9

Reluctant Entrepreneurs

A businessman sitting next to us on a plane many years ago described how, when he returned to India in the mid-1970s after completing his MBA in the United States, his uncle had taken him out for a lesson in true entrepreneurship. It was early one morning when he and his uncle headed for the Bombay (as Mumbai was then called) Stock Exchange. But instead of going into the modern tower that houses the exchange, his uncle wanted him to observe four women who were sitting on the sidewalk, facing the road in front of the exchange. The aspiring businessman and his uncle stood for a few moments watching them. The women mostly did nothing. But occasionally, when the traffic stopped, they would get up, scrape something off the road, and put it in plastic carrier bags next to them, before returning to their seats. After this happened several times, the uncle asked him if he understood their business model. He confessed to be baffled. So the uncle had to explain: Every morning before dawn the women went to the beach, where they collected wet sea sand. They then laid it evenly on the street before the real traffic began. When the cars started driving over the sand, the heat from their wheels dried it. All they had to do then was occasionally to scrape off the top layer of sand, now dry. By nine or ten, they had a quantity of dry sand, which they brought back to the slum to sell in small packets made from discarded newspapers: The local women used the dry sand to scrub their dishes. This, the uncle reckoned, was true entrepreneurship: If you have very little, use your ingenuity to create something out of nothing.

Women from slums who manage to make a living, quite literally, from the wheels of Bombay's commerce epitomize the incredible spirit of innovation and entrepreneurship the poor often display. This book could easily be filled with stories of creativity and resilience among owners of small-scale enterprises. Such images have been a powerful motivation for the recent microfinance and "social business" movement, which starts from the premise that the poor are natural-born entrepreneurs, and we can eradicate poverty by giving them the right environment and a little bit of help getting started. In the words of John Hatch, the CEO of FINCA, one of the largest microfinance institutions in the world: "Give poor communities the opportunities, and get out of the way."

Yet there are some perhaps surprising instances when, after you have gotten out of the way, the poor do not seem so ready to roll. Since 2007, we have been working with Al Amana, one of Morocco's largest MFIs, to evaluate the impact of access to microcredit in rural communities that had previously been completely excluded from formal financial sources. After about two years, it became evident that Al Amana was not getting as many clients in the villages as had been anticipated. Despite the lack of alternatives, less than one in six eligible families was interested in a loan. To try to understand why, we went with some Al Amana staff to interview a few families in a village called Hafret Ben Tayeb, where no one had borrowed. We were received by Allal Ben Sedan, the father of three sons and two daughters, all adults. He had four cows, one donkey, and eighty olive trees. One of his sons worked in the army; another tended to the animals; the third was mostly idle (his main activity was harvesting snails when they were in season). We asked Ben Sedan whether he would want to take a loan to buy some more cows, which his idle son could take care of. He explained that his field was too small—if he bought more cows they would have nowhere to graze. Before leaving, we asked him if there was anything else he could do with a loan. He replied, "No, nothing. We have enough. We have cows, we sell them, we sell the olives. That is enough for our family."

A few days later, we met Fouad Abdelmoumni, the founder (and then CEO) of Al Amana, a man of great warmth and intelligence, who in a previous life as an activist had spent years in jail as a political prisoner and was entirely devoted to improving the lives of the poor. We discussed the surprisingly low demand for microcredit. In particular, we went back to the story of Ben Sedan, who was convinced that he had no use for more money. Fouad drew up a clearly feasible business plan for him. He could take a loan, build a stable, and buy four young cows. They would not need to graze in a field: They could be fed in the stable. Within eight months, he could sell the cows for a hefty profit. Fouad was persuaded that if someone explained this to him, Ben Sedan would see the wisdom of this plan and take out a loan.

We were struck by the contrast between Fouad's enthusiasm and Ben Sedan's insistence that his family did not need anything. Yet Ben Sedan was not at all resigned to remaining poor: He was very proud of his son, who had been trained as a nurse and worked as a paramedic in the army. His son, he thought, had a real chance at a better life. So was Fouad right that Ben Sedan just needed to be led to a business plan? Or was Ben Sedan, who, after all, had been in the business of raising cows for most of his adult life, telling us something important?

Muhammad Yunus, founder of the world-famous Grameen Bank, often describes the poor as natural entrepreneurs. Combined with the late business guru C. K. Prahalad's exhortation to businessmen to focus more on what he called the "bottom of the pyramid,"[1] the idea of the entrepreneurial poor is helping to secure a space within the overall anti-poverty policy discourse where big business and high finance feel comfortable getting involved. The traditional strategies of public action are being supplemented by private actions, often taken by some of the leaders of the corporate world (for example, Pierre Omidyar of eBay), directed at helping the poor realize their true potential as entrepreneurs.

The basic premise of Yunus's view of the world, shared by many in the microfinance movement, is that everyone has a shot at being a successful entrepreneur. More specifically, there are two distinct reasons the poor may be particularly likely to find amazing opportunities. First, they haven't been given a chance, so their ideas are probably fresher and less likely to have been tried already. Second, the market so far has mostly ignored the bottom of the pyramid. As a result, it is argued, innovations that better the lives of the poor have to be the low-hanging fruit, and who better than the poor themselves to think of what they could be?

CAPITALISTS WITHOUT CAPITAL

Indeed, every self-respecting MFI has a Web site with a number of stories of successful microfinance clients who took advantage of an unusual opportunity to make a fortune. They are real: We have met several of those clients. In Guntur, in Andhra Pradesh, we met a client of Spandana who had built a very successful business collecting trash and sorting it. She started as a trash collector, which is pretty much as low as you can go in the Indian social and economic hierarchy. With her first loan from Spandana, she just paid back the loan she had from a moneylender, with its crippling interest rate. She knew that the businesses that bought the trash from her sorted it before selling it to recyclers—there would be bits of metal and tungsten from the filaments of used lightbulbs, plastics, organic matter for composting, and so forth, each of which went to a different recycler. With the breathing space that the first loan bought her, she decided to do the sorting herself to make some extra money. With her second loan and the savings from the first, she bought a cart, which helped her collect more trash, and because there was now more sorting to be done, she somehow managed to get her husband, who used to spend most of his time drinking, to start working with her. Together they were making significantly more money, and after receiving the third loan, they started buying trash from others. By the time we met her, she was at the helm of a large network of trash collectors, no longer a collector herself but an organizer of trash collection. Her husband, too, was working full-time by then: We saw him pounding away on a piece of metal, looking sober but a trifle glum.

MFIs advertise the stories of their most successful borrowers, but there are also entrepreneurs who succeed even when they have no access to microfinance. In 1982, Xu Aihua was one of the best middle-school students in her village, in the Shaoxing region of Zhejiang Province in China. Her parents were peasants and, like almost everyone else, had very little disposable cash. She was so bright, however, that the village decided to send her for a year to the local school of fashion design (whatever that meant, exactly, since everyone still wore Mao suits). The idea was that she would eventually take a leadership role in the local town and village enterprise that had just been set up (these were the early years of Chinese liberalization). But when she came back after her training, the local elders got cold feet—she was a girl, after all, not yet twenty. So she was sent unceremoniously home, jobless.

Xu Aihua had no intention of sitting idle. She decided that she had to do something, but her parents were too poor to help. So she borrowed a megaphone and went around the village offering to teach young women how to make garments for a fee of 15 yuan ($13 USD PPP). She recruited 100 students, and with the money that she had just collected, she bought a secondhand sewing machine and some surplus fabric from the local state-owned factories, and started teaching. At the end of the course, she kept her eight best students and launched a business. The women would arrive every morning with their sewing machines on their back (they each got their parents to buy them one), then start cutting and sewing. They made uniforms for the local factory workers. At first they worked at Xu Aihua's home, but as the business expanded and Xu Aihua trained and hired more people, they moved to a building that she rented from the village government.

By 1991, she had saved so much from the profits of her business that she could afford to buy sixty automatic sewing machines for 54,000 yuan ($27,600 USD PPP). Her total fixed capital had grown more than a hundredfold in eight years. That is 80 percent per year. Even if we allow for an inflation rate of 10 percent per year, a real growth rate, net of inflation, of more than 70 percent a year is impressive. By this time, she was an established entrepreneur. Export contracts arrived soon after, and she now sells to Macy's, Benetton, JC Penney, and other major retailers. In 2008, she made her first investment in real estate of 20 million yuan ($4.4 million USD), because, as she says, she had some cash sitting around, and most other people did not.

Xu Aihua is not a typical case, of course: She was especially bright, and her village sent her to school. However, there is no dearth of success stories of entrepreneurship among the poor. And there is certainly no shortage of entrepreneurs. On average in our eighteen-country data set, 44 percent of the extremely poor in urban areas (those who live on under 99 cents a day) operate a nonagricultural business. Even among the rural extremely poor, many—from 3 percent in Brazil to up to 44 percent in Ecuador (and 24 percent on average)—operate a nonagricultural business, in addition to the large number who run a farm. The number of entrepreneurs is roughly the same among the somewhat less poor in the same countries. Compare this to the Organization for Economic Co-operation and Development (OECD) average: 12 percent of those in the workforce describe themselves as self-employed. Purely in terms of stated occupations, most income groups in poor countries seem to be more entrepreneurial than their counterparts in the developed world—the poor no less so than others, an observation that inspired Harvard Business School professor Tarun Khanna's book, *Billions of Entrepreneurs.*[2]

The sheer number of business owners among the poor is impressive. After all, everything seems to militate against the poor being entrepreneurs. They have less capital of their own (almost by definition) and, as we saw in Chapters 6 and 7, little access to formal insurance, banks, and other sources of inexpensive finance. Moneylenders, who are the main source of untied financing (trade credit is an example of tied financing because it is tied to buying something and therefore cannot be used for paying wages) for those who cannot borrow enough from friends or family, charge interest rates of 4 percent a month or more. As a result, the poor are less able to make the investments needed to run a proper business and are more vulnerable to any additional risk that comes from the business itself. The very fact that they are still about as likely to go into business as their richer counterparts is often interpreted as a sign of their entrepreneurial spirit.

The fact that even after paying very high interest rates, the poor still manage to make enough money to repay their loans (we have seen that it is very rare for them to default) must mean that they are earning even more money per rupee invested. Otherwise, they would not borrow. This implies that the rate of return on the cash invested in their businesses is remarkably high. Fifty percent a year, which is what many of them pay, is quite a bit more than you can get by investing in the Dow Jones (especially these days, but even the long-term average return is about 9 percent a year).

Of course, not everyone borrows. Perhaps only the few entrepreneurs who have high returns in their businesses borrow, and everyone else has very low returns. However, a project conducted in Sri Lanka suggests otherwise. A number of owners of tiny businesses—retail shops, repair shops, lace makers, and the like—were invited to participate in a lottery. The winners (two-thirds of them) would get a grant for their business, worth either 10,000 rupees ($250 USD PPP) or 20,000 rupees ($500 USD PPP).[3]

The grants were tiny by global standards but were reasonably large as far as these businesses were concerned; for many, $250 was the entire capital stock they had started from. The lottery winners of the grants had no trouble putting the money to good use. The return on the first $250 was over 60 percent a year for the average business. Subsequently, the same exercise was repeated with small businesses in Mexico.[4] The returns found in that experiment were even higher, reaching 10–15 percent per month.

Another program, conceived by BRAC, a large MFI in Bangladesh, and now imitated in a number of developing countries, shows that when given the right kind of help, even the poorest of the poor have the ability to succeed in running small businesses, and these small businesses can change their lives. The program targets those identified by their fellow villagers as the poorest among them: Many of them live purely on others' generosity. MFIs typically do not lend to these clients, who are deemed incapable of running a business and regularly reimbursing their loan. To get them started, BRAC designed a program in which they would be given an asset (a pair of cows, a few goats, a sewing machine, and so on), a small financial allowance for a few months (to serve as working capital and to ensure they would not be tempted to liquidate the asset), and a lot of hand-holding: regular meetings, literacy classes, encouragement to save a little bit every week. Variants of this program are currently being evaluated in six countries, using randomized controlled trials (RCTs). We were involved in one of these studies, in partnership with Bandhan, an MFI in West Bengal. We visited households before the program was started and heard, from each of the families that were selected for the program, stories of crisis and desperation: A husband was a drunkard and regularly beat his wife; another died in an accident, leaving a young family behind; a widow was abandoned by her children; and so forth. But after two years, the difference is impressive: Compared to other extremely poor households that were not selected to participate, the beneficiaries have more animals and other business assets; they earn more from livestock and other animals, but they also work longer hours and earn more from working for others. Their total monthly spending is up by 10 percent; food expenditure is what increases the most, and they are less likely to complain that they do not have enough to eat. Even more impressive, their outlook on life seems to have changed. The way they describe their own health, happiness, and economic status is much more positive. They save more and are also more likely to say they are willing to borrow—they are now eligible to borrow from the MFI—and they feel confident managing assets.

Of course, this has not made them rich by any standards—they are only 10 percent richer after two years in terms of consumption, which means they are still poor. But the initial gift and support seem to have started a virtuous circle: Given the chance, it seems that even people who had been hit by extreme hardship were able to take charge of their lives and start their exit out of extreme poverty.[5]

THE BUSINESSES OF THE POOR

Seeing results like these, it is not difficult to share the enthusiasm of Muhammad Yunus or Fouad Abdelmoumni for the potential of investing in the poor: So many have managed to be entrepreneurs in the face of so much adversity, and have made so much out of so little. There are, however, two troubling shadows in this otherwise sunny picture. First, while many of the poor operate businesses, they mainly operate *tiny* businesses. And second, these tiny businesses are, for the most part, making very little money.

Very Small and Unprofitable Businesses

In our eighteen-country data set, the majority of businesses operated by the poor have no paid staff, with the average number of paid employees ranging from essentially zero in rural Morocco to 0.57 in urban Mexico. The assets of these businesses also tend to be very limited. In Hyderabad, only 20 percent of the businesses have a dedicated room of their own. Very few have any machines or a vehicle. The most common assets are tables, scales, and pushcarts.

Obviously, if these people had large and successful businesses, they wouldn't be poor any longer. The problem is, notwithstanding the exceptional stories of the trash collector or Xu Aihua, the vast majority of the businesses run by the poor never grow to the point where they start having any employees or much in the way of assets. In Mexico, for example, 15 percent of those living on less than 99 cents per day had a business in 2002. Three years later, when the same families were visited again, only 41 percent of these businesses were still in operation. Out of those that were observed in both periods, one in five of the businesses that had zero employees in 2002 had one by 2005. But almost one-half of those that had one in 2002 had none by 2005. Similarly, in Indonesia, only two-thirds of the businesses of the poor survived five years. And out of those that did, the fraction that had one employee or more did not increase over the five-year period.

Another characteristic of the businesses of the poor and the near-poor is that, on average, they are not making much money. We calculated profits and sales of small businesses in Hyderabad: The average sales figure was 11,751 rupees ($730 USD PPP) per month, and the median, 3,600 rupees. The average monthly profit after deducting any rent paid but not including the unpaid time spent by household members was 1,859 rupees ($115 USD PPP) and the median, 1,035 rupees:

It is as if the median businesses were generating just enough money to pay one member about 34 rupees per day, or about $2 USD PPP. In our Hyderabad data set, 15 percent of businesses had lost money in the last month, after subtracting rents. When we valued the hours spent by household members, even at the low rate of 8 rupees an hour (which would give someone close to the minimum wage for an eight-hour day), the average profits turned mildly negative. In Thailand, the median *annual* profit from a business of this scale was 5,000 baht ($305 at USD PPP) after deducting business costs but without accounting for family labor time. Seven percent of the household-run businesses had lost money in the last year, once again *before deducting the value of family labor.*[6]

The low profitability of businesses run by the poor also explains why, as we saw in Chapter 7 (in our randomized controlled trial of the Spandana program, for example), microcredit does not seem to lead to a radical transformation in the clients' lives. If the businesses run by the poor are generally unprofitable, this may well explain why giving them a loan to start a new business does not lead to a drastic improvement in their welfare.

The Marginal and the Average

But wait. Didn't we start off making the point that the return on investment in these small businesses is very high?

What is confusing here are the two possible uses of the word *return*. Economists (for once, probably usefully) distinguish between the *marginal* return on a dollar and the *overall* return from a business. The marginal return on a dollar is the answer to the question "What would happen to your revenue net of all operating costs (but not interest costs) if you were to invest $1 less, or $1 more?" The marginal return is what is relevant when you ask whether you should cut your investment a little (or grow it a little): If investing $1 less allows you to borrow $1 less and therefore repay 4 cents less in principal and interest, you would want to do so if the marginal return is less than 4 percent and not otherwise. So when people borrow at a rate of interest of 4 percent a month, it must mean that their *marginal* return is at least 4 percent a month. The ability of the poor to borrow and repay and the high extra profits made thanks to the extra $250 in the Sri Lanka experiment show us that the businesses of the poor have high marginal return: Growing them a little would be worthwhile.

The overall return on a business, on the other hand, is the *total* revenue net of *operating* expenses (the costs of materials, any wages you pay to your workers, and so on). This is what you can take home at the end of the day. You should look at the overall return to decide whether you should be in that business in the first place. If it is not high enough to cover the value of the time you are putting in the business, plus what it cost you to set up the business, and if you don't expect things to improve dramatically, then you should shut it down.

The paradox is explained by the fact that marginal returns can be high even though overall returns are low. In Figure 1 below, the curve OP represents the relation between the amount of investment in the firm (measured along the horizontal axis, OI) and its overall returns (measured along the vertical axis, OR), or what economists call the *production technology*. The overall return, for any invested capital of size K, is the height of the curve, whereas the marginal return is the change in height when you go from K to K+1. It tells us by how much the overall return increases when we increase the investment in the firm just a little bit.

The curve in Figure 1 looks like the inverted L-curve we discussed in Chapter 1: The returns are first high, and then lower. OP is steepest when the investment is small (nearest to O) and slowly flattens out (as it gets closer to P)—which means that increasing the amount invested increases returns the most when the initial investment is small, and this increase eventually tapers off. In other words, the marginal return is high when investment is small.

To see how this works, think of someone who has just started a shop in her home. She spends some money building shelves and a counter, but then she runs out of money and has nothing to sell. The overall return on her business is zero: not high enough to cover the cost of the shelves. Then her mother lends her 100,000 rupiahs ($18 USD PPP), and she buys a few packages of cookies to put on her empty shelves. The kids from the neighborhood notice that she has the brand of cookies they like and come and buy all of them. She makes 150,000

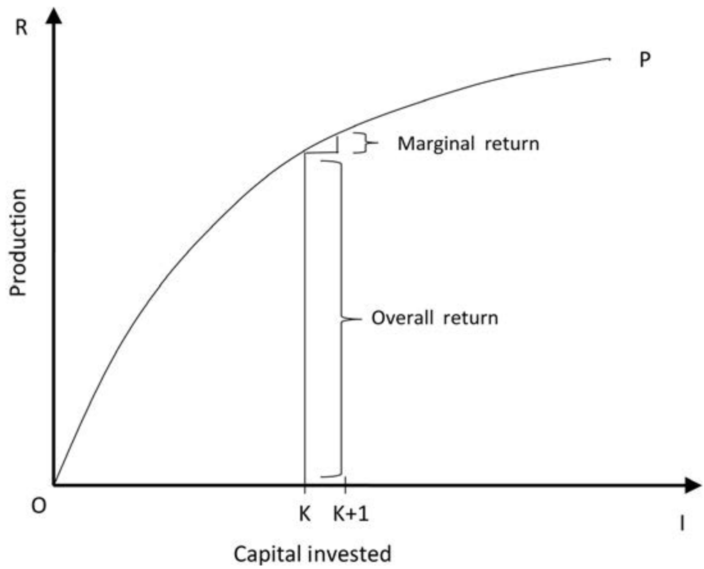

Figure 1: Marginal and Average Return

rupiahs. The marginal return is 1.5 rupiahs per rupiah of her mother's loan, or 50 percent net, which is not bad at all for a week. But the overall return is nonetheless just 50,000 rupiahs—and that doesn't cover the cost of her time and building the shelves and the counter.

Then our shopkeeper gets a loan of 3 million rupiahs and buys enough cookies and candy to fill up her shelves. The kids now tell their other friends and she sells a lot of her stock, but by the time all of the new customers get there, some of the cookies have gotten stale and can't be sold. Still, she makes 3.6 million rupiahs in a week. The marginal return is now much lower than 50 percent—her investment was thirty times larger (3 million versus 100,000) but her revenues are only twelve times as much. Her overall return, though, is now a respectable 600,000 rupiahs ($107 USD PPP), enough to make staying in business a real possibility.

This is exactly how it looks for many of the poor. The empty shelves, in particular, are not a figment of our imagination. The entire stock of a shop we visited in the outskirts of the town of Gulbarga in northern Karnataka, about a five-hour drive from Hyderabad, consisted of largely empty plastic jars in a dimly lit room. It did not take long to take inventory:

Inventory of a General Store in a Village in Rural Karnataka, India

1 jar of savory snacks
3 jars of soft candies
1 jar and 1 small bag of wrapped hard candies
2 jars of chickpeas
1 jar of Magimix instant stock
1 packet of bread (5 pieces)
1 packet of *papadum* (a snack made from lentils)
1 packet of crispbread (20 pieces)
2 packets of cookies
36 incense sticks
20 bars of Lux soap
180 individual portions of *pan parag* (a combination of betel nuts and chewing tobacco)
20 tea bags
40 individual packets of *haldi* powder (turmeric)
5 small bottles of talcum powder
3 packs of cigarettes
55 small packets of *bidis* (thin, flavored cigarettes)
35 larger packets of *bidis*
3 packs of washing powder (500 grams each)
15 small packs of Parle-G biscuits (cookies)
6 individual-size packets of shampoo

During the two hours we spent with this household, we saw two customers. One bought a single cigarette, the other a few sticks of incense. Clearly, the marginal return of increasing the size of the inventory a little was potentially extremely high, especially if the family could try to buy something that the other shops in the same village did not supply. But the overall return of the activity was very low: With this volume of sales, it was not really worth the time spent sitting in the shop all day.

There are countless such shops in developing countries, several in every village, thousands in alleys of big cities, all selling the same very limited inventory. And the same is true of the fruit vendors, the coconut sellers, and the snack stalls. Walking down the main street of the biggest slum in the town of Guntur at 9:00 AM, it is hard to miss the long line of women selling *dosas,* the rice-and-lentil pancakes that are South India's answer to the morning croissant. Smeared with a spicy sauce, and wrapped in a piece of newspaper or a banana leaf, these sell for 1 rupee (roughly 5 cents, at PPP). By our count, one particular morning, there was one *dosa* seller for every six houses. The result was that at any particular time, many of these women were just waiting around for customers. It seemed obvious that if they could have merged three of the businesses together, and sent the others on some other endeavor, they could have made more money.

This is the paradox of the poor and their businesses: They are energetic and resourceful and manage to make a lot out of very little. But most of this energy is spent on businesses that are too small and utterly undifferentiated from the many others around them. As a result, their operators have no chance to earn a reasonable living. The creative sand-driers of Mumbai had spotted an opportunity to make a profitable use of the resources available to them: some free time and the sand on the beach. But what the businessman's uncle had failed to point out was that, for all their ingenuity, the profits from this activity were almost surely negligible.

The very small scale of many of these businesses explains why their overall returns are often so low, despite the high marginal return. But it brings to light a new puzzle. The fact that marginal returns are high means that it is easy to grow the overall returns—just put more money into the business. So why aren't all the small businesses growing really fast?

One part of that answer we already know—most of these businesses cannot borrow very much, and what they can borrow is very expensive. But this is not the whole answer. First, as we saw, although there are millions of microcredit borrowers, there are many more who have the opportunity to borrow but choose not to. Ben Sedan was one of them. He had a business raising cows and could have grown it with a microcredit loan, but he decided against it. Even in Hyderabad, where there are several competing MFIs, the sign-up rate for any microcredit loan among families who were eligible to borrow was only 27 percent, and only 21 percent of those who had a small business had taken a microcredit loan.

Moreover, even those who cannot borrow can save: Consider the shopkeeper family in Gulbarga. They lived on about $2 per day per person. In nearby Hyderabad, our data show that those with this level of consumption spend about 10 percent of their total monthly expenditures on health care, whereas those living on less than 99 cents a day spend about 6.3 percent. If, instead of spending an extra 3.7 percent of his budget on health care, our shopkeeper had used it to build up his inventory, he could have doubled his inventory in a year. Alternatively, the family could cut down completely on cigarettes and alcohol and save about 3 percent of their daily expenditure per capita: This would allow them to double their inventory in about fifteen months. Why don't they?

The experiment in Sri Lanka provides another striking illustration of the fact that financing is not the only barrier to expansion. Recall that entrepreneurs who got $250 made a lot of money—far more, per dollar invested, than most successful firms in the United States. But here is the catch: The profits of micro-entrepreneurs who received the $500 grant *did not increase any more than the profits of those who received the $250 grant, in absolute terms*. In part, it is because those who received the $500 grant did not choose to invest all of it in their business: They invested about half of it, and used the rest to buy things for their home.

What is going on? Could the owners really have something better to do with this free money, given how high the marginal return is?

The notable fact is that the Sri Lankan micro-entrepreneurs did invest the first tranche of dollars. If they chose not to invest the second tranche, it is perhaps because they thought that their businesses would not be able to absorb it: Investing the entire amount would have meant tripling the capital stock of the average business, and a step like that

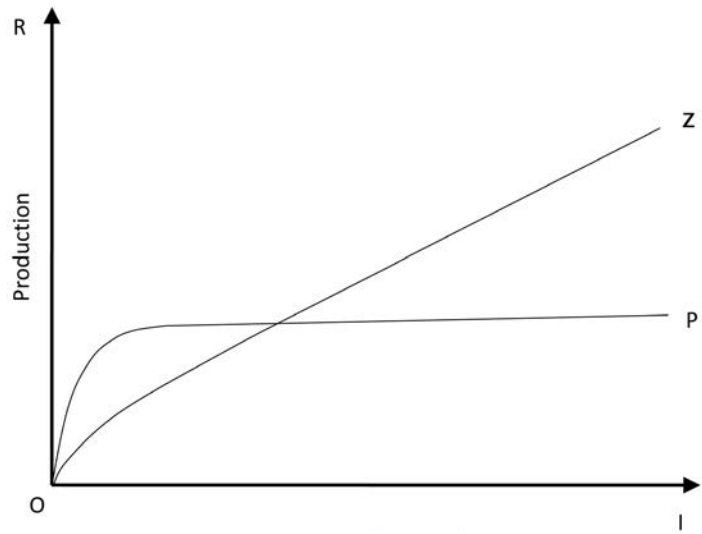

Figure 2: Two Technologies

might well require hiring a new employee or finding more storage space, which then would cost much more money.

So part of the reason the businesses of the poor don't grow, it seems to us, goes back to the nature of the businesses they operate. Recall the inverted L-shape in Figure 1, showing that overall returns could be low even when the marginal returns are high. Figure 2 shows two versions of the curve in Figure 1: One, denoted OP, is very steep when it starts out and then flattens very quickly. The other, OZ, goes up less quickly to start with but keeps going up a long way.

If, in the real world, the profits of poor businesses look like the curve OP, then it is easy for a very small firm to grow, but the growth potential tapers off quite fast. This is similar to the shopkeeper example: Once you have set aside some room in your home for a shop and have committed to working there a few hours a day, your profits will be much higher if you have enough goods to fill up the shelves and keep you busy than if you have next to nothing (as many shops seem to). But once your shelves are full, any further expansion probably would not have enough marginal return to pay off the very high interest rates on the loan you might use to make it happen. So all the businesses will stay small. If the shape is more like OZ, on the other hand, there is much more scope for growing the business. Our reading of the evidence is that for most poor people, the world is more like OP.

Of course, we know that it can't all be like OP—otherwise there would be no large firms anywhere. Perhaps the businesses of shopkeepers, tailors, and sari sellers look like OP, but it must be possible for some other kinds of businesses to use more productive capital. It is clearly possible to run large retail chains or textile factories if one can buy the right equipment, but doing so must require either some special skill or a much larger up-front investment. You can start Microsoft in a garage somewhere and keep scaling up, but to do so you need to be the kind of person who is at the absolute cutting edge of some new product. For most people, that is not really an option. The alternative is to invest enough to get a production technology that allows your business to operate on a large scale. Recall Xu Aihua, the Chinese woman who started her business with one sewing machine and built a garment empire. Her big break came once she got an export order. Without that, she would have soon hit the limits of the local market. However, in order to be considered for the export order she needed to have a modern factory with automatic sewing machines. This required her to invest more than 100 times the initial capital in the firm.

Figure 3 represents the idea of these two production technologies. There is OP on the left, but way over on the right there is a new production technology, QR, which generates no returns whatsoever until a minimum investment is made, but high returns thereafter. Notice also the way we have marked parts of OP and QR in bold to make one connected line, OR—this represents the actual return on investing a given amount. When you invest just a little, you invest in OP; you have no reason to invest in QR because QR produces no return at first. When you invest more, OP becomes a bad deal, so for a while, the marginal returns are quite low. However, once you have enough money, you may switch to QR. This represents Xu Aihua's history: She started with OP with her secondhand sewing machines and at some point managed to switch to QR and the automatic machines.

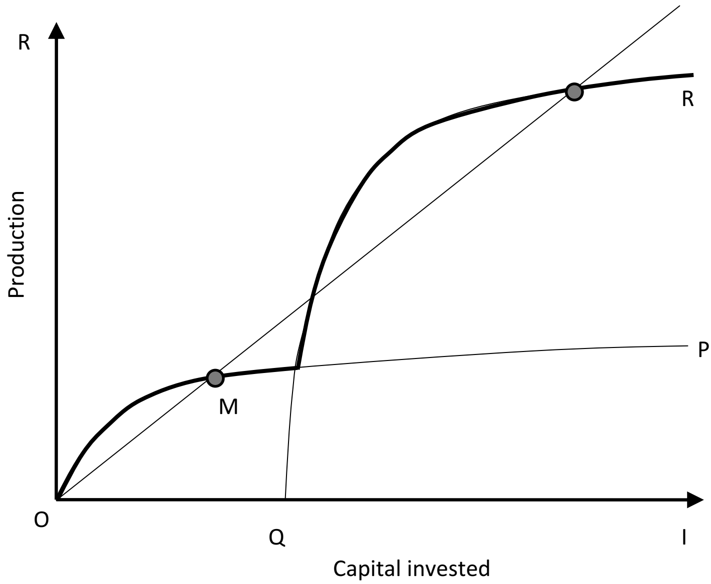

Figure 3: Combining Technologies and the S-Shape of Entrepreneurship

What does OR look like? Kind of like the S-shape, right? There is a big hump in the middle, which is the point you need to reach to make serious money. OR brings back the usual S-shape dilemma: Invest little, make little money, and remain too poor to invest much more, or invest enough to cross the hump and then become rich and invest even more and get even richer. The point is that for most people, crossing that hump is not an option. Although small loans may be available, no one (not even the MFIs, which, as we have seen, like playing it safe) will lend these small entrepreneurs enough money. Moreover, getting there might also need some management and other skills that they don't have and cannot afford to buy. Therefore, they are stuck staying small. Sometimes, the initial flattening off of returns comes so soon that the same person ends up running three different businesses rather than trying to grow any one of them, for instance, selling *dosas* in the morning, trading saris during the day, threading beads to make necklaces in the evening.

But then how did Xu Aihua do it? Remember that she increased her stock of machines by 70 percent a year for eight years through reinvesting her profits. Therefore, her profits must have been at least 70 percent of the value of her machines, *after paying her workers,* and her overall returns must have been even higher. That is unusually profitable—the average small business in the Hyderabad survey, we noted, would actually lose money if it were to pay even minimum wages. We suspect that this reflects in part that Xu Aihua is an especially talented woman, and in part the fact that in those early days of China's opening up, there was very little competition and lots of demand, so she was at the right place at the right time.

Entrepreneurship Is Too Hard

If our diagnosis is correct, the reason that the poor do not grow their businesses is that, for most of them, it is too hard: They cannot borrow to cross the hump, and saving up to get there will take too long unless their businesses have extremely high overall returns. For example, imagine that you start a business with $100 and, like Xu Aihua, you need to invest 100 times as much ($10,000) to buy the new machine. Suppose that you make a very attractive 25 percent profit per dollar invested and reinvest it all. After one year, you would have $125 to invest. After two years, $156. After three years, $195. It would take you twenty-one years before you could cross the hump and buy the new machine. If you needed some money to live on in the meanwhile and saved only half of your profits, forty years would be barely enough. And this does not take into account the stress from all the risk that doing business entails, the hard work, and the long days.

Furthermore, once a micro-entrepreneur realizes that she is probably stuck in the low part of the S-shaped curve and will never be able to make that much money, it may be difficult for her to be fully committed to her business. Imagine an entrepreneur who is below point M in Figure 3. It could be the shopkeeper we met in Gulbarga. She could increase her profits by saving some money and acquiring a slightly more exciting inventory. But even if she does that, she will not be able to go much further than point M. Is it worth it? Most likely, even if that was everything she ever hoped for, it would not change her life in any meaningful way. Given that her business is destined to remain small and never make much money, she may decide to devote her attention and her resources to other things.

In the same way that the poor may save less than the middle class because they know that their savings will not be enough to reach a consumption goal they are really looking forward to, they may not invest as much (not only money but also emotions and intellectual energy) in their businesses because they already know that they can't make a real difference. This may explain the gulf between the outlook of Ben Sedan, the Moroccan farmer, and that of Fouad Abdelmoumni: Fouad may well be right that Ben Sedan hadn't thought about the possibility of raising cattle in a barn. Or he may have thought about it, but concluded that going through the whole process of getting a loan, building a whole new stable for just four cows, and eventually selling them wasn't worth it—after all, his family would still be quite poor. So in a sense they were both right: Fouad because his business model could work, and Ben Sedan because it was not worth his while to make it work.

The fact that most micro-entrepreneurs may not be fully committed to making every penny count may also explain the disappointing effects of the business training programs that many MFIs have now started proposing to their clients as an added service. At weekly meetings, clients are told about how to keep better accounts, manage their inventories, understand interest rates, and so forth. Programs of this kind were evaluated in studies in Peru and India.[7] The research results in both countries found some improvement in business knowledge but no changes in profits, sales, or assets. These programs are motivated by a sense that these businesses are not particularly well run, but if the businesses are run that way because of a lack of enthusiasm rather than a lack of knowledge, it is not particularly surprising that the training does very little to help. In the Dominican Republic, another training program tried, alongside the regular training module, a simplified curriculum, suggesting the entrepreneurs focus on simple "rules of thumb" (such as keeping the business and household expenses separate, and paying oneself a fixed salary).[8] Here again, the regular training was ineffective, but giving the entrepreneurs the simplified tips did lead to an increase in profit. This is probably because people were willing to adopt these rules of thumb, and they actually simplified their lives rather than demanding even more intellectual resources from them.

Taken together, this evidence makes us seriously doubt the idea that the average small business owner is a natural "entrepreneur," in the way we generally understand the term, meaning someone whose business has the potential to grow and who is able to take risks, work hard, and keep trying to make it happen even in the face of multiple hardships. We are, of course, not saying that there are no genuine entrepreneurs among the poor—we have met many such people. But there are also many of them who run a business that is doomed to remain small and unprofitable.

Buying a Job

This naturally begs the question: Why do so many poor people run a business in the first place? We got an answer to this question from Pak Awan and his wife, a young couple from Cica Das, the slum in Bandung, Indonesia. They owned a small shop that they were running out of one room in his parents' house. Pak Awan worked as a casual construction laborer, but more often than not, he could not find employment. When we met the couple in summer 2008, Pak Awan had not had a job for two months. With two young children, the family needed some extra income, so his wife needed to find work. She would have liked a factory job, but she was not qualified: Factories wanted people who were young or unmarried or who had experience. She had no such experience, because after high school she studied to be a secretary, but she couldn't get through the tests that are required to get the jobs and eventually gave up on this career. Starting a small business was the only option they had. Her first venture was to cook snacks and sell them in the city, but she wanted something she could do from home, so she could mind the children. So they started a shop with a loan Pak Awan got from a cooperative he belonged to, even though there were already two other shops within 50 yards.

Pak Awan and his wife did not enjoy running the business. They were eligible for a second loan from the cooperative, which would have allowed them to expand their shop, but had decided that they didn't want it. Unfortunately for them, a fourth shop opened in the neighborhood and threatened their livelihood by offering a more diverse array of goods, and when we met them, they were in the process of taking out a new loan to buy more stock. Their hope for their children was that they would each grow up to get a salaried job, preferably in a government office.

The enterprises of the poor often seem more a way to buy a job when a more conventional employment opportunity is not available than a reflection of a particular entrepreneurial urge. Many of the businesses are run because someone in the family has (or is believed to have) some time on hand and every little bit helps. This person is often a woman, and she typically does it in addition to her housework; indeed it is not clear that she always has much of a choice when the opportunity to start a business comes up. It is only recently that men in the West have learned to at least pay lip service to the many things that their wife who "does not work" does for them; it would not be astonishing if their developing-country counterparts ascribed more leisure to their spouses than they actually enjoy. It is entirely possible, therefore, that many business owners, and especially female business owners, do not particularly enjoy running a business, and indeed, dread the thought of expanding it. This may be why, when women business owners in Sri Lanka were offered $250 nominally for investing in their business, many of them did something else with it, unlike the male business owners we encountered above who invested the money and got high returns from it.[9] Perhaps the many businesses of the poor are less a testimony to their entrepreneurial spirit than a symptom of the dramatic failure of the economies in which they live to provide them with something better.

GOOD JOBS

We have started including the question "What are your ambitions for your children?" in surveys given to poor people around the world. The results are striking. Everywhere we have asked, the most common dream of the poor is that their children become government workers.

Among very poor households in Udaipur, for example, 34 percent of the parents would like to see their son become a government teacher and another 41 percent want him to have a nonteaching government job; 18 percent more want him to be a salaried employee in a private firm. For girls, 31 percent would like her to be a teacher, 31 percent would want her to have another kind of government job, and 19 percent want her to be a nurse. The poor don't see becoming an entrepreneur as something to aspire to.

The emphasis on government jobs, in particular, suggests a desire for stability, as these jobs tend to be very secure even when they are not very exciting. And in fact, stability of employment appears to be the one thing that distinguishes the middle classes from the poor. In our eighteen-country data set, middle-class people are much more likely to have jobs that pay them weekly or monthly, rather than daily, which is a crude way to separate temporary and more permanent jobs. In Pakistan, for example, in urban areas, 76 percent of those who are employed and who live on 99 cents or less per day work for a weekly or monthly wage, but 92 percent of those who earn $2 to $4 a day do. In rural areas, 46 percent of the very poor who are employed work for a regular wage, and 61 percent of the middle class do.

The availability of secure jobs can have a transformational effect. In much of rural Udaipur District, most families live on less than $2 a day. But we once visited one village that superficially appeared to be not unlike many other villages we visited in the area, yet was in fact quite different. Signs of relative prosperity were apparent: an iron roof, two motorcycles in a courtyard, a neatly combed teenager in a starched school uniform. It turned out that a zinc factory had been set up near the village and at least one person in every family we met in the village had worked in the factory. In one of the families, the father of the current head of the household (a man in his late fifties) somehow got a job in the factory kitchen and parlayed that into a job on the factory floor. His son was part of the first batch of (eight) boys from the village to complete high school. Then he, too, went to work in the zinc factory, where he retired as a foreman. Both of his own sons finished high school. One of them works in the same zinc factory; the other has a job in Ahmedabad, the capital of the neighboring state of Gujarat. He also has two daughters, who completed high school before getting married. For this family, the fact that the zinc factory was established in this location was an initial stroke of good luck, which started a virtuous circle of human capital investment, and the progression up the employment ladder.

A study by Andrew Foster and Mark Rosenzweig shows that the role of factory employment in promoting wage growth in Indian villages goes beyond this particular anecdote.[10] Over the period 1960–1999, India experienced fast growth in the productivity of agriculture but also a very rapid increase in the number of individuals employed in factories located in or near villages, in part due to a pro-rural investment policy. Rural factory employment increased tenfold from the early 1980s to 1999. In 1999, about half of the villages Foster and Rosenzweig studied, which were initially all rural, were located near a factory, and in those villages, 10 percent of the male labor was employed at a factory. The factory was typically located in a village that had low wages to start with, and in those villages, the growth of factory employment did much more for wage growth than agricultural productivity growth resulting from the famed Green Revolution. Furthermore, the poor gained disproportionately from industrial growth, because higher-paid employment became available even to those with low skills.

Once such a job does materialize, it can make a tremendous difference in the lives of the people who get it. The middle class spends much more on health and education than the poor. Of course, in principle, it may be that patient, industrious people, inclined to invest in the future of their children, are better able to hang on to good jobs. But we suspect that this is not the entire explanation, and that this spending pattern has something to do with the fact that parents in better-off households have steady jobs: A stable job can, by itself, change people's outlook on life in decisive ways. A study of the height of Mexican children whose mothers worked in maquiladoras (export factories) in Mexico dramatically illustrates the power of a good job.[11] Maquiladoras generally have the reputation of being exploitative and paying poor wages. However, for many women without a high school education, the establishment of the maquiladoras offers the prospect of a better job than the jobs in retail, food services, or transportation that would otherwise be their lot—the hourly wages are not much higher, but they work longer hours and with more regularity. David Atkin, from Yale University, compared the heights of children born to mothers who lived in a town where a maquiladora opened when the woman was sixteen years old to that of children of mothers who did not have this opportunity. The children whose mother's town had a maquiladora were much taller than those born to similar women in different towns. This effect is so large that it can bridge the *entire* gap in height between a poor Mexican child and the "norm" for a well-fed American child.

Furthermore, Atkin shows that the effect of a job in a maquilladora on the *level* of family income is nowhere near large enough to explain the entire increase in height. Perhaps the sense of control over the future that people get from knowing there will be an income coming in every month—and not just the income itself—is what allows these women to focus on building their own careers and those of their children. Perhaps this idea that there is a future is what makes the difference between the poor and the middle class. The title of Atkin's study, "Working for the Future," sums it up nicely.

In Chapter 6, we gave several examples of the effects of risk on household behavior: Poor families take preventive actions to limit risk even at the cost of higher levels of income. Here we see another consequence, possibly even deeper: A sense of stability may be necessary for people to be able to take the long view. It is possible that people who don't envision substantial improvements in their future quality of life opt to stop trying and therefore end up staying where they are. You will recall that many parents think (perhaps mistakenly) that the benefits of education have an S-shape. This means that there is no point for them to start investing in education if they do not think they will be able to continue to invest. If they are worried about their ability to afford schooling for their children in the future—say, because they think their business might fail—they may decide that it is not even worth trying.

A steady and predictable income makes it possible to commit to future expenditure and also makes it much easier and cheaper to borrow now. So, if a member of a family has a steady job, schools will accept their children more readily; hospitals will give more expensive treatments, knowing they will be paid; and other members of the family may be able to make the investments in their own businesses that are necessary to allow them to grow.

This is why a "good job" is important. A good job is a steady, well-paid job, a job that allows a person the mental space needed to do all those things the middle class does well. This is an idea that economists have often resisted, on the reasonable grounds that good jobs may be expensive jobs, and expensive jobs might mean fewer jobs. But if good jobs mean that children grow up in an environment where they are able to make the most of their talents, it may well be worth the sacrifice of creating somewhat fewer of those jobs.

Because most good jobs are in the city, moving can be the first step to changing a family's trajectory. In summer 2009, we were in a slum of the Indian city of Hyderabad, talking to a woman in her fifties. She told us that she had never been to school and her daughter, who was born when this woman was sixteen, had started school but dropped out after third grade and had gotten married soon after. But her second son, she added almost in passing, was studying for his MCA. We had never heard of an MCA, and asked her what it was (our presumption was that it was a vocational degree of some kind). She didn't know, but her son appeared and explained it was a Master in Computer Applications. Before that, he had gotten his bachelor's degree in computer science. His elder brother had also graduated from college and had an office job in a private company, and the youngest, still in high school, was applying for college. They were hoping to send him to Australia to study, if they could get one of the preferential loans for Muslims.

What had happened to this family, somewhere between the time the first daughter dropped out of school and the first son graduated from high school, to transform the prospects for the younger children? The father retired from the army, and through his army connections had found a job as a guard in a public-sector firm in Hyderabad. Because he now had a job that did not involve frequent transfers, he moved his entire family to the city (except for his daughter, who was already married). Hyderabad has a number of affordable and relatively high-quality schools for Muslim children, a legacy of the fact that it was a semi-independent Muslim kingdom until 1948. The sons were sent to these schools, and they prospered.

Why aren't many more people adopting this strategy? After all, schools are better in most cities, even those that don't have Hyderabad's particular history. And the poor (particularly poor young men) are always moving in search of a job. In rural Udaipur for example, 60 percent of the families we interviewed had at least one member who had worked in some city over the last year. But very few of them migrate for long periods of time—the median duration of a trip is one month, and only 10 percent of the trips are longer than three months. And when they go on these trips, they mostly leave their families behind. The usual pattern is a few weeks at work, a few weeks at home. Permanent migration, even within the country, is relatively rare: In our eighteen-country data set, the share of extremely poor households that had one member who was born elsewhere and had migrated for work reasons was just 3 percent in Pakistan, 8 percent in Côte d'Ivoire, 6 percent in Nicaragua, not quite 10 percent in Peru, and almost 25 percent in Mexico. One of the consequences of temporary migration is that these workers never become indispensable enough to the employer to be made permanent or given any kind of special training; they remain casual laborers all their lives. Their families therefore never move to the city, and never benefit from the better city schools and peace of mind that come from a permanent job.

We asked a migrant construction worker from Orissa, on a visit back home, why he didn't stay longer in the city. He explained that he could not take his family there: The housing conditions were too insalubrious. On the other hand, he did not want to stay away from them for too long. Most cities in the developing world have very little planned housing for the very poor. The result is that the poor have had to squeeze themselves into every piece of land they can somehow grab from the city, often in a swamp or even a garbage dump. By comparison, the places where even the poorest live in villages are greener, airier, quieter; the houses are bigger; there is space for children to play. Life may be unexciting, but for those who grew up in the village, that is where their friends live. Moreover, a single male, going to the city for a few weeks or even a few months, does not need to actually find housing; he can sleep under a bridge or under some awning somewhere, or in the shop or construction site where he works. He can save the money he would have paid as rent and just go home more often. But he doesn't want this life for his family.

There is also the risk: Suppose you pay the cost of setting up a home in the city and moving your family there, only to lose your job. Indeed if you haven't already had a decent job before and saved up, how do you pay for the move? And what happens if someone gets very sick? It is true that health care is better in the city, but who will come with you to the hospital or have some cash handy if you need it? As long as your family is still in the village, even if you get sick in the city and end up in the hospital, you can rely on your connections in the village. But what if you actually pull up your roots and move?

This is why it is much easier to move if you know people in the city. They can house you and your family when you first arrive, help you out if someone suddenly gets sick, and help you find a job—by giving you a reference or hiring you themselves. Kaivan Munshi, for example, found that Mexican villagers migrate to cities where people from their village have already migrated, even if the original round of migration was purely accidental.[12] It is obviously also easier to move if you already have a steady job or some other source of steady income. The Muslim family from Hyderabad had both—an army pension and a job—which in turn was the product of having the right connections. In South Africa, when elderly parents get a pension, the most productive of their children permanently leave the household to move to the city.[13] The pension must be what gives them this sense of security, and it allows them to pay for the cost of their own move.

How then can more "good jobs" be created? Clearly, it would help if it were easier to migrate to cities, so policies on urban land use and low-income housing are obviously vital. Less obviously, effective social safety nets, consisting of both public assistance and market insurance, can make migration easier by reducing dependence on social networks.

But because not everyone will be able to move to the city, it is also important that more good jobs be created not just in the largest cities but in smaller towns all over the country. For this to be possible, there must be substantial improvements both in urban and in industrial infrastructure in towns of this sort. The regulatory environment is also important for creating jobs: Labor laws play a role in ensuring job security, but if they are so stringent that no one wants to hire, then they are counterproductive. Credit remains perhaps an even bigger problem, given the S-shaped nature of the production technologies: To set up businesses that create lots of jobs (rather than one job for the entrepreneur alone) takes more money than the average business owner in the developing world has access to, and as noted in Chapter 7 on credit, it is not clear how to get the financial sector to lend more to these people.

It therefore follows, though it is not a particularly fashionable idea among economists, that there may be a case for using some governmental resources to help create enough large businesses by providing loan guarantees to medium-size ventures, for example. Something like that happened in China, where state businesses, or at least part of their equipment, land, and buildings, were quietly handed over to their employees. This was also, more explicitly, part of the Korean industrial policy. This may set off some virtuous circle: Stable and higher wages would give workers the financial resources, the mental space, and the necessary optimism both to invest in their children and save more. With those savings, and the access to easier credit that a steady job brings, the most talented among them would eventually be able to start businesses large enough to, in turn, hire other people.

So are there really a billion barefoot entrepreneurs, as the leaders of MFIs and the socially minded business gurus seem to believe? Or is this just an illusion, stemming from a confusion about what we call an "entrepreneur"? There are more than a billion people who run their own farm or business, but most of them do this because they have no other options. Most of them manage to do this well enough to survive, but without the talent, the skills, or the appetite for risk needed to turn these small businesses into really successful enterprises. For every Xu Aihua, who started a clothing empire with nothing but a little training and a huge amount of talent, there are millions of Ben Sedans, who know that the way out of poverty is not one more shed with some cows in it, but a son with a secure job in the army. Microcredit and other ways to help tiny businesses still have an important role to play in the lives of the poor, because these tiny businesses will remain, perhaps for the foreseeable future, the only way many of the poor can manage to survive. But we are kidding ourselves if we think that they can pave the way for a mass exit from poverty.