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Information Asymmetries in Crop Insurance: Theory and Experimental Evidence from the Philippines

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Abstract

Asymmetric information can be costly in insurance markets and can even hinder market development, as is the case for most agricultural insurance markets. I study information asymmetries in crop insurance in the Philippines using a randomized field experiment. Using a combination of preference elicitation, a two-level randomized allocation of insurance and detailed data collection, I test for and find evidence of adverse selection, moral hazard and their interaction – that is, selection on anticipated moral hazard behavior. I conclude that information asymmetry problems are substantial in this context and that variations on this experimental design may be useful in future work for identifying interactions between choice and treatment effects.

JEL: O13; D82; G22; Q120

Keywords: insurance, adverse selection, moral hazard, selection on moral hazard, information asymmetries, selective trials, crop insurance, experiment, Philippines, agriculture

1 Introduction

The incomes of small-scale farmers in developing countries are often very volatile. The structure of agricultural production, combined with exposure to weather variation, pests and crop diseases, and fluctuations in input and output prices, results in incomes that are both periodic and highly uncertain. This risk has important short and long term negative welfare consequences for households (Maccini and Yang, 2009; Currie and Vogl, 2013; Rose, 1999). It also depresses

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Asymmetric information can be costly in insurance markets and can even hinder market development, as is the case for most agricultural insurance markets. I study information asymmetries in crop insurance in the Philippines using a randomized field experiment. Using a combination of preference elicitation, a two-level randomized allocation of insurance and detailed data collection, I test for and find evidence of adverse selection, moral hazard and their interaction – that is, selection on anticipated moral hazard behavior. I conclude that information asymmetry problems are substantial in this context and that variations on this experimental design may be useful in future work for identifying interactions between choice and treatment effects.

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