New and better jobs can create a way out of poverty. Growth in many developing countries is hampered by a lack of firms who can exploit productive opportunities and create jobs. Firms face many difficulties in financing their activities, and in motivating their workforce. Policies to address these issues increasingly rely on social networks, yet little is understood about the potential impact of these networks on economic policy. Successful growth strategies can have disruptive consequences, and effective policies should mitigate this. Here, we summarise the contribution of the iiG research programme on issues of entrepreneurial finance, labour contracts, social networks, and adjustment to land expropriation.

**KEY FINDINGS**

- Demand for microcredit may reflect demand for secure ways to save, rather than the desire to borrow. Many poor individuals struggle to hold savings intact, and microcredit is an alternative albeit costly way to accumulate cash for lumpy payments.

- Entrepreneurship in poor countries can be fostered by providing start-up finance to individuals who demonstrate smart and viable business ideas. Firms started by such individuals can provide jobs and may be on a high-growth trajectory from the outset. This finding contrasts with current policies of ‘ramping up’ existing self-employment.

- Formation of social networks is influenced by perceptions of social standing. Economic efficiency and public good provision along the lines of social networks is limited as a result.

- Adverse effects of expropriation of farm land for new infrastructure and industrial projects can be mitigated by reducing uncertainty. Compensation payments need to be carefully designed. Prolonged uncertainty adversely affects farm production before land is reallocated to a new use. Compensation payments alone do not entice farmers to create sustainable new livelihoods in the short term.
JOB CREATION, ENTREPRENEURSHIP, AND FINANCE

Common traditional policy tools to foster entrepreneurship include the provision of capital, in the form of grants or microcredit, to the self-employed poor. IIG research adds to the understanding of policy limitations in two important ways: demand for microcredit can reflect an underlying demand for secure savings products, and results show the provision of start-up capital to high-potential aspiring entrepreneurs has large impacts on entrepreneurship and job creation. Employment for most poor people comes in the form of running very small businesses. Much research in recent years has tried to identify policies that can transform these microenterprises into engines of growth, looking at employment creation, and empowerment for entrepreneurship as a way out of poverty. The findings are sobering. Provision of capital, including through microfinance, has at best very modest effects for the average beneficiary, and clearly new perspectives and new policies are needed.

IIG research provides two complementary new perspectives, one looking at how microcredit and microsavings products perform, and the other investigating the potential of start-up grants to high achieving aspiring entrepreneurs.

The first project developed a field experiment in rural Punjab, Pakistan to examine the demand for microcredit. Participants in the experiment were female members of the National Rural Support Programme (NRSP) who had previous experience with microfinance products. In a novel experimental design, IIG researchers offered credit and savings products to the same individuals, and find that people often take up both kinds of products over the course of the intervention. This behaviour can be explained by an inability to save, together with a need for larger sums of lump-sum cash (for example for school fees, or purchase of durable goods). Results show that 60 percent of the individuals who took part in the study find it difficult to hold cash over the course of a week, and that most of these savings-constrained individuals have a high valuation of lumpy cash purchases. Among the reasons for the inability to save may be family pressure, or susceptibility to impulse buying.

In a different experiment, IIG researchers evaluated a business competition for young aspiring entrepreneurs in Ethiopia, Tanzania and Zambia. Competitors presented business plans that were judged by panels of local entrepreneurs and businesspeople – not unlike the structure of popular reality television shows, such as Dragon’s Den. Cash prices of USD 1,000 were awarded to the best candidates, and the research team evaluated outcomes for the winners compared to runner-ups. The competition mimics a policy of providing startup finance to star performers who can persuade the business community of their potential. All competitors were young, bright, motivated and educated individuals with a self-declared aspiration to run a business. The effects of winning a prize over coming second are enormous: while 39 percent of the winners became self-employed within six months after the competition, only seven per cent of the runners-up achieved the same.
These approaches and findings resonate with a number of ideas about the limitations of microcredit as a policy tool to foster entrepreneurship. First, the repayment structure of microcredit is typically very tight. Borrowers are forced to start repaying immediately, before a new investment can generate income out of which repayments can be financed. In spite of this, demand for microcredit is often high, suggesting the existence of borrowing motives other than business activities. Further, flexible ways to provide cash to microenterprises might be more helpful to allow these firms to make longer term or high return, high risk investments. Second, while many microentrepreneurs are highly competent in providing the service or producing the product they sell, perhaps only a few of them have the skills to manage a large and sophisticated business organisation. Indeed, the positive impacts of providing capital to microentrepreneurs are concentrated in the few individuals who were initially running the most successful businesses. Policies that specifically identify and target high-potential entrepreneurs can be expected to yield the largest impacts.

**JOB CREATION AND IMPERFECT CONTRACT ENFORCEMENT**

Limited enforcement of the quality of work ("effort") in employment contracts can cause problems for labour management. This is especially important in poor countries with weak institutions (e.g. legal enforcement of contractual obligations), and low levels of social capital. Communication between workers and employers as a potential mitigating mechanism is helpful only to a limited extent. Building reputation through information sharing among competing employers is another way to encourage employee effort under certain conditions.

Limited enforcement of contracts affects the potential for growth in at least three ways. First, limited enforcement adds to the effective cost of labour for firms in the form of increased monitoring expenses. Second, efficient outcomes that may in principle lead to mutually beneficial outcomes, and that involve high investment, high effort, and high wages, may fail to be sustained. Third, it affects job creation because employers leave otherwise profitable activities untouched. Similarly, workers are less eager to participate in, and invest in skills for, the resulting low-wage labour market.

iIG research experimented with mechanisms that may potentially help to mitigate the problems associated with limited enforcement of contracts. These experiments were conducted using a newly formed mobile computer laboratory based on Android tablets. The advantage of developing this mobile lab specifically for fieldwork is that it can run independently of any existing mains power or network infrastructure. This allows researchers, for the first time, to conduct complicated computer-aided lab experiments within a field context in developing countries.

In one artifactual laboratory experiment, employers could invite high effort through good wage offers.
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and in some treatments additionally send messages in reaction to past worker performance. Similarly, workers were given the chance to promise to make an effort in their ‘job’ before entering into a contract. The experiment was run in Accra, Ghana with a population sampled from university students as well as actual entrepreneurs. Results show that effort is costly for workers, but could be compensated by higher wages. However, while wages can be contracted on — they are agreed upon in advance in exchange for hours worked, which are easily verified — it is much harder to write enforceable contracts on the quality of work. Indeed, in the experiment, 34 percent of workers chose low effort when effort provision is not enforced, despite high average wage offers by employers. This leads to losses for a considerable number of employers. The feedback mechanism was used widely by employers and workers, but it mostly had no significant effect on effort provision. An exception are positive messages in combination with high wage offers. This combination seems to reinforce considerations of fairness and reciprocity.

POVERTY, SOCIAL NETWORKS, AND EFFICIENCY

Social networks play an important role in the economic lives of poor people. Social identity and standing matter for both the formation of new networks, as well as interaction within given networks. If not appropriately addressed, the economic efficiency of networks, and any potential knowledge diffusion, are limited. Social networks provide important credit, insurance, or childcare services, particularly when these services are not provided by the government and private sector, or are too expensive to access. Networks play an important role in the diffusion of information, such as new technologies and better agricultural or health practices, all of which have the potential to increase productivity and income. In addition, social networks are important for many aspects of informal businesses, and for finding a job in the informal sector.

The nature of social networks encompasses a domain much larger than the purely economic one. As a result, people take into account a large set of considerations when they make decisions as part of the social network. Many policy interventions targeted at poor people are carried out using social networks, and a key issue for policy success is to understand economic behaviour within these networks.

Two ‘lab-in-the-field’ experiments in rural Maharashtra, India, shed light on the economic efficiency potential of social networks. In the first experiment, researchers analyse the formation of social networks, in particular studying whether farmers are able to form efficient links during an experimental game. Once the network is formed, a prize is paid to a random winner and all the other players who have linked to the winner directly or indirectly. Results show that while 70 percent of all link formation decisions are efficient, a high proportion of players chooses to link with most popular player,
reciprocates a link formed previously by another player, or chooses a member from the same randomly allocated group. In the second experiment, the network structure is given, and is designed to give some players the opportunity to provide public goods for the greater benefit, at a small cost to themselves. Contribution levels are nevertheless low. The reason behind this is that contributors try to match the expectations of others about their contribution – and these expectations are low.

These experiments offer some indication about ways in which an understanding of social networks might assist in formulating policy. First, agents in social networks seem to care about their social standing – about being friends with popular people, about social identity, and about what others think about them. Policy may have an unintended effect some of these relationships, and people may change their behaviour not just based on direct effects of policy, but also on network effects. Second, some policies may also directly target social networks. Understanding what motivates people’s interaction in social networks helps inform the design of injection and rollout strategies for new policy interventions, and the effectiveness of networks for technology and information diffusion.

EXPROPRIATION, COMPENSATION, AND GROWTH

Uncertainty about land expropriation and compensation reduces agricultural investment even when the planned expropriation is not carried out. Farmers who actually are expropriated and compensated adjust to their new circumstances very slowly, and may simply consume their cash payment. If policies surrounding compensation and assistance are not designed carefully, compensation can be exhausted after a few years.

One of the consequences of successful growth is that increasing industry, public infrastructure projects, and growing cities need land. Large areas of land in developing countries are also often transferred to foreign private and government investors for the production of food and biofuels. Expropriating land from small-scale farmers is an important way of providing land for new investment projects, and takes place in an environment where rural land markets function poorly. For successful policy design it is essential to know how farmers adapt after expropriation, how they use their compensation payments, and how they adjust behaviour in the period before land is expropriated and reallocated to its new use.

During the last three years, iiG research has surveyed farmers in Kombolcha, Ethiopia whose land is expropriated to make way for a new factory. All land in Ethiopia is owned by the government, and land can be reassigned for a different purpose if it is deemed to be in the ‘national interest’. Tenants nevertheless enjoy stable user rights, including the ability to rent out and bequeath land; and the right to compensation if land is expropriated.
Agricultural investment choices before expropriation can be distorted in at least two ways. First, anticipated expropriation exposes the households to uncertainty – about timing, about whether a particular plot will be expropriated or not, about compensation payments. Households may shift from planting risky crops to planting more stable crops, and reduce the use of costly inputs such as fertiliser. Second, they may reduce long-term agricultural investments that are irreversible and unverifiable; and which they therefore would not be compensated for adequately. This iiG study in Ethiopia provides some of the first empirical evidence for these factors. Households were surveyed after expropriation was announced (and then postponed), but before it was implemented. The survey found evidence for both types of adjustment. Further, it shows that adjustments are triggered by subjective beliefs about the likelihood of expropriation.

When land was finally expropriated, the affected households received large compensation payments. These amounted to about five times the total annual household consumption expenditure, or about USD 5,200. In other words, households received cash payments much larger than sums they would have previously handled. Several factors could impede a fast and optimal adjustment of households to their new situation. First, they may lack understanding of how to handle a financial asset compared to a real asset, especially in a high inflation environment (30 percent per annum). Second, they may transit slowly to new job opportunities in livestock-rearing, non-farm self-employment, or wage employment. Third, there may be physical constraints – for example, constraints on the size of herd that a plot may support. Fourth, general equilibrium may constrain the number of viable businesses that could be created, or the supply of low-skilled jobs available to former farmers. Findings indeed suggest that some of these constraints may be at play. Eight months after expropriation, it is found that households consume their cash payment, and only a small number switch to other income-generating activities, or invest their cash into productive assets. Some of this behaviour may be limited to the short term, but if the trend continues, most households would completely exhaust their compensation payments within five years of receiving them.

**Implications for Policy: Job Creation, Poverty, and Growth**

- **Policy should focus on microsavings in addition to microcredit.** Poor people who resort to microcredit if savings products are unavailable are made to bear an enormous financial cost.

- **Policy aimed at creating jobs through encouraging entrepreneurship should target programmes carefully.** Targeted cash grants can have a large impact on leveraging job creation by the average beneficiary firm.
Flexible ways of providing capital to high-potential entrepreneurs should be explored. Such a policy could come in the form of micro venture capital or micro equity.

There is a scope for policy to improve contracting institutions. Imperfect enforcement of the quality of work has adverse consequences for labour management and job creation.

Policy that works through, or changes, social networks must understand the network structure, and the motivation of agents. By definition, economic incentives and efficiency are only one dimension of behaviour in networks.

Policies for land transfer from local landowners to foreign investors should be carefully designed. Most importantly, in order to prevent social disruption, policies should reduce uncertainty in the period before investment projects start, and support farmers to find alternative livelihoods and manage potentially large one-off cash payments.

FOR MORE INFORMATION

For a discussion of micro-credit vs micro-savings, see Two sides of the same rupee? Comparing demand for microcredit and microsaving in a framed field experiment in rural Pakistan, by Uzma Afzal, Giovanna d’Adda, Marcel Fafchamps, Simon Quinn, and Farah Said (2014). CSAE Working paper 2014-32

The study on the value of start-up investment for young entrepreneurs is discussed in Aspire, by Marcel Fafchamps and Simon Quinn (2014). CSAE Working paper 2014-34

For more on the economic potential of social networks, see Cooperation and expectations in networks: Evidence from a network public good experiment in rural India, by Stefano Caria and Marcel Fafchamps (2014). CSAE Working paper 2014-33

For more on how farmers adjust after land transfers for industrial investment, see Expropriation, compensation and transitions to new livelihoods: Evidence from an expropriation in Ethiopia by Anthony Harris (2015). CSAE Working paper 2015-04
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