summary_stats

Laura Chen

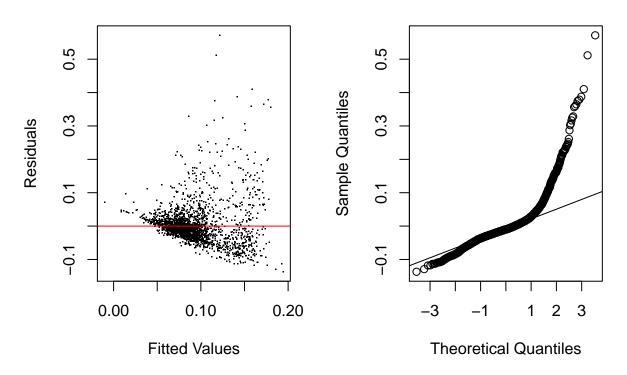
4/4/2021

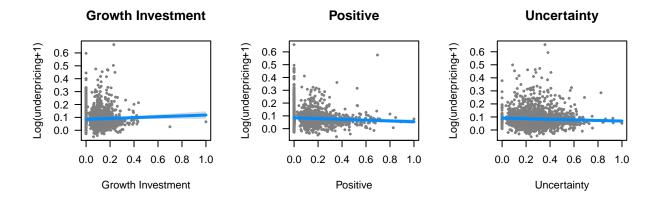
| | Min. | 1st Qu. | Median | Mean | 3rd Qu. | Max. |
|------------------------------|--------|---------|---------|---------|---------|-----------|
| $proceeds_amt_mil$ | 3.000 | 40.000 | 72.000 | 163.393 | 131.050 | 16006.900 |
| primary_shares_offered_mil | 0.000 | 3.000 | 4.638 | 7.383 | 7.002 | 236.206 |
| secondary_shares_offered_mil | 0.000 | 0.000 | 0.000 | 1.863 | 0.548 | 478.000 |
| venture_backed | 0.000 | 0.000 | 0.000 | 0.465 | 1.000 | 1.000 |
| num_bookrunners | 1.000 | 1.000 | 1.000 | 1.541 | 2.000 | 11.000 |
| rank_no_leads | 1.000 | 1.000 | 1.000 | 1.671 | 2.000 | 11.000 |
| num_lead_managers | 1.000 | 3.000 | 4.000 | 4.270 | 5.000 | 34.000 |
| acquisitions | 0.000 | 0.000 | 0.010 | 0.011 | 0.016 | 0.075 |
| financing_transactions | 0.000 | 0.021 | 0.032 | 0.035 | 0.046 | 0.134 |
| growth_invest | 0.000 | 0.000 | 0.000 | 0.004 | 0.007 | 0.071 |
| production_invest | 0.000 | 0.008 | 0.018 | 0.020 | 0.029 | 0.150 |
| word_length_sentiment | 1.000 | 124.000 | 167.000 | 192.565 | 234.000 | 1210.000 |
| negative | 0.000 | 0.000 | 0.000 | 0.004 | 0.006 | 0.050 |
| positive | 0.000 | 0.000 | 0.000 | 0.005 | 0.008 | 0.050 |
| uncertainty | 0.000 | 0.016 | 0.024 | 0.025 | 0.033 | 0.091 |
| litigious | 0.000 | 0.000 | 0.000 | 0.003 | 0.006 | 0.083 |
| strongmodal | 0.000 | 0.014 | 0.022 | 0.024 | 0.030 | 0.250 |
| weakmodal | 0.000 | 0.000 | 0.007 | 0.007 | 0.011 | 0.062 |
| constraining | 0.000 | 0.000 | 0.007 | 0.007 | 0.012 | 0.050 |
| internet | 0.000 | 0.000 | 0.000 | 0.162 | 0.000 | 1.000 |
| nasdaq_returns | -0.149 | -0.017 | 0.004 | 0.002 | 0.022 | 0.190 |
| vix_returns | -0.317 | -0.066 | 0.000 | 0.008 | 0.064 | 0.839 |
| underpricing | -0.433 | 0.004 | 0.119 | 0.297 | 0.319 | 6.975 |

| | Estimate | Std. Error | t value | Pr(> t) |
|------------------------------|----------|------------|---------|----------|
| (Intercept) | 0.0486 | 0.0114 | 4.2443 | 0.0000 |
| proceeds_amt_mil | 0.4185 | 0.1116 | 3.7499 | 0.0002 |
| primary_shares_offered_mil | -0.1666 | 0.0480 | -3.4690 | 0.0005 |
| secondary_shares_offered_mil | -0.4383 | 0.1163 | -3.7690 | 0.0002 |
| venture_backed | 0.0162 | 0.0027 | 6.0781 | 0.0000 |
| num_bookrunners | 0.0181 | 0.0303 | 0.5969 | 0.5506 |
| rank_no_leads | -0.0373 | 0.0290 | -1.2860 | 0.1985 |
| num_lead_managers | 0.0030 | 0.0216 | 0.1393 | 0.8893 |
| acquisitions | 0.0051 | 0.0093 | 0.5494 | 0.5828 |
| financing_transactions | -0.0020 | 0.0086 | -0.2322 | 0.8164 |
| growth_invest | 0.0332 | 0.0154 | 2.1599 | 0.0309 |
| production_invest | -0.0074 | 0.0113 | -0.6531 | 0.5138 |
| word_length_sentiment | -0.0651 | 0.0145 | -4.4853 | 0.0000 |
| negative | -0.0202 | 0.0100 | -2.0147 | 0.0440 |
| positive | -0.0306 | 0.0089 | -3.4430 | 0.0006 |
| uncertainty | -0.0223 | 0.0084 | -2.6649 | 0.0078 |
| litigious | -0.0367 | 0.0174 | -2.1051 | 0.0354 |
| strongmodal | -0.0348 | 0.0213 | -1.6316 | 0.1029 |
| weakmodal | 0.0196 | 0.0121 | 1.6229 | 0.1047 |
| constraining | 0.0017 | 0.0092 | 0.1825 | 0.8552 |
| internet | 0.0484 | 0.0034 | 14.4004 | 0.0000 |
| nasdaq_returns | 0.0918 | 0.0147 | 6.2621 | 0.0000 |
| vix_returns | 0.0458 | 0.0148 | 3.0826 | 0.0021 |

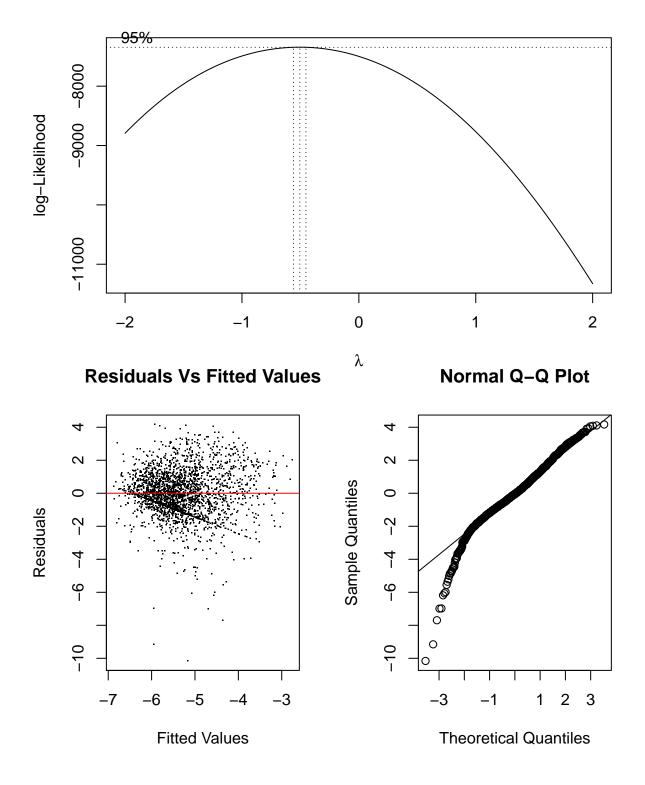
Residuals Vs Fitted Values

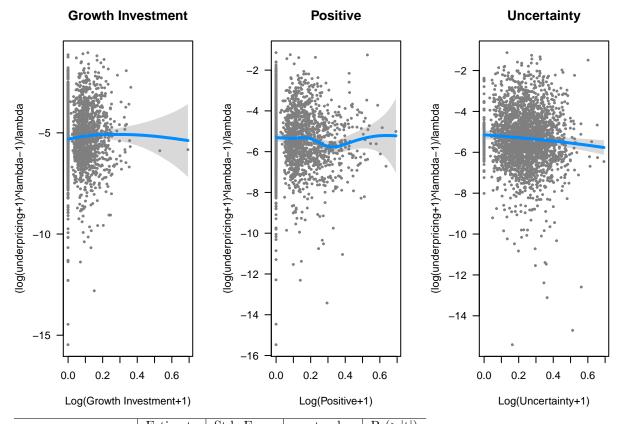
Normal Q-Q Plot





| Feature | Importance |
|-----------------------------------|------------|
| proceeds_amt_mil | 0.1319 |
| internet | 0.1262 |
| nasdaq_returns | 0.1079 |
| positive | 0.0674 |
| vix_returns | 0.0654 |
| primary_shares_offered_mil | 0.0569 |
| $strong_modal$ | 0.0552 |
| $word_length_sentiment$ | 0.0481 |
| $growth_invest$ | 0.0477 |
| $financing_transactions$ | 0.0459 |
| production_invest | 0.0369 |
| uncertainty | 0.0320 |
| weak_modal | 0.0302 |
| acquisitions | 0.0273 |
| constraining | 0.0235 |
| litigious | 0.0231 |
| venture_backed | 0.0227 |
| num_lead_managers | 0.0173 |
| negative | 0.0167 |
| $secondary_shares_offered_mil$ | 0.0133 |
| num_bookrunners | 0.0022 |
| rank_no_leads | 0.0016 |





| | Estimate | Std. Error | t value | $ \Pr(> t)$ |
|----------------|----------|------------|-----------|--------------|
| (Intercept) | -5.6062 | 0.0435 | -128.8160 | 0 |
| venture_backed | 0.3574 | 0.0685 | 5.2160 | 0 |
| internet | 0.7691 | 0.0838 | 9.1819 | 0 |
| | | | | |

| | edf | Ref.df | \mathbf{F} | p-value |
|--|--|---|---|--|
| s(num_bookrunners) | 1.0000 | 1.0000 | 3.1869 | 0.0744 |
| s(rank_no_leads) | 3.5933 | 4.3882 | 3.9290 | 0.0031 |
| s(num_lead_managers) | 4.6951 | 5.6267 | 2.8002 | 0.0118 |
| s(acquisitions) | 2.3450 | 2.9800 | 2.2437 | 0.0686 |
| s(financing_transactions) | 2.0861 | 2.6686 | 1.7368 | 0.1825 |
| s(growth_invest) | 1.9616 | 2.5038 | 3.0818 | 0.0396 |
| s(production_invest) | 1.0000 | 1.0000 | 0.2470 | 0.6192 |
| s(word_length_sentiment) | 2.4703 | 3.1383 | 7.7422 | 0.0000 |
| s(negative) | 1.9315 | 2.4213 | 2.9046 | 0.0525 |
| | | | | |
| s(positive) | 4.9171 | 5.9630 | 2.6351 | 0.0175 |
| $\frac{s(positive)}{s(uncertainty)}$ | 4.9171 1.0000 | 5.9630 1.0000 | $2.6351 \\ 8.8371$ | $\begin{array}{ c c c c c c c c c c c c c c c c c c c$ |
| | | | | |
| s(uncertainty) | 1.0000 | 1.0000 | 8.8371 | 0.0030 |
| s(uncertainty) s(litigious) | 1.0000 1.0000 | 1.0000 1.0000 | 8.8371 1.3235 | 0.0030 0.2501 |
| s(uncertainty) s(litigious) s(strongmodal) | 1.0000 1.0000 1.0000 | 1.0000 1.0000 1.0000 | 8.8371 1.3235 2.4425 | 0.0030 0.2501 0.1182 |
| s(uncertainty) s(litigious) s(strongmodal) s(weakmodal) | 1.0000 1.0000 1.0000 1.8081 | 1.0000 1.0000 1.0000 2.3114 | 8.8371 1.3235 2.4425 1.1316 | 0.0030 0.2501 0.1182 0.3558 |
| s(uncertainty) s(litigious) s(strongmodal) s(weakmodal) s(constraining) s(nasdaq_returns) s(vix_returns) | 1.0000 1.0000 1.0000 1.8081 1.0000 | 1.0000 1.0000 1.0000 2.3114 1.0000 | 8.8371 1.3235 2.4425 1.1316 0.0010 | 0.0030 0.2501 0.1182 0.3558 0.9746 |
| s(uncertainty) s(litigious) s(strongmodal) s(weakmodal) s(constraining) s(nasdaq_returns) | 1.0000 1.0000 1.0000 1.8081 1.0000 5.6935 | 1.0000 1.0000 1.0000 2.3114 1.0000 6.9181 | 8.8371 1.3235 2.4425 1.1316 0.0010 14.5806 | 0.0030 0.2501 0.1182 0.3558 0.9746 0.0000 |