

# **Investor Perception of Corporate Social Irresponsibility (CSiR) and Investing Decisions**

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*The study examines a behavioral finance paradigm, where investors incorporate emotional/expressive and financial factors. The impact of emotional ties to the firm's products and an expressive factor such as corporate social irresponsibility (CSiR) are examined to determine whether their investment decisions are based on them. We find that investors make decisions that are wealth maximizing as well as emotional/expressive. Moreover, we find that our respondents believe corporate profits should not come from using the cheapest labor nor from engaging in CSiR behavior, and they would be less likely to invest in such a firm.*

*Keywords: corporate social irresponsibility, behavioral finance, behavioral investment decisions*

## **INTRODUCTION**

Classical finance theory assumes investors are rational and make decisions solely based on cognitive processes using available information. Miller and Modigliani (1961) define rational investors as individuals who prefer more wealth to less, implying that investors make decisions based on their utilitarian benefits related to greater wealth. However, according to Statman's (2019) "Behavior Finance – The Second Generation," monograph, consumers make both purchasing and investing decisions based on their expressive and emotional benefits as well as utilitarian benefits (prices), calling them "normal investors" rather than the classical assumption of rational investors. One form of emotional benefits is the affinity towards the company's product. For example, many Apple phone users are attached to their product, and would pay a premium to purchase them. Will that emotional link to the product also result in a desire to invest in the company's stock? Another direct link may be the investors' expressive benefits such as their corporate social responsibility (CSR) values. This study attempts to determine whether an investor's emotional or expressive desire is factored within their decision to purchase an equity stock in a firm or not. In fact, the rising demand for CSR investments in the U.S. has led many mutual funds to add Socially Responsible Funds to their list of options for investors, resulting in a market cap valued at more than \$12

trillion in 2019. While these numbers provide anecdotal evidence that some investors prefer to invest in firms that follow CSR, studies to date have not documented investors' CSR perceptions and its impact on investing behavior. Our objective is to add to this growing literature by providing evidence that individual emotional and CSR perception significantly impact their decision to invest in a firm.

Our results support the hypothesis that both utilitarian (wealth) and emotional and expressive (CSR benefits) factors significantly impact an individual's decision to invest in a firm. We survey respondents regarding their emotional perspective of a company, identify a corporate social irresponsible (CSiR) act, and examine whether it impacts their decision to invest in such a firm. While all three factors significantly impact the individual decision-making our results show that about half reject the decision to buy equity stock because they disapprove of making profits using the cheapest labor and believe Apple acted socially irresponsibly by working with a manufacturer using poor working conditions. The study shows a strong inclination for our sample group to incorporate their emotional/expressive benefits with utilitarian ones.

## **HYPOTHESES DEVELOPMENT**

Statman explained that an individual is neither rational nor irrational, but defined as a "normal" investor, who values a range of benefits and costs from investing. His assertion is built on a survey of investors and their responses to the question: "Why is wealth important to you?" Aside from traditional reasons to invest such as "prospects for riches" or "protection from poverty," he found that investors also include goals such as "nurturing our children and families, staying true to our values, gaining high social status, inclusion, respect, fairness." [Statman, 2019, p. 8]

The aforementioned "normal" investors make decisions beyond the mean-variance analysis; they utilize benefits stemming from expressive and emotional assessments, as well as utilitarian ones, to satisfy the "normal" investor's "wants". These expressive "wants" include values about the environment, and social responsibility while emotional "wants" include benefits to an individual's pride, social status, inclusion, and respect. This tempers an investor's decision-making on expected returns based on expressive and emotional factors. Furthermore, an investor will trade off between utilitarian returns for a lesser return due to values placed on expressive/emotional benefits. Hence, "normal" investors evaluate their investment decisions on metrics that are subsumed by not just one, but by three factors – utilitarian, expressive, and emotional benefits.

Past studies provide evidence of expressive benefits. For example, Hartzmark and Sussman (2018) found evidence that many investors value sustainability. Harrison and Kostovetsky (2012) showed that mutual fund managers who contribute to Democrats invest less in stocks of companies that engage in socially irresponsible products (e.g. tobacco, guns, or defense companies as well as firms with bad employee relations or diversity records).

However, most past studies on CSR examined the relationship between CSR and corporate governance at the firm level rather than the individual (investor) perspective. For example, Chan et al. (2014) emphasized the importance of a firm's disclosure of corporate governance and CSR as related to its quality, details, and transparency. This study contributes to the literature by examining the impact of individual investment decisions rather than the firm's. We add to the literature above by providing empirical evidence on the relationship between individuals' utilitarian, expressive, and emotional "wants" and their stock investment decisions.

An experimental study by Cohen, Holder-Webb, and Khalil (2017) examined investor decision-making using MBA students. They conducted two experiments intended to a) examine the effect of environmental performance on investment decisions (experiment 1) and b) the impact of labor performance on investment decisions (experiment 2). Results from both experiments indicate that investment decisions are affected by CSR performance. Moreover, the findings indicate that investors pay closer attention to CSR performance as more external players (e.g. media coverage) highlight and shift to a more heightened focus on social responsibility. Given that in recent years attention on CSR has increased, our study further examines the impact of CSR on individual investment decisions.

Finally, a 2022 study by Haber et. al. presented in the *Stanford Closer Look Series* found that Millennials and Gen Z (or younger investors) are more inclined to support socially responsible initiatives than the Baby Boomers (or older investors). They survey a sample of 2,470 individual investors to inquire about their perceptions on workplace diversity and working conditions among other topics. The survey found that 62% of the younger investors would give up moderate to large investment returns to increase workplace diversity and labor work conditions while 91% of the Baby Boomers do *not* want to forfeit returns to promote these initiatives. Our study concentrates on Millennials and Gen Z to circumvent the conflicting views between generations.

Our sample consists of 159 college students in ten sections, targeting the younger investors who are becoming and will become more active investors. We ask for responses about their views of Apple, Inc. and a 2018 news article [Bloomberg, 2018-01-16] that implicates them with an international manufacturing firm committing numerous socially irresponsible behaviors (CSiR). We attempt to gain an understanding of how individuals' investment decisions are affected by behaviors akin to corporate social irresponsibility. However, some actions could be viewed simply as cost-cutting measures (e.g. low wages, long hours, unsafe working environment, no breaks) leading to higher profits, and thus seen as purely wealth maximizing decisions. Under these scenarios, we ask: Does an individual's emotional and expressive values (e.g. corporate social responsibility, CSR) affect their investment choices beyond the utilitarian decision?

We use corporate social irresponsibility as our focus because it allows us to isolate a particular event by a specific firm and test whether individuals who value expressive benefits of CSR react negatively to firms that associate with a manufacturer engaging in irresponsible behavior. Grappi, Somani, and Bagozzi (2013) find evidence that consumers who felt strong contempt, anger, and disgust towards a corporate ethical transgression will engage in negative consumer actions through word of mouth or protests. Extending their work, we argue that investor contempt, anger, and disgust with corporate irresponsibility (CSiR) will result in negative actions such as refusing to invest in the firm.

We develop three hypotheses based on the "normal" investor framework and find implications about their decision-making process. Specifically, we examine whether "normal" investors are rational investors in the traditional framework (H1) serving as our baseline. Next, we examine whether "normal" investors incorporate emotional "wants" into their investment decisions (H2). Finally, we examine whether "normal" investors include expressive 'wants' by rejecting firms that engage in corporate social irresponsibility (CSiR) as a significant factor in their investment decisions.

**H1:** "Normal" investors are rational and their decision to invest is positively related to a firm's decision to cut costs.

**H2:** "Normal" investors' emotional "wants" are positively related to investment decisions in the equity stock of a firm, beyond utilitarian benefits.

**H3:** "Normal" investors with expressive "wants" from CSR are negatively related to (or opposed to) purchasing equity stock in a firm if the firm partners with a manufacturer engaging in CSiR behaviors.

The next section presents the data and methodology.

## DATA AND METHODOLOGY

Ten class sections of undergraduate students comprise our initial sample of 168 participants from three different courses – Diversity in the Workplace, Marketing, and Managerial Accounting. We attempted to generate a broad sample by using three different classes and their college years – freshmen to seniors. Since some students were cross-listed in our classes and some did not complete the entire survey it reduced the final sample to 159. Respondents were informed that Apple, Inc. was our survey firm, and they were asked to provide reactions to a newspaper article that highlights poor employee working conditions at an overseas manufacturing partner of Apple, Inc. [Bloomberg, 01-16-2018] Respondents answered questions based on

a Likert scale of 1 to 7 with “1” corresponding to response choices, “not so familiar/strongly disagree/or extremely unlikely” and “7” relating to response choices, “very familiar/strongly agree/ or extremely likely”.

Due to its well-known product lines, we examined Apple products wherein avid and loyal fans line outside Apple stores when new products debut. While Apple has many positive CSR policies, we focus on the effects of negative CSRs (CSiRs) because it allows us to determine when it is published in the papers, while positive CSR policies are ongoing and difficult to relate to any specific event date. Moreover, when it comes to investing, the capital market does not react to CSiR infractions even though consumers may find them objectionable. For example, from January 9, 2018, four days before the news article, Apple, Inc.’s closing stock prices were \$41.63, \$41.62, \$41.86, and \$42.29. On the publication date (1-16-2018), it was \$42.07, and four days after that date, it equaled \$42.77, \$42.81, \$42.62, and \$42.27, showing no stock price reaction to the news article. However, no average stock movements do not mean that it has no impact on individual investment decisions. To explore emotional and expressive factors at the individual level, we utilize survey data to deduce consumers’ values about the firm and its products and examine responses on their decision to invest or not.

Table 1 below provides general summary statistics about the sample. It is divided relatively evenly between genders as 43% males and 55% females, while their academic credits earned clusters between sophomores and seniors with seniors being the largest group (47%). The sample represents the Millennials, defined as born between 1981 and 1996 (or ages 23 to 38 for our 2019 sample), and Gen Z born after 1997 (ages 19-22 for our sample). The student majors vary with a higher percentage in marketing due to the 3 marketing classes used in the sample. Management majors also make up a large proportion of the sample since it includes many fields such as HR, Sports Management, Management, and International Business. The most notable sample observation is the number of iPhone users (88%) respondents, allowing us to test the reaction of their emotional and expressive values related to iPhones and its effects on Apple’s relationship with a manufacturer that engages in socially irresponsible behaviors.

**TABLE 1  
SAMPLE SUMMARY STATISTICS**

<b>Gender:</b>	<b>Frequency</b>	<b>Percentage</b>
Male	68	43%
Female	88	55%
Other/No response	3	2%
<b>Total:</b>	<b>159</b>	<b>100%</b>
<b>Academic credits:</b>		
Freshman	9	6%
Sophomore	29	18%
Junior	42	26%
Senior	74	47%
Fifth year	5	3%
<b>Total:</b>	<b>159</b>	<b>100%</b>
<b>Age in years:</b>		
19 – 22 years old	67	42%
23 – 38 years old	86	54%
Older than 38	2	1%
No response	5	3%
<b>Total:</b>	<b>159</b>	<b>100%</b>

<b>Major:</b>		
Accounting	27	17%
Finance	10	6%
Management	28	18%
Marketing	52	33%
Psychology	8	5%
Other	32	20%
No response	3	1%
<b>Total:</b>	<b>159</b>	<b>100%</b>
<b>Ownership of mobile phone:</b>		
iPhone	140	88%
Samsung	7	5%
Android	2	1%
5 Companies with 1 response each*	5	3%
No response/no phone	5	3%
<b>Total:</b>	<b>159</b>	<b>100%</b>

\*Note: ZTE, Huawei, Moto, Essential, and LG had one response.

In Table 2, we present the profile of our respondents, regarding their perception about Apple, Inc. and its products to determine their levels of emotional “wants” towards Apple. We asked these questions prior to their knowledge that the corporate social irresponsible actions were committed by Apple, Inc’s manufacturer. Understanding their general views of the company allowed us to interpret their emotional values of Apple and its products as Statman (2019) described. Table 2 shows a strong support for Apple and its products. A statement such as “I like Apple products.” (EM1) had a total of 69% respond with a score of 6 or 7 (agree or strongly agree) while 83% gave a score of either 5, 6, or 7. Similar results exist for EM2 with a 64% response with a scale of 6 or 7, and 81% either “somewhat agreed”, “agreed” or “strongly agreed” to the statement, “The design of Apple’s products look great.”. The other two statements demonstrate respondents’ affinity towards Apple and its products, with 60% (EM3) and 72% (EM4) agreeing with positive statements about Apple and its products, giving a score of 5, 6, or 7.

**TABLE 2**  
**MEASURE OF EMOTIONAL “WANTS” (EM) TOWARDS APPLE AND ITS PRODUCTS**

Emotional “wants” EM1 to EM4	EM1	EM2	EM3	EM4
Likert Scale:1 – Strongly disagree	3.14%	1.88%	6.25%	5.00%
2 - Disagree	1.89%	3.13%	4.38%	6.25%
3 – Somewhat disagree	4.40%	3.75%	13.75%	9.38%
4 – Neither agree nor disagree	7.55%	10.63%	15.63%	7.50%
5 – Somewhat agree	<b>13.84%</b>	<b>16.25%</b>	<b>20.63%</b>	<b>26.88%</b>
6 - Agree	<b>37.11%</b>	<b>36.88%</b>	<b>22.50%</b>	<b>25.62%</b>
7 – Strongly agree	<b>32.08%</b>	<b>27.50%</b>	<b>16.88%</b>	<b>19.38%</b>
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
<b>Subtotal for scores 5, 6 &amp; 7</b>	<b>83.03%</b>	<b>80.63%</b>	<b>60.01%</b>	<b>71.88%</b>
<b>Subtotal for scores 6 &amp; 7</b>	<b>69.19%</b>	<b>64.38%</b>	<b>39.38%</b>	<b>45.00%</b>

NOTE: Survey prompts EM1 to EM4 are: EM1=I like Apple products; EM2=The design of Apple’s products look really great; EM3=Apple’s products come close to my idea of perfect technology devices; EM4=The performance of Apple’s products are excellent.

The first regression tests H1 to establish whether our sample consists of individuals who make rational investment decisions in the classical finance paradigm, giving us a baseline for the relationship. We test whether the respondents are utilitarian investors, who value greater wealth to less.

$$Y1_i = a + b_1UT_i + e_i \tag{1}$$

where:  $UT_i$  = individual  $i$ 's response score to prompt: "I am happy with the corporate profits made by using the cheapest labor to make Apple products."

$Y1_i$  = dependent variable giving the response score for individual  $i$  to the prompt: "I would buy equity stock in Apple because it is controlling costs".

Next, we test H2 to determine whether emotional values are included in the investor's decision-making process. First, we assess the correlations between the emotional variables to see if multicollinearity issues exist. Table 3 Panel A shows that the emotional variables are highly correlated, as EM1's correlation coefficient ranges between 68% and 79% when paired with EM2, EM3, or EM4.

**TABLE 3  
CORRELATION MATRIX AND STEP 1 REGRESSION FOR THE EMOTIONAL  
(EM1 TO EM4) VARIABLES**

<b>PANEL A: Correlation Matrix for Emotional Variables:</b>	EM1	EM2	EM3	EM4
EM1	1.00			
EM2	0.791	1.00		
EM3	0.677	0.688	1.00	
EM4	0.726	0.715	0.817	1.00
<b>PANEL B: Step 1 regression results to:</b>				
$Y1_i = a + b_1EM1_i + b_2EM2_i + b_3EM3_i + b_4EM4_i + e_i$	Coefficient		t Statistic	
EM1	0.3986		2.503***	
EM2	-0.0286		-0.167	
EM3	0.0976		0.663	
EM4	-0.1598		-0.943	
Constant	1.9298		3.252***	
Sample size, N = 159	$R^2 = 11.92\%$			

\*\*\* denotes statistical significance at the 1% level.

To address this problem, we use a two-step method where step 1 regresses the emotional variables, EM1 to EM4, on  $Y1$  or:

$$Y1_i = a + b_1EM1_i + b_2EM2_i + b_3EM3_i + b_4EM4_i + e_i \tag{2}$$

where: Independent variables record response score for:

$EM1_i$  = individual  $i$  to the prompt: "I like Apple products"

$EM2_i$  = individual  $i$  to the prompt: "Design of Apple products look really great"

$EM3_i$  = individual  $i$  to the prompt: "Apple's products come close to perfect tech devices"

$EM4_i$  = individual  $i$  to the prompt: "Performance of Apple products are excellent"

Dependent variable,  $Y1_i$  = individual  $i$  to the prompt: "I would buy equity stock in Apple because it is controlling costs".

Table 3 Panel B indicates that EM1 is the only significant and positive variable in equation (2), implying that emotional desires for Apple's products lead to a higher likelihood of investing in the company stock.

In step 2 of the two-step method, we regress only the statistically significant emotional variable, EM1, and  $UT$  on  $Y1$ . This allows us to test H2 by establishing how the utilitarian variable ( $UT$ ) and the emotional variable ( $EM$ ) affect the decision to "buy equity stock".

$$Y1_i = a + b_1UT_i + b_2EM1_i + e_i \quad (3)$$

where:  $UT_i$  = response score for individual  $i$  to the prompt: "I am happy with the corporate profits made by using the cheapest labor to make Apple products." and  
 $EM1_i$  = response score for individual  $i$  to the prompt, "I like Apple product."  
 $Y1_i$  = dependent variable used in equations (1) and (2).

Additionally, we include an interaction term between  $UT$  (Utilitarian) and  $EM1$  (Emotional) variables to determine how they interrelate by utilizing the following regression.

$$Y1_i = a + b_1UT_i + b_2EM1_i + b_3(UT_i \times EM1_i) + e_i \quad (4)$$

Finally, we examine the respondents' expressive values and test H3 or attempt to determine whether expressive variables are incorporated in their investment decisions. First, we note that the nine expressive variables in Table 4 Panel A are closely correlated. For example, EX1 and EX2 correlation coefficients equal 89%, and EX8 is strongly correlated to the other 8 EX variables, EX1 to E7 and EX9, ranging between 74% and 96%.

**TABLE 4**  
**CORRELATION MATRIX AND STEP 1 REGRESSION FOR THE EXPRESSIVE**  
**(EX1 TO EX9) VARIABLES**

<b>PANEL A:</b> Correlation Matrix for Expressive Variables:	EX1	EX2	EX3	EX4	EX5	EX6	EX7	EX8	EX9
EX1	1.000								
EX2	0.889	1.00							
EX3	0.773	0.786	1.00						
EX4	0.805	0.818	0.848	1.00					
EX5	0.733	0.773	0.747	0.722	1.00				
EX6	0.712	0.759	0.778	0.719	0.873	1.00			
EX7	0.724	0.771	0.768	0.746	0.882	0.936	1.00		
EX8	0.736	0.781	0.778	0.749	0.913	0.961	0.929	1.00	
EX9	0.743	0.777	0.769	0.745	0.911	0.923	0.922	0.956	1.00
<b>PANEL B:</b> Step 1 Regression results to: $Y1_i = a + b_1EX1_i + b_2EX2_i + b_3EX3_i + b_4EX4_i + b_5EX5_i + b_6EX6_i + b_7EX7_i + b_8EX8_i + b_9EX9_i + e_i$						Dependent variable: Y1: I would buy equity stock			
<b>Independent variable:</b> Survey prompt is: In my opinion, Apple acts socially irresponsible when it partners with manufacturers who are-----						Coefficient		t Statistic	
EX1: paying very low wages to employees.						0.0075		0.020	
EX2: not paying employees living wages.						- 0.1020		-0.200	
EX3: paying employees less than the market average.						0.2033		0.627	
EX4: paying employees not more than minimum wage.						0.2014		0.485	
EX5: having employees work in an unclean environment.						- 0.4026		-1.463	
EX6: having employees work in an unsafe environment.						-0.2584		-1.266	
EX7: treating employees disrespectfully.						-0.0170		-0.083	
EX8: providing poor working conditions to employees.						-0.4790		-2.017***	
EX9: not allowing employees to take sufficient breaks.						0.3317		1.528	
Constant						6.3354		9.621***	
Sample size, N = 159						R <sup>2</sup> = 17.54%			

\*\*\* denotes statistical significance at the 1% level.

Again, we utilize the two-step method to avoid multicollinearity issues. In, step 1, the nine EX variables are regressed on  $Y1_i$ , to determine the significant EX variable(s) or:

$$Y1_i = a + b_1EX1_i + b_2EX2_i + b_3EX3_i + b_4EX4_i + b_5EX5_i + b_6EX6_i + b_7EX7_i + b_8EX8_i + b_9EX9_i + e_i \quad (5)$$

where: Independent variables:  $EX1_i$  to  $EX9_i$  are response scores for individual  $i$  to the prompt:

In my opinion, Apple acts socially irresponsible when it partners with manufacturers who are \_\_\_\_\_.

- EX1: paying very low wages to employees.
- EX2: not paying employees living wages
- EX3: paying employees less than the market average.
- EX4: paying employees not more than minimum wage.
- EX5: having employees work in an unclean environment.
- EX6: having employees work in an unsafe environment.
- EX7: treating employees disrespectfully.
- EX8: providing poor working conditions to employees.
- EX9: not allowing employees to take sufficient breaks.

Dependent variable,  $Y1_i$  = individual  $i$ 's response to the prompt: "Based on what I read in the scenario, I would buy equity stock in Apple because it controls costs."

Table 4 Panel B provides results for step 1 based on equation (5). We find that EX8 is the only expressive variable that is statistically significant with a -0.4790 coefficient and a t-statistic of -2.017. A negative correlation between EX8 and  $Y1$  demonstrates that respondents who value CSR will give EX8 a higher score (or agree that Apple acted socially irresponsibly) leading to a lower likelihood of "buying equity" in the firm ( $Y1$ ).

We utilize step 2 of the two-step method where EX8 and UT are regressed on  $Y1$ , allowing us to measure the impact of investors' expressive values on investing decisions beyond the utilitarian factor (UT) or to test H3, presented in the next section. The step 2 regression is:

$$Y1_i = a + b_1UT_i + b_2EX8_i + e_i \quad (6)$$

where:  $UT_i$  = response score for individual  $i$  to the prompt: "I am happy with the corporate profits made by using the cheapest labor to make Apple products." And

$EX8_i$  = is the response score for individual  $i$  to a CSiR behavior by the manufacturing firm that provides poor working conditions to employees.

The same dependent variable,  $Y1_i$ , is used in equation (6).

Once again, we include an interaction term, in this case, between UT (Utilitarian) and EX8 (Expressive) variables or run the following regression.

$$Y1_i = a + b_1UT_i + b_2EX8_i + b_3(UT_i \times EX8_i) + e_i \quad (7)$$

Next, we present the analysis and results.

## ANALYSIS AND RESULTS

First, we test to ensure our sample comprises rational investors as described in the classical paradigm and establish a baseline for our analysis. To do so, we apply equation (1) and regress the responses for  $Y1$  (I would buy equity stock in Apple because it is controlling costs) on  $UT1$  (I am happy with the corporate profits made by using the cheapest labor to make Apple products.). The results show that the coefficient for



UT is +0.722 with a t-statistic of 12.20, indicating that our sample of investors conform to traditional utilitarian wealth maximizers.

Next, we test H2 using equation (3) by regressing UT, and EM1 on Y1, to determine whether emotional “wants” impact investor decision beyond the traditional utilitarian values. The positive coefficient for EM1 (+0.7165) with a t-statistic of 12.378 indicates that an investor who decides to buy equity in Apple stock positively relate to the prompt, “I like Apple products” (EM1), inferring that an affinity towards Apple products increases the likelihood to invest in Apple equity. The utilitarian variable, UT, is also positive and statistically significant at the 1% level. Additionally, the R<sup>2</sup> is high at 51.22%, providing evidence that utilitarian and emotional factors directly relate to investor decisions.

**TABLE 5**  
**STEP 2 ANALYSIS ON UT AND EMOTIONAL VARIABLE, EM1**

<b>Panel A:</b> Regression results to: $Y1_i = a + b_1UT_i + b_2EM1_i + e_i$	Coefficient	t Statistic
UT	0.2031	2.868***
EM1	0.7165	12.378***
Constant	1.6593	1.985**
Sample size, N = 159	R <sup>2</sup> = 51.22%	
<b>Panel B:</b> Regression results to: $Y1_i = a + b_1UT_i + b_2EM1_i + b_3(UT_i \times EM1_i) + e_i$		
	Coefficient	t Statistic
UT	0.0198	0.569
EM1	0.1453	1.171
(UT x EM1) interaction term	0.6036	2.921***
Constant	0.4761	1.972**
Sample size, N = 159	R <sup>2</sup> = 51.32 %	

\*\*\* and \*\* denote statistical significance at the 1% and 5% level, respectively.

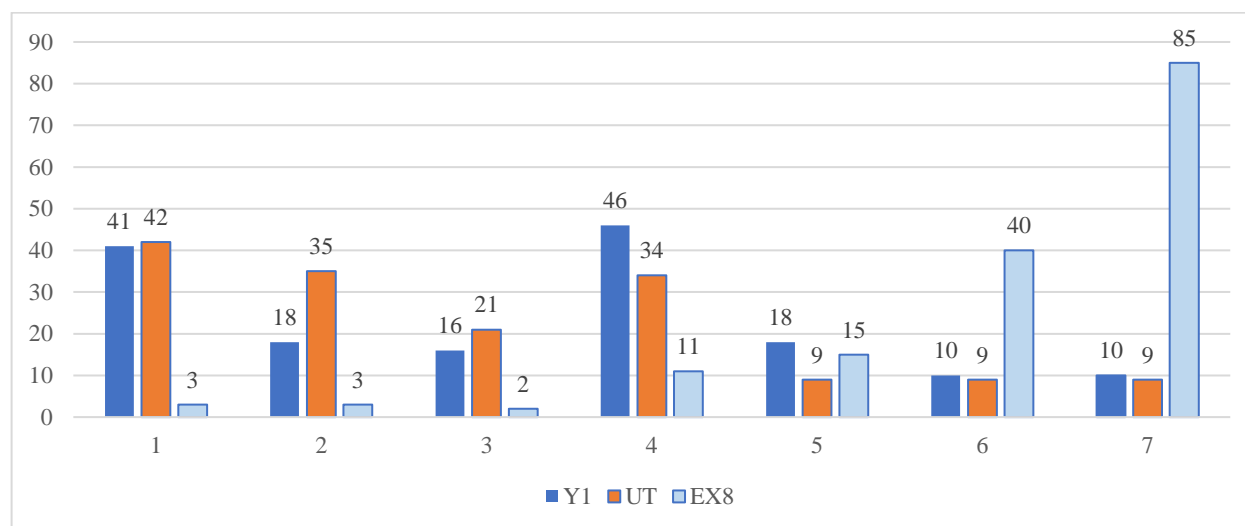
Table 5 Panel B displays the results for equation (4) which includes an interaction term between UT and EM1. While each variable, UT and EM1, is no longer statistically significant, the interaction term is statistically interrelated with a t statistic of 2.921 and a R<sup>2</sup> of 51.32%, implying that emotions play a significant and integral role alongside wealth maximization.

Before testing our last hypothesis, H3, we conduct a univariate analysis on Y1, UT, and the significant expressive variable, EX8, to better understand the relationships between these variables. Figure 1 presents the frequency table of response scores from 1 to 7, totaling 159 for each series, Y1, UT, and EX8. Note that Y1 and UT series display similar frequencies for each response score. For example, Y1 has 47% responding to a score of 1, 2, or 3 and UT percentage for the same scores equals 62%, implying respondents [strongly disagree/disagree/somewhat disagree] with the statements, “I would buy equity stock in Apple because it is controlling costs” (Y1) and “I am happy with profits made with cheapest labor” (UT). The analysis demonstrates that even a purely utilitarian investor, who makes decisions based on cost savings, have reservations about investing in its equity stock with majority respondents giving Y1 low scores of 1, 2 or 3 or remaining neutral (score of 4).

In contrast, EX8 is reversed in its frequency distribution compared to Y1 and UT. EX8 responses are mostly 5, 6 or 7, signifying 88% of the 159 sample agree that Apple committed transgressions by partnering with a manufacturer with poor workplace policies. The inverse relationship between Y1 and EX8, generally shows that investors who *agree* (scores of 5, 6 or 7 for EX8) that poor working conditions are bad CSR practices, also *disagree* (scores of 1, 2 or 3 for Y1) with investing in Apple’s equity stock. Also, they are more likely to disagree with making higher profits by using the cheapest labor or 62% gave UT a score of 1, 2 or 3. It supports the strong negative correlation between UT and EX8 (-65%), showing that individuals

who *agree* that Apple committed CSiR behaviors also *disagree* that high profits should be made using the cheapest labor. It implies that UT and EX8 factors present relatively strong commitments to social responsibility initiatives. Our sample data suggests that, on average, our participants disapprove of “investing in a firm that is controlling cost” (Y1) if it is achieved by “making corporate profits using the cheapest labor” (UT) and acting socially irresponsibly by operating under poor working conditions” (EX8).

**FIGURE 1**  
**FREQUENCY TABLE OF SCORES 1 TO 7 FOR Y1, UT, AND EX8**



**NOTE:** Sample size =159 for each series. Series: Y1= I would buy equity stock in Apple because it is controlling costs”; UT= I am happy with the corporate profits made by using the cheapest labor to make Apple products; and EX8= In my opinion, Apple acts socially irresponsible when it partners with manufacturers who are providing poor working conditions to employees”. Score 1 prompt is “strongly disagree”; 2 is disagree”; 3 is “somewhat disagree”; 4 is “neither agree nor disagree”; 5 is “somewhat agree”; 6 is “agree; and 7 is “strongly agree”.

Finally, we provide tests for H3 by applying equation (6). Table 6 Panel A displays the results for UT and EX8, which are both statistically significant at the 1% level with a R<sup>2</sup> of 50.70%. The coefficient for UT is -0.2032, implying that, on average, respondents may be happy with profits using the cheapest labor but their likelihood to invest is lower (Y1), supporting the univariate interpretation. In contrast, EX8 is positively related to Y1 with a +0.6826 coefficient, which is significant at the 1% level. (t statistic is 11.350). The investor may still be favorably disposed to buying equity in the firm even if its manufacturer engaged in irresponsible behavior. It highlights the tradeoffs that are often necessary between purchasing equity in a firm earning higher profits by controlling costs and desires to punish companies associated with manufacturers that behave badly.

**TABLE 6**  
**STEP 2 ANALYSIS ON UT AND EXPRESSIVE VARIABLE, EX8**

<b>PANEL A:</b> Regression results to: $Y1_i = a_i + b_1UT_i + b_2EX8_i + e_i$	VARIBLE Y1: I would buy equity	
	Coefficient	t Statistic
UT: I am happy with the corporate profits made by using the cheapest labor to make Apple products.	-0.2032	-2.550***
EX8:In my opinion, Apple acts socially irresponsible when it partners with manufacturers who are providing poor working conditions to employees.	0.6826	11.350***
Constant	2.5349	4.462***
Sample size, N = 159	$R^2 = 50.70\%$	
<b>PANEL B:</b> Regression results to: $Y1_i = a + b_1UT_i + b_2EX8_i + b_3(UT_i \times EX8_i) + e_i$	Coefficient	t Statistic
UT: I am happy with the corporate profits made by using the cheapest labor to make Apple products.	0.0281	0.573
EX8:providing poor working conditions to employees.	0.1524	0.574
(UT x EX8) interaction term	-0.4424	-1.492^
Constant	0.5110	1.630*
Sample size, N = 159	$R^2 = 50.94\%$	

\*\*\*, \*, and ^denote statistical significance at the 1% level, 10%, and 15%, respectively.

The results in Table 6 Panel B show that the two independent variables, UT and EX8, are not statistically significant, but the interaction term is negative and marginally significant. The negative interaction term (-0.4424) supports our univariate analysis that the lower UT responses (scores of 1 or 2) correspond to higher EX8 scores (6 or 7) or it suggests that, on average, the respondents strongly disagree/disagree with earning higher profits using the cheapest labor (UT) when they strongly agree/agree that the manufacturer is socially irresponsible (EX8).As investors, they believe corporate profits should not come from using the cheapest labor nor engage in socially irresponsible behavior using poor working conditions. Moreover, the negative coefficient infers that the likelihood of buying equity stock is reduced given the unsatisfactory behavior by the firm.

Other studies document these strong reactions to CSR initiatives by Millennials and Gen Zs [Chong (2017), Haber et. al. (2022), and Hower (2015)]. Our results reinforce the results of the Haber, et. al. survey showing that college-aged students support social reforms and are willing to forfeit investment returns to promote these initiatives. Our study adds to past work by quantifying and statistically showing the significance of CSiR (social values) and emotions, and its impact on individual investment decisions beyond wealth maximization.

## SUMMARY AND CONCLUSIONS

The study examines a new behavioral finance paradigm where investors incorporate emotional and expressive factors to which they derive benefits from the company’s product as well as investing in the firm’s equity. Using Statman’s (2019) framework of a “normal” investor who includes utilitarian, emotional, and expressive benefits, we find that investors must sometimes make difficult decisions. Using a survey with prompts, we find investors make wealth maximizing decisions and fulfilling emotional “wants”. Additionally, our sample of investors are willing to give up utilitarian gains to punish corporate

misbehavior believing that it is unacceptable to invest in equity stock of company that controls costs by using the cheapest labor (UT) and acting socially irresponsibly by practicing poor working conditions.

The results from the study imply that emotional and expressive values play a role in investor decision-making, and oftentimes, it may require tradeoffs between wealth-maximizing decisions and maintaining one's social values. Our study offers a way to quantify the effects of wealth maximizing and the emotional/expressive factors. However, the net effects on the market prices are unclear. Perhaps, the negative expressive (CSiR) factors offset the cost-cutting benefits, resulting in no effect on the stock prices during the announcement period of the news article. However, no stock movements do not equate to no impact on individual investment choices. Our study provides implications for wealth managers, who must carefully evaluate their clients' emotional/expressive "wants" to create portfolio compositions that meet their needs.

The relatively small sample is a limitation of the study, and a future study will expand the sample size. Like other CSR survey studies, our sample utilizes students, which could be seen as another limitation. However, it is noteworthy that this age group of college students (Millennials and Gen Zs) are known to be highly conscious of CSR and sustainability issues and will likely impact our future investment landscape.

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