

```
print(len(ret_63))
print(len(ret_253))
```

278  
284

```
In [11]: for i in range(len(iter_params)):
          print(iter_names[i])
          tmp = 0
          for j in range(len(iter_params[i])):
              for k in ret_63.keys():
                  if k[iter_ind[i]] == iter_params[i][j]:
                      tmp += 1
          print(tmp)
```

prior\_prd\_list  
278  
low\_stk\_bound\_list  
278  
up\_stk\_bound\_list  
278  
cluster\_u\_coef\_list  
278  
cluster\_l\_coef\_list  
278  
corr\_thesh\_list  
278

```
In [9]: rebal_prd_list = [63,253]#[21,63,253],
prior_prd_list = [253,2*253,5*253]
update_prd_list = [21,63, 253]
low_stk_bound_list = [-.007, -.005, -.003]
up_stk_bound_list = [.01,.02,.05,.1]
cluster_u_coef_list = [2,3,5]
cluster_l_coef_list = [-.02, -.05, -.1]
corr_thesh_list = [.5,.6,.7,.8]
stock_tresh_list = [.05]
```

```
In [ ]: 'prior_prd_list': 2*253 (definitively the best)
        'low_stk_bound_list': -.003 (definitively the best)
        'up_stk_bound_list': 0.01 (probably the best)
        'cluster_u_coef_list': 3 maybe. not much impact (all are pretty much the same)
        'cluster_l_coef_list': -0.02 (probably the best)
        'corr_thesh_list': 0.8 (probably the best)
```

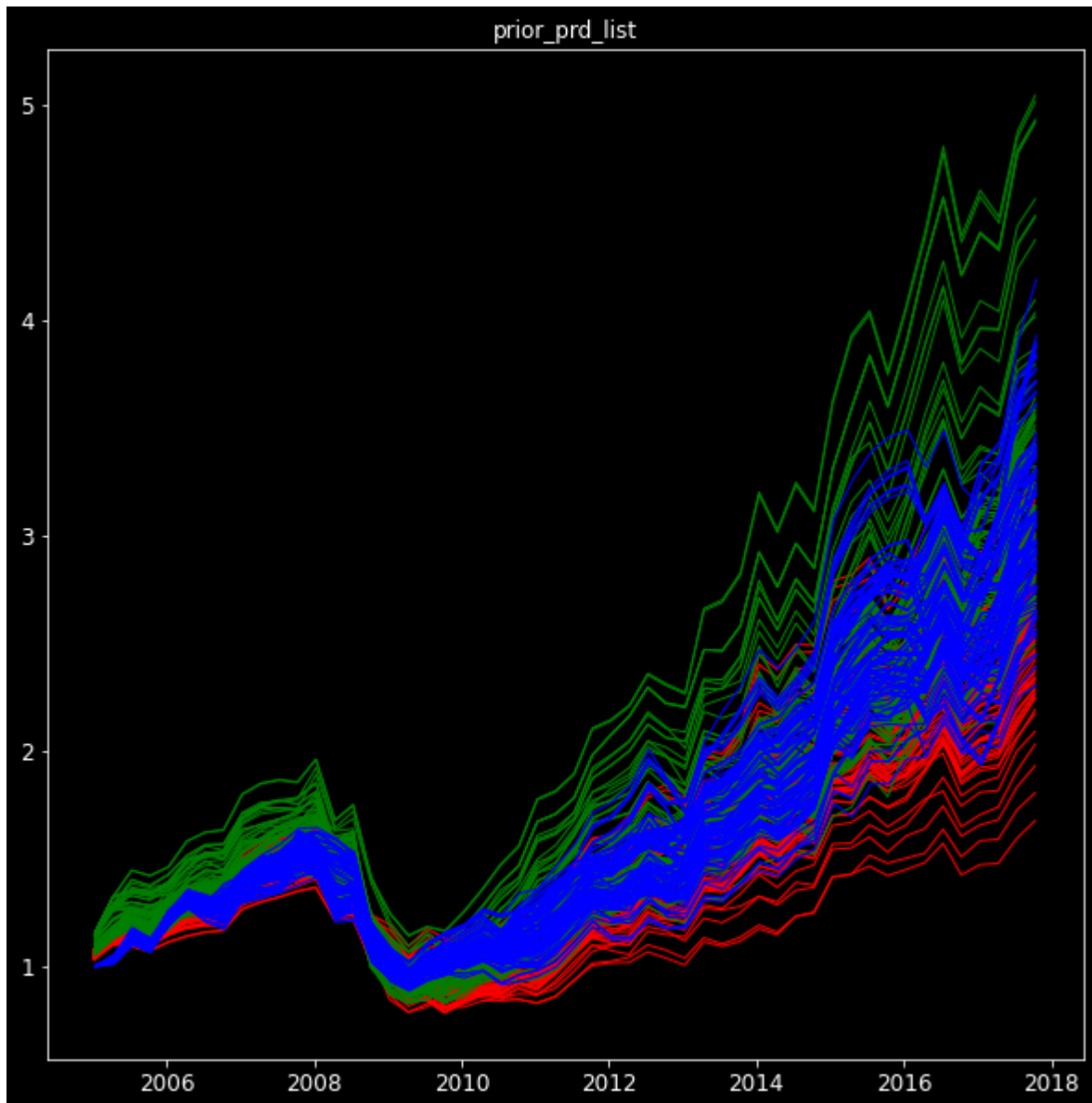
```
In [10]: iter_params = [prior_prd_list,low_stk_bound_list,up_stk_bound_list,cluster_u_coef_list,
iter_names = ['prior_prd_list','low_stk_bound_list','up_stk_bound_list','cluster_u_coef',
iter_ind = [1,3,4,5,6,7]
colors = ['red','green','blue','yellow']
```

```
In [12]: for i in range(len(iter_params)):
          means = []
          for j in range(len(iter_params[i])):
              mean_calc = 0
              mean_count = 0
```

```

for k in ret_63.keys():
    if k[iter_ind[i]] == iter_params[i][j]:
        plt.plot(ret_63[k], color=colors[j])
        mean_calc += ret_63[k][-1]
        mean_count += 1
    means.append(mean_calc/mean_count)
plt.title(iter_names[i])
plt.show()
print('legend for above graph:')
print(iter_params[i])
print(colors[:len(iter_params[i])])
print('mean final cumulative returns:')
print(means)

```



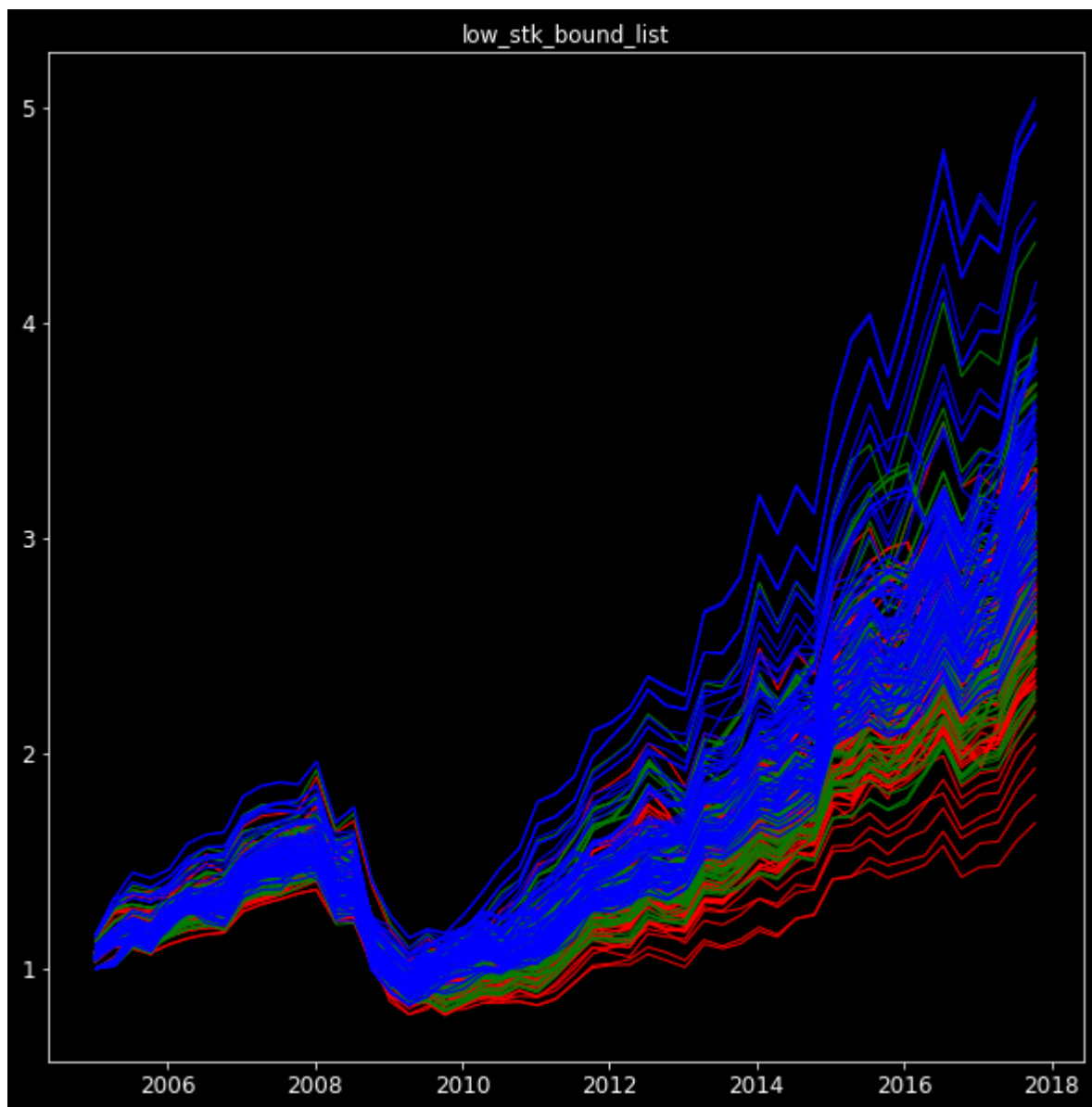
legend for above graph:

[253, 506, 1265]

['red', 'green', 'blue']

mean final cumulative returns:

[2.644063271645387, 3.32408000557537, 3.12504462458168]



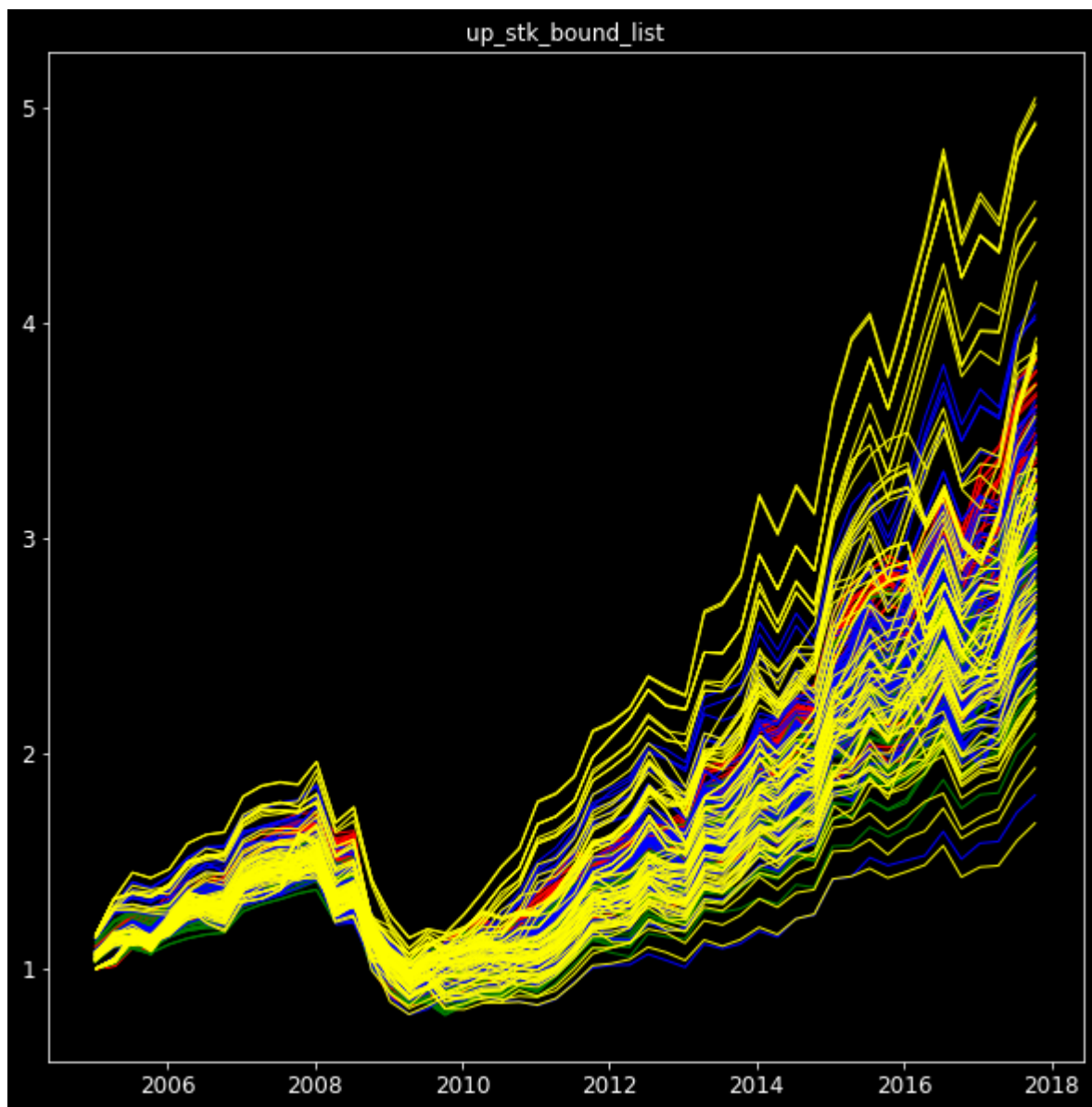
legend for above graph:

$[-0.007, -0.005, -0.003]$

$['red', 'green', 'blue']$

mean final cumulative returns:

$[2.760004412557559, 3.0294462256398984, 3.404627971977839]$



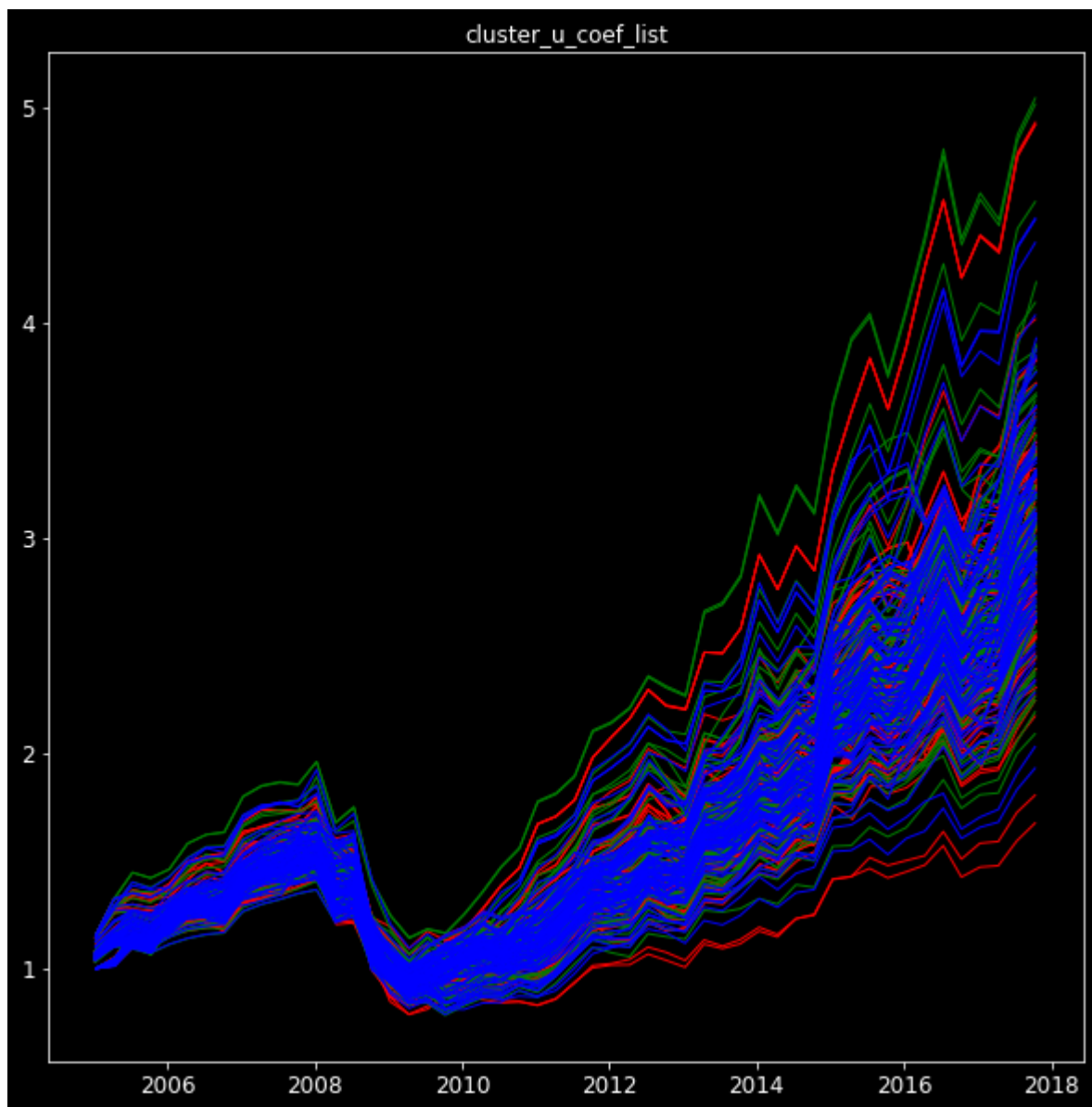
legend for above graph:

[0.01, 0.02, 0.05, 0.1]

['red', 'green', 'blue', 'yellow']

mean final cumulative returns:

[3.218554372993981, 2.86723436252182, 3.017484729370722, 3.1655255044119186]



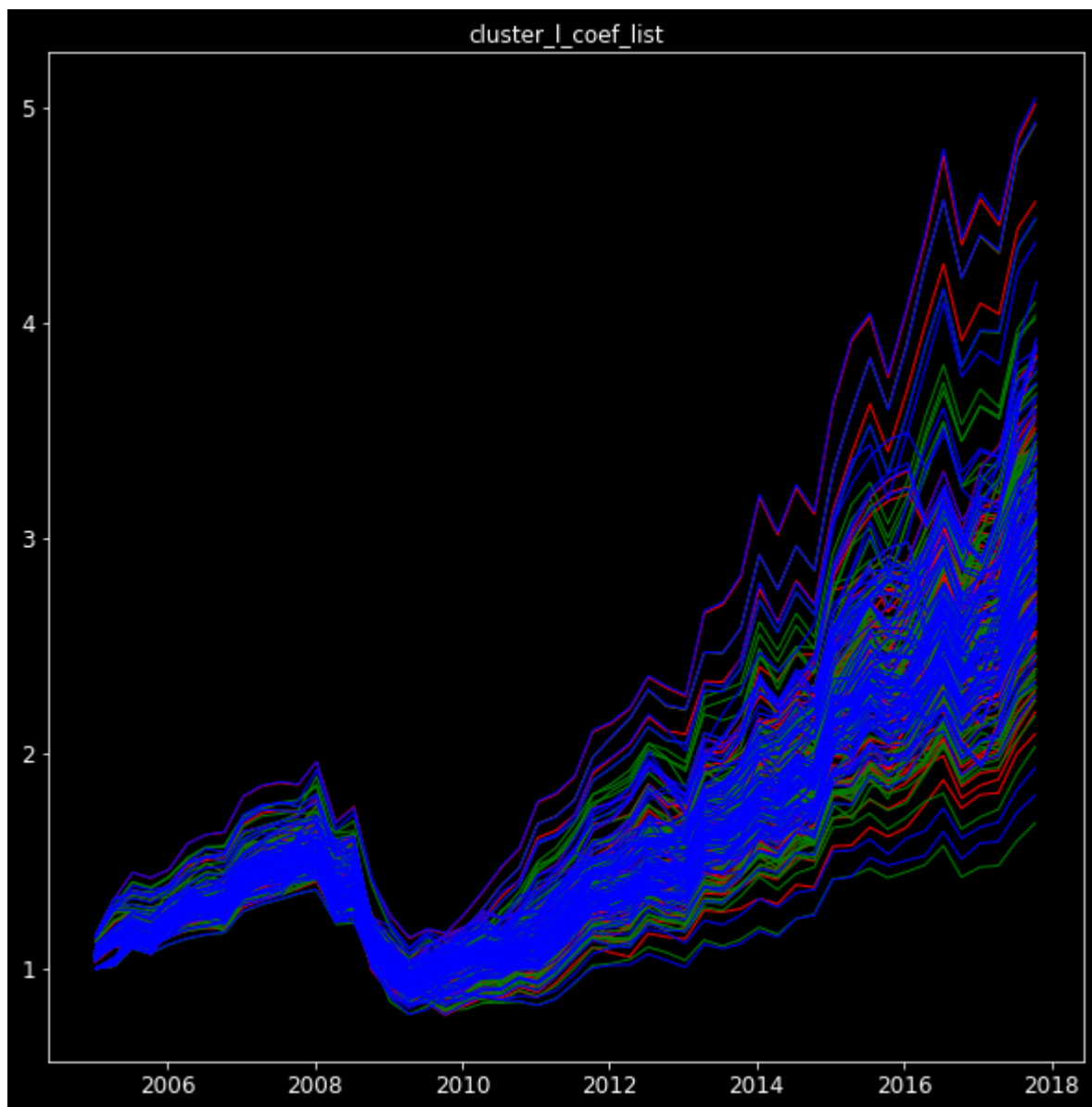
legend for above graph:

[2, 3, 5]

['red', 'green', 'blue']

mean final cumulative returns:

[3.023576270682724, 3.088034280178034, 3.0724912276282543]



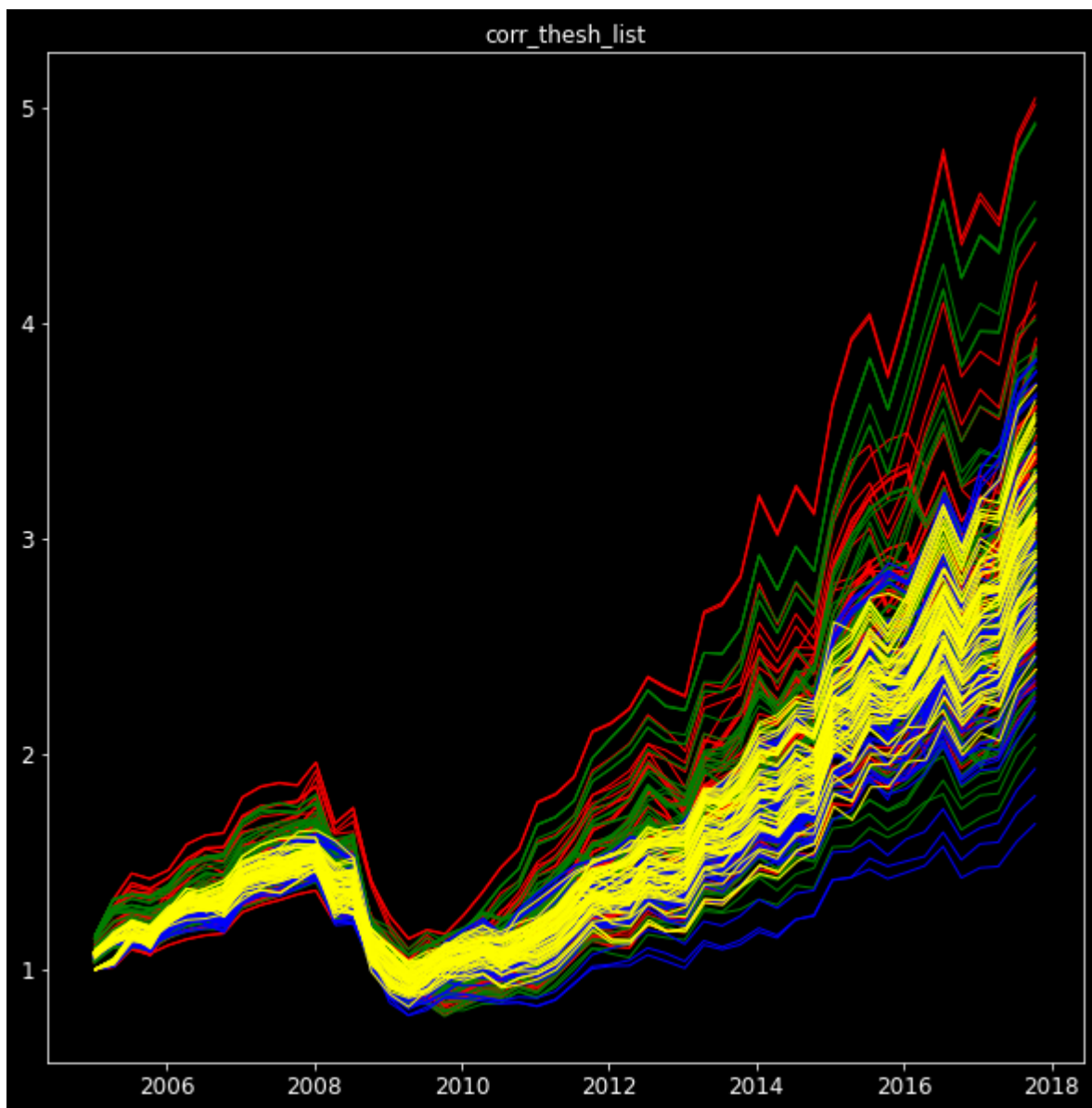
legend for above graph:

`[-0.02, -0.05, -0.1]`

`['red', 'green', 'blue']`

mean final cumulative returns:

`[3.0720163984010465, 3.014086262014761, 3.1005646405639347]`



legend for above graph:

[0.5, 0.6, 0.7, 0.8]

['red', 'green', 'blue', 'yellow']

mean final cumulative returns:

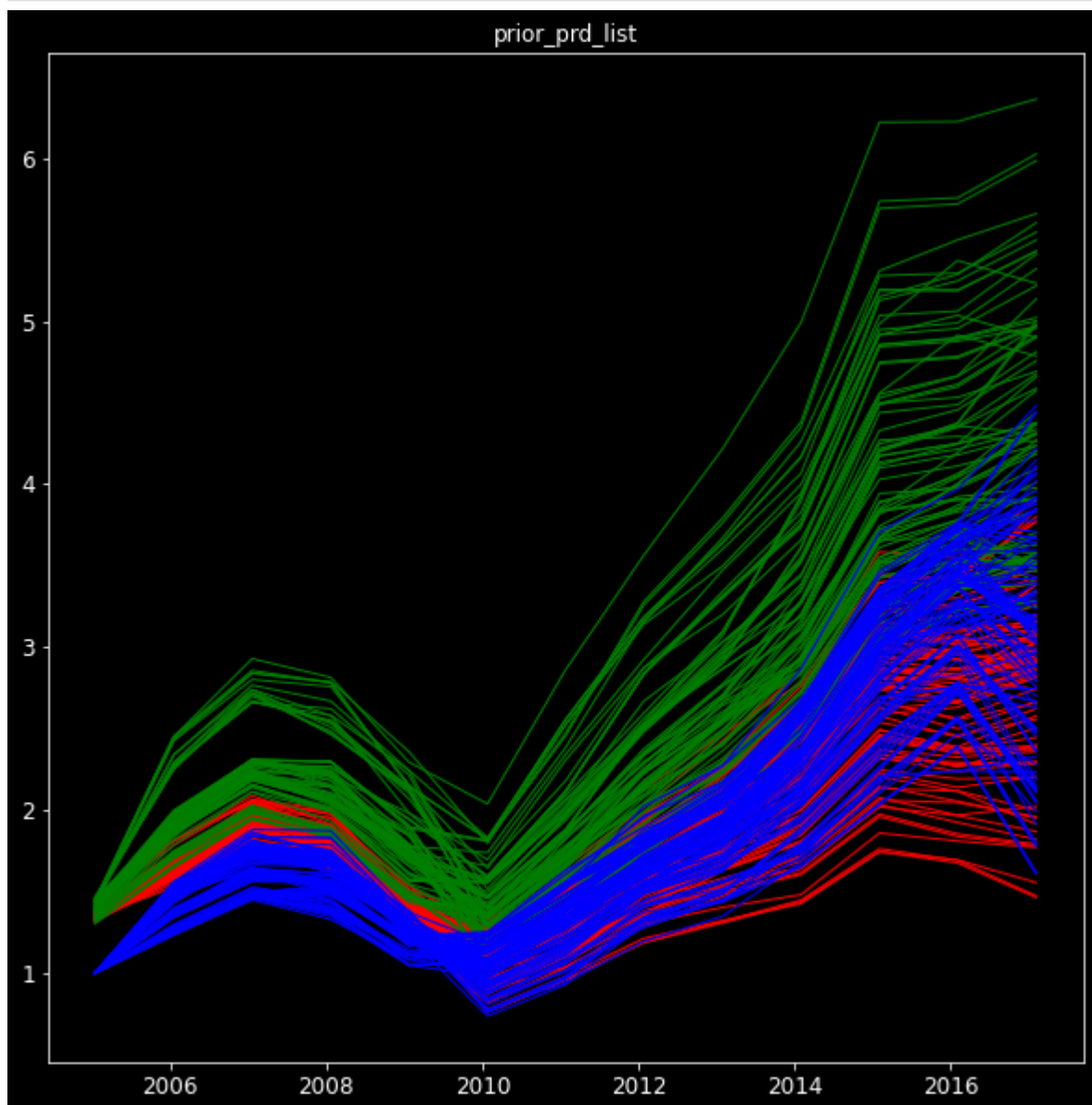
[3.203127168588327, 3.1542871757498228, 2.8469493292408203, 3.0155914122667427]

In [13]:

```
for i in range(len(iter_params)):
    means = []
    for j in range(len(iter_params[i])):
        mean_calc = 0
        mean_count = 0
        for k in ret_253.keys():
            if k[iter_ind[i]] == iter_params[i][j]:
                plt.plot(ret_253[k], color=colors[j])
                mean_calc += ret_253[k][-1]
                mean_count += 1
        means.append(mean_calc/mean_count)
plt.title(iter_names[i])
plt.show()
print('legend for above graph:')
print(iter_params[i])
print(colors[:len(iter_params[i])])
```



```
print('mean final cumulative returns:')  
print(means)
```



legend for above graph:

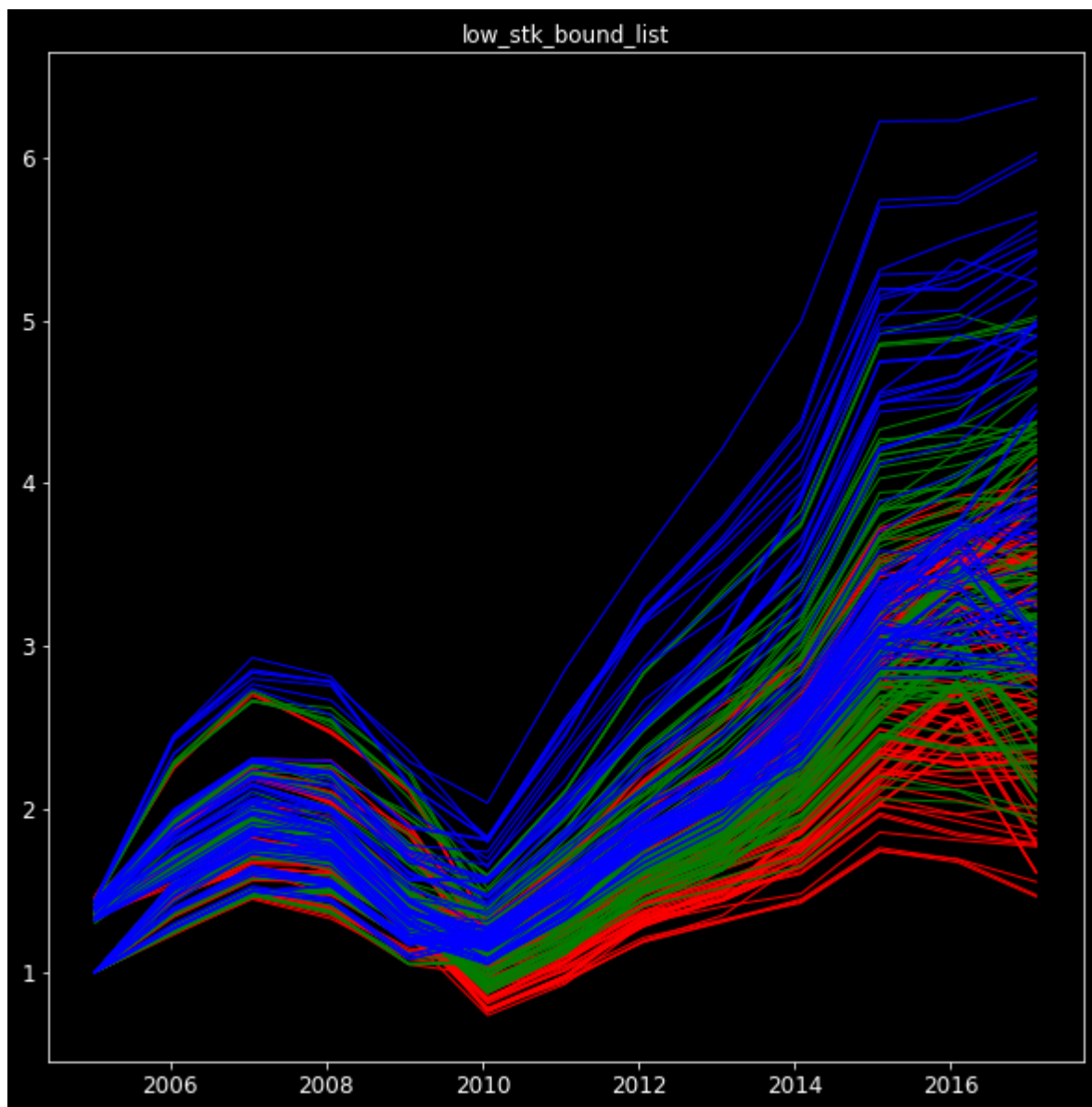
[253, 506, 1265]

['red', 'green', 'blue']

mean final cumulative returns:

[2.7562567154126625, 4.362399308965026, 3.023106751552685]





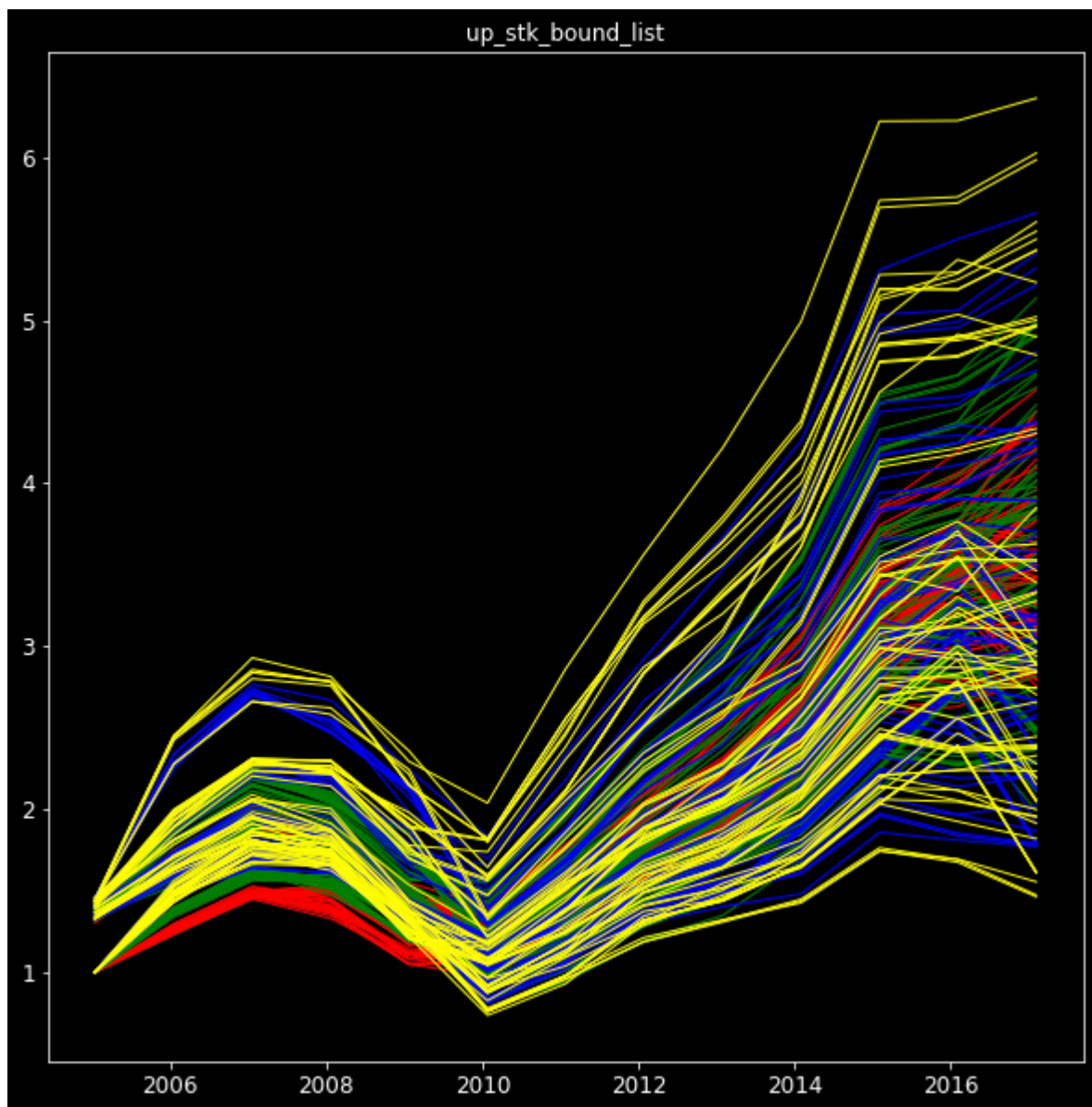
legend for above graph:

$[-0.007, -0.005, -0.003]$

['red', 'green', 'blue']

mean final cumulative returns:

[2.810213768983104, 3.3019531424224184, 3.9792318155874975]



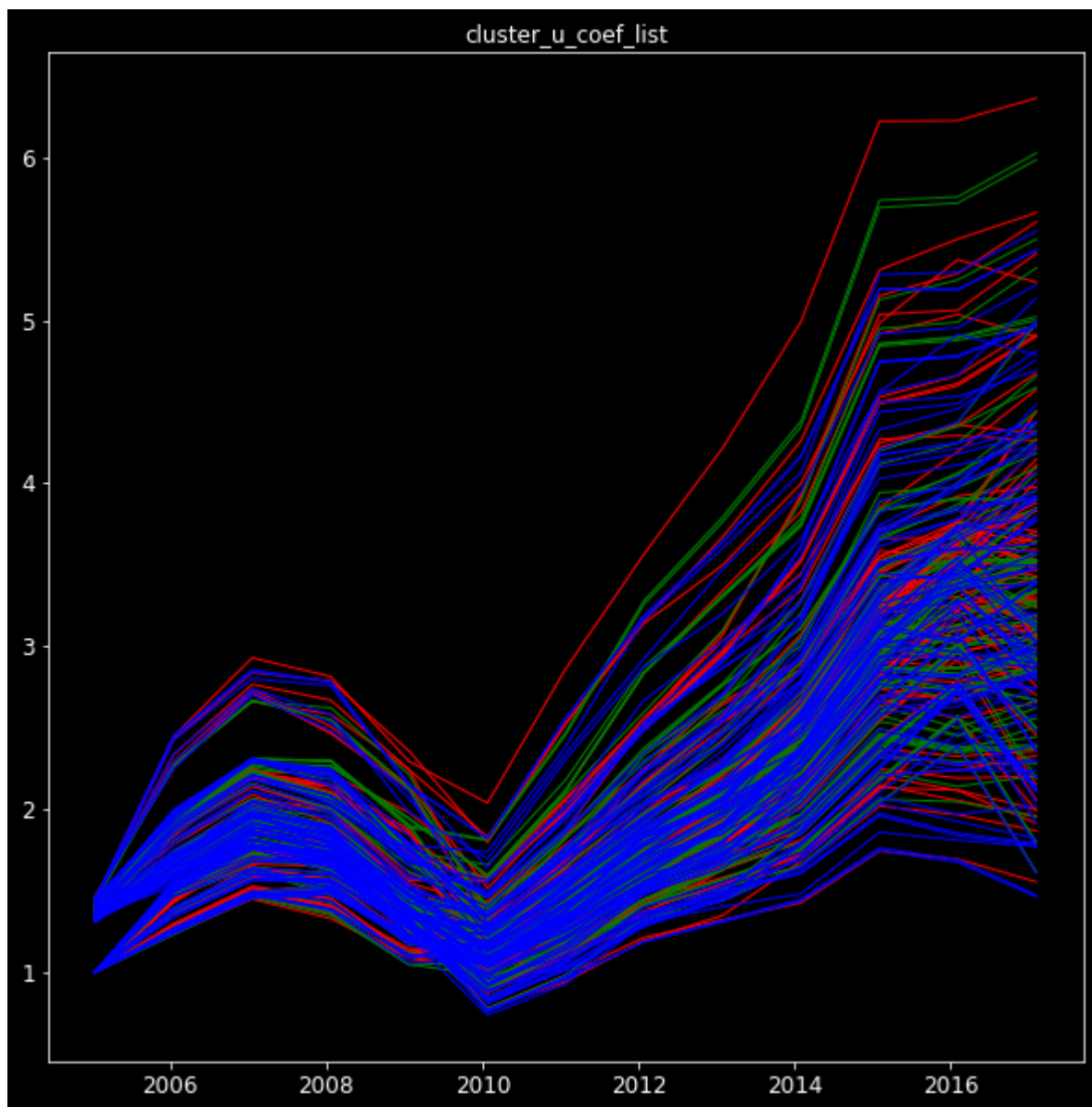
legend for above graph:

[0.01, 0.02, 0.05, 0.1]

['red', 'green', 'blue', 'yellow']

mean final cumulative returns:

[3.511212452659798, 3.4458204672618593, 3.1396842538156675, 3.2448044339933184]



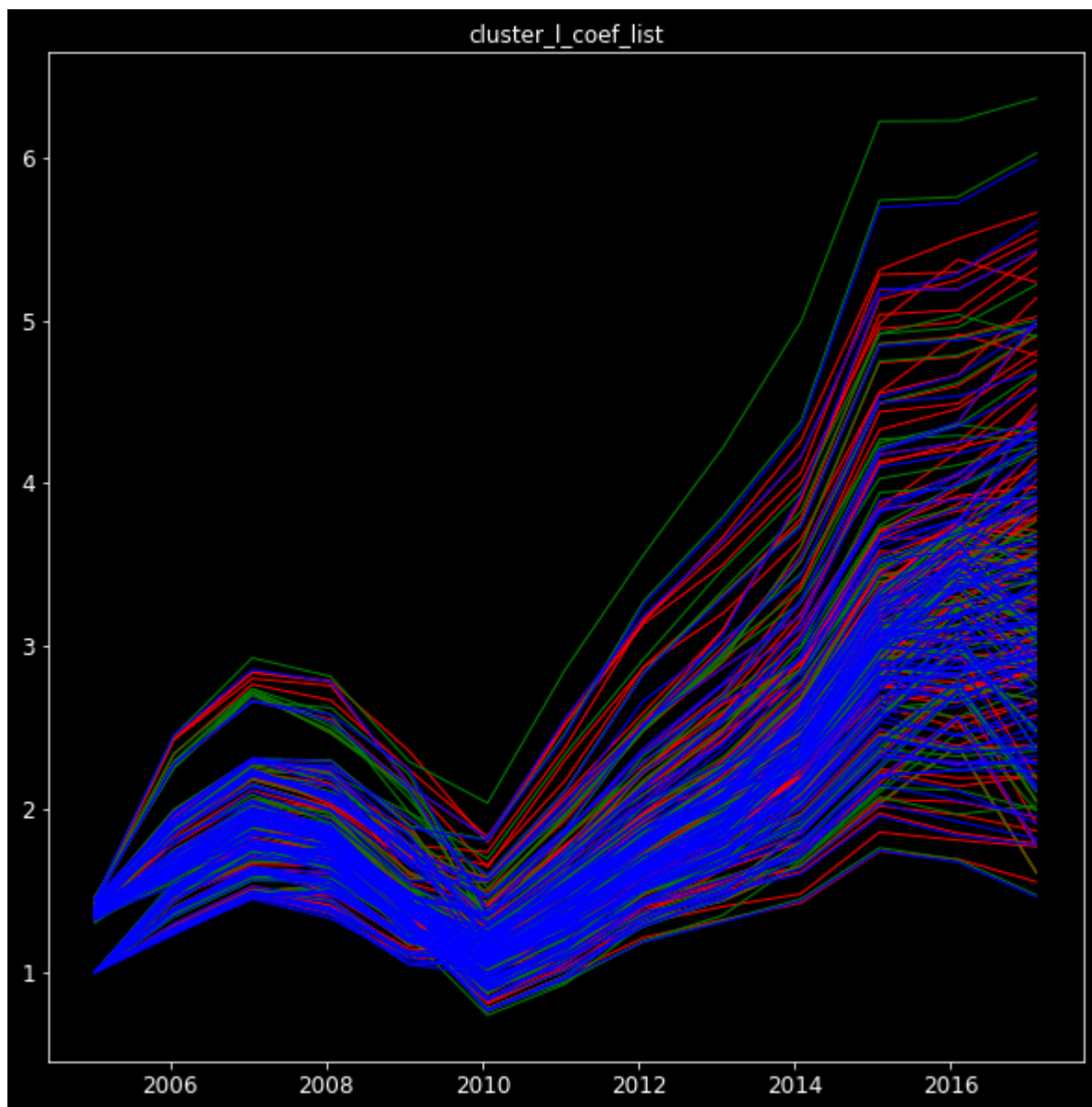
legend for above graph:

[2, 3, 5]

['red', 'green', 'blue']

mean final cumulative returns:

[3.425062263202145, 3.301224258308056, 3.3097133440503965]



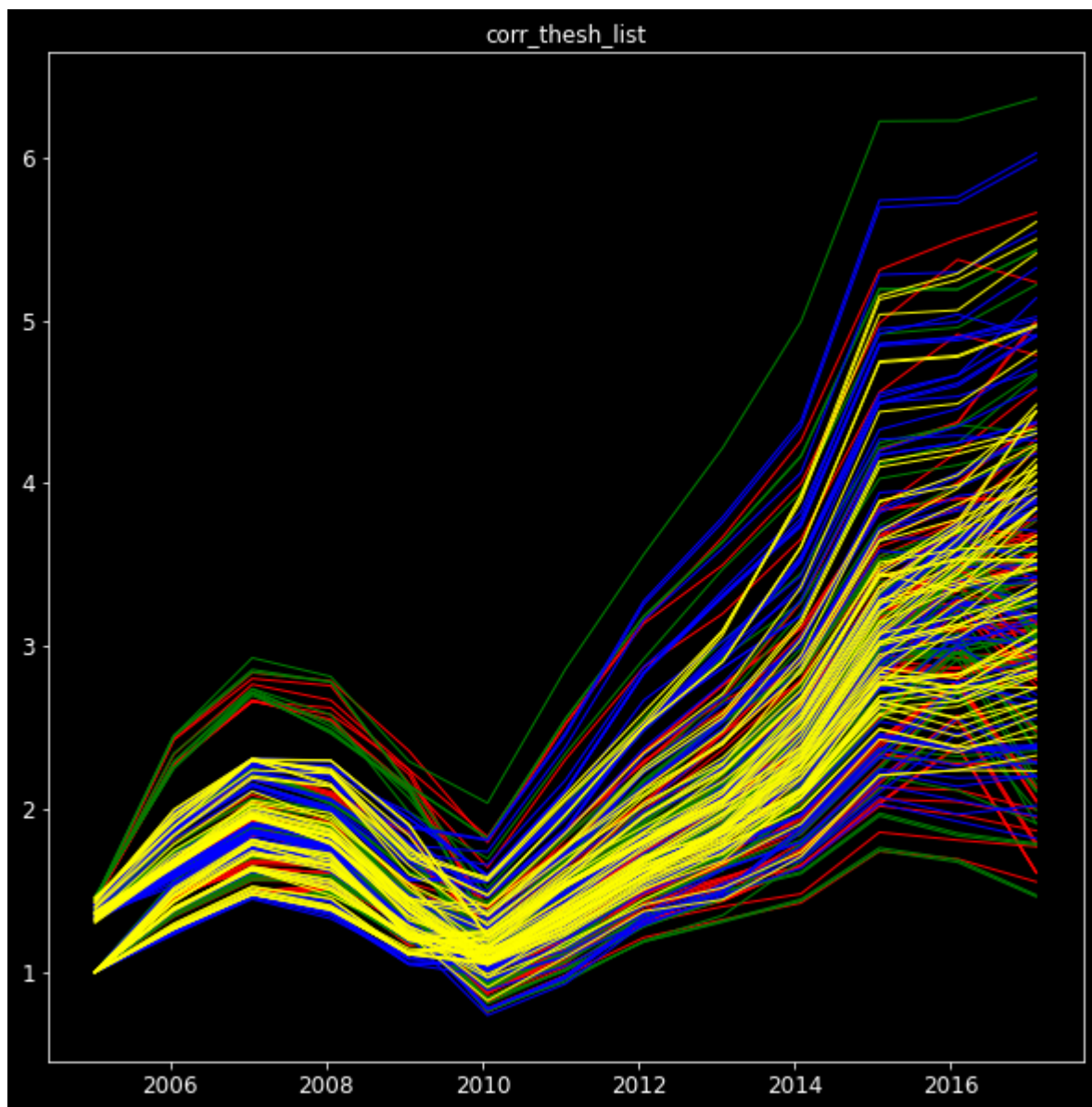
legend for above graph:

$[-0.02, -0.05, -0.1]$

['red', 'green', 'blue']

mean final cumulative returns:

[3.4405515692036834, 3.279425207662715, 3.2825958036915406]



legend for above graph:

[0.5, 0.6, 0.7, 0.8]

['red', 'green', 'blue', 'yellow']

mean final cumulative returns:

[3.0575953180097235, 3.1100013938383024, 3.6108265297951756, 3.613086890264762]

In [ ]: