

### JPM Collar Data

March 31st	Quarterly high	Quarterly low	Opening	4771	Vix at open= 17.63	3/31/2022 4520P	3/31/22 4925 C		
Calls	4925	4808	close	4539	Vix at close= 20.57	open- 82.59	open- 63.36	Initial capital-	\$14,595
Puts	4520	distance calls	ATH 12% lower		Vix at max= 38.94	max- 398.9	max- 73.8	Capital at max gains	\$33,533
Puts	3810	distance puts	ATL 7.6% higher			% gain- 342.6%	% gain- 16.4%		
		note- high put in the week after quarterly expire					at expiry- 0.05	at expiry- 0.05	
		note- low put in 7 weeks after collar roll					at expiry gain- 0% gain	at expiry gain- 0%	
June 30th	Quarterly high	Quarterly low	Opening	4588	Vix at open= 20.62	06/30/22 4285P	06/30/22 4695C		
Calls	4695	4588	close	3827	Vix at close= 28.7	open- 97.38	open- 81.3	Initial capital-	\$17,868
Puts	4285	distance calls	ATH 3.3% lower		Vix at max= 36.64	max- 596.78	max- 90	Capital at max gains	\$51,548
Puts	3620	distance puts	ATL 17.7% lower			% gain- 512.8%	% gain- 10.7%		
		note- high put in the week after quarterly expire					at expiry- 501.81	at expiry- 0.05	
		note- low put in 11 weeks after collar roll (fake bottom 7 weeks after roll)					at expiry gain- 415.3%	at expiry gain- 0%	
		note- broke through upper puts and nearly touched lower puts							
September 30th	Quarterly high	Quarterly low	Opening	3828	Vix at open= 29.53	09/30/22 3580P	9/30/2022 4005C		
Calls	4005	4327	close	3601	Vix at close= 31.61	open- 120.6	open- 86.52	Initial capital-	\$20, 712
Puts	3580	distance calls	ATH 8 higher		Vix max= 30.2	max- 127.8	max- 328.8	Capital at max gains	\$20,820
Puts	3020	distance puts	ATL 0.5% higher			% gain- 5.9%	% gain- 280%		
		note- high put in 7 weeks after quarterly expire					at expiry- 0	at expiry- 0	
		note- low put in week of quarterly expiration					at expiry gain- 0%	at expiry gain- 0%	
		note- first collar of the year that we pushed over calls first but started near 52 week low							
December 30th	Quarterly high	Quarterly low	Opening	3593	Vix at open=33	12/30/22 3425P	12/30/22 3870C		
Calls	3870	4180	close	TBD	Vix at close= TBD	open- 115.01	open- 78.92	Initial capital-	\$19,393
Puts	3425	distance calls	ATH 8 higher		Vix at max= 33.11	max- 127.34	max- 229.4	Capital at max gains	\$11,439
Puts	2850	distance puts	ATL 5.1% higher			% gain- 10.7%	% gain- 190.7%		
		note- high put in 11 weeks after quarterly expire (fake high 7 weeks after roll)					at expiry- TBD	at expiry- TBD	
		note- low put in one week after quarterly expiration					at expiry gain- TBD%	at expiry gain- TBD%	
							note- numbers up to date as of 12/22/22		
							avg winning side % gain=		331.20%

Well anyone who knows me knows I LOVE to analyze data and I LOVE to figure out what the highest probability trade is based on that data.

Okay lets break this data down a little easier to read. We have had 3 quarterly options expirations this year so far and we are about to get our 4<sup>th</sup> quarterly options expiration on 12/30/22.



I added all the collars from 2022 quarters onto the ES futures chart.

### Quarterly Cycle high and cycle low

This that are interesting to me is the way we have cycled from high to low and low to high with the rolling of the collar. Every single collar this year we either put in the low or we put in the high the week after quarterly options rolled. So for example... the march 31<sup>st</sup> collar rolled on December 31<sup>st</sup>. The week after this roll was the week of January 3<sup>rd</sup> 2022. That also was the high period during the quarterly. Another example is the June lows... so we had quarterly options expire on June 30<sup>th</sup>. The low was put in the week of July 3<sup>rd</sup>, however, this time we did end up coming all the way back down to the low at time of quarterly expiration on 9/30/22.

Something else that is very interesting in this cycle is how long the cycles take. So going back to the 3/31 collar. From the time it opened it took 7 weeks before the low of the quarter was put in. For June 30<sup>th</sup> quarter expiration we put in the low of the quarter 11 weeks after the roll... however we did put in a fake bottom exactly 7 weeks after the roll. The September 30<sup>th</sup> quarter expiration put in its quarters high 7 weeks after the roll. And even the current expiration for 12/30 put the high in 11 weeks after the roll and put in a fake high 7 weeks after the roll.

There is definitely something to be said about 7 weeks after the roll that we are going to see a potential quarterly low and quarterly high.

### The VIX correlation

Now something else that I wanted to look at was the correlation between the collar and the VIX. It is interesting to now that the collar besides the June 30<sup>th</sup> expiration and perceivably the current December 30<sup>th</sup> expiration will finish near each other. Unless the VIX rockets to 30+ by next Friday we should see a big deviation from the VIX open and VIX close at quarterly.

Now what I looked at is for the start of the 3/31 quarterly the VIX opened at 17.6 it hit a max of 38.94. As you can imagine we broke down and puts paid hugely.

For the 6/30 quarterly the vix opened at 20.62 and the same thing we had a massive drop which led to puts paying hugely.

Now take a look at the September 30<sup>th</sup> quarterly and you see the VIX opened much higher at 29.53 and this led to as you can imagine it a rally back upward which made calls pay out nicely.

This current 12/30 quarterly is a little different though. We opened the vix at 33 and did see a very nice push up which made calls pay out. However, this current quarterly the winning side was the lowest paying of them all. However this was the most choppy quarterly we have had yet.

### where are we going to close at on 12/30?



Now tomorrow and next week are an unknown. We have two scenarios... the first scenario is a repeat of the September 30<sup>th</sup> roll where we sold off the weeks leading up to expiration and closed with 5% of the upper puts. On average the close of quarter is 0.4% to 0.5% from the upper put limit at expiration. However, the June 30<sup>th</sup> expiration we actually closed 17.7% below the upper put limit.

So that means for us we COULD be looking at Friday market closing at around 3445. If we did not close near the collar this would be the first time all year that we close with more than a 0.5% variance from the upper put limit.

Even more interesting is that IF we close over 3593 this will be the first collar roll all year that we closed over the collars opening price. On average we have seen the quarter close 8.96% lower than its opening price with the mean average of 5.35% lower than opening.

For this quarter that would mean we could see 3296 to 3402. That would mean in the next 6 trading days we could drop 14.3% to 11.5%. However, I think that's highly unrealistic without some sort of major market moving catalyst. This could be the first quarter we actually close over the opening price at the start of the quarter.

In order to reach the historical trend of closing the quarter 0.5% from the upper put collar we would need to close near 3442. That would give us about a 11% total drop from Thursdays close. We actually currently are sitting at the upper call limit of 3870. To finish within a 0.5% +/- variance from the calls gives us a limit of 3850 to 3890.

And the second scenario is a complete break of trend. If we break the trend of selling off to finish near the put side of the collar then we could actually see that santa rally next week. We could end up back in that 3910 to 4000 range.

If you asked me before 2pm today I would have almost guaranteed that we would see that 3500 area before end of next week. However, with today's EOD rally we really could end up either back in the 3900s or down in 3500-3600 range.

### **How do we trade the quarter?**

If we look at the average % gain on the winning side of the calls and puts (upper put) you can see we actually have an average win of 331.2%. Now this factors in on the day AFTER the collar rolls that you open the upper strike puts (so for this quarter that is 12/30 3425P) and then you open the call side too (so for this quarter that is 12/30 3870C).

Now it should be noted due to the price in call/ put premiums being different if you bought one of each (of course this could be remedied by opening a similar SPY position with matching call and put cost basis). But March 31<sup>st</sup> and June 30<sup>th</sup> netted a very nice return on initial capital. However, September 30<sup>th</sup> resulted in breakeven gains because the puts were nearly 2x the cost of calls. Similarly for this current quarter you would end up red due to the cost of the calls vs puts and the fact that this collar only paid out max 190% gains on winning side.

If we take a look at the overall bear channel that we are in currently you can see that for the March and June quarterly we started high and dropped from a high to low position and this mostly is related to the fact the VIX was low and we were sitting at the channel resistance of that green bear channel. However, looking at the September and current December expirations we started with the VIX elevated at 29.5 and 33 which also meant we started the quarter at a low and saw a rally through the quarter.

So lets take a look at where we are currently. Currently we are closer to the high of the channel then we are the low. Its hard to tell but currently we are sitting at the upper 25<sup>th</sup> percentile of the bear channel.

My thoughts are that a strangle (using the call and put side) is a good risk to reward play. However if there is too much of a disparity between the call strike (roughly greater than \$30 between the call and put strike prices makes it not worth it) then the strangle is most likely at best going to break even.

There are a few strategies here...

First strategy is that if there is less than a \$20 difference in the call strike and put strike price than I like the odds of a strangle using those strikes. You could be looking at anywhere from a 200-300% gain on capital based on the previous trends. Something I noticed is that the loser side of this strangle hasn't seen higher than 16.4% gains all year with the average being 10.7% gains. You could potentially play this with both sides and if you see a side make more than 25% gains close the losing side. Now this is obviously risky as if you chose wrong you are kinda screwed unless that open side really does something big. Now there also appears to be a correlation of 7 weeks after the roll (the first week being counted as the next week so the week of January 2<sup>nd</sup> would be week 1) as being potential max gains and the best opportunity to close. I have also noted that the losing side has never come back to be a winner. This could easily be an open and hold till 7 weeks and close trade.

Second strategy is to pick a side. Now for this the closer we are to the top of that green bear channel the better that picking puts is and the closer we are to the bottom side the better chance at picking calls there is. With this strategy there are a couple cheats I have noticed. If the VIX is under 21 I would recommend going with puts. However, the higher the vix is and especially the closer to 30 it is the more I recommend calls. Now there also appears to be a correlation of 7 weeks after the roll (the first week being counted as the next week so the week of January 2<sup>nd</sup> would be week 1) as being potential max gains and the best opportunity to close.

Looking at strategy number 2 we need to decide where we are going to close end of next week first before we are able to really make a decision on puts or calls. However lets say we do close near 3870 call side of the collar I would feel more confident in puts. However, if we do get that swing down to 3400/3500 then I would be more apt to do the strangle as I wouldn't be sure if an additional 7 week drill is coming or a 7 week bounce first.

On average from opening quarter price to high/ low (in winning direction) we are seeing an average of a +/- 16.1% move.

Lets say we close near 3870... that means we could see a push to 4450 or 3250.

If we close near 3500... that means we could see a push to 2940 or 4060.

Now looking at this data... for me if we close near 3870 or anywhere above that come 12/30 then I would almost feel like it's a given to buy puts for 3/31/23 and use the upper put strike price. I just don't see a case with the current conditions of the market and with whats coming in 2023 for us to break out to 4450.

However, if we do get this flush down to 3500 area end of next week. I would struggle to make a decision. A lot of analysis are calling for that 3200 price range and many are calling for 2900 also spring of next year. I myself would not be surprised to see us flush that low early next year depending on CPI, FOMC and earnings that start in January. Plus we are clearly in a bear market here and most likely will be in an unofficial official recession in 2023. However, if we did see 3500 area I wouldn't be surprised to see that 4000 range retested either IF data came out amazing and earning cant out amazing in 2023.

I will update on the weekly TA post next week 12/30 based on where we finish on what I decide to do. But this is definitely something I want to play.

Note- if you want to use SPY instead of SPX you will be looking at 1/10<sup>th</sup> the initial cost basis.

My thoughts remain unless we close back over 390.1 on 12/23 that we are going to continue to see a flush and I will be looking for a close near 3500-3600. I still favor puts as I am overall bearish for 2023 so regardless of where we do close this collar I most likely will be opening the put side.