

Evaluating Gender Disparities Due to Decision-Making Under Uncertainty in Entrepreneurship: A Panel Data Analysis

Liu, Grace (School: Syosset High School)

Entrepreneurial gender disparities have immense economic and social costs: the world loses \$23 million in potential gross domestic product every minute, and promoting women entrepreneurs is crucial to reducing poverty. Yet, women remain underrepresented. Existing policy solutions are often vague and ineffective. This study examines how uncertainty—misperceptions and ambiguity—explains these disparities by testing a behavioral decision model following modified cumulative prospect theory that elucidates gender differences in decision-making. Using data from the Global Entrepreneurship Monitor in 46 countries over 2013–2019, diagnostic tests and panel econometric analysis were conducted in Stata. Generalized Least Squares (GLS), Generalized Method of Moments (GMM), and fixed-effects models were combined with binomial sign and signed-rank tests to support the theoretical model. Results indicate clear gender differences in entrepreneurial behavior that lead to disparities in three business stages. For startups, confidence in ability ($p < 0.01$) and confidence from knowing an entrepreneur ($p < 0.01$) positively influence female entrepreneurship, while fearing the worst ($p < 0.05$) is negatively associated. Gender bias progressively hinders women as the business develops, especially in developing countries. For established businesses, low reference points ($p < 0.01$) and fearing the worst ($p < 0.01$) positively influence women's entrepreneurship, suggesting shifts in favorable characteristics over time. This research fills a gap by quantifying the impact of behavioral characteristics with specific, actionable policy recommendations. It urges policies to consider women's barriers due to behavioral factors, emphasizing how women's entrepreneurship contributes to broader societal progress.

Awards Won:

