THE PRINCIPLES OF VALUE BETTING

A GUIDE TO WHAT VALUE BETTING IS AND HOW IT CAN BE PROFITABLE

TRADEMATE
SPORTS

PREFACE

In Trademate, we are passionate about finding the edge, and are always on the lookout for new ways to improve. Now, we have created this eBook to share our enthusiasm for the concept of value betting and the mindset behind it.

The goal is that after reading this, your idea of value betting – the idea about what it is and how it works - is a bit clearer. We will also introduce you to the assumptions we rely on to justify why we do what we do.

You might be a professional sports trader, or you might be reading about sports trading for the first time. No matter the starting point, we hope you will take some time to understand and appreciate the basic principles of what we are trying to do.

This is the second in this series of four eBooks covering betting from the basic concepts to strategies and how to make a living out of it.

I hope you find it interesting.

-Marius, CEO of Trademate Sports.

CONTENT

4

What is Value Betting?

An introduction to the concept

6

Deeper Insight Into Value Betting

Bookmakers margins
Market driven bookmakers
Deciding the odds
How odds change

13

How Efficient is the Sports Market?

Is the efficiency high enough to provide true odds?

15

Exploiting Arbitrage Opportunities

Comparison to stock markets
Why invest in sports betting
Being a sports trader

5

How Does Value Betting Work?

A high level explanation of how value betting works

9

The Law of Large Numbers

How value betting is about the long run and number of bets

14

The Ultimate Goal of Value Betting

How one statistically can be profitable in sports betting

1 What is Value Betting?

Imagine you were to bet on the toss of a coin. Assuming the coin can't land on its rim, there is a 50 % chance of heads, and 50 % chance of tails. Now, imagine you were to bet on the outcome, and had two people offering you the following odds:

Person A: Heads 2.10 Person B: Tails 1.80

Obviously, you choose the bet with the highest odds, since the probability of each outcome is the same. Now, let's see what happens if you place a bet on heads at 2.10. Half of the time, you'll lose your $10 bet, and half of the time you'll earn $11. From this, we can calculate the expected value of your bet to be $0.5.

After one toss, you won't have profits of $0.5. You will either be $10 down or $11 up. However, if you increase the number of tosses, your average earning per bet will theoretically converge towards half a dollar per toss. This means that if you toss the coin 1000 times, you should expect earnings of $500. Whether you end up a bit above or below $500 is a matter of luck, but it is skill that landed you there in the first place.

It doesn't require much skill to realize that 2.10 is a good odds on the toss of a coin. In fact, since odds = 1 / probability, fair odds would be 2.00. Because the odds offered is higher than what the underlying probability suggests, it is a good bet.

So why don't we do the same in sports? Why don't we use the probability of each outcome to calculate the corresponding odds, and in turn distinguish a good bet from a bad?

That's exactly what we do. Welcome to value betting.

2 How Does Value Betting Work?

If you are thinking that coin flips and sports are not the same thing, you are right. As opposed to the coin flip, the problem with sports is that you do not know the probability of a win, draw or defeat. So how do we determine it?

The short version is that some bookmakers are really good at determining their odds at a level that reflects the underlying probability. This allows them to have a high payout rate and a small margin.

Most bookmakers, however, are not that good, and when they don't know whether their odds are in line with the actual probability, they compensate with high margins. After all, they are all about making money.

Sometimes, new information enters the market. This happens, for example, if an unexpected lineup changes people's perception of the probability of each outcome. For example, if one team's key players are suddenly left out of the team, odds on the opponent will fall.

The best bookmakers are market-driven and their odds will shift automatically. Others set their odds manually, and might lag behind. If they do, their odds are suddenly higher than the one of the market leaders. The margin they once had is lost, and the probability have shifted in your favor.

As with the coin flip, if the odds are higher than what is supported by probability, you have a profitable bet.

3 Acquiring Deeper Insight Into How Value Betting Works

BOOKMAKERS TAKE A MARGIN ON EACH EVENT

All bookmakers and exchanges have a margin - that's ultimately how they make money. Their margin may vary from as low as 3% to as high as 20%. Imagine a pure coin flip where you can bet on heads or tails. The odds should be 2 on each side, which means 50% probability of hitting one of the sides. For bookmakers to make money, they put their odds at 1.8 on both sides, skimming 10% off whatever the winning bet is.

THE SHARPEST BOOKMAKERS ARE MARKET DRIVEN

Now, which bookmakers are the best at accurately predicting the outcome of a game? First, let's define the bookmakers and exchanges into two main categories: 1) soft bookmakers, who have low limits on how much money can be placed on games. 2) Sharp bookmakers, who have high limits on games. The majority of the sharp bookmakers will have higher payout rates (Soft: 85-95% vs Sharp: 95-98%). What typically happens at the soft bookmakers is that they limit winning players in order to protect their profit margins. The sharp bookmakers however, choose the opposite strategy, they want to have smart traders at their site because it makes their odds more accurate. The sharp bookmakers have much higher limits on the amount of money that can be placed on a game. This basically allows them to have more information incorporated into their odds, which makes the bookmaker able to more accurately predict the real world outcome of the game.

The best and sharpest bookmakers in the world are purely market driven. This means that whenever someone put money on one of the sides, those odds will decrease while the other one increases. In other words, the odds are ultimately decided by liquidity in the market. When the amount of money placed is high enough - the odds are as close

to perfect as it will be. By looking at the odds of these high liquidity markets, one can acquire the knowledge of hundreds of thousands of people. Not many bookmakers can pull this off, because they don't have a large enough customer base makings things too uncertain. The ones that can are mostly placed in Asia.

HOW BOOKMAKERS DECIDE THEIR ODDS

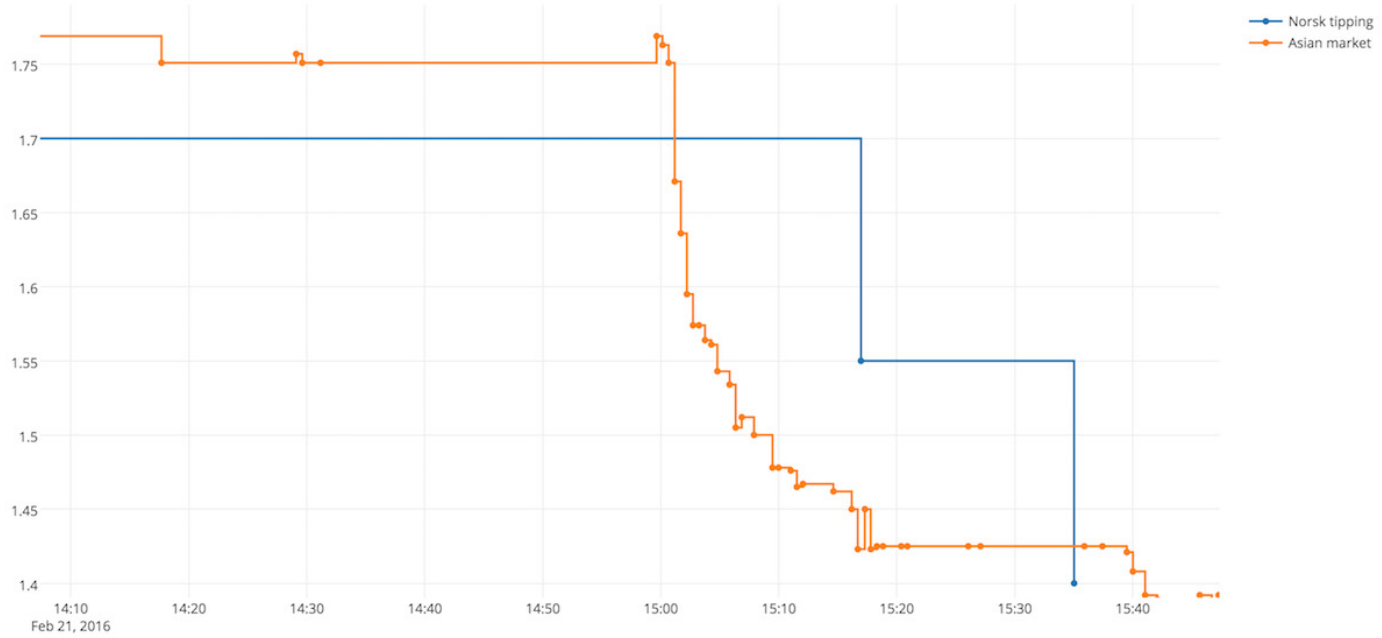
Typically an odds line will be placed by a bookmaker after they have performed a statistical analysis, which takes all the information they have available into consideration for instance, the team's lineup, injuries and historical performance. Once the initial odds line has been set it will be adjusted based on market movements, meaning how much money is put on the different outcomes. The efficient market hypothesis used in financial markets states that it is impossible to beat the market because the existing asset prices always incorporate and reflect all relevant information. So if an asset is underpriced in the stock market, it will lead to investors buying the stock until it returns to its intrinsic value or in other words a fair price.

The same applies to the sports market, if a bookmaker underpriced the odds of a particular outcome, let's say a home win to Liverpool vs Manchester United, then smart sports traders will put money on this outcome until it is priced at a fair value. So for instance, if someone places a $1 million on Liverpool to win, the odds will shift. If another person believes that the odds is now mispriced and that there is value on the other side, they might place $1 million on Manchester United to win and the odds will shift again and thus eliminating the inefficiency. The more money that is put on the outcome of a game, the more likely it is that the all of the inefficiencies have been eliminated. Thus the odds at the time the match kicks off, the vig-free (bookmaker's margin removed) closing line, will reflect all of the information that is in the market.

NEW INFORMATION ENTERS THE MARKET

Value occurs when the market acquires any kind of new information that impacts the game. One good example is the following FA cup game between Chelsea vs Manchester City.

A couple of hours before the game, the best odds you could get on Chelsea to win was around 1.75-1.8. Then, exactly 1 hour before the game, the lineups went public. As it turned out, Manchester City brought five teenage full debutants in their lineup.

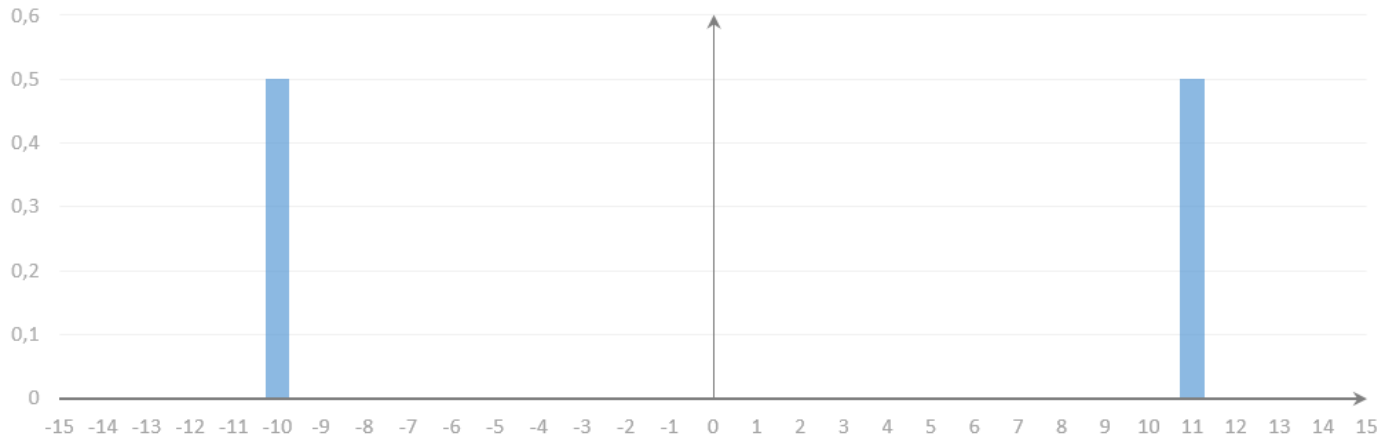


That information triggered a significant change in the market. All the high liquidity markets dropped from 1.75-1.8 to 1.35-1.45 in less than 10 minutes. However, a lot of the European bookmakers didn't react nearly quickly enough. Some bookmakers spent more than 30 minutes changing their odds. That meant you could now get Chelsea to win at 1.7-1.8 when everyone else agreed they should have no more than 1.35-1.45. This turned out as an edge higher than 15%.

4 The Law of Large Numbers

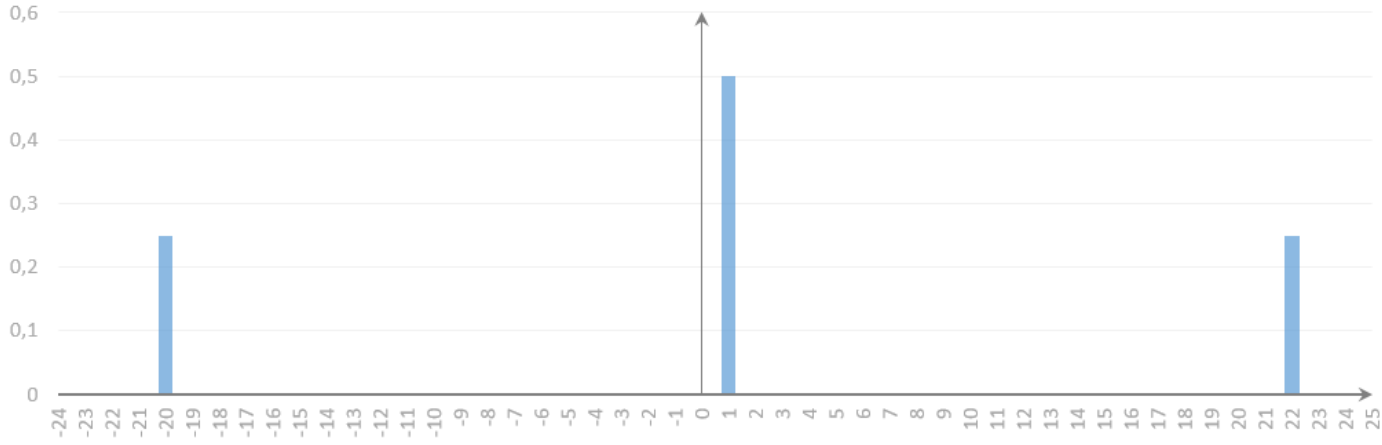
So far, we've learnt how edges occur in sports betting, and that good bets are characterized by a positive expected value. The question remains how to transform your edge into what is our ultimate goal: Long term profits.

Let's take a look at our coin flip example. The probability is 50 %, so the edge is 5 % (2.10/2.00 = 1.05). With a stake of $10 and potential return of $11, one trial gave an expected value of $0.5 ($11*0.5 - $10*0.5 = $0.5). As we also pointed out then, you won't have $0.5 in profits after the first toss. You will either be $11 up or $10 down. To see how this looks, we can plot the different outcomes and their corresponding probability:



The chart shows the two only possible outcomes after the first trial, and that both outcomes are equally likely. In other words, after only one coin toss, there's a 50 % chance that you'll win money, and a 50 % chance that you'll lose. Strictly speaking, that is a risky investment.

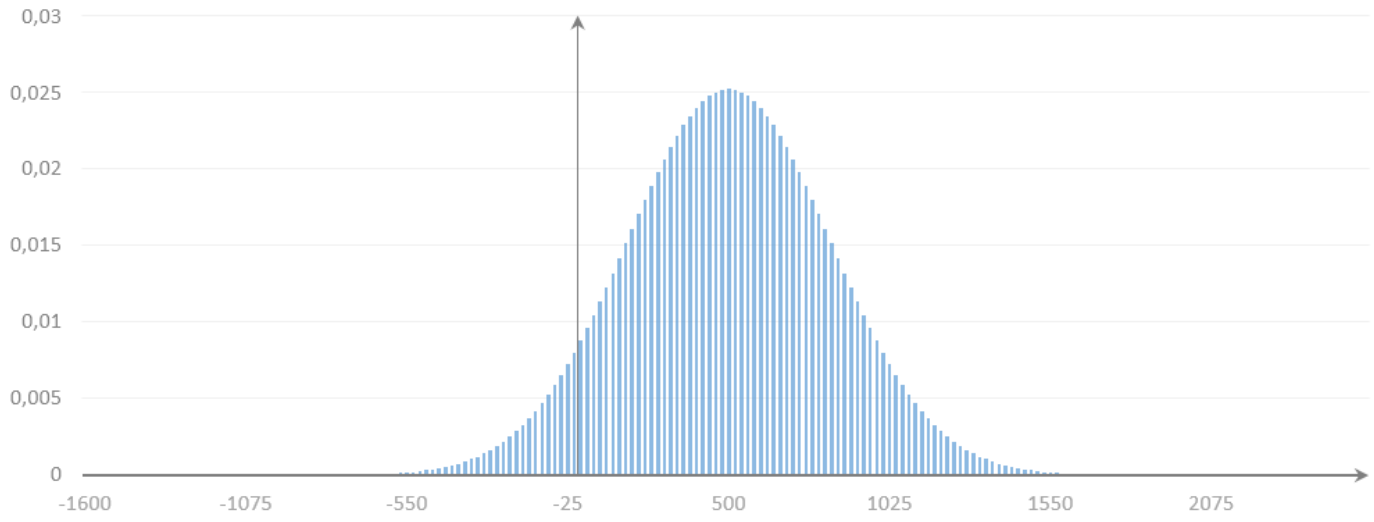
When we flip the coin a second time, there are now four outcomes: $22 up (25 % probability), $1 up (50 %) and $20 down (25 %). The expected value can be calculated to be $1 (2 tosses * $0.5), and now with more possible outcomes, the probability distribution would look like this:



As illustrated, only one of the outcomes result in negative profits. In fact, the probability of losing money has gone down to 25 %, only half of what is was after the first trial. Then again, having a 25 % chance of losing money is still way out of our comfort zone.

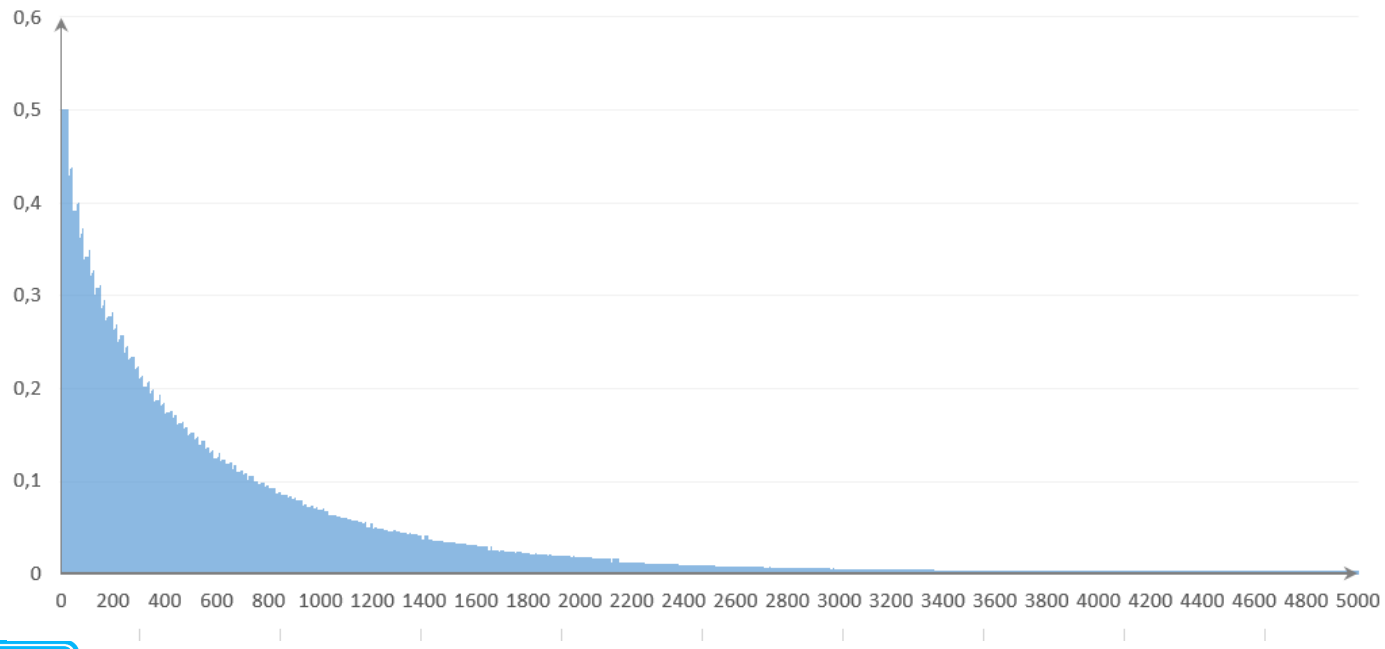
The law of large numbers states that the mean of the results obtained from a large number of trials will get close to its expected value. This means that if we toss the coin many times, we should expect it to show heads and tails approximately the same amount of times.

Therefore, let's see what happens if we keep increasing the sample size. Naturally, as the number of possible outcomes increases, winning every bet will become highly unlikely (prob = 1/(2^sample size)) and similarly it will become highly unlikely to lose all of the bets. If we map out the different outcomes and their probability after 1000 trades, we get the following bell-shaped curve:



Now, there are several observations to be made. First, we know that the expected value should be $500 ($0.5 * 1000 tosses). This is also reflected in the probability distribution, which is symmetric around 500. That means that you are equally likely to end up above and below $500.

Furthermore, the chances of negative returns is a lot less than before. In fact, we can calculate the probability of losing money after 1000 trades to be 7 % (You'll have to trust us on this one). We can also plot the same probability for a number of sample sizes, which will turn out like this:



For example, if you want to be 98 % certain to make a profit, you would need a sample size of almost 1900. Increase the number to 5000, and you are theoretically going to make a profit with a certainty of 99.96 %. Moreover, you will earn more than the expected value of $2500 half of the time.

The lesson is simple. As long as your sample size is small, placing valuable bets is only part of the story and risk is still highly present. By increasing your sample size of +EV bets you will reduce the risk of negative returns and your results will converge towards its expected value.

That is the power of the law of large numbers.

5 How Efficient is the Sports Market?

Trademate determines the value of a bet by comparing it to the odds that is supported by the underlying probability. Being able to determine this probability is essential.

Behind every value bet is the assumption of an efficient market. If this does not hold true, there is really no reason for value betting to even exist. Therefore, we present one of the most fundamental and important questions any beginner trader can ask: Can we trust the efficient market hypothesis?

In their business models, bookmakers make a tradeoff between their margin and the number of bets placed through their service. Lower margins means higher odds levels, which in turn increases the amount of money drawn to the bookmaker. High odds levels attract professional sports traders with large bankrolls, which increases the level of competition. The consequence is an efficient market, because smart sports traders exploit any inefficiencies that occur.

By looking at the correlation between the expected probability of a game's outcome and the actual outcome it is possible to determine how accurate a bookmaker's odds are. For example, consider a sample of 1000 bets all priced at 2.00. For the odds to be 100 % efficient, exactly 500 need to be winning bets. If the price was 4.00, 250 wins would imply the same level of perfect efficiency.

An Asian bookmaker, one of the sharpest bookmakers in the world, did an analysis on the results from 397,935 football games. The analysis showed a high correlation between the closing lines and the observed probabilities. More specifically, their odds accurately predicted the real world outcome 99.7% of the time (r-squared = 0.996). In other words, their odds are very efficient.

6 The Ultimate Goal of Value Betting

No one is able to perfectly predict the outcome of every sporting event. However, this does not imply that it is impossible to become a profitable sports trader, nor that those who are profitable are merely lucky.

The goal when trading sports is not to win every bet you place, but to make decisions that have a positive expected value (+EV). In other words, you want to place trades that have a larger chance of winning than implied by the odds you paid for.

As previously described, the sharp bookmakers' closing lines are considered to be the expected value. This means that If you traded at higher odds than the closing line, you have made a +EV trade. On the other hand, if your odds are lower than the closing line, your trade has a negative expected value (-EV). In that case, it's time to revise your strategy.

Over a small sample size of trades, variance will have a dominating impact on your results. In other words, anything can happen. However, over a large volume of trades, the variance will even out and luck is replaced with skill. In the end, only sports traders who are able to consistently beat the vig-free closing lines at the sharp bookmakers will be profitable.

7 Exploiting Arbitrage Opportunities: From Trading Stocks to Sports

"Arbitrage is the simultaneous purchase and sale of an asset to profit from a difference in the price. It is **a trade that profits by exploiting the price differences of identical or similar financial instruments on different markets or in different forms.** Arbitrage exists as a result of market inefficiencies" - Investopedia

HOW HIGH-FREQUENCY TRADING FIRMS EXPLOIT ARBITRAGE OPPORTUNITIES IN THE STOCK MARKET

With today's technology, the pricing of stocks is updated within a few milliseconds of real-time. This is way faster than a human is able to perform calculations, which makes it difficult to find arbitrage opportunities in financial markets. As a result, firms who are performing day trading are now using computers to perform algorithmic electronic trading at a speed that is impossible for humans to match. The way this works is that you give the computer a set of instructions, which will trigger it to buy or sell stocks. These instructions can be related to price, timing, volume or a mathematical model. For instance, you write an algorithm that tells the computer to buy 1000 Tesla stocks whenever the price goes above $200 and sell if the stock price increases by 10% above the purchase price. For more reading on arbitrage and algorithmic trading, check out the links.

The non-fiction book "Flash Boys" by Michael Lewis, tells the story of how high-frequency trading (HFT) firms used a super fast fiber optic cable that connected the financial markets of New York with Chicago to perform arbitrage trading. This $300M cable reduced the journey time for data from 17 to 13 milliseconds. An advantage, which enabled the HFT firms to obtain better prices on their trades compared to their competitors.

To illustrate how this works in practice let's imagine that a hedge fund wants to buy a 100 000 shares of Tesla stock. This purchase will be spread out on multiple stock exchanges to ensure that they get the best possible price on their purchase. As a result 60 000 shares are purchased on Nasdaq for $200 per share, but once someone buys stocks in a company, the price will increase. Thus there are only a limited amount of shares are available for $200.

Once the purchase has been made, the stock price of Tesla increases to $202 on Nasdaq. Therefore the hedge fund will look at buying the remaining 40 000 shares at a better price on a different stock exchange. At the London Stock Exchange (LSE) Tesla is still trading at $201 because the price has not been updated yet. What happens is that the HFT firm will notice that someone has purchased a large amount of Tesla shares on Nasdaq and therefore they will leverage their faster cable connection to purchase Tesla shares at the London Stock Exchange before the price increases to $202.

So let's say the HFT firm manages to buy Tesla shares at $201 per share at LSE. They then sell the stocks to the hedge fund for $201.99 and pocket a 99 cent profit per share. All of these events take place within a couple of milliseconds and are enabled by the firms using complex computer algorithms to perform their trading. In reality, the pricing difference is more likely down to 1 cent or less, rather than the 99 cents used in this example. However, if the HFT firm is able to perform thousands of trades like this during a day, then the profits will add up to huge sums in the end. profits within an industry will attract new firms to the industry.

According to the article at Harvard Politics, the HFT market produced profits of $5 billion in 2009, but declined to 1.25 billion in 2014. Also, HFT trading accounted for 73% of the total daily market volume on U.S. exchanges in 2014.

A possible explanation for this decline can be found in the macroeconomics principle of perfect competition, which states that the existence of economic profits within an industry will attract new firms to the industry. The increased competition will result in diminishing returns for the firms and in the long run the industry will reach the state of perfect competition, an equilibrium where the industry profits equal zero.

A second possible explanation is that the stock exchanges have improved their own connections, which reduced the relative edge that the faster connection provided the HFT firms.

According to Investopedia's definition, arbitrage opportunities exist as a result of market inefficiencies, which allow investors to exploit price differences. Therefore it is not limited to just investments in stocks, but really any market where such opportunities exist. As a result the HFT firms also trade other types of securities such as bonds, futures and foreign exchange contracts. The rest of this chapter will focus on price inefficiencies within sports markets.

ARBITRAGE OPPORTUNITIES IN SPORTS MARKETS

Within the world of sports betting there exists bookmakers where you bet against the house and betting exchanges where you bet against other people. The latter can be compared to a regular stock exchange, the main difference being that the traders buy and sell bets on the outcome of events such as a football game rather than stocks. What makes the sports market interesting from a trading perspective is that it is more inefficient than the financial markets, which in turn creates arbitrage opportunities. At the free site oddsportal.com, one can compare the odds of a game provided by different bookmakers and betting exchanges, which enables you to see the inefficiencies that exist within the sports market with your own eyes.

The odds of a game's outcome reflect what the bookmaker believes to be the probability of that outcome. The probability of an outcome equals the inverse of the odds, in addition one has to adjust for the bookmaker's payout rate, which is the amount of money that they pay back to their customers. For instance Mybet has a 90% payout rate, which means that they take a 10% cut of the money that is placed on this game. Next let's compare the odds provided by two different bookies.

Bookmaker	Row Type	Home	Draw	Away	Payout
Mybet	Odds	2.4	3.4	2.5	90.0%
	Formula	1 / (2.4 / 0.90)	1 / (3.40 / 0.90)	1 / (2.5 / 0.90)	
	Estimated probability, adjusted for bookie payout	37.50%	26.47%	36.00%	100.0%
	Estimated probability	41.67%	29.41%	40.00%	
Asian bookmaker	Odds	2.25	3.36	3.59	98.0%
	Formula	1 / (2.25 / 0.98)	1 / (3.36 / 0.98)	1 / (3.59 / 0.98)	
	Estimated probability, adjusted for bookie payout	43.56%	29.17%	27.30%	100.0%
	Estimated probability	44.44%	29.76%	27.86%	

What we can see here is that the two bookies differ greatly in what they believe will be the outcome of the game. Now this leaves us with the question of which bookmaker is right and are either of them able to accurately predict the game's outcome? The earlier screenshot above shows that Mybet's odds for a home win is 2.40, while the closest bookmaker is at 2.27. This large deviation from the rest of the market indicates that Mybet is the bookmaker who underestimates the probability of a Liverpool win. The consequence of Mybet having mispriced the probability of a Liverpool win, by placing their odds at a higher level than the rest of the market, is that it creates an arbitrage opportunity. More specifically it makes it possible to put money on the outcome of a draw and an away win at two other bookmakers with a guaranteed ROI of 2.62% as

can be seen in the screenshot below.

Liverpool - Manchester United

Today, 17 Oct, 21:00

1X2				
Outcome	**Bookmaker**	**Odds**	**Stakes**	**Winnings**
Liverpool	mybet	2.40	42.76	102.62
Draw	VulkanBET	3.46	29.66	102.62
Manchester United	LEONBETS.COM	3.72	28	104.16
Total amount you wish to risk:			100.00	Calculate

All stakes to be rounded up

Your profit (stake 100.00): 2.62 to 4.16 (2.62% to 4.16%)

This is what is referred to as a surebet. The advantage of surebets is that in theory you are guaranteed a profit without any risk. However, the majority of surebets will occur at the soft bookmakers (will be defined later), which can lead to several practical disadvantages:

1. Soft bookmakers limit sports traders who are able to win consistently.
2. You need to find high enough odds on all of the outcomes for it to add up to a surebet.
3. If the odds deviate too much from the rest of the market, bookmakers are able to void bets placed on that game. Imagine the following scenario: you are following the recommendation in the screenshot above, by placing money on a home win at Mybet, a draw at Vulkan bet, but when you are trying to place a money on an away win at Leonbet, you are limited to place a maximum of $1. You are now unable to complete the surebet, which results in a huge negative expected value on the bet. Now whether you are investing in stocks or sports the most important principle is to avoid loosing money, because if you loose 50% of your capital ($10 000 → $5000), you will need to increase it by 100%, just to return to the starting point ($5000 → $10 000).

4. You will need to distribute your capital and thus tie up your capital across a very wide range of bookmakers to take advantage of the surebet opportunities.

Bookmaker	Row Type	Home	Draw	Away
Mybets vs. Asian bookmaker	Difference in estimated probability, adjusted for payout rate	6.06%	2.70%	-8.70%

Because of the disadvantages with arbitrage trades (surebets) listed above, a better strategy is to place a high volume of +EV trades. An example of a value trade would be to place money on a home win to Liverpool, which has a +6.06% EV. Over a large sample size placing +EV trades should be a profitable strategy in theory. This is based on the assumption that the Asian bookmakers accurately reflect the true probability of a game's outcome, which will be discussed next.

WHY INVESTING IN SPORTS OVER STOCKS MAKES SENSE FOR PRIVATE INVESTORS

A rational investor will attempt to maximize returns while minimizing risks. This implies that they will invest in the markets or financial instruments where the potential return / risk ratio is the highest. Investors in financial markets can broadly be divided into two categories: Long-term oriented investors who rely on fundamental analysis and short-term oriented investors who follow a trend or technical analysis. The former are often referred to as value investors, which means that they try to identify assets that are underpriced by the market. They also require the asset to be significantly under-priced, which provides a margin of safety, before they purchase a given asset.

What I view as the main disadvantage for the value investors is that, because they are oriented towards the long-term, which can be anytime between 3-10+ years, it means that they will tie up their capital in investments for a long time before potentially reaching a positive return on investment. In the meantime, you do not know whether

your hypothesis that the asset is underpriced holds true.

The opposite of strategy would be day trading, taking advantage of short-term price discrepancies in the market. Day traders apply different methods such as looking at chart patterns or technical indicators in order to predict future market movements. Now the main disadvantage with being a day-trader is that computers are superior to humans in performing statistical analysis and for discovering patterns in large datasets. Thus gaining an edge in the market when you are competing against HFT firms is very difficult.

The gap in access to information held by hedge funds compared private investors have increased dramatically in the last decades. Today hedge funds can rely on real-time satellite images of the parking lots of JC Penney to predict their quarterly returns, while private investors rely on historical financial statements. The result being that it is very difficult for private investors to compete against the professional hedge funds, especially if they rely on technical analysis. This is because, if there does exist price inefficiencies in the stock market it will be exploited by the HFT firms way faster than any private investor is capable of, returning the market to an efficient state.
Thus in practice, the day trader performing technical analysis is competing against HFT firms, with access to less information and using inferior methods.

To manage risk the principle of portfolio diversification is followed by both groups of investors. The short-term investor will typically mitigate risk, by making a high volume of smaller trades with low risk and low returns that add up and provide a positive ROI. In comparison, value investors will make a lower volume of investments, but with a higher potential ROI on each of them.

Similar to the day trader a sports trader will perform a high volume of smaller investments on the sports market. With any strategy, it is important to set up a feedback loop that provides you with data on how your strategy is performing. Within sports trading, the natural benchmark is to measure whether the odds you are putting money on is able to consistently beat the closing lines of the sharp bookmakers. If so, you will have a positive expected value, which in theory should lead to profits over a large sample size of sports trades.

Poker players will be familiar with the difference between the short and the long term. In the short term is possible for anyone to win, regardless of skill. because luck or randomness has a large impact on the outcome. While in the long run, the random variance will even out and the players who have an edge will be the ones making a profit. The same holds true for people who trade in both the stock and the sports markets. Anyone can make a profit in the short term, but in the long term only traders who make decisions with a positive expected value will be profitable.

BEING A SPORTS TRADER

For professional sports traders, the majority of work is put in during the weekends because this is when the majority of games are played. In a given weekend you can potentially run through your bankroll multiple times by placing a high volume of sports trades. Trades are typically placed within a couple of hours before the game starts to reduce the variance that may occur between the opening to closing lines of the bookmakers. Thus the capital of the investor is tied up in the investment for a shorter period of time. The result being that you can grow your fund much faster, than for long-term investments in the stock market.

For example, if your bankroll consists of $10 000 and you place sports trades with an average of + 3% EV per trade. +EV being the trades where you get a higher odds than the closing lines of the sharpest bookmakers. Now let's assume that you place your trades with a flat structure* of $100 per bet and that over the weekend you place 100 bets. Then your expected profit would be: 100 (trades) x $100 * 1,03 (EV) - $10 000 = $300. Now obviously, whether you endure winning or losing streaks will have an impact on your actual profits . If we assume that there is no variance in the 100 trades we placed or in other words that we are neither lucky nor unlucky, our actual profits would be equal to our expected profits of $300. In reality, the variance will only even out if you are able to place a high amount of +EV trades.

CONCLUSION

To sum it up there are 3 main advantages of trading in the sports market compared to the stock market:

1. Market inefficiencies enable arbitrage opportunities.
2. Shorter investment cycles provide a higher potential for profit growth and reduced capital tied up in investments.
3. Faster feedback loop on strategy performance.

CREDITS

This eBook is written by Trademate Sports for educational purposes.
All rights of the content and the right to distribute this ebook lies with TM Sports Technologies AS.

If you have any questions, please do not hesitate to contact us.
This ebook is the second in a series of four ebooks about the topic of betting and value betting, each book with increasing complexity.

CONTACT INFORMATION

Trademate sports.com
marius@trademate sports.com

FOLLOW US ON SOCIAL MEDIA

TRADEMATE
SPORTS