Malaria's effect on loan repayment in Sub-Saharan Africa

A PROPOSAL

Context

The robust association between population and economic health is no secret. In a classic feedback loop, changes in a country's economic circumstance lead to changes in health outcomes, and vice-versa (Brundtland, 1999, Bloom and Canning (2008)). However, most analyses into this association are at the population-level, since individual-level financial data has historically been scarce, small, unreliable and difficult to access.

In the case of malaria - the most deadly disease in history - we understand the magnitude of its burden in health terms. And rough analyses suggest that malaria makes a country 33% poorer, even after adjustment for confounders (Sachs and Malaney, 2002). We also know that access to microfinance is associated with improved anti-malaria behaviors (Tarozzi et al., 2014). But at the individual-level, is there also a feedback loop? Does a reduction in malaria lead to improved financial behavior?

The opportunity

Lendable has amassed granular loan repayment data on more than a quarter million individuals living in malaria-endemic zones. These data can be compared to publicly available *Plasmodium falciparum* incidence data (Bhatt et al., 2015) to estimate a simple model for the effect of malaria on individual-level financial behavior.

This analysis will be relatively straightforward. But the results could be impactful since this will be the first malaria/finance study of its kind in terms of granularity and magnitude of data.

The case for pursuing this

What follows is a brief list of reasons why pursuing this is a good idea.

- We have the data already. Why not?
- Because of the uniqueness of our data, there is a high likelihood that we could publish this in a high-impact economics journal (which means good publicity, connections to academia, etc.).
- By doing a bit of publicity around the analysis, we position ourselves as thought-leaders in this field, and draw attention from impact-oriented organizations particularly.
- Joe has to spend a lot of his time doing this kind of stuff (publishing on malaria and economics) anyway over the next few months for his PhD (on his own dime/time). Using Lendable data is a win-win: Joe

gets access to a unique dataset, Lendable gets free analysis. In other words, **there is no opportunity cost in terms of labor or capacity**.
- There could be some interesting data side-products (predictive rainfall model, elevation and land-cover analysis, etc.) that would be carried out as part of this analysis, and useful to Lendable thereafter.

The case against pursuing this

- This probably won't lead to any immediate, quantifiable increases in revenue for Lendable.
- Are there data protection / disclosure issues?

References

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