

Visualizing the impact of OPEC crude oil supply disruption on WTI

Comparing OPEC and non-OPEC using
disruption analysis

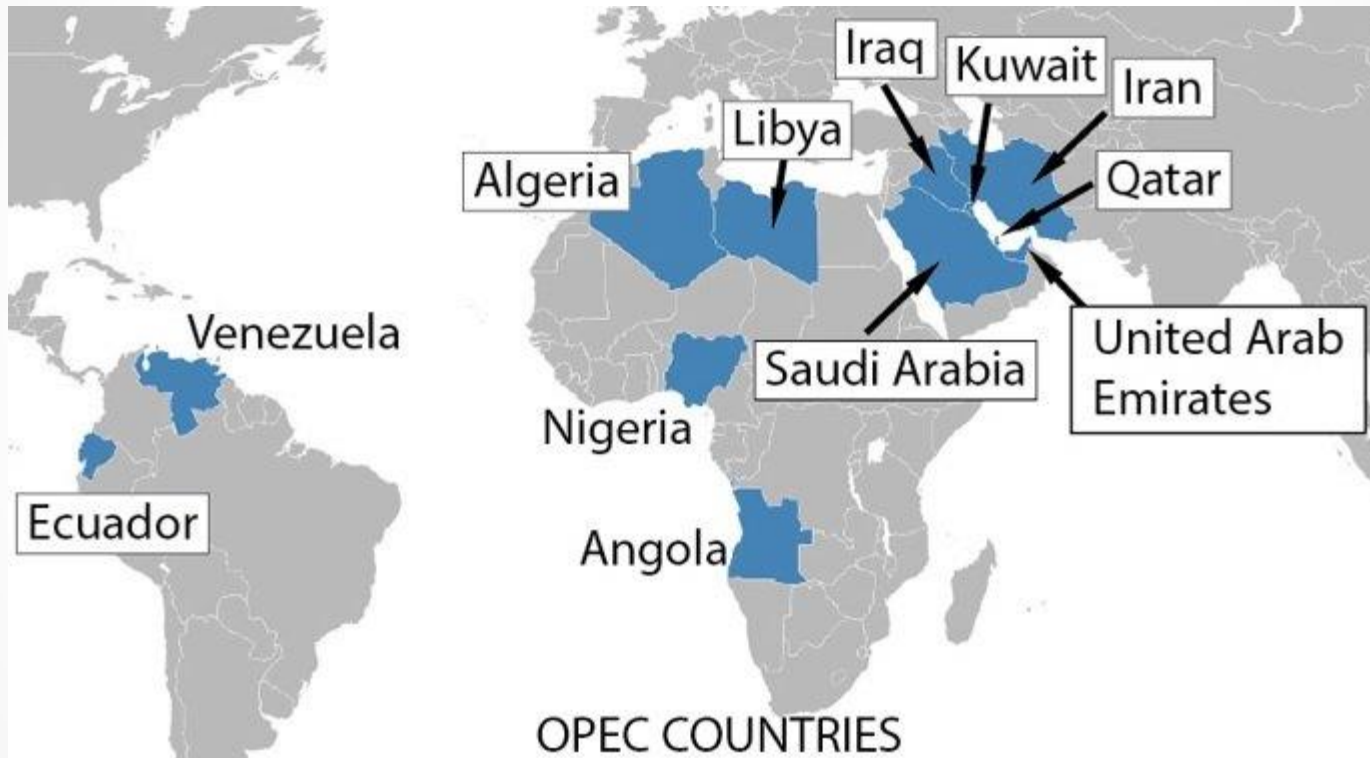
The Plan

- Use visualization to show OPEC, non-OPEC and Saudi Arabia crude oil disruptions and its impact WTI.
- Bring in other data sources to facilitate the analysis/visualization.
- See if it is possible to develop predictive relationship between the variables.
- Use the app to spot a pattern, and where the variables are possibly co-trending.

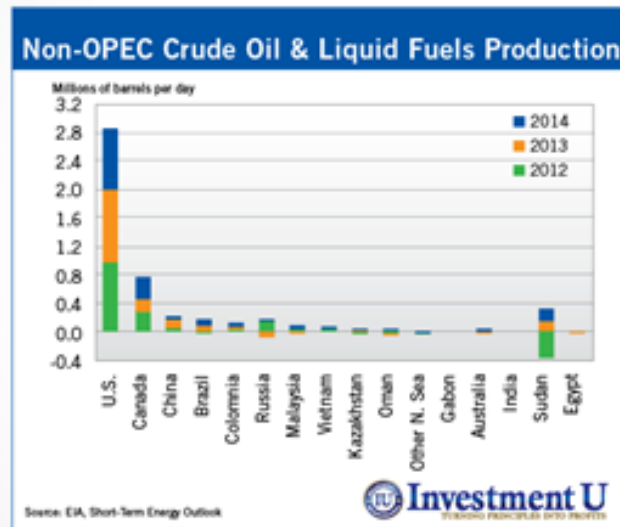
The Challenge

- Limited sample data size.
- Data were aggregated on different scale which made the analysis difficult and to visualize.
- Issues with missing data.

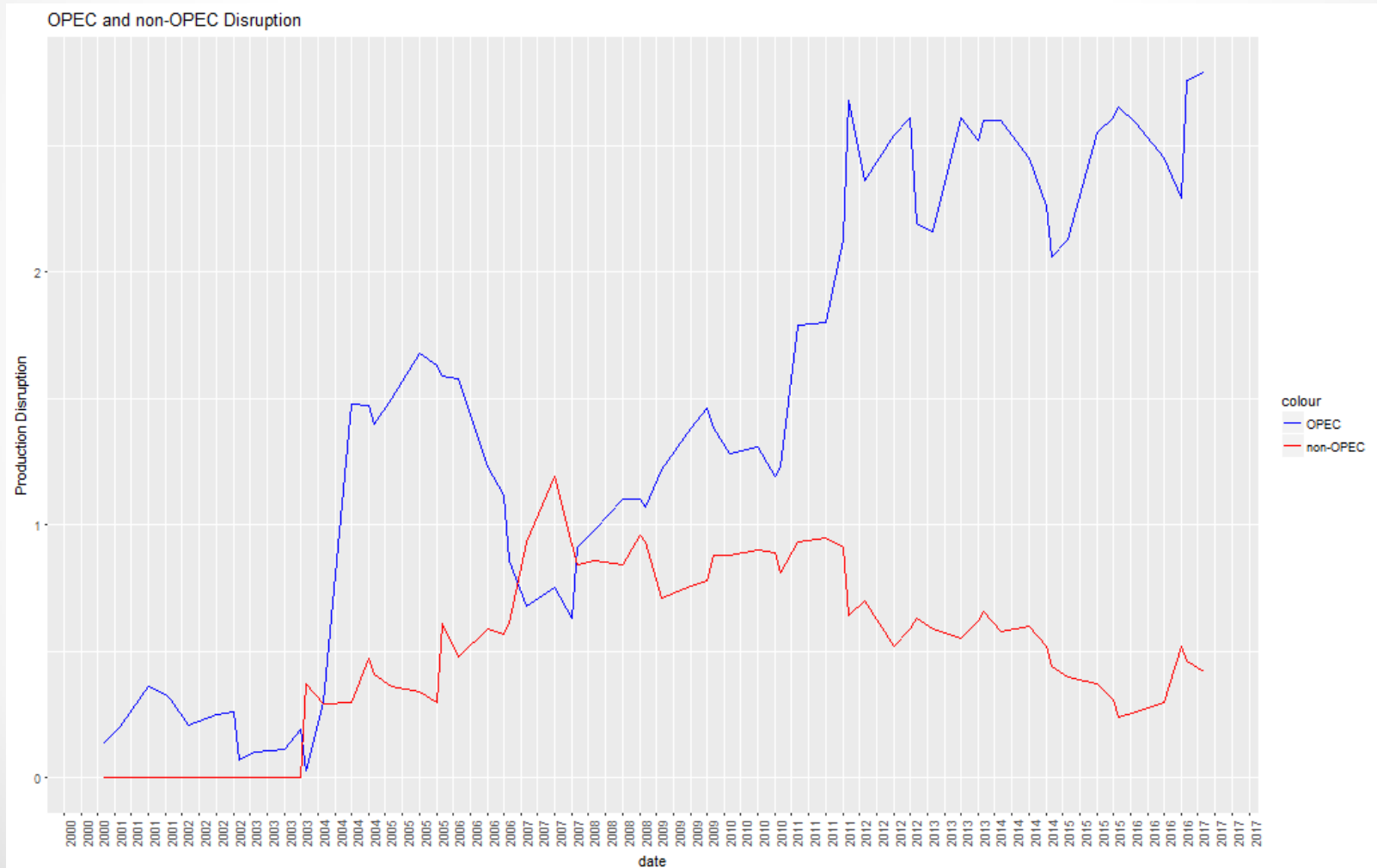
OPEC



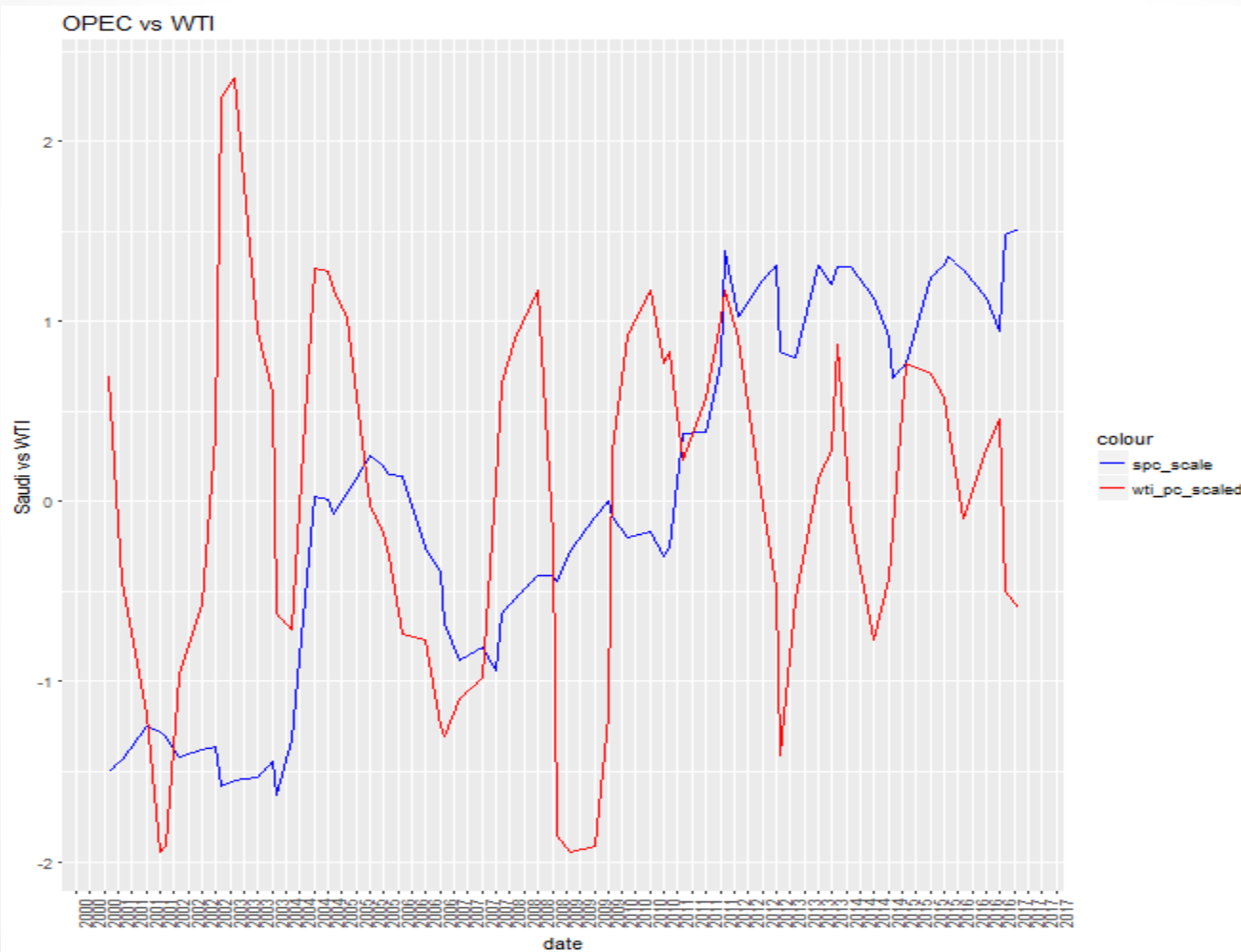
Non-OPEC



Unplanned supply disruptions OPEC and non-OPEC



Saudi compared to WTI



Conclusion & future work

- Compared on the same scale OPEC/non-OPEC crude oil production disruption.
- Showed that OPEC disruption is higher than non-OPEC
- Also showed Saudi impact on WTI.
- Future work:
 - Develop a model to create a heat map to study the disruption analysis.
 - Explore other variables to visually show co-integration.