

Synthesis

Information Document

STRATEGY SYNTHESIS

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Mercurius offers a premium fully automated AI-driven sports trading portfolio for professional sports traders and alternative investors. The AI focuses on finding and exploiting inefficient odds offered within betfair.com's betting exchange on football matches.

Trading approach

Our approach to sports trading is based on value betting using quantitative fundamental analysis through the usage of big data and artificial intelligence.

1. Millions of data points are gathered from our partner Wyscout after every game
2. Fair odds are computed using machine learning algorithms and bayesian statistical inference
3. Every 20 seconds the AI scans the exchange looking for inefficient "back" odds weighted for the liquidity available
4. If the inefficient "back" odds are higher than the AI estimated odds by a certain amount dynamically computed, a value bet is spotted
5. Once the value bet is spotted an iceberg algorithm tries to place one or more bets on the selected outcome in order to totally wager at max of 1% of the user's portfolio.

Learn more: <https://mercurius.io/en/trader-app/methodology>

Mercurius Trader

Mercurius Trader is a web application running on Betfair Exchange able to execute our betting strategies automatically. All customers with a .com account can request a Mercurius Trader account at <https://mercurius.io/en/trader-app>. All our customers should set Betfair commissions at 2% in order to get the max out of our technology.

Current betting strategy specs

Markets: '1X2' and 'Asian Handicaps' markets.

Sports modelling characteristics:

- Bayesian Networks
- Teams attack and defence ratings are computed according to goals scored, shots location, chances quality, body part, venue and recent form; everything is then weighted against opponent strength and time elapsed to date
- Match outcomes are simulated 100.000 times through Monte Carlo method to estimate future event probabilities
- The goal of this strategy is to spot higher-than-expected odds on popular (thus liquid) events when there is a discrepancy above a given threshold between betting markets and Mercurius model.

*s: leagues playing during the summer season

Contacts

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Carlo Arbelli - carlo@mercurius.io

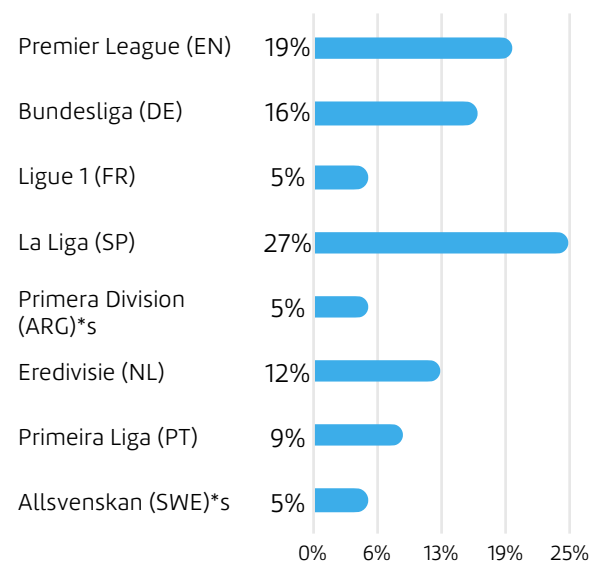
Fee structure

Suggested Bankroll (€)	€10,000
Maintenance fee (yearly)	2%
Profit Share (quarterly)*	70/30
Hurdle rate**	5%

*Read terms and conditions

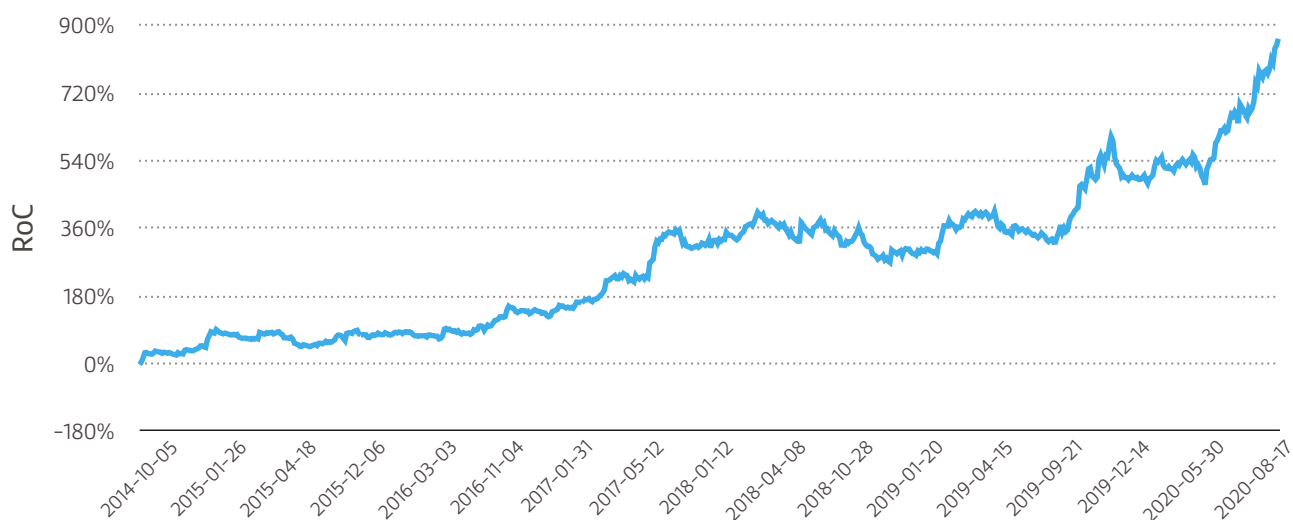
**Profits are shared just if the quarterly return on capital is greater than 5% of initial bankroll

Strategy Composition



Strategy: Synthesis
Last update: 30/06/21

Backtest Performance



[View the full list of value bets by clicking here.](#)

Backtest KPI (s)

Time (years)	6.10		
Return on Capital (ROC)	865.02%		
Annualized ROC	41.05%	Average	2.7%
RoMad	1.18	Maximum	12.0%
Yearly volatility	26.88%		8.0%
Average Odd	2.95		29.0%
Strike Rate	44.22%		
Monthly volatility	8.88%		
Total Number of operations	1764		
Yield ¹	13.12%		
Operations needed to recover the worst drawdown ²	104		

¹Yield = Profit/Loss ratio as a function of the total capital employed (total staked)

² These are the operations (bets) needed to reach profitability from the worst drawdown

³ The **exposure** is the amount of bankroll wagered in a period; it represents the money that can be lost in the worst case. There is an hard cap at 25%.

Annualised key metrics

	2014	2015	2016	2017	2018	2019	2020
ROC	35.92%	30.81%	35.44%	70.92%	-3.08%	49.33%	61.98%
Number of bets	87	275	268	237	292	365	240
Strike rate	41.38%	40.36%	44.40%	51.05%	40.00%	43.84%	48.33%
Average odd	3.79	3.59	2.66	2.52	2.86	2.94	2.94
Average stake	1%	1%	1%	1%	1%	1%	1%

Monthly Returns (%)

	2014	2015	2016	2017	2018	2019	2020
Jan		34.8449%	-0.2489%	1.7598%	4.2100%	-1.4308%	-2.6347%
Feb		-6.6020%	-1.4002%	7.8454%	3.2521%	8.3702%	5.6794%
Mar		6.2565%	0.0461%	3.5120%	13.6437%	9.4188%	4.9808%
Apr		-7.6067%	4.1241%	19.1999%	-10.1514%	5.5264%	
May		-11.6514%	4.6611%	2.8493%	1.2383%	-9.9390%	-1.0000%
Jun						2.3916%	1.0842%
Jul					-1.9900%	0.4494%	18.4200%
Aug					2.8610%	-3.4602%	15.3640%
Sep		1.1600%		-2.9800%	3.2590%	-3.6880%	-0.2700%
Oct	29.5116%	4.7521%	3.0303%	14.7501%	-7.2700%	20.6600%	2.7130%
Nov	1.1261%	2.8444%	14.9555%	20.1737%	0.2811%	25.8900%	7.0800%
Dec	3.7798%	9.8836%	6.6467%	-8.2660%	-9.9881%	-7.46%	
YTD	35.92%	30.81%	35.45%	70.92%	-3.08%	49.32%	61.99%

Terms and conditions

Mercurius receives 30% of the profits net of Betfair commissions (2%), based on the total quarterly performance and invoices the client directly every quarter when, in the case of profit, the performance is above 5% (hurdle rate). In the case of losses, the account is traded until back above the high-water mark, and only then are the profits shared. When the customer decides to terminate the contract or interrupt the usage of the service:

- if the portfolio is closed before reaching 200 settled bets Mercurius will retain a termination compensation 5% of the final bankroll
- before the end of the quarter, Mercurius will calculate the profits and charge the customer for the usage of the software until the day of interruption.

All accounts are traded on a ROC strategy, meaning that profits are automatically reallocated and the bankroll

grows with the performances.

Mercurius does not receive from clients any money for trading purposes, all the trading funds are owned by clients in their Betfair wallet. Mercurius offers its analytics and automation tools in return for a performance fee and a maintenance fee aimed at covering infrastructural costs.

The book account is held solely in the client's name and in conjunction with UK money laundering laws; funds in the Betfair wallet can only be withdrawn by the owner of the account from which the money came. The system as explained above can assure lifelong activity without restrictions or limitations from bookmakers since it is operated on a betting exchange and not a regular book

DISCLAIMER

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Mercurius assumes no responsibility for any losses that may be suffered by a user using the information, strategies, suggestions and services contained, published or available on the Platform. Users use all information provided within Mercurius applications at their discretion and their own risk.

As in any skill game, there is the risk of losing money in the wagering activity. It is understood that past performances can in no way be considered a guarantee of future ones. It is also understood that Mercurius will not, in any case, be held liable for the Advice provided or any other information or content published on Mercurius Platform. Finally, you must be aware that gambling can lead to the risk of psychological dependence.

Synthesis Extended

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STRATEGY SYNTHESIS EXTENDED

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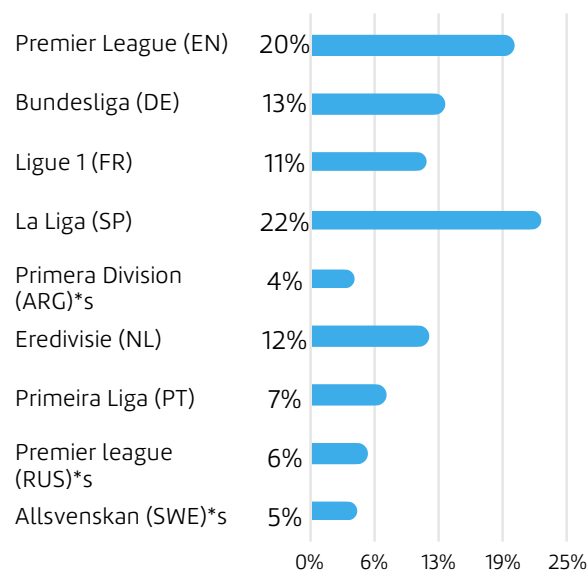
Fee structure

Suggested Bankroll (€)	€10,000
Maintenance fee (yearly)	2%
Profit Share (quarterly)*	70/30
Hurdle rate**	5%

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**Profits are shared just if the quarterly return on capital is greater than 5% of initial bankroll

Strategy Composition



Strategy: Synthesis Extended

Last update: 30/06/21

Backtest Performance



[View the full list of value bets by clicking here.](#)

Backtest KPI (s)

Time (years)	6.10		
Return on Capital (ROC)	1198.86%		
Annualized ROC	47.15%	Average	Daily Exposure ³ 3.0% Weekly Exposure ³ 9.2%
Yearly volatility	31.00%	Maximum	14.0% 33.0%
Average Odd	3.17		
Strike Rate	41.96%		
Monthly volatility	10.47%		
Total Number of operations	2140		
Yield ¹	12.94%		
Operations needed to recover the worst drawdown ²	312		

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Annualised key metrics

	2014	2015	2016	2017	2018	2019	2020
ROC	27.65%	36.98%	45.46%	85.89%	-10.69%	85.38%	65.91%
Number of bets	118	339	334	284	348	447	270
Strike rate	35.59%	38.34%	42.21%	48.59%	37.35%	42.73%	46.67%
Average odd	3.94	3.82	2.94	2.89	3.06	3.11	2.84
Average stake	1%	1%	1%	1%	1%	1%	1%

Monthly Returns (%)

	2014	2015	2016	2017	2018	2019	2020
Jan		44.8970%	10.6395%	0.6990%	9.0222%	-1.4308%	-0.0081%
Feb		-8.4997%	-4.3819%	6.8059%	0.1608%	14.9325%	7.0235%
Mar		4.0588%	2.3322%	15.8049%	17.2792%	5.4489%	4.9705%
Apr		-3.8192%	-0.3701%	16.1113%	-14.1968%	6.2821%	
May		-16.5068%	4.4541%	2.8996%	-0.7674%	-7.7000%	-1.0000%
Jun						2.3910%	0.0092%
Jul					-1.9900%	0.4494%	19.0128%
Aug		1.8611%		-1.0000%	2.8610%	-5.3814%	14.2638%
Sep		0.4177%	-3.6978%	-3.1991%	-0.1393%	-0.6825%	-0.2748%
Oct	19.9998%	2.7495%	1.8699%	20.4200%	-7.5470%	20.0695%	2.7139%
Nov	3.2978%	10.5622%	14.3263%	17.2511%	-3.0000%	44.6700%	7.0828%
Dec	2.9856%	6.4056%	15.1167%	-7.6774%	-9.2755%	-5.77%	
YTD	27.66%	36.98%	45.46%	85.90%	-10.68%	85.39%	65.90%

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