

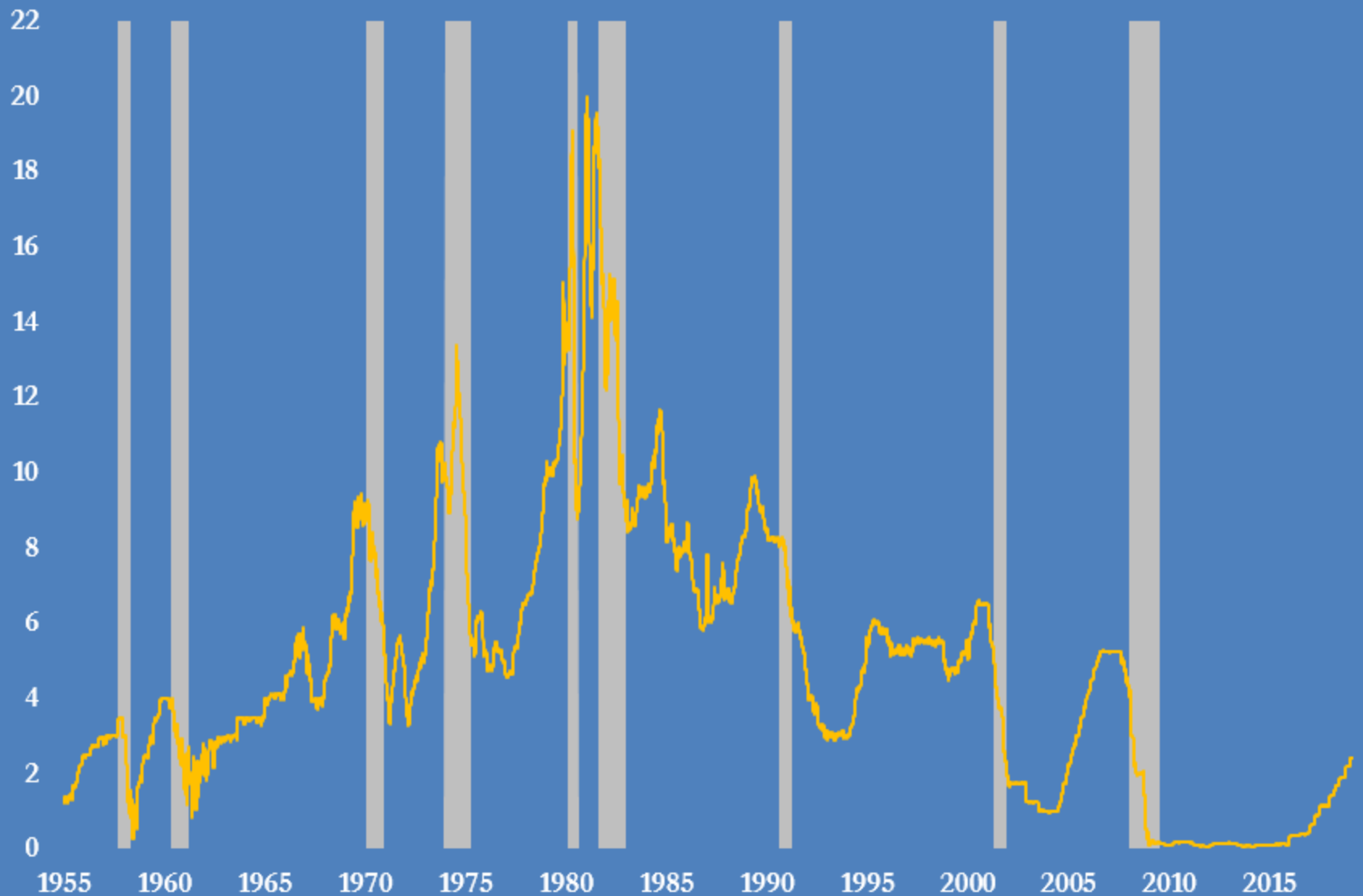
# U.S. external balance

## Selected indicators

**JOHN KEMP**  
**REUTERS**  
7 March 2019

# Effective federal funds rate, 1955-2019

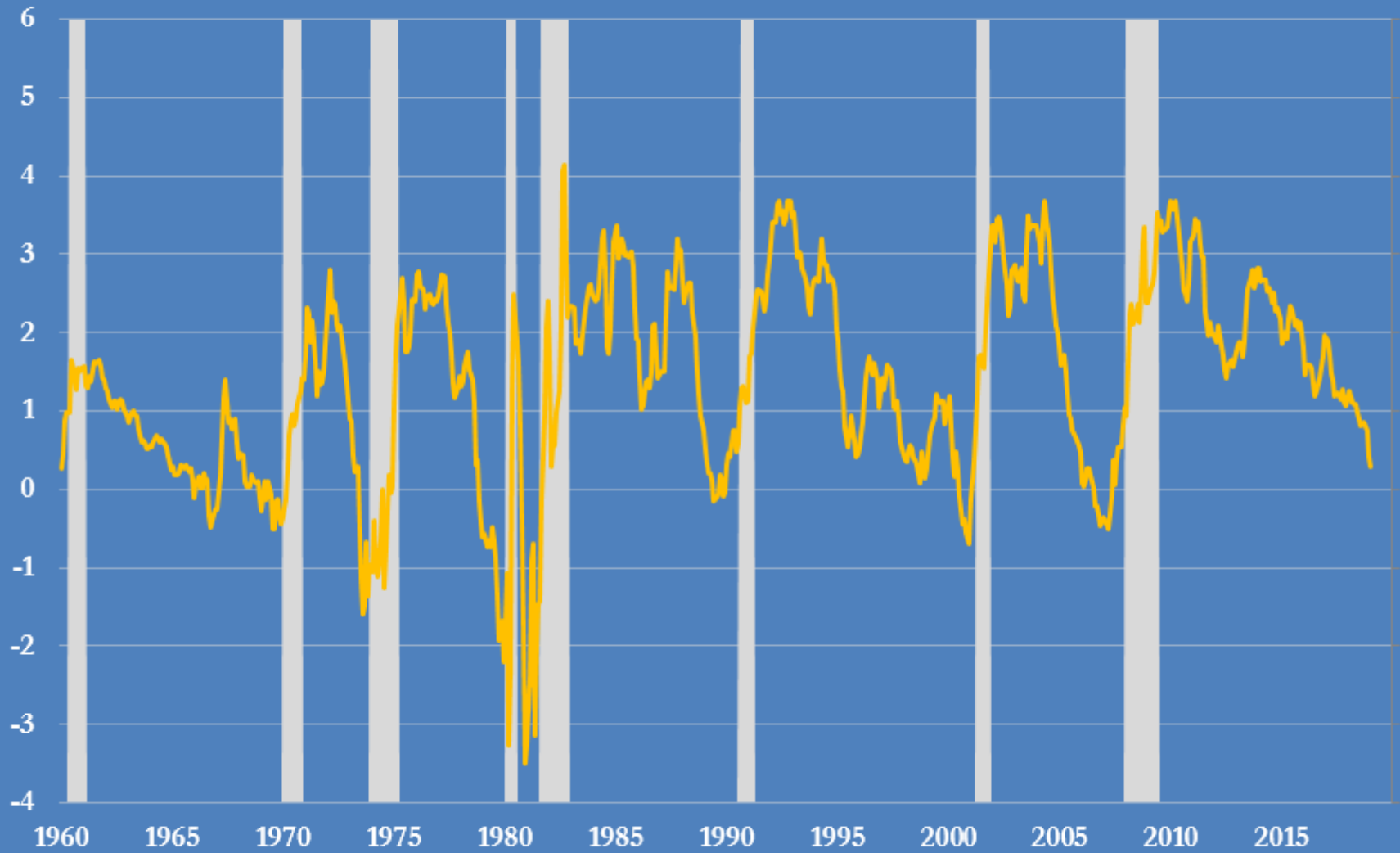
annualised percent, 20-day average, NBER recessions shown



Sources: Board of Governors of Federal Reserve System, National Bureau of Economic Research  
@JKempEnergy

# U.S. Treasury Yield Curve and Recessions, 1960-2019

## Spread between 3-month Treasury bills and 10-year Treasury Notes

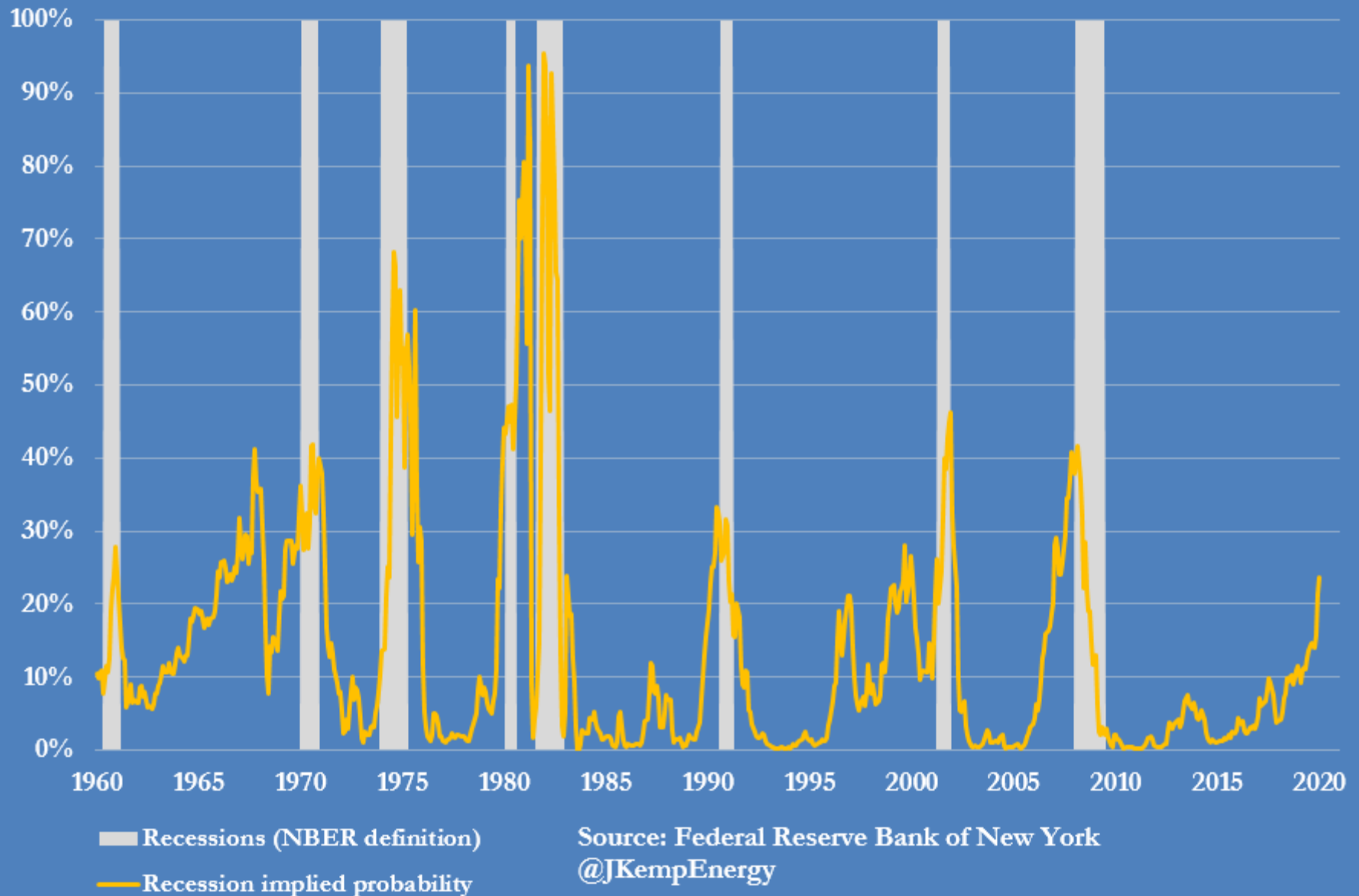


■ Recessions (NBER definition)  
— Yield curve spread (10yr-3mth)

Source: Federal Reserve Bank of New York  
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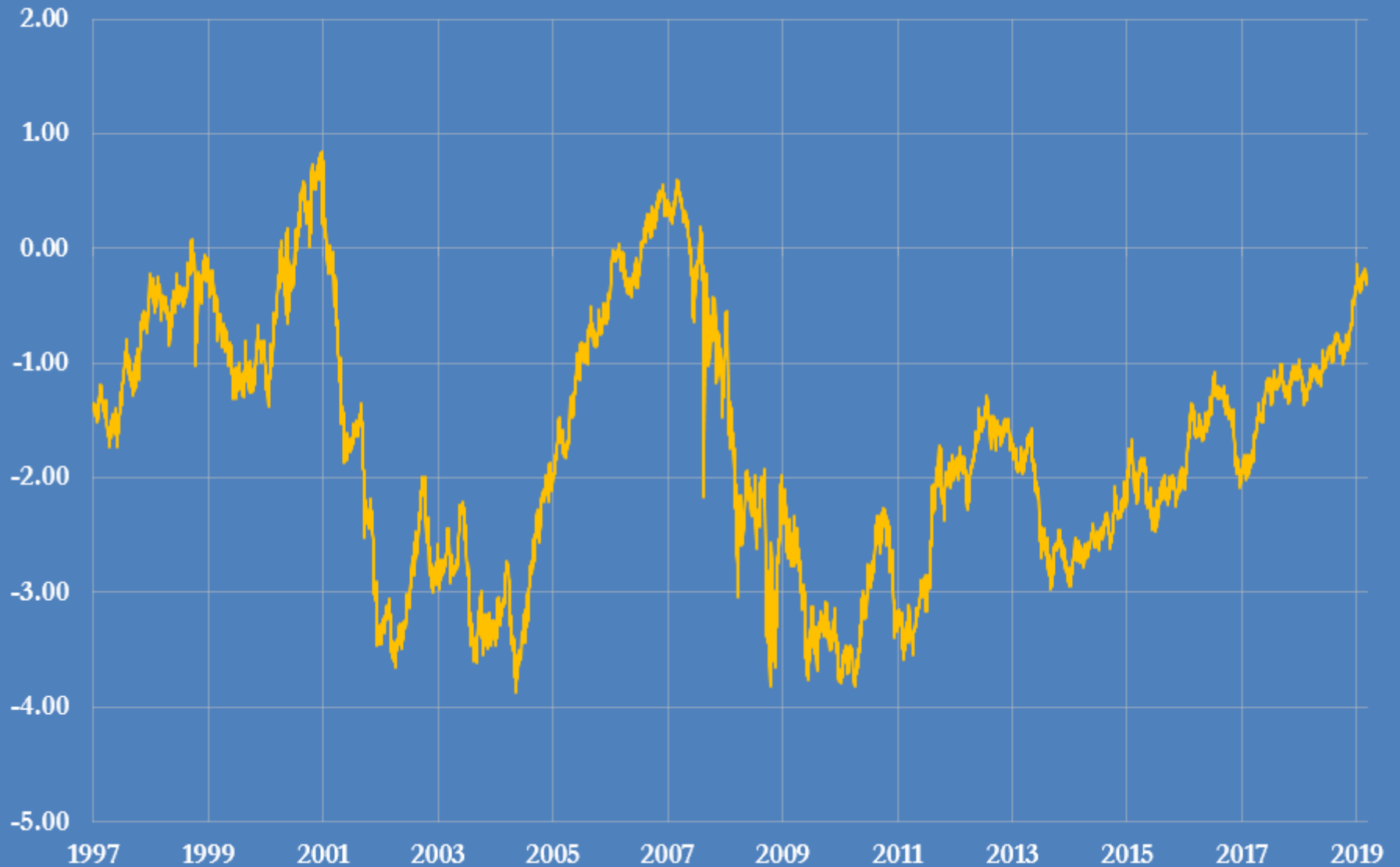
# Probability of U.S. recession 12-months ahead, 1960-2020

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



# U.S. Treasury yield curve, 1997-2019

Percent points, 3mth bills - 10yr notes



Source: Refinitiv

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# U.S. Treasury yield curve, 2018-2019

## Percent points, 3mth bills - 10yr notes



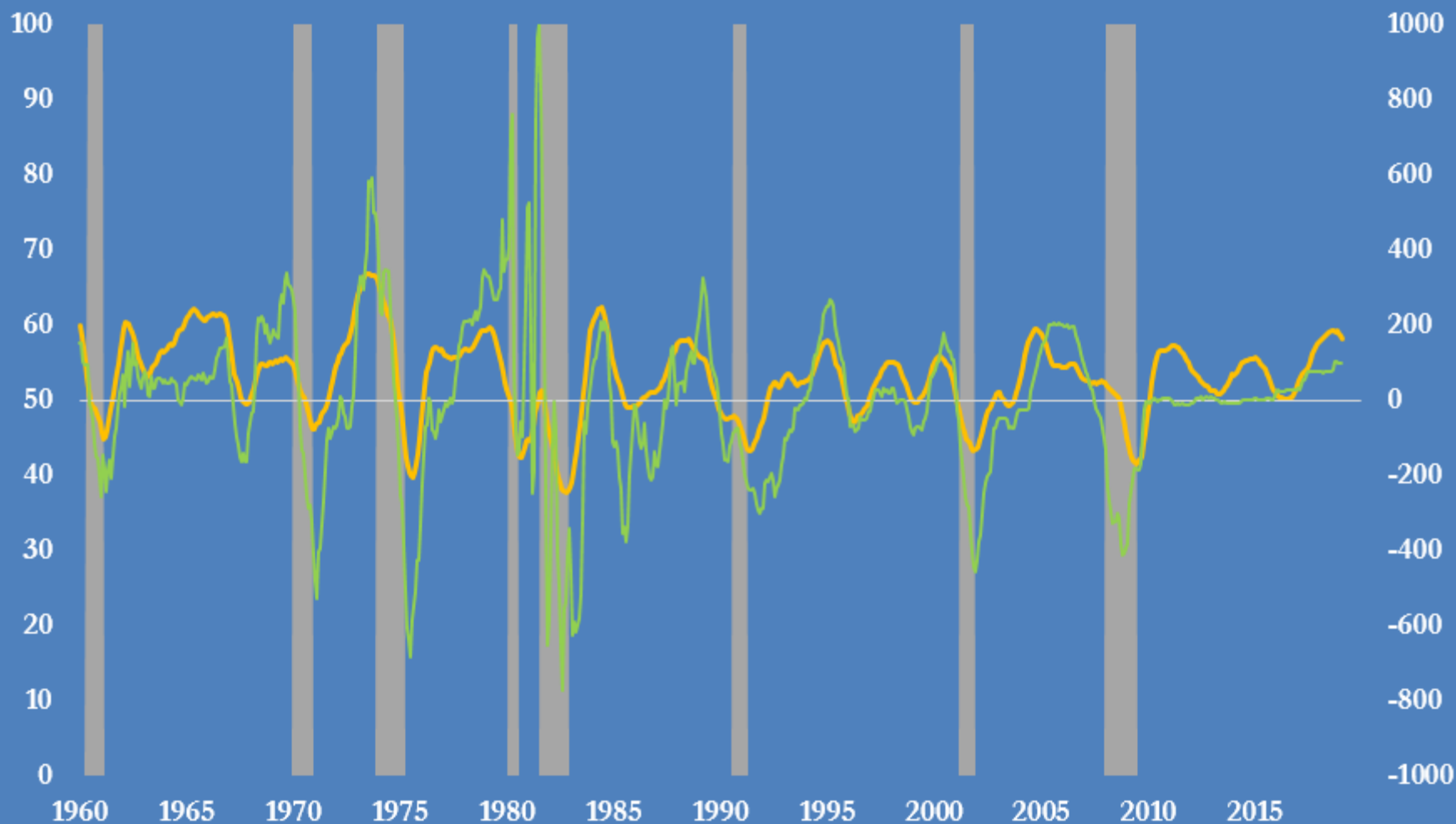
Source: Refinitiv

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# U.S manufacturing activity and short-term interest rates

ISM composite index (12-month average)

Effective fed funds rate (basis points, change from year earlier)



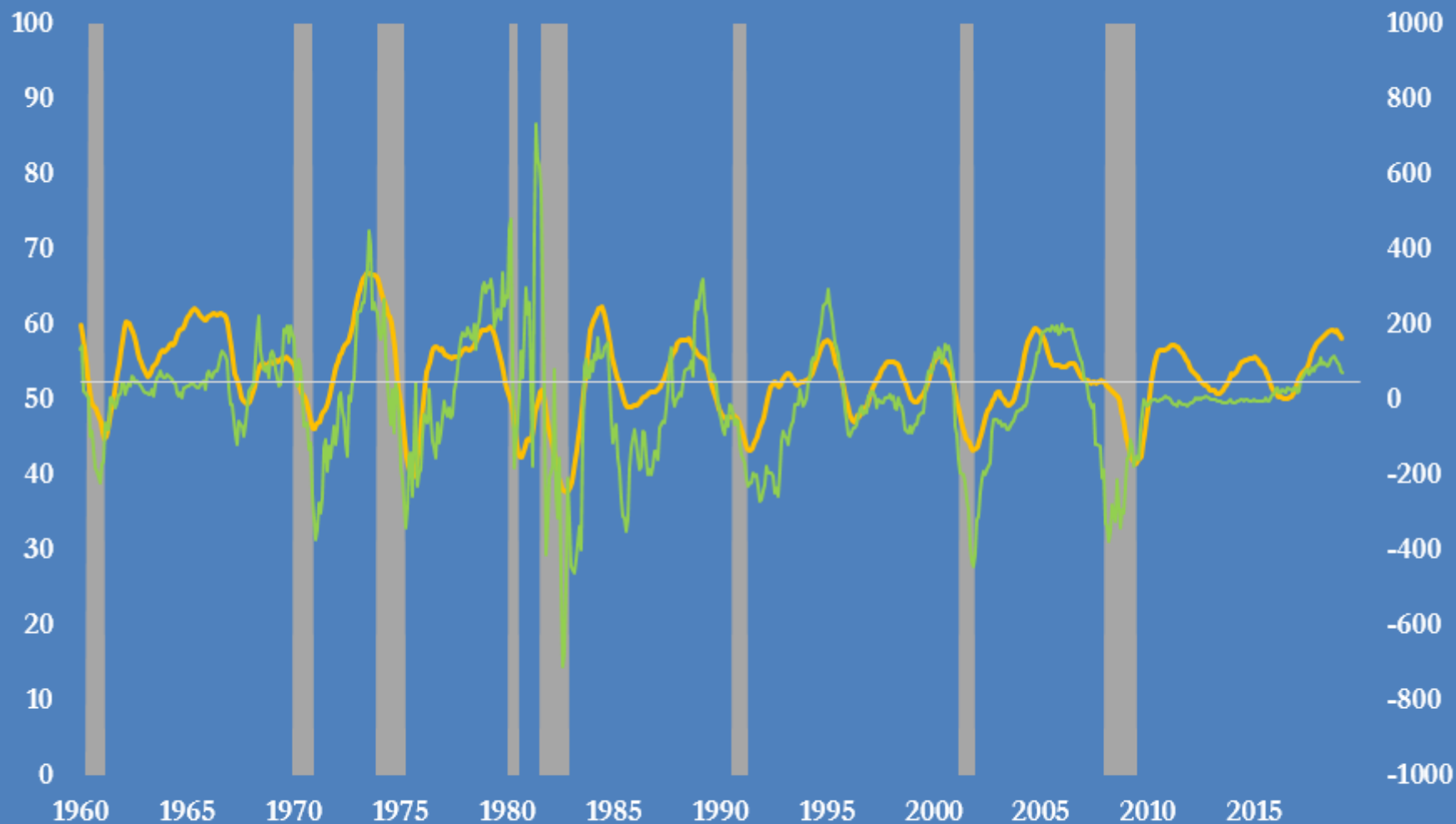
- NBER recessions
- ISM manufacturing index (left axis)
- Effective federal funds rate (right-axis)

Sources: Institute for Supply Management, Federal Reserve, NBER, Refinitiv, @JKempEnergy

# U.S manufacturing activity and short-term interest rates

ISM composite index (12-month average)

3-month U.S. Treasury bill yields (basis points, change from year earlier)



- NBER recessions
- 3-month Treasury bill yield (right-axis)
- ISM manufacturing index (left axis)

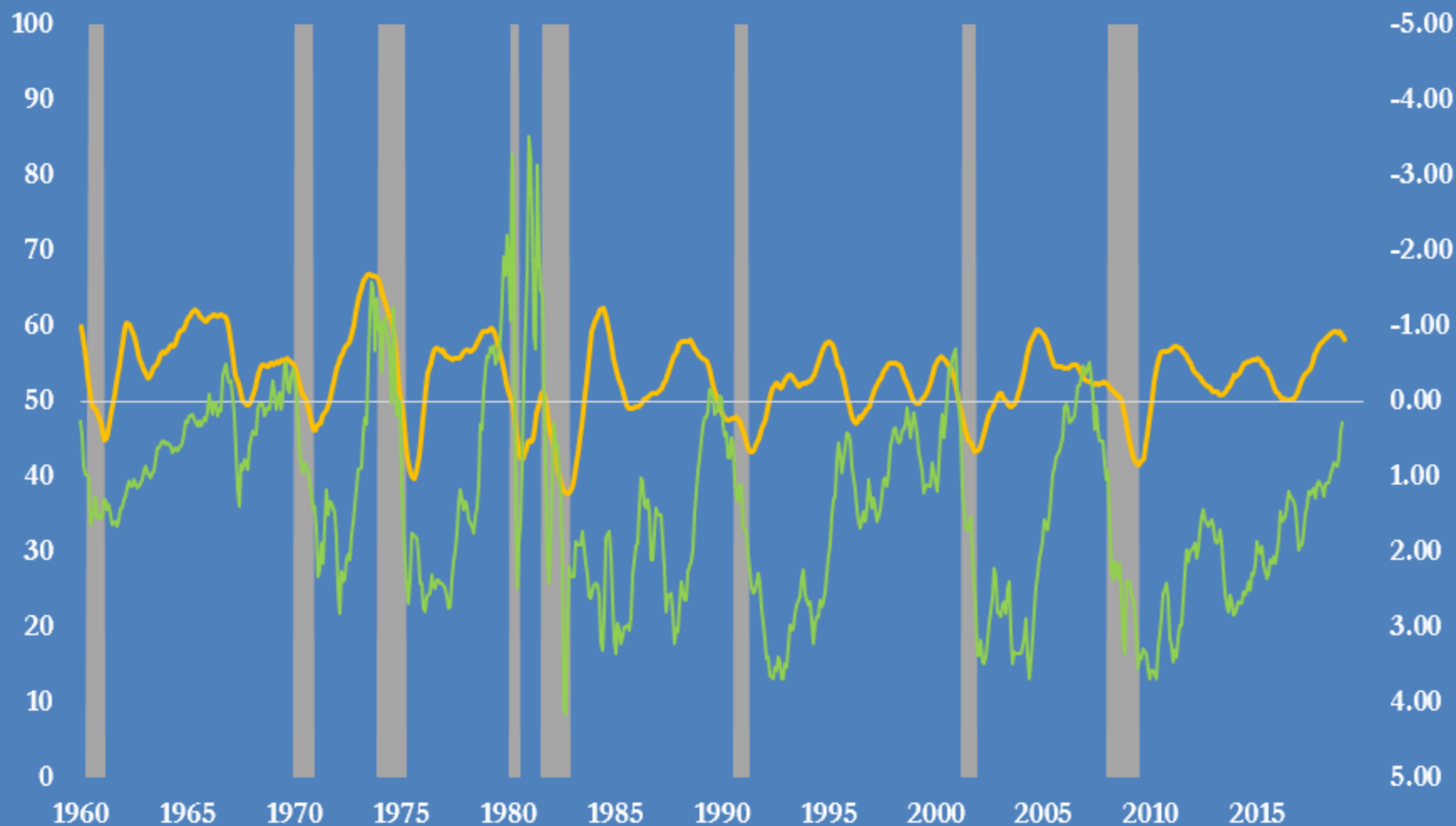
Sources: Institute for Supply Management, Federal Reserve, NBER, Refinitiv, @JKempEnergy



# U.S manufacturing activity and short-term interest rates

ISM composite index (12-month average)

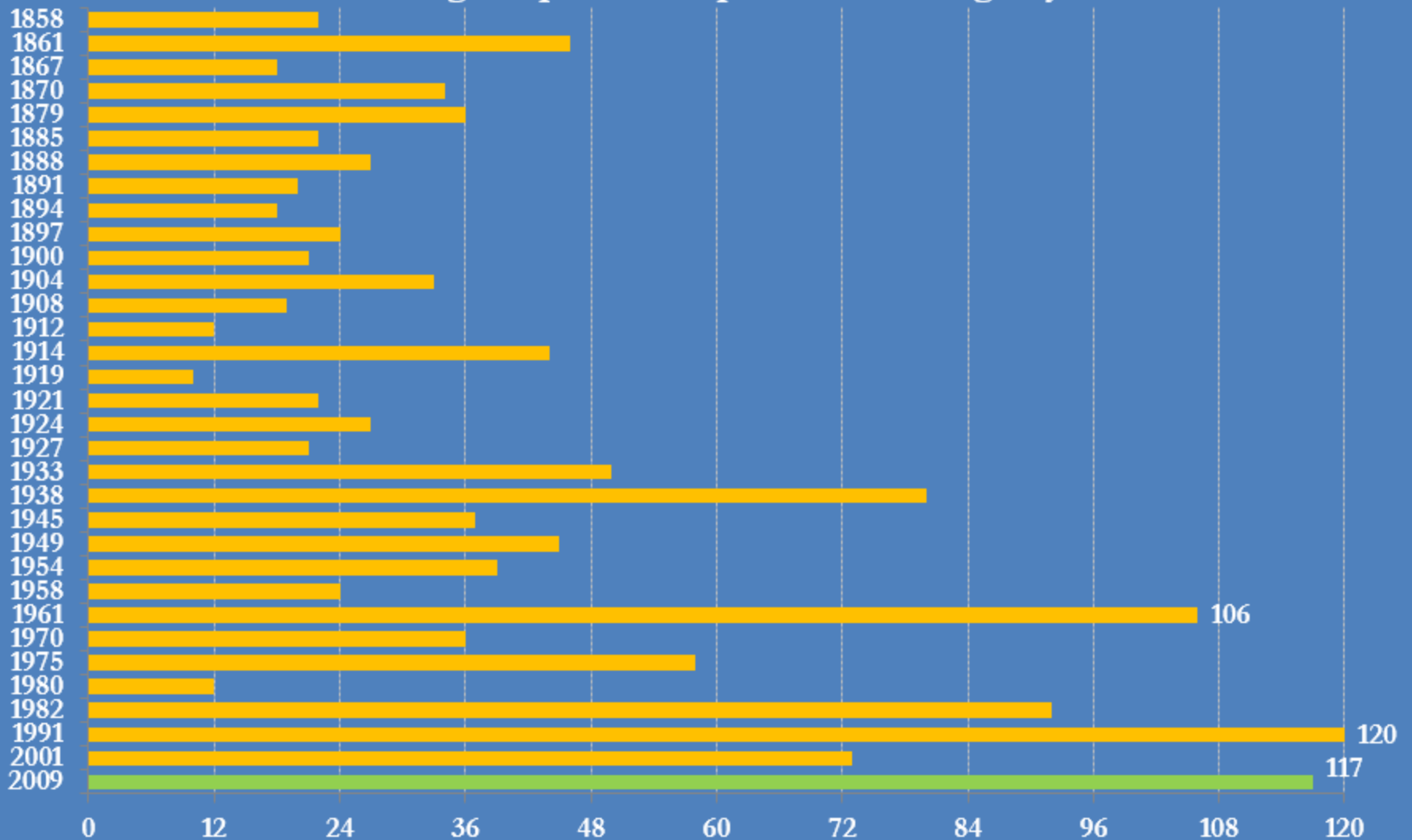
Yield spread 3mth-10yr Treasuries (percent points)



- NBER recessions
- ISM manufacturing index (left axis)
- Yield spread (right-axis)

Sources: Institute for Supply Management, New York Fed, NBER, Refinitiv, @JKempEnergy

## Duration of U.S. business cycles (expansion phase) since 1858 months from trough to peak for expansions starting in years shown



Source: National Bureau of Economic Research

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