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Ex Ante Moral Hazard & Anticipatory Behaviour: Some Evidence

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Objectivos (Objectives):

Ex Ante Moral Hazard (EAMH) is the reduction of preventive effort that influences the probability of illness due to health insurance. Past evidence has failed to identify EAMH. One possible reason is that researchers made the implicit assumption that insurance has an instantaneous effect on behaviour. This is unlikely, first because we know that the consequences of a non healthy lifestyle are not immediate. Second, some of this evidence are based on the exogenous change in health insurance due to Medicare offered to almost all the American population at age of 65. This change in health insurance coverage is anticipated, and if there exists a payoff period for the benefits of healthy lifestyles, we can expect that individuals have already adapted their behaviour before being covered by a health insurance. The main contribution of this paper to the literature is the hypothesis of anticipatory behaviour when future health insurance coverage is expected. We extend the theoretical model of EAMH to take into account the payoff period for the benefit of healthy lifestyles, and we empirically investigate the model predictions. Our second contribution is the use of semi-parametric methods to identify EAMH.

Metodologia (Methodology):

In our paper, we first review the literature on primary and secondary preventions, and their main empirical evidence in the past literature. It is necessary to distinguish both as they differ in observability and therefore in the extent they can be controlled by insurance contracts. PP (e.g.exercise) is generally not observed and personal investments in those activities are generally not reimbursed. SP (e.g.check-ups) may be observed by the insurer and eventually reimbursed. Evidence shows that the demand for SP tends to increase if reimbursed by insurance. Evidence in the case of PM are mixed: some authors find no evidence of EAMH and others some weak evidence. None of these papers discuss the possibility of anticipatory behaviour.

Our theoretical model extend the classical framework proposed by Ehrlich and Becker. We assume that today's lifestyles only influence future probabilities of illness. Our model predicts that future insurance coverage reduces today's lifestyle efforts. The more periods are influenced by today's investment, the less effort are made today. Finally, if individuals are fully covered in the future, they will not invest in preventive activities today. This is a result of EAMH with anticipatory behaviour.

Our empirical approach use the HRS. We look at three different lifestyles measured by different variables: exercising, smoking and drinking behaviour. We consider only individuals who are between 59 and 68 years old. We define the uninsured and insured

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group based on insurance coverage at the ages 61-64. We use propensity score matching to account for selection on observables and DiD with matching to remove any unobserved time-invariant effect. We include a proxy for risk aversion. We reformulate the main identification assumptions for these methods to adapt them to our framework (adjustments are necessary as before 65 years old -the treatment time-, one group is treated -the insured- and the other not -the uninsured-, but after 65 years old, both groups are treated). Our empirical approach includes various robustness check for the identification assumptions. To assess the sensitivity of our results to our arbitrary group definitions, we also propose different uninsured definitions.

Resultados (Results):

We find significant lifestyle differences between the two groups (insured-uninsured) similar to the one predicted by the assumption of positive selection (PS) but we find weak evidence of EAMH.

Conclusões (Conclusions):

Our results are in line with past evidence on EAMH. The classical theoretical framework should be reformulated to account for PS and future research should concentrate on the identification of PS to have a better understanding of the incentives created by insurance.