RESEARCH STATEMENT

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My fields of research include applied econometrics, social economics, development economics, behavioral economics, household economics and labor economics. My current research focuses on empirical analysis of social influences on consumption behavior of households in developing countries, specifically through the lens of behavioral economics and social psychology. I am also interested in examining various issues relating to income inequality and economic mobility, and have recently embarked on a project on measurement of economic mobility. The first section of this research statement discusses my work on household consumption behavior. The second section discusses my work on economic mobility. Both sections include my plans for future research in these areas.

1. EMPIRICAL ANALYSIS OF SOCIAL INFLUENCES ON HOUSEHOLD CONSUMPTION BEHAVIOR

Job Market Paper. Consumption of individuals is traditionally modeled as being a function of their *own* income and preferences. However, it is often thought that peer influences play a major role in determining individual consumption behavior. As famously noted by Duesenberry (1949), "the strength of any individual's desire to increase his consumption expenditure is a function of the ratio of his expenditure to some weighted average of the expenditure of others with whom he comes in contact." If there are such peer influences, then this would cause government policies that affect an individual's consumption to 'spill over' and affect peers' consumption. This spillover effect suggests that traditional analyses of consumption intervention programs do not capture the total social effects and that these programs are unlikely to be optimally designed as a result. In addition, finding evidence of positive peer influences in consumption indicates that individuals. over-consume by under-saving (or by over-borrowing.) which might in turn exacerbate the risk of low and middle income people getting caught in poverty traps. This fact has implications for anti-poverty policies such as conditional cash transfer programs.

Unfortunately, although the policy significance of finding peer influences in consumption is large, research on peer influences in consumption is limited (Grinblatt et al., 2008). In my job market paper, entitled *"Peer Effects in Consumption"*, I enhance the understanding of this topic with a unique empirical study. Specifically, I construct a norm-based structural model of social interactions to empirically examine whether and to what extent a household's consumption is affected by that of his/her peers using data from the 2012 Indian Human Development Survey (IHDS). I define a household's peer group as all other households living in its village/neighborhood. In assessing the influences of peers in this context, there are two key empirical challenges including shared group-level unobservables, and simultaneity of peer influences (Manski, 1993). I address these issues by using an instrumental variables/fixed effects approach that compares households in the same district but different villages/neighborhoods who are thus exposed to different sets of peers. In particular, I use plausibly exogenous variation in idiosyncratic expenditure shocks faced by peers as instruments for peers' consumption expenditure. Preferred specifications indicate that a 1 Indian Rupee increase in average peer consumption expenditure causes households to increase their own consumption expenditure by 0.7 Indian Rupee which translates into a social multiplier of about 3. Falsification tests and robustness checks support the validity of my results. My findings suggest that policies that influence a household's consumption expenditure will also affect the consumption decisions of the household's peers through social interactions. This implies that traditional analyses of such policies that do not take into account such social effects likely understate the total impact of the programs.

Work on Inequality and Conspicuous Consumption. In addition to my job market paper, I have also looked at how social influences affect household consumption behavior in an earlier paper of mine, entitled *"Visible inequality, status competition and conspicuous consumption: evidence from rural India"* (***Oxford***

Economic Papers, forthcoming). In this paper, I investigate the impact of socioeconomic inequality on conspicuous consumption decision of households. Specifically, using household-level data from the 2005 Indian Human Development Survey (IHDS), I test the following hypothesis: If individuals care about their 'status' or their relative position in the distribution of conspicuous consumption (Frank, 1985), a fall in the level of (within-reference group) 'visible' inequality, defined as the dispersion in conspicuous consumption expenditure, is likely to cause them to spend more on conspicuous goods since greater equality provides greater incentives to spend on the conspicuous good as it becomes easier to surpass their neighbors (in other words, greater equality increases 'status competition') (Hopkins and Kornienko, 2009). Employing an identification strategy based on instrumental variables to address various empirical challenges in this context, I find robust evidence that visible inequality has a negative and significant impact on household conspicuous consumption. Further, my results indicate that the increase in conspicuous expenditure in response to a fall in visible inequality is diverted from education spending which is perceived to have positive social externalities. This suggests that traditional redistributive policies that seek to reduce the level of economic inequality, by encouraging 'wasteful' spending of households, might have adverse welfare consequences.

Future Work on Consumption and Social Networks. My future research agenda is to empirically examine whether conspicuous consumption can explain the persistence of poverty as hypothesized by Moav and Neeman, 2010).[1] Also, in context of India, I am planning a project that seeks to look at how participation in the *Kisan Credit Card* (KCC) Scheme, which was introduced in 1998-99 by the Government of India and has since become a flagship program providing access to short term credit in the agricultural sector, affects consumption/savings behavior of rural households. In addition to these projects, my long term research agenda includes collecting primary social network data at the individual/household level from a developing country that would allow me to the observe actual pattern of social interactions among individuals. I intend to use such data to analyze the role of social networks in various domains including savings/borrowing behavior, education, health, and labor supply decisions of individuals. Such analyses are likely to extend our understanding of the role of social networks in affecting individual decisions, which remains underexplored, especially, in the developing world.

2. Economic Mobility: Measurement and Impact Evaluation of Welfare Programs

Measuring Economic Mobility. In addition to examining social influences in consumption, I am also currently working on a project on measurement of economic mobility. It is now widely recognized that static snapshots of income distributions alone are not sufficient for meaningful evaluation of social welfare. A relatively less unequal society with a rigid income distribution where everyone remains in the same position year after year is commonly regarded as less well-off than a relatively more unequal but 'mobile' society. This is because in an 'immobile' society the nature of the prevailing inequality is likely to be 'persistent' (or 'chronic'), whereas in a 'mobile' society it is likely to be 'transitory'. The design of policy interventions to combat inequality and poverty is also likely to differ based upon whether a society is sufficiently 'mobile' or not. Therefore, measures of economic mobility have been developed and been interpreted as indicators of 'opportunity'.

An important measure of economic mobility are income transition matrices. These show conditional probabilities of transition across quintiles of the income distribution over time. In addition, poverty transition matrices, that show transitions in and out of poverty, are a related measure that is useful to assess economic mobility of the poor. With the increasing availability of panel data for many countries, such matrices are frequently computed in studies of income and poverty dynamics. However, most studies have

[1] Moav and Neeman (2010) theoretically show that in a setup where individuals' expenditure on conspicuous consumption is a signal for their unobserved income, there exists a separating equilibrium where poor families that climb up the social ladder by the accumulation of wealth engage in conspicuous consumption that prevents them from escaping poverty.

ignored potential measurement error biases in the transition matrices, although the presence of measurement error in income data has been widely acknowledged (e.g., Pischke, 1995, Deaton, 1997).

In a paper entitled *"Partial Identification of Economic Mobility: With Applications to the United States and India"* (jointly written with *Daniel L. Millimet* and *Hao Li*), we investigate what can be learned about income transition matrices as measures of economic mobility when formally accounting for measurement error in reported income. In the absence of strong (and untestable) assumptions on the reporting error process, we cannot fully identify the conditional income transition probabilities. Nevertheless, we can provide informative bounds on these conditional probabilities using relatively weak nonparametric assumptions. Our analysis applies and extends recent partial identification bounding methods that allow researchers to consider relatively weak nonparametric assumptions (see, e.g., Horowitz and Manski, 1995; Kreider and Pepper, 2007, 2008; Gundersen and Kreider, 2008). Within this environment, we first derive sharp worst-case bounds on conditional income transitional probabilities that impose no assumptions on the patterns of classification errors in a conditioning variable and then derive narrower sets of bounds that impose structure on the reporting error process. We also explore the identifying power of level set restrictions that relate mobility patterns across observations with different attributes (Manski 1990; Lechner 1999) and consider monotone instrumental variable (MIV) assumptions that specify monotonic relationships between the true income and certain observed covariates, such as education and age. Currently we are working on the empirical application part of our paper which concerns the United States and India. Using panel data from the Survey of Income and Program Participation (SIPP) for the United States and Indian Human Development Survey (IHDS), we will be estimating the bounds on the transition income probabilities using the above described methods.

Future Work on Economic Mobility. In future, my objective is to use the partial identification approach discussed above to quantify the impact of various social welfare programs on economic mobility in context of the United States and India. Such programs include the Earned Income Tax Credit (EITC) (for the United States), which has become the centerpiece of the U. S. safety net dwarfing other means-tested programs in terms of the number of beneficiaries and total expenditure, and the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) (for India) – the world's largest employment generation program. Additionally, the precise mechanisms through which these welfare programs affect the rates of economic mobility would also be something that I would want to examine in my future research.

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