## Report for Double Down Strategy(v2)

## Strategy

start date: 1/1/2016end date: 31/5/2016

- position level from 2.0%, 2.5%, 3.0% up to 5.0%(7 levels). It means the price levels that trigger long are dmatLow, dmatLow × (1-position level), dmatLow × (1-position level)/2, ...... And price levels that trigger short are dmatHigh, dmatHigh × (1+position level), dmatHigh × (1+position level)/2,......
- take profit from 2.0%, 2.5%, 3.0% up to 5.0%(7 levels)
- round limit for stop loss from 4 to 12. (e.g. if round limit for stop loss is 4, it means that when the price hits the 4th position level, the strategy will exit to stop loss). Once exit, reset the corresponding position to 0 and set dmat value of that day as new entry price
- amount of contract for short and long are 1, 1, 2, 4, 8, 16, 32, 64, 128, ...
- unit of contract in this test is 10
- net position limit is 600
- capital is \$3M

## Result

- For each round limit, there is a sheet containing 49 data as follow (the round limit for the example picture is 4)
- The results are the total return for the corresponding positon level, take profit level and round limit.
- The green ones are positive return and red ones are negative return.
- The green one with yellow background is the best return at this round limit and the red one with yellow background is the worst return at this round limit

1	А	В	С	D	E	F	G	Н
	position level							
1	take profit	2.0%	2.50%	3.0%	3.50%	4.0%	4.50%	5.0%
2	2.0%	7.36%	.60%	-1.86%	1.91%	1.09%	03%	-6.79%
3	2.50%	4.73%	1.80%	2.95%	2.16%	.87%	.40%	.06%
4	3.0%	.43%	2.53%	2.36%	3.53%	1.67%	-5.20%	-5.76%
5	3.50%	-1.98%	3.42%	.94%	2.43%	-5.16%	-4.75%	-5.72%
6	4.0%	-3.98%	-7.35%	-2.58%	1.65%	-4.75%	-2.92%	-4.22%
7	4.50%	-3.30%	-7.12%	-2.08%	-3.82%	-4.37%	-2.32%	-3.70%
8	5.0%	-2.61%	-6.89%	-1.61%	-2.12%	-3.96%	-1.75%	-3.21%

## **Analysis**

• Here are a table and a chart showing the average return, best return, worst return for each round limit

	А	В	C	D	Е	F	G	Н	I	J
1	Round Limit	4	5	6	7	8	9	10	11	12
2	Average Return	-1.41%	-3.33%	-6.97%	-13.36%	-6.18%	-6.06%	-0.77%	-6.85%	3.23%
3	Best Return	7.36%	8.17%	12.16%	21.20%	32.06%	33.62%	35.65%	35.65%	68.43%
4	Worst Return	-7.35%	-15.00%	-24.54%	-45.41%	-53.01%	-96.61%	-84.89%	-122.53%	-168.51%



As we can see from the table and the chart, with the round limit going up, the best return goes high and the worst return goes down quickly so the risk goes high quickly. If the round limit goes up, the money invested is more which end up with higher return or higher loss.

• Here are some combinations of take profit level and position level that level lose money with any round limit. And the return is the best return of the corresponding combination

	position level			
6	take profit	2.0%	2.50%	3.50%
7	2.0%	14.83%	10.04%	6.15%
8	2.50%	21.20%	12.16%	6.56%

As we know that the return goes up with the round limit going up. The return of position level 2.0% reaches its highest value and never goes up at round limit 7, position level 2.50% at round limit 6 and position level 3.0% at round limit 5.

So I think the best combination of these three parameters should be chosen from this table, where round limit is not that high (so the risk is low), return is considerable and never lose money.