

**Han-Yen Kao**  
*Research Statement*

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The main themes of my research concern the formation and the consequences of people's beliefs and preferences. Empirical and experimental methods are my primary tools. I am particularly interested in how social structures and institutions shape individuals' tastes and ideologies through mechanisms such as social group dynamics, education, and media content. From this point of view, I focus on applications in Labor Economics, Public Economics, and Political Economy.

My job market paper, "Together We Stand? Internal Dynamics of Group Decision Making," addresses the group settings as determinants of people's belief formation. Using a laboratory experiment, by observing the binary investment decisions subjects make, I induce individuals' beliefs of their own performances on a test when they are isolated, and their beliefs of the same performances when they are in groups. The experimental design allows for a comparison between the two, and thus allows for identifying the effect of being in a group on individuals' self-evaluation. Data from the experiment strongly suggests evidence that the group setting inflates individuals' beliefs about the probability of scoring in the top half on the test and consequently induces individuals to invest even when the costs are too high. Communication structures are found to be of minor influence. Instead, those who are involved in groups before making decisions by themselves have significantly stronger intention to overinvest.

Two distinctions from the existing research highlight the contribution of this paper. First, the novel design of group type makes it possible to exclude the incentive of strategic interactions such as free-riding, and allows for a direct comparison between individual and group scenarios. Second, the exclusion of private information minimizes Bayesian updating and sharpens the interpretation of the results. The findings can be interpreted as groupthink and thus experimentally contributes to the recent literature on "motivated beliefs."

In the second and third chapters I focus on the effect of education on ideologies. In chapter two, I examine the causal effects of education on people's religious behaviors and religious beliefs, using the 1997 National Longitudinal Survey of Youth (NLSY97). In order to deal with endogeneity, I account for individual fixed-effects and construct a set of newly proposed instrumental variables measuring college accessibility, which is derived by combining NLSY97 Geocode data and the Integrated Postsecondary Education Data System. In contrast to psychological research that suggests students from religious families increase their religiosity when becoming more educated, I find a negative causal effect of education on religiosity occurs for youths from both religious and non-religious families. In chapter three, I employ a regression discontinuity design and make use of an overall curriculum change in Taiwan to examine the impacts of the major shift of focus from China to Taiwan in the middle school curriculum in 1997 on a variety of civic engagements and political ideology towards the local country. The main sources of data are the Taiwan Social Change Survey and the World Values Survey.

I have presented my work at various national and regional conferences and workshops, and have exposed my work to field experts. By the end of the year of graduation, I will submit

the first and the second chapter of my dissertation to journals. The final chapter will be submitted by the end of the following year.

My dissertation has led me to ask the question: what drives collective irrationality? Financial bubbles and irrational exuberance are now familiar concepts among the public. But why do we still see the markets go extreme over and over again? Similarly, it has been argued that the media and politicians can manipulate the opinions of the crowd even though many people are aware of the danger of political extremism and the potential biases from media. My next research plan is to study the effects of media and education on social polarization and values. An experimental approach will be adopted to address individual level value change due to effects that include priming. The empirical method targets the society level and tackles the issue using recent data. Generally, a scenario to apply my approach is when there exists a social dilemma that involves long-term risks, such as financial bubble, climate change, health-affecting social norms, political extremism and other issues of public policies.

In summary, through my research, I pursue a fundamental understanding of how peoples' beliefs and preferences are formed, and the consequences of these motivated ideologies. The rapid pace of globalization has hastened the need to understand collective irrationality at many different levels, which is now more urgent while political polarization, extremism, and terrorism are threatening the safety and welfare of the global society. Groups, small or large, are not merely a linear summation of individuals. Groups can be a Petri dish where unexpectedly extreme beliefs emerge. Ideology is not as deterministic as it was assumed to be. It is an organism. It will cluster to places where the hosts are cognitively satisfied. These hidden mechanisms are at the core of the globalized economy, and they are still waiting to be unveiled.