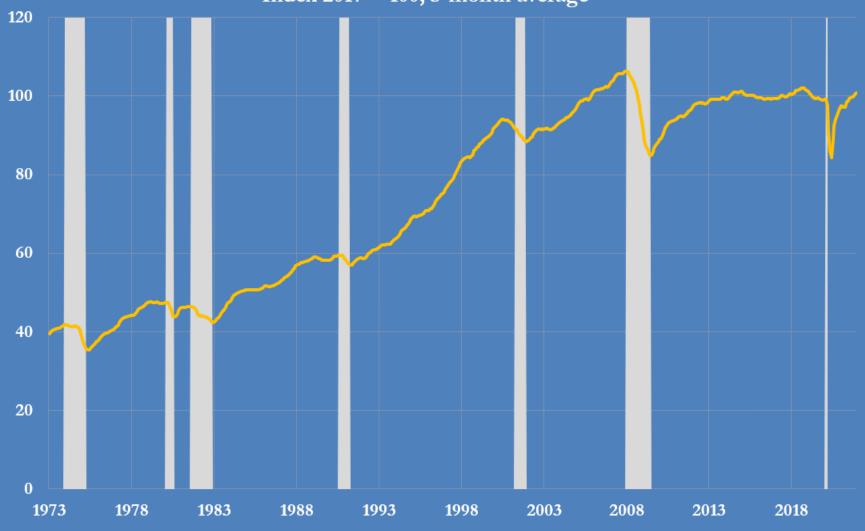


—Caterpillar share price

---OECD leading indicator

Source: OECD, New York Stock Exchange @JKempEnergy

U.S. manufacturing production, 1973-2021 Index 2017 = 100, 3-month average



Recessions (NBER)

--- Manufacturing output (NAICS)

Sources: Federal Reserve, National Bureau of Econonic Research @JKempEnergy

U.S. manufacturing production, 1990-2021 percent change from prior year, monthly and three-month centred average



Sources: Federal Reserve, National Bureau of Econonic Research

U.S. manufacturers' new orders of nondefense capital equipment excluding aircraft, 1993-2021

U.S.\$ bn, monthly and 3-month centred average, not adjusted for inflation

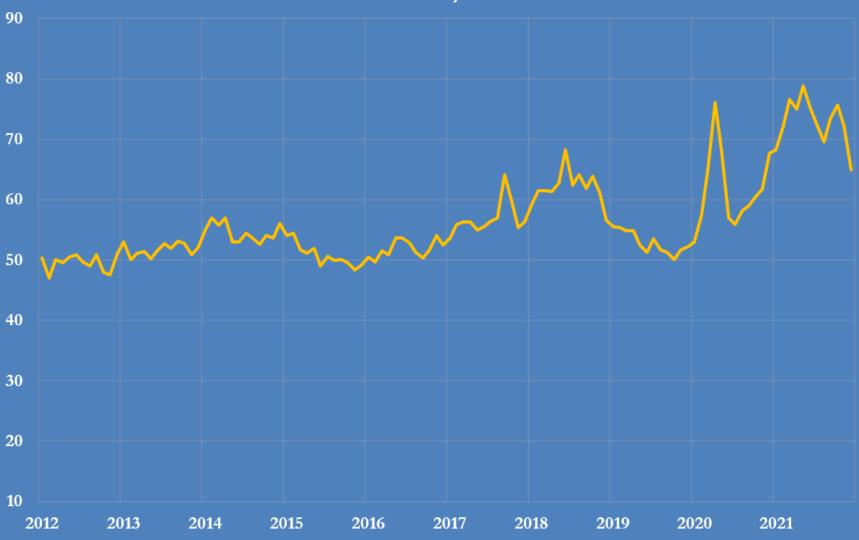


U.S. manufacturers' new orders of nondefense capital equipment excluding aircraft, 1993-2021

Percent change from year earlier, monthly and 3-month centred average



U.S. manufacturers - delays in receiving deliveries from suppliers diffusion index, base = 50



Source: U.S. Institute for Supply Management

# Ratio of inventories to sales for U.S. manufacturers, wholesalers and retailers, 1992-2021

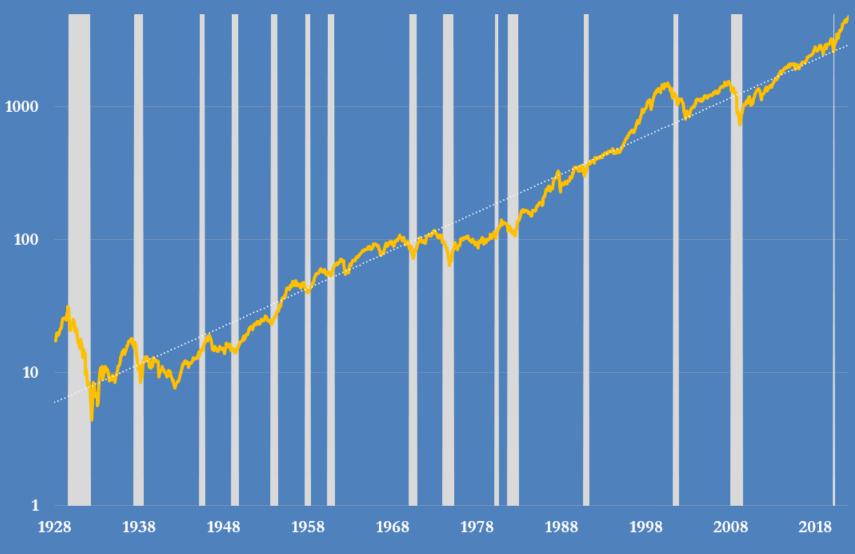


Source: U.S. Bureau of the Census, National Bureau of Economic Research

S&P500 equity index, 1990-2021 percent change from prior year, individual months and 3-month centred average

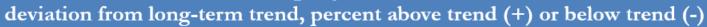


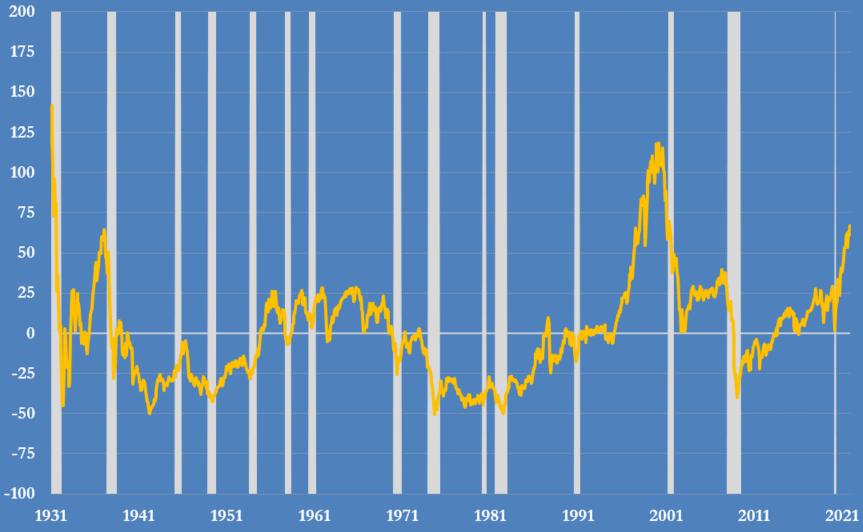
S&P500 equity index, 1928-2021 semi-log scale, with NBER recessions



Source: Refinitiv Eikon

S&P500 equity index, 1931-2021

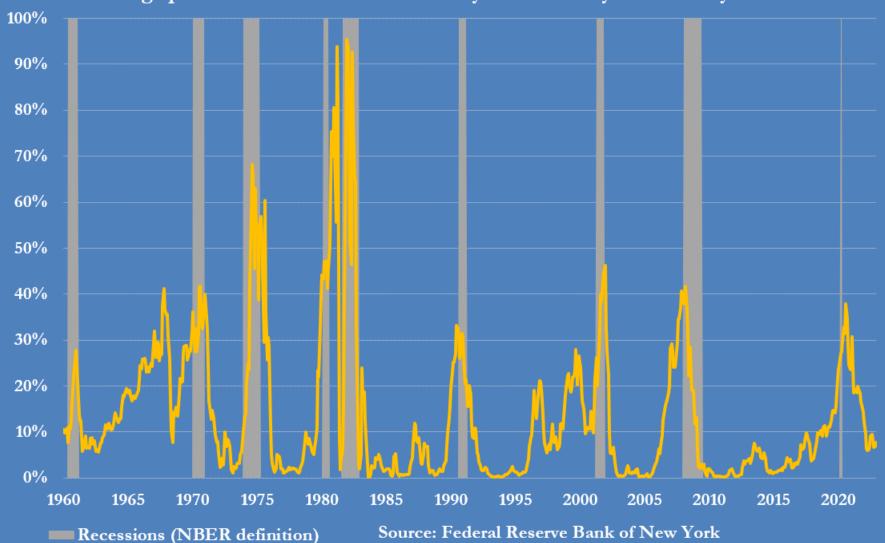




Source: Refinitiv Eikon

#### Probability of U.S. recession 12-months ahead, 1960-2022

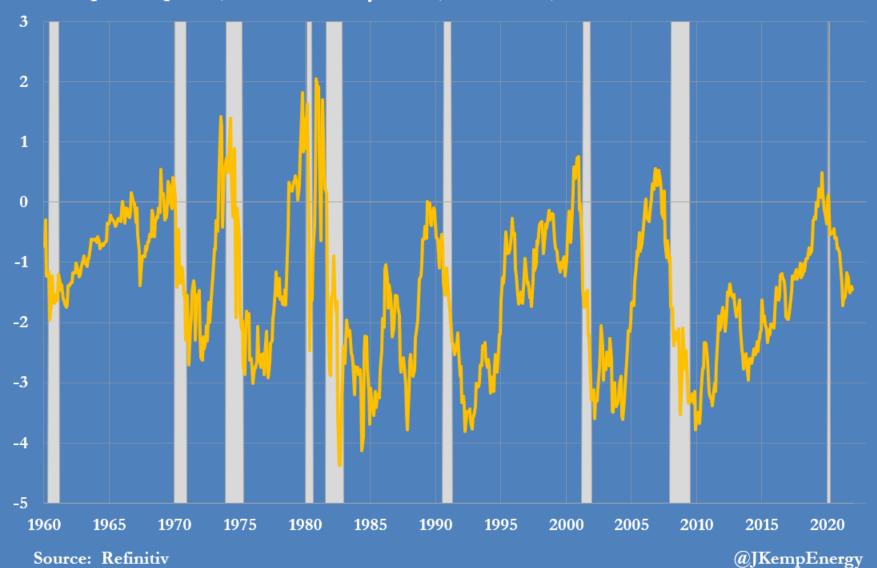
Based on Federal Reserve Bank of New York's yield-curve model Using spread between 3-month Treasury bills and 10-year Treasury Notes



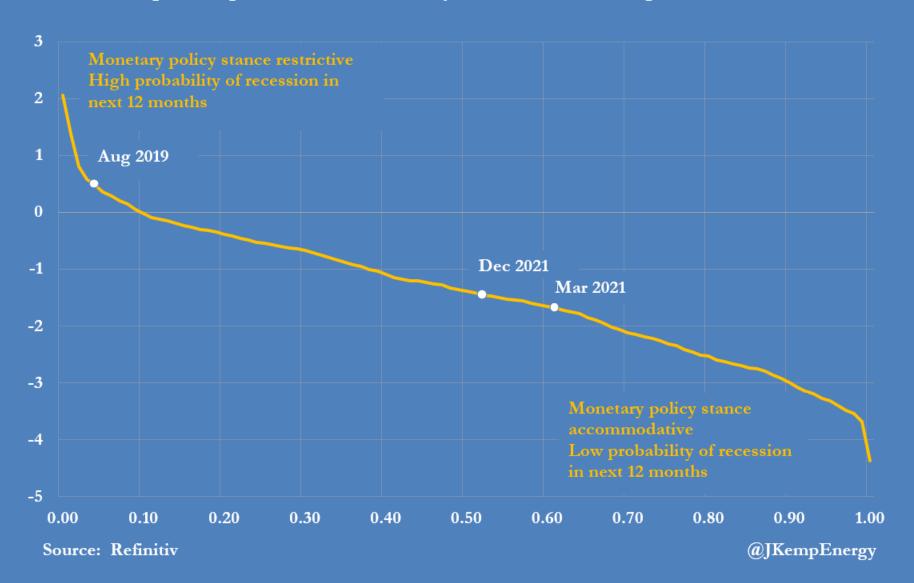
@JKempEnergy

Recession implied probability

U.S. Treasury Yield Curve and Recessions, 1960-2021 percent points, 3 mth bills - 10 yr notes, month-end, NBER recessions shown



U.S. Treasury yield curve, 1960-2021 percent points, 3 mth bills - 10 yr notes, month-end, percentiles



United States real effective exchange rate, 1994-2021 monthly, trade-weighted, index 2010 = 100



Source: Bank for International Settlements