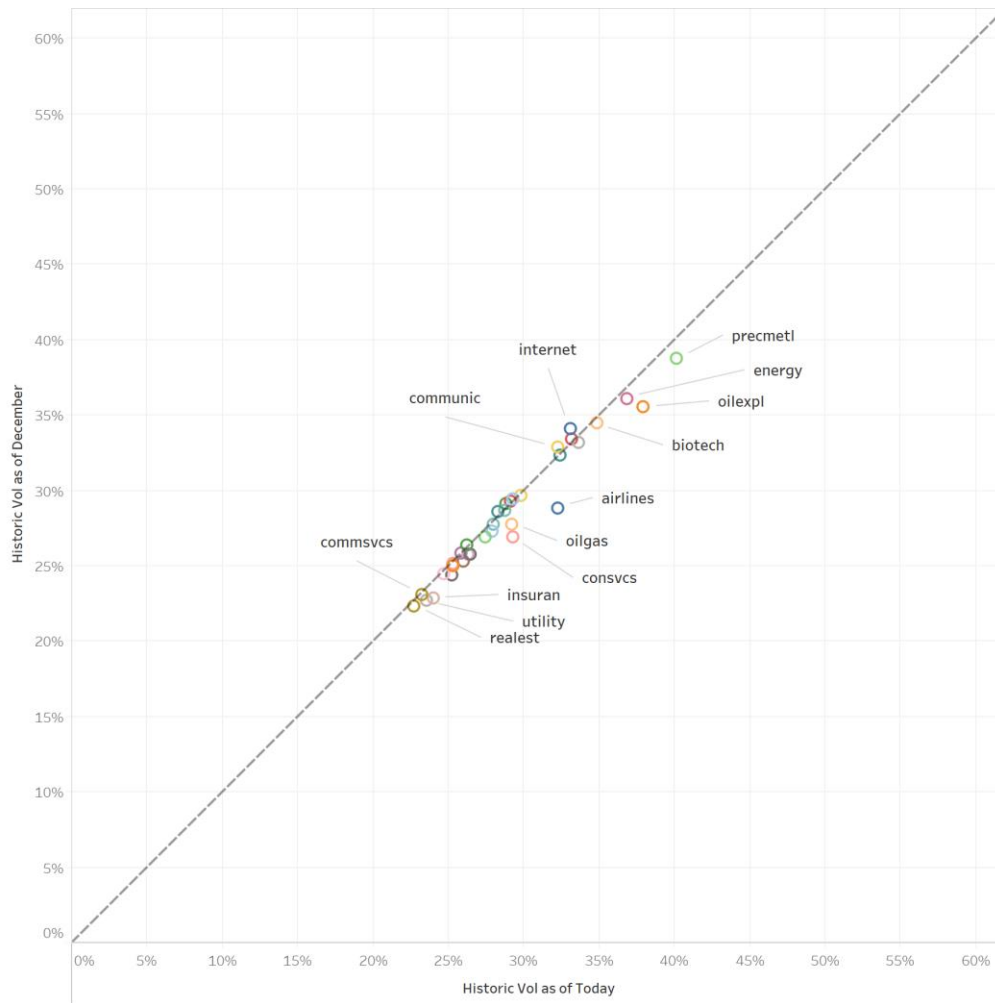


## Traditional Risk Models Not Responding

Barra Average Risk Forecast by Industry March 2020 vs. December 2019



## Analytic Model Quickly Adapting to Market

Barra Average Risk Forecast by Industry vs. Analytic Forward Risk Forecast

