Research Statement
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My professional philosophy as an economist is that empirical research should be guided by rigorous economic theory and theoretical research should be inspired by and help to explain empirical facts. As a result, I consider myself as an applied microeconomist with broad theoretical and empirical interests. My research focuses on information and labor economics. The first section of this research statement discusses my work on information economics, in particular my job market paper. The second section discusses my work on labor economics, in particular black-white inequality. Both sections include my plans for future research in these areas.

1. Information Economics

Our economy dedicates a considerable share of economic resources to communication efforts, which McCloskey and Klamer (1995) estimate to be as high as one quarter of GDP. On the one hand, communication efforts often help to transmit valuable information that improves the decision making of other agents, but on the other hand, communication often involves costs that reduce and may even dominate social gains from improved information transmission. My job market paper, entitled “The Benefits of Miscommunication,” investigates the extent to which miscommunication may improve this tradeoff between information transmission and communication costs. This question is of considerable economic importance for at least two reasons. First, many communication technologies in the real world are indeed ‘noisy’, e.g., test scores are a noisy signal of a test taker’s skill and effort and politicians communicate with voters through the media which restate and garble their messages. Thus, it is important to ask when we should be concerned about the extent of miscommunication and when miscommunication may in fact be socially beneficial. Second, if miscommunication is socially beneficial, a social planner can improve welfare by restricting information flows between agents, but requires information on efficient ways to do so.

In contrast to previous work on this topic (see, e.g., Blume et al. (2007), Goltsman et al. (2009), Hoppe et al. (2009)), I do not restrict the analysis to specific communication technologies and preference structures, but consider a general class of communication games that nests a variety of prominent communication technologies such as cheap talk, verifiable messages, and costly signaling. I argue that optimal miscommunication can often improve the tradeoff between information transmission and communication costs. I show that such gains from miscommunication result from two sources: First, an expansion of the set of communication strategy profiles that can induce a given distribution of posterior beliefs and second, an expansion of the set of distributions of beliefs that the sender may expect to induce by unused messages in equilibrium. Perhaps contrary to intuition, a higher social value of information transmission can increase gains from miscommunication, and optimal miscommunication may even transform a communication technology that makes everyone worse off into one that makes everyone strictly better off. I illustrate gains from miscommunication in the case of verifiable messages, costly signaling and cheap talk. In particular,
for a competitive version of the Spence (1974) signaling game, I characterize optimal miscommunication and derive conditions for which any equilibrium without miscommunication is Pareto dominated by an equilibrium with miscommunication. This requires perfect information transmission to be sufficiently costly (or not implementable) on the one hand and partial information transmission to be sufficiently valuable on the other.

The theoretical results derived in my job market paper can be applied to a variety of interesting settings. Currently, I am working on a paper that explores optimal monitoring regimes in a situation in which a principal delegates a decision to a better informed expert who is concerned about his reputation and the precision of the expert’s private information is type-specific. The previous literature (Prat (2005)) points out that if the expert’s actions and their consequences are fully transparent, reputational concerns can cause agents not to act on private information—contrary to the principal’s interest. I show that an asymmetric monitoring regime of the expert’s reported action can improve both the quality of the expert’s decision making and information transmission even if other information structures suggested in the previous literature such as “transparent consequences” fail to do so. Moreover, this asymmetric monitoring regime arises in equilibrium if the principal can ex ante commit to a monitoring policy. Monitoring the action in more likely states too precisely can cause the informative equilibrium to collapse and reduces the quality of both decision making and information transmission. I apply these results to the optimal monitoring of investment bankers and politicians. For instance, I show that to prevent bubbles, banks may have to be sufficiently ‘lax’ with respect to monitoring their employees’ past investment decisions during ‘normal’ times compared to the aftermath of a stock market crash.

I intend to pursue this line of research further to address some of the following questions: In which real world settings is it likely that observed miscommunication is beneficial and in which settings should we be concerned about the extent and type of miscommunication? Are there additional gains from introducing error at other stages, e.g., into the implementation of the receiver’s decision or the revelation of private information to the sender? How does error at different stages interact?

2. Labor Economics: Crime and Inequality

More than two decades ago, Smith and Welch (1989) used the 1940-80 census files to document substantial relative black progress. However, more recent data indicates that this progress did not continue after 1980, at least among men. Over the same period, prison populations have grown tremendously in the United States. In a co-authored paper, entitled “The Prison Boom and the Lack of Black Progress After Smith and Welch,” I investigate the driving forces of this prison boom and its impact on measures of black-white inequality. Using a set of states with reliable data from the National Corrections Reporting Program (NCRP), we show that the prison boom was mainly driven by a move toward more punitive sentencing across offenses. The resulting growth in incarceration rates among black men has contributed to the sharp drop in their employment rates, and in 2010, black men are likely to face worse labor market prospects relative to white men than in 1970. This trend is underestimated in studies that exclude the institutionalized population. I have presented this paper at the NBER conference this summer and have received a lot of feedback and interest in our work since then.
I intend to pursue this line of research. In particular, I am interested in whether the move toward more punitive sentencing has generated criminogenic effects that increase recidivism rates, prolong criminal careers, and can thus explain the changing age patterns of arrested offenders. If the move toward more punitive sentencing deters few potential offenders but prolongs criminal careers for many, then the long-term social consequences of the policy-induced prison boom are even more severe than current estimates indicate. Unfortunately, the NCRP does not allow one to answer these questions as it only tracks individuals for up to three consecutive transitions between prison, parole, and freedom. I am currently trying to get data that tracks the movement of individuals in and out of prison and parole over an extended period.

References