Does innovation and entrepreneurship play a role in growth? Is it possible to design policies that will successfully foster an entrepreneurial spirit? Is finance a constraint to starting a new business? The iiG research programme has considered these questions, investigating business startup and exit; whether a lump sum cash transfer might lead to a person starting a business; whether people prefer micro-credit to micro-savings products; and exploring issues of trust, reputation, sanctions and wage incentives in potential entrepreneur behaviour.

KEY FINDINGS

- Where land has been the major household asset, the transition from agriculture to alternative entrepreneurial activities is not straightforward. Cash compensation payments from land expropriation programmes may be insufficient to assist households to start new income-generating activities. Many such households lack the desire to start a business, and do not have basic business skills. In order to prevent households spiralling into poverty, policy makers should consider new ways to make this transition easier, especially in an environment where current land policy indiscriminately forces households to make this change.

- Saving and borrowing among microfinance clients can be substitutes, satisfying the same underlying demand for a regular schedule of deposits and lump-sum withdrawal. The traditional view of saving and borrowing as diametrically different behaviours may be inaccurate in many developing countries. In particular, if the poor have problems in accumulating savings to finance lumpy expenditures, then policy has a valuable role to play in identifying the most appropriate products to provide a mechanism for financing such lump-sum expenditure. This could help significantly in promoting the growth of small enterprises.

- Contract enforcement is a very important consideration in many entrepreneurial economic interactions. One characteristic of the labour market in developing countries is the scarcity of enforcement mechanisms. This has a drastic impact on the efficiency of many economic interactions, such as hiring and motivating workers. Employers must find other ways of getting workers to exert high levels of effort. Since many mechanisms appear to be ineffective in helping employers to discipline underperforming workers, policy could usefully focus on those alternative mechanisms that are most effective.
ASSET TRANSFORMATION AND BUSINESS START-UPS

Government intervention in land transactions is common in developing countries, especially where land markets function poorly. This is particularly the case in Ethiopia, where the expropriation of farmland from small-scale farmers has been used by the government as a way of providing new land for industrial investors and urban expansion. Expropriation deprives many people of their most important income-generating asset — land — and forces them to find new ways to support their household. iiG researchers have evaluated a case of expropriation in Ethiopia, investigating whether households used the cash transfer to engage in alternative income-generating activities or to start up new businesses.

The study investigates the investment choices of small-scale farmers facing an imminent risk of expropriation, questioning both households who eventually lost their land and their neighbours from the same administrative area that did not. The focus of this baseline survey is two mechanisms by which a household’s expectations about expropriation can distort agricultural investment decisions. First, households may employ ex-ante coping strategies to mitigate against any income risk they may face in the year following expropriation. Second, households may react to investment incentives associated with expropriation by reducing investment in immovable, unverifiable investments for which the household will not be compensated, such as organic fertilizer. Using a cross-section of households living in and around the site of a proposed factory, results show that those households that anticipate expropriation choose a safer crop portfolio, reduce their use of fertilizer inputs, and avoid investing in the long-term fertility of plots that will ultimately be expropriated. There is no evidence of households borrowing money in order to invest in a new business or retraining members of their household to work in the non-agriculture sector.

The second focus of this research looks at outcomes following expropriation, using data from a survey conducted eight months after households lost their land and received compensatory cash payments. Households in this study experienced a significant intervention: on average they lost half of their farmland and received the equivalent of USD 5,200 as compensation, amounting to nearly five times average total annual consumption expenditure and nine times the value of their livestock holding. Researchers investigated whether the lump-sum payments received by households were sufficient compensation for the lost land and how households subsequently adjusted their asset and activity portfolio. The evaluation focused on the extent to which households use the financial compensation payments for productive investments, changes in their income-generating activities, and changes in consumption levels following expropriation. Results showed that, to some extent, these households responded by moving into new income-generating activities, investing in new businesses and adjusting their asset portfolios. Households also increased their consumption expenditure relative to the
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comparison group and increased their consumption of durable goods. Households who lost most of their land also received the largest payments and were more likely to participate in non-farm generating activities.

Before the expropriation, households were asked a hypothetical question about how they would use the cash payment. Households on average predicted that they would spend 25% of their compensation payment on a non-farm business and that they would save 25%. In practice, households on average kept approximately 60% of this compensation payment in the bank and only invested 6% of it in non-farm businesses. This striking result suggests that, at least in the short run, rates of return are likely to be very low and scope for investing cash transfers is limited.

Land serves as more than just a productive asset for many farmers in developing countries; it can act as insurance and security in old age and is a major asset that can be passed onto children. In a situation where the land is likely to be expropriated, compensation payments should assist households in making the transition from small-scale agriculture to some other income generating activity. Results from this iiG research reveal that households are not yet putting large parts of their cash payments to productive use. More worryingly, many households seem to be using their compensation payments to meet general consumption needs and to pay for household expenses. If this trend continues, many households will be left without either a productive asset or a large amount of cash. Many households lack the business skills or human capital to make the transition from farming to alternative income-generating activities, and the local labour market has not absorbed sufficient numbers of household members to replace the lost income from farming. Without major changes to land markets, expropriation will continue to play an important part in the process of industrialization and development. Policy makers need to consider new ways to assist people in making the transition from small-scale farming.

Survival of Manufacturing Firms in a Changing Economy

The Ghanaian economy has been characterised by drastic changes over the last decades: high levels of growth, increases in consumption expenditure, and a rise of the service industry. Traditionally, about a tenth of Ghanaian output was produced in the manufacturing sector, but this has been declining in recent years. On the basis of a follow-up survey conducted in 2013 on firms interviewed as part of the 2003 National Industrial Census, iiG researchers investigate the performance of manufacturing firms in this rapidly changing environment. The goal of the study was to answer two basic questions: what determines whether a firm survives or fails; and what determines whether it grows or shrinks.
Results reveal that only around sixty percent of firms operating in 2003 were still operating in 2013. In the case of small and medium-sized firms (below 75 employees), personal circumstances, such as the death of the owner or relocation, as well as the loss of building, land or equipment were often given as the main reason why the business stopped operating. This seemed to be less of a reason in large firms (more than 75 employees); here, increased operating costs were given as the main reason in more than a fifth of the cases. Size is very important; larger firms are less likely to exit than small or medium sized firms, even when controlling for other factors, such as location. This in line with earlier studies done in both developed as well as developing countries.

There are striking regional and sector differences in the results. Compared with firms in Kumasi and other large Ghanaian cities, firms in the capital, Accra, were more likely to cease trading. However, firms who did manage to survive in Accra were more likely to grow. Results also reveal stark differences between sectors. The metal and machinery industry is the best performing industry; exit rates are low and employment growth rates are higher than in other industries, such as beverages and food or textiles.

Employment by manufacturing firms seems to have dropped drastically, and aggregate employment in surviving firms decreased by 27%. Only about a quarter of the surviving firms that were interviewed increased employment by more than 5%, and two thirds actually reduced employment. Results do not paint a positive picture of the state of manufacturing in Ghana.

Given the changing dynamics of the Ghanaian economy, targeting this situation through policy changes is difficult. However, this study of the causes of exit points out two that could be targeted by policy: losses of building and land (affecting mainly small and medium-sized enterprises), and increasing input costs (affecting mainly larger enterprises). Policies working to secure formal property rights would guard against the potential loss of buildings and land, and policies aimed at reducing the costs of inputs — for example lowering trade barriers for these products — could help the manufacturing industry.

**UNDERSTANDING THE DEMAND FOR BORROWING AND SAVING**

Saving and borrowing, which are generally viewed as a means to defer or expedite consumption, are traditionally considered as diametrically different behaviours. However, in many developing countries, individuals struggle to hold savings over time and occasionally wish to incur ‘lumpy’ expenditures, for example a fixed asset for their business. Under these conditions, the same individual may demand both savings and credit; a demand which is unrelated to any desire to defer or expedite consumption.
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Rather, both of these products can provide a valuable mechanism by which a lump-sum expenditure can be implemented at some future time. In doing so, each product meets the same demand for a regular schedule of deposits and a lump-sum withdrawal.

iGiG research in rural Pakistan modelled a simple repayment structure on the idea of a rotating savings and credit association (ROSCA) and offered it as a microfinance product. The survey was designed to test a ‘traditional’ model of microfinance, in which participants prefer either to borrow or save, and an alternative model where participants demand both borrowing and savings products as opportunities to make lump-sum payments. Demand for the newly designed microfinance product was high, with take-up around 65%, and results provide substantial evidence against the traditional model, indicating that the same pool of participants simultaneously demand both microcredit and microsaving. These results are very useful for understanding recent research on microfinance, in particular the growing empirical evidence on the inability of standard micro-credit contracts to generate growth in small businesses.

UNDERSTANDING LABOUR MARKET DYNAMICS

Entrepreneurs often have to engage in a number of economic interactions, such as the hiring of a worker or trading of a good or service, which can be risky affairs when there is no possibility of contract enforcement. Trust therefore plays a very important role in many trading interactions, including labour markets. One strand of iGiG research in Ghana uses experimental methods to assess the effect of contract enforcement in labour markets using a gift-exchange game where participants, recruited from universities in Accra, are designated as either employers or employees. In the game, employers make offers to workers, specifying how much they will pay them and the level of effort they desire. The worker then chooses which offer to accept and subsequently how much effort they are going to put in. A higher level of effort is more costly to the worker, but gives the employer a higher payoff. The worker receives the payment regardless of how much effort he or she chooses to invest. Preliminary results show that limited enforcement of effort levels has a drastic impact on efficiency; lowering both the income of the employer and the worker.

Firms surveys have shown that management of workers is often more problematic in developing countries, and in particular in sub-Saharan Africa, where manager to worker ratios are often found to be higher. When employers cannot rely on an institutional framework to compel high levels of effort from their workers, finding other ways of doing so are essential.

In another iGiG project in Ghana, a laboratory experiment was conducted in a labour market setting, using both students and entrepreneurs in Accra. Researchers looked at several ways that employers could motivate their workers: by giving them a higher wage, or by sending them a motivational
message (either praising or shaming) after the worker has indicated the particular level of effort they are going to put in. The first option, raising the wage, has a positive effect on high effort provision, in line with other work done in developed countries. However, higher offers can also make employers more vulnerable to workers defecting, and it turns out that this actually leads to income losses. The second option for the employer is to send feedback to the worker. Results show that positive messages reinforce the choice of high effort, but only when the wage is sufficiently high. The positive message also has an effect on the sender of the message: the wage offered by the employer who sent out the message increases. Remarkably, results do not show a significant effect of sending out a negative message.

**IMPLICATIONS FOR POLICY: ENTREPRENEURSHIP**

- Consider business training alongside cash grants to promote entrepreneurship amongst households affected by land expropriation programmes.

- Consider alternative microfinance products to promote lumpy investment by microentrepreneurs, such as microsavings.

- Focus on the most effective alternative mechanisms for enforcement in microenterprise employment contracts, such as sending positive messages to reinforce high effort.
To find out more about what households do with lump sum cash transfers following land expropriation, see *How do households cope with expropriation? Evidence from an expropriation programme in Ethiopia* by Anthony Harris (2014). CSAE WPS 2015-04.

For a discussion of how the manufacturing sector has changed in Ghana, see *Firm survival and change in Ghana, 2003-2013* by Elwyn Davies and Andrew Kerr (2015). CSAE WPS 2015-06.


For more information on understanding the dynamics of a changing labour market, see http://www.iig.ox.ac.uk/research/59-Firm-growth-and-performance-over-time.htm
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