

THE BROOKINGS INSTITUTION

WHAT CAN WE LEARN FROM THE RESULTS OF THE
WORLD'S FIRST DEVELOPMENT IMPACT BOND IN EDUCATION?

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Welcome Remarks and Presentation:

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Panel: Results of the Educate Girls Development Impact Bond:

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Closing Remarks:

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P R O C E E D I N G S

MS. ATINC: Welcome. My name is Tamar Manuelyan Atinc. I'm a Nonresident Senior Fellow at the Center for Universal Education at Brookings, here. Good morning to everyone here in D.C., and also online.

So, we are going to be spending the next hour-and-a-half learning about and discussing the performance of the First Development Impact Bond, which focuses on educating poor children in the State of Rajasthan in India, with a particular focus on girls.

If you are participating via webcast, please do submit your questions for the panelists via Twitter. You can use the hashtag *EducateGirls*.

Just a little bit of background on why we here at the Center are hosting this event. The Center has been doing research on global impact bond market for the last four years, and the work has been led by my colleague, Emily Gustafsson-Wright and Izzy Boggild-Jones, whom you're going to be hearing from later as part of the team.

Emily, unfortunately, couldn't be here, but I know she's watching. So, hi, Emily.

So, we were interested in the social impact bonds and development impact bonds from the perspective of seeing whether or not they had any relevance for developing countries. As most of you know, these were started in the developed world, and most of them still, the existing ones, are in the developed world.

So, we wanted to see if they had any relevance for developing countries, and we were particularly interested in the sectors of education and early childhood development, which were the areas of focus for us at the Center.

There's been a great deal of enthusiasm about this tool, this way of working, we also felt there was a need for a real objective voice in this space, in this market, to observe the trends, draw out the lessons and the applications for further transactions, and sort of be an independent voice, because a lot of the literature that comes out on this comes from people that participate in the market.

So, over the past four years we've put together a database, a comprehensive database of all transactions that have concluded, and are in the design phase, and have also published five reports, and you'll be seeing them in Izzy's presentation.

So, I know we all are eagerly waiting to hear the results of the Educate Girls development impact bond. I just want to ask, how many people in the audience know something about social or development impact bonds, or even more broadly, impact investing? Can you just put your hands up so we know? Oh, excellent! We have a very well-informed audience here. Great!

So, what I'd like to do now, is I'm going to invite Izzy to come up and make a presentation, to sort of set the stage, give us a little bit background about what this instrument is all about, a little about Educate Girls, and then we are going to hear from Dr. Neil Buddy Shah, who is going to be presenting the results after three years of the activities of this particular intervention.

Just quickly, to introduce the two of them: Izzy Boggild-Jones as I mentioned, is at the Center for Universal Education here. She's a Research Analyst, and she works on innovative finance and early childhood development.

And Dr. Neil Buddy Shah is CEO and Co-Founder at IDinsight, which is a service organization that provides support to developing countries, NGOs and foundations to help them make impactful decisions by providing rigorous evidence.

Once, they have concluded their presentation then I'm going to invite others up here to the panel. We'll have a moderated panel discussion for about half-an-hour to 40 minutes, and then I'll open it up for questions, both from the floor and via Twitter. So, let's get started. Izzy?

MS. BOGGILD-JONES: Thank you, Tamar. And thank you everyone for being here today, both those of you in the room here in D.C., and watching online. We are so pleased to have you here for such an exciting launch of results. In fact, I'm just

going to put up -- these are our five research reports published on impact bonds.

And in the interest of time, I'm going to jump straight into: what is an impact bond? And now I realize that we've got so many experts in the room, I apologize in advance if this is too simplistic. But it is, I think, always good to sort of set the scene at the beginning of a presentation like this.

So, we usually think of an impact bond as a combination of three components, its impact investing, public-private partnership and payment by results. It is not, despite the name, a bond, but rather a type of pay-for-success mechanism.

So, here's the slide that everybody looks forward to, it's the typical structure of an impact bond, and we usually think of them being three main organizations involved, an investor, a service provider, and an outcome funder.

The investor typically provides upfront capital to a service provider who delivers services to a population in need, then an independent evaluator will verify whether the service provider has met some set of pre-agreed outcomes, and the outcome funder who is a government organization in a social impact bond, or SIB, and in a development impact bond, or DIB, this will be a third party such as a donor organization, or a foundation; apologies for the acronyms.

So, in the case of success, the outcome funder is going to repay the investor the agreed principal plus some return. Now, in addition to these parties, there's also typically an intermediary who will help to structure the deal and to provide performance management. Often there are other parties providing technical assistance or legal counsel, and the idea of a social impact bond was developed about eight years ago in the U.K. to reduce the high costs incurred when young people were repeatedly returning to the prison system.

The idea being that by reducing the cost of recidivism you could save money without having to have the government face the financial risk of a failed program.

Now, this differs from traditional payment by results as you're shifting the

risk away from the outcome funder and the service provider while also being able to potentially encourage innovation and increase the capacity of service providers.

So, what do we know now about impact bonds around the world? As of right now we have 113 impact bonds contracted globally, and there are various definitions of when an impact bond is contracted, for our database we say it's contracted when all the contracts have been signed.

So, as you can see on the map we've got 113 across 26 countries, 107 of these are social impact bonds, and six are development impact bonds, and all of those social impact bonds are in high-income countries with the exception of the Columbia Workforce Social Impact Bond. The U.K. has the most with 46, followed by the U.S. with 19, the Netherlands has 9, Australia has 8.

And what sectors have they been contracted in? Employment and social welfare dominate so far, and most of these social welfare impact bonds are in homelessness or child welfare. We have a further 16 for health, 9 for criminal justice, 8 for education, and 1 each for the environment and agriculture, but those are just the ones that been contracted.

There are many, many more in various stages of design, and this map just shows you those that are in design in developing countries. There are more than 20, many of these are in Africa, and followed by Latin America. Health is the dominating sector followed by employment.

And in addition to these there are two education outcomes funds in design, both seeking to raise a billion dollars for education outcomes in India, and the Middle East, and Africa.

So, now the bit everybody is waiting for. A little bit of background on the Educate Girls DIB before I pass over to Neil Buddy Shah to talk to you about the results.

I was hoping there might be some balloons or something coming down, but they don't seem to have appeared, so I have to talk to somebody after. Okay.

So, we have been really lucky here at Brookings to be able to follow closely the results for the last three years of this exciting impact bond. We've had webinars after year one and two on the results, and so I'm just going to give you a really brief overview here.

So, this DIB targeted 7,300 children across 166 government schools in Rajasthan, India, identifying out-of-school girls, encouraging increases in attendance enrollment, and alongside a child-centric curriculum run by volunteers. The outcome metrics were enrollment and learning outcomes across Hindi, Math and English.

And while, as you'll see in the next slide, the outcome funder was not the government, the Government of Rajasthan is an important partner here having signed MOU to allow access to the government schools. The upfront capital was \$270,000, and the potential outcomes funds \$422,000.

Now, this slide gives you the main partners in the deal and we are extremely lucky that on the panel immediately following we are going to have representatives for each of the main partner organizations, so I hope everybody is getting their questions ready.

We have UBS Optimus, the investor who provided capital to Educate Girls, the Service Provider. Instiglio, the Project Manager, structured the deal and helped with performance management; IDinsight verified the outcomes; and the Children's Investment Fund Foundation, the Outcome Payer, agreed to repay UBS Optimus upon the agreement -- upon the achievement of the pre-agreed results.

So, without further ado, I know after three years everybody is desperately awaiting these results. So, I'm going to pass on to Dr. Neil Buddy Shah, who is the evaluator to tell us about what they found.

MR. SHAH: Thanks, Izzy. I was very excited to announce the results of this First Development Impact Bond, though, for those of you who read *The Economist* article today some of that suspense may have been killed.

But before diving into the numbers I want to walk you through some of the methodology and process that we used in order to judge whether in fact Educate Girls had improved learning outcomes for these children in Southern Rajasthan.

So, our primary objective as the outcome evaluator was to provide an independent and rigorous assessment of the true impact of Educate Girls on these students in Southern Rajasthan in order to trigger payments for the development impact bond.

And we did that by looking at two outcomes. The first which determined 80 percent of the payments was learning gains for students in grades three through five, and we measured that using a cluster randomized-controlled trial, which I will explain in a second.

The second outcome which determined 20 percent of the payments was Educate Girls' ability to identify and re-enroll girl children who had dropped out of school previously, and we evaluated this using a simple pre-post evaluation due to cost considerations.

So, we've measured learning outcomes using something called the ASER tool, which is a straightforward, well validated test instrument that essentially grade students in Hindi, Math and English on a score of one to five or one to six in a fairly straightforward manner.

So, for instance, if a student can read words in Hindi they get a grade of 3, if they're able to do a simple subtraction problem they get a grade of 4 in the math section. And the reason we chose the ASER test instrument is that it's a validated tool, it's been used in many education interventions across India and the world, and therefore that allows us to better place Educate Girls' impact within that larger ecosystem of education interventions.

Significantly it's fast to administer and therefore keeps the evaluation cost down, and perhaps most importantly, it tests the most foundational elements of

students' core competency.

But beyond just choosing a robust test instrument, one of the things that we worry about in these kinds of evaluations is: how do we know that it's Educate Girls that's driving these learning outcomes as opposed to innumerable other factors that affect student learning? Whether that's the government's own programming, other education NGOs, or even contextual factors like, was there a drought in that region, and parents were pulling their students out of school.

And so in order to really pinpoint the true causal impact of Educate Girls we ran what's called a Randomized Control Trial. And the way this works is that in the three districts where the DIB took place, we identified all the government primary schools, and then we randomly selected half of those schools for Educate Girls to support and kept the other half as comparison or control schools.

And since we had a large number of schools and randomly selected which ones Educate Girls would work in, and which ones they wouldn't, we were able to say that any differences between Educate Girls' schools and the comparison schools are only because of Educate Girls' work, and not due to any other factors. And this is our way of kind of having the gold standard of knowing that Educate Girls is causing these changes rather than other factors in the context.

So, once we have that randomization, basically all we have to do is look at the treatment schools and measure the aggregate learning gains across them, and then subtract away the learning gains that were seen in the control schools.

And then for enrollment of out-of-school girls we simply look at treatment villages and see what percentage of them Educate Girls was able to re-enroll.

So, what are the results after all this methodology? Well, before getting to the year three, I want to highlight, after two years the learning gains for Educate Girls were clearly improving. And so what you see here are the improvements of treatment schools over control schools, and while they were positive and improving we also see

that they were not on track to hit the year-three targets set by the DIB, while for enrollment of out-of-school girls, after two years Educate Girls had nearly reached the target.

And so the big question going into year three is that: would Educate Girls be able to learn enough from their experience of the first two years be incentivized by the DIB mechanism, and therefore adapt their program in order to cross that threshold, and really see greater improvements in the final year, than they were able to generate in years one and two?

So, what ended up happening? Impressively, Educate Girls made significant changes to their program, and were able to drive massive improvements in learning gains between years two and three, and surpassed the threshold set by the DIB by nearly 60 percent, and this is quite striking of a turnaround. And then for the enrollment of out-of-school girls they were already close to hitting the target and easily surpassed in year three by 16 percent.

So, what do all these numbers mean in very practical terms? The first is that students in Educate Girls increase their learning outcomes 28 percent more than students in the control schools. And for the education or evaluation wonks in the room, this roughly translates to 0.31 standard deviation increase, which by all counts is an impressive and large improvement in education outcomes, compared to other programs that have been rigorously evaluated.

Secondly, and perhaps more strikingly is that Educate Girls was able to drive massive improvements in year three such that their students learned 79 percent more in that third year than their peers in comparison schools, and an easy way to think about this is that that roughly translates to an additional entire year of education.

So, truly phenomenal gains in year three, these gains were largely in Math and English rather than in Hindi. And finally, the majority of out-of-school girls enrolled were 10 years or older.

So, now that we've established very rigorously that Educate Girls was able to cross the threshold by a substantial margin in both the learning gains as well as enrollment, what does that mean for the payments?

So, as referenced earlier, there were terms set at the start of the DIB where UBS would receive an internal rate of return of 15 percent or around 52 percent over the three-year period on a base investment.

Based on these results Children's Investment Fund Foundation will repay UBS their initial investment of \$270,000, plus that 52 percent rate of return on investment over three years.

UBS is going to then use that payout of \$144,000, a third of which will go to Educate Girls, and two-thirds will be reinvested in other development programs.

And so I think by all accounts, and we can get into this in the panel, this was a successful DIB, not just because Educate Girls was able to cross the threshold, but also because some of our hypotheses around the way a DIB would function in terms of incentivizing learning, giving flexibility for the implementer to actually adapt their program in the face of data, all played out.

And so I'm looking forward to the panel discussion with the other partners. Thank you. (Applause)

MS. ATINC: Neil Buddy, sorry, you're part of the panel as well, so please, do come up. As the panelists are making their way up here, why don't I introduce them very quickly, and then we will get into the discussion.

Safeena Husain, who is just coming up is the Founder and Executive Director of Educate Girls, who, as you all heard is the Service Provider.

Grethe Petersen, on my way left, is the Director of Policy and Advocacy, at the Children's Investment Fund Foundation, who played the role of the outcome funder in this development impact bond.

Avnish Gungadurdoss -- I don't know how I did -- Co-Founder and

Managing Partner of Instiglio, and Instiglio was the intermediary in the DIB.

And Phyllis Costanza, who is right next to me, CEO of the UBS Optimus Foundation who was the investor in the Educate Girls' bond.

The UBS Optimus Foundation provided generous support to Brookings to help make this event possible. So, I'd like to reiterate at this point, Brookings' commitment to independence, and underscore that the views expressed today will be solely those of the speakers.

So, I'm going to go ahead and start the discussion. I'm going to start with Safeena. Safeena, we heard about the tremendous results that were achieved over the course of these three years, it might be helpful just to hear a little bit about what the intervention is. What did you actually do with these children? How did you get these results? And in particular, if you can focus on that impressive change that we see between years two and three; what is it that you in terms of the services that accounts for that change? Thanks.

MS. HUSAIN: Thank you. First and foremost, I mean I think I want to kind of reflect on the fact, I mean today we are announcing the results, but this journey actually started more than six years ago, and it took a long time to, you know, germinate the idea, put all the parties together, and almost a year of that I think went with all the partners actually designing, what we'll get paid for, how much, and the entire transaction.

So, it's been a really, really long road. And I just want to thank everybody around the table here for jumping into the unknown, and making this happen, because really they deserve a lot of credit for doing what hadn't happened before.

So, really even before the three-year execution started there was an enormous amount of work that was done, but in terms of what we do at Educate Girls, and what happened in the bond in terms of interventions, we work in -- India has one of the largest number of out-of-school girls, over three million girls, and a lot of it has to do with patriarchy, low status of women, child marriage, all the kind of factors which keep

girls out of school, and children from learning.

So, essentially we work in the most critical rural, remote and tribal areas, and we work through a community volunteer called Team Balika. And essentially it's about mindset change, because everything to do with gender is underpinned with mindset. So we go door-to-door and we find every single girl who is not in school, either dropped out or never enrolled, and this is done with our community volunteers.

And once we identify them we actually work, either through village meetings, neighborhood meetings, individual parent counseling to bring them back into school, and then to make sure that they are staying and learning. And we had a learning curriculum that we ran with all the children in third, fourth and fifth grade, girls and boys, to make sure that all the children are actually learning and moving forward.

So that's in terms of the intervention. When we started the development impact bond, the big reason behind that was that Educate Girls had scaled really rapidly, and all of us like scale, and we know that the problem is very large and we want to solve it at a large scale, but I think what worried me a lot was: is it scale for the sake of scale? Are you just replicating, or are you scaling quality, and are you scaling result?

So, really the intention behind what all of us are doing here is trying to see, can you scale with quality? So, even if you work with my one million girls, are you still having the same value-add for that one millionth child that's in your program?

So, with that intention, the bond was launched. And the first day, I have to say was an absolute blur, I don't think we realized what hit us. The timelines were really crunched, we barely got 30-odd days in the classroom, it was like, kind of, building the plane and flying it at the same time, you know.

So, at the end of year one, when we saw the results we kind of were like: oh, my, god, we are never going to make it. (Laughter) And I think there was this deep realization that we had to do things very, very differently. And year two was very much -- you know, Avnish helped us a lot with the performance management, and really mapping

out all the different things that we could do.

And year two was about rebuilding from scratch: the learning, the pedagogy, our own systems and processes internally, and at the end -- and year three is when I think the organization kind of hit its stride. Everybody knew what had to happen, all the performance management systems and processes that we set up, finally we were able to internalize them and really work them. And therefore we see all the results kind of coming in your three.

MS. ATINC: Excellent! Thank You. Avnish, it's really the same question to you, but this time from the perspective of someone who worked to help Educate Girls with their performance management system. So, what did you see? What changes were really made in the performance management system of Educate Girls to enable that big leap? And is the expectation that that's there to stay, that's been acquired right now? So are all the children in the future are going to be seeing these large gains?

MR. GUNGADURDOSS: Yes. Thanks. Thanks for this question. So, as you mentioned about (inaudible) to provide assistance on how to build these performance management systems, and the year three results in many ways is really strong evidence that supports the hypothesis of DIBs, right, that you provide the right incentive environment to high-performing organization. You give them the right autonomy, and they will somehow be able to use that autonomy and those incentives to drive results forward.

For this promise to play out, though, there are certain capacity upgrades that happened that I think could be categorized along three different dimensions. The first one, I remember back in 2015 when this project started, we went through the process with Educate Girls of really thinking about: what information are they collecting that actually allows them to figure out as they go through implementation whether they on track or not? For which parts of the population this program is working, which parts of the theory of change is actually active and which parts are not, to be able to make those

kinds of cost-corrective decisions?

So, this led to kind of a rebuild of the performance management data systems that provides the organization clarity over time on what kind of decisions they need to make to improve the performance.

And the second thing is that data can also be quite static. You need to have problem solvers who can engage with them, so I think there was a whole process of building the capacity that was championed by Educate Girls, building the capacity of not just people at headquarters, but all the way to the field office who were having problems solving capacity-building sessions in the field with the frontline workers.

How do you engage later? How do you get to this kind of last-course corrective insight that allows you to improve your delivery, and make the data alive, right? And even if you have that I think you also need to, like, add a third piece to this capacity building or upgrade, it's the learning culture.

Will the organization create a space for people to surface problems and to talk about what's not working? Because oftentimes in our space we are just so used to talking about what works, but an organization needs to be able to create the learning culture and the feedback loops where decisions are going to be rapidly flowing back up to the decision-makers, and they are going to flow back decisions right down to the field.

So, I think that was also something that happened a lot in year one and year two, and that I think took much more work than anybody anticipated. But the results of that, all of that, is that in year two like, you know, a lot of experimentation that's happening, that is about cost-correcting the designs of this home visit program that was for the first time rolled, teaching at the right level, which is an evidence-based intervention was also integrated in the intervention.

So many experimentations happened that allowed Educate Girls in year three to roll this out, and I think get the type of improvements that you're seeing.

Now, the power of that story is that we are not talking about rocket

science, right, like we are talking about actually creating an incentive environment that provokes the rapid adoption of best practices in management science, that are well known in any results-driven industry, and the question that really arises for us is, how do we replicate those kind of incentive environments that allow other organizations as well to adopt these well-known techniques that can provoke these kind of massive leaps in performance that we are seeing in this deal.

And once that one last piece to the results; had come into the results, is that when we set up the targets for these results it was actually benchmarked on a rigorous randomized-control trial that was done right before the program.

So, the expectation was that, right, Educate Girls would replicate those results. So, this is not just setting target out of nowhere this is actually setting the target where the organization was at the beginning of the program, and to see them go 60 percent; 16 percent above, it's just an incredible testament to the power of these techniques that were used.

MS. ATINC: I have a quick follow-up question, but an important one. And Safeena may want to comment on this as well. So, what we've seen is the results and the benefits of the intervention, we don't know a great deal about the costs, and obviously, especially if you're going to be talking about taking things to scale cost-effectiveness is very important.

So, could I ask you, Avnish, I don't know if you're the right person; what do we know about costs? How do they compare to costs in other public schools that provide these programs? And what is one's expectation of the evolution of cost? Do you expect them to come down over time? Or, will they remain at their level? Is that a question we can respond to?

MS. HUSAIN: Sure. I can take it --

MS. ATINC: Okay. Please, go ahead.

MS. HUSAIN: Thank you. So, I think in terms of cost, I think we hit

about \$12 per child per year, in terms of the overall cost, but to remember that here we were paying only on results. So for Educate Girls, when we do our regular programming in which we do a lot more things, like school improvement plans, and life skills and you know, it's a much broader piece rather than just paying on results, our costs are a little under \$5 per child per year, and that's because of the scale, and the economies of scale we sort of bring in. So yes, but if you compare it with other educational programs, I mean it's very, very low cost.

MS. ATINC: Okay. I'll move on to Buddy. So, one of the main challenges of course in designing these impact bonds is the data requirements, and that's particularly challenging in low and middle-income country contexts. Could you talk us through some of these data challenges? In particular identifying the target population of out-of-school girls must have been particularly tough.

And then I wanted to ask you about the results. You presented the aggregate results, and if I understand the construct of the DIB, it's all cumulative. So, the gains could be larger for some children than for others. So, I wanted to ask about the heterogeneity of the results, if you will. Are the gains concentrated in a few children? Or are they widespread?

MR. SHAH: Yes. Great! Thanks. So, on this question around administrative data requirements --

MS. ATINC: So, I'm asked to pull -- they're asking you to pull the mic closer (inaudible).

MR. SHAH: Sure. So, thanks for those questions -- I think maybe that's too close. So, on the administrative data side one of the challenges is before you set up the DIB, how do you actually determine what are the total number of out-of-school girls? What is a reasonable threshold to set for the service provider to actually reach? What our baseline student learning levels?

All of those things which are the kind of foundational elements of

determining thresholds and payments are -- we are operating in often data-poor environments. And so in this particular case we had government data on out-of-school girls, but we quickly realized that those were multiple years old, and they were probably not that accurate even at the time of collection.

And so that definitely posed a challenge in this context. I think we were able to get around that through a few different mechanisms. One is that, as Avnish mentioned, there was a previous randomized-control trial in Southern Rajasthan, so we were able to pull some of that data in order to get a sense of benchmarks.

And in the second, which I think we just have to be ready for is to make kind of rapid course corrections in the moment once we realize that the government data was so outdated that it was basically unusable, we adapted our data collection strategy in order to do more original data collection on the number of out-of-school girls.

But what I would say for forward-looking, on this question of administrative data, and how do you actually set targets when that's very poor? I think there's a couple different solutions. One obviously is that there are certain governments in contexts in which there's decent administrative data, and so you might want to focus energies there.

I think the second is that as you start to bundle together multiple DIBs you could actually pay to do baseline data collection before setting the terms of payment and it doesn't really make cost-effective sense if you're only doing it for one DIB, but if you imagine 10 different education DIBs, you might say, okay, in year one we are just going to get the baseline data, and then all the parties are going to essentially negotiate a contract with fuller information.

And then to your question around the heterogeneity of results, you know, I think one of the things which was interesting is that the results -- improvements were concentrated in math and English, rather than Hindi which, you know, makes kind of theoretical sense, because students are learning Hindi in their day-to-day lives anyways.

But in terms of different subgroups the gains were pretty robust, both with girl children as well as boys, and there didn't seem to be large differences by caste or other demographic groups in learning outcomes. And so I think one of the indications of that is that this program was really kind of well balanced and targeted, at the entire population, rather than picking off or cherry-picking certain subgroups.

And I think the second thing which is, perhaps, slightly different than the heterogeneity question, is that Educate Girls, kind of, in the second half of the program did a good job of targeting chronically-absent students. So they were one of the subgroups that were really driving down student test scores, because if you look at the students that actually showed up regularly the improvements in year one and two are quite robust.

But there was this group of left-behind students that Educate Girls in year three was able to more effectively target. So, I think that's an interesting subgroup to look at, and more broadly, how do governments and NGOs try to reach those hardest-to-reach students.

MS. ATINC: Great. Thank you. Grethe, so, this was the first contracted impact bond for education in the developing world, and you were the outcome funder. What was your interest in the Children's Investment Foundation Fund -- Fund Foundation, to engage in this different way than the normal business that you did? And what really needed to happen within the organization to enable you to be an actor in this interesting experiment?

MS. PETERSON: Thank you. Yes, so why did CIF go into the DIB? And it was really because it was a new financing tool that could be used to support and to scale innovation with local solution and trying to see if they would demonstrate results.

And we at CIF are so proud to have partnered with Educate Girls, with UBS Optimus, with Instiglio, and with IDinsight, to show that we have delivered this independently-verified and real-world impact, by getting girls into school and to help them

to learn. And we hope that others would sort of build on this learning, and also further innovate and increase the ambition of this tool.

In CIF, we have sort of learned three things from this, and there were three things that we had to consider when we went into this. First, we spent a lot of time upfront to agree the outcomes, and it was outcomes that we all most cared about, it was - in this case it was getting girls into school and to help them to learn and that took time.

But by taking the time upfront we felt that actually it helped everyone to focus on what we wanted to get delivered, and we have seen that Educate Girls has actually achieved well beyond our expectation on getting girls to learn.

Secondly, it was impossible to predict ahead of time, when we set up the contract, all the obstacles we might -- had come across. And Buddy alluded to some of them on the data side. So to us the second learning is really that this partnership and ongoing dialogue with partners is incredibly important throughout the process.

And then thirdly, in theory CIF could have chosen to give a grant directly to Educate Girls, and the DIB allowed CIF, in some ways, to reduce our risk because we wouldn't have to pay unless the results were produced. And, more significantly, it actually allowed Educate Girls to innovate and constantly be agile and adjust their programming, and this was really what we hoped for, that the results would show. So, those were the three things for us.

MS. ATINC: A nice segue; you raise the point about the reduction of the risk for you, so that sets up my question for Phyllis as the investor.

As we saw in the PowerPoint, and as Grethe mentioned, one of the purported benefits, advantages of this setup is that the risk is passed on to the investor rather than the outcome funder who only has to pay when the results are achieved.

So, my question, Phyllis, to you as an investor is: how much of an appetite for risk do you have? You know, where do you situate yourself? What kind of due diligence do you require before you agree to invest? Can it be a completely

greenfield operation without any data behind it? What would you require? So, I'm trying to get at how true is this assertion that an impact bond actually reduces risk?

MS. CONSTANZA: The impact bond definitely reduces risk for the outcome funder. And I think that's at the core of what this is about. And your last question to me would be: would you invest in something that hasn't been tested and tried as the risk taker? We are the investor, so we are taking the risk, financially. And the answer is no. We absolutely would not.

And it's because of the unknown. We think about risk in financial markets, when you make an investment in something that is highly risky, meaning there's evidence to show that you may lose all of your money, you expect to get a much higher return to accept that risk.

If we invest in a fixed-income note, we might get 2 percent, but we know we are going to get that 2 percent, so we are willing to forego a potentially high return. And that is the way we have to think about this, and I think that's a really big obstacle, getting people from our sector, meaning the nonprofit, the development sector, to think about financing that risk is a really hard leap for us to make.

And let's take an example from the U.S. In the U.S. approximately \$800 billion goes in to funding human service programs every single year from both local government, state government and federal government. Yet, we have knowledge of impact of less than 1 percent of that 800 billion, and that's here in the U.S.

So, what percent of International Development Funds do we have any idea about impact on? Does anybody know the answer; anybody? I see people here from USAID any -- no, I won't call on you. Nobody knows. Okay, do you know what? I have no idea either, frankly.

SPEAKER: (off mic).

MS. CONSTANZA: And I think that's the point. We have no idea whether or not the money is working, and we haven't factored this concept of risk into it.

So, let's just say, you know, we are spending \$100 billion going into aid each year and what if only 50 percent of that money is actually working. We've just paid a \$100 billion for \$50 billion of value, and we never factored that concept of risk into how we pay for things.

And this is really an important part of what the development impact bond does, because it monetizes that risk. So, you know, we heard that we made a return of 15 percent internal rate of return, and 50 percent plus, if we look at it from a return on investment perspective.

And wow, that's pretty damn good. Anybody in the financial industry would say, that's a pretty good return. But we don't know if that's appropriate. You know, we only know what's politically palatable. So, if you ask a government to pay back investors 15 percent, the backlash is going to be, wow, you know, people are making money off the backs of poor people.

And the fact is that that money may be far more impactful than the aid money we are using now, we just have to think about it differently, and risk is at the core of this, so as the investor we are going to manage that risk. I'm not going to invest in something that's never been tried or tested.

So, new organizations, which Safeena was telling me, new organizations come up to her all the time and say, we are just starting and we want to do a DIB. And, you know, that's a no-no, run away. And that that makes sense, you know, we want to fund things where we can mitigate that risk, because in this sector there's a lot of risk out there, and we have no idea how to measure it. So, we need to try to mitigate it wherever possible.

MS. ATINC: Good. We'll come back to this topic. Grethe, I want to do a second round of questions, and I think we are doing well on time, before opening it up to the audience.

Another theme has to do with sort of the sustainability of these kinds of

engagements. This is one of the few impact bonds, the only one actually, where the outcome funder is not a government. So, do you see -- what is your vision -- I guess is the better way of formulating this question -- for the future? Do you see a potential for handing this over to the government? What does sustainability look like at the end of this contract now?

MS. PETERSON: Thank you. And so CIF supported the Educate Girls DIB, primarily because we wanted girls to go into school, and we wanted them to learn, because that brings huge benefits, not only to the girls but also to society as a whole, and there are so many things that are dependent on girls actually being in school.

But we also supported it because we wanted to test and innovate a social impact bond and see whether this could actually work in development. So, when a DIB or a SIB produces good outcomes, as in this case, the question is then, how can this success then be spread and be sustained, and take to scale?

So philanthropy cannot really be the solution to pay public services, that's really governments that should be doing that. So, the SIB test the promising and experimental techniques, it adapts, it learns, it finds out what works, and after that we see two pathways.

The first pathway or the first option is that governments adopt the approach of a SIB that has been tested and proven and then roll it out as policy. The intervention has then shown that it works, and then further innovation is not really necessary. And we saw that with the Peterborough prisoner SIB that happened in the U.K. a couple of years ago.

And what happened was that the U.K., afterwards, took on this as a policy and thereby reducing prisoners to reoffend. So, that's one option, and which Izzy alluded to when she gave us the initial and presentation.

The second option is when a SIB or a DIB shows that there's no reliable or proven way of finding the solution to the outcomes that we are looking for. That works,

then we still have to continuously adapt, and learn, and basically take different approaches and contexts this to solve the problems that we -- for the outcomes that we are looking for.

And in that case you don't have a proven intervention, and therefore you might want to have another way either as a SIB or as a DIB to continue that learning. And in those cases we would like governments to take on this role to become the outcome funder on a social impact bond that enables sort of cost-effectiveness and innovation to continue to happen.

As many of the people here will know, there's currently an Education Outcome Fund under development, and that combines resources from governments, philanthropy and others to support impact bonds and results-based financing in education; and that seems to be sort of a promising way that this learning might be taken forward.

MS. ATINC: Safeena, I'd like to ask you the same question from your perspective. First, if you can tell us a little about the nature of your interactions with governments during the course of the intervention.

And then, so you've had a very successful three years with this celebrating I'm sure. But what's next for you? And you might want to put this activity in the broader context of your other activities as well, because I know this is not the only thing that you do, and it may actually be a very small part of what you do. Are there spillover learnings for you from this particular operation to the other things that you do?

MS. HUSAIN: Thanks. I think so to -- you know, I'll go with the government question first in terms of the nature of our partnership with the government. And, you know, Grethe said it. I mean eventually it is the government's responsibility in terms of education and all the services, and we are essentially partners with the government.

So, even when Educate Girls started our role was, we went to the

government and we said, you know, India is a huge country, where is it, where the problem is most difficult for you to solve? And they actually, you know, gave us a list, and usually they helped us identify areas saying, this is where the problem is most acute. And that's where we see our role, is as a helping hand to help accelerate resolving those.

So, the nature of our partnership with the government is that we are there to help in whichever areas are the hardest to reach, and that are lagging behind the most, because this is where the education gap is the heaviest.

So, starting with that in terms of selection of where you work, how you work, what needs to be done, is very much in consultation with the government, and secondly this pilot also had an MOU with the Government of Rajasthan, so it was very much, you know, with their encouragement of looking at innovative ways of accelerating impact in the hardest to reach areas, that was really the key piece behind it.

So, they give us permissions to come into the government schools, to work with the children, our community volunteers went inside the government school to run the remedial learning sessions, et cetera. So, that way it's a very nice partnership where, you know, we are helping to contribute to the success of the government schools.

Secondly, as to what happens now, what's kind of next? So, we have learned such an enormous amount, right. We've got a whole new curriculum, we've got a whole new way of decision making and course corrections, so we've just learnt very much as an organization the last three years, in terms of how do you deliver higher learning results for some of the poorest and most marginalized children.

I mean Buddy was talking about the fact, you know, a lot of our children are scheduled caste, caste scheduled tribes, other backward class, very marginalized, tribal populations, and now we have a potential solution that we know works, with all the evidence.

So, this year itself we are actually scaling the learning program to over 6,500 schools, which means that everything from the DIB will immediately get to almost a

quarter of a million children, and we will be able to scale this exact -- all the learnings of the performance management system, the course correction mechanism, the use of data for decision making and school planning, and everything will go to a massive level of scale. So, that's all with the sort of (inaudible).

MS. ATINC: And what is the source of funding for that?

MS. HUSAIN: The source of funding for that is grants, so even under the DIB, you know, when Phyllis -- the contracts as an investor and things, are between Phyllis and CIF, but as far as we are concerned we got a grant from UBS Optimus Foundation, the only change with this grant is (a) it's result-focused, it's multi-year, and it's flexible.

So, our hope is that more and more of the grant money that we get will mimic that level of flexibility, not prescribing what we should do on the ground, but letting us sort of just run after the result that needs to be delivered.

MS. ATINC: Phyllis, this has clearly started as a small operation, I'm very happy to year that it's going bigger, but the problems in India are clearly very vast. And I guess my question is, what do you think is the value-added of the DIB approach? Where does it fit best? You did just say, in response to my previous question, you wouldn't touch something that hasn't been tested at all.

So, at what stage in the project cycle, if you will, is this kind of approach best suited? And, you know, what is this potential for scaling up, given the highly transaction-intensive nature of how this is put together?

MS. CONSTANZA: Thank you. I think there are a few, kind of, rules in the DIB, world about what is, and I'll say *dib-able*, it's not a word, but you heard a first here. What is *dib-able*, something where there is evidence to prove the relationship, the correlation between the intervention and the outcome you seek, there has to be evidence of that.

And the second thing is that the results have to be really clear and fairly

easy to measure. And then the third thing, and there's more, but these are some of the key things; the third thing is that they have to be measurable in a relatively short period of time. It could be longer, but then we get back to that point of risk. If we are going to lock up capital for a longer period of time people are going to want a higher return.

So how do we scale these things? And what is the role then for DIBs? There are really two ways to scale things, and one is government, and the other one is the private sector.

So, how can we work within those systems to make these things big? Well, from a private-sector perspective it has to be attractive to the private sector, there has to be a way -- and what makes it attractive to the private sector would be if we can manage the risk sufficiently that we can offer what is a politically palatable return.

How do we manage the risk? Well, one way to do it is instead of how we did it in this when we had one investor, we had one outcome funder and we had one implementer. Why don't we create more of a fund structure where you've got multiple implementers striving for a similar outcome, you've got multiple investors and you've got multiple outcome funders.

Then you de-risk it along the entire chain and just like you would with any investment, you know, most of us won't put all of our money in one stock, because of the chance of us losing it is much greater than if we spread it around to a lot of different stocks. So, I would make that analogy, and say the way to scale this is to find ways that we can derisk it, and make it palatable to the private sector.

MS. ATINC: And, Buddy, I wanted to ask you about the evaluation method. So, this was an RCT, a randomized control trial, and when we've looked at the 113 transactions that have been contracted, very few of them actually have an RCT as their evaluation method. So, my question is why was that chosen as the method for this particular intervention? But more generally, when do you think it's appropriate to have an RCT versus using administrative data, for example?

MR. SHAH: Yes. Excellent question. Before I jump into the evaluation piece, could I just comment on some of these ideas around risk?

MS. ATINC: Of course. Yes.

MR. SHAH: So, it's much easier for me, without my money on the line as an investor, to have a different take than Phyllis. But let me just wager a proposition. I'm curious to hear Phyllis' thoughts.

I think my view on the question in steady state, what does this market look like? Is that it actually can accommodate a very wide range of risky endeavors, and in fact I see development impact bonds as potentially most powerful for solving those intractable social issues for which the government and donors have essentially given up on. And saying, look, we've poured millions of dollars into prison recidivism, or trying to enroll girl children who have dropped out of school, it's not worth that money but, hey, if a private-sector investor comes in and is willing to take that risk go out and search for a great innovative service provider that would be willing to pay for an investment.

And so I think in the same way as the private sector works, it's just a question of setting the return appropriately high enough for risky investors. And, you know, people invest vast sums of money into oil fields in Guinea-Bissau which has -- you know, a relatively stable regime. And so I think similarly, hopefully we could see in the development sector, a really wide range of everything that's already been proven to the hardest-to-crack problems with very little evidence, and it's just a question of calibrating the returns appropriately to the risk.

MS. CONSTANZA: I'm going to agree and disagree. So, if we look at Educate Girls, Educate Girls wasn't getting funding from the government, yet there was an RCT that showed that they could deliver learning outcomes for a very small marginal cost that far exceeded what the government was achieving in government schools. I mean for \$14 more they are delivering 75, better, percent learning gains.

That seems like great value for money, yet the government is not funding

it. So, I would say that that was -- that's an example where there is solid evidence, but until we get people to understand that we have to price this risk appropriately, I think it's going to be hard to get people to accept a higher rate of return. I hope we get there because, you know, if we look at -- if we look at the history of any asset class, in anything in the financial markets, they all started out like this.

You know, people didn't know how to price it, and they didn't think it was a big enough -- had big enough potential private equity. I mean it started in the '40s but even in the '80s that people were looking at it as a really small, niche, little market. And there were two people at Bear Stearns who wanted to scale up the private equity business, and the CEO of Bear Stearns at the time said, no, I don't think there's a big market there.

So they left to start one of the biggest private equity funds, and as we all know private equity is a totally acceptable asset class and, you know, there's a lot of money that goes into it. So, hopefully we'll see that, but it's not it's not going to happen tomorrow.

MS. ATINC: Yes. I mean there's clearly a question of the maturation of the market, and we are in the very early days. But let me get back to you on the evaluation.

MR. SHAH: Yes, sure; so, sticking to my area of expertise here. So, I think that it's a good question. So what is the appropriate evaluation mechanism for DIB? I think the first high-level principle always has to be that there's the appropriate balance of rigor and practicality for the particular context that we are facing. So sometimes that will mean an RCT, sometimes it won't. And there needs to be judicious choice of the evaluation methodology that balances actually being able to pin down what the true impact of the service provider is with practical considerations.

And I think one of the dangers that I potentially see is that the entire results-based movement is predicated on this idea that we want to pay for true change.

And in the interest of efficiency, or ease of doing something, if we move away from having some robust estimate of the true impact, we can completely kill the foundational premise of the results-based financing movement.

So that's one point. I think, that doesn't mean you have to do an RCT every time. In this particular context we chose an RCT because there were so many factors that could affect student-learning outcomes. These were government schools so obviously the government is doing something, even if it's not as much as we would hope.

There are other NGOs working in these areas presumably, and there are a lot of potential shocks. I mean, I think just a few years earlier in a previous Educate Girls Project there was a drought which made learning much more difficult, which made enrollment much more difficult, and so it's very easy to either overestimate or underestimate the impact of a service provider if you don't have some kind of comparison group.

And so because of the very many factors that could affect learning outcomes, we chose a randomized control trial so that we could actually pinpoint Educate Girls' impact, independent of all these other factors. And it makes the results so much more impressive, right. Like you see these gains and if there wasn't a rigorous comparison group, people would be saying, well, the government of Rajasthan had a new Chief Minister and they introduced all this stuff. Here, we can say confidently, this was Educate Girls' impact.

I think the conditions under which you don't need a randomized control trial are either in instances where there's clearly only one provider that is influencing an outcome, right? So, if you were doing this in Educate Girls' privately-run private schools, where there might not be that many other factors, you could kind of get away with it and say, all right, presumably there's no other NGOs working there, the government is not working there, we can attribute it to them, and so thinking about that.

And I think the second, as you said, is you can potentially rely on

administrative data. But that still doesn't necessarily mean that you don't need some comparison group where the service provider is not working, and I think that in a lot of the context in which we work in development there's not good administrative data. And so I'm somewhat skeptical of that unless, again, you have a fund approach and make an upfront fixed-cost investment and getting the administrative data to high enough quality.

MS. ATINC: A follow-up, somewhat indelicate question. So the initial investment we heard was \$270,000. I have some experience with randomized-control trials, whose costs can run essentially around those numbers. I'm not going to ask you what it was here, but just simply to put on the table that this is an expensive proposition, and you're spending as much money evaluating an intervention as you are for delivering the particular intervention.

So, I guess then maybe there's not a question there, but simply to say, really important to do it when you have to -- it's important to demonstrate that things work because of the particular intervention.

MR. SHAH: And just to jump in on that. I'm really glad that you raised it, and in many ways this first DIB was an experimental enterprise, and so the ratio of evaluation cost and implementation cost was high, but what I'd say is that it's important not to over learn from that fact. So, Avnish has put together another development impact bond in East Africa which we are the outcome funder on, and in that case the ratio of evaluation costs to the total DIB structure is something like 5 percent.

And I think the important thing to know is that there are a lot of fixed costs in designing and evaluation and doing analysis, and that if you just have a large enough scale of implementation the ratios look very reasonable. And so I think that's probably the more appropriate learning.

MS. HUSAIN: Can I add something?

MS. ATINC: Yes.

MS. HUSAIN: So, I'd like to add a little bit to that. So, when we were

designing the transaction I think I was like mortally against the RCT. There's a Robert Kennedy School case study somewhere, that sort of just captures the fight that happened do, you know, in this. And I was like, oh, no, no, there's absolutely no way, we don't want an RCT, this is ridiculous, and all the rest of it.

And yet now if you ask me, I would say that was probably the best decision at that point, because I don't think -- if you look at DIBs even as just very strong R&D tools, it helped us, you know? I mean at the end of the second year we realized that, because we looked at the treatment and control, to say that we weren't moving for a certain subgroup of children.

And so it helped us to innovate the homeschooling, the content, the whole sort of pedagogy approach, the rapid assessments; I mean all of that fed into the high performance. But if you look at it, you know, saying it was an R&D cost, so yes, it may have been high for the 166 schools but if those learnings and improvements are getting to 6,500 schools, then it totally made sense to make the upfront investment, and so you don't have to do it over again, so I would say even though I was wrong, I'm happy that, you know, we went with that structure.

MS. ATINC: Excellent! So, Avnish, and you and your organization, Instiglio, you've been involved across a number of different impact bonds across different countries, and you've been observing this space as well. I wanted to ask you how you think contracts have been changing over time, and what do you see for the future?

MR. GUNGADURDOSS: Yes. Thank you.

MS. ATINC: I know some the ideas have come up in terms of outcome funds, but you may have other thoughts.

MR. GUNGADURDOSS: Right. So, just kind of, before jumping into that, I think, to the earlier debate in the panel, which is a very interesting debate. I think it's really important for us to remember that what we are doing this for development goals, right, first and foremost, financing should just be an output of that thinking, rather than,

you know, the sort of driving force of it.

In fact, if you were to see -- look at impact bonds today across the diversity of impact bonds that have been launched; some of those are so different from each other you can't really start thinking about a single way of doing development impact bonds. Many impact bonds today are paying entirely for outputs, for example, we are paying here for outcomes, so you have a diversity of instruments out there, but the important, I think, levers that we need to be thinking about is, at each point in time, whether you're thinking about a greenfield solution or an evidence-based program, is what's the right level of incentive and autonomy to flow into financing, and how does funding carry that intentionality in a way that really allows development goals to happen, right.

So, I think we are trying more and more to shift away from conversations such as, where is DIB useful? You know, what should a DIB do? What should it not do? But rather to conversations that are more nuanced around: what are the features that we really need to see to get a development goal happening?

So that we would encourage, and sort of like push everybody who is interested in this space to really be nuanced about these design features, and to see that's where the important sort of rubber meets the road, kind of happens.

Now, to your question I think we -- that there's, in my answer, because we are still in an experimentation phase, so I don't think we can speak very well to trends we are seeing, and such, but we can speak to experiments we are running, and where we hope these experiments would lead.

I think there are some really interesting experiments happening on the design of these instruments, first kind of recognizing that, to my earlier comment, this is not complex rocket science, we are really talking about how to make basic delivery science, management principles work in the social sector.

So, being much more rigorous about how we do that, consulting the

literature and the evidence that exists on how to motivate frontline workers, and really basing design based on that rigorous literature in that emerging evidence, but also building that evidence. So, more and more of our projects now accompanied by learning agendas, operational research that's trying to really think about how incentives and autonomy are changing delivery on the ground, so I would encourage more rigor, and hope for more rigor in the design of these instruments.

Second, I think it's launching these spaces of conversations on results, is launching us into an interesting philosophical debate around who defines results and what results mean for the space. And that I'm really excited about because I think we need to, if we are trying to move our work towards a service delivery-approach, and trying to think of beneficiaries as clients, we need to put them back in the center of decisions, and what we are designing, and who is getting to define results.

It's a hugely political concept, but I think, you know, that's really important that beneficiaries are truly at the center of the definition of results, and we have been holding ourselves to what impact means for them. So, we are really excited to push this boundary forward.

The third boundary is kind of helping donors and funders who have a fiduciary responsibility, to think about what kind of new rules and regulatory frameworks need to regulate these kind of projects, where you have funding being dispersed with very little control, you have risks of perverse behavior playing out on the ground. So, what kind of safeguards do you need to like really put in place, that are different from typical programming that we need contracts to adopt? So, these are kind of design features that we are particularly excited about.

In terms of feasibility, many of the panelists mentioned the idea of making this easier for different parties, and I think there's the idea of outcomes fund as an interesting docking port for impact bonds to be launched much more easily.

We launched a first pilot last year in Poverty Alleviation in Africa and, you

know, we were able to launch this instrument in about like four or five months of design, which is kind of really a testament to how fast things can be when you pull funders together, and you sign single contracts with implementers,

So that's some really interesting work coming on in terms of reducing transaction cost. Buddy, I know, and his team working hard on measurement cost which is going to be a big, you know, factor of scaling these kinds of instruments.

And then the one thing that doesn't get talked about enough is, you know, more and more these deals -- of thinking are actually providing funding for capacity building for implementers. And that's really important.

I mean we can't as -- you know, if you are a funding organization you can't just turn around and expect magic overnight, right, like this is not going to happen. We can't one day be paying for outputs, and the next day asking organizations to be delivering outcomes consistently. There needs to be some real operational shifts happening on the ground as we talk about performance management, and how do organizations actually build those capacities, and upgrade their capacities, I think, is a really important thing.

And then the final piece that we are seeing in impact bonds, is kind of the intentionality of it playing out much more in the design, and the choice of where to apply them. For us there are really interesting incubators of impact, really interesting laboratory of innovations, as you could see from the conversation today.

Whether we should -- we don't necessarily believe that impact bonds should scale to the millions, and to the billions, we think once, you know, and maybe Safeena can add to that, but once you, you know, really figure out how to work your model out, and how to get it to deliver impact, I think the simpler results-based financing contracts that can scale them up in a way that's less complicated.

So, being very intentional, and then sort of to learn from the evidence movement about being intentional in connecting the innovation to large-scale policy

objectives. When we innovate in something we are hopefully innovating so that it can be scaled up,

ISAT scale-up theory of change of (inaudible) establish our government's interest in the innovations with engineering, so being much more, you know, intentional of where -- the impact bonds based on the demand for that kind of innovation, so that the innovations we create can be scaled further down the line, it's not just kind of a wishful thinking, right? So, I think these are some of the interesting innovations.

MS. ATINC: Excellent! So, I'd like to open it up to questions from the floor. And I have a few from the Twitter world. But I'll take some questions here first.

MS. GAY: Hi. Jill Gay with Works Association. Would you talk a little bit about how you engaged parents?

MS. ATINC: Let's take a couple, there's a lady right there.

QUESTIONER: I was wondering if it might be *dib-able* for the investor --

MS. CONSTANZA: It's catching on.

QUESTIONER: -- and the service provider to be the same organization, because there are some -- there are instances where people are willing to invest in an idea and they want to invest their own money and do it all. So, will there be an outcome provider willing to consider this scenario? And then I have one more question for Safeena. Did you have any interaction with the teachers directly in the schools? Or were these all private lessons that were given to the girls?

MS. ATINC: We'll take one more.

QUESTIONER: Hi. I want to ask a question of Ms. Phyllis. I think she mentioned that we are investing in well-organized organizations for type of projects handling. There is a lot of innovative ideas and startups, especially young generation, creating wonderful ideas. What is the risk that investing in those startups or young generation ideas instead of already making money, and well-established organizations? What is the risk, real risk between those two investments?

MS. ATINC: Why don't we take those two? So, Safeena, do you want to take the questions around engaging parents and engaging teachers? And then I think the other two are for you, Phyllis.

MS. HUSAIN: Yes. So, thank you for that. And obviously for us to help bring girls back into school, and also to make sure the children who weren't learning are attending regularly, because I mean obviously if they're not attending no learning, you know, they're not going to be able to gain. For both of those pieces, or both of those outcomes, working with parents was really key.

And so there's a lot of different things we did. So, for example, out-of-school girls tend to be clustered so, you know, the eight hundred odd girls that we found out of school they weren't evenly distributed across the 160 schools and, you know, the 130-odd villages.

We found that there were clusters, so about 14 to -- 14-odd villages had the highest concentration of out-of-school girls, and what happens here is that people play off each other's mindset: oh, in our village we don't do it. Or even within villages you will have neighborhoods which will have predominantly, you know, majority of the out-of-school girls will live in a particular area.

So, the combination is not just talking to the parents but it's figuring out where these hotspots are, and then if they are clustered in certain villages then you do a lot of village meetings, because then it's a community mindset that you need to change.

If it is concentrations in the neighborhoods, then you're doing very intense and large number of neighborhood meetings with those parents, and finding influencers out of the village or neighborhood level. And when it gets to, then the third phase is to actually do the parent counseling. So you're kind of creating the ecosystem for that mindset change, and depending on whether it has to be at a village or neighborhood or on that street level, and then engaging with parents.

And engaging with parents, mean engaging with the entire family,

because a lot of the times mothers will say, well, I wanted to but my mother-in-law is not in favor; or I want to but such-and-such elder in the family, or the father is not agreeable. So, it's really about working with everyone. And sometimes it can take you three weeks, sometimes three months, and as we saw for the older children if you look at the results, in the first year we were able to bring in almost 44 percent, but majority 7 to 10-year-old girls.

So the younger girl is much easier to bring back to school. It's only the second and third years that, you know, when the community mobilization had really set in deep within the communities that we were able to convert for the older girls, which is obviously much harder, because then there's risk of getting married, and the pressures on the adolescent girls are much heavier. So, that's how the entire community mobilization piece work.

In terms of working with the teachers, a large number of schools we work in already have heavy shortage of teachers. So a large percentage of our schools also tend to be like either single teacher schools or just two teachers and you have, you know, minimum five grades to run. So, in any case I think teachers were happy for the extra capacity that was coming in.

Secondly, it wasn't, you know, an outside person, our Team Balikas are educated youth from the same villages and a lot of them have actually studied at the same school. So, the teachers were very welcoming, because they're like, oh, I taught this person, and now they're coming back to help me.

And the third factor working with teachers was also that we actually, with the new content and curriculum, we brought in almost 15 kilograms worth of materials, worksheets into, you know, a rural government school.

So, the teachers were really happy. They suddenly had so many more tools vocabulary, books, phonics, I mean worksheets, so many other tools to really work with that. So it was really, I think because we use a village-level community volunteer it

makes working with the teachers just much easier.

MS. ATINC: Phyllis?

MS. CONSTANZA: So, the first question was: can a service provider be an investor? And I think that's a really important question. And I'll get back to something Avnish said, which is this -- he said it much more eloquently than I'm going to say it -- but basically, the DIBs may not be the thing, but they might be the thing to the thing (laughter).

So, we are not necessarily -- you know, where these have to be evolved, and I have recently seen a DIB, which is really a performance-based contract, where the implementer is using their balance sheet, so they're the implementer and the investor, and they're getting an outcome funder to pay them. And I think that's an incredibly clever.

Then the second question, and I hope I captured your question properly. It was around longer-term, riskier startups basically. Is that -- did I capture that right? Okay.

Well, if we look at small and medium enterprises in the U.S. 50 percent of them are still in existence five years after operation, and we know that because there's lots of evidence around that, but we don't have a lot of evidence around nonprofit startups, if it is indeed a nonprofit. And there are, you know, while a DIB may not be the right thing there are other sources of capital.

I think that the important thing about the DIB is that it's not a silver bullet for everything, there's things that it's not going to be appropriate for, but we need to better understand, for instance, the risk, because you don't hear a lot about nonprofits going out of business. You know, as long as nonprofits are raising money then they can continue to exist regardless of what their quote "bottom line" is.

So, I think once we start to see more real evidence about what are the nonprofits that are really delivering impact on the ground, we won't know how to price

that risk.

MS. ATINC: I'm going to throw to the panel two questions from Twitter that both relate to the choice of the outcome measure. One from Marco Andrew and the other one from Suzanna Harris, and the one of the questions is around ASER as the tool for measuring learning outcomes.

She says, "ASER levels are difficult to follow. It would be nice to know," she says, "how many kids were reading at the grade level after the intervention, so something that's easier to understand?"

And then the second question asks: why there was no assessment of socio emotional development and you just did Math, Hindi and English?

MR. SHAH: That's a great question. I actually don't know off the top of my head the percent of people at grade level. Kate Sturla, do you know?

MS. STURLA: Yes. Well, it's not at grade level, but I kind of put into more concrete terms.

MR. SHAH: Kate ran the evaluation from the IDinsight side.

MS. ATINC: All right; the heavy guns. Go ahead.

MS. STURLA: Can you hear me okay?

SPEAKER: Yes, sure.

MS. STURLA: Yes, sir. As you mentioned, I think there is a relative to the control group we didn't see as big of gains in Hindi. And so even though they were statistically significant, in real terms it looks smaller. And here I'm talking actually specifically -- I think another thing to keep in mind is that different groups of students had different levels of exposure.

And so if we talk about children who are in the program from the beginning and benefited from all three years of the program, and at the beginning 31 percent of students in the treatment group, and 33 percent of students in the control, I could read a Hindi paragraph fluently. And at the end 80 percent of students in the

treatment group, and 78 percent of students in the control were able to.

So, we see gains but they're small. And on the other hand, on Math and English is where we see these like really big differences at the end. So, similarly at the beginning, in English, less than 2 percent of students in each group were able to read an English word or sentence correctly. And after the three-year program 64 percent of students in the treatment group were able to do so, and just 28 percent of students in the control group were able to do.

And similarly, in math, on division, just less than 1 percent of students in each group could solve a division problem at the beginning, and at the end 50 percent of students in the treatment group were able to do so, and just 22 percent of students in the control group. So these are, you know, really important foundational skills where we see really big gains in the treatment group relative to control.

MS. ATINC: That's very helpful. Thank you.

MR. SHAH: Thanks, Kate. And then on the question of why not to include a more holistic learning assessment? The thing obviously, we are optimizing under pretty strict constraints and so we wanted to focus on the most foundational learning outcomes, in future if there's a larger DIB, things like that, you can consider adding those elements.

MS. ATINC: But you also have the ready-made instrument that's easier to use.

MR. SHAH: Yes. Exactly.

MS. ATINC: Other questions from the floor? I see two hands there and one here, and that probably will do it.

MS. SMECK: Hi, I'm Sadie Smeck, with the Inter-American Dialogue. And thank you so much for this fascinating discussion, and just congratulations on the results. So, two questions, first, as Safeena mentioned, you know, it's ideal that in this case there was great cooperation from the government, you know, in getting this done.

I'm wondering if in context where the government would not necessarily be as cooperative if this model would, you know, be a good alternative since it's working with a third party, as opposed to working with a SIB, or what sort of challenges might come up that didn't come up here?

And the second question, for Phyllis. I was really interested in the funds model that you brought up. I'm just wondering if you see that incorporating, you know, maybe different levels of education, programs on skills development or other things that might also help engage the private sector more effectively?

QUESTIONER: Hello. This question is for Phyllis. Can you provide any more specificity about how you determined the initial investment size of 270,000? And then how you came up with the 15 percent IRR, and not 10 percent or 20 percent.

Thanks.

MS. ATINC: A question on this side this, yes.

MS. DAY: Barbara Day. Maybe this is a little bit of an indelicate question. I hope not. So, I'll try and phrase it right. Of the \$270,000 in bond proceeds, can you give an estimate of what the percentage was that actually went to the service provider versus transaction costs and other support implementing costs?

MS. ATINC: That should be a quick response, so I'll take one more here.

QUESTIONER: Hi. Safeena, I just wanted you to address, as we close. You know, we've talked about literacy and numeracy being areas that we measure, but as we began we talked about mind shifts. And so I thought I'd ask you to talk a little bit about the behavioral change that you were able to kind of track as a result of the DIB, because after all it is those gender issues that we are trying to change.

MS. ATINC: Okay. Avnish, I suggest you take the first question about, does this work in instances where government is not cooperative?

MR. GUNGADURDOSS: Okay. Let me see if I understood the question well. So, the question I understood, was to say -- to ask about like, you know, the

necessity of having government partnership in these structures, and what happens if there's no government partnership?

I feel this is less of a DIB question, but more of a program implementation question. You know, if an organization like Educate Girls that operates in public school, you don't have government permission you just can't operate, right. So I think that this question is much less about a DIB but much more about like sort of the programmatic necessities.

We have seen DIBs like Educate Girls that depend heavily on government, we have seen DIBs, you know, that are more bread-and-butter donor engagements with program delivery in rural Kenya and Uganda, where we are going towards village-level communities, and intervening on them, where government participation is not necessary. In fact, the whole idea of program deliveries to extend into places where government is not present. So, I think it's going to really depend on the partnerships that are required to deliver services rather than, you know, the financing instrument.

MS. ATINC: Okay. And Phyllis, on outcome funds and the determination of the initial investment amount, and the return, you can start (inaudible) --

MS. CONSTANZA: Okay. I'll start, and then I'm going to pass it over to Grethe also, because it was a negotiation. So the fund model, I think one of the keys to creating a fund and making these larger, in terms of the evaluation and what are the outcomes that we are looking for, for really large ones, we don't want to create a parallel data collection system.

So we want to try to look at outcomes that are being measured already by the government and where there's reliable, maybe we could just spot check to make sure that those data are correct. And that's going to be a challenge to identify what are the couple of things that all the organizations can agree on. That's going to be -- that's going to be a long and fun debate, but we do have to keep it really simple and make sure

that we are not creating a parallel system.

And then the other question was around: how did you come up with 270,000, and how did you come up with 15 percent IRR? The return was a debate. At the time there wasn't a lot of information about what SIBs -- there wasn't a lot of evidence, so SIBs right now are somewhere between 6 to 8 percent. At the time it was somewhere between 8 to 12 percent. And we thought, we are doing this in a development context, so we should probably get more than they would get in the U.K. or the U.S.

But I think Grethe could probably add a little bit more color to that as well because it's a negotiation between both parties.

MS. PETERSON: Yes. Thank you, Phyllis. We wanted this to be a learning DIB, so everybody was interested in the learning, and actually I just want to touch on the point about the evaluation. I know all the questions that we've had today, none of them have questioned the results, and this is why this has been so -- this is why the RTC XXXsic meant RCT?XXX was really important for this learning DIB, that everyone realized what we actually have done is amazing, and what Educate Girls have done is fantastic.

So, I just wanted to make a point that it was expensive, but it had to be at the -- for learning DIB it was really important, that it was not easy.

And then on the -- yeah, it was a negotiation on the internal rate of return. I think this would be the more clear we are about outcomes and how risky they are, and we took at the time, if we didn't have to pay then we had no -- didn't have to pay any return, and then after year two you could look -- that it didn't look like it was going to be 15 percent. So, this was a learning DIB, so we negotiated, and I think UBS, too, negotiated well.

MS. CONSTANZA: (Laughter) Well, come on I mean they're hedge fund linked too, Children's Investment Fund Foundation is returning a lot more than 15 percent

IRR, so we should be in the ballpark of that, right.

MR. GUNGADURDOSS: Can I just add a little point on this?

MS. ATINC: Yes.

MR. GUNGADURDOSS: I think we often get asked the question what's the right rate of return, and I think that's a slightly misguided question because if you look at the way the private sector allocates capital it's usually a process of discovery that determines what's the right rate of return, and certainly we don't have, you know, a healthy ecosystem of investors for implementers to pick from right now to go through the discovery process, but we hope that sort of a steady-state equilibrium of this market, of the impact bonds could actually involve, you know, very clearly predefined outcomes contracts. On the back of which implementers can actually search for the right and cheapest capital, and the right capital for them to actually play into their programs. And that's the kind of market dynamics that I think would help us assess what kind of rates can be, you know, flown into these programs.

And I, personally, don't have any problem with, you know, an implementer coming and putting their own money, or going and raising grant capital so that they can deliver and earn returns, earn money that they can scale their programs. So, I think we should be much more flexible and go into the structures with less pre-defined ideas of returns and type of investors, but rather that the market figured it out in many ways. And of course that's kind of speaking about a state of play that's a bit more mature than we are right now.

MS. ATINC: We are almost at the end of time but I do want to give, I think it's appropriate to give Safeena the last word, and respond to the question that was posed about the mind shift changes. And I am curious are you tracking those?

MS. HUSAIN: So, in terms of -- sorry you're saying in terms of tracking the mindset change?

MS. ATINC: Mm-hmm.

MS. HUSAIN: So, in this particular transaction we haven't set up a mechanism for tracking mindset change but, for example, we know that 92 percent of the out-of-school girls are now in because it's all third-party validated, right. And we are actually, we, as an organization have made a decision to stay in the villages where the DIB has functioned for the last three years, for another three years we've made a commitment we were going to look for grant money for that.

But to actually see how well it sustains, because I think there's an enormous amount of learning there, but I think initially, I mean three years have shown that 92 percent of the girls are back in, and they have stayed in school till now.

The question obviously is, is whether this will continue over time, and I think it would be really important to watch it over the next three years to see if the learning gains sustain, and if the mindset shift is permanent, or whether it's temporary.

MS. ATINC: Okay. I think this has been a terrific discussion. I want to thank all of the panelists for having taken a leap in faith in engaging in this transaction. This clearly -- it's exciting, but it's also clear there's a lot more to be done if this market is going to become bigger and mature.

And we've touched upon some of them. I just took note and I'll mention them. There's a clear issue about data need, so there's a lot of work that needs to be done on that score. Improving performance management capacity among providers is another one, we are thinking creatively about wholesaling that, I think would be important, simplifying contracts is something else that was mentioned, and pooling funds.

So we, at the Center for Universal Education, will continue observing and monitoring the space, and do plan to work on performance management capacity, and also follow the evolution of the outcome funds.

So, there is lunch at the back of the room. Thank you to all of you in the room, and those of you who were following it on webcast as well. (Applause)

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