

## Volume 32, Issue 2

### Emotions and economic expectations: A field study.

Uri Benzion  
*Western Galilee College*

Shosh Shahrabani  
*The Max Stern Emek Yezreel College*

Tal Shavit  
*School of Business Administration, College of  
Management*

Rumy Weiss  
*Center for Academic Studies Or-Yehuda*

### Abstract

The current field study examines emotions, evoked by a fire disaster, and economic expectations of people who were exposed to a fire disaster in Israel. We find that negative emotions are correlated with expectations regarding the economic self-improvement, as well as expectations for national economic improvement

---

**Citation:** Uri Benzion and Shosh Shahrabani and Tal Shavit and Rumy Weiss, (2012) "Emotions and economic expectations: A field study.", *Economics Bulletin*, Vol. 32 No. 2 pp. 1455-1460.

**Contact:** Uri Benzion - [uriusa2@gmail.com](mailto:uriusa2@gmail.com), Shosh Shahrabani - [shoshs@gmail.com](mailto:shoshs@gmail.com), Tal Shavit - [shavittal@gmail.com](mailto:shavittal@gmail.com), Rumy Weiss - [rumyweiss@yahoo.com](mailto:rumyweiss@yahoo.com).

**Submitted:** March 01, 2012. **Published:** May 15, 2012.

## 1. Introduction

Over the last two decades a new line of research suggests an important link between emotions and decision-making, specifically economic decision-making (Damasio, 1994; Elster, 1998; Grossberg and Gutowski, 1987; Kahneman, 2003; Lo, 1999; Loewenstein, 2000; Lucy and Dowling, 2005; Peters and Slovic, 2000; Zeelenberg and Pieters, 2006). Hanoch (2002) argues that emotions are important as a focusing mechanism in economic decision-making, while Thaler (2000) argues that economists are increasingly interested in the influence of emotions on economic decision-making. Yet, Loewenstein (2000) argues that in the process of decision making, economists have concentrated on anticipated emotions while psychologists have concentrated on immediate emotions that are experienced at the time the decision is made. He also suggests that visceral factors, such as immediate anger and fear, may affect the utility function, and should be taken into consideration by economists.

The current study is a field study, which uses unique data to examine emotions and economic expectations of people who were exposed to a fire disaster in Israel. It follows previous studies that examined emotions and risk perception after natural disasters (e.g., Vastfjall et al., 2008; Weinstein, et al. 2000). Our research is motivated by the argument made by Rick and Loewenstein (2008) regarding future research on the role of emotion in decision making. They stated:

"There is a need to study stronger emotions than have generally been examined in the empirical literature. Many vitally important decisions are made in the heat of the moment, and indeed important economic decisions such as major purchases often evoke powerful emotions. But studying the impact of such emotions is difficult—in part because it is difficult if not impossible to manipulate such strong emotional states experimentally and in part because people generally do not like to be studied when they are in heightened emotional states. Gaining a better understanding of the role of immediate emotions in economic decision making, therefore, is going to require researchers who are willing to extend themselves into “hot” situations and creative enough to find natural experiments in which people are naturally assigned to different emotional states before they make important decisions" (p.150).

We conducted the research four months after a fire disaster has occurred on Mount Carmel in Israel in December 2010. It is unique in that it examines the emotions and their correlations with economics expectations of participants in two sub-groups: (a) those who were harmed by the fire (e.g., lost their homes or assets, or forced to evacuate their homes for several days), and (b) those who live in the area and saw the fire from a distance, and even smelled it, but who suffered no damage or injury.

As expected we found that those who suffered damage and injury have higher levels of fear and anger, than those who were exposed to the event but suffered no damages. While previous studies showed that emotions trigger global effects on risk perception, well beyond the specific foci of the stimuli (Lerner et al., 2003; Vastfjall et al., 2008), our findings show that emotions correlate with economic expectations. The correlations we found were not only between emotions and self-economic improvement, but also with more general economic improvement of the Israeli economy and the Israeli stock market improvement.

## 2. Method

The sample consisted of two groups of people, all living within a 20 km range the Mount Carmel, near Haifa, Israel. The “harmed” group included 73 people who suffered damages or economic loss because of the fire; the “not harmed” group included 104 people, who did not suffer damage in the event. Of the participants, 62.2% were male and 37.8% were female. Their average age was 36.1. The participants were recruited in different public places (such as work places) and private homes in Haifa and surroundings. The average response rate was about 60% and we did not know in advance if the participants were “harmed” or “not harmed” by the fire.

The study was conducted in March 2011, four months after the fire on Mount Carmel started. In the Carmel disaster, 44 people lost their lives, and approximately 17,000 people were evacuated from their homes. The fire burned 25 square kilometers of trees and homes, in and around the Carmel Park Nature Preserve, devastating the human and animal communities in its immediate environs.

Participants were asked to complete a three-part questionnaire: (a) *Demographic background* relating to age, gender and place of residence. In addition, we asked whether or not the participants suffered property damage or other economic loss from the Mount Carmel fire disaster. (b) *Emotions*: The respondents were asked to estimate the level of two emotions they felt during the fire disaster on a Likert scale of 1-5, ranging from 1 (did not feel the slightest bit of emotion) to 5 (felt very strong emotions). Based on Lerner et al. (2003), respondents were asked to estimate their level of fear as either fearful or frightened (two items). Respondents were also asked to estimate the level of anger (three items) they felt during the fire. The feelings of anger were focused on the fire department and the government who were blamed for not preventing the disaster. The items included anger on the fire department’s inability to control the fire, rage that the government which can’t be relied on, and anger at the Ministry of Finance that didn’t allocate resources. (c) *Economic expectations*: Respondents were asked to estimate the future economic improvement of three different levels, during the coming year: the Israeli economy, the Israeli stock market, and their own economic situation. The anchors for these scales ranged from 1 (there is no chance of improvement) to 7 (there is a high chance of improvement). The questions were: (1) I think that the Israeli economy will improve. (2) I think that the Israeli stock market will improve. (3) I think my own economic situation will improve.

## 3. Results

Table I summarizes, for the “harmed” and the “not harmed” groups, the mean values and the standard deviations (in parentheses) of the emotional levels evoked during the fire and expectations for an improvement in the participant’s own economic situation and the country’s economic situation in the coming year. The table also presents the t-test results for the null hypothesis that the mean response of the two groups would be the same on all items. The Cronbach’s alpha values for the items measuring fear and anger were 0.857 and 0.762, respectively.

**Table I: Mean values and standard deviations for emotions and economic expectations by groups**

		“Harmed” group	“Not harmed” group	t-test (d.f) , p value
<b>Emotions</b>	Fear	4.12 (1.05)	2.85 (1.32)	t(174) = 7.06; p=0.00
	Anger	4.10 (1.01)	3.56 (1.05)	t(174) = 3.39; p=0.00
<b>Expectations for improvement in the economic situation</b>	The Israeli economy will improve in the coming year	3.36 (1.64)	4.13 (1.33)	t(175) = 3.30; p=.00
	The Israeli Stock market will improve in the coming year	3.56 (1.61)	4.26 (1.31)	t(174) = 3.08; p=.00
	My economic situation will improve in the coming year	2.90 (1.74)	3.94 (1.58)	t(174) = 4.13; p=.00

The results in Table I show that the levels of fear and anger were significantly higher for the “harmed” group than for the “not harmed” group. The table also reveals that the expectations for economic improvement, unrelated to the fire event, both for the individual’s economic situation and the Israeli economy were all significantly lower for the “harmed” group than for the “not harmed” group, although both groups live in the same area.

Table II summarizes the correlations between the predictors of economic expectations for the “harmed” and “not harmed” groups and the negative emotions index. The negative emotions index is defined as the average value between the fear and the anger levels for each participant.

**Table II: Correlations between economic expectation and negative emotions**

<b>Expectations</b>	<b>“Harmed”</b>	<b>“Not harmed”</b>
<b>The Israeli economy will improve</b>	-0.368 (0.00)	-0.116 (0.24)
<b>The Israeli Stock market will improve</b>	-0.289 (0.02)	-0.168 (0.09)
<b>My economic status will be improved</b>	-0.300 (0.01)	-0.248 (0.01)

\* Significance in parentheses

The results reveal that for the “harmed” group, a higher level of negative emotions evoked by the fire is significantly correlated to lower expectations for improvement in participants’ own economic situation, in the Israeli economy, and in the Israeli stock market. However, for the “not harmed” group, the negative emotions evoked by the fire is correlated to lower expectations only for improvement in participants’ own economic situation (all the other correlations are non-significant).

It seems that higher levels of negative emotions, like the ones experienced by the harmed group, correlate not only to the individual economic situation but also to the broader economic situation.

#### **4. Discussion**

We found that not only that are the anger and fear levels evoked by the fire disaster for the “harmed” group higher than for those of the “not harmed” group, but also that the highly negative emotions correlate with lower expectations for economic improvement, and may explain why the “harmed” group is more pessimistic regarding improvement in their own economic situation and also pessimistic about the Israeli economy and stock market. In addition, our results indicate that only higher levels of negative emotions (as in the “harmed” group) correlate with expectations for general economic improvement. A lower level of negative emotions (as in the “not harmed” group), correlate only with expectations for self-economic improvement, but not for improvement in the general economic situation.

The findings may suggest that negative emotions affect not only economics decision-making, as shown in previous literature, but also correlate with the economic expectations. It could be argued that economic expectations are the mediator between emotions and economic behavior. Lower expectations for improvement in the economic situation lead to different economic decision-making than higher expectations, e.g., different decisions on saving, spending etc. For example, people may purchase insurance against emotionally vivid events even if these events are not very probable (Johnson et al., 1993).

## 5. References

- Damasio, A. (1994) *Descartes' error: Emotion, reason and the human brain*, Avon Books: New York.
- Elster, J. (1998) "Emotions and economic theory" *Journal of Economics Literature* **36**, 47-74.
- Grossberg, S. and W. Gutowski (1987) "Neural dynamics of decision making under risk: Affective balance and cognitive-emotional interactions" *Psychology Review* **94**, 300-18.
- Hanoch, Y. (2002) "Neither an angel nor an ant: Emotion as an aid to bounded rationality" *Journal of Economic Psychology* **23**, 1-25.
- Johnson, E. J., Hershey, J., Meszaros, J., and H. Kunreuther (1993) "Framing, probability distortions, and insurance decisions" *Journal of Risk and Uncertainty* **7**, 35-51.
- Kahneman, D. (2003) "A psychological perspective on economics" *American Economic Review: Papers and Proceedings* **92**, 162-168.
- Lerner, J. S., Gonzalez, R. M., Small, D. A., and B. Fischhoff (2003) "Emotion and perceived risks of terrorism: A national field experiment" *Psychological Science* **14**, 144-150.
- Lo, A. (1999). "The three P's of total risk management" *Financial Analysts Journal* **55**, 12-20.
- Loewenstein, G. (2000) "Emotions in economic theory and economic behavior" *American Economic Review* **90**, 426-32.
- Lucy, B. M. and M. Dowling (2005) "The role of feelings in investor decision making" *Journal of Economic Surveys* **19**, 211-237.
- Peters, E. and P. Slovic (2000) "The springs of action: Affective and analytical information processing in choice" *Personality and Social Psychology Bulletin* **26**, 1465-75.
- Rick, S. and G. Loewenstein (2008) "The role of emotion in economic behavior", in *Handbook of Emotions* by Lewis M., Haviland-Jones J. M. and L. Feldman-Barrett, Eds., 3rd Edition, Guilford: New York, 138-156.
- Thaler, R. H. (2000) "From homo economicus to homo sapiens" *Journal of Economic Perspectives* **14**, 133-141.
- Vastfjall, D., Peters, E. and P. Slovic (2008) "Affect, risk perception and future optimism after the tsunami disaster" *Judgment and Decision Making* **3**, 64-72.
- Weinstein, N. D., Lyon J. H., Rothman, A. J. and C. L. Cuite (2000) "Changes in perceived vulnerability following natural disaster" *Journal of Social and Clinical Psychology* **19**, 372-95.
- Zeelenberg, M. and R. Pieters (2006) "Feeling is for doing: A pragmatic approach to the study of emotions in economic behavior, in *Social Psychology and Economics* by D. De Cremer, M. K. Zeelenberg, and M. Murnighan, Eds., Erlbaum, Mahwah: NJ, 117-137.