

# Forecasting Oil Prices using Wavelets

Ashwin Kachhara, 10D070048

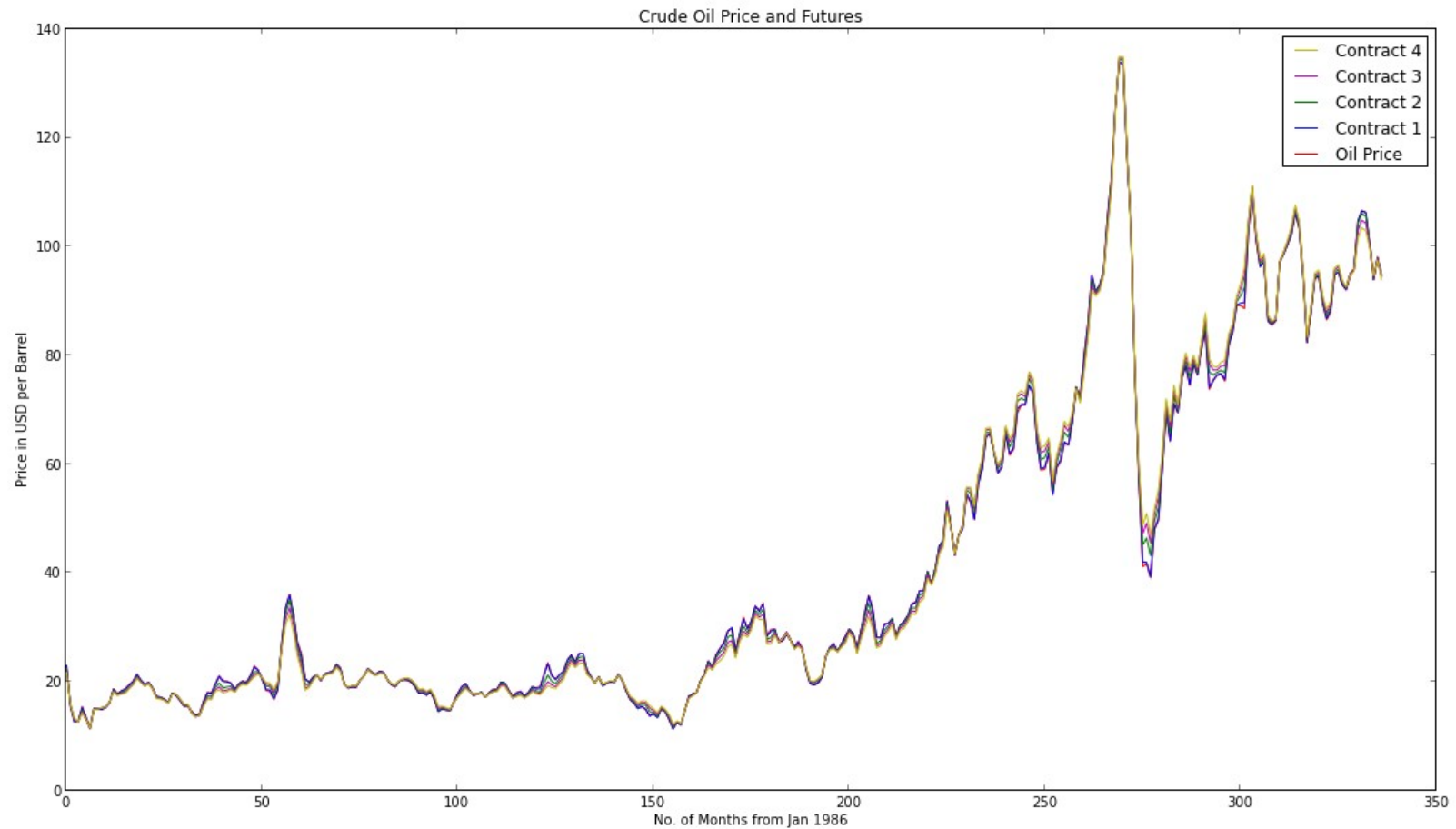
Sumeet Fefar, 10D070001

Ankit Agrawal, 10D070027

# Wavelet Analysis

- Decomposes signal into an approximation and detail, or coarse and fine
- Notable impact in geophysics, data processing, image compression, detection of discontinuities, neural networks
- Known to perform better where other methods fail

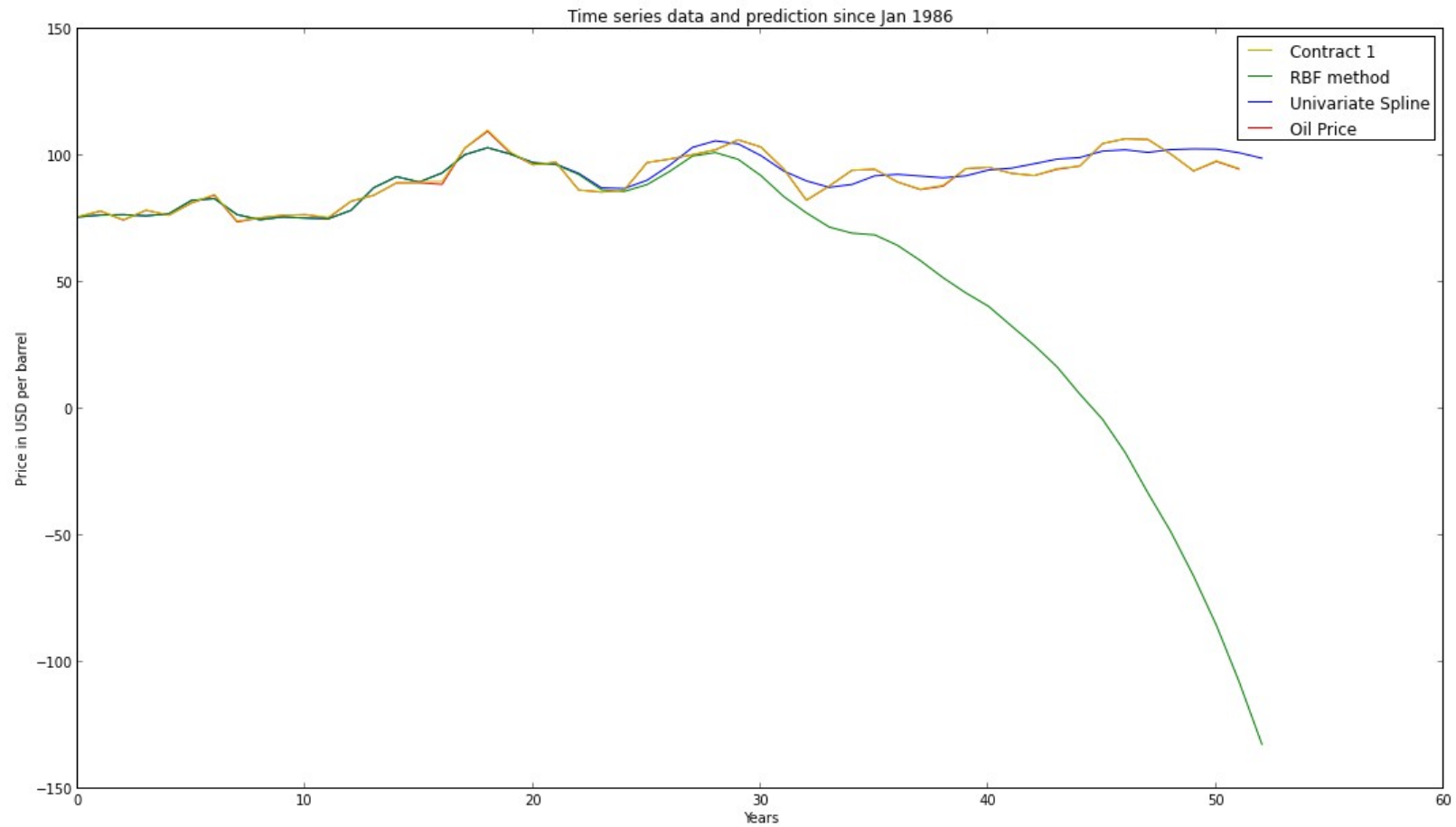
# Oil Prices – Futures Market



# Forecasting Methodology

- Wavelet Decomposition by suitable wavelet
- Modeling of decomposed signals
  - Univariate Spline
  - Radial Basis Function
  - Trigonometric Fitting (Sine)
- Extension by interpolation
- Wavelet Reconstruction of extended signals

# Results (Latest 52 months)



Thank you!