

Informed Trading Around Operation Absolute Resolve: Evidence from U.S. Firms with Outstanding Arbitration Claims Against Venezuela

Grace Shao^a

^aMontgomery Blair High School, 51 University Boulevard East, Silver Spring, MD 20901, USA

September 21, 2026

Abstract

We find that the five U.S. firms with outstanding arbitration claims against Venezuela exhibited abnormal stock returns (ARs) consistent with informed trading on the last trading day before the public disclosure of Operation Absolute Resolve, the covert U.S. removal of Venezuela's then-president on January 3, 2026. Their average Carhart four-factor ARs are 3.05% (weighted by exposure, claim value relative to market capitalization) and 2.25% (equal-weighted), each significant at the 5% level under analytic and small- N nonparametric tests. The AR-exposure relationship is positive but imprecisely estimated. Chevron is examined as an active-operations case.

1 Introduction

On January 3, 2026, President Trump announced the U.S.'s covert capture of then-Venezuelan President Nicolás Maduro in Operation Absolute Resolve. At the time, five U.S. companies had outstanding arbitration claims against Venezuela, primarily from Venezuela's 2007 nationalizations of their assets. Those five companies exhibited unusually positive abnormal returns (AR) one day before the operation's public disclosure, as did Chevron, the only U.S. firm still operating with Venezuela's government. We investigate whether those ARs are consistent with informed investors pricing in higher claim-recovery odds under a friendlier government.

We examine all U.S.-traded firms with documented outstanding Venezuelan arbitration claims (exact criteria in Appendix A.1, provided as supplementary material): Halliburton (HAL), ConocoPhillips (COP), ExxonMobil (XOM), Williams Companies (WMB), and Smurfit Westrock (SW). A firm's exposure is its outstanding claim value divided by its 2025 market capitalization. We compute ARs using the ? four-factor augmentation of the ? three-factor model estimated over a 224-day window. Chevron (CVX) is examined as an active-operations case.

The five firms with outstanding claims exhibit an exposure-weighted average AR of 3.05% ($p = 0.019$) and an equal-weighted average AR of 2.25% ($p = 0.024$), following a pre-event cumulative abnormal return that was negative but not statistically distinguishable from zero. All six firms exhibit positive ARs on January 2. The positive cross-sectional relationship between AR and exposure is suggestive but statistically insignificant with three degrees of freedom. January 2's exposure-weighted average AR exceeds that of 123 of 124 placebo dates (empirical $p = 0.016$) and all 31 dates of public U.S. military escalation towards Venezuela (empirical $p = 0.031$), consistent with a market response specific to Operation Absolute Resolve rather than general U.S.-Venezuela tensions.

Our findings join the literature using asset prices to detect informed trading around classified government operations (?, hereafter DKN) and political or war-probability shocks (????). Unlike DKN, we lack declassified event dates and instead use the day before the operation as a proxy; that a significant AR nonetheless emerges suggests informed trading may be detectable from a publicly observable event date alone. The exposure-weighted AR of 3.05% is comparable to the ~3% ? documents on SEC-confirmed insider-trading days.

2 Data

2.1 Sample Construction

Our event date is January 2, 2026, the last trading day before the public disclosure of Operation Absolute Resolve. The only authorization event identified in subsequent reporting is President Trump's final confirmation at 10:46 PM EST on January 2; the operation was completed at 3:29 AM EST on January 3 and announced via Trump's Truth Social post at 4:21 AM EST that morning. January 2 is therefore also the day on which informed investors' timing uncertainty was lowest.

Using the World Bank's International Centre for Settlement of Investment Disputes (ICSID) database, we identify all arbitration cases with Venezuela as respondent (57 as of January 2, 2026) and restrict to U.S.-traded corporate claimants whose claims remain outstanding, excluding dismissed, divested, and delisted claimants (Appendix A.1). The remaining five firms constitute our main sample.

Since 2019, U.S. sanctions have prohibited transacting with the Venezuelan government absent a specific Office of Foreign Assets Control (OFAC) authorization, which only CVX held as of January 2, 2026 (Appendix A.3). We examine CVX separately: it has no claim, and its gains from Maduro's removal would come through loosened sanctions rather than claim recovery, so it receives no exposure value. HAL and three other firms were previously authorized but forced by OFAC to "wind down" (General License 80, ?); because the other three have no outstanding claims, we analyze the four as a separate sample (Appendix A.4).

2.2 Data and Variable Definitions

Claim values come from 2025 SEC filings (COP, SW) and a federal judgment (XOM); HAL's undisclosed claim is proxied by its 10-K allowance for credit losses on Venezuelan receivables, and WMB's is drawn from ? (Appendix A.2). Market capitalization is average 2025 daily closing price times weighted-average shares outstanding from the 2025 10-K.

Table 1 summarizes the six firms and their factor loadings. Market caps range from \$20.42 billion (HAL) to \$478.73 billion (XOM) and exposures from 0.083 (COP) to below 0.004 (XOM). All exposures are small, bounding the maximum economically plausible AR. Venezuela owes these five firms approximately \$13.2 billion, over \$9.7 billion of it to COP.

Table 1: Summary Statistics

	HAL	WMB	SW	COP	XOM	CVX ^a
	Outstanding arbitration claims					Active assets
Panel A: Firm Characteristics						
Market cap. (\$B)	20.42	71.89	23.03	117.19	478.73	279.51
Outstanding claim value (\$M)	805	420	474	9,739	1,752	—
Exposure variable	0.0394	0.0058	0.0206	0.0831	0.0037	—
Panel B: ? Factor Loadings						
$\hat{\alpha}$ (daily)	−0.0012	−0.0002	−0.0025	−0.0014	−0.0002	−0.0005
$\hat{\beta}_{\text{MKT}}$	1.500	0.709	1.260	1.233	0.747	0.857
$\hat{\beta}_{\text{SMB}}$	−0.349	−0.053	0.767	−0.317	−0.348	−0.377
$\hat{\beta}_{\text{HML}}$	0.856	0.314	0.644	0.804	0.697	0.601
$\hat{\beta}_{\text{MOM}}$	−0.766	0.555	−0.460	−0.536	−0.394	−0.457
$\hat{\sigma}_{\varepsilon}$ (daily)	0.0209	0.0149	0.0176	0.0157	0.0118	0.0118

^a Chevron is reported separately from the five-firm sample because it is exposed via active assets rather than outstanding claims.

Notes: The five-firm sample consists of U.S.-traded firms with outstanding arbitration claims against Venezuela as documented in ICSID arbitration records and SEC filings. The exposure variable is defined as arbitration claim value divided by 2025 market capitalization. Market capitalization is estimated as average daily closing price across 2025 multiplied by basic weighted-average shares outstanding as reported in the firm's 2025 Form 10-K (WMB excepted: its weighted-average shares were not disclosed, so we average the four quarterly point-in-time figures from its 2025 Form 10-Qs). Daily closing prices are unadjusted, from Yahoo Finance via `yfinance` 0.2.66. Factor loadings are estimated using OLS over the estimation window (January 2 – November 21, 2025; 224 trading days). $\hat{\sigma}_{\varepsilon}$ is the residual standard deviation from the ? regression. Factors are from Kenneth French's data library.

3 Methodology

3.1 Event Study Specification

For each firm i , we estimate the 4-factor model,

$$r_{it} - r_{ft} = \alpha_i + \beta_{MKT,i}(r_{mt} - r_{ft}) + \beta_{SMB,i} \cdot SMB_t + \beta_{HML,i} \cdot HML_t + \beta_{MOM,i} \cdot MOM_t + \varepsilon_{it}, \quad (1)$$

where $r_{it} - r_{ft}$ is the firm's daily excess return, $r_{mt} - r_{ft}$ the market excess return, SMB_t and HML_t the size and value factors, and MOM_t the momentum factor. Compactly, $r_{it} - r_{ft} = \beta'_i f_t + \varepsilon_{it}$.

The 224-day estimation window runs from January 2, 2025 (one year before the event date) to November 21, 2025 (six weeks before), leaving a 27-trading-day buffer against contamination from pre-event informed trading. Returns are log returns on dividend- and split-adjusted closing prices. The AR is

$$AR_{it} = (r_{it} - r_{ft}) - \hat{\beta}'_i f_t. \quad (2)$$

A single-factor market model (SPY) serves as a robustness check.

The cumulative abnormal return (CAR) is $CAR_i(\tau_1, \tau_2) = \sum_{\tau=\tau_1}^{\tau_2} AR_{i\tau}$, where τ indexes trading days relative to January 2 ($\tau = 0$). We normalize CARs to zero at $\tau = -1$ to isolate January 2's AR, accumulate backward for $\tau < -1$, and examine $\tau \in [-20, +10]$.

3.2 Standard Errors

Individual-firm AR standard errors follow 1, which accounts for parameter-estimation uncertainty (Appendix B). This assumes serially uncorrelated residuals; where Ljung-Box tests indicate otherwise, we substitute a 2 long-run variance (Appendix Tables B.5 and B.6).

Average ARs are $\overline{AR}_t = w' AR_t$, with $w_i = 1/N$ (equal-weighted) or $w_i = \text{exposure}_i / \sum_j \text{exposure}_j$ (exposure-weighted). Because residuals are correlated across firms, we use $\text{Var}(\overline{AR}_t) = w' \hat{\Sigma} w$, with $\hat{\Sigma}$ the estimation-window cross-firm residual covariance matrix (1, Section 5E), which inflates the equal- and exposure-weighted variances by factors of 1.78 and 1.53 relative to assuming independence. CAR standard errors follow the multi-period generalization of 1, which accounts for parameter uncertainty and produces the widening confidence band in Figure 1 (Appendix B).

3.3 Non-Parametric and Comparison Tests

To assess whether January 2's AR is truly unusual, we compute each date's equal- and exposure-weighted ARs and AR-exposure slope for two sets of non-event dates: 124 placebo trading dates from May 29 to November 21, 2025 (Appendix A.5), and 31 dates of publicly observable U.S. military escalation towards Venezuela between September 2 and December 31, 2025 (Appendix Table A.5). If January 2 is indistinguishable from the escalation dates, its AR may reflect general sensitivity to U.S.–Venezuela tension rather than information specific to Operation Absolute Resolve. Permutation p -values are $(k + 1)/(n + 1)$, where n is the number of non-event dates and k the number whose statistic is at least as large as January 2's (?).

To check against non-normal AR distributions, we conduct two small-sample tests: the ? exact binomial sign test and, because the sign test is not robust to cross-sectional dependence, the ? rank test, which simulation confirms holds nominal size under cross-firm correlation up to $\rho = 0.6$. Given our directional hypothesis, these p -values are one-sided; we report two-sided analytic p -values for a more conservative headline number (Appendix C).

3.4 Cross-Sectional Analysis

We regress AR on exposure across the five-firm sample. With three degrees of freedom, the standard errors are too large for formal inference, so we omit them and treat Figure 2 as descriptive (Appendix Table B.11).

4 Results

4.1 Main Effect: Abnormal Returns on the Event Date

Table 2 reports January 2 ARs for the five firms with outstanding arbitration claims, their equal- and exposure-weighted averages, and CVX. The exposure-weighted average AR of 3.05% ($t = 2.35$, $p = 0.019$) exceeds the equal-weighted average of 2.25% ($t = 2.26$, $p = 0.024$) because the two most exposed firms, COP and HAL (weights 54.45% and 25.84%), exhibit the two highest ARs. Both averages are economically large for a diversified basket of five firms, suggesting a common shock rather than idiosyncratic news. CVX's AR just misses the 10% level ($t = 1.64$, $p = 0.102$). All

six ARs are positive, which occurs with probability $(0.5)^6 = 0.016$ under the null that each AR is equally likely to be positive or negative. Both average ARs remain significant under the ? rank test (one-sided $p = 0.023$ and $p = 0.024$) and the ? sign test, neither of which assumes asymptotic normality (Appendix C).

The event-day AR does not reflect energy-sector-wide behavior: XOP, an equal-weighted oil and gas E&P ETF, shows an insignificant AR on January 2, and our sample's exposure-weighted AR exceeds XOP's at the 10% level (Appendix Table B.4). Newey-West corrections change no firm's inference except HAL's, whose p ranges from 0.015 to 0.052 across bandwidths (Appendix Tables B.5 and B.6). Market-model results are qualitatively similar (Table 2. Dollar ARs, raw returns, and AR as a share of exposure are in Appendix Table B.3. The four-firm license-lapsed sample also exhibits positive ARs, with SLB significant at the 1% level (Appendix Table B.1).

4.2 Cumulative Abnormal Returns Around the Event Date

Figure 1 shows equal- and exposure-weighted average CARs for the five claim firms from $\tau = -20$ to $\tau = +10$, re-zeroed at $\tau = -1$ (December 31, 2025; values in Appendix Tables B.10 and B.9.

The pre-event CAR trend is negative, with a 95% confidence interval containing zero throughout $\tau \in [-20, -1]$.¹ On January 2, the equal- and exposure-weighted CARs jump by approximately 2.25 and 3.05 percentage points, versus 0.56 and 0.69 on December 31. Informed traders plausibly bid up prices immediately before the operation, whose timing depended on weather: Joint Chiefs Chairman Dan Caine stated that on the night of January 2, "the weather broke just enough" for the operation's aircraft to proceed (?). Because authorization documents remain classified, we have only one identifiable pre-disclosure date, so post-authorization, pre-disclosure drift cannot be separately observed.

Market-model and license-lapsed-sample CARs follow the same pattern (Appendix Figures B.8 and B.2). Per-firm CARs are in Appendix Figure B.7.

¹The sharp decrease at $\tau = -11$ (December 16, 2025) and partial recovery the following day reflect an energy-sector-wide shock unrelated to Venezuela: investors feared an oversupply of Russian oil (?).

Table 2: Abnormal Returns on January 2, 2026

Firm	?		Market Model (SPY)			
	AR	SE	t	AR	SE	t Exposure
<i>Outstanding arbitration claim sample</i>						
HAL	0.0436**	(0.0212)	2.06	0.0449*	(0.0233)	1.92 0.0394
WMB	0.0017	(0.0151)	0.11	0.0109	(0.0159)	0.69 0.0058
SW	0.0240	(0.0178)	1.35	0.0242	(0.0201)	1.20 0.0206
COP	0.0286*	(0.0158)	1.81	0.0316*	(0.0176)	1.79 0.0831
XOM	0.0145	(0.0119)	1.22	0.0178	(0.0136)	1.31 0.0037
Equal-wtd avg	0.0225**	(0.0099)	2.26	0.0259**	(0.0115)	2.24
Exposure-wtd avg	0.0305**	(0.0130)	2.35	0.0329**	(0.0152)	2.16
<i>Active-asset case</i>						
CVX ^a	0.0195	(0.0120)	1.64	0.0214	(0.0135)	1.59 —

^a Chevron is reported separately from the five-firm sample because it is exposed via active assets rather than outstanding claims.

Notes: Abnormal returns (log returns) on January 2, 2026, the last trading day before Operation Absolute Resolve was disclosed publicly. Expected returns are computed using the ? model, with factor loadings estimated over a 224-day estimation window (January 2 – November 21, 2025). Standard errors in parentheses follow ?. Average AR standard errors are SUR-corrected for cross-firm residual correlation; the resulting variance inflation relative to the independence assumption is $1.78\times$ (Carhart, equal-weighted) and $1.53\times$ (Carhart, exposure-weighted) for the Carhart model, and $1.96\times$ (equal-weighted) and $1.70\times$ (exposure-weighted) for the market model (SPY). The equal-weighted and exposure-weighted ARs include the five firms with outstanding arbitration claims only. The exposure variable is outstanding claim value divided by 2025 market capitalization. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$ (two-sided, asymptotic normal).

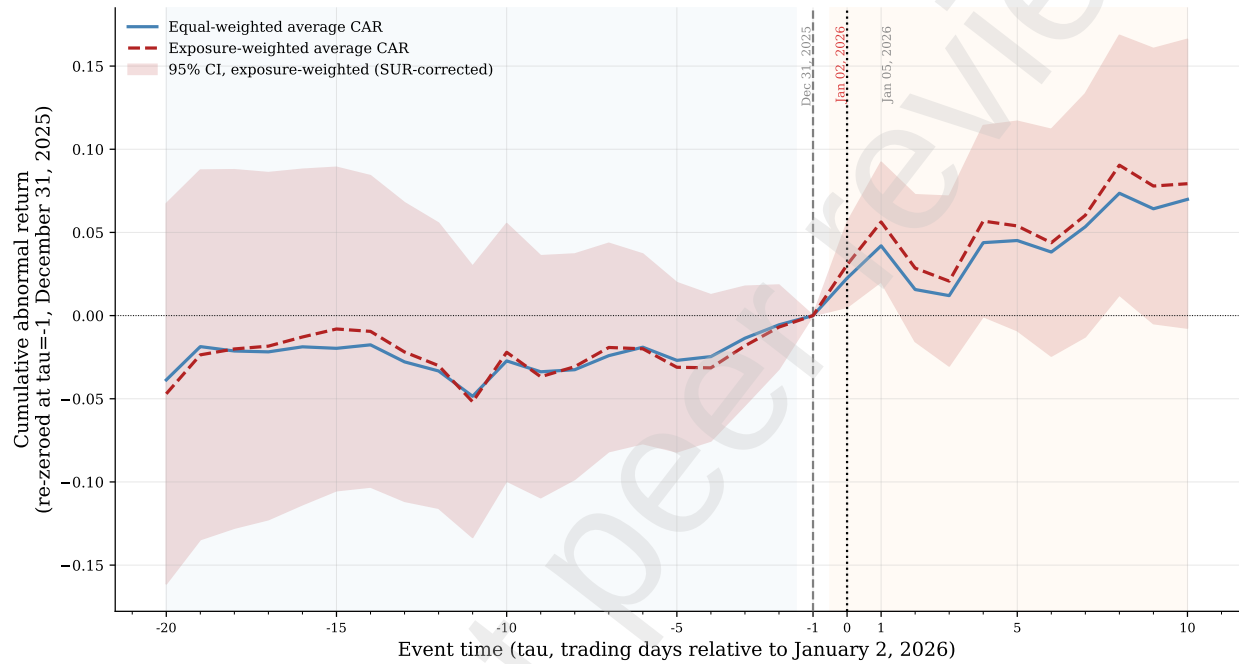


Figure 1: Equal-weighted and exposure-weighted average cumulative abnormal returns from $\tau = -20$ to $\tau = +10$ trading days relative to January 2, 2026 (Operation Absolute Resolve disclosed publicly on $\tau = 1$), re-zeroed such that the CAR is zero on $\tau = -1$ (December 31, 2025, marked by the vertical dashed line). Exposure-weighted CAR is in dotted red; equal-weighted CAR is in solid blue. The shaded band is the 95% confidence interval for the exposure-weighted average CAR, where standard errors were SUR-corrected following ?, Section 5E. The vertical dotted line marks the event date (January 2, $\tau = 0$). This re-zeroing highlights the event-date jump and pre-event drift. Exposure is defined as a firm's outstanding claim value divided by its 2025 market capitalization. Exact exposure-weighted and equal-weighted average CAR values are in Appendix Tables B.9 and B.10, respectively. All abnormal returns are estimated following ?. Figure generated using code developed with the assistance of Claude (Anthropic); see AI Declaration.

4.3 Additional Robustness Checks

Table 3 compares January 2's ARs to those of 124 placebo dates and 31 U.S. military escalation dates.

Table 3: Nonparametric Comparisons of January 2 Average Abnormal Returns and Exposure–Return Slopes

	124 Placebo Dates	31 Public U.S. Military Escalation Dates
Equal-Weighted AR (Jan. 2)	Higher than 122 of 124 ($p = 0.024$)	Higher than 31 of 31 ($p = 0.031$)
Exposure-Weighted AR (Jan. 2)	Higher than 123 of 124 ($p = 0.016$)	Higher than 31 of 31 ($p = 0.031$)
AR–Exposure Slope (Jan. 2)	Higher than 118 of 124 ($p = 0.056$)	Higher than 29 of 31 ($p = 0.094$)

Notes: Entries report the number of reference dates whose ? equal-weighted average abnormal return (AR), exposure-weighted average AR, or OLS cross-sectional AR–Exposure slope was lower than the corresponding January 2, 2026 statistic. Exposure is outstanding arbitration claim value divided by 2025 market cap. The placebo sample consists of the 124 trading dates from May 29, 2025 through November 21, 2025. This restriction avoids drawing estimation dates from SW's pre-merger price history; daily ARs are estimated using rolling 224-day windows. Public military escalation dates comprise 31 publicly observable U.S. military escalation events involving Venezuela (??). Reported p -values equal $(k+1)/(n+1)$, where k is the number of reference-date statistics exceeding the January 2 value and n is the total number of reference dates.

January 2 was statistically unusual in both its large, positive AR and its positive AR-exposure relationship relative to a typical trading day, and its ARs exceeded those of all 31 escalation dates, indicating a reaction specific to January 2 rather than to general U.S.-Venezuela tensions. Escalation events were evidently not read as raising claim-recovery odds, as an invasion installing a U.S.-friendly regime would. Placebo comparisons including CVX are equally significant (Appendix Table B.12).

4.4 Cross-Sectional Relationship with Exposure

Figure 2 depicts the OLS regression of event-day AR on exposure (coefficient 0.286, intercept 0.014, $R^2 = 0.356$); with three degrees of freedom, we report no standard errors and treat the positive

association as descriptive.

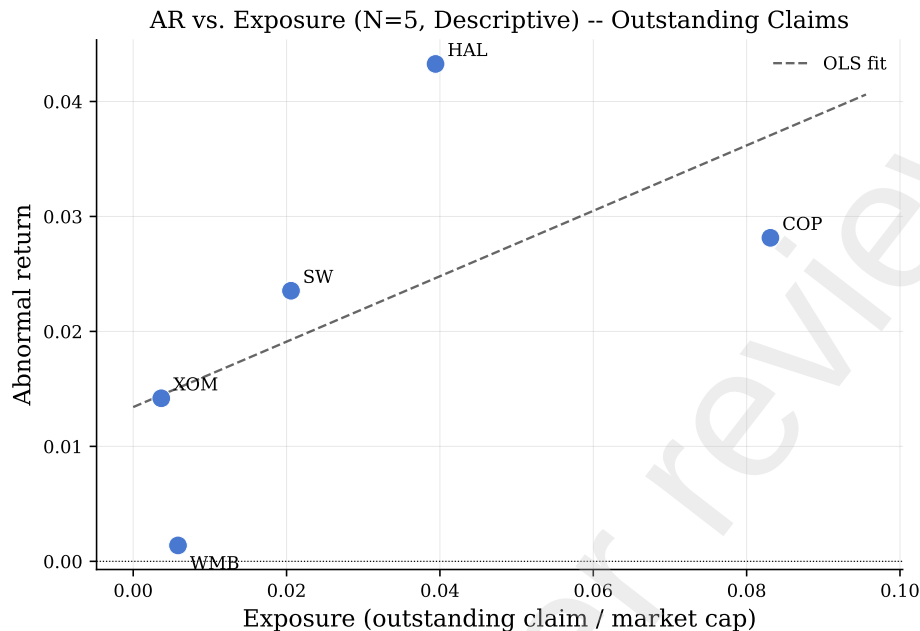


Figure 2: ? abnormal returns plotted against exposure (defined as outstanding claim value divided by 2025 market cap) for all five sample firms. The dashed line shows the OLS regression line for descriptive purposes; the sample size $N=5$ is too small for formal inference (see Section 4.4 and Appendix Table B.11). Figure generated using code developed with the assistance of Claude (Anthropic); see AI Declaration.

The two most exposed firms (HAL, COP) exhibit the two highest ARs and the two least exposed (XOM, WMB) the two lowest, a tier concordance occurring with probability $2! \times 2! \times 1!/5! \approx 0.033$ under random assignment.

5 Conclusion

One day before Operation Absolute Resolve went public, the five U.S. firms with outstanding arbitration claims against Venezuela exhibited equal- and exposure-weighted average ARs of 2.25% and 3.05%, significant at the 5% level across parametric and small-sample nonparametric tests, and larger than on 123 of 124 placebo dates and all 31 dates of public U.S. military escalation towards Venezuela.

Informed trading on military operations may thus be detectable from public stock prices even when classified authorization dates are unavailable. Operation Absolute Resolve fits a longer pat-

tern of U.S. foreign military interventions coinciding with financial benefits to U.S. corporations (??), and, as our results suggest, to informed investors trading on that connection.

6 Declaration of generative AI and AI-assisted technologies in the manuscript preparation process

During the preparation of this work, the author used Claude to write statistical and data-processing code, screen candidate firms against the ICSID case registry and OFAC General License text, search SEC EDGAR filings for firm identification and ownership details, assist with line editing and LaTeX formatting, and review and revise the Methodology's Event Study and Standard Errors sections. After using this tool, the author reviewed and edited the content as needed and takes full responsibility for the content of the published article.

7 Acknowledgements

I thank Ethan Kaplan for guidance and feedback throughout this project. All errors are my own. This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.