

This paper makes some clever and intriguing points and it gave me a lot to think about. But (a) it is not really a development paper and the attempts to link it to puzzles surrounding microfinance are a bit of a stretch; and (b) it is insufficiently fleshed out in general.

I thought the central point of the paper was really interesting. The authors observe that there are less common but quite plausible ways to think about the relationship between investment and returns. Specifically, if investment affects the probability of success rather than the size of the return, then a risk-averse agent might favor corner solutions (investing nothing or a lot) because those are risk-minimizing. This creates discontinuities across investor types – poorer (and as the authors conjecture, more risk averse) agents will invest nothing, while richer (less risk averse) agents will invest up to whatever the technology permits.

While I think this model has potential in a number of ways (more on that later), as it stands it is an unconvincing explanation for the question of why the poor don't borrow despite what appear to be high returns to investment. First, this paper has nothing to do with credit or credit constraints. It is merely about investment. So the predictions should be more along the following lines: absent credit constraints, more risk-averse people will not invest at all while less risk-averse people will invest a lot. Is this what we see in reality? I don't know, and the experimental evidence added a wrinkle. The experimental data shows that highly risk-averse people invested at the corners – a lot or not at all. But this is not the prediction of the model. The model says that highly risk averse people would invest very little, and risk-tolerant would invest a lot. Despite this divergence from the model, the authors spend no time discussing possible explanations. (This is a general point about the paper in fact – there are lots of places where a more careful discussion would help).

Second, to better link the model to problems in development, why not lean into the issue of credit constraints? Maybe the poor simply cannot borrow enough to reach sufficiently high investments. This could generate an explanation of why they don't borrow. By this argument,

the poor are credit constrained but not *marginally* credit constrained. This is a potentially important point that could be modeled and analyzed using existing survey data.

Third, there is a simple implication of the model – people should pool their investments. Unlike the enforcement problems associated with subtler insurance schemes, this one seems easily implementable. So why don't people do that? Or could it be that group lending is a way to facilitate that? This is another interesting thing to think about, but the paper once again stays too far in the abstract realm instead of connecting the model to actual institutions.

Fourth, if we were to use this model as an explanation for underborrowing and underinvestment, do we really believe it? To some extent yes (which is why I am optimistic about the paper in general even if not in the current form). But to some extent, the traditional story of investment still rings very true. In fact, if one thinks about pooling investments on one project, I think the correct gut level reaction would still be that this is risky. So in reality there are two forces simultaneously at play: pooling reduces risk through the channel of this paper; pooling increases risk by reducing diversification. It might be worth thinking about how these effects interact.

Finally, as a theoretical model, the paper doesn't go far enough. One suggestion is to try expanding the world described in one of the directions I lay out above. Alternatively, keep the model abstract but convert it into a very short paper with greater precision. There is no need to emphasize the inverse U shape if the other key results can be derived for general utility functions. I think readers would like to see that. Things should be made more precise (e.g. in proposition 1 what stops consumption from being negative?). Proposition 2 needs comparative statics exercises – how do things depend on the cost function, etc? Proposition 4 is interesting but not discussed in words at all! I think it would be worth thinking much more about that, especially in the context of the fact that people don't choose across projects with fixed levels of investment. If they can allocate investments across different types of projects, what might optimal choices look like? I think there are lots of such interesting questions raised by the paper.