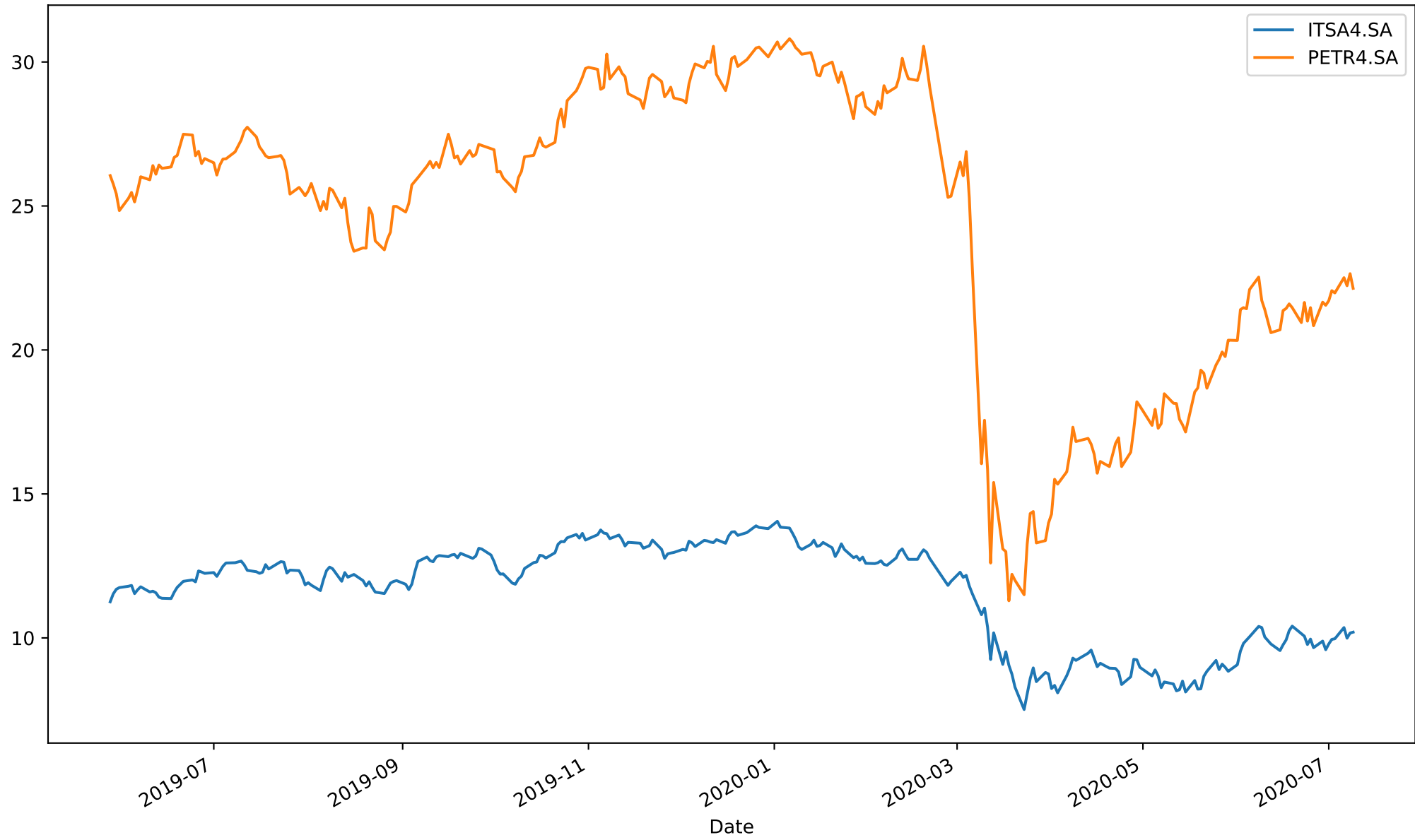


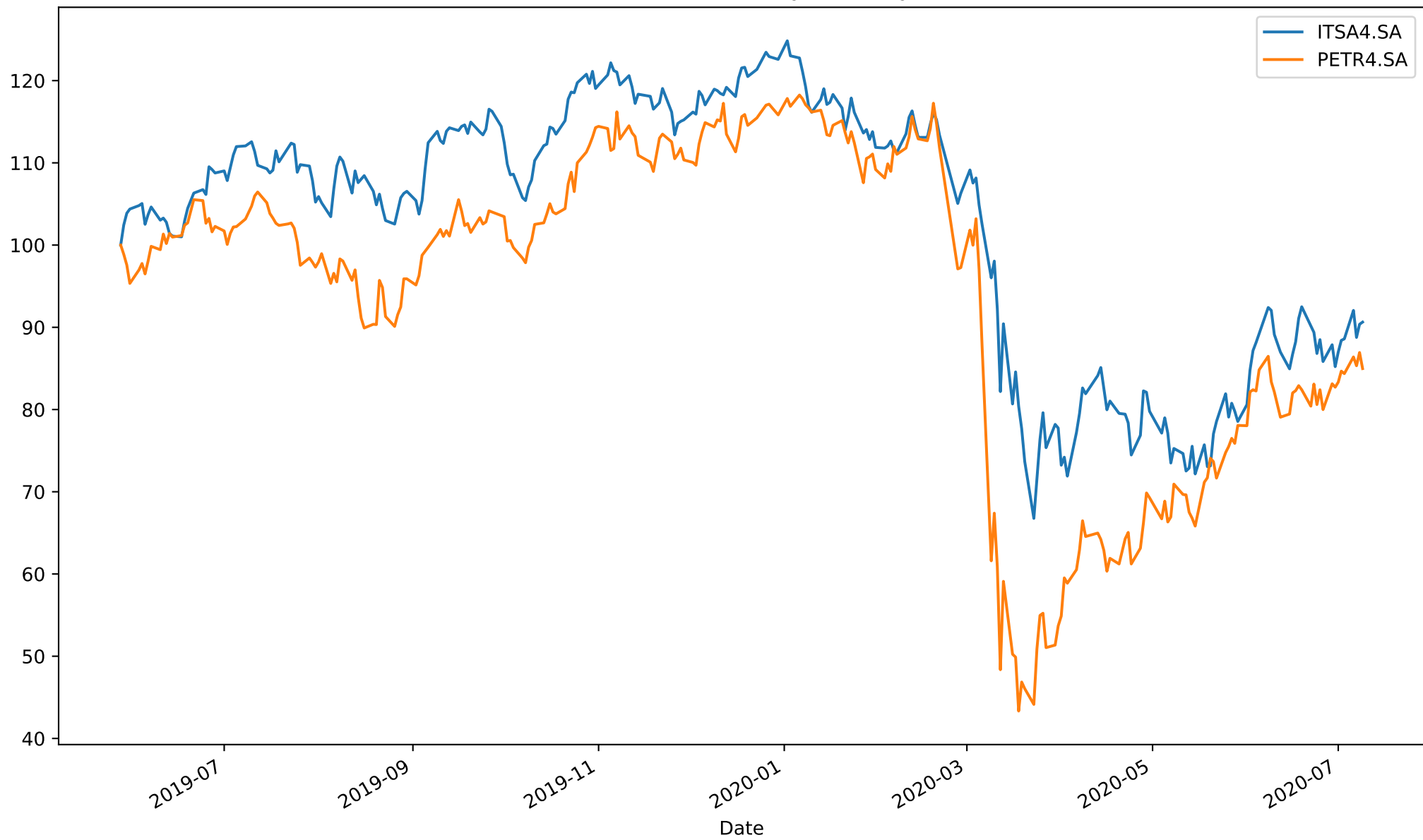
Valor de fechamento dos tikers

ITSA4.SA	PETR4.SA
11.254095077514648	26.053571701049805
11.529047966003418	25.76192855834961
11.690227508544922	25.421676635742188
11.747113227844238	24.8383846282959
11.794595718383789	25.266130447387695
11.82308578491211	25.47028350830078
11.538191795349121	25.139753341674805
11.671141624450684	25.54805564880371
11.775604248046875	26.014684677124023
11.595170021057129	25.907751083374023
11.623659133911133	26.403545379638672
11.566681861877441	26.10218048095703
11.414737701416016	26.422988891601562
11.376751899719238	26.306331634521484
11.367255210876465	26.354938507080078

Valor de fechamento dos tikers



Percentual de valorização das ações



Variação dos tikers em relação a média (volatividade)



%% de distribuição dos tikers (melhor caso)

Return	Volatility	ITSA4.SA	PETR4.SA
-0.11820828310083836	0.4876929102875647	0.4935100948082693	0.5064899051917308
-0.11740659060580393	0.4839514189966625	0.5072979223341075	0.4927020776658925
-0.11736571713539393	0.48376247043824383	0.5080008805928987	0.49199911940710134
-0.11709973960939359	0.48253724741837567	0.512575268250206	0.4874247317497938
-0.11659205878601459	0.4802196173101332	0.5213065656919074	0.4786934343080925
-0.11565808717586964	0.47602906719837307	0.5373693822387369	0.4626306177612632
-0.11267754833099329	0.4633165977979472	0.5886298789775154	0.4113701210224845
-0.11164149088908076	0.45914410731278965	0.6064484084067295	0.3935515915932704
-0.11154411852790212	0.4587587391853959	0.6081230571405402	0.39187694285945984
-0.11078848312167007	0.45580841252113563	0.6211187764694288	0.3788812235305711
-0.10991826392186259	0.4525003186505582	0.6360851536164465	0.3639148463835536
-0.1084956237513904	0.447304159205893	0.6605522871162517	0.33944771288374825
-0.10788625113733775	0.4451608127440532	0.6710325205643224	0.3289674794356776
-0.10553809697334732	0.43737976596910927	0.7114170131443457	0.28858298685565426
-0.1050360018744409	0.4358170999870871	0.7200522450670208	0.2799477549329792
-0.10230281613786933	0.42796070182823004	0.7670586643179722	0.23294133568202777
-0.099710485292893	0.4215633558774408	0.8116426049209197	0.18835739507908034
-0.09742092852096648	0.41680543229748573	0.8510193161630297	0.14898068383697027
-0.09665607469251151	0.41540793020969413	0.8641735775968495	0.13582642240315043
-0.09540777506915547	0.4133375878702468	0.8856423327791748	0.11435766722082516
-0.09497009405183077	0.41267410202733396	0.8931697456158727	0.10683025438412731
-0.09444000259960475	0.4119142867643921	0.9022864699977062	0.09771353000229378
-0.09439105618358325	0.4118465546670574	0.9031282699974473	0.09687173000255267
-0.09063834696530867	0.40789091776190783	0.9676688610303849	0.03233113896961512
-0.09022586113148959	0.4076067396053598	0.9747629570444741	0.025237042955525823

%% de distribuição dos tikers (melhor caso)

Return	Volatility	ITSA4.SA	PETR4.SA
-0.14546780147636593	0.6457261126225179	0.024690017126180748	0.9753099828738192
-0.14226059270314462	0.6247324771050382	0.07984887376812941	0.9201511262318706
-0.14169706701044166	0.6210946033827542	0.08954061356299092	0.9104593864370091
-0.13723050034650497	0.5928459884112594	0.16635840988322753	0.8336415901167725
-0.1358995132289716	0.5846431506826169	0.1892492575951973	0.8107507424048026
-0.13326812642861985	0.5687430429194402	0.23450489810790903	0.765495101892091
-0.1318916503929522	0.5606031204547065	0.25817808239089246	0.7418219176091075
-0.13161217624891153	0.5589659855689482	0.2629845902724447	0.7370154097275553
-0.13050582087442628	0.5525381211063171	0.28201213160552335	0.7179878683944766
-0.1297091777692427	0.5479633525009125	0.295713117709238	0.704286882290762
-0.12857583337320777	0.5415350085892222	0.3152048270076191	0.6847951729923809
-0.1279102118506532	0.5378045616287349	0.3266524516359049	0.6733475483640952
-0.12773884274494554	0.5368496284143666	0.3295997259179882	0.6704002740820117
-0.12620342231831858	0.5283966359330141	0.3560064992794782	0.6439935007205217
-0.12616674214597487	0.5281970060461959	0.356637339524367	0.6433626604756331
-0.12192515613244319	0.5058831758905241	0.4295858288177218	0.5704141711822782
-0.12076065434370913	0.5000396870564828	0.4496133953922421	0.5503866046077579
-0.12054988272909323	0.49899579396493104	0.4532383297500737	0.5467616702499262
-0.12001700251795362	0.49637576034125214	0.462403016320839	0.537596983679161
-0.11991186396010955	0.4958620943233146	0.46421123120478547	0.5357887687952145
-0.11981770640632396	0.49540299942597776	0.46583059039785707	0.5341694096021429
-0.11973468577007931	0.49499893099203846	0.4672584124377498	0.5327415875622502
-0.1193227374014297	0.4930040504940109	0.4743432649113247	0.5256567350886753
-0.11849089833340204	0.48902778384423173	0.48864956523253056	0.5113504347674696
-0.11843919724111017	0.48878297090867	0.48953874125430047	0.5104612587456995

Indicador de retorno e volatilidade segundo Markowitz

