KENTUCKY DERBY

★ ★ ★

ANNUAL WRITE-UP

By Jordi Visser

SATURDAY, MAY 7, 2022

CHURCHILL DOWNS
LOUISVILLE, KY

Churchill Downs, the world's most legendary racetrack, has conducted thoroughbred racing and presented America's greatest race, the Kentucky Derby, continuously since 1875.

The first Saturday in May is here so it is time for handicapping Kentucky Derby 148.

After two Covid impacted years at the Derby, Churchill Downs will be back to normal in 2022. In 2020 the race happened in September instead of May, and last year, despite happening on the first Saturday in May, only around 50,000 people attended. This year we will be back to 150,000 screaming fans. For those of you reading my annual write-up for the first time, my analysis takes longer to read than the two minutes the race will be, so be prepared. This is my data analytics attempt to help all of you enjoy the Kentucky Derby even more than in past years by giving you a breadth of unique information about the history of the race and each horse. In this world of big data, there is more and more information to process. This is meant to give it to you in one place along with some of my own statistics from years of database building and, hopefully, to give you a chance to make some money and maybe even learn a little about handicapping. While I hope you make money using my analysis, the key message is it is free. The only thing I can guarantee is that you will see some data you will not see anywhere else.

After attending 15 of the last 21 Derbies, each year I hope the time spent handicapping the race will prove profitable, but more importantly, I will reiterate what I wrote in the first piece years back. For those of you who have never attended the Derby as one of those 150,000 people, it is something I recommend for all Americans at least once in their life. The Kentucky Derby has survived the test of time and is a true piece of Americana. It gathers friends and families from all over the country as they come back to see each other and enjoy a day of laughter, excitement, and in some cases, overindulgence. It is like a prom, reunion, and Mardi Gras wrapped up into one, and you can visit all three parties during a day that feels like it never ends. No matter your age, the

**THE KENTUCKY DERBY
"AMERICA'S GREATEST RACE"**

Derby makes you feel young for the day, and in this age of millennials, where experiences are highly valued and where it is harder to keep people's attention span, remember this is the most exciting two minutes in sports! The Derby is a bucket list experience not to be missed.

My father owned racehorses for part of my childhood and was my inspiration for this annual write-up. He taught me how to handicap a race at an early age. That experience served as the beginning of my journey in using data analytics at a young age to make better decisions. This handicapping approach is the same way I approach all aspects of my day job as the CIO of an asset management company. There have been many books about poker and decision-making, but handicapping a race is very similar to handicapping the markets. There are narratives about why people like horses. There are analytics in the racing program and all the different speed ratings available which have their own algorithms. Finally, parimutuel betting in a horse race means the betting drives the ultimate odds on the race, just like multiples of the stock market are driven by investors' expectations and change as their decisions change. My father taught me to listen to the narratives, go through my analytics on race and training patterns, watch the movements of the odds, and, based on my handicapping, put my own probabilities of the horses winning and then compare this with the odds the rest of the bettors have set and look for value. My method is very different from the "Who do you think will win?" approach. I am looking for opportunities or value where your edge will win out over time.

For a race like the Derby, my approach is even more necessary given the size of the field, the inexperience of the horses, and the number of bettors who only bet on this one horse race each year. Recently, favorites have dominated, but historically, over the last 147 runnings, this race offers value. Using that mindset, in past years for this analysis, I would break the handicapping down into five categories and use historical statistics to look for and eliminate horses that appear too slow, lack the necessary experience, or don't appear to have the endurance for the grueling journey. Then I review the remaining horses and look for value based on the odds. The five categories are 1) STYLE 2) STAMINA/PEDIGREE 3) EXPERIENCE 4) CURRENT FORM, and 5) SPEED.

THE KENTUCKY DERBY
"AMERICA'S GREATEST RACE"

This year I am adding a new element to this annual analysis to help people understand the concept of handicapping. The last two years (I skipped the 2020 Derby), the horse I liked based on the value at the time of publishing saw their odds become significantly less attractive the day of the race to levels that were not attractive anymore. I thought it would be better to put my probabilities of winning and subsequent odds of the horses from handicapping it and let you compare them to the odds of the horses at the time of the race. I will still throw out the horses that do not meet the historical criteria and pick a winner, but this way, you have my handicapping odds to compare with on race day with the odds available.

On to the race: since the Derby point system came into play in 2013 to determine who qualified, as a handicapper looking for value, 2013-2018 had six consecutive favorites win the race. Until last year, no horse had won the race with odds higher than 8-1. Last year, Medina Spirit initially won the race at 12-1 and with the eventual winner being named Mandaloun, who went off at 27-1. The last two years have now seen the horse crossing the finish line first having at least 8-1 odds. Hopefully, the breeding, training, and jockey adjustments to the points system will lead to more of the historical environment with derby winners having higher odds.

To highlight the point I made in 2019 on typical value for the winner, which includes the last six years from 2013-2018 dominated by the favorites and eight winning favorites over the last 23 years, the average payout on the winner has been about 24 dollars. Thus, it does pay in this race historically to look for value. When you go back further, you see in the 1980s and 1990s that amazingly NOT ONE favorite won the race, and only three times during that period did the favorite even come in second place. Before the recent string of favorites, only four won in the 33 years from 1980-2012, so although we have seen more favorites winning recently, history tells us you can find value in the Derby.

To start the analysis each year, I focus on the likely early pace of the race. The early pace and the overall expected shape of the race are always a big part of race handicapping. For the Derby, given its distance and the bunching of horses, many will lose the race by the half-mile pole, depending on how fast or

THE KENTUCKY DERBY
"AMERICA'S GREATEST RACE"

slow it has been run. The first quarter is a pinball-like dash by 20 horses to get into position by the first turn. Historically, horses have benefitted from being away from the early pace. Since the point system went into place ten years ago, the horse crossing the finish line first has been no further back than 3rd with a quarter-mile left to go, except for Orb in 2013, who was 5th at that point. Before the last seven years where the eventual winners sat close to the pace, from 2004-2013, at the half-mile, the eventual winner was no closer than 4th place with the average being in 11th. 4 of the 11 winners were 16th or worse at the half. Over the last 33 years of the Derby, 11 of the eventual 33 winners were more than eight lengths behind the leader at the half-mile mark.

The narrative of why early speed has been holding up and winning in recent years is around the change to the points system, making it more difficult for horses who win the earlier, shorter races to get into the race. Although there is a logical side to that, it also should mean that more horses with stronger endurance who come from behind with a late run should get in the race as well. Maybe, most of the best horses in recent years prefer to run close to the lead, and this is just about a narrative created based on results rather than objective data. To check this, I used the Brisnet (one of the racing analytics sites) running style designation of S (closer) to see how many legitimate closing horses have been in the Derby during this streak. I will explain why this is important for this year later. From 2013-2021, there were 35 horses that ran in the Derby designated as closers. Not one of those 35 was a favorite. Only four have had odds less than 10-1. 15 of the 35 had odds of 30-1 or higher. Given the trend, the odds this year will certainly be skewed towards the horse expected to be near the lead early, so value should show up for the closers until this trend changes.

This year again, most of the true speed horses in early preps are not making it into the Kentucky Derby. However, with Classic Causeway deciding to run and Taiba, Messier, Epicenter, Summer is Tomorrow, and Simplification all looking to be close, we could have a different type of fast early pace. I say different because I don't think Classic Causeway, Summer is Tomorrow, or Simplification have the pedigree or speed to win the race. This will put pressure on three of the favorites,

Taiba, Messier, and Epicenter, to make early decisions on placement. For the first year in some time, I see this as a risk where we get a fast pace with a strung-out field as they turn for home. If this occurs, it will open it up to some of the talented closers.

One more trend to get out of the way early is the trend in foundation or average starts before the Derby. In 1982, the average career starts for the Derby horses was 10. It has been declining steadily since then and this year it will be around five. Taiba, one of the favorites for this year, only has two-lifetime starts. He is attempting to be only the second horse in the 147-year history to win the Kentucky Derby in his third start. Since the average is declining and Justify won the Triple Crown recently after having only three starts and none as a two-year-old ending the Apollo curse, Taiba cannot be overlooked. The historical importance of the foundation analytic must be less important than in years past.

Before we go through eliminations and categories, here are my odds for the race with approximate probabilities for winning so everyone can see where I see value relative to the bettors on Derby day.

Horse	Odds	Probability
Epicenter	5-1	16%
Zandon	5-1	14%
Mo Donegal	6-1	14%
Taiba	8-1	11%
Messier	8-1	11%
Smile Happy	10-1	9%
Zozos	12-1	8%
Charge It	15-1	6%
White Abarrio	20-1	5%
Cyberknife	20-1	5%
Crown Pride	25-1	4%
Pioneer of Medina	50-1	2%
Tiz the Bomb	50-1	2%
Barber Road	50-1	2%
Simplification	50-1	2%
Classic Causeway	75-1	1%
Summer is Tomorrow	100-1	1%
Tawny Port	100-1	1%
Happy Jack	100-1	1%
Ethereal Road	100-1	1%

You can notice the top five horses are very close to each other in my odds. The top five horses all won their last prep race or finished second with a Brisnet speed rating above 100. So I believe all have the endurance and speed to win, depending on the type of trip they get.

Now on to the elimination rounds, which you can likely figure out from the odds. Let's start by using seven stats that have helped identify the winner in past years. 49 of the last 53 winners had a win as a 2-year-old. 33 of the previous 41 winners had a win as a 2-year-old at a distance of at least a mile. 35 of the last 44 winners had a 3-year-old stakes win. 58 of the last 64 winners had at least one stakes race win before the Derby. 77 of the last 86 winners had six or more starts before the Derby. 19 of the last 21 and 24 of the last 30 winners had a final 1/8 in final prep of fewer than 13 seconds, and 22 of the last 29 winners had a final 3/8 of less than 38 seconds in final prep. When you combine missing these with not having shown the speed necessary to finish in-the-money, I will start by throwing out Ethereal Road, Happy Jack, and Summer is Tomorrow, whom I all have odds at 100-1.

The rest of the elimination round is based on the categories.

1) As mentioned above, STYLE is very important for the Derby. It is a grueling race with a huge field filled with inexperienced and unqualified horses. There are always traffic problems which most of these horses have not seen. Many have never had horses in front of them kicking up dirt in their face. You want to avoid horses likely to get into a speed duel and, on the other side, deep closers who are grinders without tactical speed. Out of the horses remaining for style, I will eliminate Classic Causeway and Tiz the Bomb. Classic Causeway likes to be on the lead and has not kept form as the races have gotten longer. Tiz The Bomb is a very talented turf horse but has not shown the ability to handle the dirt, and seldom are horses great on the turf and dirt, so his best days are ahead of him on the turf.

2) Because of the length and grueling nature of the race, STAMINA is a necessity. Pedigree and late speed have always been important for the winner. For STAMINA, we will look at their pedigree, use their final furlong and final three-furlong

THE KENTUCKY DERBY
"AMERICA'S GREATEST RACE"

times in their last preps, and compare them with the pedigree. For pedigree, one remarkable statistic is related to their sire lines. Since 1990, 47% of the Kentucky Derby, Preakness, and Belmont Stakes winners have had Mr. Prospector in their sire line, and in this race, there are 8 of the 20. For late speed in final prep, one of the best analytics for finding horses that will be able to handle the mile and a quarter Derby is to see how they closed in their final prep. The important levels have been under 13 seconds for the final 1/8 and less than 38 seconds for the final 3/8s. In addition, there is one statistic that has worked for the last 30 winners, which means there is a data analytics measurement you could have used even to pick the longshots Mine That Bird, Giacomo, and Country House. I created a velocity measure to see how much a horse is slowing at the very end of the final prep race by measuring the rate of change within the final 3/8s. For this, I take the final furlong time and subtract the average of the final 3 furlongs to see how much the horse slowed in the final 1/8. The last 30 winners all had a difference of no more than 0.40 seconds. You are looking for stamina and being able to finish fast but also at a consistent speed that suggests the extra 1/8 will not be a problem. 52 of the last 60 in-the-money horses also met this requirement. This historical calculation does not include the 2020 Derby because of the strange distances in the races before the Derby. Medina Spirit is included despite being eliminated as we handicap based on finishers, not disqualifications. For Stamina, I will eliminate Simplification and White Abarrio. White Abarrio will be one of the mid-tier choices, but his final 1/8, 3/8, and velocity in the Florida Derby were slow. I have to stick with data and throw him out.

3) EXPERIENCE/CLASS has historically been very important for the winner. Historically, horses have needed to have raced as a two-year-old, had at least three starts as a three-year-old, and had six starts overall to have a chance statistically. In terms of class, you want to see that they have been racing against good horses and did not just get into the race. You also need to look at experience racing on dirt. As mentioned earlier, the trends in this are declining with the success of Justify and Taiba, in particular, so there is nobody to eliminate from this area.

THE KENTUCKY DERBY
"AMERICA'S GREATEST RACE"

4) CURRENT FORM is an often overlooked part of a Derby analysis. It has historically been important as you want to find a horse that is peaking at the right time. This involves their progression up to the race, including the results of their most recent preps and their workouts over Churchill Downs preparing for the race. Since most of these horses have raced less than eight times in their career, they are still improving, and recently improving horses with their speed numbers rising as the distances get longer has been an excellent factor to follow. You also do not want too much of an improvement in their final prep, suggesting they could regress or bounce. 45 of the last 46 Derby winners (including Maximum Security) finished their final prep in-the-money or at least within three lengths on the winner. For current form, I will throw out Tawny Port and Pioneer of Medina.

5) If there is one factor to go with for the Derby, it should not be surprising for it to be SPEED. Using Brisnet speed figures since 1992, horses with a final prep speed figure of 95 or less are 1-for-166 in the Kentucky Derby for the horses crossing the finish line first. 59 of the last 66 horses that finished in-the-money had a final prep speed rating of 95 or higher. 53 of the last 66 had a rating above 98. Using Beyer figures, 27 of the previous 30 crossing the finish line first had a final prep speed of 95 or higher. Only two winners since 1990 did not have at least one 95 or higher Beyer in their prep races. In the last 23 Kentucky Derbies, only 6 of the 69 horses that finished in-the-money did not have a better Beyers speed figure as a 3-year-old than their best 2-year-old speed figure. For speed, I will toss Barber Road, Charge It, and Cyberknife. I will say Charge It and Cyberknife are two improving horses, but both not only need a massive speed improvement, but some of that is coming from the fact they are still showing immaturity signs in their recent stretch runs. Both could be good Belmont horses if they run well here and come back for the Belmont.

After the statistical elimination round, eight horses remain—Epicenter, Zandon, Taiba, Mo Donegal, Smile Happy, Messier, Zozos, and Crown Pride. As I said at the beginning, it is very crowded at the top, and even out of these, I don't have a huge spread between seven of them if you look at my odds. If you want to start with one way to separate them, the ones left from the Mr. Prospector line are, Taiba, Messier, Smile Happy, and Zozos.

Crown Pride is the one left with the highest odds so let's start here. He is in here for three reasons. The horse has looked very strong and full of energy in all four of his races and has carried that exact look over to his workouts at Churchill Downs. Second, he has shown the ability to run all day, so distance should not be a problem. Finally, he is a Japanese bred and trained horse, and Japan has been doing well in these big races lately with their horses. Speed figures are tough with these overseas races, so I would not bet him at all with odds lower than 30-1. He is my longshot if Japan does not bet the odds down.

Zozos is a horse that is improving, but with only three starts and no stakes wins yet. It is a lot to ask, but the talent is there. His pedigree is questionable for a mile and a quarter, but he did finish his 1/8 and 3/8 in good time, and his velocity was still good. He is a Mr. Prospector, his speed ratings are at levels suggesting he can win the Derby, and his progression in those three races is good. It would take a considerable effort, but his odds reflect this risk. Another live longshot.

Smile Happy was one of the favorites during the prep campaign this year but has not appeared to make the next jump from his two-year-old form to three. The horse has done nothing wrong, and I expect his odds to be more attractive at post time than where I have him at 10-1, so he does offer value, particularly in exotic wagers. His post position 5 ends up being surrounded by three other horses that I expect to go to the lead quickly, so he will have a decision to make quickly for positioning. This horse offers value.

Epicenter, surprisingly, is not the morning line favorite. I would be surprised at post time if he is not, but I also don't like his post position given the types of trips he has had leading into the Derby. At post position 3, all the speed in the race is outside of him, which to me means he will likely be used harder than usual to try and get in position or get stuck behind a lot of horses. I see a high risk of the horse being put in a more challenging experience than the easier trips he saw in the preps, so although it would not surprise me if he wins, I don't like the value.

THE KENTUCKY DERBY
"AMERICA'S GREATEST RACE"

Taiba's analysis is straightforward. He could be a freak and go on to win and be only the second horse in the history of the Kentucky Derby to win with only two prior races. More likely, he will not have the experience to handle the journey, and too much is being asked of the horse without the foundation historically needed. This comes down to value. This horse has the highest speed ratings of any horse in the race, which means he doesn't have to run his best race and can still win. He got an outside post where maybe he can use his speed to get close and get the opportunity to run them down at the end. I have him at 8-1. If you get anything higher than that, he is worth some money on him based on his speed and win in the Santa Anita Derby.

Messier lost to Taiba in the Santa Anita Derby and has great speed ratings and progression into the race. I think this is another horse where depending on the value, he could be the best bet. I have him at 8-1 but would not be surprised to see him offer better odds at race time. If it weren't for the expectation of a contested pace and strung field as they turn for home, I would say Messier would be number one on my tickets. But I want horses from off the pace this year, and I expect Messier to try and use his speed early to get into position. This field is filled with gritty horses that fight back in their races. Messier did not show that fight in the Santa Anita, and I don't think he can go wire to wire, so I like the last two horses more.

The final two horses for me this year are the two closers. If either of these horses wins, it will be the first time a closer has won in a while. It would be the first Derby win for trainer Chad Brown of Zandon. If Mo Donegal wins, it would be the first win for a horse in post position 1 since Ferdinand in 1986. These two had a contested photo finish in their last race as two-year-olds where Mo Donegal got the victory. They both finished the 1 1/8 mile Remsen Stakes with the necessary closing 1/8s and 3/8s times and velocity measure for the Derby as two-year-olds. They both did the same in their final preps before the Derby. There are two reasons why I will choose Mo Donegal to win the Derby over Zandon. The first is I think the long stretch run at Churchill Downs is perfect for his running style combined with the fast pace and strung out field I expect as they turn for home. The second is very simple. As I mentioned

THE KENTUCKY DERBY
"AMERICA'S GREATEST RACE"

at the beginning, handicapping is about finding value and not solely about who is going to win. My handicapping has both Zandon and Epicenter with higher probabilities to win but the odds in the morning line that came out after the draw have Zandon at 3-1, Epicenter at 7-2, and Mo Donegal at 10-1. I see these horses as very close in talent, so for 2022, I will select Mo Donegal.

Enjoy Derby Day!

Jordi

Related Podcasts

About Jordi

Jordi Visser is the President and Chief Investment Officer of Weiss Multi-Strategy Advisers LLC, a market neutral pioneer of the asset management industry. Jordi has over 30 years of experience in the investment and finance industry. At Weiss, Jordi oversees the portfolio managers and is responsible for the overall risk aggregation. Additionally, he is the architect and a portfolio manager for the Weiss Alternative Multi-Strategy Fund (Ticker: WEISX), a strategy that reflects the firm's market neutral approach and the desire to make its expertise in alternatives universally accessible. Jordi is the host of the video series, "Real-Time with Jordi Visser" and a lead contributor to the firm's podcast, "In Search of Green Marbles." Prior to joining Weiss, Jordi was the founding Managing Partner of Anchor Point Asset Management, a global macro hedge fund, and a former Managing Director at Morgan Stanley where he held various senior management roles. Jordi has been featured as a guest speaker on various popular podcasts and media outlets. Jordi is a magna cum laude graduate of Manhattan College and a Board Member of the School of Business at Manhattan College.

Disclosures