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Chapter 6

Conclusion

This thesis included four studies on health insurance. Each of the studies analyzed a different aspect of the behavior of individuals in relation to health insurance.

In the second chapter, we addressed the effect of information asymmetries on the purchase of private supplementary health insurance, and the use of health care services. The empirical focus was on Ireland, which has a mixed system of public and private health insurance. This system is ideal for studying moral hazard and selection. Data from the Living in Ireland Survey are used for the analysis. This 8-wave panel dataset allows us to distinguish between fixed effects and dynamic effects in insurance choice and health care utilization. No evidence was found for the presence of moral hazard. This implies that the presence of copayments does not influence health care utilization. There was, however, evidence for the presence of advantageous selection: those who have low levels of health care utilization, are most likely to insure themselves. We find that education is an important determinant of advantageous selection. Other determinants include income, health and healthy behaviors. Possible pathways via which these determinants drive advantageous selection include risk attitude, time discount rates and other measures of time preference, and preferences for health. Finally, we showed the importance of both persistence and unobserved fixed effects in health insurance decisions and health care utilization.

The third chapter provides a theoretical motivation for the presence of advantageous selection in dynamic models. Model simulations show how advantageous selection can occur, and that only limited variation between individuals is needed to change patterns of strong adverse selection into patterns of strong advantageous selection.

How copayment-free health insurance for low-income households affects retirement behavior was investigated in the fourth chapter. In particular, we investigated for Ireland whether the sharp income limit on the provision of copayment-free public health insurance induced older workers around this income limit to retire earlier. A structural model is built that incorporates the institutional details of the health insurance and retirement schemes in Ireland and the incentives created by these schemes. It describes the insurance

choice and retirement decisions of married men between the ages 50 and 75. Individuals differ in the wage they receive if employed, their (retirement)age specific pension profile, preferences, risk aversion and the sequence of health shocks and shocks in employment opportunities. The model is solved with dynamic programming and estimated using simulation techniques. With the obtained parameters policy simulations could be performed. Simulating the effect of abolishing the copayment-free health insurance for low-income households shows that this will have very little effect on the retirement age. We therefore conclude that the Medical Card scheme does not induce earlier retirement.

The fifth chapter, exploits the Dutch health insurance reform of 2006. It investigates how individuals choose a health insurance, using a simple consumer search model. From this model we derived four hypotheses: two on insurance plan choice and two on search behavior. The hypotheses on insurance plan choice were confirmed by the data. The hypotheses on search behavior, however, were rejected by the data. In particular, according to the model individuals with an offer for a group contract should search less, while the data show higher search levels. We discussed the role of three simplifying assumptions that were made in the search model: homogeneity in search costs, knowledge about the distribution of prices and homogeneity in the probability to receive an offer for a group contract. There was evidence in the data that individuals differ in search costs, and that this is correlated with health. Furthermore, it was found that offers for a group contract are not randomly distributed in the population. Those with the best knowledge about the health insurance system have the highest probability of receiving an offer for a group contract. The price dispersion that results, is highly undesirable from a social welfare point of view: as health insurance coverage is highly related to the premium, it may affect equity and access to health care.

The main conclusion from this thesis is that selection effects are very important. Incentive effects, such as moral hazard and labor supply effects, are found to be much smaller or even absent. This should be taken into account by governments when (re)designing their health insurance system to keep it affordable in the future. From chapter 2 we know that the individuals selecting themselves into insurance need not be those with the highest risks. This implies that health insurance need not be disappearing in a private market. On the other hand, chapter 5 showed how, even in a highly regulated setting, insurers may have indirect ways to select their insurees and how this may lead to inequality in access to care. This is not only important in (re)designing health insurance systems, but also important for regulators of existing health insurance systems to pay special attention to.