Problem Set #2 MACS 30200, Dr. Evans Sushmita V Gopalan

## (a) State the research question of your assigned paper.

What is the quality of advice provided by life insurance agents in India? Specifically, Anagol, Cole and Sarkar (2017) are interested in exploring the impact of 1) the consumer's needs and prior beliefs and 2) the disclosure reforms instituted in India in 2014 on the nature of advice provided by life insurance agents.

To explore this, the researchers employ two kinds of field experiments. The first is a randomized controlled experiment where auditors are randomly assigned specific scripts with which to elicit advice from insurance agents. The second is a natural experiment that explores the changes in agents' behaviour after a major regulation in the insurance industry in 2014, based on which insurance agents would be mandated to disclose the commissions they would earn while selling a certain type of insurance.

#### (b) What data did the paper use?

The authors conduct a series of field experiments to collect their own data. In coordination with the Centre for Microfinance in India, they trained a group of largely middle-aged men who were at least high school educated, as auditors, who would seek out advice from life insurance agents and record their responses. These auditors were randomly assigned 'treatments' - scripts intended to convey certain pieces of information to the agents. Subsequent to this round of fieldwork, an additional survey was administered in 2014, with the intention of gauging beliefs and preferences of the agents themselves and to understand whether or not they were *aware* of the fact when they gave bad advice. Replication data for the paper has been posted by authors here.

# (c) What theory did the paper reference in order to interpret the data?

There are two theories that largely inform the study's research design.

The first theory has to do with how an agent's behaviour depends on the nature of the specific customer they are interacting with. Inderst and Ottaiviani (2012) treat both agents and consumers as utility-maximizing, rational individuals engaging in a negotiation. Thus, the advice provided by insurance agent is contingent on the interaction between the agent and the customer. Naive or ill-informed customers are likely to receive poor-quality advice peddling a complicated product with higher commissions for the agent, but no meaningful benefit for the consumer. Within this framework, discerning customers are likely to receive better advice. To test this theory, Anagol, Cole and Sarkar (2017) measure the proportion of agents dispensing low-quality advice in response to auditors with different scripts that represent varying levels of sophistication, financial needs and prior beliefs.

The second theory is to do with the claim that mandatory commission-disclosure requirements can indeed improve the quality of advice given by agents - by, as Inderst and Ottaviani (2012) argue, creating awareness in the mind of the customer that commissions can bias advice. This theory is tested out by the natural experiment section of the study.

(d) Was your assigned paper a descriptive study, an identification exercise, a numerical solution to system of equations study, or some combination of the three?

The paper is a combination of a descriptive study and an identification exercise. The former can be seen as summarized in Table 1, where the authors present the proportion of interactions in which term insurance is the recommended course of action, across different treatment groups.

The identification exercise is seen across Tables 3, 4 and 6, each of which display regression results for

- impact of customer's prior beliefs and financial needs on advice given
- impact of customer's previous 'shopping experience' on advice given
- impact of changes in disclosure regulation on advice given

# (e) What computational methods did this paper use to answer the research question? What was their result or answer to the question?

Logistic regression is the computational method employed by the authors to answer the research question. This is is true for both parts of the study - the randomized field experiment and the natural experiment. I explain each separately.

Field Experiment: The dependent variable here is binary, taking the value 1 if the agent provided advice consistent with the expert's advice and 0, otherwise. Independent variables here binary variables capturing a consumer's bias towards term insurance, their need for term insurance, whether or not they have 'shopped around' and dummies for the location of the audit - home, officer or other. Interaction terms between several dummy variables are also included.

Natural Experiment: The dependent variable here is binary as well, taking the value 1 if the agent recommended a 'ULIP product' and 0, otherwise. In addition to the independent variables in the first model, dummies are included to describe timing - 'post disclosure', whether or not an explicit enquiry was made - 'disclosure inquiry', along with their interactions.

## Primary Results:

- Stating a need or preference for term insurance only increases the chances that the agent will recommend it by 5.3 percentage points.
- The impact of a customer having received prior advice from another agent on whether agents are likely to include term insurance in their recommendation was found to be statistically indistinguishable from zero.
- Auditors with scripts that conveyed greater sophistication were more likely to receive good advice, i.e. a term insurance recommendation.

- The proportion of life insurance agents recommending ULIP insurance, for which commissions disclosure became mandatory dropped precipitously from 65% to 40% after the regulation reform.
- (f) Think of yourself as an academic referee. Give two suggestions to the author(s) of your assigned paper of things the authors might do to improve their results or strengthen their evidence for the answer to the question.
  - In the study, auditors are trained to stick with a pre-written script that is designed to convey a certain set of consumer traits to the agent. While a script does standardize the actual verbal communication put forth by the auditor, the agent's response could be influenced by a host of other factors ranging from body language, delivery of the 'dialogue', tone, clothing, etc. The assumption that the cues given to the agent by the auditor are standardized and homogenous within each treatment group does not sound very reasonable to me. Having agents respond to written communication could be one way to circumvent this, but that would keep us from understanding the impact of non-verbal cues. Very specific, detailed training approaching the rigour of an acting class, might be in order to standardize body language and cues within each group.
  - The location of the study cited only as 'city 1' and 'city 2, doesn't allow us to accurately judge whether or not these results are generalizable to 'India'. India is a highly heterogeneous country, with very significant variability in cultural context across its geography, across rural-urban context, etc. Describing the location in which the study was conducted, I believe, is important to define the scope within which these results can be considered applicable.