Research Statement

Jijian Fan
I am an applied microeconomist with interests in public, political, and financial economics. I have five completed research papers, two of which are in submission status. Three of my works are empirical studies that focus on unique policies in China, a context rich for careful empirical analysis, and two use methods of applied theory and simulations.

My job market paper, “Local Government Response to Fiscal Squeeze: Evidence from a Targeted Tax Reduction,” is joint work with Jiayi Xu, who is also a graduate student at UCSC. A rich literature examining the effects of intergovernmental grants to local governments has documented evidence of the “flypaper effect” in terms of overall and categorical expenditures. We extend the studies on this phenomenon in the context of a budget shortfall generated by a targeted tax reduction. Specifically, we examine whether local government increases tax revenue from other sources to offset the shortfall, reduces expenditures that benefit the targeted group, and consider the net impact of these local responses on income and economic productivity. Identification comes from a ban on agricultural taxes in China combined with large differential revenue replacement levels determined by a national formula applied to province-level characteristics. To conduct the analysis, we merge plenty of data sets from various sources, including the manually collected politician information and digitalized data set from printed books. By comparing nearly identical counties in adjacent provinces, we find that the differences in revenue shortfall are not offset by increased taxes on other subgroups. However, government expenditure on agriculture is disproportionately reduced, attenuating the benefits to the targeted group. Further analysis reveals that farmers in counties that experienced larger revenue shortfalls suffered a loss of net income. These results shed light on how local government responds to fiscal shortfall stemming from a targeted tax reduction and suggests that the attenuation affect should be considered when making policies.

My second dissertation chapter, “The Effect of Regulating Political Connections: Evidence from China's Board of Directors Ban,” is solo work and examines the effect of a Chinese policy prohibiting government officials from serving on the boards of directors of companies. There is a great deal of variation in how countries regulate relationships between politicians and private sector firms, but little evidence about how such policies affect firm performance. In 2013, China passed a new regulation and politicians were no longer allowed to work as independent directors. Using a novel, manually collected data set that links board members, government officials, and forced resignations, I estimate the effect of the policy on the composition of corporate boards and subsequent changes in firm performance and stock price. The estimates reveal that firms complied with the policy and that the loss of a high-level politician resulted in lower profits and a 5.4 percent reduction in stock price in the year after the policy was announced. Heterogeneity analysis reveals that the negative effect is increasing in the number of high-level politicians on a firm's board, but that the loss of lower-level politicians generates little or no observable change in performance. The estimates
provide important evidence about the efficacy and implications of one of the most commonly used policy tools for reducing political influence in the private sector.

Co-authored with Jiayi Xu, my third dissertation chapter, “Market Sensitivity to Product Quality, Personal Information, and Business Practice Scandals,” analyzes how stock prices are affected when firms face different kinds of scandals. While the financial impacts of firm scandals are widely studied, few studies compare different scandals in a systematic way. We exploit the special annual television program led by the government as an opportunity of systematic scandal exposure in China and examine which types of scandals are most cared by the market. We find that the scandal exposures cause a negative effect on average. Heterogeneous analysis shows that the effects are the largest for firms hit by defective products. The market also shows strong responses to personal information breaches, but no effect is found for firms performing deceptive business practices. Regarding industry sectors, the consumer goods sector suffers the largest impacts, the services sector also experiences great losses, but the investors show high tolerance for the technology sector.

In addition to empirical projects on China’s financial markets and politics, I also conduct research in applied theory and use simulation methods. The study entitled “How Fundamentalism Takes Root: A Simulation Study” is co-authored with Daniel Friedman (UCSC), Jonathan Gair (University of Edinburg), Sriya Iyer, Chander Velu (University of Cambridge), and Bartosz Redlicki (Compass Lexecon). We report agent-based simulations of religiosity dynamics in a spatially dispersed population. Agents’ religiosity responds to neighbors via pairwise interactions as well as via club goods effects. A simulation run is deemed fundamentalist if the final distribution contains a sizable minority of very high religiosity together with a majority of lesser religiosity. The simulations suggest that the rise of fundamentalism in the modern world is boosted by greater real income, lower relative prices for secular goods, less substitutability between religious and secular goods, and less time spent with neighbors. This study sheds lights upon the rise of modern religious fundamentalism.

Another simulation-based work, “Intergenerational Persistence in Education and Income: An Evolutionary View,” is joint work with Hugo Lhuillier (PhD student in Princeton). We develop a model to explain the natural formation of intergenerational persistence in education and analyze the evolutionary dynamics. While the gains from education are the same for different subgroups of the population, constant education costs generate higher disutility for lower-income families. Under competitive labor supply, where increasing the size of the educated population reduces the payoff, lower-income families will give up education, which leads to intergenerational persistence. We find neutral stability with perfect immobility of education levels, but the share of educated population may differ. While intergenerational persistence exists naturally, partial subsidy of one-price education leads to
social efficiency, reduces inequality and promotes welfare, yet immobility still exists, and social persistence could be solved by price discrimination.

In the future, I will continue researching questions of broad economic interest in China, a context that lends itself to strong policies and opportunities for credible identification. For example, on work in progress, I examine the role of politicians serving on corporate boards on land market transactions. Another work in progress exploits changes in censorship laws and considers the effect on scientific and technological innovation.