

A General Theory of Risk Points

We will have a lot more to say about the setting of risk points over time, along with tools and formulas that can be helpful. But first it makes sense to lay out some general theory, which then makes everything else easier to understand.

RISK POINTS ARE A FUNCTION OF STRATEGY

The first thing to observe is that risk points are a function of risk management... and risk management is a function of strategy.

There is no one size fits all for risk points or risk management, in other words. There is only "best fit" depending on your strategy.

Risk points are typically associated with stop loss orders. But that isn't set in stone either. For example:

- You can limit risk with a stop loss.
- You can limit risk by setting price alerts and exiting manually.
- You can set alerts on factors other than price. A growth investor, for example, might get out if earnings per share growth declines too many quarters in a row. A long-term trend follower might use a moving average cross.
- You can use options instead of stops. You can protect a position with options. You can hedge by selling options for a premium cushion.
- You can also hedge with inversely correlated positions. This was the original thrust of the "hedge fund" concept - buying GM and shorting Ford, shorting the Russell 2K and buying the S&P against it, things like that.
- You can also use time stops, or spread stops, or time decay or intermarket relationship variables.

The point isn't to create confusion by listing out these possibilities, but rather to quickly show there are lots of ways to skin a cat. The "best way" depends on what your particular strategy is.

SOME DIFFERENT STRATEGY EXAMPLES

Here are some different strategy examples and risk point approaches. Some are not recommended obviously.

The Naked Put Seller

The Naked Put Seller is the classic blow-up artist. They collect premium month after month and post super-smooth returns... until a big volatility event comes and they blow up.

The naked put seller's risk management strategy, of sorts, is not having a strategy. Paying for insurance would wreck the premium collection relative to transaction costs – so they just take the naked risk, and hope no black swans show up.

These guys “eat like birds and crap like elephants.” Some famous names in this school are John Meriwether, Vic Niederhoffer, Long Term Capital Management, and the insurance giant AIG (American International Group).

AIG, as you may recall, was bailed out for \$80 billion in September 2008. AIG raked in huge amounts of money for years selling CDS insurance, aka “credit default swaps.”

This was like selling hurricane insurance on a dumb assumption that the odds of a hurricane were zero – under collective market conditions that *created* a hurricane – and then blowing up when the hurricane appeared.

With the \$80 billion bailout, AIG was really acting as a “beard” – a cover for other activities – because AIG was forced to turn around and use the bailout money to pay obligations to other investment banks (like Goldman Sachs).

As such, the subprime crisis and following meltdown was the equivalent of banks all over the world selling “naked puts” – or the CDS equivalent – on risky housing bets.

Having no risk point and hoping nothing goes wrong actually qualifies as a risk management approach. It's risky, and it's an approach... and it's STILL popular! Not recommended obviously.

The S&P Day Trader

Marty Schwartz is maybe the best S&P day trader of all time. His historical track record is astounding.

His book, *Pit Bull*, is a very funny and excellent read, even for people with zero interest in day trading.

Schwartz had insane consistency levels in his heyday. He was also comfortable using a risk point that was twice as wide as his profit target. Schwartz would risk 4 handles to take 2 handles, and so on.

Marty Schwartz had to be right 7 times out of 10 to make his strategy work. And even as a hyperactive daytrader, trading dozens of times per day, Schwartz estimated he probably broke even on 80 percent of trading days – and took home his big paydays in the other 20 percent.

What Schwartz did likely isn't possible anymore. Machines that can trade hundreds of times per second have taken over from humans, and even high frequency trading is now a brutal and low margin business, like selling groceries, because the upfront investment in equipment and research is huge and the algorithms constantly battle each other.

We don't recommend day trading in the Information Age. Our rule of thumb is, if you want to play video games, buy an X-Box. But it's theoretically possible to make a Schwartz style risk strategy work (risking more than your profit target) if you are insanely dedicated.

The Classic Value Investor

The classic value investor never uses leverage, meaning they never borrow money or take positions larger than the available cash in the portfolio. They also rarely if ever go short.

Because they don't use leverage, the classic value investor also avoids stop losses. Their cushion is the maximum loss of the position.

So if a classic value investor has a \$10 million portfolio, and they take a 5 percent position in General Mattress Corp, they just sweat the risk of losing the whole \$500K, which is their maximum exposure.

Of course, they also look for a margin of safety and other things to reduce the odds their investment goes to zero.

Classic value investors can still get killed like anyone else. A number of high profile value investors were carried out on stretchers in 2008, after loading up on financial stocks at an 80 percent markdown and then seeing them fall 80 percent yet again, stuff like that.

People have an image of classic value investing as being safe and stodgy. But it can also be a wild ride, with occasional bouts of gut-wrenching volatility part of the package.

Charlie Munger (Warren Buffett's ornery partner) has said that "real" value investors have to be willing to see their portfolio down 50 percent, without puking, at least once or twice in their careers – this has happened to Buffett – and that anyone who can't handle that is a sissy. We report this view without necessarily endorsing it.

The Quant

The quant uses machine learning and computer programs to trade hundreds or even thousands of stocks at a time. It's a normal thing for a quant strategy to be long hundreds of stocks at once and short hundreds of other stocks simultaneously.

Quant trading is all about turning value-based or price-based rules into computer instructions, things like "buy stocks with a tangible book value below X and three consecutive quarters of positive trend earnings growth," or "short stocks with market-cap-to-revenue ratios above Y and a positive-sloping-but-decelerating 120 day price trend."

There are literally an infinite number of fundamentals-and-price rule combinations a quant can cook up, and there are limitless outside conditional rules they can add on top that.

One famous quant fund supposedly recorded the snowfall in Central Park at one point, to see if it was worth adding to their algorithms.

Quants typically don't use stops, or risk points in any traditional sense, because they trade way too many positions at once, and the bull and bear positions generally offset each other.

This is the hot area of Wall Street now because it promises the theoretical Holy Grail of smooth returns with low risk. So of course hundreds of billions are being thrown at quant strategies.

And because so many quant strategies are similar - buy value, short overpriced growth, things like that - occasionally the quants wind up in a mosh pit with each other and take big losses on both sides of their portfolio, because they are all doing the same thing and trying to close the same positions.

The Activist Manager

Activist managers are like value investors but more aggressive, with a willingness to use leverage, and also to hedge, as they advocate for change to catalyze a rise in the stock.

So for example, an activist hedge fund might take a very large position in an energy stock, agitate for a share buyback or a change of management, and sell short XLE or a basket of related energy stocks, or buy puts on the same, to hedge out their general energy sector exposure.

Activist funds are like venture capital firms or private equity funds in that a lot depends on the caliber of the talent, and most activist funds really need a bull market to do well.

In a bull market an activist effort might not work out, but the stock could go up anyway because it's a bull market. In bear markets that doesn't work.

Also, some activists can be riverboat gamblers and will just take huge losses, like Bill Ackman with Target Corp and Valeant.

The Trend Follower

The Trend Follower is typically mechanical — meaning they focus on a set of rules, and then apply adjustments and tweaks to the rules rather than directly judging the market.

The trend follower also takes steps to "normalize" volatility, which allows them to trade stocks and currencies and soybean futures (or anything else that trends) in exactly the same way.

The key risk-setting tool for the trend follower is the average trading range, or ATR.

A common trend follower risk-point setting is 2ATR, or twice the average daily trading range.

You can find ATR on virtually any decent charting package. It just takes the amount of price movement between the highs and the lows over a standard interval, e.g. 14 price bars.

The beauty of using ATR is that it doesn't matter what you are trading, the risk point adjusts for the amount of volatility within a market.

For example, if stock X has an average daily trading range of \$2... and stock Y has an average daily trading range of \$30... then these two stocks will obviously require different-sized risk points, and different net position sizes, to "normalize" the amount of dollar risk taken from one position to the next.

To get a sense of what normalized dollar risk means, think about taking a position in corn futures where you risk \$5,000, and then taking a position in dollar/yen where you also risk \$5,000.

The normalization aspect comes from the fact that you size the positions in such a way that your planned risk is the same, 5K, for each trade — and the distance of your stop loss is based on a normalized volatility range, e.g. 2ATR in both cases.

The Macro Trader

The Macro Trader draws inspiration from multiple camps. The true macro trader potentially has elements of value investing, trend following, and quant factors all rolled into one.

The classic macro trader makes use of a combination of price, fundamentals and sentiment — the holy trinity described by Michael Marcus in the original Market Wizards.

It's necessary to use fundamentals in macro because there would be too many things to trade otherwise — you could go through hundreds or thousands of charts, and find the same "attractive pattern" repeated 75 times — and fundamentals are also needed to get a sense of how big or powerful a trade could be.

But it's also necessary to use price action in macro because there is too much embedded uncertainty to do otherwise — too many scenarios, and too many of possibilities of being wrong, to do well without using price as a clarifying guardrail.

So the macro trader typically uses a "chart stop" for their risk point — meaning, a point on the chart where price will not travel to if the thesis or scenario is correct.

But the macro trader will ALSO use normalized volatility to size different types of positions — a forex position versus an equity position for example — and will use average trading range (ATR) in the context of position management.

A key task in macro trading is finding a balance between the following three things:

- Placing a risk point in such a way that, if the risk point is hit, price itself has invalidated the scenario (and not placing it so close a random elbow throw closes the position)...
- While keeping the risk point close enough to allow for an attractive reward-to-risk scenario (if the risk point is too wide, the scope of the payoff is weakened)...
- While following a general rule of thumb that says wider risk points earlier in the trade (when uncertainty is higher, positions are smaller, and chaotic moves are more frequent) and tighter risk points later on in the trade (as certainty grows stronger, position sizes larger, and the crescendo or conclusion of the move comes into view).

LINE IN THE SAND: 2.5 ATR BEYOND THE 50

Discretionary trading is both an art and a science, in the sense that certain things are done mechanically while others are a matter of situational judgement.

In that context, there are a handful of useful universal rules, for example:

- A position that is behaving properly should, as a “necessary but not sufficient” condition, have price on the correct side of the 50-day moving average (above the 50 day MA if the trade is bullish, below the 50 day MA if the trade is bearish).
- A “line in the sand” from this viewpoint is penetration of the 50 day moving average by an amount of 2.5 ATR (two-and-a-half times the average daily trading range).



Above we see a visual example of a 2.5 ATR penetration.

- The green line is the 50 day moving average.
- On the day of the breach, the ATR was 12.76.
- A 2.5 ATR penetration threshold was thus 306.85.
- You can see the layout for spreadsheet cells at right.

TSLA	
ATR VALUE	12.76
2.5 MULTIPLE	31.9
50 MA VALUE	338.75
2.5 ATR ABOVE	370.65
2.5 ATR BELOW	306.85
50 MA +/- 2.5 ATR	

Often the risk point will be (and SHOULD BE) far closer than the 2.5 ATR penetration threshold. But this is a useful “maximum envelope” type guideline. You can use it on anything with a price chart, because ATR is just a volatility measure (a trading range). You can apply it to anything where price action matters.

The theory behind it is, if all of your trades and investments respect price as a guardrail, there is no situation by definition where you’d want to hold something beyond a 2.5 ATR penetration of the 50. A good trade can go for months or even YEARS without breaking that moving boundary.

And again, this is an “outer bounds” guideline. Nor is it necessary to set an actual risk point in that vicinity (though you could). It’s not a foolproof measure, but a robust rule of thumb.

A 2.5 ATR penetration risk point can also be useful as a risk point early in a trade — when the entry point is likely to be near the 50 MA, and when price is jumping around because, closer to the beginning of the move, the bulls and bears are still wrestling on equalized ground. If a trend is going to go bad, the maginot line of 2.5 ATR beyond the 50 will, by definition, be crossed.

INFLECTION BASED RISK POINTS

Another key idea for the macro trader or go-anywhere discretionary trader is the potential for inflection based risk points. Here are a few quick examples of an inflection based risk point:

- A new market development – a central bank decision, a sharp price reversal on a key piece of company news, something of that nature – can create a sort of “all or nothing” scenario, where price is either going to move significantly from this point or it won’t – allowing for a much tighter risk point in the immediate aftermath of a catalyzing event.
- An existing position can develop a price pattern where a recent pivot point on the chart is clear and obvious, with a sense that “if the position is good, that pivot point on the chart should NOT be violated,” allowing for a tightening to 0.5 ATR beyond the pivot.
- Breakout FAILURE in a resonating direction can make for an excellent entry with a relatively close risk point, just beyond the failure bar’s highs or lows. As an example, we were bearish on crude oil but the price trend was rising. Crude continued to rise just above its 50 day moving average. Then the upward trend reversed in a flourish of disappointment with OPEC, sending crude oil below its 50 day MA in a bearish price reversal and downside volatility expansion. That was a great time to initiate a trade in the bearish direction (which we did) with a risk point just above the reversal bar highs.

RISK POINTS AND POSITION SIZE

The secret sauce of the macro trader – though value investors can also use it – is position size, and the willingness to sometimes take on very, very LARGE position size. The beauty of a tight risk point, in a position with high conviction, is that very large size can sometimes be deployed.

Let’s say there is an extremely bearish reversal – on a piece of news that was supposed to be optimistic – in a stock index where you were already bearish, and this bearish reversal wipes out the existing bullish countertrend right at the 50 day line, with a beautiful vol-expanding reversal that looks juicy. Let’s further say you already have a large P&L profit cushion for the year.

In a situation like this, you could establish a super-aggressive short position, either with the underlying ETF or futures and a stop loss, or with an options position, and make a plan to immediately exit the trade if the nearby reversal highs are violated.

This is the type of trade where you can put on absolutely massive size with tightly limited risk, because you have surfed the wave of a critical inflection point and made a giant but risk-limited bet, with your preexisting profit cushion as a backstop and your conviction as an edge. And of course the same idea can work in reverse on the bullish side, depending on the situation.

RISK POINT AND TIME FRAME CONSIDERATIONS

We really prefer trades with a time horizon that can last for months, e.g. a trade “runway potential” of multi-month duration at minimum, for multiple reasons that all work together:

- Looking for trends that can run for months keeps your focus on weekly charts, with daily charts more of an execution tool, which in turn keeps you out of chop n’ slop moves.
- If you are looking for runways that can play out over months, you are forced to give more consideration to the underlying drivers of the trade – the Livermore “general conditions” that align in your favor – which you should be doing as a habit anyway.
- The very best trends by definition are the ones that just go like an energizer bunny for months at a time, sometimes even years at a time. What is the best way to be in position to catch excellent moves like that, the ones that go for three months or six months or eighteen months? Focus on spotting that type of potential in the first place.
- A great trade is one where you find a couple spots to add along the way, allowing the position to get large, and then find an inflection point to add hugely in the last third of the move, a kind of all-or-nothing build (usually with conviction plus profit cushion) where sentiment and crowd awareness come together and the final leg is like Beethoven’s Ninth Symphony. These trades happen over a window of months or years, not days or weeks, and they can deliver epic, life-changing payoff amounts. Seek them.
- The simplest explanation of building size in a trade is that you take a more cautious or moderate position to start out, then you wait for the breather periods in the trend, where there is a temporary retracement or countertrend move of at least 10 trading days’ duration (that still leaves the 50 day MA barrier more or less intact). After a sufficient breather, you can add to the trade and build it to bigger size. To do this, once again, you need trades with the potential to run on for months, not little squeakers.

RISK POINTS AND SIZE CONSIDERATIONS

A great trading method is one that scales and also one that allows you to sleep at night while having big positions on, without having to sweat every little quirk and elbow throw of the market. A logical theory of risk points and a macro-discretionary trading style, which seeks out potential trends that can run for a good length of time, meets these general requirements.

Looking for bigger trends lets you go wider in your risk point at the beginning (when the movement is choppy) because the ultimate profit opportunity justifies it, and also lets you put larger amounts of capital into positions. This might not feel important if you are trying to trade, say, ten thousand dollars, but it’s hugely important if you are trading many millions.

Also, the more robust the method, the more it can scale and the more confidence it inspires in the trader, with larger position sizes able to be taken with a relaxed air. The good value investor, according to Charlie Munger, has to be willing to endure hair-raising volatility on occasion, as a function of confidence in the method. The same is true of a good trader. Understanding the theory of how you set your risk points, and building confidence in the approach you use, is the pathway towards the kind of confidence that lets you feel comfortable running large sums.