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Problem Set 2

Understanding the Advice of Commissions-motivated Agents: Evidence from the Indian Life Insurance Market

(a) State the research question of your assigned paper.
Do features of the customer interaction influence the advice given by insurance agents in India concerning whether to buy term or whole life insurance?

(b) What data did the paper use?
The data were collected by the authors of the study using several experiments. The experiments involved trained auditors calling insurance agents asking for advice concerning which insurance policy to purchase. Three separate experiments were run: quality of advice (varying the auditor's needs, beliefs, and source of beliefs), disclosure (varying whether a disclosure was required; a natural experiment following a July 2010 policy change requiring such disclosures), and sophistication (varying the auditor's financial sophistication). The number of observations within each experiment are 557, 257, and 217, respectively. Depending on which experiment was assigned and whether the treatment was assigned to the auditor, the auditor would present the agent with the information given to them by the principal investigator and then record the recommendation provided by the agent. For the first two experiments, the data have one outcome of interest: whether term or whole life insurance was recommended. For the third experiment, the authors took advantage of a policy change that occurred on July 1, 2010 that required agents to report commissions earned on a specific product called ULIP. Audits were performed before and after the policy change and the treatment was that auditors would express preexisting knowledge about commissions. In this case, the outcome of interest was whether or not the ULIP product was recommended.

(c) What theory did the paper reference in order to interpret the data? (Note: it is possible that the paper has no reference to theory.)
Each of the three experiments were underpinned by the theory that consumers in India are better off purchasing term rather than a whole life policy in most cases. The authors of the paper cited several other publications and concluded that whole life insurance is "a complicated product that has higher commissions but no real benefits to [the consumer]". This theory that the authors can manufacture interactions with customers wherein the correct recommendation between whole and term life insurance can be known *a priori* and used to test the quality of the advice given is used as the basis for the entire study.

Each of the three experiments is also built upon existing theories. When varying the source of the customer's pre-existing beliefs, the authors hoped to overcome the market power that insurance agents are theorized to have in such situations. Since finding another insurance agent may be costly in terms of time, insurance agents may believe that they hold the power in the relationship and a customer who mentions having already spoken to another agent may rectify this. Past publications have also theorized that customers with different levels of sophistication will receive different advice, with more sophisticated customers receiving better advice. The authors of the study tested this theory by using previous interactions with an agent as a proxy for sophistication. The third experiment is based on theories

concerning whether a requirement for agents to disclose commissions affects the product recommended. Past publications have claimed that when disclosure is mandatory the quality of advice will improve since customers become aware that commissions can skew the advice they are given. The authors of this study tested that theory by using a natural experiment wherein disclosing commissions was mandatory for a specific product after July 1, 2010.

(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? (These are the three classifications we discussed in class.)

This paper was a combination of a descriptive study and an identification exercise. The authors of this study collected their own data and spent ample time presenting their newly created dataset. They then presented some unanswered questions (such as the mechanism behind the poor advice). Once the dataset had been introduced in depth, the authors conducted an identification exercise. Their goal was to find relationships between the three treatments and the presence of advice to purchase term insurance or the ULIP product.

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

The computational methods in this paper were logistic and generalized linear regression. The first two experiments employed very similar models. The dependent variable for the logistic regression models of the first two experiments was the presence of advice to purchase only a term insurance policy. When generalized linear regression was used, the dependent variable was the logarithm of the risk coverage that was recommended.

In the first experiment, the main independent variables for both models were booleans stating if the auditor expressed a bias toward term insurance and a genuine need for term insurance, and the interaction between those two booleans. The authors found that even if the auditor states a bias toward term insurance and a need for term insurance, 79% of the audits ended with a recommendation for whole insurance. The study also concluded that agents will defer to their customers beliefs or needs by recommending term insurance as part of a bundle with whole insurance, a recommendation which the authors see as difficult to defend.

In the second experiment, the dependent and main independent variables are the same except now a dummy variable is added concerning whether the auditor mentions that they have spoken with another agent before coming to the present agent. The coefficient on this dummy variable was very small and never statistically significant in the model except for a small effect when the auditor expressed a need and a bias toward term insurance. The authors concluded not that sophistication does not have an effect on the quality of advice, but rather that “shopping around” was not a good proxy for sophistication.

In the third experiment, a generalized linear regression was used with the dependent variable being the fraction of interactions that resulted in ULIPs being recommended. After the policy change, the authors saw a 20% decrease in ULIP recommendations. They did not, however, observe a statistically significant effect caused by the treatment. This led the authors to conclude that while mandatory commission disclosure does alter agent behavior, an expressed knowledge of commission earnings by the auditor does not.

(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.

The authors of this paper chose firms to audit based on websites that have national listings of life insurance agents. This leads me to wonder if the authors truly have a representative sample of life insurance agents. Does this method of selecting agents exclude rural populations? If so, the conclusions reached in this paper cannot be applied across all demographics. Perhaps agents from smaller, more rural communities would act more like the agents in the study when posed a hypothetical question about whether to recommend term or whole life insurance to a cousin. In this hypothetical, in which the agents understood they would not be receiving commission, the agents mostly recommended term insurance. The authors assumed that this may reflect their true opinions of the two policies. By including rural agents in the study, the authors would be able to better claim universality, at least in India, in the conclusions reached and may have been able to extrapolate more about how the closeness of the community affects the quality of advice.

My second suggestion concerns the sophistication proxy. In this study, the authors used the auditor expressing that he had previously spoken with another agent as a proxy for sophistication. In the end, this proved a weak proxy that had confounding variables. The auditor stating a previous interaction with an agent may have caused the agent to agree with the previous agent hoping to make the sale or disagree with the previous agent in an attempt to prove their dominance. I would recommend using knowledge of the policies as the proxy for sophistication. Assign certain auditors to speak very intelligently about the products and their various advantages and shortcomings. Knowledge about the policies that rivals the agent's own knowledge seems a better indicator of sophistication for the agent to respond to rather than introducing a mysterious third-party agent.