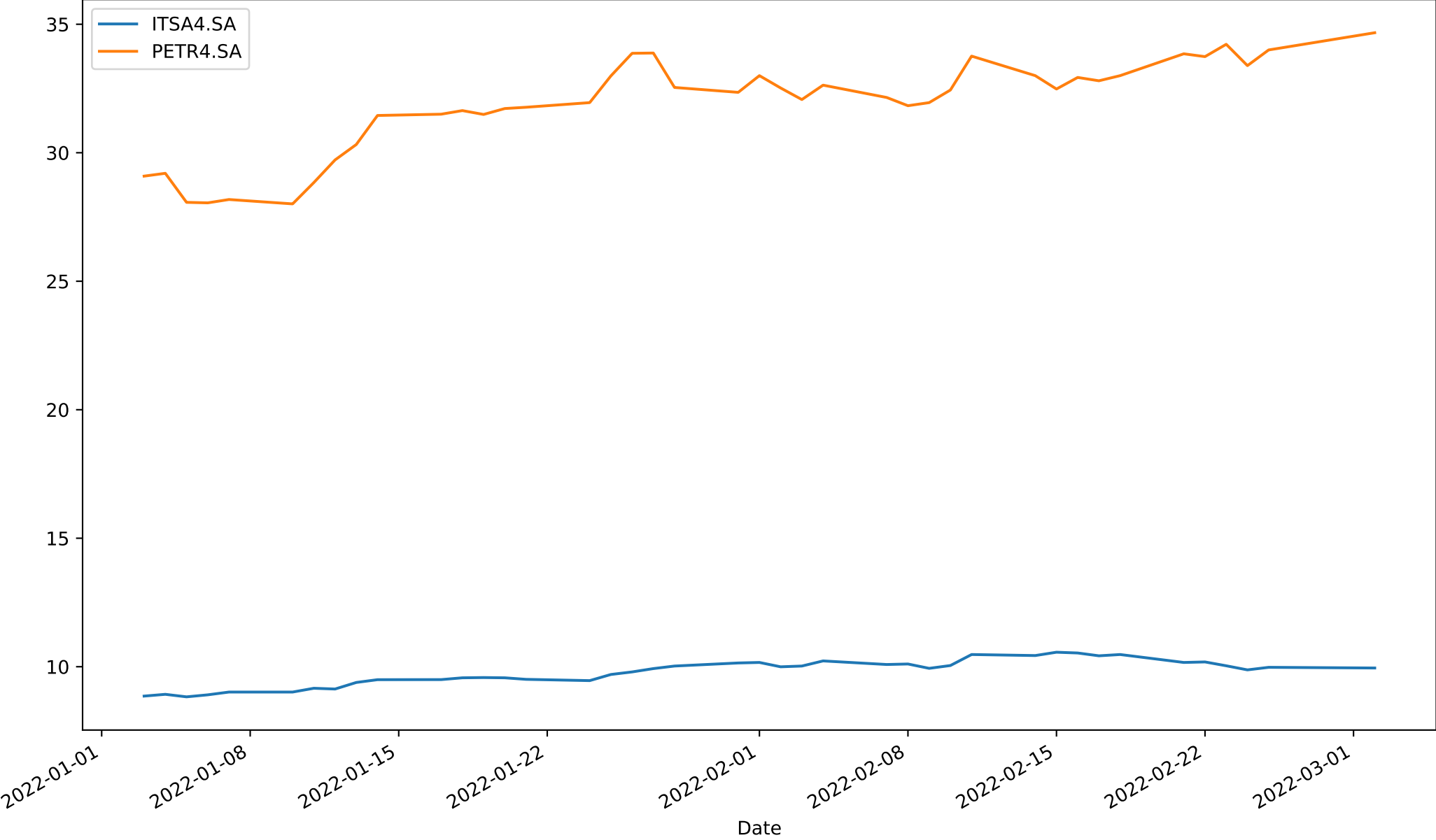


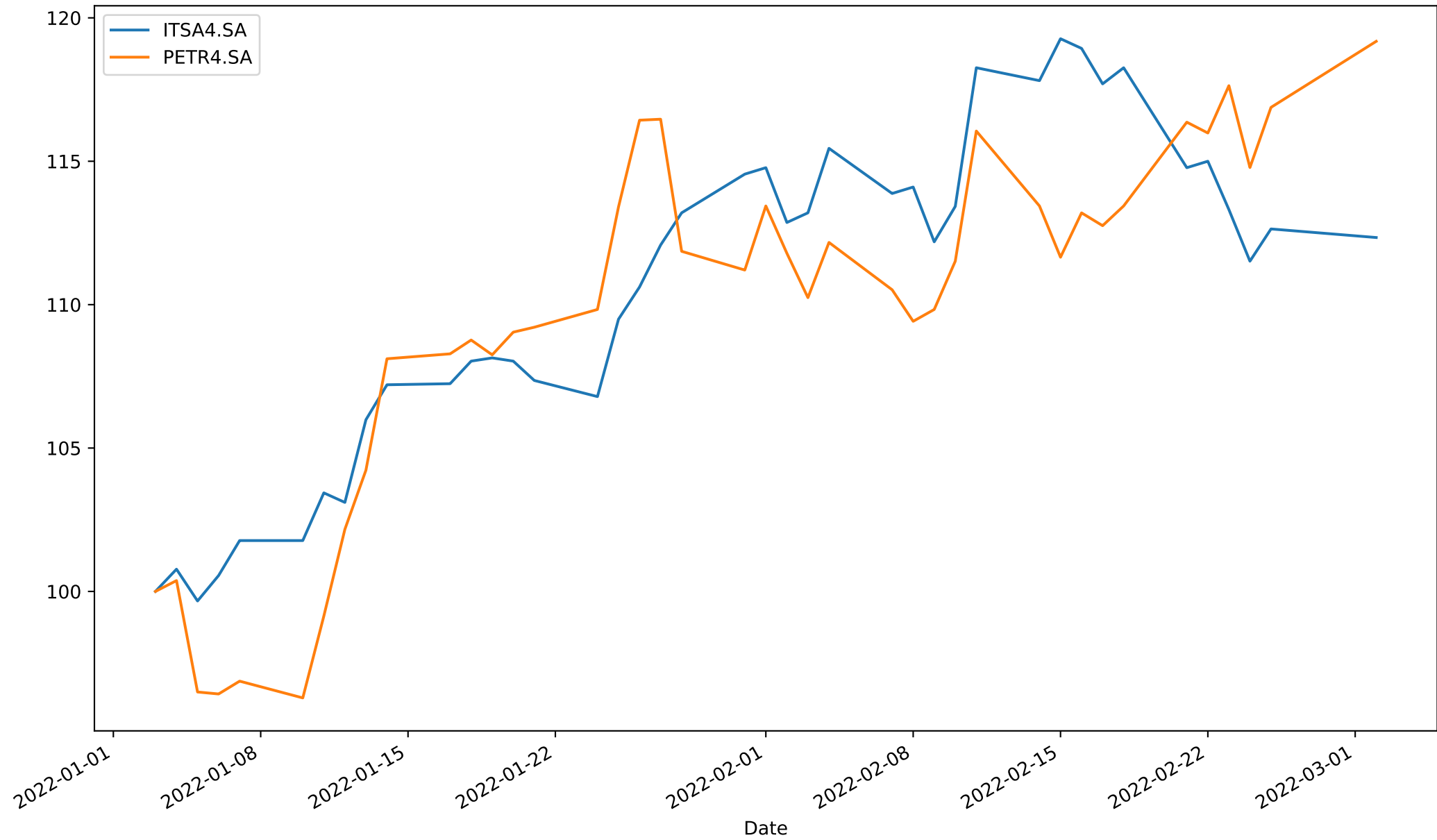
## Valor de fechamento dos tikers

ITSA4.SA	PETR4.SA
8.85702133178711	29.09000015258789
8.925755500793457	29.200000762939453
8.82756233215332	28.06999969482422
8.906116485595703	28.049999237060547
9.014130592346191	28.18000030517578
9.014130592346191	28.010000228881836
9.161418914794922	28.84000015258789
9.13196086883545	29.719999313354492
9.387264251708984	30.31999969482422
9.495275497436523	31.450000762939453
9.498600959777832	31.5
9.568297386169434	31.639999389648438
9.578253746032715	31.489999771118164
9.568297386169434	31.719999313354492
9.50855827331543	31.770000457763672

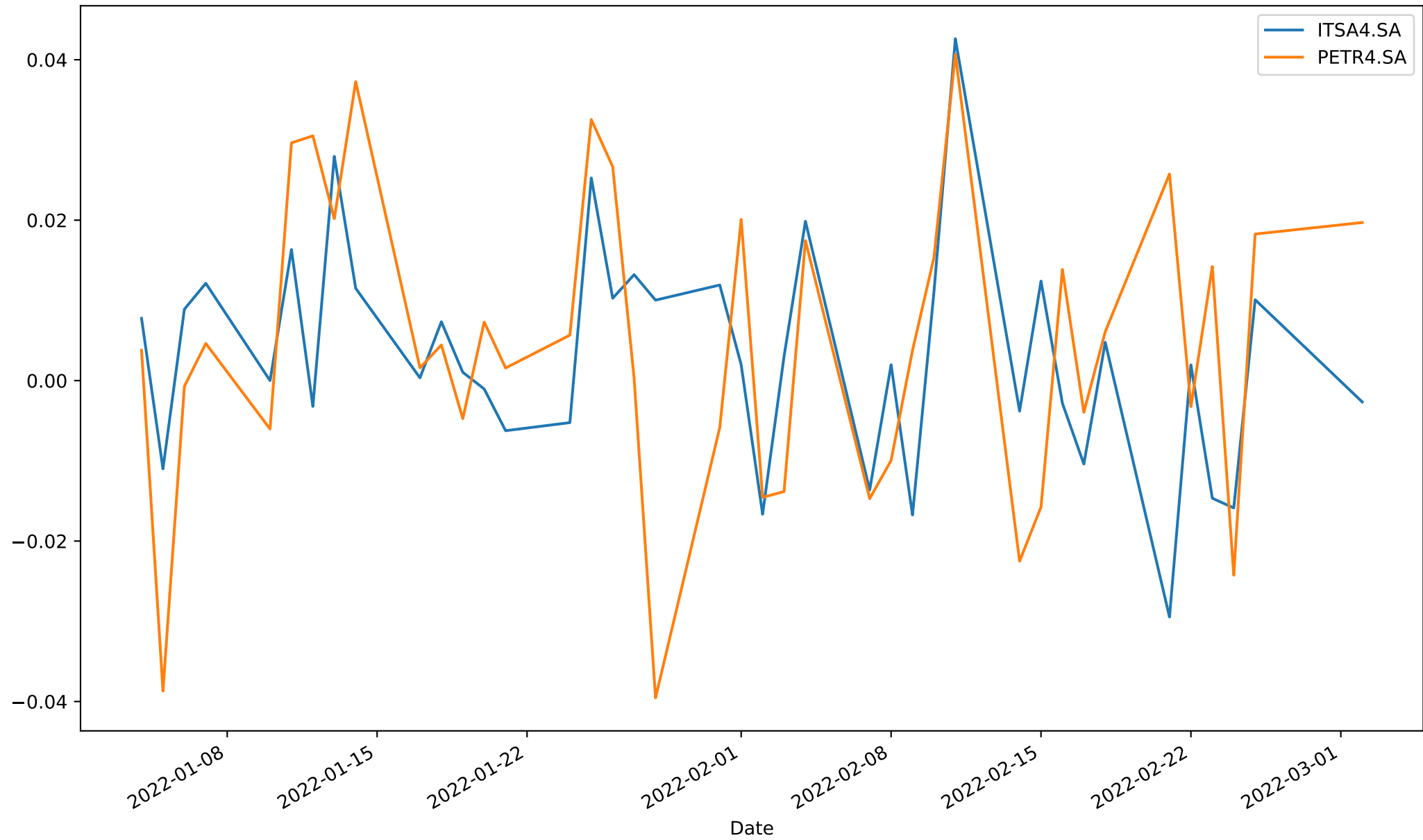
Valor de fechamento dos tikers



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
0.8920107042778423	0.21231146816186522	0.5541188595692207	0.4458811404307793
0.8924414381386572	0.21240892215399626	0.552953103452641	0.4470468965473589
0.8934692413070632	0.21264355723848985	0.550171414016983	0.44982858598301706
0.9092924402544016	0.21662106945890386	0.5073468473069994	0.4926531526930006
0.9163231727670176	0.2186023723902786	0.488318579097225	0.5116814209027749
0.9241051241482402	0.22094299271299872	0.4672571807562112	0.5327428192437889
0.9248558893118062	0.22117683692560222	0.4652252785512481	0.5347747214487518
0.9262551262545959	0.22161638371843387	0.4614383252304311	0.5385616747695688
0.9299379113316973	0.22279622163427754	0.45147108183434265	0.5485289181656574
0.936051545404758	0.22482708747065866	0.4349248871569221	0.5650751128430779
0.9408839882636085	0.2264948132237995	0.42184616190864754	0.5781538380913523
0.9414195135383705	0.22668296385442308	0.4203967939312715	0.5796032060687285
0.9434928345422079	0.22741760522523202	0.41478547134501387	0.5852145286549861
0.9470513758719985	0.22870127180369954	0.405154486417438	0.594845513582562
0.9495742263454869	0.22962854032993005	0.3983265384935836	0.6016734615064164
0.9568333531787199	0.23237455660584247	0.378680134352384	0.621319865647616
0.956978991287757	0.2324308138780053	0.3782859732894579	0.6217140267105421
0.9603335500951556	0.23373907293357135	0.36920705518268826	0.6307929448173117
0.978538848728658	0.2412404474741004	0.3199354743601063	0.6800645256398937
0.9908691595322916	0.2466840901499757	0.28656420605194527	0.7134357939480547
1.0024720512187413	0.2520547116459396	0.2551616552334433	0.7448383447665566
1.0358280550287065	0.2686992462157816	0.16488557293855516	0.8351144270614449
1.038277496040986	0.269985854920275	0.15825630344749694	0.8417436965525031
1.0508060609765677	0.2766919150639042	0.1243484718737539	0.8756515281262461
1.0563507134551418	0.27972399723979424	0.10934219275518749	0.8906578072448124

%% de distribuição dos tikers (melhor caso)

Return	Volatility	ITSA4.SA	PETR4.SA
0.7296186609847398	0.21570560205524503	0.9936234701300147	0.006376529869985267
0.7315753028211851	0.21519500889818108	0.9883279329171375	0.011672067082862532
0.7374082459705643	0.2137342209286097	0.972541411882581	0.027458588117419
0.7639303054501824	0.20829523434110644	0.9007610020393427	0.09923899796065731
0.7686986300255664	0.20753426682218665	0.8878558091922458	0.11214419080775422
0.7769436035075082	0.20637960403977076	0.8655412684932011	0.13445873150679882
0.7838126297538294	0.20557563927058045	0.8469506488784689	0.15304935112153112
0.7927677808275444	0.2047461331724033	0.8227140538744734	0.1772859461255266
0.7955537938643668	0.20453897320366407	0.8151738717945188	0.18482612820548122
0.7967109108323227	0.20446006980721543	0.8120422020891448	0.1879577979108552
0.8128869733526368	0.20379807844901449	0.7682626306629403	0.23173736933705968
0.8199139449246468	0.2037680959387041	0.7492445412199503	0.2507554587800495
0.8219771567671665	0.2037889793877832	0.7436605784902353	0.2563394215097648
0.834461454548675	0.2042023784166332	0.7098725533917172	0.29012744660828277
0.8450754189429563	0.20493941862043386	0.6811464767132253	0.3188535232867747
0.8489209059439453	0.20529318151549858	0.6707388900327881	0.32926110996721186
0.849546522843873	0.2053550707562976	0.669045694317117	0.330954305682883
0.851317576470352	0.20553683281776866	0.6642524407893994	0.3357475592106006
0.8516293036159592	0.205569827283384	0.6634087694188505	0.33659123058114954
0.8525203809529491	0.2056657942908238	0.6609971204856175	0.3390028795143824
0.8756454801510898	0.20899973992304857	0.598410385870091	0.401589614129909
0.8760459721500653	0.20907154704072922	0.5973264775918709	0.4026735224081291
0.8796353411454295	0.20973603925480708	0.5876120593822347	0.41238794061776524
0.8856906111901076	0.21094161374355763	0.5712238235496252	0.42877617645037475
0.8880632560440684	0.21144262798723756	0.5648023983899149	0.4351976016100852

Indicador de retorno e volatilidade segundo Markowitz

