

**Internet Appendix A224: Finance: Negativity Bias
Illustrative Reverse Engineered Pitch Template Example**

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(A) Full Reference	Akhtar, S., Faff, R., Oliver, B., 2011. The power of bad: The negativity bias in Australian consumer sentiment announcements on stock returns. <i>Journal of Banking & Finance</i> 35, 1239-1249.				
(B) Basic Research Question	How does the equity market react to the monthly release of Australian consumer sentiment news? This paper focuses on examining whether and to what extent the negativity effect explains which direction stock prices move (positive or negative) when sentiment changes and if these impacts are symmetric.				
(C) Key paper(s)	Baker, M., Wurgler, J., 2007. Investor sentiment in the stock market. <i>Journal of Economic Perspectives</i> 21 (2), 129–151. Rozin, P., Royzman, E., 2001. Negativity bias, negativity dominance and contagion. <i>Personality and Social Psychology Review</i> 5 (4), 296–320. Qui, L., Welch, I., 2006. Investor Sentiment Measures. Working Paper. SSRN: < http://ssrn.com/abstract=589641 >.				
(D) Motivation/Puzzle	The issue concerning whether sentiment affects stock prices has increased significance over the last decade in the context of dramatic rises and falls in the stock market. Previously, it was questioned whether investor sentiment affects stock prices, however current researchers are investigating how to measure investor sentiment and quantify its effects. This study is motivated by considering the negativity effect which explains that greater value is given to negative information than positive information. There is an abundance of literature regarding the impact of US sentiment news on stock market reaction. However, there is a lack of research which explores the issue in other settings a sentiment index is released once periodically, unlike the US where there is often a progressive release over the month.				
THREE	Three core aspects of any empirical research project i.e. the “ IDioTs ” guide				
(E) Idea?	It is hypothesised that the announcement of negative (positive) consumer sentiment news will induce a negative (zero) stock market reaction. This hypothesis embodies the negativity effect. This effect demonstrates that potential costs are more heavily weighted than potential gains are in making decisions under risk, and negative information is more heavily weighted than positive information is in the creation of overall evaluations. Independent variables evident in this paper include sentiment news, world market returns and economic risk rating. Dependent variables used in this study include the aggregate Australian stock market reaction and stock return prices.				
(F) Data?	<p>Country/setting: Australia is an ideal setting as the sentiment index is released only once each month.</p> <p>Data Sources:</p> <ul style="list-style-type: none"> • Consumer sentiment index (CSI) produced by the Westpac-Melbourne Institute of Applied Economic and Social Research. Investors have public access to the data for most of the announcement day. • Daily values from the Australian All Ordinaries Index (AOI). <p>Sample size: Approximately 200 CSI announcements.</p> <p>Sample Period: CSI announcements are available on a monthly basis from June 1992 until December 2009.</p> <p>Measurement of Data: The CSI is constructed based on surveys of consumers which they complete one week before the CSI is publicly released. The CSI provides a timely indicator of attitudes to the business climate, personal finance, and spending.</p> <p>Data Limitations: It is preferred to examine the direct linkage between investor sentiment and market reaction, however the absence of a reliable measure of investor sentiment with a sufficient history results in an unappealing analysis.</p> <p>Data Obstacle: Construct validity is evident through use of the consumer sentiment index as a proxy for investor sentiment.</p>				

(G) Tools?	<p>Descriptive statistics: AOI daily returns, MSCI World Index, monthly change in the CSI from month to month are calculated. Use of t-tests and Jarque-bera test.</p> <p>Regression analysis: <u>Baseline regression</u> is used to estimate the impact of changes in sentiment on stock returns depending upon change in sentiment. The <u>two-day event period</u> expects that some information regarding the announcement either leaks into the market and/or is anticipated beforehand. <u>Linearity of the effect</u> analysis found no evidence regarding non-linearity. <u>Sentiment prone portfolios</u> explored how strongly the negativity effect holds in portfolios, considering characteristics including size, volatility and price-earnings which offer richer insights.</p> <p>Extended analysis: event study, the impact of stock market conditions (use 2x2 dimensional representation), the uncertain information hypothesis (3 testable implications).</p> <p>Robustness checks: Considers a range of issues such as outliers. Uses economic risk rating index.</p>
TWO	Two key questions
(H) What's New?	There are many papers which investigate asymmetric security market reactions to a range of news announcements, however this paper is the first to explore the negativity effect on stock returns in the context of consumer sentiment announcements. Previous studies have analysed the impact of US sentiment measures on various securities, with this paper being the first to investigate the aggregate Australian stock market reaction to periodic announcements of consumer sentiment from the Westpac-Melbourne Institute of Applied Economic and Social Research.
(I) So What?	Psychological biases documented in psychology literature manifest themselves in stock market prices, with the negativity effect being recognised in relation to stock prices for the first time. This information provides us with a better understanding of markets and how they operate – with a particular insight into the role of behavioural effects that deliver superior understanding, compared to traditional “rational” models.
ONE	One bottom line
(J) Contribution?	This study contributes to current literature as it explores the equity market reaction to the monthly release of Australian consumer sentiment news in the Australian setting. By focusing on the ‘negativity effect’ the paper adds broadly to the growing collection of behavioural finance literature, and also supplements our knowledge of asymmetric stock market phenomena, particularly relating to the linkage between information and prices.
(K) 3 Key Findings	<ul style="list-style-type: none"> • Authors state that results show that the CSI has valuable information content. • When a lower than previous month CSI is announced, the Australian stock market suffers a significant negative announcement day effect. The market recovers from this shock relatively quickly post-announcement. • When a higher than previous month CSI is announced, there is no significant market impact. This supports the negativity effect sourced from psychology literature.