

[FORECAST] Прогноз движения цены с учётом новостного контекста

The_Last_Siberia

Контекст

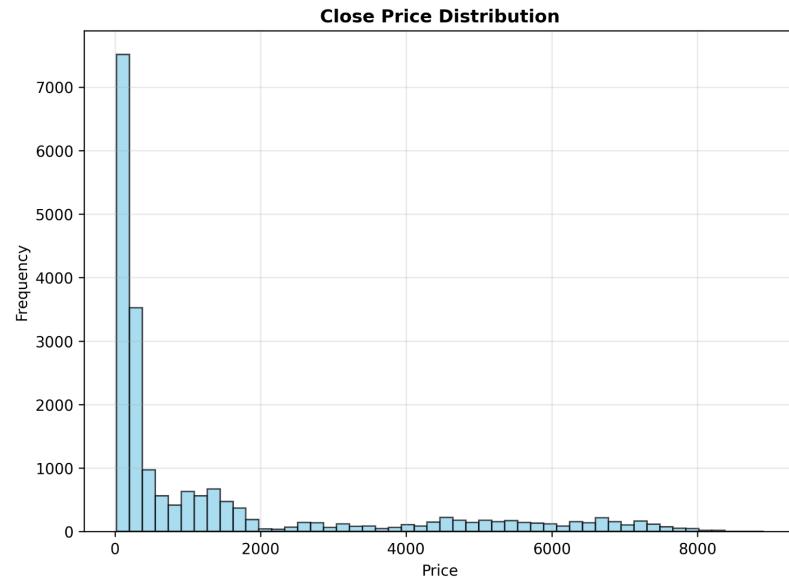
Рынок изменчив: распределения, волатильность и корреляции меняются во времени. Цены отражают текущий консенсус ожиданий. Новости привносят экзогенную информацию (макро, регуляторика, корпоративные события, цепочки поставок, геополитика) и запускают перерасчёт этих ожиданий, что ведёт к смене тенденций и скачкам волатильности. Реакция возникает на сюрпризы — расхождения факта и прогнозов (ставка ЦБ, guidance, M&A, судебные решения, релизы продуктов, санкции, инциденты на производстве).

Цель

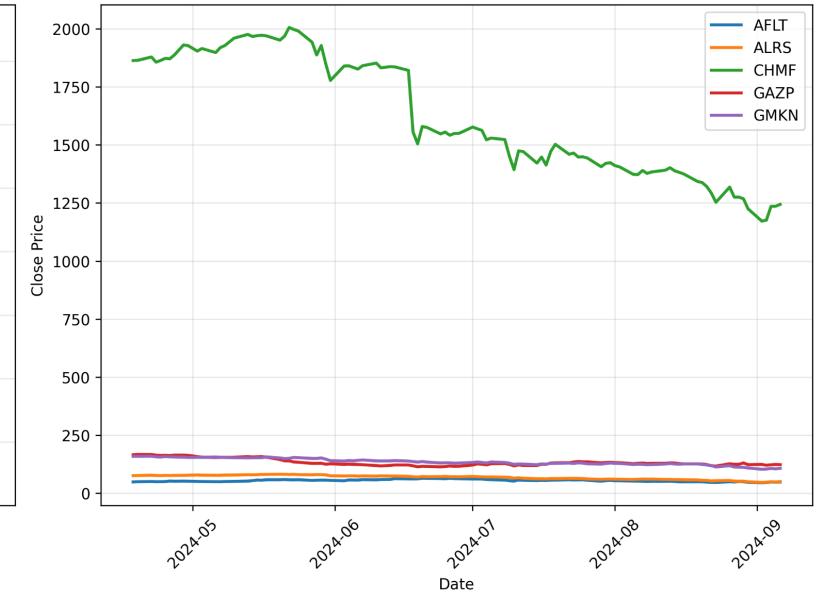
Обучить модель, которая на вход принимает свечи по N тикерам, новости по ним и k (количество дней, т.е на какую дату $t+k$ предсказываем) На выходе предсказание по N тикерам на дату $t+k$

Обзор и анализ данных

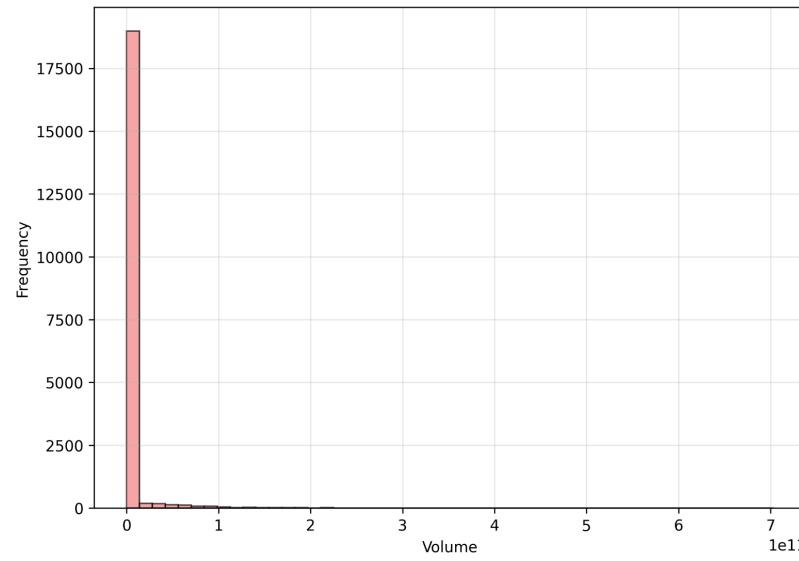
Data Overview Analysis



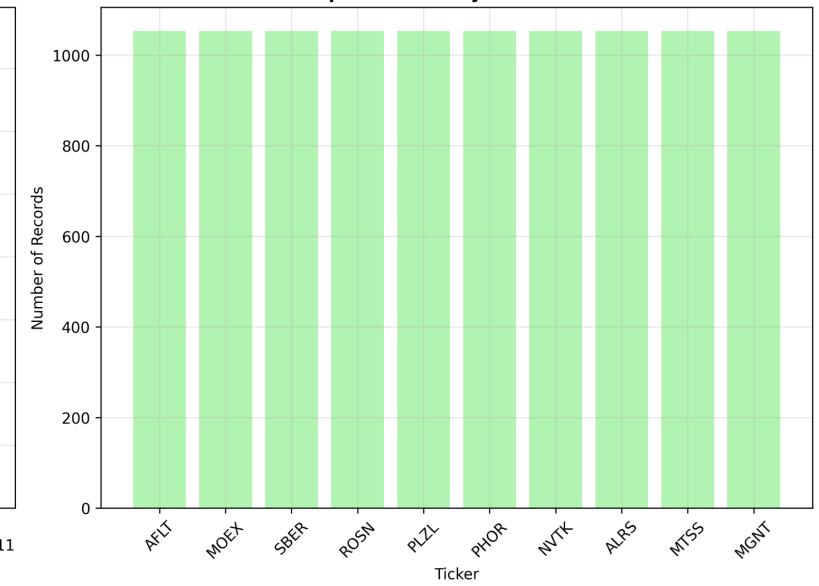
Price Trends (Sample Tickers)



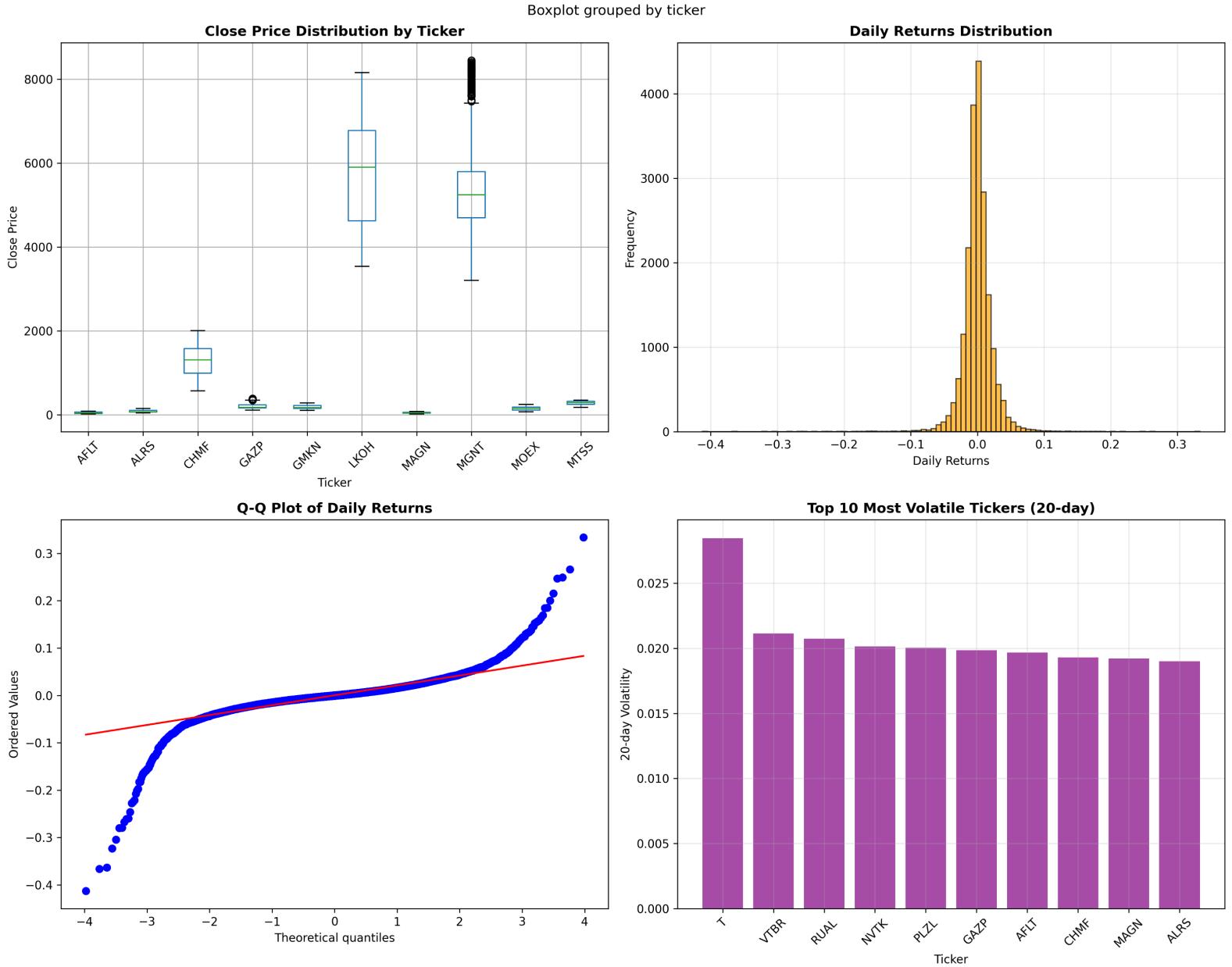
Volume Distribution



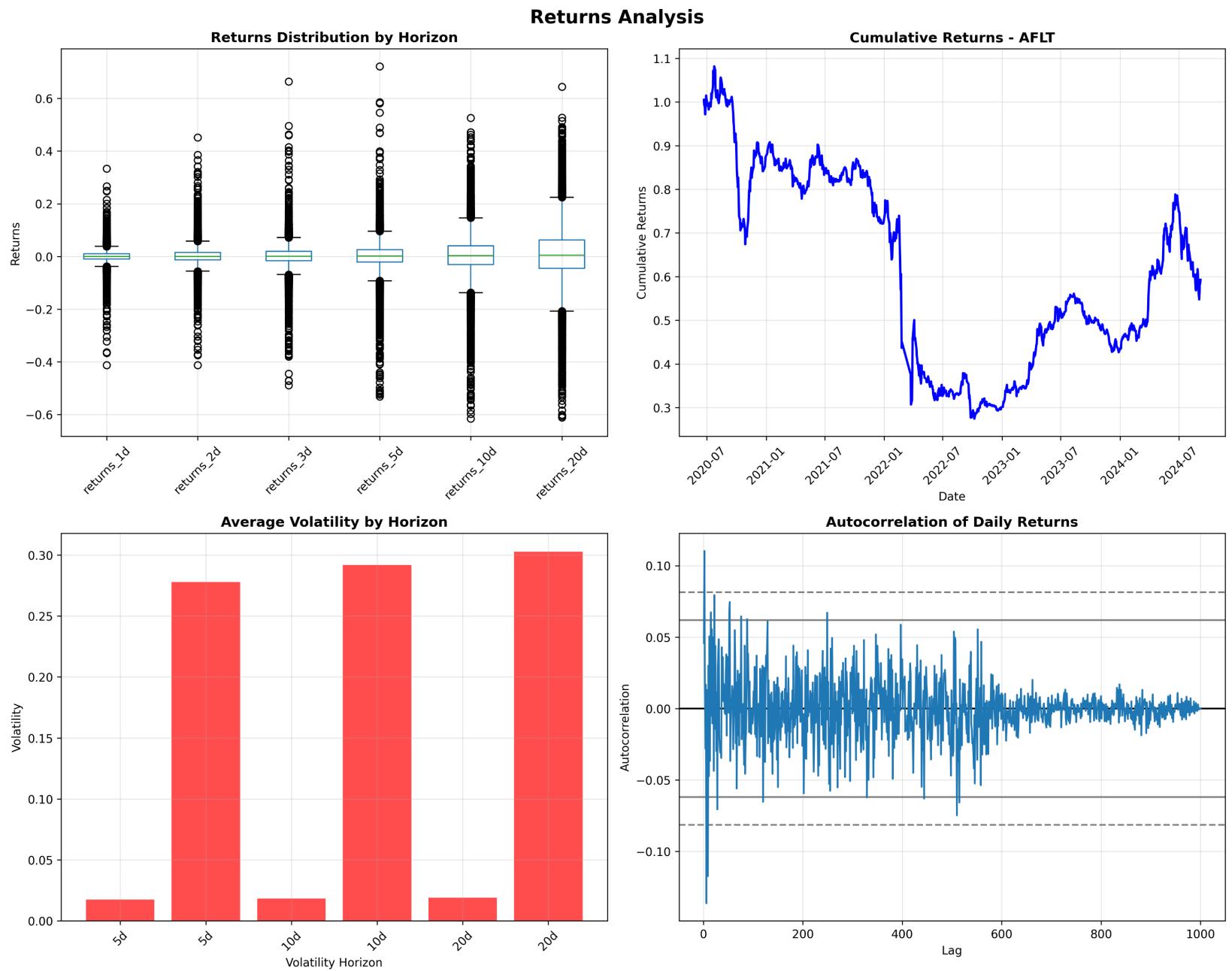
Top 10 Tickers by Data Points



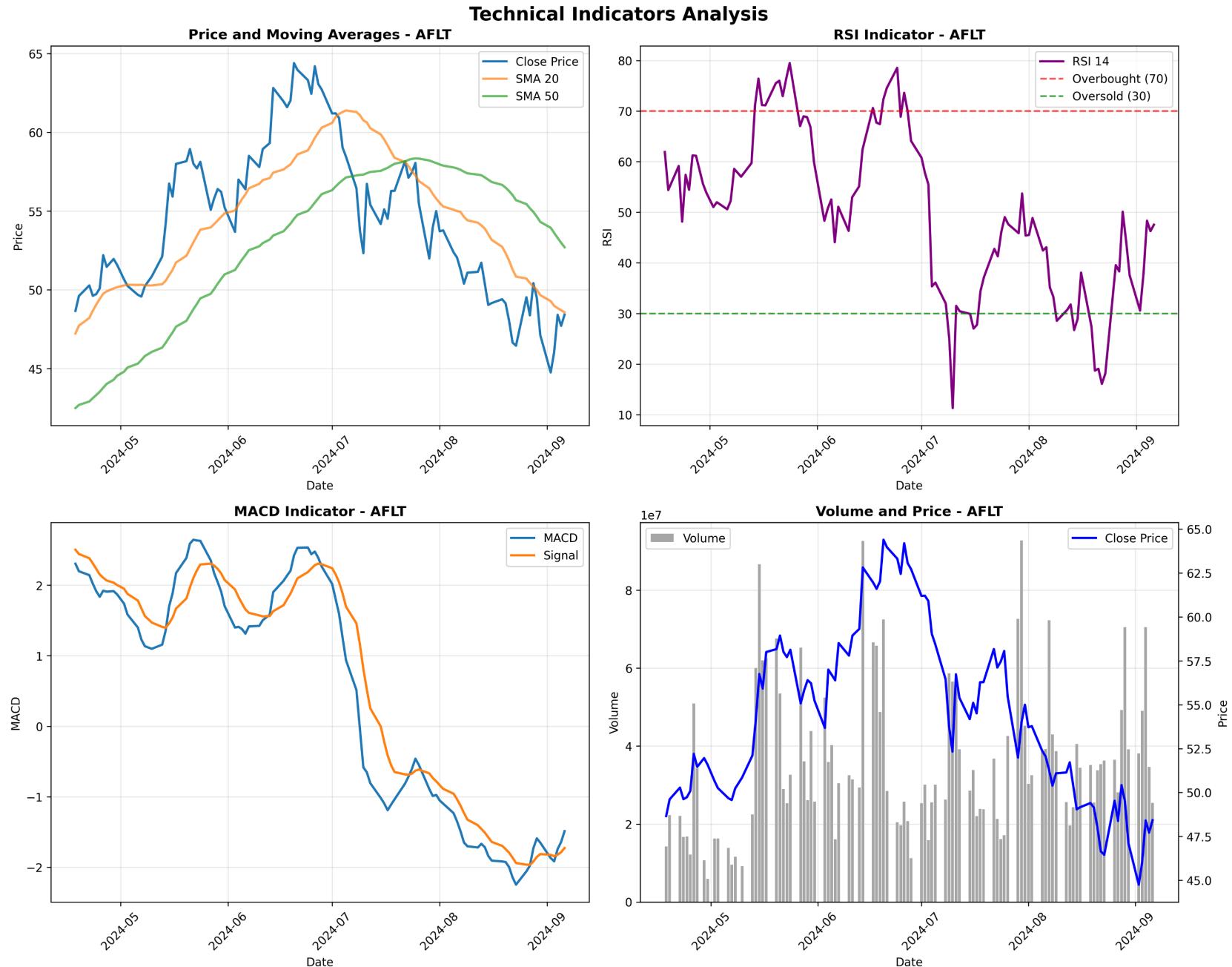
Анализ распределения цен



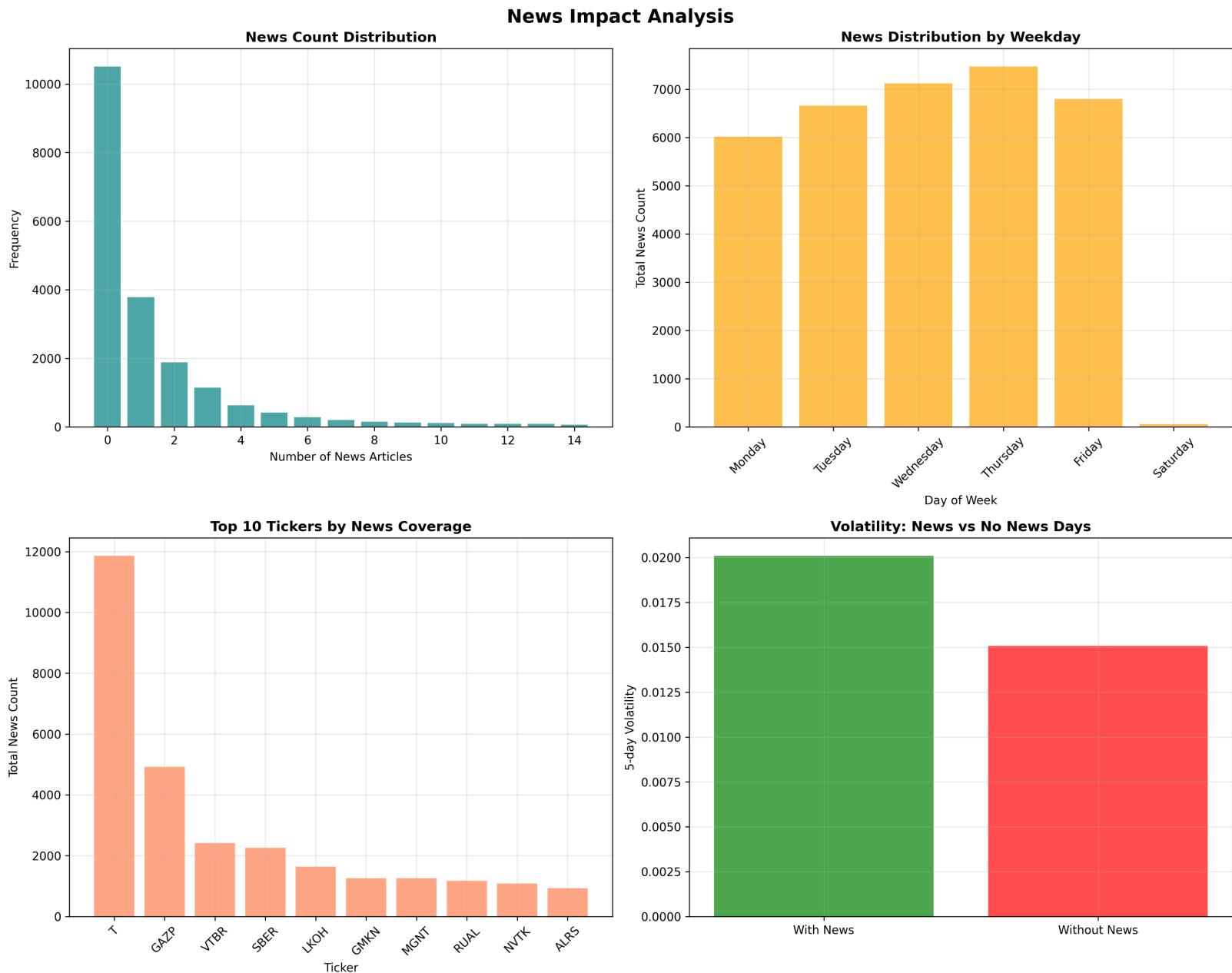
Анализ доходности



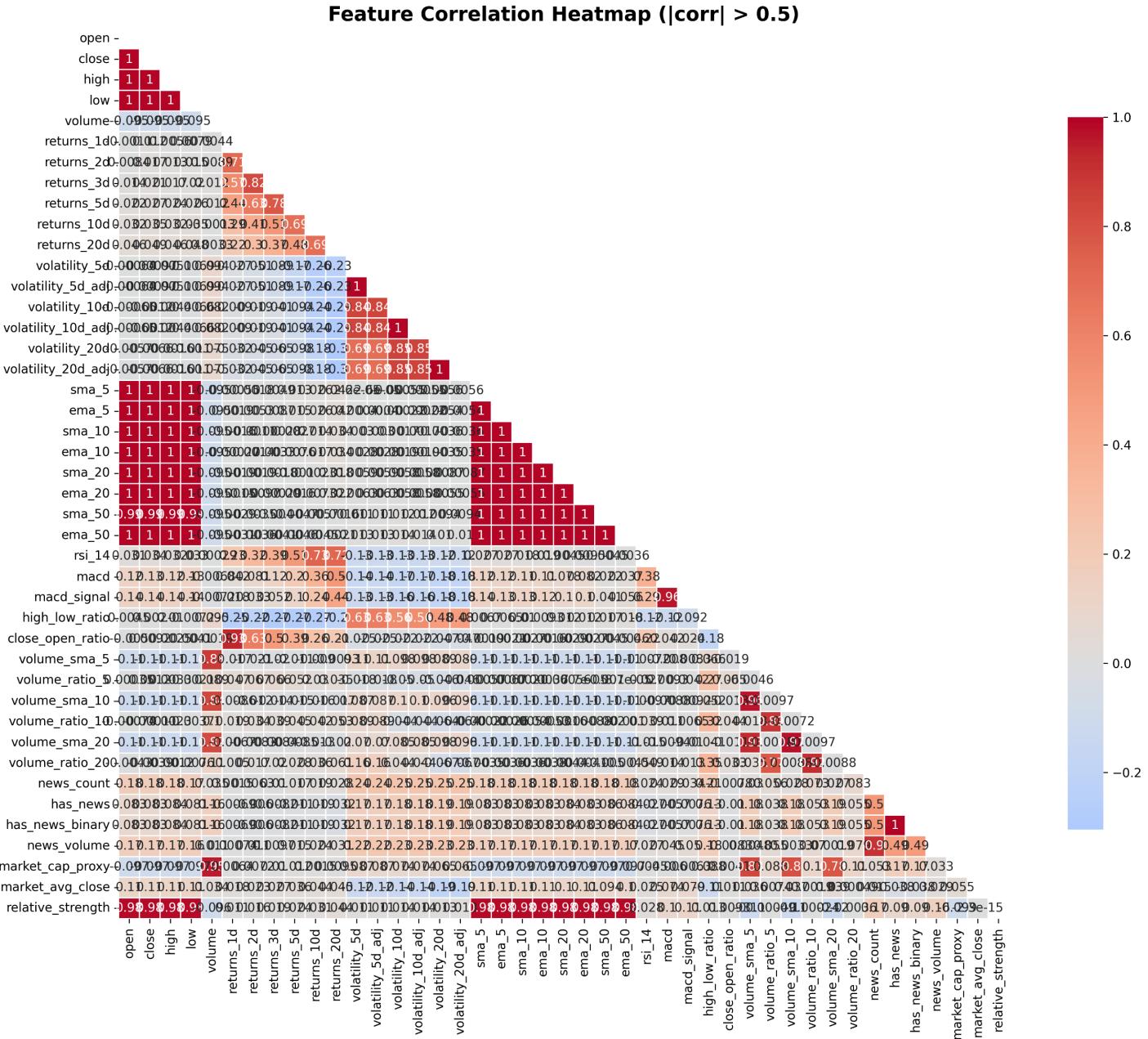
Анализ технических индикаторов



Анализ влияния новостей



Тепловая карта корреляции объектов



Результат

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1 | ticker,p1,p2,p3,p4,p5,p6,p7,p8,p9,p10,p11,p12,p13,p14,p15,p16,p17,p18,p19,p20
2 | AFLT,0.168684,0.178618,0.165918,0.181637,0.199144,0.164001,0.164001,0.200268,0.184032,0.159294,0.179535,0.159415,0.159369,0.173523,0.13
3 | ALRS,0.114620,0.100000,0.143933,0.110105,0.115971,0.100000,0.103732,0.116839,0.100000,0.122134,0.102607,0.108786,0.102586,0.151666,0.11
4 | CHMF,0.193967,0.167403,0.197904,0.208736,0.197394,0.191654,0.187945,0.164396,0.179570,0.184754,0.215109,0.200839,0.158706,0.200448,0.18
5 | GAZP,0.345933,0.339749,0.352559,0.365444,0.336350,0.342220,0.323807,0.322009,0.362184,0.373058,0.344493,0.366004,0.353166,0.333031,0.35
6 | GMKN,0.309483,0.311224,0.303503,0.311318,0.269732,0.305090,0.316625,0.339041,0.299118,0.293313,0.299448,0.327791,0.316058,0.298888,0.31
7 | LKOH,0.601904,0.572634,0.607827,0.607125,0.602006,0.597212,0.573597,0.593491,0.595050,0.585859,0.598678,0.609985,0.639628,0.605396,0.60
8 | MAGN,0.187569,0.183722,0.193600,0.186875,0.164196,0.210426,0.202608,0.203390,0.169381,0.215625,0.159532,0.199306,0.231378,0.167758,0.17
9 | MNGT,0.326460,0.335932,0.308071,0.357458,0.310795,0.320019,0.342730,0.301842,0.331009,0.352603,0.294310,0.330152,0.331657,0.342096,0.30
10 | MOEX,0.113810,0.100210,0.118455,0.119672,0.100000,0.151126,0.123287,0.100000,0.126941,0.100000,0.129552,0.136982,0.100000,0.133078,0.12
11 | MTSS,0.543876,0.527560,0.542334,0.550699,0.549410,0.560420,0.544136,0.572947,0.538583,0.598280,0.556390,0.526733,0.522458,0.553526,0.53
12 | NVTK,0.277196,0.268265,0.294323,0.281477,0.252281,0.280659,0.284902,0.259518,0.280270,0.278360,0.254336,0.284351,0.288411,0.298857,0.29
13 | PHOR,0.300059,0.377113,0.311477,0.322770,0.319139,0.313087,0.293753,0.315238,0.284602,0.295322,0.290352,0.301696,0.346352,0.262714,0.31
14 | PLZL,0.394026,0.379720,0.407618,0.379418,0.398355,0.394937,0.380994,0.436905,0.406704,0.353523,0.397755,0.380790,0.411074,0.378175,0.39
15 | ROSN,0.290109,0.277043,0.325418,0.298209,0.264891,0.308466,0.332552,0.310758,0.259722,0.280424,0.315447,0.275956,0.298986,0.305602,0.27
16 | RUAL,0.234026,0.266674,0.205423,0.225225,0.236641,0.262851,0.205309,0.257289,0.234230,0.214396,0.243268,0.238007,0.222021,0.235422,0.22
17 | SBER,0.211465,0.172423,0.208429,0.223231,0.217085,0.199011,0.207302,0.201605,0.199678,0.228457,0.218605,0.197607,0.229457,0.217611,0.22
18 | SIBN,0.120834,0.120415,0.123180,0.146387,0.109002,0.131775,0.116790,0.116480,0.142809,0.137342,0.137104,0.146943,0.121254,0.134473,0.11
19 | T,0.315360,0.357208,0.295240,0.291077,0.338523,0.331194,0.327843,0.327927,0.315115,0.297415,0.316876,0.301817,0.334863,0.312419,0.29885
20 | VCBR,0.517541,0.522440,0.507402,0.508120,0.522182,0.488579,0.489391,0.503172,0.513272,0.523759,0.547048,0.534694,0.514342,0.517160,0.49
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