Dear Sofia,

I've now gone through your excellent review of the literature. It's forced me to come to terms with how much there already is in this area! Although I'm sure we could push through all that and still make a contribution, I've come to wonder whether we should indeed push through. It seems that the value add is not necessarily large enough to merit doing so.

For this reason, I've now developed a related – but somewhat different – game plan that I'd like to try out with you. The idea is (a) to create an index of "noxiousness of contracts," and (b) to show how noxiousness has changed over time and, presumably, in different ways for different racial, ethnic, age, regional, and gender groups. The merit of this idea is that the concept of the noxious contract is important, that we need to find a way to measure it (conceptualized as forcible exposure to risk), and that we can then use this new measuring stick to track noxiousness and changing differentials (by race, ethnicity, age, region, gender) in exposure to noxiousness.

Once we have the measure, it will be easy to use the Census Pulse to track such between-group differences over time. The main work, in other words, is in creating the measure. Here's the measurement model that I propose:
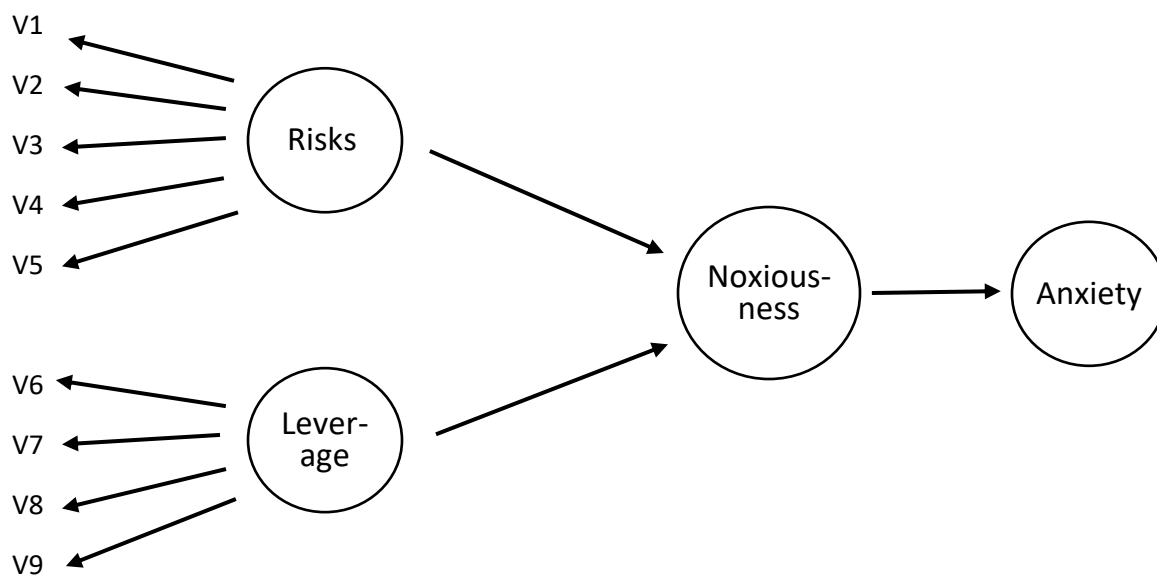
where variables V1-V5 represent, for example, on-the-job exposure to risks of infection (as affected by whether the respondent is vaccinated, whether the respondent has had COVID, the proportion vaccinated in the respondent's state and in their occupational group, the underlying COVID rate in their state and in their occupational group, their preexisting health conditions that raise or lower their risks);

and variables V6-V9 represent how incentived respondents are to maintain their job (e.g., whether they've lost employment income recently, whether they find it difficult to cover household expenses, whether they're food deprived, whether they have low income). I've gone through the Pulse Survey and mined such variables at those I've listed above, but I'm not at all committed to these particular variables (and a few of the variables I've listed here, like vaccination or infection rates by state, will need to be secured elsewhere).

The factor loadings would then be generated by fitting the above model (where noxiousness is the latent factor) by calibrating against a measurement of anxiousness or worry. We would fix the resulting loadings to be the same for all groups and time periods (so we're not measuring with a "rubber" measuring stick) and would probably want to set them at the level that prevails when COVID rates are going up (so as to protect against respondents getting inured to the risk).

The factor model is a bit complicated become some of the indicators are continuous and some are categorical, but there are models that can handle that.

Also, the way in which risks and leverage combine to produce noxiousness isn't going to be additive, although the model above suggests that it is.

These are, however, all details, and the more important point is whether this is the piece that we should write. What do you think?

All best, David