Matching Products with Preferences: Innovations in Commitment Savings for the Poor

Presentation Transcript

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Dasha: Good morning, everyone. Thank you so much for coming to our seminar number 62. And today we have a very exciting presentation and I would like to introduce you to our moderator, Jason Wolfe. Jason is a senior household economic advisor with the HIV and AIDS office at USAID, where he works our ______ programs to help improve economic circumstances for households affected with HIV and AIDS. Jason has 14 years of experience and worked in 45 different countries. Prior to joining HIV and AIDS office Jason with USAID microenterprise development office. Thank you.

Jason Wolfe: Thanks, Dasha. I have to turn this off. So good morning, everybody. Thanks for joining us here. And thanks to the 46 people who have joined us online. I am so excited that we were able to pull this seminar together today, bringing together two of my favorite topics, which are savings and evidence. *[Laughs]* And in particular, two specific research projects that I've read about and followed for quite some time and I'm really thrilled to be able to hear from the investigators themselves about what they did, and I hope everybody here will enjoy it as well.

So without further ado, the two main presenters that we have today are Jessica Goldberg, currently assistant professor of economics at University of Maryland, and Jonathan Robinson, also assistant professor of economics at University of California in Santa Cruz. Jessica is with us here live in person, John is joining us virtually via webinar. John, maybe you can say hello via chat. And I don't know, I could go on and on and on for the next half hour, talking about the vast amounts of experience that both of you have, but Jessica will be talking about a specific project that she was co-investigator on Malawi, and John will talk about a research project that he was co-investigator on in Kenya.

But to kick things off, Aishwarya Ratan – am I pronouncing your last name right?

Aishwarya Ratan: Sure.

[Laughter]

Jason Wolfe: Close enough. From Innovations for Poverty Action, will kind of set the stage for us. And Aishwarya is the director of the Microsavings – it's a longer name than just Microsavings – Microsavings and Payments Innovation program at IPA. And so Aishwarya, let me turn it over to you.

Aishwarya Ratan: All right. The sound is okay for everybody? Okay, great. So hello and good morning. I am glad all of you have made it here, and thanks to everybody who is participating online; I think that's just great. So what I'm going to do is maybe in about 15 minutes I'll set the stage for what the topic is for today and sort of how we might think about some interesting questions in that space. And hopefully it will be useful for you as you listen to Jessica and to John speak about specific projects in this area.

So first thing, I work for Yale University and for IPA, Innovations for Poverty Action. And we basically go around trying to evaluate different development interventions to see which ones of them are working, how effective are they, what kind of results are they producing, for whom, how much, where, in what context, all of those questions. Right? So we build evidence and hopefully this is useful for policymakers as a result. So IPA works in a lot of places; that's the map. So I think about 400 projects currently underway in around 50 countries, and we have about 600 staff doing this work every day. So it's a fairly big set of activities.

So we'll start sort of very high level and then get pretty specific. So first, so that, you know, everybody in this room is here, everybody who is watching is here because we're interested in questions around why people are poor and what can we do about it to help them not be poor. And poverty itself, you can think about it as having a bunch of characteristics, right? So you can say the poor or poor households typically have some sort of issue with consumption levels, so they have poor consumption; some set of issues around the kinds of livelihoods or occupations they get to pursue. Yeah, can everybody see the slides? They have some set of issues around having few assets, whether these are material assets or human assets, like education and healthcare, which is sort of embodied in people.

They’re very prone to shocks, so they are much less resilient than you and me in responding to adversity or things that are unexpected. Both of the variety of earthquakes, you know, covariant shocks, where a lot of people are affected at the same time, and sort of more idiosyncratic shocks, which is to say my father passed away, you know, and then what happens? And sort of the big other issue is that a lot of these people are not at the heart of any social or political debate; they live on the margins and their voices are often not heard, so that’s another big problem that we should think about when we’re thinking about poverty.

So to respond to this you could do any number of things, and you can pick your favorite sort of, you know, approach. Some people work on consumption support, you know, the governments are often in that business. Some people work on livelihood expansion and support, some people work in financial services, some people think about health and education reform, and other people are working on civil society reform, solidarity, governance reform, etc.

So I work in financial services, and so do many people. And there’s a reason I particularly like this approach, and part of it is that it does a lot of things. So if you fix the way people are able to manage their money and the way they’re able to sort of spread it out over, you know, the course of their lifetimes and the way they pass it on to their children, then you may be hitting, you know, a number of constraints in consumption, in livelihood, in asset creation, in human capital-building, in susceptibility in response to shocks, and some would even argue social and political inclusion, but I haven’t yet circled that; I’m not yet convinced. Yeah?

So there’s a sort of theory of change we’ll be using in sort of thinking about why what we do may have an effect on the outcomes that we care about. So I’ll very quickly go through this. So when we’re talking about savings products, right, you can think about – so the first question to ask in any of these discussions in development is why are we doing what we’re doing? What is the problem? Why is what we want to see in the world not happening organically, right? So why is it not all automatically happening if everybody wants this to happen?

And in our case we don't need to be convinced to go and get a life insurance product, go and get a bank account, go and invest in a hedge fund, whatever we want to do, right? But for the poor, they face a bunch of constraints when it comes to accessing and using financial services. So you can think – I think about them in these three buckets, and we can sort of debate them later if you want. One is that where the poor live, the way they live, access to formal financial services is itself a problem, both for the distance they have to travel to get to these services, in terms of the pricing of these products, in terms of the regulatory requirements for getting these accounts. All those seem to be issues, right, for the poor.

Second big bucket of things is basically what we are focused on today. There are some things that are inherent to us being human beings which are sometimes problematic. So there are some set of, you know, behavioral issues, which we all deal with, which we have to overcome or find a way to fix as we think about optimal financial sort of behaviors for ourselves. And this also relates to our societies, right? The people we live with and engage with, even they have an influence on the kinds of financial products we use and how we end up, you know, meeting our financial goals.

Thirdly is sort of education or training, you can say. So basically in a world where you have choice how are you going to pick the financial product that suits your needs? Do you have enough information; do you have enough sort of awareness of the choices that you have at hand, etc.? And in that I think I would put everybody in the world is in that bucket, and quite significantly deficient. I don't think I have the right knowledge to make choices around my own portfolio, let alone like people who have like a class two education and a million other things to think about.

So if we get some of these right, you know, if we target some of these with interesting and effective interventions then what would you expect to see in the world? You would expect to see the poor starting to accumulate more of whatever they want to accumulate, whether it's grains or whether it's cash or whether it's cows or whatever. You will hope that their wealth does not shrink as much as it does right now, either because of loss, you know, because theft happens, I think maybe they're less able to secure what they have. So less theft, but also less demands from either themselves or from other people who are making demands on their money and with whom they don't want to share for whatever reason. And you hope their wealth will grow, you hope that this extra whatever wealth is available for both consumption during regular life as well as during shocks, that they have a buffer now. And you would hope that this wealth was available for investment in themselves and their families.

If this happens right there is more wealth, which is a great thing; there is better consumption, which means they are eating better, having maybe better clothes, having better tools, whatever it is they want to buy with their money. I put in parenthesis “frivolous consumption” will be sort of dampened. And I think it’s very difficult in this room for us to decide what is frivolous consumption, or in any room, because I like watching movies, you like dancing; I don’t know, you like something else. Somebody likes smoking a cigarette. So nobody is here to make judgments on anything, that’s not the point of the discussion, but to say that maybe when people have more money they’re able to sort of think again about what they want to spend on and in what balance.

You hope that they are able to face shocks better because they have a buffer stock. You’d hope that the investment that they’re making in their own life as well as sort of their assets will improve. And this last point is not emphasized enough; your savings are your cheapest source of capital. So for the past couple of decades we have taught a lot about credit services for the poor, and that’s fantastic, because we all need loans at some point. But you don’t start off your life saying, “I want a loan,” right? You start earning a little bit of money whenever, you know, and then you start putting aside a little bit and then you get to like $300.00 and then you say, you know, “I want to buy a good bicycle and it costs $500.00 and then my deficit is $200.00; I’ll borrow $200.00 at 10-percent or whatever interest rate,” and then you’re done. That sounds exactly like what you and I would do.

But we didn’t start with that same kind of portfolio approach for the poor, and that’s problematic. So I think savings becomes critical because it’s the logical way to start building assets, and then credit, and then insurance and all these other interesting products can come into play. So think about it in that fashion.

So we do all this, right? And at the end of the day what do we want? Happy people. People doing what they want to do, eating what they want to eat, buying what they want to buy. Their own and their family's stock of capital should be able to grow in this generation and in the next and they should be more resilient to shocks. Okay? That's our big theory of change and why we think this is interesting and important.

So now we'll speak specifically about the problem we're going to discuss today, which is the strangeness about human behavior, right? So human behavioral science, you know, which comes somewhat from psychology and from, you know, a little bit of, I don't know, sociology, and then now economics is dealing a lot with sort of the behavior; human behavior and what this means for economic decision-making. And here, if you look, there are a whole bunch of things which you will immediately recognize once I put them up.

Self-control is a problem for all of us, you know? And in economics or in psychology, I don't know where the term comes from, but this is called time inconsistency. And this is exactly what we're going to talk about for the rest of today. Yeah?

Other problems are inattention. You know? So we all have 10 million things on our task list, I forgot – like I'm doing everything and I forgot that today is the day I have to pay my mortgage, whatever payment, and then tomorrow I get a penalty on my credit card, but, you know, whatever.

So third status quo ______ is basically inertia. You're doing something, you're doing something, you're doing something, and then to make a change requires some special significant, you know, prompt, you know, and so it's very easy for us to get into these rhythms, as I think is also true with many people who stick with jobs that they don't like. You know, it's just that it's too tough to change.

Choice overload is something that there are a couple of really nice ____ talks on this by Sheena Angar from Colombia. And she basically talks about the problem in this day and age of having too many things to choose from. So when you have like, you know, Pepsi, Diet Pepsi, Coke, Diet Coke, something else, something else, you know, and when the difference between them is so marginal, it becomes difficult for us to really tell apart the difference and make a choice. So think about this in the context of financial products, right, how you're choosing between HDFC and Citibank and somebody else and how you're making those decisions, right? Etcetera. So a whole bunch of other things which are specific to human behavior that we need to sort of think about as we plan for optimal financial decision-making.

But it's not just on the behavioral side; we also have other issues that we face when we're making these decisions, both within our families. So any sort of plan to buy something is a choice between, for example, a husband and a wife, between two siblings, between a parent and a child. Right? So how are these negotiations done within the household, you know? Is there optimal sort of whatever, like optimal sort of collective decision-making, or is it a lot more skewed towards the person who holds the balance of power in the household? So how do we think about it in that context?

And same thing holds for outside the household; everybody is linked into a whole bunch of social networks; you have friends, you have family, you have kin networks. How does what you do affect them and how does what they do in response to what you do affect you in the long-term? Because you are in it for the long-haul, not just for finance, but for everything. These are the people you go to when you have a health crisis, right? These are the people you go to when you have a health crisis, right? These are the people you sort of cry with, so you want to make sure that you're not upsetting them too much. You know?

So now we will get back to the core problem for today, which is the self-control time inconsistency problem. So this is best described as the two-self problem, again, or twin-self; I don't know. I don't know where that nomenclature comes from either. But so this is the problem of there being two, I'll use myself as the example, two Aishwaryas. And I like this example; Sandhel _______, another researcher, uses it a lot, and I like it because it's extremely appropriate. So there's Aishwarya of 11:00 PM last night. So let's imagine we are at 11:00 PM last night, and there's Aishwarya of 11:00 PM, and she has to attend this meeting here today. And so that is a decision involving Aishwarya of Wednesday morning, right? But the problem is if I let nature take its course then Aishwarya of Wednesday is going to get up at 10:00 AM, and that's a problem because she has to be here at 9:00 AM. So we need to sort of do something to make sure that this other person in the future does something that the 11:00 PM Aishwarya wants her to do. And so what does she do? She gets an alarm clock or her phone and says, “Okay, I’ll set it for whatever, 7:00 in the morning, so that it will prompt the future Aishwarya to get up at the right time.”

But how many people in this room today got up at the time that their alarm clock rang? Hands up. Okay, but that’s still a minority. So this is exactly the heart of the problem, that oftentimes we don’t live up to the goals we set for ourselves. So you have, you know, and so basically this is why the snooze button is invented, to say, “15 minutes, 15 minutes, 15 minutes” right? Or 9 minutes, whatever the snooze, whatever time it’s set for. But does it even – okay, so imagine, so everybody is happy with snooze, but people are still sleeping too late, even with the snooze button, ‘cause they keep just hitting it and sleeping.

So somebody invents Clocky. Who knows about this? Okay, thank you. These are the people who have serious problems.

[Laughter]

Aishwarya Ratan: But what happens if this clock starts ringing, and then it jumps off the desk, and then it sort of like moves around, goes into some corner of the room, and starts beeping ferociously. So now you have to get up and off your bed and go to where Clocky is and turn it off. And once you’re up you overcome the big problem, right? Once you’re standing you’re like, “I might as well go into the shower.” You know, you’ve come out of the blanket, that’s the problem.

So this is exactly a commitment problem. Exactly. So we have, you know, we’ve had a range of interventions and innovations in responding to sleep commitment issues. We have soft commitments like, somebody told me about this and I found it fascinating, so you have some way in which you can preset your oven for the morning, you know, and say, “At 7:00 Am I want you to start turning on and baking whatever’s inside,” and you put some bacon inside and you put some dough, and so at 7:00 AM you start getting these wonderful smells of like cooking bread and whatever you love. And then you’re like, “Oh, I'm just totally motivated to get up" and you get up and you get about your day, because of a nice, pleasant reminder of some sort. So you can do that.

But there are people who will totally not respond to that; they'll be like, "It's okay, I can have bread later. You know, I'm just going to sleep in." So you want something that's harder than that kind of a soft commitment, which is this is what I used to do – actually, my sister used to do with my other sister, which is to say, "If I don't get up at 7:00 you come and pour water in my face." Because she knew that she had such a big commitment problem, and she had to do what she had to do; she was like, "7:00 AM, if I'm not up, you come and just throw water in my face. I'll hit you, but I'll get up." You know, so-

[Laughter]

Aishwarya Ratan: So exactly translate that into the way we think about savings products, right? You can have soft commitments, which is one project that we did to put labels on the – so you have a passbook in many developing countries where you record all your savings deposits. So we just had a label that was added which said the goal that the person had set for themselves. So some women said, "I want to set a goal for my child's education. I want a label that says 'enterprise' for my microenterprise. I want a label that says 'housing.'" All we did was just put a sticker that said 'education, housing, enterprise," and this is the cheapest intervention you can think of, right? It's printing a bunch of labels and sticking them on these passbooks.

But then a year later we find – I won't say that. I will say that next slide. But, so we find that it does something good, just putting these labels. And that's a very soft commitment, because you can just totally ignore it, right? There's no penalty involved. Versus a hard commitment in which you sign up for a program in which you will face a penalty if you don't make a deposit, or you sign up for a fixed deposit scheme. Everybody in this room should have some kind of long-term savings plan, right? Pension plans, exactly a hard commitment device. You've signed up for it, 20-percent of your income is being set aside for your long-term savings, you don't see it, you don't touch it. I hope some amount has been set aside for your long-term savings.

[Laughter]

Aishwarya Ratan: But that's the point of like an automated, you know, it's out of your hands, you're not going to touch it. So that's a hard penalty. Yeah, a hard commitment.

So we have seen a range of impacts in this space so far. With the soft commitment device I just described to you, the labeled accounts, we saw a 30-percent increase in net savings for these women. This is huge for an intervention that costs like some ridiculously small amount, you know? Huge bump up, right? This is in Ghana last year; it's a project by Dean Karlin and Maggie McConnell. Hard commitment, another project by Dean and _______, 80-percent increase in net savings towards the goal that these people had set for themselves. And this was, in all of these the one thing you should always ask when you're in a presentation or in a discussion on impact evaluations is what's the take-up rate. So always ask that question, I encourage you to, because that's the benchmark against which you can evaluate.

So for example, I think the second study – I don't know the first study off the top of my head, but the second study, it was I think about a 25-percent take-up rate. And off those, like, you know, and even with that 25-percent take-up rate you had an 80-percent bump up, which is very, very good.

Okay, so last comments. I know I've gone over time, but I hope this is useful in setting the stage. A couple of things for you to keep in mind as you go through the next two discussion. First is commitments that we're talking about, commitment devices; for whom is it, what kind of individual, what kind of family? Some of us are better at self-control, some of us are worse at it, right, just as people. Some people meditate and are better, some people don't. So who is the kind of person that you're talking about.

What is the kind of commitment device required? Do you need something soft or do you need something hard? Yeah? When is it required? It's not that I might need a commitment all my life, right? When I'm 60 years old nobody should tell me I have a commitment savings account. I want to be spending my money before I die. You know? Like you should think about what kind of commitment for what timeframe for what kind of consumption on the side.

Short-term impacts, how does it affect both the outcomes you care about and financial services, like, you know, an accumulation in welfare? But also on the behavioral side and on the social impact side, and long-term. And I think the long-term piece is something that's under-studied in my opinion, because this is also a new space. So what are the long-term behavioral ramifications of having commitment devices? Does it lead to habit formation? Do you get better at self-control if you start using more of these products, right? And second, like the social side, what's the strength of your kin networks in the future if you start like, you know, committing away some of your cash and not having it available for them to use periodically?

And finally, two big things. Always think about the commitment product in the context of a portfolio. This is not the only product anybody should have. So it's always a balance for the individual or the family between liquidity concerns, like cash requirements; that's why we have checking accounts, and sort of committed accounts which build up towards a goal, you know, in some sort of future. And finally, savings itself is meaningless. Just having cash in a bank does nothing for anybody. It has to at some point, either in the present or in the future, translate into some sort of consumption or expenditure or asset which is useful to somebody, right? Because it just – it shouldn't just stay as money.

And that's the point of the end of the day, that when we're making our measurements we might measure savings balances now, but in the long-term, and Jessica will talk to this, we want to measure actual welfare outcomes, how much are you spending on education, how much are you spending on healthcare, and how is that leading to better crops, better health, better education, better lives, yeah?

So that's my overview. That's our URL if you want to learn more about our work, but I'll let Jessica take over.

[Applause]

Jessica Goldberg: Okay, then I'd rather do this. It seems so odd to talk while sitting down.

Great. Thank you so much. That was a really very useful way to start to think about the context in which John and I designed the research projects that we'll be talking about today. So the project that I'll present is work done jointly with Lasa Brunee and Dean Young, who are both at University of Michigan, and Chavey Jenay, who is here in D.C. at the World Bank.

We became interested in studying savings exactly for many of the reasons Aishwarya talked about. So – oh, sorry.

Female: *[Inaudible]*

Jessica Goldberg: Right. Right. Are we good?

Female: Yep.

Jessica Goldberg: Okay, great. So there are really big – savings can help people achieve lots of important goals. It can help them increase their consumption, it can help them with their ability to cope with shocks that they experience, and it can help them make profitable investments. In this project we're really focusing on the investment motive for savings. There is evidence from previous studies that people in developing countries do have activities that have high returns. So there's high returns to capital for entrepreneurs. For farmers probably the highest return investment available is fertilizer, and a project that John, who will speak later, is involved in, demonstrates that in Kenya, for reasonable levels of fertilizers, farmers can realize a nearly 70-percent annualized return. This is a very profitable investment.

Despite the fact that this is s a profitable investment, fertilizer is often underutilized, and the response of governments and other organizations has been to try to increase fertilizer usage through programs like subsidies. In Malawi the fertilizer subsidy program reaches about 1.5 million farmers per year. This is a country with about 13 to 13.5 million people, so it's a big program, and it's a very expensive program; it accounts for 11-percent of the government budget. So that's not a sustainable level of spending without continued donor support.

What I'm going to talk about today is the third project in a series of research projects designed to look at how financial services can help increase farm output. So the first project looked at using weather insurance to encourage the take-up of a new technology, of a higher-yielding seed variety. The second project uses biometric identification, fingerprint identification to improve loan repayment rates. And we demonstrate that when people – that when the sanctions for not repaying a loan can be enforced because we can track who did and did not repay a loan through fingerprinting, then that does improve loan repayment rates, which helps target loans to people who are the most appropriate borrowers, but also helps them in the long-run reduce the costs of microfinance. And this project focuses on savings. So moving away from credit and towards the idea that we want to help people accumulate their own resources to purchase their inputs, rather than relying on loans.

And so what we do here is we look at two different types of savings products; one we'll call ordinary savings accounts; these are the liquid savings accounts that people in the United States are familiar with. So they are accounts into which you can deposit and withdraw freely. There may be small transaction costs, but no fees or penalties associated with these transactions. The alternative are commitment savings products, and commitment savings products are illiquid savings products that have a number of different variations I'll talk about as we go forward.

So a good place to start explaining this project is to talk a little bit about the agricultural cycle in Malawi. Harvest – whoa – could you make that? Great. I pressed the wrong button. Yep, there we go. Thank you. There's not a high – okay.

Harvest in Malawi begins right at the end of the rainy season. So harvest starts in about May and runs May, June, July. That's also the peak selling season for tobacco. Tobacco is the main cash crop in Malawi; it counts for about 40-percent of exports. And then there's a period kind of from about August through October where there aren't a lot of agricultural activities. The tobacco market is winding up and people are kind of waiting until the agricultural cycle begins again, when the first rains start, often in late November/early December. And so the time of year when people are planting is the time of year when they need to be applying inputs to their crops.

And then the rainy season lasts from November through about the end of March, with the months of January, February, and March sometimes called the hungry season. This is a time of year when people have often consumed the crop that they grew last year, so they've run out of maize that they grew and stored. But it's before they can harvest the new season's crop, and so it's a time of year when people really are running short on resources. And savings is particularly important to span this period between harvest and planting. So when we think about savings for investment purposes we're thinking about tools that can help people move money from the harvest period, when they get money, to the planting period, when they need to buy agricultural inputs. And so that's really what we're talking about today in this project.

So what we do is we used a randomized controlled trial to answer a number of questions about how savings can help increase agricultural profits. So the most basic question is what is the effect of providing access to savings accounts on savings themselves, on input use, and on output? Then we want to compare whether these illiquid commitment accounts have different effects or greater effects than ordinary liquid accounts. And we want to try to start to unpack the mechanism, what is this, how is this working, and going back to the number of constraints, the number of obstacles to savings that people may experience which of them are these accounts helping address.

Now the commitment savings accounts are a mechanism that have been used in many developing countries. They are actually related to a product that should be familiar to us in the United States, which are fixed deposit accounts. And what they do is they let people voluntarily restrict their access to their own funds. So there are two common types of commitment savings accounts; one is an account that is a date-based account. People choose a date, they put money into account, and they can't withdraw it before that date. The alternative, the product that we do not test in Malawi is an amount-based account. So you do say that you have a goal and you can't withdraw money from your account until the account has reached a specific balance. We are focusing on the date-based account because we are really interested in products that will help people move money across the agricultural cycle, and so that's a date-based problem.

Now the illiquidity here is on the spectrum that we saw earlier, about kind of from soft to hard commitment. This is moving towards a hard commitment. And an extreme form of this would say that you absolutely cannot take your money out of the account before the date that you have chosen. Now in practice, the microfinance organization that we partner with does allow some exceptions in emergencies, but it's a fairly hard commitment. And what that means is that while it helps households move money across time, it also limits their ability to respond to shocks. So if something changes, if there's an unanticipated change in income or an emergency in your family then you don't have access to your money to respond to that shock. And what that means is that the net impact of these commitment savings products on households is not known, and that's what we're testing in the project.

Now I won't talk very much about the sources of demand for commitment because Aishwarya really covered this. But we focus on two of the things on her list. One is the self-control problem. So economists describe this as having hyperbolic time preferences. What that means is that people are more patient about decisions that they make in the future than they are about decisions that they're making right now. When I think about money that I am going to get six months from now or a year from now, yes, I want to save; that's a good idea. When I get that money I'm going to save. But when that decision becomes a present-tense decision, what do I do now? I have money now. Do I want to save it? Then I tend to be less-patient and think, "No, I don't want to save. Actually what I want to do is spend that money now." And one form that that can take is this hyperbolic time preference.

There is evidence from laboratory experience that people do have these sorts of preferences, so this isn't a hypothetical thing; real people seem to behave this way. And in another experiment that I run with my coauthors in Malawi, among tobacco farmers, among the population we'll talk about today, we see that people who have these types of preferences are exactly the people who are less likely to stick to a plan that they've made about how they want to use money. So when people have these kinds of preferences it does translate to a real-world tendency to have trouble sticking to a plan about using money.

A second important reason that people might want commitment savings products is that they face demands from others. So the first set of reasons are demands from yourself, self-control problems; the second set of reasons are demands from others, right? Other people who are in your family or in your social network ask you for money. And if you have money on hand it's really hard to say no. It's socially unacceptable to say no. But a commitment savings product could give you a valid reason to turn down these requests. You could say, "You know, I'd really like to help you, but my money is in this account that makes it impossible for me to access." And to the extent that people anticipate these sorts of demands and want a tool to resist them, they might want commitment savings accounts for that purpose.

So the sample who we work with are about 3,000 tobacco farmers who are borrowing money from Opportunity International Bank of Malawi. These tobacco farmers are all members of joint liability borrowing clubs, and they receive loans for their agricultural inputs. Tobacco in Malawi has a particular marketing scheme. What happens is that when people sell tobacco, small holder farmers or others actually, it's all sold through a centralized auction system. And part of the regulations of that auction system are that all of the proceeds are deposited directly into bank accounts. For the small holder farmers who we're working with these are club-level bank accounts. Farmers transport their tobacco to the auction floor, it's sold under a grower ID number associated with the club, and then money is deducted from the proceeds of the sale to repay the club's loan, and the profits are deposited into the club's account.

And so what we do is we take advantage of that preexisting direct deposit system to design our experiment. What we are actually doing is we are offering individual savings accounts to members of these clubs. We randomize at the club level and we split the clubs into three groups. Some of the clubs are given financial education, but no other treatments. Then a second set of clubs are offered direct deposit into individual ordinary savings accounts, the liquid deposit accounts that we're all familiar with. And so the intervention here is that instead of just having a group savings account, individuals in the club have the opportunity to open up an individual account that they can deposit and withdraw from at will.

In the third group of clubs members are offered access to not only this individual liquid account, but also to an individual commitment savings product. And so they can open both of these accounts together. And when they open a commitment savings account we ask them to make three decisions. The first decision they make is about a trigger level. So they choose how much money they want to have access to in their ordinary account. And whatever level they choose, then money goes into the ordinary account until deposits into that ordinary account have reached this trigger level. So this is a way of recognizing that first people need to have some liquid assets available.

The second thing that they choose, so then once they've hit that trigger level money starts going into the commitment account. And money stays in that commitment account until a date that has been selected by the farmer. And so that's the second choice that farmer makes, when do you want to be able to access this money that you have locked away.

The third thing that these farmers choose when they open a commitment account is the maximum amount of money that they want to save in this illiquid account. And if they reach, if they fill up the illiquid account to that level, then any excess profits will go back into the ordinary or liquid account. So the financial education, the idea that you need to preserve some money for now for your immediate expenses, and you might want to lock away some money for future expenses, that financial education is given to all three groups. The difference is are whether they're offered help in opening individual ordinary accounts or individual ordinary and commitment accounts, and we'll call these groups going forward the ordinary treatment group and the commitment treatment group. But do keep in mind that everyone in the commitment treatment group also has access to the ordinary savings product. So as Aishwarya said, a commitment savings product should never be the only savings product in your portfolio.

We are also interested in understanding the mechanisms. We want to know in particular if this is a self-control problem or another control problem. And so in order to do that we layer on top of the first experiment a second experiment designed to tease out what is the role of pressure from others in inhibiting peoples' ability to save. And so what we want to do is we want to vary the amount of pressure that people might be exposed to. That's a tricky thing to do, but here's how we do it. We take all of our clubs that were offered savings accounts, and among those clubs we further subdivide them into eligibility for a raffle based on savings balances. And the way that the raffle works is that people get one ticket per 1,000 kwacha in their savings account. What that means is that the number of tickets you get for the raffle is very closely linked to your savings balance. If you get seven tickets you had between 7,000 and 8,000 kwacha in your savings account. Right?

And so we give out these raffle tickets in private for some of the clubs and publicly for other clubs. When we give the tickets out in public that means that we're also giving out a lot of information about the amount of money that people have saved. And that is the kind of intervention that might increase the amount of pressure they're under to share money. And we want to see if the commitment savings accounts are especially helpful in a context where people are likely to face more pressure to share their money.

And so this is the second intervention layered across the top. And first, when I talk about the results, I'll talk about the results looking only at the savings accounts. Remember that within each savings treatment there is an equal fraction of people who were affected by each of the raffles. So to make the treatment conditions clear we have a control group. So the control group here, we're not giving access to any new savings products, and also they didn't have a raffle. So these people received the financial education, but otherwise they are working under the status quo of financial services available to tobacco farmers in Malawi in 2008.

And then we have a second group of clubs, a third of the clubs, who are offered only the ordinary liquid savings accounts. So they get the financial education plus they get access to individual accounts. Their money is directly deposited into their individual accounts. And among the groups offered these individual accounts, one third of them have no raffle, one third of them have a raffle where the tickets are distributed in public, one third of them have a raffle where the tickets are distributed in private. And then finally we have the group who are offered the ordinary and the commitment savings accounts, again, some under each of the raffle conditions.

So to make the timing clear, lining this up with the agricultural season, we offer these savings accounts to people just as the harvest is beginning. So really in April and very early May, before they've started to harvest their tobacco. And then we distribute the raffle tickets after people have harvested and sold most of their tobacco, in between about August and October in 2009. Planting takes place in November and December 2009, and then we run an end-line survey after the 2010 harvest so that we can get retrospective information about the inputs that people used in the 2009-2010 season and their profits in 2010. So we have sets of outcomes that are related to the savings balances, those are administrative data, and then we do worry about these outcomes that are more closely related to welfare; how much inputs did you use and what did that translate to in terms of profits and consumption.

So to quickly preview our findings, what we find is that being offered a commitment savings account has a big effect on the level of inputs that are used in the next season, and on the profits that are realized from the crop grown in the next season. We don't see that effect on input use and on profits from the offer of ordinary savings accounts. Now very interestingly, these accounts work; they have big effects, but those effects are not coming through the actual restriction of access to the funds, the tying of hands, the keeping people from withdrawing their own money doesn't seem to be necessary. And I'll explain this as I go through the results, but what really happens here is that most of the money accumulates in the liquid ordinary savings accounts. Right? So people who have commitment savings accounts still accumulate most of their money in the liquid account, yet they are better off than those who only had the liquid account.

And what this means is it's very hard to pin down the mechanism. So it's possible that what we're seeing is that there's a reduction in the problem of other control, there's a reduction in the demands from the social network, or more likely an increase in one's ability to cope with those demands. It could also be that there's a mental accounting effect, particularly of having two different savings accounts.

So let's get into the results. I'm going to skip through the regression specification, except just to say that we are comparing among these six different groups and talk more about the outcomes themselves. So what I'm showing you here is what is the added effect of being offered either a commitment account or only an ordinary account on six different outcomes compared to farmers who were not offered any new financial products. And so the first outcome we look at is just a take-up indicator. So when we offer these accounts about 95-percent of people sign up for the accounts. But that doesn't mean that 95-percent of people actually save money, right? And so when we look at how many people actually saved, those who were offered ordinary accounts are 16-percent more likely to save than those not offered any individual accounts. Those offered commitment accounts are 21-percent more likely to save than those not offered any accounts. Now there are no statistically significant differences between the ordinary and the commitment treatment in the outcomes that I'm going to – in most of the outcomes in this table. So being offered a savings account of any type increases savings.

For both groups deposits are about $150.00 higher for those offered an individual account than for those not offered any individual account. And again, the effect on total deposits is similar for people in the commitment and the ordinary savings groups. Most of those deposits wind up in the ordinary accounts. So the increase in deposits is about 22,000 kwacha for those offered commitment accounts, but 19,000 kwacha that winds up in the ordinary liquid account, and only 2,000 winds up in the commitment account. Now we're pleased to see that there is more money in commitment accounts for those who are offered commitment accounts; that's basically just a check of our randomization. If that was equal we would think, "Wait, something went wrong here." People who weren't offered commitment accounts are very, very unlikely to have them. And then we see that people wind up withdrawing most of their money over the course of their season, and that total withdrawals are much higher for people who were offered savings accounts, but again, similar between the ordinary and commitment savings treatments.

So then we go and we look at the outcomes that we think we probably care about more, right, because as we talked about, savings balances themselves aren't a welfare indicator; what is a welfare indicator are investments in inputs and then profits. And so here's where the results start to be pretty exciting. What we see is that among those offered commitment savings accounts they're growing about 4/10ths of an acre more land, cultivating about 4/10ths of an acre more land than those not offered any accounts. And they are growing more land than those offered only the ordinary accounts. So here the difference between the commitment accounts and the ordinary accounts is meaningful.

The value of the inputs is much higher for people who are offered commitment accounts. They're using almost $100.00, a little bit more than $100.00 more inputs than people who weren't offered any savings accounts, and about $60.00 more in inputs than those who are only offered ordinary savings accounts. And this translates into real differences in profits. So profits are almost $200.00 higher for people who were offered a commitment account than those not offered any account. Just offering people a commitment savings account increased their profits by $200.00 over the course of a year, right? It's a huge effect; this is just the offer of a savings account.

And then what this means is that in the period right before the survey they also had more money available to spend. So they're spending about $14.00 in the month right before we re-survey them. So a little over a year after they were initially offered the accounts their household expenditures have gone up; they have more money available. And for a number of these outcomes there are meaningful differences between the commitment and the ordinary account. The commitment illiquid accounts are more effective in increasing agricultural inputs and increasing profits than the ordinary accounts were.

Now then we tried to say how is this happening? Right? What is going on here? And as I said, our initial hypothesis is that these commitment accounts work by restricting access to funds. But in this case that doesn't seem to be what's going on, because the money that is used to finance these inputs isn't in the illiquid accounts. That money is in the liquid, the ordinary account. So we are clear that the commitment accounts have real meaningful benefits. We are equally clear that that doesn't happen through the channel that we and others suspected; it's not happening through the restricted access, through the tying of hands. What gets tough is that we don't have conclusive evidence for the alternative channels, so we look at this other control channel, how able are people to resist pressure to share their money with others. And we have two ways of looking at this.

The first is to just look directly at how much money did you transfer to other people, how much money did you give to others in your family or others in your social network. And we don't see any reduction in those transfers associated with having a commitment savings account. One thing that we can't do is we can't rule out the idea that people who have – who do not have a commitment savings account are engaging in some sort of participatory consumption; they know they're going to be asked for money, and so they just spend the money in advance to make it unavailable. We can't rule that out, but we also can't rule it in.

Another thing that we can't rule either in or out is this idea that these commitment savings accounts are really working through psychological channels and that this is mostly a labeling effect, that this is not so much in effect of having a commitment savings account as just having a second account. And if what you've done is you've mentally told yourself that the ordinary account is for consumption and the commitment account is for investment then there could be this sort of mental accounting phenomena. Now if that story is true it's a little puzzling, because there's not very much money in that so-called investment account, but just having that second account could have changed your expectations about what your investments and profits are going to be going forward. And once you have changed your expectation you then want to live up to it; you're very averse to not meeting that new expectation. And that's a possibility; again, something we can't rule either in or out.

So the bottom line is that these commitment savings accounts are very, very promising. We see real statistically significant and economically meaningful effects of having a commitment savings account; they increase savings, they increase investment in agricultural inputs, and they increase farm profits. This all happens through some channel that is not the mechanical restriction against spending money. Unfortunately it's going to take more research to be able to disentangle the mechanisms through which this is really happening. And so we are planning additional work trying to understand which of these channels is the important explanation. Is this really about commitment or is it more about just having two different types of savings accounts? Is this about direct deposit? We work in a context where this isn't a commitment to put money into your account; it's a commitment not to take money out of your account. And so would we see the same types of effects if we didn't have this direct deposit?

And so we're continuing this work. We're now working with tea estate workers and smallholder tea farmers in southern Malawi. And this is kind of a growing body of literature that is all trying to unpack these big, positive effects of savings accounts and trying to understand how it is that they're happening.

And so I'll stop there and turn it over to John, who will talk about what I think of as a very closely-related and complementary project.

[Applause]

Jonathan Robinson: Okay, thank you very much. Can everyone hear me?

Female: Yes.

Jonathan Robinson: Okay. So thanks very much for having me. Sorry I couldn't join in D.C., but I just – my wife and I just had a baby, so it's difficult to travel right now. But thanks so much for inviting me.

So what I would like to talk about today is partially about commitment, but it's mostly about in general the types of characteristics that are most important in enabling savings. So I think like Jessica was talking about, my own interest in these projects isn't so much about commitment itself as that we know by now that there's a lot of evidence suggesting that enabling savings is a really important thing for very poor people. So what I'm really mostly interested in and what I'll talk about is whether characteristics _____ one of them are useful in enabling savings, which we think is an important thing.

So with that background, here's some, just to start, some – sorry – some statistics on bank ownership rates in developing countries. A lot of these statistics are for Africans, in particular where my work has been as well as Jessica's. So I guess with this audience most people are really aware that bank account ownership rates are really kind of shockingly low in poor countries, especially in very rural areas. So in a series of projects that are going on with

JPO and IPA researchers working kind of very rural remote areas of a variety of countries, we find account ownership rates which are less than 10-percent, and we think that this probably is a very important thing in limiting households' ability to cope with shocks, to develop investment, all those things that Aishwarya mentioned.

And so the question that we're really interested in is, so as I say, savings is really important, expanding access is important, but how do you do this effectively? And so what I'd like to talk about is just very quick detail, just several studies that we've conducted. So all of these studies are with Pasqueline Dupaw, who is a professor at Stanford University, and so I'll just quickly go through them.

But the first project is simply does providing just a really basic savings account, not really with any real commitment features, does that have any effect for people? And the main finding that we have is that it does. So just simply having a basic account can help certain types of people, but not everybody.

So then the second project is to try to look – this is where the commitment kind of comes in a little bit more, to see what types of characteristics really mattered, why was it that those accounts worked. and what we find from that is that the characteristics of products – so on the one hand sometimes having commitment, meaning that you can't easily access money, can help in some circumstances, but can actually really hurt in other circumstances, because the flip side of commitment is that you can't get the money when shocks are available, which Jessica mentioned very clearly. And so we find a lot of evidence that the characteristics are really going to matter.

And then the third project, which I'll just talk about very, very briefly, is one in which we tried to do a bigger scale experiment providing savings accounts to people, and what we found from that was that the characteristics of the bank really matter too. so that's something that we don't always talk about so much, even though it's maybe – maybe it's not shocking, but really the characteristics of the bank providing the services really matter. Okay?

So the first study, which is about simply expanding access to village banking among market women, this took place in Kenya and these are some pictures of small-scale entrepreneurs in Western Kenya. So the experiment is very simple, which is just to provide – we basically have to provide as-is savings accounts in a village bank. And so what we end up finding is really significant demand for these accounts among female vendors. We really don't find any evidence that other types of entrepreneurs, typically male vendors and other male entrepreneurs, they really didn't use the accounts at all, but among this group, these female vendors we find these big effects. And then so it wasn't just that they took it up, it's also that they increased their overall sales levels, they increased the size of their business, and they also increased their expenditures.

So the study, just very briefly, worked with a village bank, which this is Kenya, all these studies are in Kenya, which – so that's a picture of the village bank, the Bumala FSA. So the FSA stands for financial services association. So this is a bank, a village bank that is loosely affiliated with a microfinance organization in Nairobi. There's no deposit insurance; it's not a formal bank at all. They provide saving services however, so we – the study was very simple; we sampled a group of people who work as entrepreneurs in this village of Kumala, so we worked with 250 people. And then we opened them accounts in this bank.

And so the thing that might be most interesting about this study is that the accounts in this bank are really quite bad by our standards, by a developing country's standards, because it costs $6.00 to open an account, these are people who are making like $1.00 or $2.00 a day, so these are huge account-opening fees. And then on top of that, I think this is common, at least in a lot of our other work in other African countries, is that they don't provide really any interest, but there are pretty sizable withdrawal fees. Inflation in Kenya at that time was around 9-percent per year, so here in the U.S. we wouldn't really use these accounts because obviously the real return is negative, yet we find this really high level of take-up among this one subpopulation, which raises the question as to why they can't do this on their own.

So the way we look at the outcomes in this study is we have some bank records, okay? But the main thing is that we have financial diaries that people kept. So I won't go into detail here, but we can talk about those in the Q&A if people are interested. And so from those diaries we found, first of all that, you know, the first outcome is just whether they save more. So this is not just in the bank, but whether also other types of savings, like saving in animals, for example. And we found that while the control group is saving very little, about – this is per day, so they're saving only about $0.01 a day, in the treatment group, which is the red line there, it goes up to about $0.10 a day. So there's an increase in savings. But as Aishwarya mentioned earlier, we really don't care about savings per se; it's really what happens to peoples' lives. So the main finding from this study, the main contribution, I think is just to show that this does translate into actual welfare impacts.

So for example, this graph is showing daily investment in the business, and we see that in the control group, the blue, while it's just $3.20 a day, that increases to $4.70 in the treatment group. That's the ITT, the red bar there. So these are pretty sizable impacts for this group.

I'll skip through this, but we also find an effect on total expenditures. So some sort of measure of income, but also of consumption. So these are important outcomes.

Okay, so the conclusions from study number one is just that there appears to be a demand for these types of accounts, these really pretty flawed accounts, at least among these female entrepreneurs. And they also seem to have welfare effects. But then the question, of course, is why would anyone use these, why don't they just – it seems in a lot of ways that it might be actually better just to save at home, because at least then you don't have to pay the withdrawal fees. So that's one question.

And so the second study, which is the main one for this presentation, is really to try to think about, okay, what are the characteristics that matter. So one of the main things we'll be looking at here is commitment. Okay, so why do people take up these savings products.

Okay, so the second experiment, in contrast to the other, is using completely informal savings products. And we set up four different treatment groups and a control group. The four different treatment groups all have different – are offered products with different characteristics. And so what we're going to look at is what characteristics matter and for whom. The main outcomes for this particular study are all going to be about health. These were all products that were specific to health.

Okay, so what we were thinking from this first study is, you know, why is it that people can't save on their own. And, you know, Jessica did a great job talking about this, that probably the two big classes of explanations are that it's an interpersonal issue, which is that people have large kinship networks in Kenya, they have many friends and neighbors asking them for money and it's very difficult to say no. So these sharing norms, which are great for insurance and other things, might not be so great in trying to build up your business, for example. Okay, and then the second is one of behavioral issue, as Aishwarya spoke about earlier. Now people have difficulty following through on their savings plans.

So to implement this study we wanted to do these different types of products and we wanted people to, you know, put their money into these products, and so we needed to work with an organization that people trusted and that people were willing to put their money in. And so we worked with rotating savings and credit associations, or RSCAs. So I guess a lot of people here are very familiar with RSCAs, but just in brief, these are informal savings clubs in which a group of people meet at some regular interval, say like once a week or once a month, and then there's a set contribution amount every time, and then, so for example, if in my group we have 20 people and the contribution amount is $1.00, the way it works is everyone comes in with their $1.00 and then one person walks away with all $20.00 that month. And then the next month somebody else gets it and so forth and so on. So this is the main way that people save in Kenya and a lot of other places.

Okay, so we worked with a large sample of RSCAs, we offered different savings products. And so the products, just to go very quickly, let me just show you a picture of the box. So we had several of the products were just basically a box, just like this. So people were given a box. There's a lock that goes on the front of that box. And then the first two interventions are – we call them a safe box and a lock box; the difference is the safe box, people were given the lock and the key so they could open the box whenever they wanted. The lockbox, on the other hand, the box was locked but we had the key. So program officers for IPA had the key, so if they wanted to open the box they had to call us up. And so the idea here is that in a safe box they could get the money whenever they wanted it and the lockbox they couldn't. So if you thought that people really valued commitment, the lockbox is better than the safe box, but then the flip side is that you can't get it if you need it. So in terms of liquidity, in case your kid gets sick or something like that, the safe box might be better.

Okay, and then the other two treatments were at the RSCA level. So one of them is a health savings account. So it's actually very similar to a health savings account in the U.S. actually, just like much smaller amounts. So basically people could deposit money in the RSCA, like in a personal account that was kept by the treasurer; there was like a ledger that was kept. And if people wanted to withdraw the money they had to show proof that they needed it for an emergency. So it had to be that somebody in the household was sick, and so that was all enforced by the RSCA.

And then the last one is a health pod. And so this is in addition to the normal RSCA in which people were saving up that $1.00 with their group of 20 friends. We asked them if they were interested to do a second RSCA, a side RSCA kind of, in which they could save up for some health products. So if everybody agreed that what they want to save up for is a bed net, for example, and people would figure out how often they wanted to meet and how much the contribution was going to be, and then every time they met somebody walked away with a bed net, rather than $20.00.

Okay, and so there are several important findings. The first is just, without going into a lot of details, was just the take-up was really high. Okay, so I won't go through all the numbers, but the take-up was in the order of 80 to 90-percent of all of these products, and this actually continued for some time. So we don't have really long-term outcomes, but people were still using them for three years. So kind of we were shocked actually at how high the usage was.

Okay, and then sorry that this is a little bit cut off, but this graph is showing us how much people invest in preventative health products, like whether they buy a bed net. And so just to summarize very quickly, what we see here is just the control group is only spending about $3.00 – has only spent $3.00 in the past year on preventative health., whereas in the safe box group and the health pod group there are much larger increases, so really big effects on nut just savings here, but this is also like actually buying a bed net or another product similar to that.

And then our other outcome is whether people had enough money to deal with a health shock. Okay? And so we – this graph is showing us, we asked people if they had a shock in the past three months and whether they were able to cope with it on their own. We find that in the control group what this is showing us is that 21-percent of people in the control group say, "Okay, I had a shock, a health shock in the past three months, and I couldn't fully treat it." Okay, so that's a bad thing; the higher this is the worst. Whereas in the safe box group that drops to 11-percent and in the health savings account, the one that that was really for these types of shocks, it goes down to 7-percent. Okay, so we find these very big effects of these two interventions and the things we expect. So the health pod really works with saving up for a big thing; these other things help for dealing with shocks.

Okay, so we do find some evidence that is both an interpersonal and an intrapersonal issue. So we find that people who have present bias preferences as measured by surveys, they don't really save in the products that don't offer commitment, and we also find that people who are really taxed by the social network are more likely to use it. Okay, so what the main conclusion from this is that what we essentially found is that, you know, like I say, I should just go back just very quickly, just to show that one of the things that you observe from both this graph and the other is that the lockbox isn't really working very much. So locking up that money in the lockbox was not something that people really benefited from. And so that suggests to us that in this case at least, that locking up your money in a way that you can't touch it is actually a bad thing. So that kind of really strong commitment in this case is not good for people.

Okay, on the other hand, people who did lock up their money in a health savings account, okay, and that's because in Kenya I think the main thing that people are really worried about is "What's going to happen when my kid gets sick?" So they are willing to put their money into something in which they can only take out in case of that type of emergency, but saving up for this bed net or something like that is maybe not the first thing in their mind. So giving people strong commitment and limiting liquidity can really work, but it has to be for the right thing. Okay, and so both these barriers are important; this interpersonal and intrapersonal issue.

Okay, so the last thing from this study is just like how is it possible that these things can work. So in particular how could that safe box work, how could a box, when you have the lock, possibly work? And so we asked people this, and it's similar to some of the stuff Jessica was talking about, people really reported the mental accounting issue. So really what people were saying is that once they put the money in the box, that even though they can touch it, even though they can get it very easily, they just won't, because it's now savings for them. And so we really find some evidence for that, suggesting that maybe not – sometimes providing not very strong commitment is important.

Okay, so then I'm running low on time, so let me just very, very quickly go through the last one. Okay, and so this last study is, I think, an important one, though maybe the results aren't shocking, but I think it's one that's not talked enough about by people who are working in this realm, which is what about the quality of the services that are actually being provided by that village bank and by other banks? So this study is very, very simple. We had a big sample of people, about 1,900 people, and we just randomized, again, whether they've got bank accounts. And so we did this now with two banking options; one is very similar to the previous one, a village bank, basically the same village bank. And the second is a well-known Kenyan commercial bank. Okay? And so they're just – the interventions are very simple. So we did a savings intervention in which we just paid the account-opening fees as before. Okay, and if I have time I'll talk very briefly about the credit.

Okay, so again, in this population you'd think that banks could be really important, because we found that only 10-percent of women and 20-percent of men had accounts. Okay, but one thing that we were surprised at is that they don't even know that there's a bank available. So only about 50-percent had even heard of the local village bank. Okay? And then when we asked people just in an open-ended way why people are not opening the accounts, of those we know why they don't open accounts, people are saying things like, "The fees are too high. I don't trust the bank. The interest rates are poor. The reliability is poor." And so then just to explore this further we just took 50-percent of these people and offered them an account.

Okay, so what we found here is pretty low take-up. So when you give somebody a free savings account of course they sign up for it and they'll take it, you know, there's no real cost of that. Okay, so 60-percent of the people like sign up for the account, but only 28-percent of people actually were depositing money in the account. So the overall take-up rate, if you multiply those two things together, is less than 20-percent. Okay, so some people actually did use them a lot, but on average the usage was quite low. And so why is that?

Okay, so we did a follow-up survey where we asked people these questions, and so we can just briefly look at panel B, these are people who were offered an account but didn't open them. So on the commercial bank people are saying, "Well, it's the fees." You know, it's also that "It's unreliable" or that "It's far away from me," but, you know, mostly it's the fees. And the village bank you find that it's kind of a mix of things. But like for instance, 24-percent of people are worried that their money is going to be embezzled, 37-percent are saying that the bank is unreliable. These seem like pretty high numbers. So when you think about it, these are actually pretty valid concerns for the average Kenyan just because, you know, things have improved quite dramatically over the past few decades, but not long ago there were many, many financial crises, there's numerous well-known pyramid schemes. Those are not directly always related to banks, but just this kind of distrust of giving people you're money seems like a valid thing.

And then, in fact, and it's really terrible, is that one of those three branches of the bank, they actually had this scandal in which withdrawals were actually frozen for some period. And then another one of those branches the service is really quite terrible, so that when we did random spot checks and 60-percent of the time the bank is just closed when it should be open. Okay, so this all makes sense as to why people aren't going to use these accounts. So we also – while we did this we also gave people the option of getting – giving them some help with getting a loan at the bank. Okay, so I won't go into the details, but we basically facilitated them getting a microcredit loan. Okay, and so again, we give people like a voucher in which they can get some, basically like a small amount of capital from it. So people would, you know, accept that voucher. Some of them will go redeem it at the bank, but only 3-percent ever start applying for a loan. So even though we made it a lot easier to apply for a loan, nobody does it. And so why is that? Again, the same sorts of things, people don't trust the bank, but it’s also just that it’s too risky for people and they’re really scared about collateral being frozen – I’m sorry, collateral being stolen or taken when people default. And so even though, you know, there seem to be these high returns to capital and it seems like this could work, it just didn’t at all.

So the conclusions from this study is just that I think that the characteristics – the trust in these types of institutions and just the services that are provided by the banks themselves are really important, and so oftentimes when we do these studies we work in really rural areas of very poor countries. These are kind of tucked away little areas in which people don’t have a lot of financial access, but then almost by design the types of products that are being offered in those areas are really quite core. And so, you know, it’s just something to think about in terms of not just expanding access to people, but also expanding the quality of services.

Okay, so this is my last slide. So just to conclude from three studies, I realize it went very quickly, but basically I think what we find is that if designed properly, even very simple things can really help, and I think that that’s true of the previous two talks as well. So basic access sometimes can be enough. Not always. Limiting liquidity through commitment can be good or it can be bad. So we found on one hand that limiting liquidity for emergencies is good, but not so much for big investments.

In a related study in the same part of Kenya, very similar to Jessica’s talk, we allowed people to invest their harvesting ______ to fertilizer for the previous year, and that really worked, because that’s a very specific type of investment that people want to make. So just to conclude, there are many important open questions, so I think that even just basic questions about what are the effects of any type of account on long-term outcomes is not answered, but then also to try to think a little bit more about whether there’s ways of designing things specifically to deal with these sorts of issues that come up in all these different studies.

Okay, so that’s it. Thank you.

[Applause]