

# Trading the Shorts

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Should retail trend followers trade the short side?

The, ahem, short answer would be; probably not.

## **The problem with the shorts**

The short side is extremely difficult. It's easy to fall into the trap of seeing the longs and the shorts as the same, just a different sign in front. After all, going short is as easy as going long. The problem however is that the probabilities of making money following trends down are very low. The only justification for including short positions is for their often positive effect on the overall portfolio skew, given long enough time horizons. This means that most of the time the shorts will just keep losing money, but once in a while they short large gains, just as the long positions lose out big. This effect is arguably much more important to institutional money manager than it is to a retail trader. So should a retail trader bother with the shorts at all?

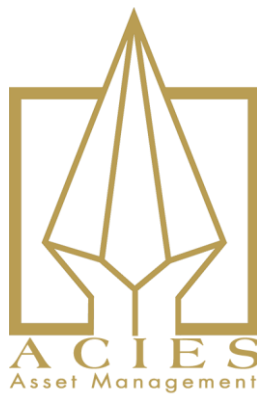
In the past couple of months, the short side has done very well. The commodities have fallen for a long time and there was plenty of money on the table. That is however unusual and not likely to last.

I think it's a fair assumption that all of you reading this have some knowledge of how to develop trading models. Let me suggest an exercise for you. Develop a trend following trading model that only takes the short trades. Keep the rules simple to avoid curve fitting and make sure you test the model on a large set of diversified futures markets, covering all major asset classes.

What you're likely to find is just how difficult and frustrating it can be to attempt such a model.

Naturally, if you test the model only on a couple of markets which has historically seen protracted price declines, all will look fine. But that's not what we're looking for here.

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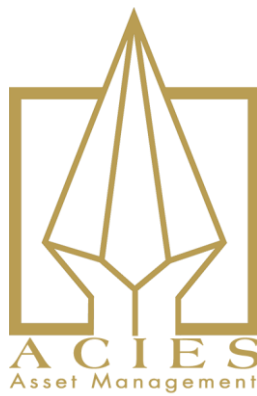


Avoid the temptation of throwing indicator after indicator at the problem to try to optimize the returns. Actually, go ahead and throw those indicators in there. What you're likely to find is that it won't help anyhow and just makes the model more and more complex.

### **Simple trend models**

Start by looking at the sad picture below. Remember the 12 months momentum model that I showed in the past? The one that has extremely simple trend following rules, yet produce very respectable returns. What if we take that model and turn off the long trades? By default, this model looked 200 trading days back, and went long if the current price is above that level, else short. So let's take only the short trades and see what happens.

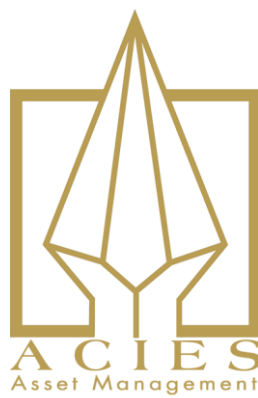
Below is a screenshot of an optimization run, testing look back periods of between 5 days and 275 days. Testing period was from 2005 to date, and testing universe was all the markets in the Futures Intelligence Report.



Run #	lookBack	Net Profit	APR	Max Exposure	Max Drawdown	Trades	Winning %	Sharpe ...
1	5	(\$12,595,202.13)	-9.63 %	63.74 %	71.75 %	8897	33.99 %	-0.7919...
2	20	(\$10,244,335.74)	-7.05 %	69.00 %	68.01 %	4028	31.53 %	-0.6248...
3	35	(\$9,175,596.36)	-6.06 %	74.62 %	60.71 %	3098	32.41 %	-0.5486...
4	50	(\$7,177,861.12)	-4.43 %	73.02 %	59.73 %	2556	31.69 %	-0.4188...
5	65	(\$2,477,427.74)	-1.34 %	74.44 %	46.71 %	2200	31.95 %	-0.2469...
6	80	(\$1,108,485.89)	-0.58 %	76.36 %	48.22 %	1901	32.93 %	-0.2097...
7	95	(\$5,168,868.57)	-3.00 %	78.07 %	56.53 %	1761	31.18 %	-0.3502...
8	110	(\$4,279,105.69)	-2.42 %	77.83 %	50.52 %	1614	31.04 %	-0.3303...
9	125	(\$6,240,343.31)	-3.74 %	77.24 %	54.38 %	1564	31.27 %	-0.4368...
10	140	(\$6,964,968.62)	-4.27 %	76.12 %	57.22 %	1472	29.48 %	-0.4738...
11	155	(\$6,077,746.18)	-3.62 %	77.97 %	55.54 %	1397	30.99 %	-0.4438...
12	170	(\$8,274,531.23)	-5.29 %	77.36 %	61.00 %	1331	27.05 %	-0.5577...
13	185	(\$6,037,885.95)	-3.59 %	78.23 %	57.42 %	1252	29.23 %	-0.4394...
14	200	(\$6,425,620.43)	-3.87 %	78.33 %	60.01 %	1176	27.55 %	-0.4408...
15	215	(\$4,540,916.42)	-2.59 %	75.58 %	54.20 %	1092	31.59 %	-0.3656...
16	230	(\$4,029,410.59)	-2.27 %	77.62 %	51.19 %	1067	30.08 %	-0.3487...
17	245	(\$3,277,239.05)	-1.81 %	76.23 %	50.44 %	1028	32.10 %	-0.3348...
18	260	(\$5,192,303.87)	-3.02 %	75.26 %	53.11 %	984	31.50 %	-0.4142...
19	275	(\$7,132,630.67)	-4.39 %	75.74 %	57.54 %	972	28.91 %	-0.5459...

Yes, every single one lost money. They all had high volatility, massive drawdowns and no gains. Clearly the very concept of this trading model doesn't really work on the short side. At least as a stand alone strategy.

For comparison, take a look at the same optimization run, only this time I've disabled the shorts and enabled the longs.

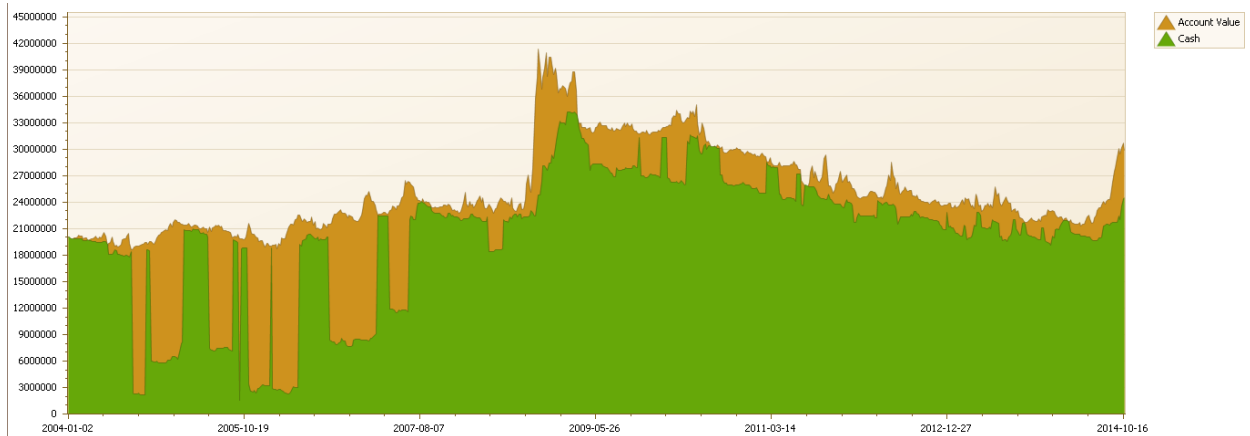
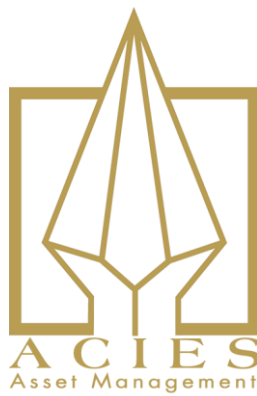


Run #	lookBack	Net Profit	APR	Max Ex...	Max Dra...	Trades	Winning %	Payoff ...	Sharpe ...
1	5	\$34,756...	10.80 %	73.36 %	26.05 %	8769	38.47 %	1.81122...	0.45415...
2	20	\$52,434...	14.01 %	53.52 %	24.22 %	3990	37.64 %	2.04726...	0.61102...
3	35	\$57,681...	14.82 %	54.60 %	24.65 %	3061	36.85 %	2.27991...	0.62540...
4	50	\$73,861...	17.06 %	54.37 %	22.75 %	2522	36.32 %	2.48956...	0.71953...
5	65	\$109,82...	20.99 %	43.54 %	24.12 %	2179	38.55 %	2.46208...	0.89324...
6	80	\$120,77...	21.99 %	47.06 %	23.17 %	1882	39.80 %	2.43393...	0.93556...
7	95	\$88,939...	18.85 %	44.78 %	23.38 %	1738	38.32 %	2.45762...	0.79936...
8	110	\$96,659...	19.68 %	35.60 %	24.54 %	1598	36.86 %	2.82384...	0.82979...
9	125	\$81,608...	18.01 %	35.86 %	27.30 %	1554	38.80 %	2.57872...	0.75475...
10	140	\$76,085...	17.34 %	30.09 %	25.43 %	1460	38.84 %	2.51373...	0.71243...
11	155	\$84,348...	18.33 %	30.10 %	27.86 %	1384	38.73 %	2.70567...	0.77305...
12	170	\$69,363...	16.47 %	30.54 %	28.21 %	1328	38.93 %	2.48710...	0.68955...
13	185	\$86,463...	18.57 %	22.22 %	28.67 %	1237	38.64 %	2.69982...	0.79161...
14	200	\$83,809...	18.27 %	15.67 %	28.77 %	1170	36.84 %	2.90858...	0.76447...
15	215	\$98,551...	19.88 %	15.82 %	30.99 %	1088	37.68 %	2.91711...	0.83466...
16	230	\$101,54...	20.18 %	15.64 %	31.84 %	1065	39.72 %	2.86524...	0.83488...
17	245	\$109,95...	21.00 %	17.52 %	33.66 %	1025	38.93 %	2.99499...	0.86260...
18	260	\$89,815...	18.95 %	15.76 %	32.49 %	988	37.04 %	3.15001...	0.76131...
19	275	\$71,090...	16.70 %	15.61 %	32.76 %	974	37.17 %	2.95063...	0.67191...

That looks a little better, in particular on the longer periods. The concept of this trend model works for the long side, but not really for the short side. Is this a specific problem to this simple trend model?

Let's try the core trading model from my book. You did read my book, right? Right..?

Running that core model on the markets in the Futures Intelligence Report, taking only short trades, actually produces a profit over time. But it's still not a return profile you'd be happy with.



There one big spike up, in 2008. If not for that, we wouldn't have made much money on this ten year period. Even with this big spike, we made a compound return of 3.6% for a max drawdown of 52%. Even buy and hold equities give (slightly) better results than that.

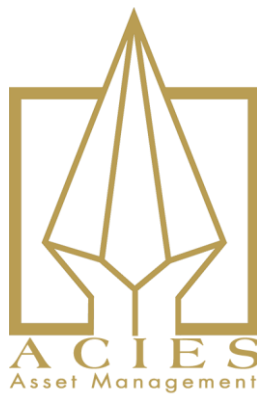
### **What if we try a counter trend model?**

Ok, so the standard trend models don't work well with shorts. But how about the Plunger based models? Remember that these models are based on entering in the direction of the main trend, but only after a significant move against it. Essentially, we're entering trends on pullbacks.

I showed you a well performing model a few months ago, which enters long on a pullback of 3 ATR units. Let's use this same model, but only enable the short side.

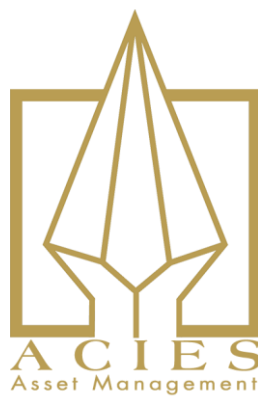
Using the default settings for the same set of markets and the same ten years, this model showed a 17% annualized gain at a max drawdown of 28%. For the long side. The shorts did less well. They showed a negative yearly return of 4.8% and a max drawdown of 61%. That's not very impressive.

But what if the parameters were wrong? Let's do a robustness test and run some different iterations. As mentioned, the default version entered on 3 ATR units pullback, stopped out at a loss of 2 ATR units

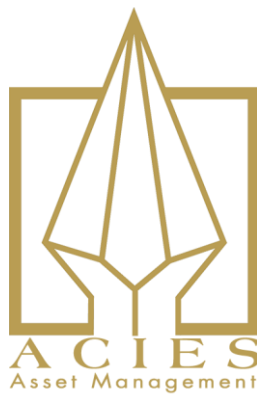


and took profits at a gain of 4 units. Let's vary these numbers a bit to see if the problem here is in the concept or just in the details.

In the table below, you see the results of varying these three factors. The entry trigger is varied from between 3 to 6, the stop point from 2 to 4 and the target from 4 to 7. Feel free to run more iterations on your own.



Run #	shortEntry	shortStop	shortTa...	APR	Max Dra...	Winning %	Sharpe ...
1	3	2	4	-4.78 %	61.26 %	23.45 %	-0.2201...
2	4	2	4	-5.43 %	56.25 %	23.45 %	-0.3969...
3	5	2	4	-3.48 %	38.34 %	29.04 %	-0.6695...
4	6	2	4	-2.26 %	27.84 %	30.07 %	-1.0396...
5	3	3	4	-5.75 %	59.17 %	25.43 %	-0.2407...
6	4	3	4	-6.09 %	57.58 %	24.55 %	-0.4285...
7	5	3	4	-3.18 %	48.73 %	31.15 %	-0.5351...
8	6	3	4	-2.63 %	30.08 %	33.33 %	-0.9804...
9	3	4	4	-7.40 %	63.28 %	25.76 %	-0.2935...
10	4	4	4	-5.69 %	58.33 %	25.10 %	-0.3892...
11	5	4	4	-3.64 %	49.51 %	31.05 %	-0.5640...
12	6	4	4	-2.98 %	32.61 %	32.76 %	-1.0157...
13	3	2	5	-4.78 %	61.26 %	23.45 %	-0.2201...
14	4	2	5	-5.43 %	56.25 %	23.45 %	-0.3969...
15	5	2	5	-3.48 %	38.34 %	29.04 %	-0.6695...
16	6	2	5	-2.26 %	27.84 %	30.07 %	-1.0396...
17	3	3	5	-5.75 %	59.17 %	25.43 %	-0.2407...
18	4	3	5	-6.09 %	57.58 %	24.55 %	-0.4285...
19	5	3	5	-3.18 %	48.73 %	31.15 %	-0.5351...
20	6	3	5	-2.63 %	30.08 %	33.33 %	-0.9804...
21	3	4	5	-7.40 %	63.28 %	25.76 %	-0.2935...
22	4	4	5	-5.69 %	58.33 %	25.10 %	-0.3892...
23	5	4	5	-3.64 %	49.51 %	31.05 %	-0.5640...
24	6	4	5	-2.98 %	32.61 %	32.76 %	-1.0157...
25	3	2	6	-4.78 %	61.26 %	23.45 %	-0.2201...
26	4	2	6	-5.43 %	56.25 %	23.45 %	-0.3969...
27	5	2	6	-3.48 %	38.34 %	29.04 %	-0.6695...
28	6	2	6	-2.26 %	27.84 %	30.07 %	-1.0396...
29	3	3	6	-5.75 %	59.17 %	25.43 %	-0.2407...
30	4	3	6	-6.09 %	57.58 %	24.55 %	-0.4285...
31	5	3	6	-3.18 %	48.73 %	31.15 %	-0.5351...
32	6	3	6	-2.63 %	30.08 %	33.33 %	-0.9804...
33	3	4	6	-7.40 %	63.28 %	25.76 %	-0.2935...
34	4	4	6	-5.69 %	58.33 %	25.10 %	-0.3892...
35	5	4	6	-3.64 %	49.51 %	31.05 %	-0.5640...
36	6	4	6	-2.98 %	32.61 %	32.76 %	-1.0157...
37	3	2	7	-4.78 %	61.26 %	23.45 %	-0.2201...
38	4	2	7	-5.43 %	56.25 %	23.45 %	-0.3969...
39	5	2	7	-3.48 %	38.34 %	29.04 %	-0.6695...
40	6	2	7	-2.26 %	27.84 %	30.07 %	-1.0396...
41	3	3	7	-5.75 %	59.17 %	25.43 %	-0.2407...
42	4	3	7	-6.09 %	57.58 %	24.55 %	-0.4285...
43	5	3	7	-3.18 %	48.73 %	31.15 %	-0.5351...
44	6	3	7	-2.63 %	30.08 %	33.33 %	-0.9804...
45	3	4	7	-7.40 %	63.28 %	25.76 %	-0.2935...
46	4	4	7	-5.69 %	58.33 %	25.10 %	-0.3892...
47	5	4	7	-3.64 %	49.51 %	31.05 %	-0.5640...
48	6	4	7	-2.98 %	32.61 %	32.76 %	-1.0157...



Now that looks quite depressing, doesn't it? The short side is no walk in the park.

### **Why trade the short side at all?**

For fund managers it makes sense. In the institutional game, vola control is everything. It's not about who ends up with the highest absolute return at the end of the year. It's about who gets the best return per vola unit.

For a retail trader, the interim vola may be more acceptable. This is a tradeoff that deserves plenty of consideration and everyone needs to make their own choices. For most retail traders, it probably makes sense to simply skip the short side all together.

Try the exercise that I suggested above. See if you can develop a model that trades only the short side and still has strong enough, and robust enough results.

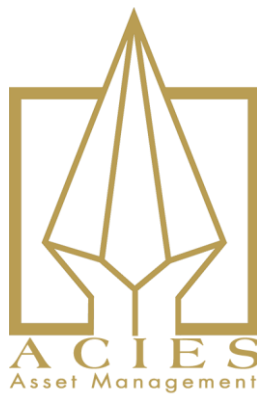
All trading models don't have to be profitable. That's an important concept to understand, whether you trade that way or not. A model which shows a slight loss over time may still have value, if it has a negative correlation to your other strategies. It may be used as a risk reduction tool. By trading such a model at the same time as your other things, you may be able to get the same return at lower risk. Still, that's mainly an institutional game and for retail traders this level of complexity may not be needed or desired.

### **When the short side makes sense**

An alternative way of handling the short side is to take the term structure into account. There are markets where there's a massive negative bias from a steep and consistent contango. This used to be the case with natural gas, but not anymore. It still applies to the VIX of course and there are other markets that at times fall into this category.

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This can get a little tricky to back test properly, but I'll give you this as a tip of another area of research. If you can measure the steepness of the curve and take that into account, you could use it as a filter for whether or not to enter short trades.