

# Determinants of the Price of Horse Boarding

## A study of Sweden and Norway

### Introduction

- Farmers are seeking to develop alternative business activities to supplement farm incomes following stagnating incomes in agriculture. In this context, developing horse-related activities such as horse boarding is suitable for farm owners who have grazing opportunities and a farm building structure in place.
- Boarding horse services imply that different sets of qualities and services are offered by farmers at a price that usually corresponds to the quality and service level provided.
- The objective of this empirical exercise is to determine the factors influencing the prices charged by boarding horse farms in Norway and Sweden.

### Method

- An hedonic price model linking the (logarithm) price of horse boarding to a set of explanatory variables representing structural, locational, environmental and social characteristics of the farms is specified and estimated econometrically by ordinary least squares and robust estimation procedures.
- The proposed model uses data collected in a sample survey of boarding horse farms conducted in both countries. The survey consists in 53 questions to yield information about the economic performance both in general and in relation to boarding, the pricing system of boarding, managerial and technical performance, customer details, as well as background information of both the business structure and the farm owner.

### Results

- We obtained 330 responses from the survey with information on the price of horse boarding. The price of horse boarding (expressed in Swedish Kroners per month) is highly skewed. The average price of horse boarding in Norway is almost twice greater than the one in Sweden.
- A regression model based on 14 explanatory variables was selected using 205 observations. The explanatory power of the model is satisfactory (adjusted R-square of 0.64). Nine explanatory variables out of fourteen are statistically significant at a 10% level (see table 1).

**Table 1: Econometric Results**

Variable Definition	Estimated Coefficients	P-value
Intercept	6.467	0.000
Sweden (dummy variable)	-0.787	0.000
Distance (km) to City < 5000	-0.005	0.080
Number of Boarding Facilities within 10 km	0.069	0.039
Hobby Farmer	-0.352	0.001
Facility – Stable	0.528	0.004
Facility - Riding Hall	0.331	0.000
Horse Accommodation – Loose	0.143	0.096
Farmer Grazing	-0.153	0.068
Level of Services Included in Rent	0.144	0.000
Share of Grazing Land	-0.055	0.158
Agricultural Activity	-0.032	0.641
Farmer Receives Grants	0.094	0.200
Horse Accommodation – Stall	0.190	0.108
Facilities – Riding Trail	0.104	0.240

- Locational and structural variables (hobby farming, farms located in Sweden and nearest horse boarding facilities) are significant and could have either a positive or negative effect on the price of horse boarding. For instance, an increase by one km in the distance away of from the closest town results in a 0.5% reduction in the price of horse boarding.
- Horse boarding capacity, the share of grazing land, agricultural activity on the farm and receiving subsidies), albeit having in most cases the expected effects on the price of horse boarding, are not statistically significant.

### Conclusion

- This econometric exercise on the determinants of the prices of horse boarding in Norway and Sweden provides insightful results on a increasingly popular horse-related activity practiced by farmers in a European context.
- However, a weakness of this empirical work is not to find a significant relationship between the prices of horse boarding and agricultural activities.