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Credit Rationing of Farm Households and Agricultural Production: Empirical Evidence in the Rural Areas of Central Sulawesi Province, Indonesia

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Abstract

The agricultural sector provides the highest contribution to economic development in the Central Sulawesi Province, Indonesia. On average, the share of the agriculture in the Gross Regional Domestic Product (GRDP) is more than 40 % (2003). However, poverty is a widespread problem found in this area, as indicated by almost 46 % of the total households are categorised as poor and most of them are farmers. Smallholders and poor farmers may perpetually be trapped in poverty due to lack of finance needed to undertake productive investment. This is indicated by lower rate of advance agricultural technology adoption, which results the productivity of some agricultural products in this area are lower compared to the national average.

This paper addresses the question of whether greater access to financial services increase agricultural production. Specific research questions addressed are as follow: **(1)** How many households have access to formal credit markets? **(2)** How many households are credit constrained? **(3)** What factors influence that households are credit constrained? **(4)** How does credit rationing influences agricultural production?

As many studies have shown, many rural households lack access to either formal or informal credit institutions. In the rural areas of Central Sulawesi Province, particularly in the vicinity of the Lore Lindu National Park only 21.5 % of the households have access to formal credits. The results also show that under certain conditions, only 18.1 % of the households are not credit constrained. Most households are credit constrained due to a lack of collateral and because of the self-selection problem.

The econometric analysis consists of two parts. The first part explores the determinants for a household to be credit constrained, focusing on the formal credit market by using a Probit model. In the second part of the analysis, we investigate the influence of being credit constrained on the rice production by applying a switching regression model. The results of the Probit model show that human capital (i.e. education and age of the head of household) as well as wealth and risk-bearing indicators are significant in determining whether a household is credit constrained.

Keywords: Agricultural production, credit rationing, econometrica, Indonesia

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