Research Proposal for Funding from
Coleman Fung Risk Management Research Center


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1. Non-technical summary

Much of the research on risk management evolves around improving our understanding of the stochastic nature of different types of risk and developing risk mitigation strategies. In this research project, I propose that individuals’ experiences of realized risk have a long-lasting effect on their risk attitudes and their willingness to financial risk. An example is the notion of “Depression Babies.” For the generation living through the Great Depression in their youth, it has often been suggested that their experience of a large macro-economic shock had a long-lasting effect on their attitudes towards risk and made them averse to investing in the stock-market.

This project asks, more generally, whether people who live through different macroeconomic histories make different risky choices. Standard models in economics assume that individuals are endowed with stable risk preferences, unaltered by economic experiences. Standard models also assume that individuals incorporate all available historical data when forming beliefs about risky outcomes. The psychology literature, in contrast, argues that personal experience has a greater influence on personal decisions than knowledge from “description” via statistical summary information (e.g., in books or via education) and that recent experiences get disproportionate weight (Weber et al. 1993; Hertwig et al. 2004).

This research hypothesis also feeds back into the evaluation of risk and its management more broadly: If investors’ willingness to take risks depends on the personally experienced history of, say, stock-market returns and inflation, these experience-based changes in risky asset demand could in turn influence the dynamics of stock prices. In other words, changes in investor sentiment due to experience may represent a risk factor in asset returns, which should be priced in the market.

I am planning to test the experience hypothesis using data from the Survey of Consumer Finances from 1964-2004. The preliminary results suggest that individuals that have experienced high stock-market returns throughout their lives report lower risk aversion, are more likely to be stock-market participants, and, if they participate, invest a higher fraction of liquid wealth in stocks. The preliminary findings can explain, for example, the relatively low rates of stock-market participation among young households in the early 1980s (following the disappointing stock-market returns in the 1970s depression) and the relatively high participation rates of young investors in the late 1990s (following the boom years in the 1990s).

I am currently trying to complement these findings in two ways: First, the experience hypothesis also suggests that individuals who have experienced high inflation are wary of investing in long-term bonds. Second, individuals who have experienced natural disasters such as earthquakes may be more likely to insure their house against that type of natural disaster, holding constant the objective catastrophe probability.