



EU-FADN: 50 years informing the CAP and much more  
Brussels, Charlemagne, Sicco Mansholt room  
11 June 2015

# Credit level influencing factors at Hungarian farms



Department of Agricultural Economics and Rural Development

József Tóth (josef.toth@uni-corvinus.hu)

Kristóf Tóth

## Background

Financial situation of farmers and creditability is a standard and important topic in agricultural economics. According to the literature collateral (tangible assets), farm size and subsidies have significant effects on farm loans. Growing supports can substitute bank loans with more cheaper and – particularly after the financial crisis – more and easier available subsidies.

## Objective

To estimate the impact of different factors on creditability of agricultural farms.

## Data & Methodology

The data were drawn from the Hungarian Farm Accountancy Data Network. We used unbalanced panel for the period 2001-2010 with 19146 observations in total.

We have estimated fixed effect panel data models which helps in controlling unobserved heterogeneity and the effect of omitted variables.

## Hypotheses

H1: Subsidies and profit reduce credit demand

H2: Economic size and collateral increase creditability

H3: There are other factors which significantly influence creditability

## Results 1: Short-term loan

Total subsidy	-0,09***
Profit before taxation	-0,09***
Economic Size Unit (ESU)	28,84***
Total output	0,07***
Tangible assets	0,14***
Inventory	0,45***
Buyers	0,31***
Suppliers	0,17***
Constant	-22646***
R <sup>2</sup> (within)	0,45

## Results 2: Long-term loan

Total subsidy	-0,02*
Profit before taxation	-0,17***
Economic Size Unit (ESU)	-11,11***
Total output	0,07***
Tangible assets	0,19***
Inventory	-
Buyers	0,09***
Suppliers	-0,07***
Constant	-10564***
R <sup>2</sup> (within)	0,40

## Results 3: Total liabilities

Total subsidy	-0,24***
Profit before taxation	-0,39***
Economic Size Unit (ESU)	13,69*
Total output	0,14***
Tangible assets	0,59***
Inventory	0,48***
Buyers	0,73***
Suppliers	0,79***
Constant	-29962***
R <sup>2</sup> (within)	0,73

Notes: \* p<0,1 \*\* p<0,05 \*\*\* p<0,01

Source: own calculation

## Conclusions

Subsidies like profit decrease the demand for short- and long-term loans together with total liabilities. Size of farms (expressed in ESU, total output and tangible assets) increases the creditability, but ESU decreases the claim for long-term loans. Inventory growth increases the demand for short-term loans. Hungarian farms are squeezed both by buyers and suppliers on short run and with respect to total liabilities. Suppliers partly compensate buyers on the long run.

We acknowledge the financial support of the Hungarian Scientific Research Fund (OTKA), K 84327 „Integration of small farms into modern food chain”