Optimism and Economic Crisis

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Autumn 2008 brought the biggest economic collapse in the United States since the Great Depression. Trillions of dollars in wealth disappeared, long-standing institutions failed, millions of jobs vanished. How do events of this magnitude impact people’s expectations of the future? How does a forward-looking trait like optimism respond to a once-in-a-lifetime economic shock?

These are particularly important questions given the growing dialogue between researchers in psychology and economics. Economists increasingly incorporate personality-based psychological measures into models of economic behavior (e.g., Puri & Robinson, 2007). Given the uncertainty associated with virtually every significant economic decision, expectations for the future are an especially important input. Indeed, “rational expectations” has been a cornerstone of economics for 40 years (Lucas Jr, 1996). Dispositional optimism captures generalized expectations very well, but research on this trait has focused on the domain of health (e.g., Scheier et al., 1989) not economics. Moreover, virtually no existing work evaluates the impact of crisis on dispositional optimism (cf. Schofield et al., 2004) A better understanding of this interplay would also shed light on the self-fulfilling “crisis of confidence” presumed to exacerbate economic downturns (Shiller, 2008). The collapse for 2008 offers a unique opportunity to investigate these issues.

Method

We tracked the expectations of daytime MBA students at a mid-Atlantic university over a 4-year period, September 2005-May 2009. This involved three student cohorts in the two-year full-time program. Students who completed a survey received a $5 gift card to a national coffee chain, as well as entry into a drawing for a $100 gift certificate to a local restaurant.
We conducted two on-line surveys that included the Life Orientation Test – Revised (LOT-R), a measure of generalized expectations that is the most common instrument for assessing dispositional optimism (Scheier, Carver, & Bridges, 1994). The first was administered during orientation, in August of their first year, and the second at the beginning of the students’ final semester, 17 months later. Subsequently we merged these responses with the university’s records for in-class grades, job search outcomes and student demographics. The economic crisis unfolded during 2008, between the first (August 2007) and second (January 2009) LOT-R assessments of our third cohort, which we label the Crisis Cohort. Comparing the change in LOT-R in the Crisis Cohort to the change in the other cohorts allows us to assess the impact of the crisis on optimism.

Results

599 students (52% of all possible) responded to both surveys. The demographics of this sample closely match the broader student population – 30% female, 46% Caucasian, and 29-years-old on average.

The average LOT-R score in our sample was 15.9 (SD=3.9). To measure the impact of the economic crisis we subjected these scores to a 2 (Time: 1st vs. 2nd) X 2 (Cohort: First two vs. Crisis cohort) repeated-measures ANOVA. We found a main effect of Time ($F(1,597) = 14.55, p < .001$) and a significant interaction between Time and Cohort ($F(1,597) = 7.10, p < .01$). Follow-up analyses revealed a reliable difference in the two LOT-R assessments for Crisis Cohort ($M = -.90, t(1, 184) = -3.66, p < .001$), and no difference between the assessments in Cohorts 1 and 2 ($M = -.16, t(1, 413) = -1.07, ns$). We plot these results in Figure 1.1

Thus, optimism decreased more during the first 1.5 years of graduate school for the third cohort than for the first two cohorts. This decrease coincided with the onset of the economic
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crisis. The effect size – approximately one-sixth of a standard deviation – is very similar to that found in a study of patients undergoing radiotherapy for lung carcinoma (Schofield, et al., 2004). That is, the economic crisis had the same impact on optimism as medical treatment for cancer.

Despite the decrease in the level of optimism, test-retest reliability remained as high for the Crisis Cohort (.70) as for Cohorts 1 and 2 (.72 and .61, respectively)². This suggests the change in optimism represented a global shift. To test for effects of a more local nature we consider the impact of student performance in the classroom and on the job market. We found that the grade-point average accumulated between the surveys did not have a reliable effect on the change in optimism, $\beta = -0.60$, $t(598) = -0.99$, $ns$. More surprisingly, neither did accepting a full-time job offer, $\beta = 0.25$, $t(598) = 0.93$, $ns$.³

Discussion

The economic crisis in 2008 caused a statistically reliable drop in optimism among students in our sample. The impact was comparable to that observed in patients undergoing radiotherapy. Also notable is that more narrow events – even those generally considered momentous at the time, such as job offers – had no impact on optimism.

Previous research has found a weak relationship between dispositional optimism and situation-specific expectations, presumably because the LOT-R’s “generalized expectations” are appropriately independent of narrow uncertainties (Armor & Taylor, 1998). Though causality here runs in the opposite direction, our findings are analogous. We found that dispositional optimism is affected by an exceedingly broad event while remaining unaffected by more narrow ones.
While dispositional optimism may largely be a fixed personality trait, it is still subject to situational influence. Considering the role optimism plays in a wide range of health outcomes (e.g., Segerstrom & Sephton, 2010), the implications are far-reaching. It also reveals that there is some degree of rationality in this measure of expectations. After all, economic conditions at graduation have a significant impact on a student’s lifetime earnings (Oyer, 2008). Finally, it suggests dispositional optimism may be more malleable than otherwise thought, providing an opening for psychological interventions (Seligman, Steen, Park, & Peterson, 2005). Overall, we find dispositional optimism to be reliable over time and robust to personal highs and lows, but still shaken by global crisis.
References


Footnotes

1. Time-1 scores are not reliably different across cohorts.

2. Reliability is very similar to that reported by Scheier et al (1994).

3. All results are robust to the inclusion of a wide range of control variables. The job result is similar for job offers.
Figure 1. Life Orientation Test – Revised. Cohorts vary by matriculation year, 2005-2007. There were 17 months between assessments. Shown are means and standard errors. The y-axis ranges from the 25th to the 75th percentile.