Asset-based Microfinance for Microenterprises in Pakistan Podcast Transcript

Pramila Krishnan:

Hello, everyone, and welcome to the CSAE Research podcast. I'm Pramila Krishnan, Professor of Development Economics at Oxford. This is a series of conversations about projects taking place at the Centre for the Study of African Economies at the University of Oxford.

Standard microcredit contracts seem to have modest, if any, effect on the performance of small firms and no effects on household consumption. Could we construct a better designed product to improve on the standard contract?

Today, we're going to discuss the project 'Asset based microfinance for micro-enterprises in Pakistan'. The project explores whether alternative contracts do better. They explore the effect of offering larger financial products, particularly with the option of flexible repayment to previous microfinance borrowers who have been successful and repaid their loans. This is a project run in partnership between the Centre for the Study of African Economies, Innovations for Poverty Action, and Private Enterprise Development in Low-Income Countries.

So, to find out more about this project and its impact, we're going to join the key players, Simon Quinn, Deputy Director of the Centre for the Study of African Economies and Associate Professor of Economics here in Oxford. Muhammad Meki, a Departmental Lecturer at the Department of International Development here in Oxford, as well. And from Pakistan, Faisal Bari, a Senior Research Fellow at the Institute of Development and Economic Alternatives and also at the Lahore University of Management Sciences, as well as Kashif Malik, an Associate Professor in Economics at the Lahore University of Management Sciences, as well.

Welcome again and thank you for joining me. I'd like to get all of the team to explain the project in more detail. So, to begin, perhaps Faisal, you might lead the discussion and explain the key questions the project aimed to address.

Faisal Bari:

And thank you very much. It's a pleasure to be here. So, as you explained in the intro that you give, microfinance has shown a lot of promise. And for quite some time, questions around microfinance were what kind of contributions can it make to not just alleviating poverty, changing the consumption patterns of those households, but also what contribution can it give to growth and development of small businesses? Now we know that small businesses, especially in developing countries, tend to be very credit constrained, and that's one of their major issues. Whenever you do any surveys on asking them about constraints to growth, access to finance comes in. And the question that we were trying to see in the literature was that what would happen if you increased the size of the resource that you transferred to the enterprise? Will that allow the enterprise to change substantially in terms of growth, profit, revenue, and also, what kind of impact would it have on the household? How do you make that product compatible for the provider, the microfinance bank or the institution? Because as you know, for most of microfinance, collateral is not in the form of the usual collateral that we used to take from banks. It's either reputational or for other things that we use as collateral. And so how does the institution make that kind of a trade-off and make it compatible? And on the other side, how do you make it more flexible in terms of payment schedules, in terms of the requirements of the various kinds of businesses that people at that level in terms of moving out of poverty into a level slightly above and or a little more than slightly above that? How do you make the product compatible with their requirements? And so those were the few flexibilities that we were trying to look at and introduce.

So, what we thought of was can we experiment with a very established microfinance provider, but increase the size of the product significantly and rather than just a standard loan, go into asset financing? Assets tend to be bundled and that's one of the things that small businesses find difficult to finance because they don't have accumulated capital in the same way. So would that kind of large instrument based on the asset as collateral work? And can that solve the problem for the provider in terms of its incentive compatibility? And, on the other hand, can it provide the injection in terms of resources to the business and then therefore change the trajectory of the business significantly. So that was the whole idea behind this particular project.

Pramila Krishnan:

Thanks a lot for that. Kashif, perhaps you want to leap in and tell us a little bit about how the project was implemented? I imagine Muhammad and Simon might want to add their bits, too.

Kashif Malik:

Thanks for having me on the podcast. Sure, I'll briefly explain [the] implementation strategy of the project. So, what we have done is we identified a large pool of borrowers who had successfully completed a loan cycle with the microfinance institution, and we were targeting people who want to expand their business to purchase a fixed asset that cost significantly higher than the prevailing borrowing was limited to. So, we have offered a collateralised asset financing structure that has not previously been used in the experimental microfinance literature, namely a hire purchase agreement in which the client's ownership share in the asset increases as repayments are made. This type of arrangement combines two distinct contracts into one product — a shared ownership contract, and a rental contract.

So, we have conducted a field experiment in which we offer these graduated microfinance borrowers the opportunity to finance a business asset worth up to approximately 2000 US dollars. So, we implemented two types of hire purchase agreements. One is the fixed repayment contract, another is the flexible repayment contract. Both contracts were 18 months, and they allow clients to finance the purchase of a fixed asset up to value of 200,000 rupees. And the client was obliged to initially purchase 10 percent of the asset with the MFI purchasing the remaining 90 percent and the rental amount was based on a nominal annual rate of 12 percent.

So, in our treatment we offered two types of contracts. One is the fixed repayment contract. In this contract, the client was required to purchase five percent of the MFI's ownership share each month, and after 18 months, the client would fully own the asset. The second treatment arm is the flexibility payment contract. The client was only obliged to purchase 2.5 percent of the MFI's ownership share each month, and the client also had the option to pay more than what was required in any given month. And if the client purchased all of the MFI's share before the 18 months period was over, the contract would terminate. In another case, if the client had not fully purchased the MFI's share at the end of 18 months, the contract gives the MFI the right to sell the asset in the market and the proceeds would be disbursed in proportion to the ownership shares at the time of sale. Clients were randomly assigned to a control group, and they were eligible for the MFI's Standard Cash Loan worth four-hundred- and seventy-five-dollars borrowing limit. In the end, you know, the procedure for the default in both contracts is identical. If a client misses a payment, they receive a one-month grace period. If they still do not pay, the asset is repossessed and sold in the market, so proceeds are then disbursed proportional to the ownership share at the time of the default, reflecting the shared ownership structure. So that's the brief implementation strategy of the project.

Pramila Krishnan:

Thank you very much. Can I just jump in and ask just a couple of simple questions, which is what sort of assets are we talking about?

Kashif Malik:

So, these were rickshaws, sewing machines, lathe machines, cameras, and couple of other assets.

Muhammad Meki:

Seeing as Pramila was asking about the assets and presumably at some point, you probably want to know about some of the challenges that we had on the project. We had interest from many people who wanted to expand their business with assets, but they weren't quite fixed assets. And so, we had a particular focus in this project on fixed assets like the type that Kashif just mentioned, rickshaws, sewing machines, other manufacturing machines. Although we did have a number of people who came and wanted working capital for their business, and we weren't able to provide that, it wasn't so nice to turn people away who wanted to expand their business with working capital, but we just weren't able to provide that product because we had a focus on fixed assets.

Pramila Krishnan:

Excellent. I don't know whether you had any particular carving up of the project in terms of your roles within it or do you think of it as completely collaborative, being involved in every aspect together?

Muhammad Meki:

I guess we did have different roles and they evolved over time so that, you know, we all spent a lot of time together in Pakistan having meetings, especially working on the design. We had a number of meetings in Lahore University of Management Sciences, the four of us together, and we conducted a pilot before we scaled up this project, so our roles evolved over time. Clearly, Faisal and Kashif are based in Pakistan, so they're closer to the ground. Kashif was very heavily involved with the implementation, and you know, he'd be the great person to speak to in terms of the challenges of implementation because he was the front line in terms of the partnership with the local microfinance institution partner. So, if you want any details of challenges in the implementation, Kashif is your man, for that, I think.

Pramila Krishnan:

Absolutely, I think that is what we want. So, we're going to ask Kashif what he thought were, let's say, the three main challenges the project faced. Did you have any instances where you had to go in and repossess at all?

Kashif Malik:

Yes. I mean there were five percent of cases where the asset was repossessed and then sold in the market, and then the proceeds were shared between the client and the microfinance institution.

Now on the challenges, one of the biggest challenges that we faced was explaining to our partner the importance of the control group. You know they come up again and again and ask that why do we really need a control group? Now this is like sort of a broad challenge you face in every type of RCT. But in our case, the MFI hadn't done an RCT before that. So, they were really concerned as to why we are giving some people a bigger size of finance and then keeping a control group that are getting this small amount. So that is one of the challenges we faced in terms of explaining to them how important the control group is to really see the treatment effect at the end of the study.

Another important challenge is the sample size. We do our calculations and we need to see that we have enough power to explain our result. But again, it's difficult to explain to our partner why we need to see a 900 person sample? They say, why can't we do it with 100? So that is, again, another difficulty we faced in convincing them, why do we need a bigger size? The reason being that, of course, I mean, if they are giving finances to say, more than 300 people and the amount is 200,000 then [the total] is in the millions, and they had to invest that money. But we had a hard time explaining to them why we're choosing a specific sample size.

Another challenge which we face on the part of clients that although we explained to them that we are offering them a fixed asset, collateralised sort of contract, but in the end, [the clients] wanted working capital. Because, you know, someone wants to buy more than one asset with that money, someone wants to build an extension in their shop. So, a lot of clients, you know, they were dropped because they wanted the working capital instead of a fixed asset, which we offered in this particular project. Maybe Meki wants to add more?

Muhammad Meki:

Just to build on something that Kashif said, we had a certain amount of capital that the MFI had committed to exploring this new product. So, it was explained there was only a certain number of people that can get this new product, and the MFI was interested in testing whether this would be an effective product for helping people expand their business, and that's why it can't be given to everyone at this stage. It has potential for it to be rolled out in the future. In terms of the control group again, as Kashif said, this is a conversation that probably many people would engage with their partners these days. Maybe we use the example of the vaccines and the importance of testing vaccines in a rigorous manner. Even though we have a sense that the vaccine is a useful thing, they still had to have a control group before vaccines could be approved. These days we could probably use that kind of example to explain that to our partners. But no doubt this is a challenge that many people face. And as Kashif said, you know, it wasn't nice having to turn some people away from our project because we couldn't fund working capital. But, you know, hopefully that gives us a potential future idea for a project where we can help people finance their working capital.

One other thing, since we're being honest about challenges, we had an earlier pilot and in the pilot we had an even more flexible contract. One of the clients didn't behave well under that contract, in the sense that, they were behaving in a way that is slightly concerning to us about the sustainability of that contract, which ultimately helped us redesign a contract for the larger project. And this was the first project that I was working on during my Ph.D. and it really showed me the value of doing careful piloting before scaling up to a larger project. I really learnt [that] lesson on this project.

Pramila Krishnan:

I think that's really, really useful to understand because obviously, you know, even a well-designed project in theory, runs into all sorts of obstacles when you're faced with real people in the real world. Perhaps we should move on, however, and talk a little bit about the results. I mean, going from the challenges to the results, do we understand the impact that the project had and the constraints that it might have faced?

Muhammad Meki:

Thank you Pramila. When we look at the effects of our intervention, the effects of the treatment using follow up surveys, we measure business impacts and household impacts at the six months stage, 12 months stage, 18 months stage, a 24 months stage, and up to two years after the intervention. And we find that assets increased a lot for the treatment group relative to the control group, even after a couple of years. So, our average effect suggests around 40 percent greater assets for the treatment group compared to the control group. And this increase in assets then flows through in terms of an increase in profits for their business. So, the treatment group on average have an increase of profits of about 11 percent per month compared to the control group. And this then positively impacts the household in terms of household consumption expenditure. So, there's a greater expenditure on education, specifically schooling for girls, also, greater expenditure on food for the household. So positive impacts both for the business in terms of assets, profits, and then flowing through to impacts on the household. So, we were happy to see those positive results and persistent, so, it's not the case that they were just short term and then disappearing at the two-year point. They seem relatively persistent.

Pramila Krishnan:

That sounds really exciting. And the obvious question might be, is there room to scale this up across Pakistan, or is there room to integrate it into the formal lending sector? Given that you've started with a microfinance organisation which might be constrained by how much you can lend.

Muhammad Meki:

These are great questions, and it's something we're exploring in future projects. One thing that we're planning at the moment is trying to look at some of the assets that were most productive for these clients. Rickshaws were particularly productive. And we have a project at the moment that's in the design phase where we're trying to help female rickshaw drivers and focussing specifically on female economic empowerment.

In terms of scaling up, we do have a good relationship now, subsequent to this project and subsequent to something that we worked on during COVID. We have a good relationship with the regulators in Pakistan and we're in discussions with them because we are interested in testing out some of these products and interested in testing different forms of this product. And so, we are conscious that it's important to continue this discussion with the regulators. There are two regulatory bodies which would regulate microfinance institutions in Pakistan. There's the Securities and Exchange Commission, which regulate the non-bank financial institutions, and there's also the State Bank of Pakistan, which would regulate the deposit taking institutions. Interestingly, Akhuwat, the partner, is using a similar contract structure now on a different project, which is asset financing for housing finance. And so, in a sense, there is a similarity there and they're implementing it in a different space. But this is definitely something I want to explore in future research, especially this idea of large assets. This is potentially something that Simon wants to talk about soon when he talks about the mechanisms and the model that we use in the paper to try and rationalise our finding and think about what impact these large injections are having for these households.

Pramila Krishnan:

Well, thank you, and yes, I'd want Simon to come in here. As a group of academics, one of the key interests, apart from whether this is a well-designed intervention which has impact, has got to be understanding how to make sense of this, theoretically. And so, Simon, would you be able to tell us a little bit more about that?

Simon Quinn:

Yeah, thanks Pramila. Thanks for having me. Thanks, everyone for joining us. Great to have this podcast. So, we did build a model and we tried to fit the model to the data. That's to say it's a structural model. I always feel like I have a love-hate relationship with models and data. On the one hand, it's a lot of fun and it's interesting to think about possible mechanisms. On the other hand, sometimes the model can be brutally honest in making sure that your assumptions actually make sense.

So, we set up this model, and the model just imagines a very stylised situation where you've got a household that's running a small business and it's trying to decide how much cash to hold, how much fixed capital to invest in the business, in order to increase future profits and how much to consume. The interesting thing is you set that model up and you ask for its predictions and it keeps basically trying to tell you the same thing, which is, look, if you think that the returns to fixed capital in small businesses are really high and both our estimates and indeed the rest of the literature seem to support that, then it must be the case that these households should be investing a lot in their business. So even in the control group, even absent our product, we should see large and sustained increases in the size of small businesses. And what's more, it would be nice to give out our product, but it certainly wouldn't make a profound or lasting difference because the control group is going to be able to invest in order to catch up. But of course, that's not what we observed in our experimental context, and it's not what other people observe looking at micro-enterprises around the world, micro-enterprises basically stay small for the most part.

So, what we thought about in the model is, look, what if it's not as simple as that? What if there are important restrictions on the kind of investments that people can make in fixed capital? We're not the first to have this idea, and we build on ideas in the literature. Formally the literature will call this non-convex capital adjusted cost, but I like to think of it as basically saying that you can't buy an auto rickshaw one wheel at a time. Or put differently, if you try to do that, the rickshaw is not going to make you any money until you get the fourth wheel and the steering wheel and the windscreen and all the rest of it. Now, if that's the case that these kind of capital investments can't be made at a small incremental stage, they have to be either made in big, lumpy investments or not made at all, then the model starts telling us something very different.

For one thing, it tells you that most businesses will not change their fixed capital stock from one period to the next. That's something that we observe not only in our context, but around the world. These businesses do not change their fixed capital stock. Second, you can simultaneously have a high return to fixed capital in the business, while also having a really low return to holding cash. Possibly because there's inflation, maybe family and friends are always taking it from you, promising to repay you at some unspecified future date and so on. And if that's the case, then what you'll find is that people are quite cash poor and not holding large lump sums in cash, and therefore it doesn't make sense for them to slowly accumulate cash in order to make a big, profitable investment. And indeed, that also is something that we see in our data as well. These micro-enterprises are not holding a lot of cash.

Now, if that's a reasonable reflection of the world, then it actually explains that the kind of product we offered could be incredibly useful because it allows a kind of investment that not just was going to happen later, but was possibly just never going to happen for these micro-enterprises. And we think that's consistent with our results, but also some of the other results in academic literature on micro-enterprises, which seems to find that if you give a large, lumpy transfer, then you can actually have large and sustained impacts on both business and household welfare. So, the model really kind of held our feet to the fire, but I think in doing so, it maybe helped us to understand one of the reasons that these kind of larger loans might make a lot of sense, at least for the kind of graduated micro-enterprises that we're working with in this project.

I wanted to make one other point about this product, and I am unambiguously less qualified than any of my three co-authors to speak about this. But it's worth noting that the class of product we offered would often be known say in the UK or the US as a hire purchase contract. But in Pakistan is to be understood as a diminishing Musharakah. That's to say that this product is Shariah compliant, and I think that's important for two reasons.

First, in our experiment, the control group were offered zero interest loans, and that is already massively more generous than almost any other kind of microfinance product that's going around in the academic literature. That’s already a very high bar for our product to clear. It's not enough that our product outperforms the usual microfinance contract that we see in the world. It had to actually outperform a zero nominal interest microfinance loan in the control group. And it did that. But the second point is, I think we're just at a kind of quite early stage in trying to understand how more creative design of microfinance products might enable greater financial inclusion for a lot of the unbanked poor in many Islamic countries. I'm not suggesting that Shariah compliance is always and everywhere the reason that these people are unbanked. But I think there's really exciting scope, to think about creative Shariah compliant financial products that may go a long way to reaching households that previously have felt very excluded from traditional banking systems.

Now, as I say, I am massively underqualified to speak about this, so I should let my three other co-authors come in.

Muhammad Meki:

Yes, I agree with Simon, and I think, especially now, people in the world of microfinance are thinking more about financial inclusion and populations who may not have access to the type of financial products that they require, given their own preferences. We think that this product or these types of products can bring a greater number of people, especially in populations with large number of Muslims, or any other people of any other faith. As Faisal said, this is part of a growing strand of the microfinance literature that really tries to provide more tailored products rather than just the classic kind of Grameen product being applied to everyone. This is about thinking about people’s own preferences and people's own requirements and providing them with more tailored products, and that takes into account their preferences and what could be most effective for them.

Pramila Krishnan:

Thanks Simon and Muhammad, that was fantastically clear.

Muhammad Meki:

I just wanted to add one thing that, as Simon said, having said all of that in terms of it being compliant, we did not use religious language at all when explaining this product. We were very conscious not to use any Arabic language. We described it purely in terms of cash flows. And as Simon said, the cash flow structure of this contract that was implemented has parallels to many structures that are used in lease contracts and hire purchase contracts across the world. It doesn't look dramatically different in terms of the underlying cash flows. And we were very careful in the way that we described the product in terms of the underlying cash flows and specifically did not use any sort of religious language or any sort of Arabic terms at all.

Faisal Bari:

Yes, I just wanted to add that, I mean, we wouldn't have been able to make sense of those Arabic terms for most people. Our clientele was people who had small businesses. They were not from the world of finance. So, it would have been these very difficult Islamic finance terms would have been difficult for them, also, they are actually difficult for some of us as well. But that's another side.

The other thing I just wanted to say was that in surveys, when you're doing surveys in Pakistan and asking the people about why do they not go to banks, etc., there is definitely a significant number of people who point out that compliance with Islamic law and Shariah, and the issue of interest is an issue for them. It's not for all of them, but for quite a few, it is an issue. And so, they might either go to friends, family or places where they can get more flexible arrangements that are going to enable asset financing, profit loss arrangements, etc. So in that sense, such instruments, and experimenting with such instruments, is a very good idea.

Pramila Krishnan:

Thank you. That was very useful. I suppose it might be interesting to ask at some stage whether indeed your more formal lending sector might be able to design instruments inspired by the experiments that you've run and the impacts that you've had.

Kashif Malik:

Yeah. So I was just wanted to say that there is a big demand of risk sharing products within Pakistan. It wasn't explored before. And as we were discussing about the scale up of such projects, Akhuwat, our partner MFI, is already considering the same asset-based product to be implemented with a slight increase in the number of months. But that I wanted to add.

Muhammad Meki:

Yeah, thank you Kashif. Just to end on Pramila’s question. When presenting this paper and sending it to people and getting feedback, a number of people were wondering how does this scale up? And more specifically, what's the right type of institution to offer this kind of product? We are working with a microfinance institution, but others have suggested to us that potentially, if you're focussing on particular productive assets, particular assets that could help a large number of people and perhaps produce manufacturers of those assets could provide that type of financing. And so, we would need to think, you know, going back to what Faisal was mentioning about the type of information that a microfinance institution has and the type of trust that they have with their borrowers, the type of information that they have that maybe others do not have. We need to think about whether a manufacturer of such assets could actually provide this type of financing. But it's something that has been raised to us as a possibility, you could have these big companies that produce productive assets, which could actually finance this directly. And obviously we know from a number of other successful development interventions, such as the graduated programmes pioneered by BRAC and others, that there are sometimes these clear, productive assets that can benefit a large number of people, and so, if you think about specific assets, there are potentially other ways of delivering these to people that do not necessarily have to go through a microfinance institution, even though that's the route we've taken with this particular project.

Pramila Krishnan:

Thank you very much. I think that was just a splendid discussion, and there's lots of food for thought here.

Faisal Bari:

Can I just say that when people were talking about challenges, I think one of the joys of doing this sort of research and one of the challenges always is the length of time it takes to do an RCT carefully, and pilot it and then bring it to completion in the field. It takes a number of years and that in itself is a challenge. But also the joy of working with amazing people is the other side of it and the pleasure of it.

Muhammad Meki:

Can I also end on a positive note, since Faisal ended on a positive note. Yes, it's taken a very long time to implement this as many other projects as well. But it's been such a pleasure to visit the country and to spend time in Lahore University of Management Sciences, where Kashif and Faisal hosted us and introduced us to so many of their students, and the opportunity to learn from so many people in the country and with local researchers has just been really life changing I would say. It has led to so many other projects, it also just helped so much in terms of my own development as a PhD student and since, so it's really, really been great. And I know this builds on a very long tradition at CSAE of working in the field, working very closely with partners, yourself Pramila and others in Ethiopia and other places. And it's really, really been an enormously beneficial experience way beyond just this particular project.

Simon Quinn:

I completely agree. And when the world and the COVID situation permits, I know we're all looking forward to visiting again.

Pramila Krishnan:

I'm just going to end on a slightly more personal note and ask Faisal and Kashif what they made of Pakistan's wonderful T20 victory over India and how they think that happened.

Simon Quinn:

Far too magnanimous, Pramila.

Kashif Malik:

And New Zealand as well.

Pramila Krishnan:

Ah, New Zealand as well, yes.

Kashif Malik:

Thoroughly enjoyed both.

Faisal Bari:

It was lovely to see these games, but I mean, I tend to not watch Pakistan when Pakistan is playing because then I can't really enjoy the game. I get too involved, so I'm actually enjoying other matches more. And it's nice to see Pakistan win once in a while.

Pramila Krishnan:

Indeed, and it'll be lovely to be able to, as Simon says, travel for research and exchange ideas, but also perhaps to be able to travel to see the teams.

So, thank you, Simon. Thank you, Muhammad, and thank you Faisal and Kashif for joining us for this fantastic discussion. And finally, thank you to everybody for listening to this CSAE research podcast. We hope you'll join us again next time. Thank you.

Faisal Bari, Kashif Malik, Muhammad Meki, Simon Quinn:

Thanks everyone.