

# ***Applied Causality: Meaning of Work and Productivity***

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**The data:** My coauthors collected detailed survey data from microfinance branches across India in 2012. The data comes from 571 branches across 19 microfinance institutions and contain well over 500 features (that have been coded so far – due to the nature of some of the survey questions, we could easily code more). These features represent survey responses from branch loan officers and managers, comprising details on their activities breakdown, training, payment schemes, incentives, education and background, job enjoyment, and social measures, as well as details on the social service activities of the branch itself. The data is multilevel in that we have responses from one branch manager and two loan officers at each branch, nested within the larger organizations, although most outcomes of interest occur at the branch level.

**The problem:** I have noticed a very strong negative correlation between one of the survey responses, “I sometimes feel my job is meaningless (1-7)” and branch productivity (measured in this case as the size of the portfolio that is not in default, divided by the size of the defaulted loans plus employee costs). This effect exists for the branch managers and the loan officers, but is particularly strong for the branch managers. The relationship appears to be linear (not driven by extreme values), is extremely robust and persists regardless of what control variables we throw at it. The problem is that it is very difficult to rule out reverse causality, and I haven’t been able to identify a mechanism for the causal effect (I have found some weak evidence for effort – measured as hours worked – as in, meaning drives effort drives productivity, but it seems to explain only a small portion of the effect). We have an enormous amount of survey data, a lot of which we haven’t really looked at, but it’s only one snapshot in time, and I haven’t been able to land on a clever identification scheme to make a causal argument.

**Why it matters:** These type of “soft” concepts – such as the meaning of work – are the kind of thing that are often stressed anecdotally by managers, but are very difficult to measure. Being able to make a causal argument that these intangibles actually drive productivity would be very exciting. I also see some evidence in the data for a communicable culture within each branch – for example, there is a robust correlation between the generosity of employees of the same branch in behavioral games, even though they played independently (this generosity measure is also strongly correlated with both the meaning variable and productivity, which is interesting). I would like to be able to apply some methodological rigor to a problem that might appear “fluffy” from the outside and make an argument for why it is important.