

MAITREESH GHATAK analyses the effectiveness of microfinance

While it's no magic bullet for solving all the problems of poverty, it does relax credit constraints faced by the poor

Small is smart



Microfinance is big these days. It may be called 'micro' but there is nothing small-time about it. It serves more than 100 million poor people (mostly women) worldwide. About \$25 billion (roughly the size of the US current account trade deficit) is lent out worldwide through various micro-finance programmes (MFPs). While its true origins are lost in the mists of time, Muhammad Yunus of Bangladesh is viewed as the leader of the movement for singlehandedly creating the most famous and successful microfinance institution (MFI) of the modern era, the Grameen Bank of Bangladesh. In 2006, Yunus and the Grameen Bank won the Nobel Peace Prize for reducing world poverty.

Why is microfinance needed? Why cannot standard finance (i.e. banks) do the job? Because of transactions costs (screening and monitoring borrowers, ensuring repayment) credit markets are imperfect. After all, credit is an odd transaction: one party gets money and the other party simply gets a promise (to repay).

A standard solution is to use collateral, which makes the promise to repay credible. But there are several problems. First, a large fraction of the population in developing countries is poor and does not own any assets. This means they are shut off from the credit market, so they are unable to improve their economic condition and accumulate assets: a classic poverty trap. Second, even if someone owns assets he or she does not necessarily have a formal title to it. Third, even if someone has an asset and a formal title to it that can in principle be used as collateral, foreclosing on collateral is costly because of inefficient judicial systems.

Thus, there is an obvious case not to rely on the operation of market forces. However, the evidence on government lending programmes targeted to-

wards the poor is not very encouraging. Low repayment rates, mistargeting of loans, corruption and leakage are common. This is not surprising. The reasons why markets do not work well apply to government organisations too, and there are the usual problems of bureaucracy and political interference. In this gloomy scenario, the Grameen's record is quite striking. Only 5% of their borrowers were outside the target group, and even according to conservative estimates, its repayment rate is 92%.

Starting in the mid-seventies, the Grameen now lends to about 8 million people, most of whom are rural, landless women, and operates in 84,000 villages covering most of the country. It gives small loans for self-employment projects (poultry, weaving, grocery, tea shops). No collateral is charged and interest rates are comparable to government programmes.

The key innovative feature of Grameen is that borrowers are asked to organise themselves into self-selected groups of 5 people from the same village. Earlier Grameen used explicit group or joint liability: loans were given for individual project, but the group was jointly liable for each other's loans. Now it has shifted away from explicit joint liability. However, in their own words, "Repayment responsibility rests solely on the individual borrower, while the group and the centre oversee that everyone behaves in a responsible way, and none gets into repayment problems." This is consistent with implicit joint liability. If any member of a group defaults, other members fear they might become ineligible for credit in the future even if the lending contract does not specify this punishment. One form in which this can happen is if the branch of the microfinance organisation itself chooses to fold its operations when faced with delinquency.

Some economists see the group

1: Treatment and control slums in a MIT study

	Population	Average Debt Outstanding (Rs)	Businesses Per Capita	Per Capita Expenditure (Rs/month)	Literacy
Treatment	300.31	45538.42	0.289	1006.08	0.69
Control	316.56	50430.01	0.299	981.31	0.68
N	104	104	104	104	104

2: Impact on business creation and outcomes

	All Households New Businesses	Business Owners Profit Rs/month	Employees
Treatment	0.07**	6513.65**	0.354
Control	0.05	1703.82	0.384
N	6756	2365	2365

**statistically significant at 5% level

3: Impact on monthly household expenditure (Rs per capita)

	Total PCE***	Non-durable PCE	Durable PCE	Durables used in Business
Treatment	1456.59	1322.5	138.47	12.11
Control	1419.22	1304.78	116.17	5.33
N	6821	6775	6775	6817

***per capita expenditure Source: Banerjee et al*

aspect of microfinance as a key to its success. Members of a community know more about one another than an outside institution such as a bank. While a bank cannot apply financial or non-financial sanctions against poor people who default on a loan, their neighbours may be able to impose powerful non-financial (e.g. social) sanctions at low cost.

Therefore, an institution that gives poor people the proper incentives to use information on their neighbours and to apply non-financial sanctions to delinquent borrowers can outperform a conventional bank. These programmes might be inducing group members to select their peers carefully, monitor each other, and put pressure on delinquent group members. Others have argued that even without joint liability, the threat of losing access to future loans is the mechanism that explains the success of MFPs. The problem with this argument is that conventional banks can also use these dynamic incentives, and so the question is why aren't they doing it? Also,

whether or not explicit joint liability is used, almost all MFPs are group-based and so it's reasonable to infer that groups must be performing some role.

Microfinance represents a big watershed in how economists think about anti-poverty programmes. It is decentralised, largely independent of the government, and the underlying philosophy is to view the poor as potential entrepreneurs as opposed to passive recipients of government subsidies. While all this sounds good in theory, the key question is, has microfinance been successful in doing what it aims to do, namely, relaxing credit constraints, and improving the standard of living of its clients?

Some studies have compared the performance of MFPs with conventional lending programmes and found that the latter in general have better outcomes. However, this runs into the standard problems of selection bias and endogenous placement that beset empirical evaluation of any programme or policy. In particular, borrowers who are more dynamic and

reliable may be more likely to join a MFP, and as a result, the impact of such a programme on them is not representative of what its impact would be on an average member of the target group. Similarly, if MFPs choose to operate in poorer and backward villages (i.e. where the need is the greatest) then again, the outcomes in these areas will underestimate its potential impact in an average village.

A number of recent studies avoid these problems. They follow the method of randomised control trials that are increasingly being used in economics. When feasible, they have the great virtue of being both simple and powerful. They follow experimental trials in medicine: you select two groups that are similar and then randomly select one to receive the treatment (a drug, or a policy) and then compare the outcome of this group (treatment group) with the other group (control group). If the difference is statistically significant, then that is attributed to the treatment.

For example, MIT researchers Abhijit Banerjee et al* have studied the impact of access to microfinance on the creation and the profitability of small businesses as well as various measures of standard of living. Working with Spandana, a MFI, they randomly selected 52 of 104 slums of Hyderabad for opening one of their branches, while the other 52, who were eligible and similar to the former group, were not selected. About a year and a half later they conducted a detailed household survey of an average of 65 households in each of the slums, with a total of 6850 households.

In this study, the control and treatment slums look pretty similar before the programme was carried out in terms of population, average debt outstanding, businesses per capita, per capita expenditure, and literacy (Table 1). What about the effect of the programme? The study finds that the

treatment groups were significantly more likely to start a new business, and existing business owners experienced a significant increase in profits, but employment did not increase significantly (Table 2). However, other than expenditure on durables, including durables used in business, the programme didn't increase per capita expenditure significantly (Table 3). The likely explanation for this is that for the effects of increased investment to show up in increased consumption, a longer time horizon is required. Also, the study shows that households change the pattern of consumption and cut down on non-essential consumption to augment loan money and finance their new business venture—another reason why total consumption doesn't increase immediately. The study also finds that there was no significant impact of the programme on education and health. These effects are unlikely to kick in immediately.

The evidence suggests that microfinance is no magic bullet to solve the problem of poverty. But perhaps the fault lies not with microfinance (or, for that matter, any anti-poverty programme) but our impulse to look for magic bullets that will solve the problem of poverty overnight. After all, microfinance is supposed to relax credit constraints faced by the poor who are shut off from formal credit markets and allow them to create and expand businesses through investment. The evidence suggests that it is successful in doing that. That sounds like a promising start to me.

*Abhijit Banerjee, Esther Duflo, Rachel Glennerster, and Cynthia Kinnan (2009): *The Miracle of Microfinance? Evidence from a Randomised Evaluation* (Available at <http://econ.mit.edu/files/4162>)

The author is professor of economics, London School of Economics.

DATA FROM

The Economist

OVERVIEW

- Japan's GDP grew by 0.9% in the three months to the end of June, an annualised rate of 3.7%. Stronger exports and a rise in consumer spending more than offset weakness in housing and business investment.
- Industrial production in America rose by 0.5% in July compared with June, after a surge in the output of cars and car parts. The housing market was less buoyant. Private housing starts fell by 1% in July. The number of permits to build new homes fell by 1.8%.
- Britain's inflation rate was steady at 1.8% in July. In much of the rest of the world consumer prices have fallen in the past year. America's were unchanged in July, leaving them 2.1% lower than in July 2008. In the euro area, consumer prices fell 0.7% in the year to July, revised from an initial estimate of a 0.6% decline. Canada's price index in July was 0.9% lower than a year earlier.

The Economist commodity-price index

2000=100

	Aug 11th	Aug 18th*	% change on one month	one year
Dollar index				
All items	198.6	189.8	+3.6	-20.3
Food	207.5	192.8	-2.0	-21.0
Industrials				
All	187.0	185.9	+12.4	-19.3
Nfat†	146.5	143.0	+4.6	-23.9
Metals	209.2	209.3	+15.6	-17.4
Sterling index				
All items	182.5	174.1	+3.2	-10.2
Euro index				
All items	129.9	124.4	+4.5	-16.9
Gold				
\$ per oz	943.75	935.30	-1.4	+17.0
West Texas Intermediate				
\$ per barrel	69.38	69.18	+6.8	-39.6

*Provisional †Non-food agricultural

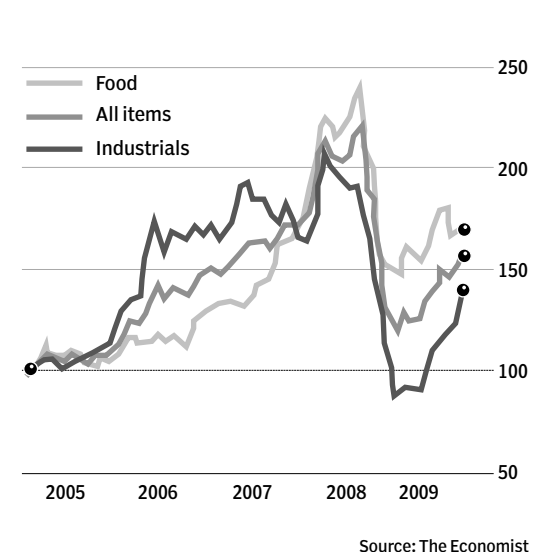
Trade, exchange rates, budget balances and interest rates

	Trade balance* latest 12 months, \$bn	Current-account balance latest 12 months, \$bn	% of GDP 2009†	Currency units, per \$ Aug 19th	year ago	Budget balance % of GDP 2009†	Interest rates, % 3-month latest	10-year gov't bonds, latest
United States	-639.5 Jun	-628.3 Q1	-3.0	-	-	-13.7	0.26	3.47
Japan	+9.0 Jun	+115.3 Jun	+2.5	93.7	110	-7.9	0.40	1.35
China	+269.4 Jul	+426.1 Q4	+6.5	6.83	6.85	-4.1	1.74	3.77
Britain	-139.8 Jun	-52.5 Q1	-1.7	0.61	0.54	-14.4	0.80	3.71
Canada	+15.5 Jun	-3.9 Q1	-2.3	1.10	1.06	-2.3	0.22	3.40
Euro area	-40.1 Jun	-158.1 May	-1.3	0.70	0.68	-6.4	0.85	3.29
Austria	-5.5 May	+10.7 Q1	+1.6	0.70	0.68	-5.2	0.86	3.68
Belgium	+6.3 May	-12.0 Mar	-2.4	0.70	0.68	-6.0	0.87	3.74
France	-71.1 Jun	-58.3 Jun	-2.1	0.70	0.68	-8.2	0.86	3.45
Germany	+182.0 Jun	+159.9 Jun	+3.7	0.70	0.68	-4.7	0.86	3.23
Greece	-50.6 Jun	-41.6 Jun	-9.0	0.70	0.68	-6.1	0.86	4.52
Italy	-11.9 May	-63.1 May	-2.8	0.70	0.68	-5.2	0.86	4.08
Netherlands	+43.5 Jun	+50.0 Q1	+6.1	0.70	0.68	-4.2	0.86	3.54
Spain	-101.4 May	-117.2 May	-7.1	0.70	0.68	-10.3	0.86	3.74
Czech Republic	+4.3 Jun	-4.7 Jun	-2.0	18.0	16.6	-4.8	1.89	5.14
Denmark	+6.2 Jun	+8.1 Jun	+1.5	5.23	5.06	-2.5	1.91	3.54
Hungary	+2.0 Jun	-11.3 Q1	-2.9	192	159	-3.9	8.40	8.80
Norway	+58.0 Jul	+79.6 Q1	+14.6	6.08	5.40	7.1	1.93	4.24
Poland	-13.5 Jun	-11.7 Jun	-3.3	2.93	2.25	-3.9	4.16	6.09
Russia	+122.2 Jun	+55.3 Q2	+1.9	31.9	24.4	-8.0	10.75	11.21
Sweden	+13.6 Jun	+31.4 Q1	+6.7	7.21	6.38	-4.7	0.10	3.39
Switzerland	+16.7 Jul	+56.6 Q1	+7.4	1.07	1.10	-3.1	0.34	2.00
Turkey	-47.4 Apr	-20.3 Jun	-0.4	1.50	1.19	-5.8	8.54	6.25‡
Australia	+5.7 Jun	-29.8 Q1	-4.0	1.21	1.15	-3.9	3.28	5.44
Hong Kong	-20.7 Jun	+29.6 Q1	+9.2	7.75	7.81	-3.9	0.22	2.30
India	-93.4 Jun	-29.8 Q1	-1.2	48.8	43.7	-7.8	3.35	7.60
Indonesia	+11.2 Jun	-0.8 Q1	+0.7	10,070	9,160	-3.0	7.06	6.85‡
Malaysia	+38.2 Jun	+40.5 Q1	+14.1	3.55	3.33	-8.0	2.14	2.14‡
Pakistan	-16.3 Jul	-12.2 Q1	-2.1	82.8	74.8	-4.3	12.30	12.22‡
Singapore	+18.4 Jul	+23.1 Q1	+14.4	1.45	1.41	-4.1	0.50	2.28
South Korea	+21.9 Jul	+20.7 Jun	+3.2	1,256	1,049	-5.0	2.48	5.37
Taiwan	+15.9 Jul	+31.9 Q2	+10.4	33.0	31.4	-5.2	0.85	1.34
Thailand	+11.3 Jul	+8.1 Jun	+5.2	34.1	34.1	-5.6	1.38	3.07
Argentina	+17.1 Jun	+6.8 Q1	+3.4	3.85	3.03	-0.9	14.25	na
Brazil	+27.1 Jul	-18.4 Jun	-1.3	1.85	1.62	-2.8	8.65	6.16‡
Chile	+4.5 Jun	-3.6 Q2	-0.5	553	519	-4.1	0.48	2.33‡
Colombia	-0.1 Jun	-6.5 Q1	-3.3	2,047	1,883	-3.0	5.13	5.68‡
Mexico	-16.0 Jun	-14.2 Q1	-2.7	12.9	10.1	-4.0	4.48	7.98
Venezuela	+32.5 Q1	+26.2 Q1	+1.4	6.58	0.00§	-7.6	14.51	6.55‡
Egypt	-26.1 Q1	-2.9 Q1	-1.8	5.56	5.36	-6.8	9.89	2.88‡
Israel	-8.7 Jul	+4.1 Q1	+2.2	3.82	3.57	-6.1	0.56	4.18
Saudi Arabia	+212.0 2008	+134.0 2008	+4.5	3.75	3.75	-0.5	0.64	na
South Africa	-5.4 Jun	-18.7 Q1	-5.3	8.05	7.76	-4.5	7.00	8.74

*Merchandise trade only. †The Economist poll or Economist Intelligence Unit forecast. ‡Dollar-denominated bonds. §Unofficial exchange rate.

The Economist commodity-price index

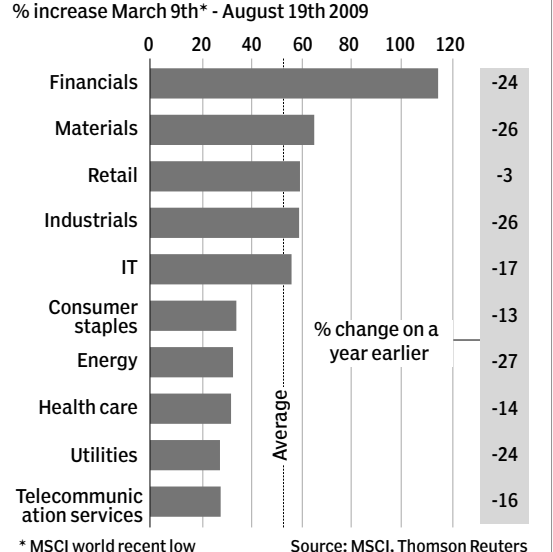
January 2005=100, \$ terms



Source: The Economist

Share prices by industry

Developed countries



Source: MSCI, Thomson Reuters

Commodity prices have risen by almost 30% in dollar terms since the start of this year. Resurgent Chinese demand underpinned especially rapid rises for industrial commodities, the prices of which have increased by more than 55% since December. Copper and nickel prices have doubled to reach 11-month highs. Increases in food prices were attenuated by big harvests. Wheat and maize prices have fallen to eight-month lows. The United States Department of Agriculture estimates this year's soyabean and maize crops will be the largest and second-largest ever, respectively. But the price of sugar recently hit a 28-year high after poor rainfall in India and too much in Brazil spoiled their crops.

Anyone who had the confidence to buy shares in large international companies back in March, when markets had reached their lowest point to date in 2009, should be happy this week. The Morgan Stanley Capital International world index, which tracks the equity returns of the world's 1,500 largest companies, has increased by more than 50% since March. Share prices of large financial firms have more than doubled. Longer-term investors who held their shares throughout the financial crisis, however, do not have as much to cheer about. Share prices in most industries are still around 20% lower than a year ago. Big retailers held up better than firms in any other sector. Their share prices fell by just 3%.