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Ex ante moral hazard: Increased or decreased risk taking?

Insurance is omnipresent in the Western world. In fact, governments make certain types of insurance obligatory (e.g., health care and/or liability insurance). On top of that, people opt for additional coverage and buy even more (non-compulsory) insurance (car, travel insurance etc.). It has been demonstrated theoretically that having insurance should increase risk taking and decrease prevention efforts in rational utility maximizers (Arrow, 1963; Pauly, 1968). Indeed, it is often observed that insured people are more likely to engage in all kinds of risky behaviors such as smoking, sedentarism, and other unhealthy lifestyles (e.g., Stanciole, 2007). A field study on the effects of obtaining Medicare found that getting this free type of health care was associated with more and heavier smoking, less working out, and more alcohol consumption (Dave & Kaestner, 2009). Naturally, field studies are limited to correlational interpretations of the data. For example, the latter study is unable to control for factors that covary with obtaining Medicare, such as retirement and more time off. What is more, these studies mainly focus on the changes in behavior of people who were previously

uninsured, and later insured. These people most likely are poor, more reckless, and deviate in other ways from people who do buy insurance. It is thus not possible to draw causal conclusions about the insurance actually causing increases in risk behavior.

Interestingly, evidence from the French car-insurance industry does not suggest the existence of ex ante moral hazard. Namely in France, young drivers whose parents are safe drivers are allowed to pay reduced premiums. As a result, these young drivers opt for increased coverage and thus have more or better insurance at the same price as their less lucky counterparts with more reckless driving parents. These two groups of young drivers do not differ in how likely they are to be involved in an accident (Chiappori & Salanie, 2000). This study thus does not support the ex ante moral hazard theory. Again, because these data were obtained in a field study, it leaves open many possible explanations for the obtained effect. It is likely that the young drivers allowed to pay reduced premiums had ‘safe’ and careful role models, and thus were more likely to drive safely in the first place. It remains unclear whether moral hazard behavior influenced the extent to which the two different groups of young drivers were exposed to the risk (traffic accidents).

To our best knowledge, the ex ante moral hazard effect has yet to be tested empirically. We present a set of studies in which we manipulate whether people are insured or not. Importantly, we also ran control conditions in which insurance is not mentioned at all. We find that people who have insurance are more willing to take risk than people who do not have insurance. In Experiment 1 (N=57), compared to the uninsured, the insured people are more likely to indicate that they would leave their bike outside, rather than park it in the free, guarded bike parking area. In Experiment 2 (N=91), we ask people to imagine that they are on a skiing trip, and that they have time for 10 more rides downhill. The insured people indicate that they would take more off-piste trips down than their uninsured counterparts. Crucially, the levels of risk-taking that we observe in the control conditions are very similar to those of the

insured conditions. It thus seems that not being insured makes people more careful, rather than that being insured making people more risk-seeking. Statistically, we cannot differentiate between the insured condition and the control condition. We do find significant differences between the uninsured and the other two conditions.

These findings shed light on the process underlying the ex ante moral hazard effects reported in previous studies. Also, they are in line with literature on the psychology of insurance. Recently, it has been established that people who are confronted with the fact that they do not have insurance, are more likely to think that bad things will overcome them (Tykocinski, 2008). Also, research on the effects of ‘tempting fate’ illustrates that when people engage in acts that are believed to signal bold personality or audacity, they feel like they are more likely to experience negative outcomes (Risen & Gilovich, 2008). We assume that an increase in the perception of the likelihood of the risk, results in more careful behavior, and thus less risk taking. Currently, we are working on an experiment that is aimed at shedding light at the process underlying the results we found in our experiments. We focus on whether not being insured indeed brings negative outcomes to mind, and whether this decreases the willingness to take risk.

References

- Arrow, K. (1963). Uncertainty and the Welfare Economics of Medical Care. *The American Economic Review*, 53(5), 941-973. doi: citeulike-article-id:580320
- Chiappori, P. A., & Salanie, B. (2000). Testing for asymmetric information in insurance markets. *Journal of Political Economy*, 108(1), 56-78.
- Dave, D., & Kaestner, R. (2009). Health insurance and ex ante moral hazard: evidence from Medicare. *International Journal of Health Care Finance & Economics*, 9(4), 367-390. doi: 10.1007/s10754-009-9056-4
- Pauly, M. V. (1968). The economics of moral hazard: comment. *The American Economic Review*, 58(3), 531-537.
- Risen, J. L., & Gilovich, T. (2008). Why people are reluctant to tempt fate. *Journal of Personality and Social Psychology*, 95(2), 293-307. doi: 10.1037/0022-3514.95.2.293
- Stanciole, A. E. (2007). *Health insurance and life style choices: Identifying the ex ante moral hazard*. IRISS Working Paper Series. Retrieved from <http://econpapers.repec.org/RePEc:irs:iriswp:2007-10>
- Tykocinski, O. E. (2008). Insurance, risk, and magical thinking. *Personality and Social Psychology Bulletin*, 34(10), 1346-1356. doi: 10.1177/1046167208320556