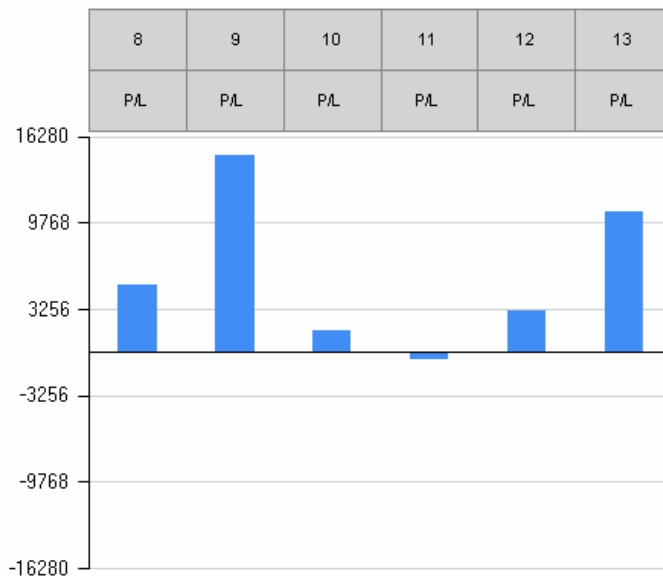


1. Chart description:

Total P/L values, split up by the Hour of Day.



What the chart tells me...

My best trading, in terms of total P/L, occurred from 9-10am, followed by the 1-2pm hour.

My worst trading, in terms of total P/L occurred from 11am-12noon. In fact, this hour is the only hour of the day during which my total accumulated P/L is negative.

A trend in P/L accumulation appears as the day progresses. I begin the day averagely, performing better (in terms of P/L) as I near 9am and through this hour. Nearing 10am I begin to slump and this slump gets progressively worse until the 11am hour when it reaches its low point. Around 12noon, then I come out of my P/L slump and get progressively better as the day comes to a close, ending the day on a high note.

Further questions:

What is it about the 9-10am hour that makes it my best hour, in terms of P/L?

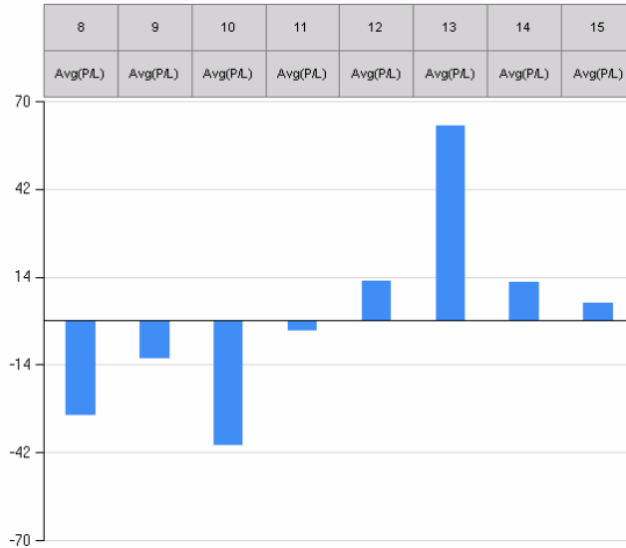
Why is 11am-12noon my worst hour, and further, the only negative hour?

What occurs around 10:00am that brings my P/L down, on average?

What would happen if I continued trading for an additional hour past 2:00pm (provided there is ample volume in the traded market)?

2. Chart description:

Average P/L values, per trade, split up by the Hour of Day.



What the chart tells me...

On average, my best trades occur in the afternoon hours, specifically from 12noon to 3pm, and conversely my worst trades occur in the first half of the trading day, specifically from 8am to 12noon.

My best trades occur between 12noon and 3pm, with the pinnacle being reached during the 1-2pm hour. My average P/L decreases as the trading day nears an end.

My average P/L continually improves (increases) from around 10am to 2pm.

Further questions:

Why is my P/L the worst from the hours of 8-10/11am?

What is it about 12noon to 2pm that makes me perform my best during these hours?

What would happen if I began trading around 9 or 10am rather than 8am?

What would happen if I stopped trading around 2:30pm?

3. Chart description:

Total P/L per Hour of Day, per Date

Date	Hour	P/L
02/27/07	9	-3950
	10	-2350
	11	-5600
02/28/07	9	2960
	10	-6250
	11	7950
	12	-160
	13	-920
03/01/07	14	10600
	9	390
	10	4815
	11	-5680
03/02/07	12	1140
	13	1650
	14	3240
	9	750
03/03/07	10	1312.5
	11	-8257.5
	12	150
	13	-4912.5
	14	-4432.5
03/04/07	9	225
	10	-490
	11	770
	12	-2680
	13	-985
03/05/07	14	3355
	9	-1675
	10	-3975
	11	0
	12	1275
03/06/07	13	-2085
	14	1525
	9	400
	10	-3840
	11	10475
03/07/07	12	2220
	13	3140
	14	1755
	9	-107.5
03/08/07	10	1875
	11	-60
	12	-165
	13	3145
	14	1635
03/09/07	9	660
	10	1100
	11	-5900
	12	-7550
	13	-4810
03/12/07	14	7700
	9	1350
	10	-9570
	11	-4550
03/13/07	9	-250
	11	-14360
	12	9820
	13	250
	14	1610
03/14/07	9	-250
	10	-6625
	11	0
	12	-425
	13	-1940
03/15/07	14	1780
	9	-4200
	10	-1275
	11	-840
	12	-10920
03/16/07	13	-810
	14	-3375
	10	-4725
	11	-2887.5
03/19/07	12	-1680
	13	37.5
	14	4657.5
	9	-3285
03/20/07	10	-2782.5
	11	-3907.5
	12	-1687.5
	13	-4447.5
03/20/07	9	275
	10	-865
	11	-150
	12	-615
	13	4530
03/21/07	14	-40
	9	-135
	10	-2235
	11	-420
	12	-4000
03/22/07	13	860
	14	585
	9	-6360
	10	-1640
	11	-1465
03/22/07	12	-750
	13	0
	9	740
	10	202.5
03/23/07	12	-880
	13	190
	14	1462.5

What the chart tells me...

Out of the last 19 trading days, 11 have been losing days and 8 have been winning days.

2 trends appear:

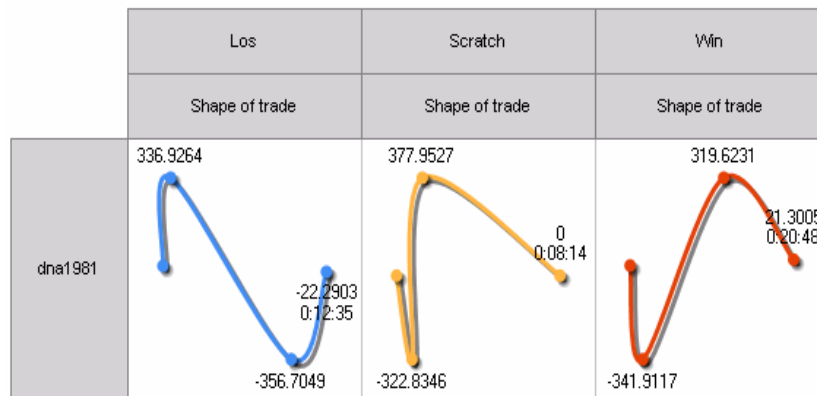
- 8 of the 9 days in which the first trading hour was negative (represented in yellow), turned out to be losing days. From this past 3 weeks of data, I might conclude the following: When I am down after my first hour of trading, 89% of the time the rest of the day will end up as a losing day.
- Of the 8 days in which the first TWO hours were negative, all 8 days have ended up as losing days. From this data I might conclude the following: When the first two hours of my trading day are both negative (in terms of P/L), 100% of the time, I have ended the day in a loss.

4. Chart description:

Shape of Trade split up by Winning Trades, Scratched Trades, and Losing Trades.

Shape of the trade is a very powerful visual representation of 7 primitive measurements, namely:

- 1) average negative drift
- 2) average positive drift
- 3) average lost opportunity
- 4) average p/l
- 5) average time to negative drift
- 6) average time to positive drift
- 7) average time in trade



*Average Positive Drift and Average Negative are represented by the top and bottom points, respectively. The first point is trade entry; the last point is trade exit. Average P/L (in dollars) is represented by the value listed at the end of the shape of trade. Average Time in Trade is reflected in the slope, and is listed as the second value at the end of the shape of trade.

What the chart tells me...

My losing trades, on average, are profitable at first, and then they experience a loss to a slightly greater amount. On average, as the market turns back my way, I close these positions for a small loss of \$22.29 as I approach my breakeven point. The average time spent in my losing trades is 12:35.

My scratched trades, on average move against me upon getting filled (negative P/L). Then they tend to rally back until my P/L is positive and then slowly works its way back down to breakeven. My scratched trades have an average time duration of 8:14.

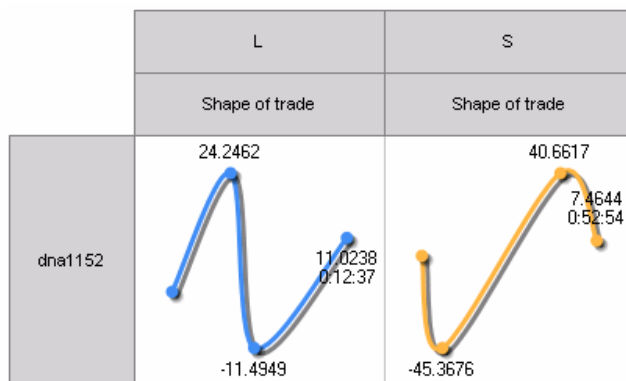
My winning trades, on average, look somewhat similar to my scratched trades, the difference being that it takes a little longer to see the max profit point and I cover the bulk of the position for a slight profit of \$21.30. The average time spent in my winning trades is 20:48.

5. Chart description:

Shape of Trade, split up by Long Trades, and Short Trades.

Shape of the trade is a very powerful visual representation of 7 primitive measurements, namely:

- 1) average negative drift
- 2) average positive drift
- 3) average lost opportunity
- 4) average p/l
- 5) average time to negative drift
- 6) average time to positive drift
- 7) average time in trade



*Average Positive Drift and Average Negative are represented by the top and bottom points, respectively. The first point is trade entry; the last point is trade exit. Average P/L (in dollars) is represented by the value listed at the end of the shape of trade. Average Time in Trade is reflected in the slope, and is listed as the second value at the end of the shape of trade.

What the chart tells me...

My long trades, on average, move in a favorable direction at first and then suffer a quick loss to a degree that is about half of the profit reached off the open, and then slowly move back in a profitable direction before they are closed for a profit of \$11.02. The average time spent in my long trades is 12:37.

My short trades, on average, move in an unfavorable direction at first and then slowly become profitable again. As the trades begin to lose profit, I get out for an average profit of \$7.46. On these trades, I am taking a significantly larger risk on the downside than I am collecting in profit. I risk nearly 6 times the value of my average profit (\$7.46 and -\$45.36 in downside risk, on average). The average time spent in my short trades is significantly longer than my long trades at 52:54.

6. Chart description:

Number of trades, number of total contracts, average P/L per trade, and total P/L, per Day of Week.

2007				
	Count (Quantity)	Quantity	Avg(P/L)	P/L
2 Mon	278	1521	4.973	1382.5
3 Tue	375	1888	10.9333	4100
4 Wed	362	1682	-1.6091	-582.5
5 Thu	422	1628	20.8116	8782.5
6 Fri	539	1554	-1.3636	-735
Total	1976	8273	6.5523	12947.5

What the chart tells me...

I generally increase frequency of trading as the week progresses, trading most frequently on Fridays, and least frequently on Mondays.

Size wise, I trade the most in the middle of the week (Tues, Weds, Thurs).

I am most profitable on Thursdays, averaging a profit of \$20.81 per trade and totaling \$8782.50, seconded by Tuesdays, where I average \$10.93 in profit per trade and has accumulated a total P/L of \$4100.00.

I am negative in terms of P/L on Wednesdays and Fridays.

No clear trend is present, as the P/L distribution seems more sporadic than trending, as the week goes by.

Further questions...

What specifically about my trading on Wednesday and Friday is causing a loss?

What is it about Thursdays that make them significantly better--in terms of P/L earned/lost—than the rest of the week?

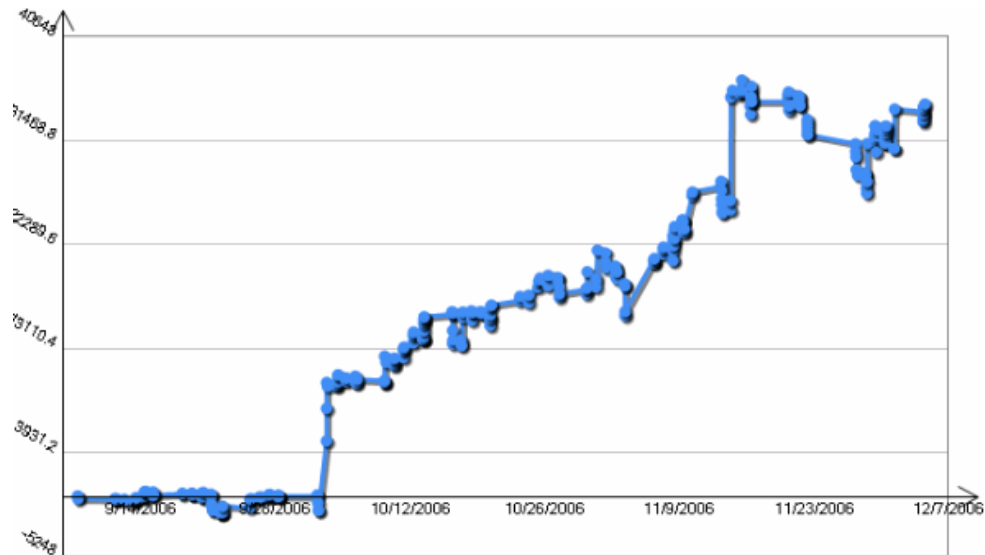
On Thursdays, am I earning my P/L evenly over the course of the day, or rather during a few hours of trading?

Similarly, on Wednesdays and Fridays, does the loss occur evenly throughout the day or during certain times of the day or on certain trades?

Does the high frequency of trading on Friday have anything to do with the fact that it is my worst day, in terms of P/L earned/lost?

7. Chart description:

Cumulative distribution of P/L earned/lost, from September to December.



What the chart tells me...

I have been profitable over the course of 9/1/06 to 12/7/06.

Until October 5th, my P/L accumulation was generally break-even.

In percentage terms, I made the most profit in the shortest amount of time on November 14, seconded by October 4-5.

Pullbacks in the profit enhancement occurred on October 18-19, November 2-3, November 13, and the largest pullback occurred from November 14 - December 4.

Further questions...

What changed on October 5 that allowed me to break out of my break-even phase? I might run analysis of the period before October 5 compared to the period after October 5 to find out what changed exactly, and what cause this improvement.

On October 5-6 I made large gains in my account and continued to make gains over the course of the next few weeks. On November 14, I made large gains to a similar amount, however, this time, the trading that followed resulted in a loss. What was different about the two instances?

What specifically caused the pullbacks (periodical losing sessions)

8. Chart description:

Number of trades, total number of contracts, and average P/L Per Contract, per size of trade (#contracts)

Outright futures trading generally consists of one of the following three execution strategies.

- 1) Buy/Sell a block of x number of contracts in a single order, and then liquidate the entire block of contracts in a single covering order. (i.e.- buy 10 ES at 1432, then sell the 10 at 1434 to go flat)
- 2) Buy/Sell a block of x number of contracts in a single order and gradually liquidate the x contracts in smaller increments, different orders, and maybe different prices. (i.e. – buy 10 ES at 1432, then sell 3 ES at 1432.50, sell another 4 ES at 1433, then another 3 ES at 1434). This is sometimes referred to “scaling out” of a position.
- 3) The third strategy is a variation of # 2, where the trader might add on additional contracts in the initial direction before that position goes flat (i.e.- buy 10 ES at 1432, then sell 3 ES at 1433, sell 4 ES at 1433.50, buy another 5 ES at 1433.50, then sell 4 ES at 1434.50, and another 4 ES at 1435). This is sometimes referred to “scaling in” to / “scaling out” of a position.

The chart below is designed to treat the size of the trade as a dimension by which we can split measures (in this case, number of instances, total number of contracts, and average P/L per contract).

Looking at the chart below, this trader often initiates trades with a position of 5 contracts, and sometimes with a position of 10 contracts, 15 contracts, 25 contracts, and so on. The chart below shows us his efficiency in trading with different size contracts.

	2006		
	Count (Quantity)	Quantity	Avg(P/L per contract)
1	5	5	-25
2	15	30	33.3333
3	5	15	75
5	232	1160	3.9331
10	74	740	8.8682
15	19	285	26.0961
25	12	300	12.0833
40	7	280	71.875

What the chart tells me...

I most frequently put on trades with 5-contracts, seconded by 10-contracts, but relative to other sized trades I am not performing nearly as well in terms of average P/L earned per trade in these 5 and 10 lot trades.

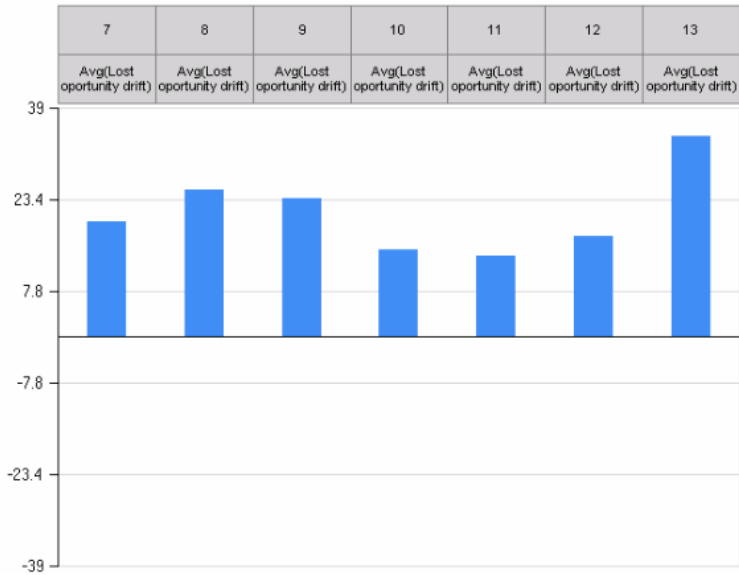
On average, I am taking losses at the instances in which I trades 1 contract, and am profitable with every other size trade.

In terms of P/L, I take the most profit, on average, when I trade 3-contracts, seconded by 40-contracts, and then 15-contracts.

Conversely, I incur the most loss, on average, when I cover with 1-contract, seconded by times when I cover with 6-contracts.

9. Chart description:

Average Lost Opportunity Drift per trade, per Hour of Day



What the chart tells me...

I leave the most money on the table during the 1pm hour, seconded by the 8am hour.

From 8am-12noon, my performance in taking profits at peak opportunities increases (lost opportunity drift decreases) with each hour.

10. Chart description:

Avg. P/L, Avg. Negative Drift, and Avg. Positive Drift, per Hour of Day.

		dna1981		
		Avg(P/L)	Avg(Neg. drift)	Avg(Pos. drift)
TNOTES	8	46.2962	19.6851	20.6666
	9	-9.9954	16.1323	24.8676
	10	6.4957	19.6516	24.0898
	11	-92.5	40.34	15.7
	12	64.012	23.7419	14.2903
	13	13.9973	27.5	16.9791
	14	-29.2968	7.4583	34.2916

What the chart tells me...

The first 3 hours of my trading look very similar with respect to how much downside, and conversely how much potential profit, I'm seeing in my open positions.

The 11am hour is generally the worst time of day in terms of risk/reward exposure in my open positions. On average, I'm taking \$40.34 downside risk and only seeing \$15.70 of profit potential. The end result is that this is my worst hour in terms of average P/L.

The 12noon hour is also poor in this regard, although not as poor, but my profit is positive. In fact, this is my most profitable hour.

1pm and 2 pm is very similar. I am exposing myself to more risk than potential profit, although despite this I am coming out profitable.

Further questions:

What is different about the 11:00 hour than the 12:00 hour? In both time periods, I traditionally expose myself to more risk than profit potential, yet in the 12:00 hour I am still performing relatively well in terms of P/L. What am I doing differently?

Why is my P/L relatively poor in the 2:00 hour, seeing that my downside exposure is a mere fraction of my potential profit? Am I missing opportunity to take profit in this 2:00 hour, or perhaps adding size to the wrong positions?

	P/L	Neg. stackup
2006-09-07	-138	0
2006-09-11	-16	0
2006-09-12	-90	0
2006-09-13	183	3
2006-09-14	570	0
2006-09-15	-336	0
2006-09-18	160	8
2006-09-19	-90	3
2006-09-20	444	4
2006-09-21	-1590	5
2006-09-22	355	5
2006-09-25	672	0
2006-09-26	160	0
2006-09-27	222	0
2006-09-28	-162	0
2006-10-02	-1240	0
2006-10-03	10872	4
2006-10-04	1025	0
2006-10-05	-228	0
2006-10-06	-112	0
2006-10-09	1512	0
2006-10-10	360	0
2006-10-11	2136	0
2006-10-12	1344	0
2006-10-13	1344	0
2006-10-16	-2044	0
2006-10-17	2464	4
2006-10-18	-8	0
2006-10-19	-75	0
2006-10-20	700	5
2006-10-23	760	0
2006-10-24	120	0
2006-10-25	1380	0
2006-10-26	370	0
2006-10-27	-1636	0
2006-10-30	1950	10
2006-10-31	1900	20
2006-11-01	-1560	18
2006-11-02	-350	35
2006-11-03	-3500	25
2006-11-06	4680	15
2006-11-07	1000	0
2006-11-08	1820	0
2006-11-09	-205	5
2006-11-10	3250	10
2006-11-13	-1855	0
2006-11-14	10840	5
2006-11-15	0	0
2006-11-16	-995	0
2006-11-20	-360	0
2006-11-21	0	8
2006-11-22	-2559	0
2006-11-27	-3576	6
2006-11-28	3255	21
2006-11-29	1440	0
2006-11-30	340	0
2006-12-01	1509	0
2006-12-04	440	0
2006-12-05	-100	0
2006-12-06	1320	0

11. Chart description:

Total P/L and number of Negative StackUps, per Date

What the chart tells me...

Out of the string of 60 trading days shown here, there were 20 days when I added to losing positions (shown in yellow). What's interesting is on which days I added to losing positions...

A trend is apparent. Of the 20 days in which I added to losing positions, 16 of those days occurred after a losing day. So 80% of the days in which I added to losers came directly after a losing day.

	PL	Quantity
2006-09-07	- 138	18
2006-09-11	- 16	12
2006-09-12	- 90	24
2006-09-13	183	42
2006-09-14	570	36
2006-09-15	- 336	18
2006-09-18	160	16
2006-09-19	- 90	30
2006-09-20	444	68
2006-09-21	- 1590	75
2006-09-22	355	105
2006-09-25	672	16
2006-09-26	160	16
2006-09-27	222	36
2006-09-28	- 162	54
2006-10-02	- 1240	36
2006-10-03	10872	72
2006-10-04	1025	80
2006-10-05	- 228	96
2006-10-06	- 112	98
2006-10-09	1512	240
2006-10-10	360	108
2006-10-11	2136	240
2006-10-12	1344	192
2006-10-13	1344	448
2006-10-16	- 2044	128
2006-10-17	2464	224
2006-10-18	- 8	164
2006-10-19	- 75	165
2006-10-20	700	300
2006-10-23	760	80
2006-10-24	120	120
2006-10-25	1380	300
2006-10-26	370	100
2006-10-27	- 1636	228
2006-10-30	1950	250
2006-10-31	1900	200
2006-11-01	- 1560	180
2006-11-02	- 350	198
2006-11-03	- 3500	250
2006-11-06	4680	350
2006-11-07	1000	150
2006-11-08	1820	840
2006-11-09	- 205	385
2006-11-10	3250	100
2006-11-13	- 1855	230
2006-11-14	10840	315
2006-11-15	0	350
2006-11-16	- 995	210
2006-11-20	- 360	360
2006-11-21	0	595
2006-11-22	-2559	150
2006-11-27	- 3576	168
2006-11-28	3255	455
2006-11-29	1440	540
2006-11-30	340	200
2006-12-01	1509	81
2006-12-04	440	360
2006-12-05	- 100	120
2006-12-06	1320	150

12. Chart description:

Total P/L and number of contracts traded, per Date

What the chart tells me...

Out of the string of 60 trading days shown here, there were 24 losing days (shown in red). Highlighted in yellow are the days in which I increased my total number of contracts traded from the losing day before.

If anything, we can conclude that after a losing day, 84% of the time, I increase my total # of contracts the next day (20 out of 24 days). What does this mean? Well, perhaps not much without asking one last question...

Did I perform better or worse when I traded more than the losing day before? Or, in other words, if I trade more the day after a losing day, does it generally result in an improved performance?

The chart revealed that of the 20 times I traded more after losing days, I improved my performance from the previous day 16 times, 13 of which resulted in positive days (+P/L).

~ What do I do differently on my winning days than on my losing days? ~

	Avg(Neg. drift)	Avg(Pos. drift)	Avg(Lost opportunity drift)
Loss day	3.6017	4.0058	3.9642
Win day	3.6927	4.0417	3.9678

	Avg(Consec. loss)	Avg(Quantity)	Avg(Scratch qty)
Loss day	0.7143	5.7242	0.6385
Win day	0.566	5.535	0.8043

	Avg(Time since last loss)	Avg(Time since last win)	Avg(Time in loss)	Avg(Time in win)
Loss day	0:01:17	0:02:57	0:00:35	0:00:38
Win day	0:02:05	0:03:47	0:00:27	0:00:47

	Avg(Pos. stackup)	Avg(Neg. stackup)
Loss day	0.2645	0.4456
Win day	0.2066	0.2383

What the chart tells me...

Here I'm looking at the following measures of my performance on winning trading days, and losing trading days: downside risk taken in open positions (Avg. Neg. Drift), potential profit seen in open positions (Avg. Pos. Drift), and my lost opportunity on winning trades (Avg. Lost Opportunity Drift).

The results indicate that my trading is eerily similar on both winning and losing days with respect to downside and upside potential in my trades, as well as lost opportunity on my winning trades. This suggests that my entries and exits are very consistent on both types of days. I might conclude from this that the difference-maker in winning and losing days lies in some other variable(s) or aspect of my trading.

Here I can see the average number of consecutive losing trades, the average number of contracts traded, and the average number of times I scratched trades, separated by winning days and losing days.

The fact that I generally have more consecutive losing trades on losing days is nice to know, but I'm more interested in knowing WHY.

The chart shows that I trade slightly larger size on my losing days, but by an amount that may not be significant.

The last column is perhaps the most interesting because it reveals that I am scratching significantly more trades on my winning days. This suggests that scratching more trades has some impact on the overall outcome of the day.

This chart shows some time values and their differences as they occur during winning days and losing days.

The first column indicates that on losing days, after my losing trades I enter a new trade much sooner than I do on my winning days. This is something I might pay attention to.

Conversely, regarding my winning trades, I take more time to enter the next trade after a winner during my winning days than I do on my losing days (indicated in the second column).

I spend slightly more time in my losing trades on losing days than I do on winning days. I spend longer in my winning trades on winning days.

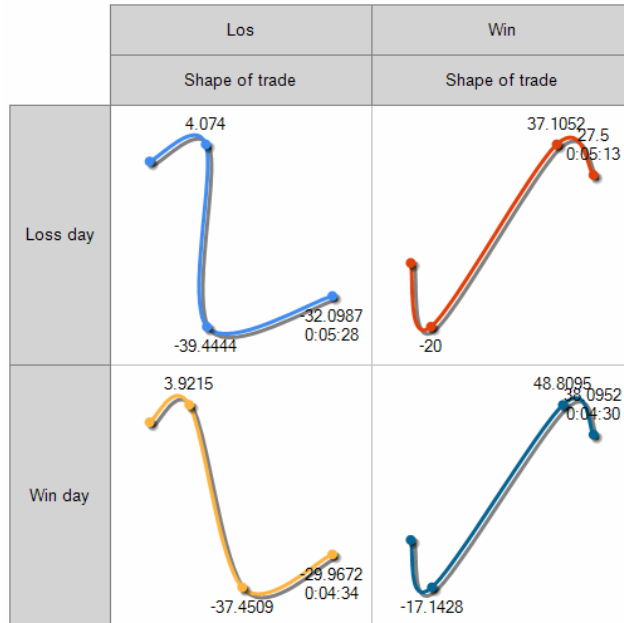
This chart shows the average number of times I add additional contracts to a losing trade and the average number of times I add additional contracts to a winning trade, during winning days, and losing days.

The first column indicates that I add additional contracts to winning positions more often during losing days than I do during winning days. This suggests that I am performing better when I do not add additional contracts to winning positions, or when I add additional contracts to winners less frequently.

The second column reveals perhaps the most important piece of information of all: In losing days, I add to losing positions at a rate of nearly twice as often as I do in winning days.

14. Chart description:

Shape of Trade of winning trades and losing trades, split up by winning days and losing days.



*Average Positive Drift and Average Negative are represented by the top and bottom points, respectively. The first point is trade entry, the last point is trade exit. Average P/L (in dollars) is represented by the value listed at the end of the shape of trade. Average Time in Trade is reflected in the slope, and is listed as the second value at the end of the shape of trade.

What the chart tells me...

Looking at the shape of trade in such an arrangement is useful because we can see the difference in our winning trades over both types of days, and in our losing trades over both types of days. Winning trades and losing trades together make a day either a winning day or a losing day. A trader either has more losers than winners on his/her losing days or his losers are larger on those days, or a combination of the two. Conversely, on winning days, either there are more winning trades or the winners are larger, or both scenarios are at play.

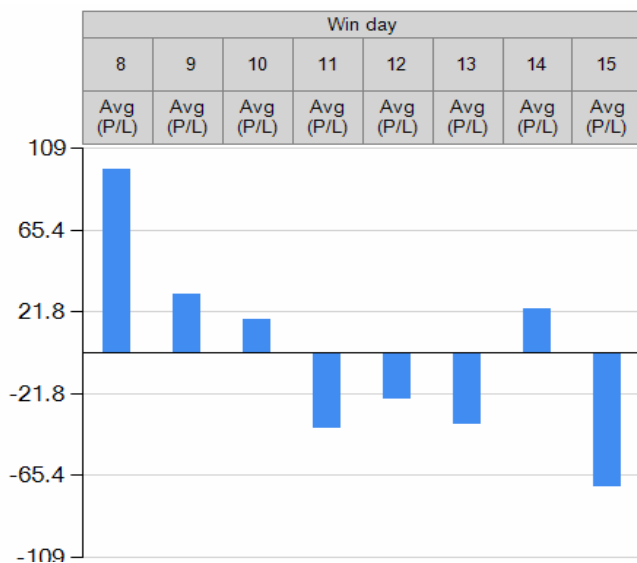
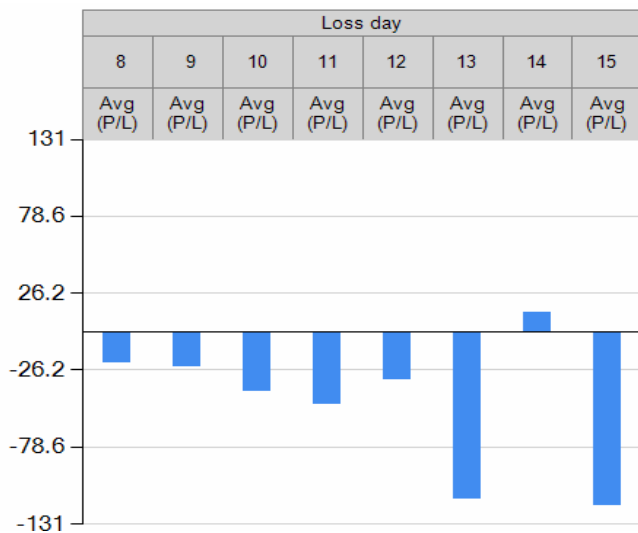
Here we are looking at the dynamic of our P/L in open winning positions and open losing positions on both types of days. A couple important points stand out:

- My winning trades on my winning days see more profit potential than they do on my losing days (\$48.80 to \$37.10). I am also in my winning trades longer on my losing days than on my winning days (5:13 to 4:30).
- My losing trades look very similar with respect to risk/reward and amount lost. The main difference with these trades is that on losing days, my losing trades tend to move against me quicker than on my winning days. I am also generally in my losing trades for a longer amount of time on my losing days than on my winning days (5:28 to 4:34).

15. Chart description:

Average P/L per Hour of Day, shown separately for losing days, and for winning days.

	Loss day	Win day
	Avg(P/L)	Avg(P/L)
8	-21.5131	98.1481
9	-23.6666	31.6051
10	-41.1158	17.8585
11	-49.3951	-40.0646
12	-32.9666	-24.5338
13	-114.437	-38.2246
14	13.2378	23.8793
15	-118.5	-71.2666



What the chart tells me...

This view takes Hour of Day analysis to a whole new level. Here I can see how my trading evolves throughout the trading day on winning days, and on losing days (shown in 1-hour increments).

On my winning days I am getting a good start to the day and generally trading well in the first 3 hours. As the winning day continues, each hour I'm able to keep my losses smaller than they are in the corresponding time frames in the losing days.

- It's important to note that the losing days generally get off to a poor start and tend to get worse as the day progresses, with the exception of the 2:00 hour.
- The 2:00 pm hour has been a good hour for me consistently. I might look into this in more detail and look at different measures in this hour compared to all other hours grouped together so as to understand why I am generally profitable at this time of day.
- What's interesting is the fact that, looking at the bar charts, my P/L trend looks very similar in both my winning days and my losing days: I get progressively worse (in terms of P/L) as the afternoon approaches and continue to suffer losses, despite my averagely good performance during 2:00-3:00pm.

The main difference seems to be that I start the day well in my winning days and generally keep my losses smaller throughout the day.