Managing Agricultural Insurance Resources and Uses through Estimation & Balance between Premiums and Compensation as well as Establishing Insurance Portfolio

B. Nikahval*, Dr. R. Hejazi**, M. R. Almasi***

Abstract

This study has investigated the creation of a balance between received premiums as resources and paid damages (compensation) as uses. Two elements have been studied in this research: investigating the nonparametric income pattern in order to measure the income more properly, and calculating the received premium based on estimative nonparametric model for two-product insurance policies. By virtue of these two elements, the difference between received premiums and paid compensations can be reduced. The required data was collected from the insurance companies and agricultural insurance fund agencies located in 11 cities throughout Fars province, all of which were doing insurance activities, estimating damages and paying compensation during 2003 to 2008. In the present study, wheat and barley crops were simultaneously placed in the same insurance basket and, by establishing an insurance portfolio as well as simultaneously predicting and estimating the insurance and the losses to these crops in a two-product insurance policy, the way has been paved for the government or insurance companies to reduce the probable payable damages. The findings show that through predicting and estimating wheat and barley crops simultaneously and then receiving the related premium at the same time in a twoproduct insurance policy, the amount of damages payable by insurance companies under the supervision of Agricultural Crops Insurance Fund will decrease due to their mutual overlapping.

Keywords:

Premium, Payable Damages, Agricultural Crops, Resources and Uses, Portfolio, Two-product Insurance, Nonparametric Model.



^{*} M.A in Accounting Email: beh.nik.ac@gmail.com

^{* *} Associate Professor of College of Social Sciences and Economics, Alzahra University Email: Hejazi33@yahoo.com

^{* * *} Lecturer in Islamic Azad University, Sarvestan Branch Email: Mohammadrezaalmasi@gmail.com