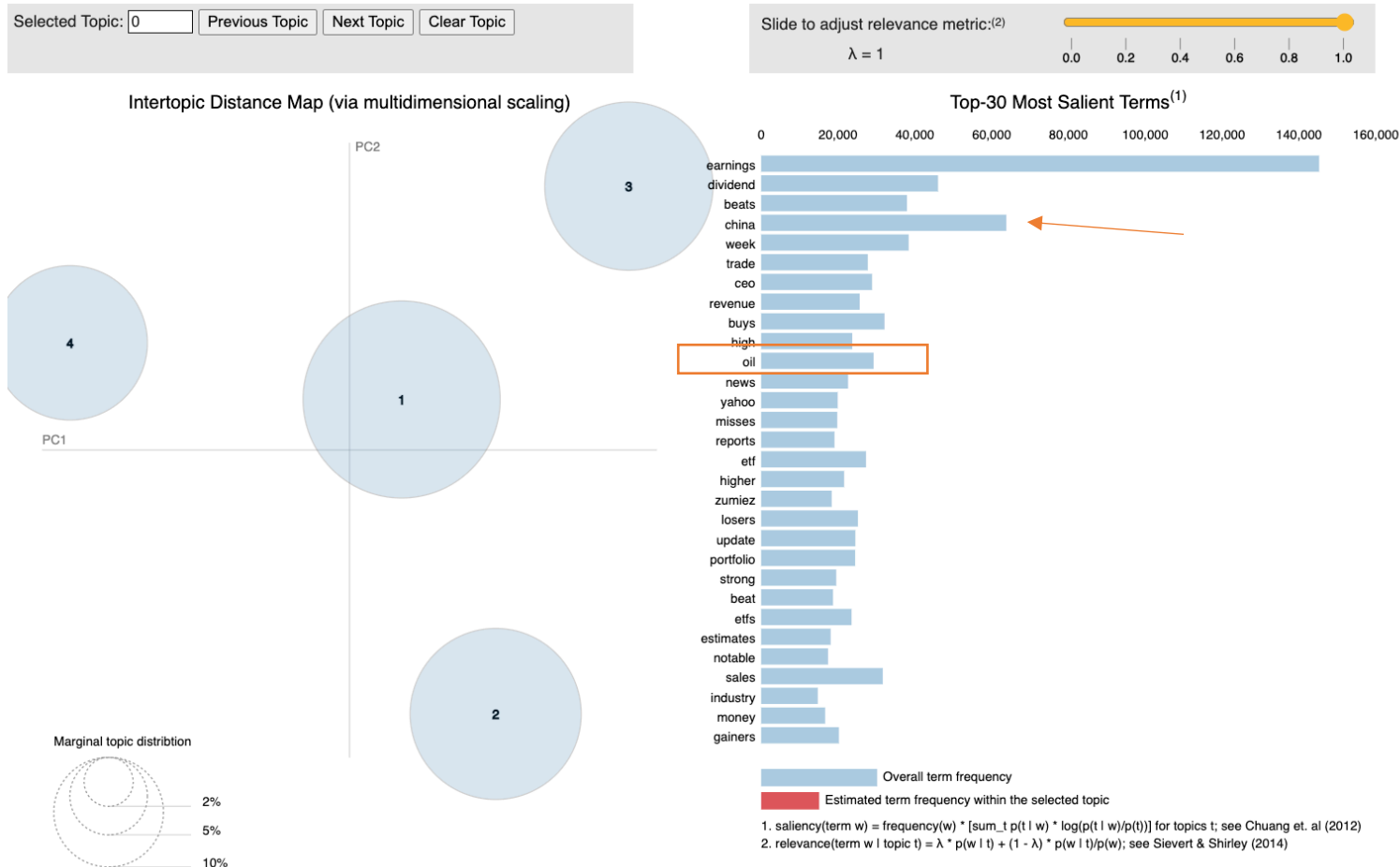


## Appendix

### Graph 1: before 2018



Graph 2:



Graph 3: after 2018

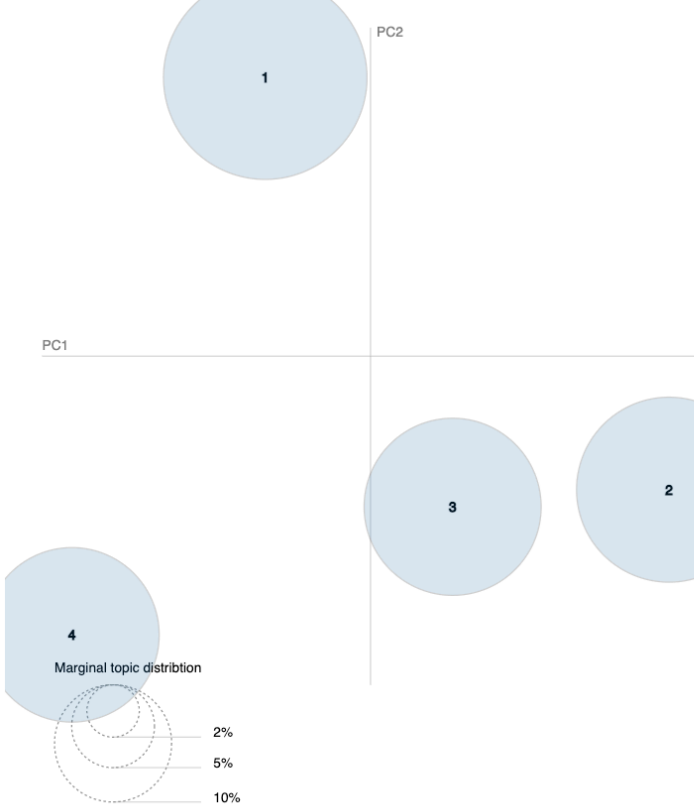
Selected Topic:

Slide to adjust relevance metric:<sup>(2)</sup>

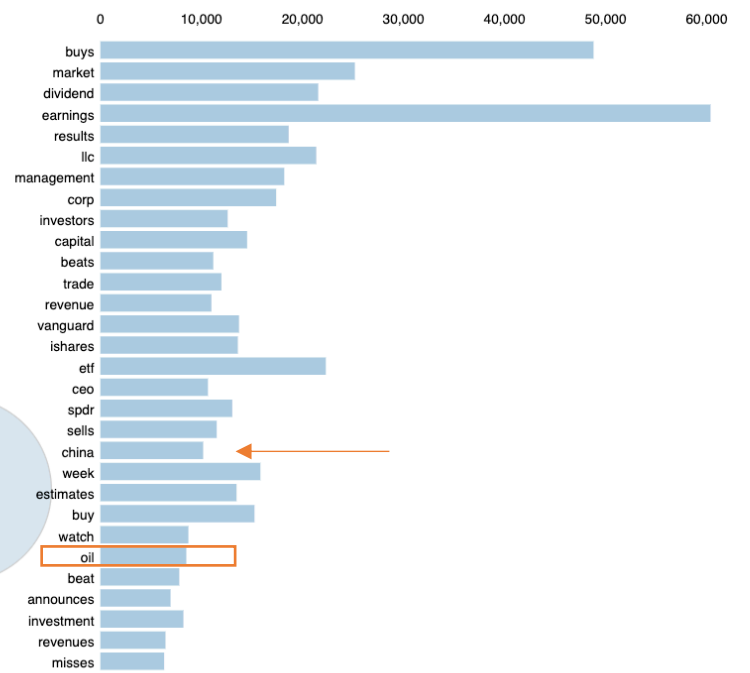
$\lambda = 1$

0.0 0.2 0.4 0.6 0.8 1.0

Intertopic Distance Map (via multidimensional scaling)



Top-30 Most Salient Terms<sup>(1)</sup>



Overall term frequency

Estimated term frequency within the selected topic

1. saliency(term w) = frequency(w) \* [sum\_t p(t | w) \* log(p(t | w)/p(t))]; for topics t; see Chuang et. al (2012)
2. relevance(term w | topic t) =  $\lambda * p(w | t) + (1 - \lambda) * p(w | t)/p(w)$ ; see Sievert & Shirley (2014)

Graph 4



Graph 5( All 3 international/Chinese stocks show similar topic words in the graphs, so I only include one here as an example)



Graph 6 (Kroger)



Graph 7(stock PJM)

