Results of 1 Long, 1 Shot Dow portfolio

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Here's a rather important result, holds over a 10 YEAR period. ( 2009 to 2018 ):
There's no significant benefit to holding more than 1 stock & playing with weights.
The weights (for 3, 4 & even for 5 stocks) end up looking like <0.96,0.01,0.01,0.01,0.01>
Essentially that says put all the money on the first component.
i.e. Most of the weighting schemes point to the fact that
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going long a single stock, AND
going short a single stock
suffices.
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Strategy
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1. Sort yesterday's daily return, from biggest to smallest.
2. Since we have 30 stocks in Dow, we have 30 positions.
3. Pick an arbitrary stock to go long, out of these 30 positions.
4. Pick an arbitrary stock to go short, out of these 30 positions.
5. Steps 3 + 4 can be done in 30x29 ways
6. Go long and short as per 3 + 4, then close out at end of day.
7. Do steps 1-6 for all 30-day periods, in a time window of x100 days ( ie. 100 days, 200 days etc )
8. Report the best return & the position on which we went long, position on which we shorted.

Results
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[1] "Past  1 x100 days"
[1] "Samples: 71"
[1] "Mode Long  2 Mode Short  4"
     Long Short Monthly Return
[1,]    2     4      0.1614292
[2,]   28     4      0.1602337
[3,]    2     5      0.1598842
[4,]    3    30      0.1595210
[5,]   28     5      0.1586886
[1] "Past  2 x100 days"
[1] "Samples: 171"
[1] "Mode Long  26 Mode Short  1"
     Long Short Monthly Return
[1,]   26     1      0.1241082
[2,]   28     1      0.1102044
[3,]   29     1      0.1092634
[4,]   26    12      0.1065908
[5,]    2     1      0.1040797
[1] "Past  3 x100 days"
[1] "Samples: 271"
[1] "Mode Long  26 Mode Short  1"
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     Long Short Monthly Return
[1,]   26     1     0.10563931
[2,]   26     5     0.09763222
[3,]   28     1     0.09503034
[4,]   27     1     0.09137054
[5,]   28     5     0.08702325
[1] "Past  4 x100 days"
[1] "Samples: 371"
[1] "Mode Long  26 Mode Short  5"
     Long Short Monthly Return
[1,]   26     5     0.08305331
[2,]   27     5     0.07609680
[3,]   22     5     0.06953204
[4,]   28     5     0.06813121
[5,]   26     9     0.06587132
[1] "Past  5 x100 days"
[1] "Samples: 471"
[1] "Mode Long  26 Mode Short  5"
     Long Short Monthly Return
[1,]   26     5     0.06958204
[2,]   27     5     0.06623831
[3,]   27    30     0.05981050
[4,]   28    30     0.05646678
[5,]   29     5     0.05626489
[1] "Past  6 x100 days"
[1] "Samples: 571"
[1] "Mode Long  27 Mode Short  5"
     Long Short Monthly Return
[1,]   27     5     0.06319514
[2,]   25     5     0.05713573
[3,]   26     5     0.05652985
[4,]   28    30     0.05575002
[5,]   29     5     0.05418957
[1] "Past  7 x100 days"
[1] "Samples: 671"
[1] "Mode Long  27 Mode Short  5"
     Long Short Monthly Return
[1,]   27     5     0.04845572
[2,]   25     5     0.04521055
[3,]   28    30     0.04462437
[4,]   26     5     0.04404591
[5,]   29     5     0.04311610
[1] "Past  8 x100 days"
[1] "Samples: 771"
[1] "Mode Long  29 Mode Short  5"
     Long Short Monthly Return
[1,]   29     5     0.04417558
[2,]   27     5     0.04235365
[3,]   26     5     0.03994993
[4,]   25     5     0.03959223
[5,]   29    12     0.03861255
[1] "Past  9 x100 days"
[1] "Samples: 871"
[1] "Mode Long  29 Mode Short  5"
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     Long Short Monthly Return
[1,]   29     5     0.03874689
[2,]   29    12     0.03566757
[3,]   27     5     0.03555274
[4,]    1     5     0.03517524
[5,]    8     5     0.03404344
[1] "Past  10 x100 days"
[1] "Samples: 971"
[1] "Mode Long  29 Mode Short  5"
     Long Short Monthly Return
[1,]   29     5     0.03920914
[2,]   29    12     0.03650009
[3,]    8     5     0.03507549
[4,]   26     5     0.03485111
[5,]   29     3     0.03450962
[1] "Past  11 x100 days"
[1] "Samples: 1071"
[1] "Mode Long  29 Mode Short  5"
     Long Short Monthly Return
[1,]   29     5     0.04090650
[2,]   29    12     0.03965855
[3,]   29     9     0.03278548
[4,]   29     3     0.03203382
[5,]    8     5     0.03195567
[1] "Past  12 x100 days"
[1] "Samples: 1171"
[1] "Mode Long  29 Mode Short  12"
     Long Short Monthly Return
[1,]   29    12     0.03681885
[2,]   29     5     0.03622762
[3,]   26    12     0.03145677
[4,]   26     5     0.03086554
[5,]    8    12     0.03000567
[1] "Past  13 x100 days"
[1] "Samples: 1271"
[1] "Mode Long  26 Mode Short  12"
     Long Short Monthly Return
[1,]   26    12     0.03736375
[2,]   29    12     0.03717476
[3,]   26     5     0.03545195
[4,]   29     5     0.03526296
[5,]    8    12     0.03168648
[1] "Past  14 x100 days"
[1] "Samples: 1371"
[1] "Mode Long  26 Mode Short  12"
     Long Short Monthly Return
[1,]   29    12     0.03692764
[2,]   26    12     0.03602985
[3,]   29     5     0.03493971
[4,]   26     5     0.03404193
[5,]   18    12     0.03330790
[1] "Past  15 x100 days"
[1] "Samples: 1471"
[1] "Mode Long  26 Mode Short  5"
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     Long Short Monthly Return
[1,]   26     5     0.03379122
[2,]   26    12     0.03315299
[3,]   29     5     0.03269941
[4,]   18     5     0.03269696
[5,]   27     5     0.03262058
[1] "Past  16 x100 days"
[1] "Samples: 1571"
[1] "Mode Long  26 Mode Short  30"
     Long Short Monthly Return
[1,]   27    30     0.03446775
[2,]   26     5     0.03303053
[3,]   26    12     0.03210658
[4,]   30    30     0.03130410
[5,]   28    30     0.03083612

Conclusions:
After sorting yesterday's returns from highest to lowest,
Go long the stock in the 26th position.
Short the stock in the 5th position.
That provides the best monthly return (minimum 3%, upto 12% in good months)

More generally:
After sorting yesterday's returns from highest to lowest,
Go long ANY stock in the [26-30] position. ( ie. yesterday's losers )
Short the stock in the [1-5th] position. ( yesterday's winners)
That provides the best monthly return.
This has been tested over a 10 YEAR period. ( 2009 to 2018 )
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