Predicting the next recession

Report Validation

Moises Evangelista
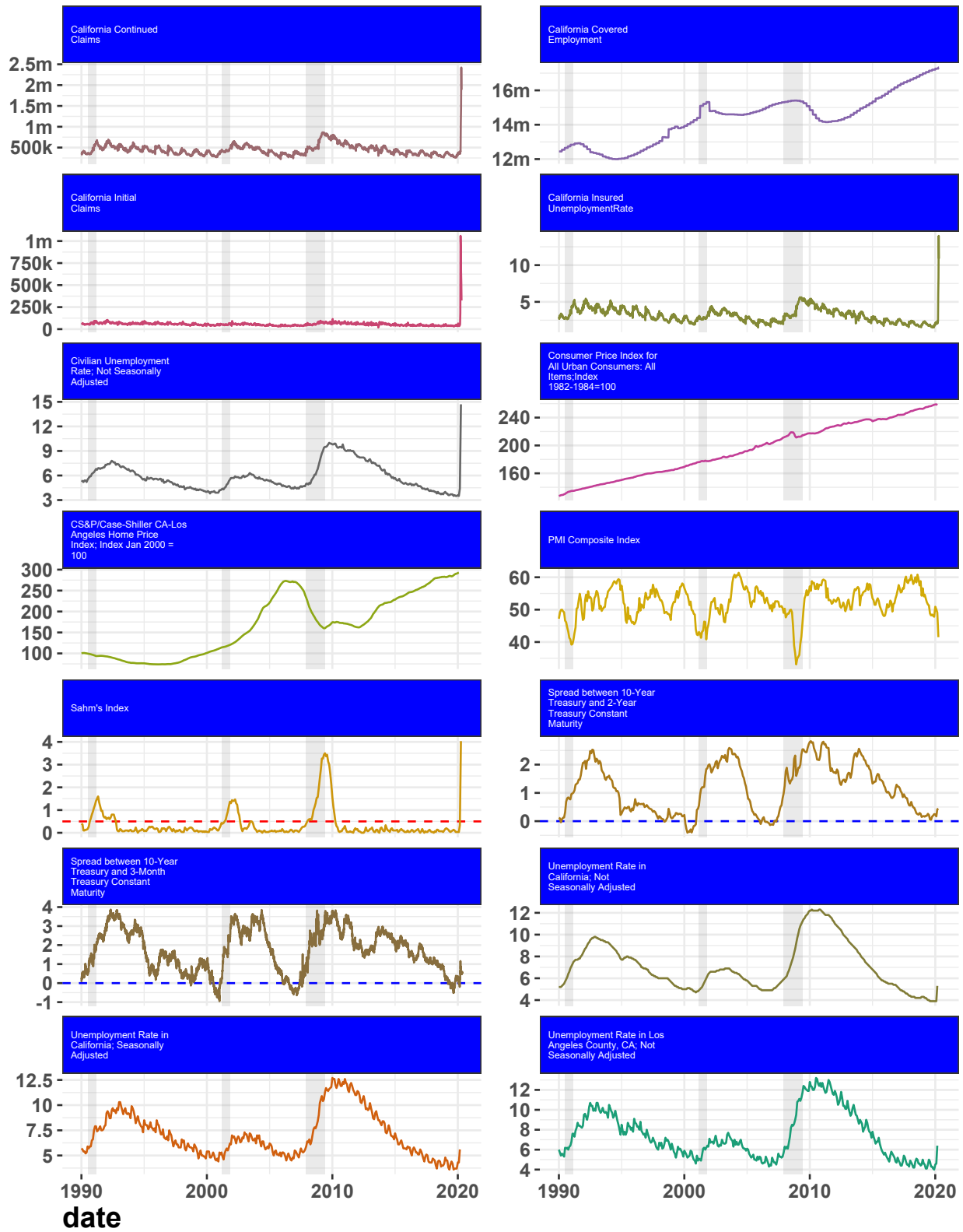
Prepared May 10, 2020
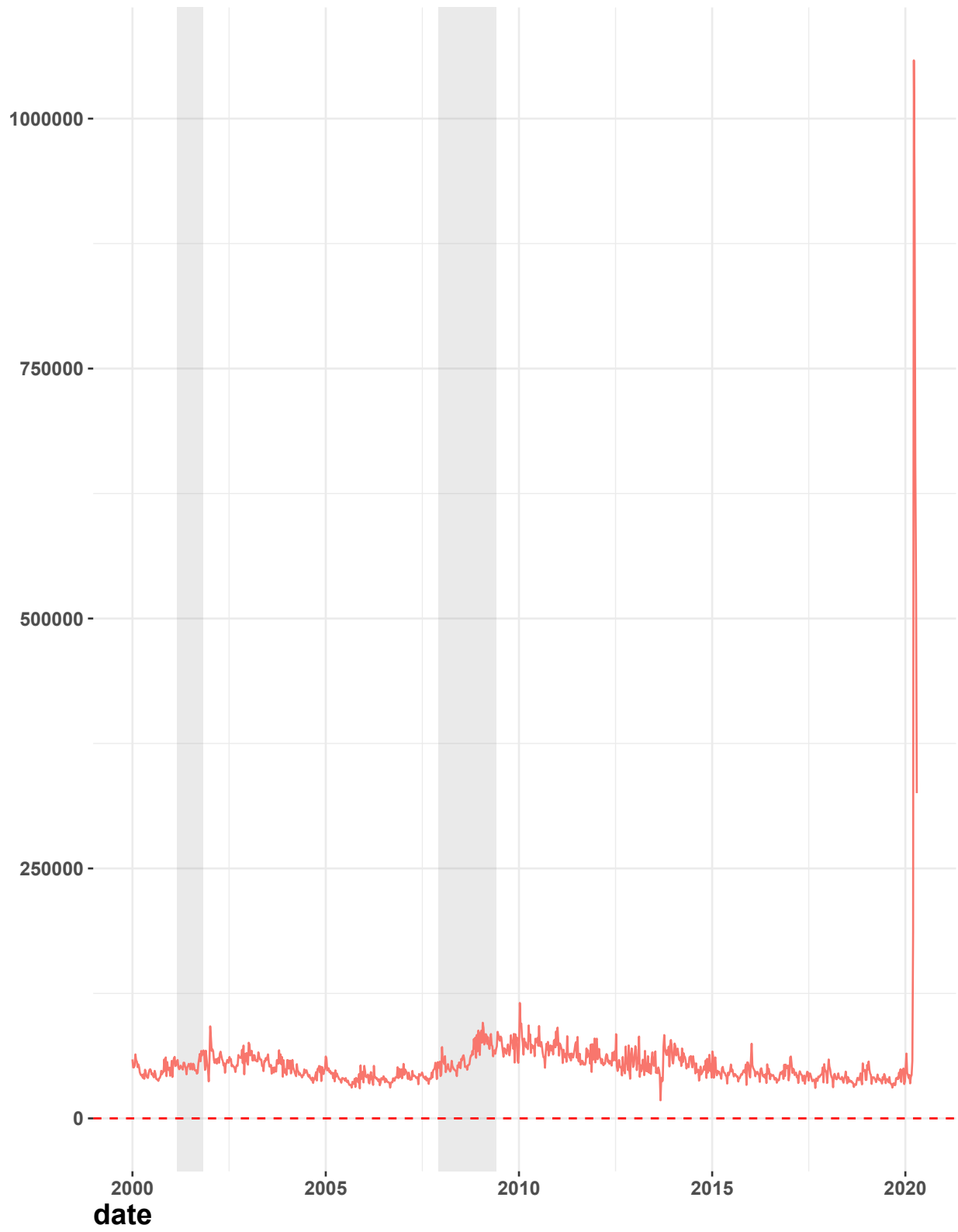
Contents
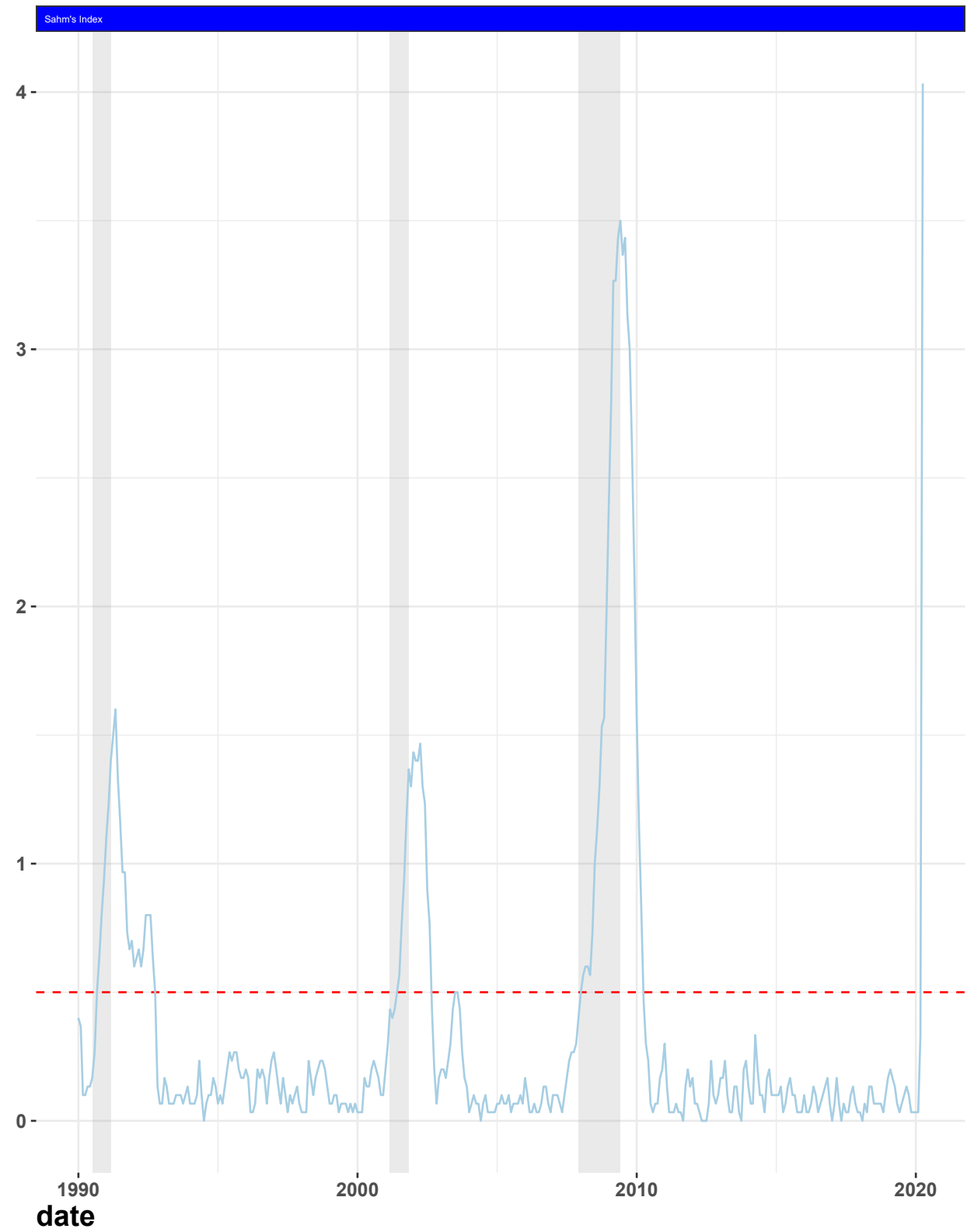
R Markdown

This is an analysis of an index developed by Claudia Sahm and other recession predicting data
https://www.hamiltonproject.org/assets/files/Sahm_web_20190506.pdf

California Continued Claims

California Covered Employment

California Initial Claims

California Insured UnemploymentRate

Civilian Unemployment Rate; Not Seasonally Adjusted

Consumer Price Index for All Urban Consumers: All Items;Index 1982-1984=100

CS&P/Case-Shiller CA-Los Angeles Home Price Index; Index Jan 2000 = 100

PMI Composite Index

Sahm's Index

Spread between 10-Year Treasury and 2-Year Treasury Constant Maturity

Spread between 10-Year Treasury and 3-Month Treasury Constant Maturity

Unemployment Rate in California; Not Seasonally Adjusted

Unemployment Rate in California; Seasonally Adjusted

Unemployment Rate in Los Angeles County, CA; Not Seasonally Adjusted

date

2

date

3

Sahm's Index

date

```
## 
## Call:
```

```
## lm(formula = value ~ ContinuedClaims, data = comboUnempCorr)
##
## Residuals:
##      Min      1Q   Median      3Q      Max
## -10.1957  -1.0178  -0.2153   0.8913   4.2471
##
## Coefficients:
##                     Estimate  Std. Error t value            Pr(>|t|)
## (Intercept)     1.044669664 0.309025970   3.381            0.000803 ***
## ContinuedClaims 0.000013421 0.000000663  20.243 < 0.0000000000000002 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.528 on 361 degrees of freedom
##   (1 observation deleted due to missingness)
## Multiple R-squared:  0.5316, Adjusted R-squared:  0.5303
## F-statistic: 409.8 on 1 and 361 DF,  p-value: < 0.00000000000000022

##         1
## 26.37752

##   ContinuedClaims
## 1       19.29157
## attr(,"constant")
## [1] 7.08595
```

Scatter plot of Calif Unemployment and Continued Claims
based on 364 months of data