

Day 1: Wednesday, 12 September 2018

Session 1: Microfinance and Enterprise

Chair: Imran Rasul (UCL)

When Nudge Comes to Shove: Demand for Commitment in Microfinance Contracts

Uzma Afzal (University of Nottingham), Giovanna d'Adda (University of Milan), Marcel Fafchamps (Stanford University), Simon Quinn (University of Oxford) and **Farah Said** (Lahore School of Economics)

Discussant: Jacopo Bonan (Politecnico di Milano and Fondazione Eni Enrico Mattei)

We conduct a field experiment to test the demand for flexibility and for soft and hard commitment among clients of a microfinance institution. We offer a commitment contract inspired by the rotating structure of a ROSCA. We find substantial demand for both saving and credit contracts, with many respondents willing to take up either —suggesting that many microfinance clients borrow to save. Additional treatments test ex ante demand for soft commitment (e.g., reminders), hard commitment (e.g., penalty for missing an instalment), and flexibility (e.g., option to postpone an instalment). We find no demand for any of these features, in isolation or in combination: individuals appear to actively dislike them all. These findings complement a literature showing that commitment devices induce financial discipline. Our results suggest that many commitment devices used in practice may be seen as overly restrictive ex ante, even for a population with a demonstrated demand for commitment products. Finally, we find a small and significant effect of our treatment on a novel incentivized measure of female empowerment.

Shared-ownership Microfinance: A Field Experiment in Pakistan

Muhammad Meki (University of Oxford), Faisal Bari, Kashif Malik (LUMS) and Simon Quinn (University of Oxford)

Discussant: Azam Chaudhry (Lahore School of Economics)

Shared equity and asset-based financing are two of the most important sources of investment capital for small and medium enterprises around the world, however microenterprises in developing countries typically only have access to rigid debt-based contracts, which may not be the optimal contract structure to support higher-risk, higher-reward investments. In this paper, we conduct a field experiment in which we offer a relatively large amount of financing to growth-oriented microenterprise owners, using a shared-ownership contract. We focus on shared equity in a single asset, as a proof of concept for shared equity more generally, and to investigate demand for such products. We find high take-up rates for our shared-ownership product, and a strong preference for a more flexible repayment schedule among microenterprise owners, especially those who are more risk-averse. The result on risk aversion is striking when compared to the existing literature that finds a higher take-up of flexible microfinance contracts among the least risk-averse, which we suggest is due to the shared-ownership structure of our contracts and the implicit insurance inherent within them. Overall, results provide promising evidence for the potential of shared-ownership microfinance contracts to help stimulate investment among growth-oriented microenterprise owners.

Session 2: Political Economy I

Chair: Azam Chaudhry (Lahore School of Economics)

Do Electoral Quotas Make Government Programs Work Better, and For Whom? Evidence from India

Saad Gulzar (Stanford University), Nicholas Haas (New York University) and Benjamin Pasquale (Independent Researcher)

Discussant: Ayesha Ali (LUMS)

Affirmative action skeptics often point to the self-undermining effects of electoral quotas in the administration of government programs designed to alleviate poverty. We conduct a clean test of this concern by examining how Scheduled Areas in India – which reserve all elected local leadership positions for the historically disadvantaged Scheduled Tribes – affect the implementation of the world’s largest employment program, the National Rural Employment Guarantee Scheme (NREGS). A regression discontinuity design on a new dataset of nearly a quarter million villages allows us to characterize the overall implementation of NREGS and assess its impacts across identity categories. We find that quotas yield significant benefits to targeted minorities. Quotas improve overall program implementation while groups that are relatively privileged do worse, contrary to the expectations of affirmative action skeptics. Our results signal the promise of electoral quotas as complimentary institutions to anti-poverty development programs.

Improving Political Communication and Responsiveness: A Field Experiment in Khyber Pakhtunkhwa, Pakistan

Miriam Golden (UCLA), Saad Gulzar (Stanford) and **Luke Sonnet** (UCLA)

Discussant: Muhammad Yasir Khan (UC Berkeley)

We present the results of a field experiment with 40 members of a provincial assembly in Pakistan. We worked with a random sample of 20 members to provide a low-cost and scalable technology — Interactive Voice Response (IVR) — to improve political communication. We study the effects of a pair of robocalls recorded by a politician asking specific questions to constituents regarding their development preferences and priorities. By randomizing which polling station areas within a constituency are targeted with robocalls, and randomizing which households within each polling station receive these robocalls, we study how constituents respond to increased communication with their incumbent legislator. From our total sample of 14,400 households, we find that constituent take-up among treated households is relatively high when compared with other phone based interventions: greater than 15 percent. We also present preliminary results on the effects of the intervention on vote shares at the polling station level, politician behavior at the polling station level, and effects on household perceptions of the incumbent, their sense of political efficacy, and political participation.

Session 3: Gender

Chair: Fauzia Viqar (PCSW)

Microcredit for Startups: Experimental Evidence from Aspiring Female Entrepreneurs in Pakistan

Farah Said (Lahore School of Economics), **Mahreen Mahmud** (University of Oxford), Giovanna d'Adda (University of Milan) and Azam Chaudhry (Lahore School of Economics)

Discussant: Rachel Cassidy (Institute for Fiscal Studies)

We use data over two years from a individual level Randomised Control Trial with 630 aspiring female entrepreneurs in Punjab, Pakistan to evaluate the impact of a start up loan for enterprises run by women. We find that the treatment increases the likelihood of setting up enterprise by 12 percentage points but only in the short run. Treated women whose husband's have their own business are significantly less likely to set up a business. We find small but significant effects on household assets and measures of financial access but no transformative effects on general household welfare or female agency. We find using incentivised experiments that these households prefer women set up a business but operate it from within the home; limiting the potential to expand the business operations outside the home. Microcredit is unable to influence these preferences, challenging popular development practice aimed at encouraging female-run microenterprise through access to finance. Women also exhibit a 'home-bias' in their demand for advice; more likely to prefer the advice of a male household member than that of a field expert outside the household. Taken together, results indicate internalized gender norms may explain the size and lack of sustainability of businesses operated by women.

Institutional Reforms and De Facto Women's Rights in Pakistan

Kate Vyborny and Erica Field (Duke University)

Discussant: Hadia Majid (LUMS)

One important constraint on women's de facto legal rights in Pakistan is the fact that government officials who carry out basic legal functions such as marriage registration and the processing of inheritance of property often follow their own judgment, are misinformed on details of law, or respond to the pressures of other interested parties rather than complying strictly with the law. In this project, we work with the Punjab Commission on the Status of Women (PCSW) on a randomized evaluation of a major initiative to address these challenges and ensure women's de facto rights in marriage: the first ever initiative to train all marriage registrars in the province of Punjab.

Gender Gap in the Returns to Tertiary Education in Punjab, Pakistan
Zunia Saif Tirmazee (Lahore School of Economics)

Discussant: Mahreen Mahmud (University of Oxford)

This particular study aims to estimate the gender gap in the returns to tertiary education in Punjab. To estimate the returns to years of education the study makes use of a unique instrument i.e supply of education in a given district at a given point in time owing to the fact that the decision to move to a higher tier of qualification especially for girls has got a lot to do with the access to an educational facility. If there is a large number of colleges in a given district it can affect the probability of moving from secondary to tertiary education since the accessibility is hypothesised to have been improved. The other objective of this analysis is to determine whether much or all of the gender gap in earnings is explained by measurable differences in male and female characteristics by decomposing the gender gap into its explained and unexplained part using the conventional Oaxaca-Blinder decomposition (Oaxaca, 1973) and comparing its result to a more recently developed unconditional quantile estimation, the Recentered Influence Function Regression based on Firpo, Fortin, and Lemieux (2009). The study also analyzes the trend in gender gap in returns to tertiary education over a decade using a cross sectional pool constructed from six available rounds of the Household Integrated Economics Survey (HIES) spanning over a decade i.e. 2005, 2007, 2010, 2011, 2013 and 2015. The use of a large cross-sectional pool for this analysis provides an opportunity to work with very large number of observations to reach a conclusion as far as dynamism of gender wage gap is concerned. This analysis derives its motivation from the fact that the returns to tertiary education as projected over the life cycle reflect the expectations that influence current students' decisions to participate in higher education. If the returns are higher there is a positive signal from the labor market and it should effectively lead to greater investment in higher education. Moreover these returns also reflect the contribution of higher degrees to the distribution of earnings across different segments of the population.

Day 2: Thursday, 13 September 2018

Session 4: *Firm capabilities*

Chair: Johannes Boehm (Paris Institute of Political Sciences)

Why Do Banks Not Lend: An Experiment Testing Contractual Frictions

Ali Choudhary (State Bank of Pakistan) and Anil Jain (Federal Reserve Board)

Discussant: Kumail Rizvi (Lahore School of Economics)

A key question with enormous policy implications is "why do banks not lend in rural areas?" Significant resources have been devoted to expanding rural lending with limited success (for example, rural (subsidized) banks, credit guarantees for rural lending, and regulated fraction of bank branches in rural areas). In our paper, we examine three related but separate questions. (1) Who are banks willing to lend to rural areas and how does this differ from other potential lenders? (2) Are banks targeting mechanism inaccurate? That is, are banks unable to select credit worthy borrowers? (3) Do banks have sufficient and efficient methods for enforcing a loan contract? We examine these questions using a novel randomized contract. To examine question number 1, we ask a bank to evaluate a set of borrowers to determine who they are willing to lend to. We compare this set against the set of borrowers that an alternative lender was willing to lend to -an intermediary who is an actual buyer of the farmers' crop. To examine question number 2 and 3, from the set of borrowers that the intermediary was willing to guarantee loans for, we randomized them. Some got guaranteed loans through the intermediary, the others got direct loans from the bank. We compare default rates across the set of borrowers that did and did not get guarantees. We find the borrowers that the intermediary was willing to guarantee but ultimately (due to the randomization) did not get guarantees had statistically and economically significant greater default rates. Our findings suggest that banks suffer from an inability to enforce contractual terms rather than an inability to select good borrowers.

Does Spatial Proximity Matter? Understanding the Costs and Benefits of Agglomeration in Pakistan

Maryiam Haroon and Azam Chaudhry (Lahore School of Economics)

Discussant: Johannes Boehm (Paris Institute of Political Sciences)

Agglomeration externalities can impact the productivity of firms and can also increase firm level profits. These externalities and their effect on productivity are particularly relevant to Pakistani manufacturing firms because it has been found that Pakistan is still at a stage of development where it can benefit from agglomeration economies. Using unique firm level panel data, we empirically investigate the effect of various sources of agglomeration externalities (localization, urbanization and competition) on firm level productivity, costs and prices while controlling for unobserved heterogeneity across firms and locations for manufacturing firms in Punjab, Pakistan. We find that agglomeration externalities operate through localization in improving the productivity of firms. These benefits are more pronounced for medium productivity firms as well as larger firms. We also find that agglomeration externalities operate through competition in reducing labor and raw material costs and not through specialization.

Misallocation in the Market for Inputs: Enforcement and the Organization of Production

Johannes Boehm (Paris Institute of Political Sciences) and Ezra Oberfield (Princeton University)

Discussant: Theresa Thompson Chaudhry (Lahore School of Economics)

The strength of contract enforcement determines how firms source inputs and organize production. Using microdata on Indian manufacturing plants, we show that production and sourcing decisions appear systematically distorted in states with weaker enforcement. Specifically, we document that in industries that tend to rely more heavily on relationship specific intermediate inputs, plants in states with more congested courts shift their expenditures away from intermediate inputs and appear to be more vertically integrated. To quantify the impact of these distortions on aggregate productivity, we construct a model in which plants have several ways of producing, each with different bundles of inputs. Weak enforcement exacerbates a holdup problem that arises when using inputs that require customization, distorting both the intensive and extensive margins of input use. The equilibrium organization of production and the network structure of input-output linkages arise endogenously from the producers' simultaneous cost minimization decisions. We identify the structural parameters that govern enforcement frictions from cross-state variation in the first moments of producers' cost shares. A set of counterfactuals show that enforcement frictions lower aggregate productivity to an extent that is relevant on the macro scale.

Session 5: State Capacity and Local Institutions

Chair: Theresa Thompson Chaudhry (Lahore School of Economics)

Institutional Capacity as an Organizational Challenge: Pilot Results From a Field Experiment in Pakistan

Hamna Ahmed (Lahore School of Economics), Asha Gul (University of New South Wales), Simon Quinn (University of Oxford), Kate Vyborny (Duke University)

Discussant: Saad Gulzar (Stanford)

The objective of this study is to understand how the donor responds to new information on performance of local community organizations on Key Performance Indicators (KPIs). We also test how the donor's response relates to organizational characteristics of theoretical importance, including divergence of preferences between members of the organization; communication costs between parts of the organization; and decentralization of decision-making authority. To answer these questions, we have designed a novel revealed-preference ranking experiment. We plan to run this experiment at every node in the organizational hierarchy of National Rural Support Program (NRSP) i.e. District Offices, Tehsil Offices and Field Units. We implemented a small pilot of this design, in which we conducted ranking exercises with several NRSP staff members at various nodes of the organizational hierarchy. After an initial training round, we asked respondents to rank community organizations based on four different information sets: (i) a set with a full vector of 'complex data', (ii) a set with 'complex data' plus summary KPIs, (iii) a set with 'complex data' and organization names, and (iv) a set with 'complex data', summary KPIs and organization names. We find that respondents place substantial weight on the KPIs as a means of summarizing the complex data – but only when the respondents do not already have information on the identities of the organizations under study. This suggests that KPIs may have heterogeneous effects across different levels of a hierarchical organization, based on the degree of pre-existing information that managers hold about the agents being monitored. More generally, we learned that the donor experiment is practically feasible; respondents found the ranking exercise to be challenging but manageable. Therefore we plan to conduct a full-scale implementation in due course.

Scarcity and Inter-Village Cooperation
Haseeb Ashraf (University of Warwick)

Discussant: Luke Sonnet (UCLA)

Existing studies document the existence of institutions that monitor and enforce cooperation in the management of collective resources, however we do not know much about how resource scarcity affect these institutions. In this paper, I evaluate the impact of scarcity on inter-village cooperation in Pakistan. I use detailed administrative data on water discharge to quantify water theft along a distributary that serves as a measure of inter-village cooperation in the management of surface water for irrigation. First, using exogenous variation in rainfall, I find that an uncertain and short-term scarcity shock reduces cooperation. Then, I exploit changes in ground water quality that were induced by industrial effluents, to define my long-term scarcity measure. I find that an increase in ground water pollution increases the inter-village cooperation on surface water management. Finally, using a village-level survey, I show that areas that have faced long-term water scarcity are also more likely to have active informal institutions.

Policing and Resolving Disputes in Punjab

Ali Cheema (IDEAS), Ahsan Zia Farooqi (IDEAS), **Ali Hasanain** (LUMS) and Jacob Shapiro (Princeton)

Reducing crime and violence are existential goals for a well-functioning state. We conceptualize crime as falling into two categories: crimes of opportunity that are economically-motivated (such as cattle theft), and crimes of passion that are triggered by social friction (such as assault in a land-dispute context). We are currently conducting a randomized control trial evaluation of two sets of policing reforms in Punjab that are aimed at reducing the economic rents from crime, and defusing potential social triggers for violence respectively. Here, we report findings from a baseline survey to contextualize the setting of our experiment.

Session 6: *Political Economy II*

Chair: Waqar Wadho (Lahore School of Economics)

Barriers to Political Entry: Experimental Evidence from Local Government Elections in Pakistan
Saad Gulzar (Stanford University) and **Muhammad Yasir Khan** (UC Berkeley)

Discussant: Ali Hasanain (LUMS)

Local governments are said to be susceptible to elite capture in the developing world. Reforms that aim to improve political competition may help reduce elite capture. We run a randomized control trial prior to elections for village councils in rural Pakistan to study three barriers to political entry: cost of running for office, lack of information on electability of candidates and lack of information on benefits from office. We find that the cost of running for office is the main barrier preventing political entry of citizens, while lack of information on electability and benefits from office are not binding constraints on average. We find they do matter for certain populations: citizens who have higher prior beliefs of winning the elections respond to the provision of information with increased probability of running for office.

Political Dynasties and Political Competition: Evidence from Pakistan

Noman Ahmad (Higher Education Department, KPK) and Faiz Ur Rehman (Quaid-i-Azam University)

Discussant: Shaheen Naseer (Lahore School of Economics)

Existing literature on political dynasties argue that dynastic candidates enjoy dis-proportionate electoral advantage. Theoretically, presence of political dynasties can be considered as a non-institutional barrier to candidacy in elections. Using constituency-level data on national assembly elections in Pakistan, we study the impact of political dynasties on various metric of electoral competition. Interestingly, we find no systematic association between dynasties and political competition in Pakistan. However, at disaggregated level, we find negative association for Khyber-Pakhtunkhwa (KPK) province where incidence of political dynasties is low. These findings are robust to various estimation techniques, and specifications of dependent and independent variables.

Session 7: *Poverty and Behavioural Constraints*

Chair: Anjum Nasim (GC, IDEAS)

Are the Poor so Present Biased?

Rachel Cassidy (Institute for Fiscal Studies)

Discussant: Kate Vyborny (Duke University)

Estimates that many poor individuals are “present-biased” may be exaggerated if credit-constrained individuals are expecting to have greater liquidity in the future. I conduct an experiment in rural Pakistan to provide causal evidence of this effect, using windfalls to generate fully exogenous variation in subjects' liquidity constraints. I show that the effect of fluctuating liquidity on measures of time-inconsistency exists, is large, and does not operate via cognitive function or risk preferences. Importantly, I establish that the causation runs from tighter liquidity constraints to appearing “present-biased” – rather than truly present-biased individuals making choices which lead to tighter liquidity constraints.

Access to Electricity: Role of Flexibility and Planning in Repayment Discipline

Jacopo Bonan (Politecnico di Milano and Fondazione Eni Enrico Mattei), Giovanna d'Adda (University of Milan), Mahreen Mahmud (University of Oxford), Farah Said (Lahore School of Economics) and Massimo Tavoni (Fondazione Eni Enrico Mattei and Politecnico di Milano)

Discussant: Muhammad Meki (University of Oxford)

Almost 70 million people in Pakistan (35% of the population) do not have access to electricity, as they live in areas, mostly rural, not reached by the grid. In spite of the significant benefits of access to electricity, the long-run feasibility of grid expansion for the provision of quality electricity to remote areas is often a concern. The development of market solutions to increase access and energy services in underprovided areas using renewables and alternative energy sources is essential to meet SDG 7, reduce poverty and promote growth. We collaborate with Eco Energy Finance (EEF), a for-profit company supplying sustainable and efficient solar energy solutions to households and small business in off-grid areas of rural Pakistan, to evaluate one such market solution. The product is innovative, as it allows to relieve credit constraints to adoption and has strong enforcement features: customers access energy through a pay-as-you-go monthly payment scheme and are disconnected when the credit expires. The research provides contributions both research and policy-wise. First, we investigate key determinants of the sustainability of the business model, by looking at the trade-off between discipline and flexibility in repayment schedule, which is a debated issue in the microfinance literature. Second, we push the frontier of the behavioural and microfinance literatures, looking at individual constraints to repayment. We investigate the role of soft behavioural prompts aiming at stimulating the formulation of intentions and mental plans of action in a novel setting as low-cost solutions to lower default rates.

In the Same Boat, but not Equals: The Heterogeneous Effects of Indirect Taxation on Child Health in Punjab, Pakistan

Faiz Ur Rehman (Quaid-i-Azam University) and Muhammad Nasir (Pakistan Institute of Development Economics)

Discussant: Haseeb Ashraf (University of Warwick)

The 2011 National Nutrition Survey of Pakistan revealed that 51% of the country's population was consuming less than 2,100 calories a day. In the backdrop of rising food insecurity, hunger and malnutrition in Pakistan, this study aims to measure the effects of indirect taxation on health outcomes of children (<5 years). More specifically, the impact of incidence of General Sales Tax (GST) in the province of Punjab has been estimated on a child's height and weight. The proponents of the uniform GST argue that the tax would not affect children because most food items consumed by children are exempted from the GST. However, the opponents believe that households, especially those belonging to the lower income group, would reallocate resources away from children in the face of higher GST. To study these effects, we utilized three different waves (2007-08, 2011 & 2014) of Multiple Indicators Cluster Surveys (MICS). The results show that the tax incidence, and not the GST rate, has a significantly negative impact on children's height-for-age Z-score (HAZ). No effect was found on weight-for-age-z-score (WAZ). These results are robust to different specifications and exhibit considerable heterogeneity across different income groups. These findings suggest that the exemption of certain food items for children from the GST may not eliminate the negative effects of this tax on a child's health. Thus, our study raises concerns on the long term welfare consequences of GST.

Notes