White Paper: The Value of Blue Heron's Findings

Between Q1 2021 and Q2 2024, 7.0% of Blue Heron's 4,300+ projects revealed <u>significant</u> negative findings about the public company being investigated. On average, the stocks of these companies underperformed the S&P 500 by 26% over the subsequent two years and by 38% over the subsequent three years.

	Relative to SPY: 1 Year	Relative to SPY: 1.5 Years	Relative to SPY: 2 Years	Relative to SPY: 2.5 Years	Relative to SPY: 3 Years
Avg Performance vs S&P 500	-13%	-19%	-26%	-30%	-38%
Median Performance vs S&P 500	-16%	-21%	-39%	-54%	-59%

Project Scope

Blue Heron performs research on thousands of companies each year. No overarching evaluation or rating process is currently undertaken on these companies. Our business practice includes:

- Rating individual calls based on call quality, source quality and overall sentiment (e.g. Negative, Mixed, Positive); and,
- Providing our interviews to our clients for their analysis and interpretation, often along with a summary of the completed calls.

This study set out to analyze the performance of companies where we uncovered a <u>significant negative finding</u>, as defined by a call that was sufficiently negative to be coded as a "negative" call. 304 projects out of 4,356 projects conducted during the 14-quarter review period were on public companies where at least one significant negative finding was revealed.

This white paper explains the project scope, methodology, findings, limitations, and opportunities for additional inquiry.

Methodology

Blue Heron chose to perform this analysis on a 14-quarter sample period: Q1 2021 through Q2 2024. Given the qualitative nature of Blue Heron's work, we believe that a one-year time horizon is the minimum relevant measurement period. Q2 2024 is the most recent quarter

that allowed for one year of forward performance for analysis as of the date of this analysis. The starting point of Q1 2021 was established due to the likely distortions caused by the COVID-19 environment that persisted in 2020.

Blue Heron parsed our data to identify projects that contained at least one call with a significant negative finding, as determined by the call being coded as "Negative". All Blue Heron calls are subjectively given one of four call ratings: Positive, Negative, Neutral or Mixed. During the 14-quarter sample period, the call rating distribution of the 4,356 projects was:

Call Rating	Projects
Positive	50.1%
Mixed	12.5%
Neutral	5.5%
Negative	7.8%

* Excludes Interviews that were given no rating.
* Projects with negative calls often had more than one negative call.
* The methodology for this study relates to standard BHRP projects; exclusion methodology is defined in this paper.

We created a report from our database (QuickBase) of all public company projects during the 14-quarter period with at least one negative call:

	Ticker	Project Name	Project Type	Business Due Diligence Type	Target Type	Complete Date ↑	# INTV Sent	NEG/ALL ↓	
✎ 👁	IFF	International Flavors & Fragrances - Nov2020	Management Due Diligence		Public Company	01-05-2021	9	22%	
✎ 👁	ZI	ZoomInfo Technologies	Management Due Diligence		Public Company	01-08-2021	4	75%	
✎ 👁	LUMN	Lumen (fka CenturyLink)	Business Due Diligence	Customers	Public Company	01-12-2021	2	50%	

Our analytical methodology measured the performance of the public company stock from the date of project completion over the subsequent 12, 24 and 36 months.

Stock price history was referenced using CapIQ "LASTSALEPRICE" function.

Our analysis showed that stocks with negative findings on average underperformed the S&P 500 by 13% initially over the first four quarters following our project, by an increasing amount through 12 quarters following the completion of the project. This average underperformance was -26% after two years, and -38% after a three-year period with wide variation and a large number of outlier results (fat tails). We include median performance as well for reference.

Ticker	Company Name	Project Complete Date	# of Calls	Negative % Calls	# of Negative Calls	Stock Prices					Performance: 1 Year Project	Performance: 1.5 Years Project	Performance: 2 Years from Project	Performance: 2.5 Years from Project	Performance: 3 Years from Project	Under / Over vs SPY: 1 Year	Under / Over vs SPY: 1.5 Years	Under / Over vs SPY: 2 Years	Under / Over vs SPY: 2.5 Years	Under / Over vs SPY: 3 Years
						1 year from project	1.5 Years from Project	2 Years from Project	2.5 Years from Project	3 Years from Project										
						Avg Performance vs S&P 500										-13%	-19%	-26%	-30%	-38%
						Median Performance vs S&P 500										-16%	-21%	-39%	-54%	-59%
IFF	International Flavors & Fragrances	1/5/21	9	22%	2	145	119	107	80	80	26%	3%	2%	20%	26%	8%	8%	-3%	-46%	-52%
ZI	Zoominfo Technologies	1/8/21	4	75%	3	53	37	25	26	16	22%	2%	2%	15%	25%	-7%	-21%	-47%	-59%	-89%
FIS	Fidelity National Information Services	1/12/21	7	14%	1	118	94	69	59	62	24%	1%	5%	17%	26%	-36%	-31%	-53%	-72%	-80%
LUMN	Lumen Technologies	1/12/21	2	50%	1	13	11	6	2	2	24%	1%	5%	17%	26%	0%	-2%	-48%	-97%	-111%
BIGC	BigCommerce Holdings	1/15/21	2	50%	1	31	17	10	10	8	24%	1%	6%	20%	27%	-74%	-73%	-90%	-103%	-113%
POOL	Pool Corporation	1/20/21	8	13%	1	476	386	353	366	387	16%	2%	3%	19%	26%	14%	3%	-7%	-19%	-20%
ESTC	Elastic, NV	1/22/21	5	40%	2	82	81	55	64	123	14%	4%	3%	18%	26%	-66%	-56%	-71%	-80%	-53%
PEN	Penumbra, Inc.	1/25/21	6	50%	3	213	131	239	303	251	13%	3%	4%	18%	27%	-30%	-51%	-11%	0%	-29%
EHTH	Ehealth, Inc	1/29/21	5	20%	1	22	8	8	7	7	19%	10%	10%	23%	33%	-74%	-93%	-93%	-108%	-118%
CLF	Cleveland-Cliffs	2/9/21	6	17%	1	21	19	20	16	20	17%	6%	4%	15%	28%	13%	11%	21%	-15%	-4%
DDOG	Datadog, Inc	2/9/21	6	17%	1	156	113	83	88	135	17%	6%	4%	15%	28%	15%	-10%	-34%	-40%	-14%
CCL	Carnival Corp	2/9/21	4	25%	1	23	10	12	18	15	17%	6%	4%	15%	28%	-7%	-58%	-50%	-30%	-56%
TVTX	Travere Therapeutics, Inc	2/10/21	5	40%	2	27	28	20	15	8	15%	5%	5%	14%	29%	-21%	-9%	-34%	-62%	-99%
MLKN	Herman Miller / Miller Knoll	2/18/21	3	33%	1	41	33	24	19	30	11%	9%	4%	12%	28%	-2%	-22%	-40%	-60%	-47%
PACB	Pacific Biosciences of California (PacBio)	3/4/21	5	20%	1	11	6	10	11	5	15%	5%	7%	20%	36%	-78%	-85%	-73%	-80%	-118%
LITE	Lumentum Holdings	3/4/21	5	20%	1	93	84	54	54	50	15%	5%	7%	20%	36%	-5%	-7%	-44%	-56%	-77%
OPEN	Opendoor Technologies	3/8/21	7	14%	1	7	4	2	4	3	9%	3%	4%	18%	35%	-75%	-82%	-97%	-99%	-120%
MTLHY	Mitsubishi Chemical	3/11/21	6	17%	1	6	5	6	6	6	7%	1%	-2%	13%	30%	-21%	-35%	-19%	-31%	-52%
ZRSEF	Zur Rose Group (Doc Morris)	3/12/21	7	43%	3	149	48	50	66	84	7%	2%	-2%	13%	30%	-72%	-90%	-86%	-98%	-110%
JDSPY	JF Sports Fashion	3/15/21	8	25%	2	2	1	2	2	1	7%	3%	-2%	13%	30%	-28%	-40%	-14%	-38%	-68%
TFII	TGI International	3/16/21	6	17%	1	102	106	119	131	151	10%	4%	0%	13%	29%	27%	39%	61%	64%	75%

Exclusions

The analysis did not include all projects with negative findings during the sample period. This analysis was designed to convey the results for a "typical" project undertaken by Blue Heron.

We did not include:

- Projects focused on an industry or group of companies where a ticker was entered into our project management system as a reference point.
- Companies that were acquired during the measurement period where our dataset was truncated or otherwise incomplete.
  - Observationally, the acquisitions were frequently pharma/biotech-related.
- Projects involving mega-cap public companies where Blue Heron was tasked with narrow questions (e.g. How does Amazon's new [Head of Pharmacy] check out?) where the results of our findings were unlikely to have a material bearing on the larger company.
- Projects involving complex corporate actions where it was unclear what to measure.
- Companies where we could not get reliable stock information.

All exclusions were documented within the work papers along with the reason why the project was excluded. This data was subjected to internal peer review.

Limitations

This analysis is observational only; there is no causation revealed or implied in this analysis. Blue Heron does not grade, rate, rank, evaluate or form opinions or conclusions about management teams or companies. This analysis is limited to the future stock price performance of companies where our work turned up a significant negative finding. Such negative findings include a wide range of scenarios described by the sources we interviewed ranging from ethics concerns to fraud accusations, accounting issues, sales practices, etc. Such findings are often based on small sample sets and a biased source pool; e.g. Blue Heron only speaks with sources who reply to our outreach.

By design, Blue Heron does not need to know our clients' interest in a company before undertaking a project. Some clients ask for a "standard" management diligence review, other clients pursue a more specific line of inquiry relating to the business, while others

have a broad mandate incorporating a range of questions about both management and the business. We do not know if our client is looking for us to either confirm or refute suspicions or if they are entirely unbiased at the outset. We also do not know if a client is looking at a security on the long side or the short side, in which case underperformance vs the S&P 500 is expected as opposed to unexpected.

Conclusions

We believe the findings are generally valuable and demonstrative of Blue Heron's value proposition. There are a wide range of use cases among Blue Heron's client base, and the experience of clients will differ significantly.

The analysis and this report are the combined efforts of Blue Heron personnel.

The underlying analysis and this document have been peer reviewed internally within Blue Heron by this team.