Finding an Edge and Keeping It (analytics.bet)

With the right combination of skill, discipline and mindset, it is possible to make a significant among of money betting on sports — maybe even enough to quit your day job. Whether you want to do it full-time or make a little extra money on the side, the key is to identify which approach works best for you, and to implement that approach systematically over an extended period of time.

In this post, I discuss some important practical considerations for the aspiring serious, semi-professional, or professional sports bettor.

Staying Within Yourself

What do an expert data analyst with little or no betting expertise, an expert computer programmer with no understanding of data analysis, and a high school dropout who doesn't know any math, statistics, or computer programming have in common?

They can all be winning sports bettors. But each needs to play to their strengths, and minimize their weaknesses.

As my baseball coach would say whenever I was up to bat, "Stay within yourself." The same advice applies to sports betting.

A singles hitter who tries to hit a home run every time he's up to bat is going to fly out or strike out most of the time. In the same way, a sports bettor who tries to win using techniques he hasn't mastered will end up depositing a lot more than he withdraws.

If you don't know any math beyond high school algebra, then implementing an advanced machine learning model probably isn't where your edge in sports betting lies. If you're really good at modeling soccer, but don't know anything about baseball, then betting

on baseball probably isn't the first place you should look for an advantage. If you're expert at web scraping, data processing, and automation but don't know anything about data analysis, then a less statistical and more technical approach might be your best bet.

Identifying the approach that works is a personal decision. Whatever approach we choose, it's important to have a clear idea of *why* we expect it to give us an edge and *how* we plan to implement that approach in a real world betting situation. Even with clear answers to these questions, there are a number of potential pitfalls between the ideation stage and the execution stage that we can't ignore.

Before we can be confident that our approach will be profitable over the long-term, it's worth asking:

- What is the source of our edge?
- Why are we able to execute this approach better than other bettors?
- How can the approach be refined to guard against common pitfalls and increase our edge?

Sources of Edge

There are 3 primary ways to get an edge as a sports bettor. We can have

1. better information,
2. better execution, or
3. better models

than the sportsbook. As a bettor, if you don't know which of these applies to you, then you probably don't have an edge. Back to the drawing board.

Even if you do know where your edge comes from, there's a good chance your edge is smaller than you think it is. It may not even be an edge at all. There are a number of reasons for this that I'll discuss in more detail in another article, but some possibilities include:

1. There may be others in the market who are leveraging the same edge (i.e., the same source of information, the same method of execution, or the same modeling approach).
2. There are others in the market who have an advantage that you don't have, and therefore are either taking advantage of the same opportunities for different reasons or avoiding spots that your approach identifies as profitable based on information they have that indicates otherwise.
3. What was a profitable edge last season might no longer be available. The rest of the market may have caught up.
4. Sportsbooks have built-in advantages in information, execution and modeling that are hard to overcome.

Regarding the last point, sportsbooks have the following built-in advantages.

1. **Information Advantage**: Sportsbooks have access to information that bettors don't have. Most obviously, sportsbooks know which sides and for how much all of the other bettors in the market are betting. Because some of these bettors are using methods that are either the same as or correlated to our approach, the book can sometimes counteract our strategy based on betting patterns of competing bettors.
2. **Execution Advantage**: In setting limits, taking markets down, reviewing bets before they are accepted, and punishing or banning winning players, sportsbooks enjoy a first- and last-mover advantage. Their first-mover advantage allows them to set low limits on markets they

are most vulnerable (or to remove the markets entirely). Their last-mover advantage is the ability (in some jurisdictions) to review bets before accepting them, and also to ban winning players. All of these work to the advantage of the book and the disadvantage of the bettor.

3. **Modeling Advantage**: Sportsbooks have their own internal data science teams developing their own models.

So while it's definitely possible to make money as a sports bettor, there's a big difference between identifying a potential advantage and profiting from that advantage. It's not enough to be good at what we do. We have to be better than most or all of the competition (books and bettors included).

Because we know that

- there are other players in the market who know what we know and
- there are other players in the market who know things that we don't know,

every potential bet that our approach identifies as profitable is a possible aberration. Every profitable bet that we identify is a bet that the rest of the market apparently hasn't identified as profitable, and therefore is an invitation for us to rethink why we might be wrong.

Now, for the economics scholars out there, don't worry. I'm not going down the usual Efficient Markets Hypothesis "If you see $100 on the sidewalk, you shouldn't bend over to pick it up because if it was a real $100 bill then someone else would have already picked it up"-rabbit hole. We don't want to second guess ourselves to the point of never betting at all. Edges do exist. But taking a moment to rethink things is an opportunity to either (i) reaffirm our edge and bet with more confidence and also (ii) correct deficiencies or blindspots in our approach that will increase our advantage moving forward.

Below I'll discuss how this mindset applies to each of the three situations highlighted above.

Information Advantage

An **information advantage** is knowing something that nobody else knows, e.g., injury news, lineup changes, rule changes, etc. (Note: access to public information, such as the Draymond Green incident, is not an information advantage because everyone had access to this information at the same time.)

Having access to information that nobody else has is like being able to see the future. We can take action now, and watch as the rest of the market tries to catch up later. For this reason, an information advantage is probably the most profitable edge in sports betting. If our information is correct, then we know how the markets are going to react once the information goes public. We have as close to a sure thing as we'll ever get.

But even with such a big advantage, we have to ask ourselves: if a piece of information in a particular situation is so obviously being ignored by the market, is our information as valuable as we think is it? Do we *really* know something that nobody else in the market knows? Maybe. But in any given situation, the market disagreement could also indicate:

1. Our information may be incorrect.
2. Our information may not mean what we think it does. That is, it might not have as big of an impact on the probable outcome as we initially believed.
3. There may be other important information that we don't know about which nullifies or diminishes the advantage gained from our information. For example, we might have inside knowledge that half of the Lakers starting lineup is out with Covid, but if half of their opponent's

> starting lineup is also out with Covid and we don't know about it, then our partial information is much less valuable.

These are just a few of the possibilities. Of course, if we have a trusted source that has served us well in the past, then we may be able to quickly rule these out and place the bet with confidence. But, especially if a particular source of information is new or rare, it pays to ask the question. Last thing we want is to bet a large amount of money on what we think is a sure-thing but turns out to be based on information that is either well-known, priced-in, or simply false.

On a practical note, even though an informational advantage is a very profitable way to get an edge on any given play, it is also very easy for sportsbooks to detect, and therefore take countermeasures against. Before acting on a piece of information, it's worth considering whether the potential payoff on a single bet is worth the risk of detection, and thus the risk of possibly losing profits from all future bets at the book.

Execution Advantage

An **execution advantage** is the ability to act on information faster and more effectively than others in the market. We don't need access to non-public or little known information. As long as we're able to execute faster on information everyone else has, we're in a position to profit over the long-run. Arbitraging between books before one of them moves is a common example of an execution advantage. The Draymond Green prop mentioned above is another example of an execution advantage: despite the sportsbooks built-in advantages in information and execution, bettors were able to execute on this public information before certain sportsbooks.

But again, even with an execution advantage, any time our bet is accepted is an indication that we might have missed something. Maybe:

1. The market doesn't believe our action is sharp enough to limit or deny outright.
2. We think we're acting early, but in fact the information we are acting on is already reflected in the line.
3. If we're using automated software to execute bets, there's always the possibility of a technical failure. Even if we do have a real advantage in the vast majority of situations, a bug in our software could wipe that out in a single mistake.

Of the three advantages we discuss here, a consistent edge in execution is probably the least susceptible to second-guessing. But it pays to be vigilant. Also, as mentioned in the above section on Information Advantage, being faster than the rest of the market may be a reliable way to profit on any given bet, but it is also easy for a sportsbook to detect, and therefore take countermeasures against. The art eventually overtakes the science: Once the system is in place to execute bets consistently, capitalizing on this advantage requires significant effort to avoid detection and to maintain the edge over a long enough period of time.

Modeling Advantage

A **modeling advantage** is an ability to more accurately price events than the market.

On a per-bet basis, an edge in modeling is usually smaller than an edge in information or execution. But superior modeling can offer a bigger potential to scale with the number of markets offered on a given sport. If we're really good at modeling a particular sport (e.g., soccer) then we can potentially leverage this advantage in every soccer betting market around the world.

While there are many potential advantages to modeling, there are also major challenges to profitably implement such an approach. Aside

from needing significant technical knowledge in statistics, analytics and data management, we still need to compete with the sports books and other sharp bettors in the market who are leveraging their own advantage. First, the sportsbooks have their own models, which our model has to be better than. Second, the sportsbooks have built-in information and execution advantages, as discussed above, which generally means our model needs to be *a lot* better than the sportsbooks' model. Third, even if we overcome these first two challenges, we're still competing with other modeling teams and bettors who have better information and execution than we do.

To be a profitable model-based bettor, we still need a good amount of expertise in the information and execution departments. We need to understand how the market works, and develop the intuition to know when the market is telling us that our model is missing something. When our model finds an apparent edge in the market, it's worth considering whether

1. there is a key piece of information missing from the model,
2. the perceived edge will disappear before we can act on it, or
3. the model is simply wrong in assessing the situation.

All of the above situations are common, and will happen from time to time, even with a profitable model. This is why the per-unit profit (ROI) tends to be lower and the volatility tends to be higher for model-based approaches than the others mentioned above. In fact, the situations that are easiest to act on tend to be those where we are in one of situations (1)-(3). I'll discuss this in more detail in a future post on market support and market resistance.

Ideas are easy, Execution is hard

Becoming a winning sports bettor isn't easy, but it is possible. Having a clear plan to take advantage of better information, execution, and/or modeling capability is an important first step toward success. It also helps to not only know what we don't know but also know that there are others out there who do know what we don't know.

Without a solid foundation, there's little hope of long-term success. Even with a strong foundation, there are practical challenges to avoid detection and maintain our edge in a competitive environment. For the aspiring sports bettor who hopes to make significant money through betting, these challenges should be welcome. The fact that it is difficult means that most people won't be willing to put in the work to become winners – that includes sportsbooks! If you've found this blog, then you're already in a good position to find actionable betting information and develop smart ideas. All that's left now is to execute.

"Risk Free" bets aren't risk free

Many of U.S. sportsbooks offer a large "risk free" first bet to attract deposits from new customers. The amount of the risk free first bet usually ranges from $500 to $5,000. If you're like most people, "risk free" sounds like something that has no risk. You couldn't be blamed for thinking that a $5,000 "risk free" bet is a free chance to make $5,000 or $10,000 without any risk. But you'd be wrong.

A **risk free bet** is a cash wager that pays out as usual if it wins and is reimbursed* if it loses. So if you bet $5,000 at +200 and the bet wins, then you get your $10,000 profit in cash just as if you placed the bet normally. If the bet loses, you get reimbursed*. But how?

The asterisk * next to "reimbursed" indicates the fine print that you need to understand before placing a "risk free" bet.

First, let's talk about what would make a risk free bet actually be "risk free". Very simple: a $5,000 risk free bet pays out as usual if it wins

and returns $5,000 in *cash* if it loses. You could cash out the $5,000 reimbursement right away, and pretend this never happened.

That's what something called a risk free bet *should* be, but that's not what it is.

Instead, the "reimbursement" by U.S. regulated sportsbooks is almost always paid either in sportsbook credit or in free bets.

Sportsbook credit acts like cash but can only be used for wagering at the sportsbook. It cannot be cashed out, but it can be wagered and any winnings turn into cash. So if a $100 bet with sportsbook credit wins at +200, the stake and profit are both returned in cash; that is, your account will increase by $300 in cash.

A **free bet** is betting credit usually in a fixed denomination (e.g., $25 or $100). If the bet loses, the player loses nothing. If the bet wins, the account is credited only with the profit. So if a $100 free bet is placed at +200 and it wins, then the account will increase by $200 in cash. The free bet amount disappears.

First, notice that a risk free bet that regardless of whether the reimbursement is paid in sportsbook credit or in free bets, the bettor is required to place an additional bet (and therefore take additional risk) in order to recover their initial stake. This is not, by definition, risk free.

Of course, all the conditions of the "risk free" bet are explained in the fine print. But, if sports books know one thing, it's that gamblers aren't generally the type to read the fine print. And, even if someone were to read the fine print, only a select few is savvy enough to figure out that the true value of the reimbursement falls short of a full refund.

So, if you take up the offer for a $5,000 "risk free" first bet and lose, then you'll be left with $5,000 in sportsbook credit that you have to put at risk in order to get your money back. Your initial $5,000 investment

is still very much at risk. If you don't play it correctly, you could end up losing $5,000 on what was supposedly "risk free" proposition.

A better way to think of a risk free bet is as a "get out of jail free" card: if I lose my first bet, I get to bet the same amount a second time for a chance to win my money back (or more). Not a bad deal, but a far way from risk free.

In a regulated industry, you'd expect truth in advertising: that when something is advertised as "risk free" that it actually means it's "risk free". But that doesn't mean it's a bad deal for us. Indeed, risk free bets (and other sportsbook promotions) are actually a great way to pick up some extra money and build your bankroll *if you know what you're doing*. We just need to approach it with the right mindset.

The questions we need to answer are: How much is a risk-free bet really worth? Is it worth our time and money? And if so, how should we execute the risk free bet and other sportsbook promotions in order to extract the maximum value with the minimal risk?

Answering these questions requires too much detail for this short blogpost. More details on evaluating risk-free bets and other sportsbook promotions, along with other skills necessary to becoming a profitable sports bettor, will be discussed in future articles.

Reasons to ignore the Kelly Criterion (analytics.bet)

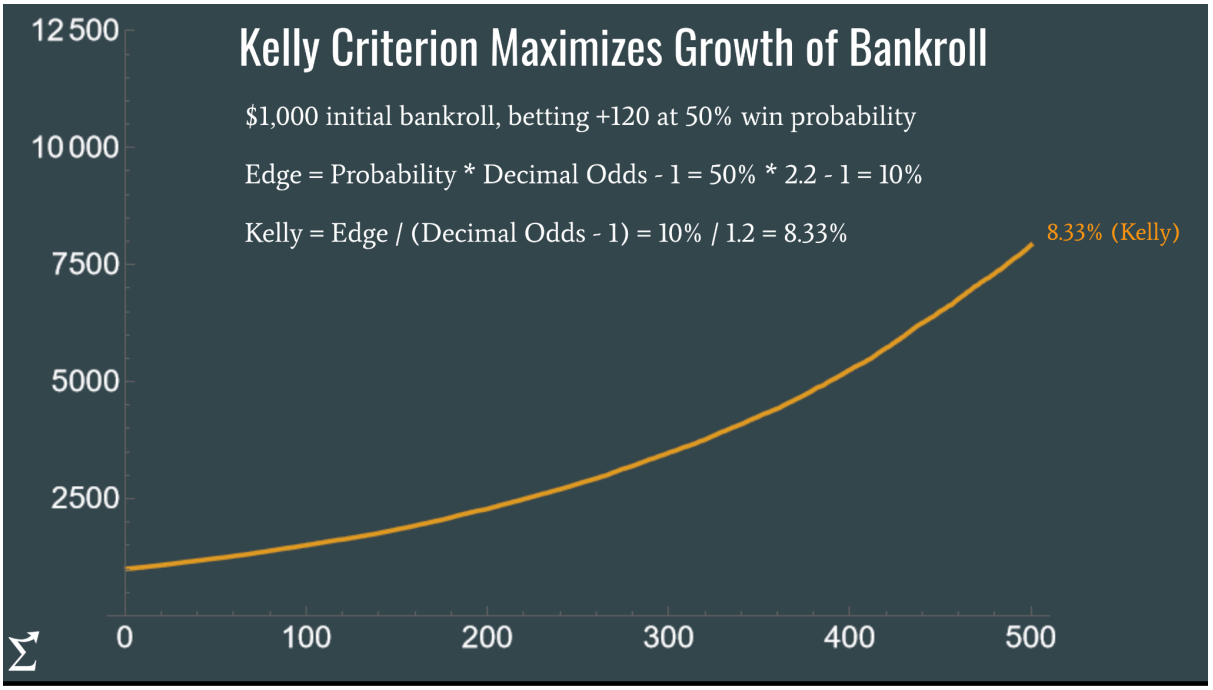
In "sophisticated" betting circles, the Kelly Criterion is accepted as the single correct way to determine your optimal bet sizing. In plain English, the Kelly criterion says: *Bet bigger when your edge is bigger and your chance of winning is higher*, *but bet less when your edge is smaller and your chance of winning is lower.* At face value, this

makes perfect sense and it leads to a precise formula that balances the two competing factors to achieve the best long-run results:
(**) Kelly = Edge / Odds

So if your edge is 10% on a bet at even-odds, Kelly says to bet 10% of your bankroll; but for the same 10% edge on a bet at 10-1 odds, Kelly says to bet 1% of your bankroll. The smaller fraction in the latter case offsets the additional risk presented by betting on a 10-1 outcome versus a 1-1 outcome.

I won't discuss the mathematical details of where this formula comes from, as have been (too) many articles written on the topic. For a detailed discussion of the Kelly Criterion see The Real Kelly Criterion by PlusEVAnalytics. For our purposes, all we need to know is that the math is correct. But as bettors who care about winning (real) money, we need the math to work in practice, not in theory.

The theory tells us that if we have an edge and we bet according to (**), then our bankroll will grow like this:



Multiply your initial bankroll by about 7.5x after only 500 bets. Who wouldn't want those results?

And yet no sharp gambler would ever recommend betting the full Kelly fraction. Maybe they're not so sharp after all!

Or maybe the Kelly Criterion is optimized for a different problem than what bettors actually care about?

The Kelly Criterion is optimized to achieve fastest possible bankroll growth for a given edge and payoff odds. The Kelly Criterion doesn't care about volatility, doesn't consider the possibility that we've miscalculated our edge, doesn't entertain the possibility that we might not get paid when we win, doesn't account for minimum and maximum bet sizes, …

So, if you're an emotionless, omniscient bettor dealing with bookmakers who always take your action and can be 100% trusted to pay when you win, then by all means apply the Kelly Criterion.

For everyone else, please can keep reading.

There are three primary reasons to be careful with the Kelly Criterion (especially in sports betting contexts).

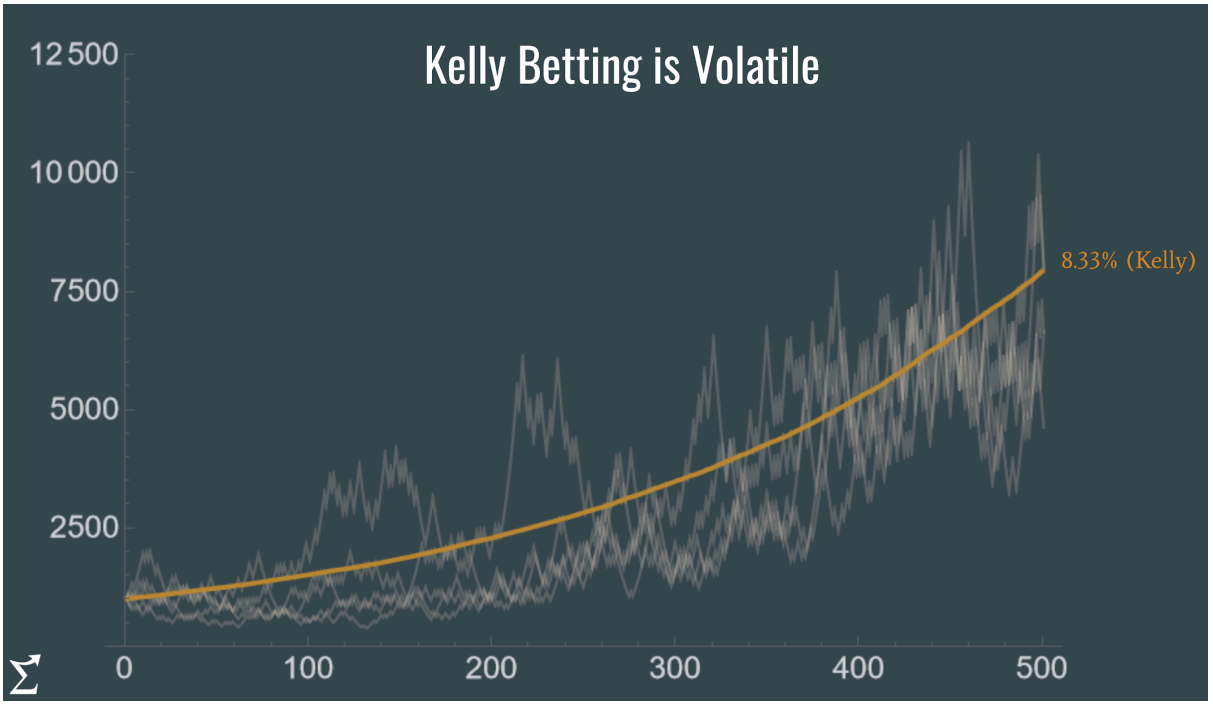
1. **1t is volatile.**
2. **Your edge is probably smaller than you think it is.**
3. **The situations where you think you have the biggest edge are most likely to be those in which you are the most wrong.**

Taken together, these three reasons might be enough to make you want to ignore (or seriously revise) the Kelly criterion when betting actual money.

Kelly Criterion is Volatile

Growing your bankroll is great, but even better is growing your bankroll *and* being able to sleep at night. And even better is growing your bankroll *and* knowing that your bankroll is growing because you're good (not because you're lucky).

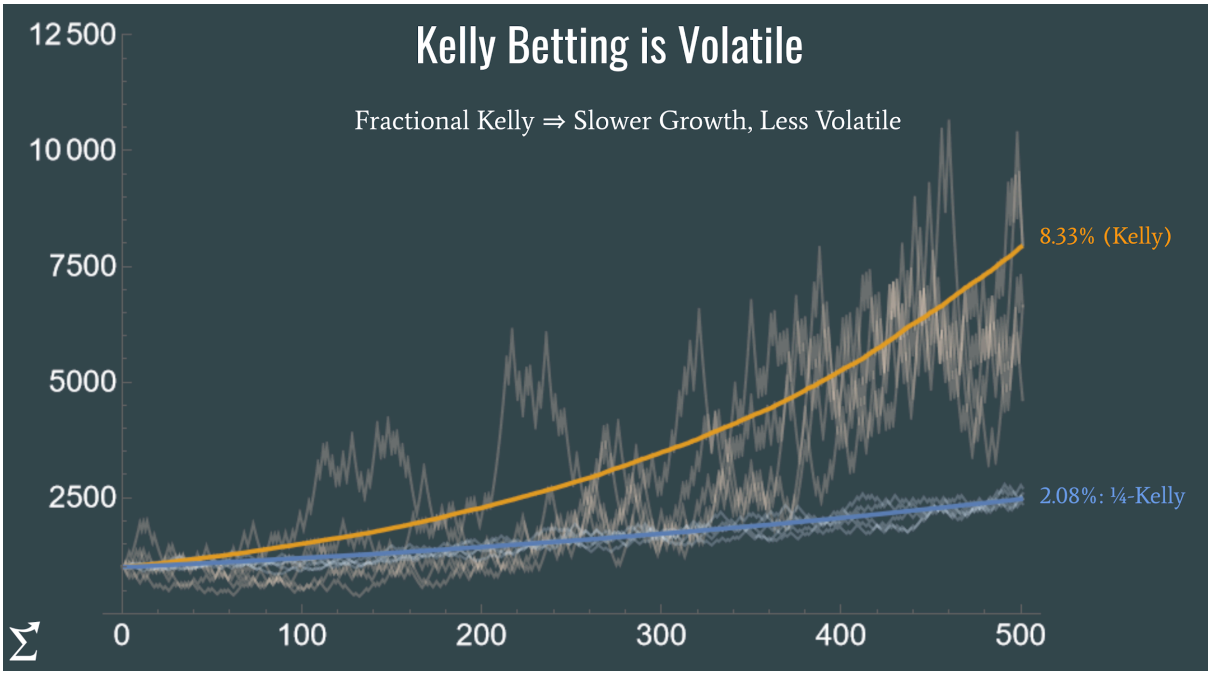
The plot above only shows *where* you should end up by betting Kelly, without saying anything about *how*you end up there. A typical experience for the Kelly bettor looks something like this:



With a 10% edge betting at +120 odds (2.20 decimal), we expect to multiply our bankroll by 7.5x after 500 bets. But in the course of realizing this "expectation", we very easily could find ourselves up more than 10x after 400 rounds of betting, and then up only 3x by the 450th round. That's the difference between **theoretical expectation** and **actual realization**.

The untold cost of attaining Kelly's theoretical expectation is having to live through the actual realization, which means a lot of volatility, sleepless nights (and possibly a subscription to Prozac).

The easiest way to cut volatility is to bet less. Instead of betting the full amount suggested by (**), suppose we bet 25% of that amount. We'll make less money in the long-run, but we'll sleep better at night:



This **fractional Kelly** approach has been applied by savvy bettors to reduce volatility. But it's not just for nits who can't handle the swings. Even if you think you can handle the ups and downs of Kelly betting, you still shouldn't try it.

As bettors, we know that winning and losing is part of the deal, and we need to train ourselves to handle ups and downs. We may be tempted to dismiss the volatility shown above as something only a "lesser bettor" would concern themselves with. We only care about what makes the most money, and living through the volatility is the price we pay to achieve that goal.

All well and good — if you know that your violent down swings are just a result of ordinary Kelly volatility. In the simulation shown above, we know the down swings are only caused by random chance. If we let the simulation run longer, the line will recover, and we'll live happily ever after in math fantasyland.

But in real life, we'll never know for sure that the downturns are just a result of ordinary statistical variation. When we have a losing streak, it might be because of temporary bad luck, or it could be because something has changed either in the betting markets, or in our betting strategy, or in our data, or somewhere else that has eliminated our edge. Thoughts will (and should) run through our heads:

Did we introduce a bug in our code?

Is our data corrupted?

Has the betting public gotten stronger?

Are our models stale?

Does our strategy no longer work?

These are questions we are always asking ourselves because all of these things can (and sometimes do) happen. But by subjecting ourselves to an approach that is extremely volatile in the best case scenario — as is the case with Kelly betting — we make it impossible to quickly diagnose when any of the above (very serious) issues pops up.

This last discussion about all the bad things that can go wrong without us knowing about it leads us to our next reason to reconsider the Kelly criterion. Not to burst your bubble but …

Your edge is smaller than you think it is

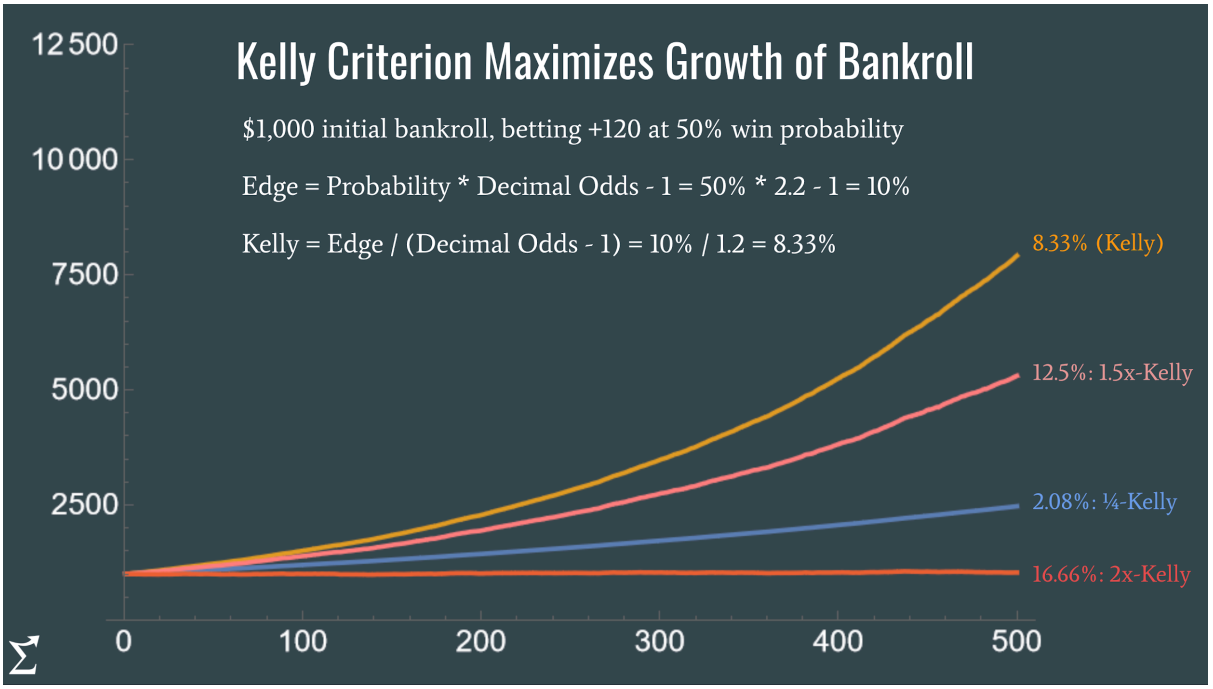
No matter how sharp you are, there's always information you haven't accounted for. Often, this mismatch of information explains you think a bet is favorable in the first place. If you knew what others in the market knew, then you probably wouldn't think the bet was as favorable as you do. So, if you think your edge is 10%, it's probably more like 5%, or even 2-3%.

This means that even if we don't mind the volatility of Kelly, we should still consider fractional Kelly as a way to guard against overestimating our edge.

The interesting thing about the Kelly criterion that betting less can sometimes *increase* how much money we make. This relates to **overbetting**, which happens when we bet more than the Kelly fraction in (**). If we bet too much, even when we have a positive edge, we'll stunt the growth of our bankroll.

In our running example, we assume a 10% edge at +120 odds, so that the Kelly optimal bet size is 8.33% of our bankroll. But since we have a positive edge, wouldn't we make more money (on average) by betting more than 8.33%?

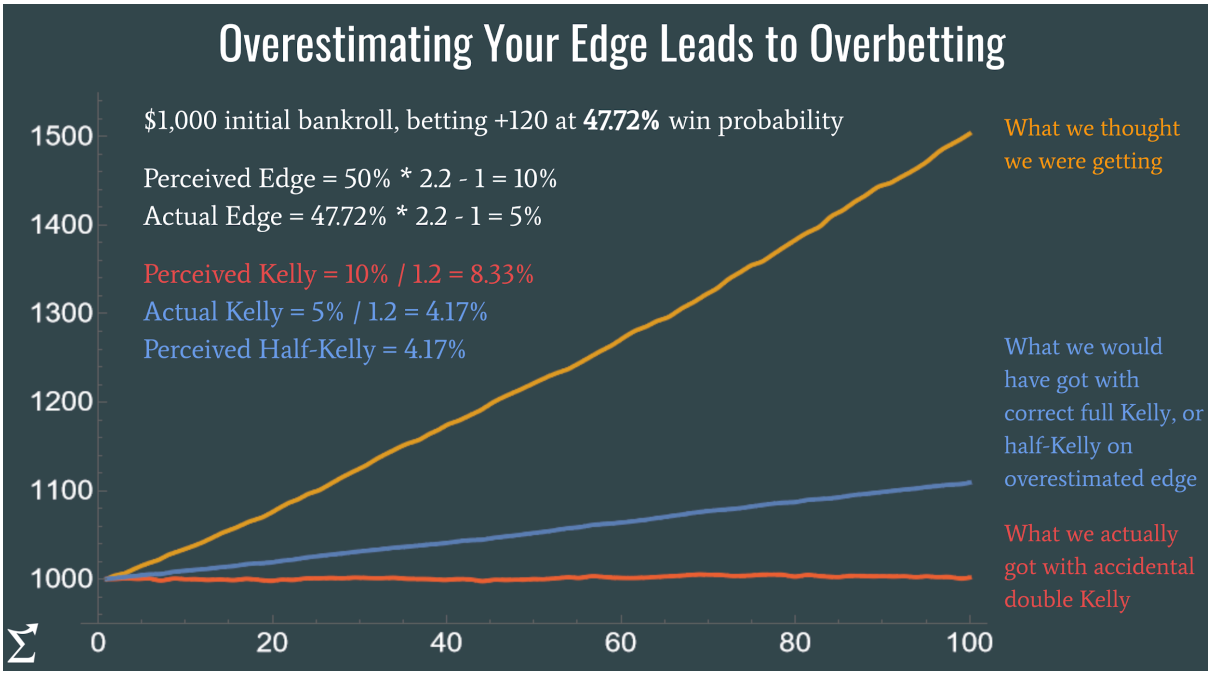
As the graphic below shows, if we bet 12.5% of our bankroll (or 1.5x-Kelly), then we expect our bankroll to grow slower than when we be 8.33%. And if we bet 16.66% (or twice Kelly), we shouldn't expect our bankroll to grow at all!



But why does this lead to fractional Kelly?

Read carefully. The Kelly criterion (**) says to bet in proportion to what our edge *is*, not what *we think our edge is*. So if we think our edge is 10%, meaning our edge is more like 2-3%, then we should bet as if our edge is 2-3%. This translates to betting around 20-25% of the Kelly fraction.

For illustration, suppose we adopt a half-Kelly approach, so that instead of betting 8.33% we bet 4.17% of our bankroll. Also suppose that we have overestimated our edge, so that our edge is actually 5% instead of our estimated 10%. Now consider the difference between what we think we would be getting by betting full Kelly (orange line) to what we would actually get (red line) to what we get by betting half-Kelly (blue line).



If we bet full Kelly, we would expect a lot of growth but get none. But by being conservative (betting half-Kelly), we actually are betting the exact correct Kelly fraction given our actual edge.

So, in addition to diminishing volatility, fractional Kelly also helps us avoid overbetting. And since we are very likely to be overestimating our edge, fractional Kelly may actually bring our bet size closer to the optimal amount.

By now I hope you're convinced that less is more when it comes to the Kelly criterion: 10%-50% fractional Kelly is useful practical advice, both to reduce volatility and to avoid overbetting. But you could have learned this from just about this just about any other article about the Kelly criterion. What you probably haven't read elsewhere is that you might be better off forgetting about the Kelly criterion altogether and simply flat betting—picking a unit size (say, $100) and betting the same amount every time.

The situations you think you have the biggest edge are those in which you're the most wrong.

It's common to talk about edge as if it's a fixed physical constant of the universe. We interpret having an edge of 2% to mean that every bet we place expects a profit of 2%. But in reality, having a 2% edge in sports betting really means a 2% *average edge*.

Sports betting isn't like craps or roulette, where every bet is placed under the same conditions with the same probabilities and edges. In sports betting, every future outcome is unique, which means our information about that potential outcome is unique (in its own way), and therefore subject to variation due to the natural fluctuations of information flow and human psychology.

We might win 2% over the long run, but in practice this 2% is made up of some bets that have a 10% edge, others a 1%, others a -3% edge, and it all averages out to an ROI of 2%.

Of course, if we knew exactly what our edge is, then we would bet more when we have the 10% edge, less with the 1% edge, and not bet at all with the -3% edge. But, as we've already observed, we don't really know our edge. We're just guessing.

We discussed this, and how we can address it, when we talked about fractional Kelly above. But we didn't talk about how our actual edge and our perceived edge may not be related by the simple relationship assumed by fractional Kelly betting. For example, half-Kelly betting assumes that our actual edge is half of whatever we think it is. So if we think our edge is 1%, then we bet as if it were 0.5%; if we think our edge is 10%, we bet as if it were 5%; and if we think our edge is 100%, we bet as if it were 50%.

But why should we expect that the gambling gods would be so kind to allow for a nice proportional relationship between our perceived and actual edges, regardless of their size? It can't be this easy!

More to the point, aren't the situations in which we think our edge is biggest also most likely to be the ones where our opinion is most wrong?

For simplicity, suppose all of our bets are at even odds, and that the Kelly fraction determined by our model is either 2% of our bankroll (when our projected edge is 2%) or 20% (when our model senses a 20% edge).

Here's the thing. The reason the model thinks our edge is 20% in some cases isn't because of ordinary randomness in the process being modeled. It's more likely because our model is wrong in a systematic way, meaning that we might be assessing a 20% edge on a random outcome. In such cases, we can expect to lose the vig (or worse) over the long run.

For the sake of illustration, let's assume that our actual edge in these situations is -10%. Also, let's assume that when we assess the edge at 2%, it is actually 2%. (The exact values of vig, edge, etc. don't matter for this example.)

Under these assumptions, we have an expected profit of 0.04% of our bankroll (2% Kelly fraction times our edge of 2%) each time our model finds a 2% edge. And we have an expected loss of -2.0% of our bankroll each time our model finds a 20% edge (20% Kelly fraction times our actual edge of -10%).

Therefore, even if a mistake happens only 1 time out of 50, our 2% "edge" reduces to a 0% ROI. If it happens more often, then our profitable model is now a loser.

Even more troubling is that fractional Kelly is helpless in this scenario. Suppose we were betting half-Kelly instead of full Kelly. Then we cut both our expected gains and losses in half, so our 2% bets become 1% bets with an expected profit of 0.02% of our bankroll, and our 20%

bets become 10% bets with an expected loss of -1.0% of our bankroll. Still, 1 mistake in 50 is enough to wipe out our edge entirely.

If, on the other hand, we ignore Kelly and always bet the same amount no matter what our edge is (say $100), then we profit $2 (on average) when our model correctly identifies a 2% edge, and we lose $10 (on average) when it incorrectly assesses a 20% edge. Now our mistakes aren't so fatal because we've capped our exposure to them: if we're wrong 1 time out of 50, then we can still earn an ROI of about 1.8%, which is a little bit less than 2.0% but a whole lot better than 0%.

In practice, mistakes are inevitable regardless of our approach (top-down, bottom-up, statistical, technical, or anything else). We can only do our best to eliminate them, mitigate them, and then protect against the ones that survive our attempts at elimination and mitigation. Forgetting about the Kelly criterion, or severely curtailing our use of it, may just be the best way to do this.

How Losers Lose

There are a lot of great resources out for learning how to win at sports betting. This isn't one of them.

Some of my favorite resources on winning are this article by Matt Buchalter, and Spanky's Be Better Bettors podcast.

This article is about losing. Why?

Because knowing how to lose is more important than knowing how to win. Once you know how to lose, you also know how not to lose. And not losing is a pre-requisite to winning. So while "not losing" isn't the ultimate goal, it's an important milestone because every subsequent improvement you make puts you over the top.

Even though this article is about losing, it's not just for losers. Even if we're already winners, we can improve our results with a simple formula.

1. Understand why losing bettors lose.
2. Avoid doing those things.

Two Kinds of Losing Bettors

Before digging deeper into the process of losing, it's important to distinguish two kinds of losing bettors: those who should be losing (a *should-be loser*) and those who shouldn't be losing (a *would-be winner*).

The Should-Be Loser

Yes, some – actually most – bettors deserve to lose. Not because they were born unlucky or the world is turned against them, but because they either don't have or aren't using the skills needed to win. For a non-sports betting related example, take blackjack. A blackjack player who doesn't know basic strategy deserves to lose: he's playing a sub-optimal strategy in a game in which he has a negative edge under optimal conditions. The sports betting equivalent of this is betting without a clear understanding of your edge or any well-defined process for executing.

The Would-Be Winner

On the other hand, there are bettors who *should* be winning but aren't. They would be winners if not for some critical mistakes.

The equivalent in blackjack is a player who has mastered basic strategy and is an expert card counter, but still loses money because of mistakes that offset their advantage. They may play perfectly for 8 straight hours grinding their +1% advantage, but grow frustrated and

fatigued during losing sessions. Instead of quitting, they increase their bet unit by 5 times and play at a -1% disadvantage for the remaining couple hours in their session. Just like that, they've turned a solid advantage of 1% into an overall disadvantage of -0.2%. The same kind of thing happens to would-be winning sports bettors. Below are some reasons why.

8 reasons why losers lose

Reason #1: They're not trying to win.

Without a doubt, the #1 reason most bettors lose is because they're not trying to win. They *want* to win, but they're not really *trying* to win. They bet for fun. They bet on their favorite team. They bet on the game that's on TV. They bet because they have a good feeling.

There's not necessarily anything wrong with betting for these reasons. But anyone who does bet this way simply isn't trying to win. So they shouldn't be surprised when they lose.

Reason #2: They lie to themselves.

A bettor bets all 10 games on an NBA slate. They go 5-5 betting $110 at -110 ($110 to win $100) against the spread on each game. The next day their buddy asks how they did the night before, to which they reply: "Broke even".

That's a lie. They bet $1,100 and lost $50. It doesn't sound like much. It might even feel like breaking even. But it's not.

Over time, these lies compound. Psychologically, we tend to remember our wins a bit better than our losses. This gives us an inflated opinion of our performance, which in turn leads us to incorrectly believe that we're either already winning or we're "on the

cusp". Because we wrongly think our process is working, we're likely to keep doing it, and we continue the cycle of losing and lying to ourselves about it.

Reason #3: Excuses, excuses.

The same psychological bias that makes us remember wins and forget losses also causes us to be delusional about the reasons for our wins and losses. We tend to attribute winning streaks to skill and losing streaks to luck. When we lose, we can explain how things didn't turn out the way they were supposed to: the starting pitcher got injured, the coach should have gone for it on 4th down, we got unlucky on a buzzer beater, etc. These are all excuses to justify why certain losses don't really "count". Trust me, they count. It all counts.

Reason #4: No discipline.

Our approach is only as sound as our commitment to execute it, through good times and bad. Finding a solid strategy is an important step. Having the discipline to execute the strategy is another challenge altogether. A technically sound approach that we can't commit to (for psychological, financial or other reasons) isn't a sound approach overall.

The would-be winning blackjack player in the previous section grinds an edge for 8 hours only to throw it all away with undisciplined play in his last couple hours. The would-be winning sports bettor does the same thing when he spends weeks methodically picking his spots, betting within reasonable bankroll limitations, but grows frustrated after a break-even or losing month and tries to get it all back with a few big bets.

Reason #5: They don't keep records.

Ask any bettor how much they've won or lost over the last week, month, or year. Answers will vary, but the most common answer you'll probably hear is, "I'm about even." (See Reason #2). (Believe me. They're not even – and it's not even close.). The truth is, most bettors have no idea how much they've won or lost, because they don't keep records.

It sounds mindlessly simple: Every time you place a bet, just write it down. It's easy to do for a day or two, maybe even a week. If you start out on a nice winning streak, it might even be easy for a month or two. But the minute you start losing, the harder it becomes. And the thing is: everyone has losing streaks. Even the biggest winners.

Aside from the fact that you won't know your profits and losses without accurate records, the practice of record keeping instills discipline that many bettors lack (Reason #4), it prevents us from making excuses (Reason #3) and lying to ourselves (Reason #2), and it forces us to care about winning (Reason #1). Perhaps for this reason, keeping records is almost always cited by professionals as the #1 thing every bettor absolutely must do.

Reason #6: They don't respect the market.

Suppose we log into our account to look at tonight's MLB offerings. Based on our analysis, we expected the Yankees to be a -200 favorite but we find they're being offered at +150. What should we do?

We quickly deposit as much money as possible to lock up the +150 before the market adjusts the price closer to where it should be.

Wrong answer.

The fact that the market disagrees with our expectations by so much should be a red flag that our original assessment is very, very wrong. The same goes for much smaller disagreements between our

expectations and the market. When the market disagrees with us, it usually indicates that we're missing something. The ability to detect when the disagreement is in our favor – the market is missing something – or not – the market knows something we don't – is perhaps the most important, and also most difficult, aspect of winning betting to master.

Reason #7: They can't explain what their edge is.

If you expect to win, you should be able to explain *why* you're a winner.

In an earlier article on Finding an Edge and Keeping It, I discuss the main ways to get an edge betting sports: having better information, better execution, or better modeling than the other bettors.

Right now, ask yourself: where do I get my edge? Be specific. Acceptable answers could be:

- Because I know about NFL injury information before anyone else.
- Because I can act on line changes faster than certain books.
- Because I have a better College Basketball model than anyone else in the market.

Forget about whether you're correct in any of the above assessments. Having a reason for why you expect to win is a necessary (but not sufficient) condition for winning. Winning doesn't happen by accident. If you don't know why you should be winning, then how can you expect to win?

Remember Reason #2: Don't lie to yourself. If you've never considered this question before or can't give a clear answer, then you probably don't have an edge. That's OK. Actually, it's great. Just by

realizing this, you're in a much better position to stop losing — and that's the first step to winning.

Reason #8: They don't play to their strengths.

In today's marketplace, every bettor can win, but very few do. In addition to all the reasons given above, the nail in the coffin is not playing to our strengths. Suppose you're a diehard Chicago Blackhawks fan. You're obsessed with the team. You listen to Chicago sports radio 6 hours a day, you've read every article ever written about them; you sit center ice at every game. Your best friend drives the Zamboni. Chances are that you know more about the Blackhawks than just about every other bettor and bookmaker out there.

You've found your edge (Reason #7). You definitely know enough to make money by betting on Blackhawks games. But what's the problem?

Maybe you always bet on the Blackhawks. They're your team. It's bad juju to bet against them. It's a betrayal. (You're not trying to win; see Reason #1)

Maybe you don't just bet on Blackhawks games. You bet on every NHL game. Every night. And during the summer, you get bored and you bet on Cubs games too. (No discipline; see Reason #4)

But you say: only bet Blackhawks games? That's at most 81 games a year. That's not scalable. In this particular case, you're right, but that's where your edge is in this example. You need to ask yourself, would you rather bet less often and be a winner at the end of year, or bet more often and lose money?

The principle applies much more generally. All bettors have strengths and weaknesses. Everyone's edge has a limitation to scaling. There

are WNBA specialists, NFL player props specialists, and MLB futures specialists.

There are two general ways to increase profit: we can either expand our strengths or eliminate our weaknesses. Ideally, we would do both. But if we're already strong in one area, the easiest way to improve is by honing our strengths and eliminating our weaknesses as much as possible.

Am I still a loser?

Be honest. How many of the above mistakes are you guilty of?

I hope you didn't say *zero*. If you did, then either (i) you're not being honest with yourself (violation of Reason #2) or (ii) you have no easy ways to improve.

If you've admitted to yourself of being guilty of one or more of the above mistakes, then congratulations.

First, you've taken the first step toward recovery: admitting there's a problem.

Second, you've identified an immediate step you can take to become a smaller loser (or hopefully a bigger winner).

There's no shame in losing. But there is shame in being a loser. Almost every professional bettor started out by losing. Many went broke multiple times before finding success. With the right mindset, losing is just a temporary state of affairs.

Whether you're a should-be loser or would-be winner, or a proven winner, there is no easier way to improve your game than by limiting or eliminating the above mistakes.