Defining foresight activities and future strategies in farm management: empirical results from Finnish FADN farms

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Introduction

The goal of this paper was to analyse what kind of future goals, planning horizon and foresight approaches farms have. Also, the link between the stated future goals and the success of the farms as measured by economic and structural indicators (e.g. profitability, growth) was studied through available FADN data.

The specific research questions were:

1. What kind of future goals do farmers have for their farm enterprises?
2. Do these different future goals reveal the use of different planning horizons or a different foresight approach in farm management
3. What is the link between the future goals used and the success of the farm as measured by economic and structural indicators (e.g. profitability, growth)?

Material and methods

Alongside with the conducted farm survey (valid n=260 farms), FADN data from the same farms were obtained to scrutinise economic and structural changes in defined farm groups during the five year period 2004–2008. The data for examining the economic and structural changes between farms are based on the annually gathered Farm Accountancy Data Network (FADN) database from Finland concerning the years 2004–2008.

Farm group Indicator	Group 1: Traditional and environmentally oriented farm group	Group 2: Economically oriented farm group	Group 3: Growth oriented, 'economies of scale' farm group
Turnover *x^2=16.067 – 21.842 *df=2 *p=0.000 - 0.000	in 2004: €91,630 in 2008: €105,027 Average 2004–2008: €96,449	in 2004: €145,581 in 2008: €200,078 Average 2004–2008: €167,265	in 2004: €116,750 in 2008: €152,241 Average 2004–2008: €132,399
Family farm income *Statistical significance only in 2004 and 2006 *x^2=17.348 - 19.745 *df=2 *p=0.013(2004), 0.012 (2006)	Minimum €20,393 Maximum €29,608 Average 2004–2008: €23,962	Minimum €30,125 Maximum €42,680 Average 2004–2008: €34,408	Minimum €21,390 Maximum €37,237 Average 2004–2008: €26,497
Profitability coefficient *No statistically significant differences between groups *x^2=0.772 – 4.192 *df=2 *p=0.123 – 0.812	Minimum 0.39 Maximum 0.63 Average 2004–2008: 0.46	Minimum 0.49 Maximum 0.73 Average 2004–2008: 0.56	Minimum 0.29 Maximum 0.72 Average 2004–2008: 0.51
Equity ratio *x^2=8.072 - 16.643 *df=2 *p=0.000 - 0.018	Minimum 85.3 Maximum 90.5 Average 2004–2008: 88.14	Minimum 74.6 Maximum 76.7 Average 2004–2008: 75.38	Minimum 75.1 Maximum 78.0 Average 2004–2008: 77.6
Debt-equity ratio* *x^2=8.006 - 16.331 *df=2 *p=0.000 - 0.018	Minimum 26.22 Max :40.84 Average 2004–2008: 34.03	Minimum 62.31 Maximum 71.07 Average 2004–2008: 67.45	Minimum 65.73 Maximum 83.13 Average 2004–2008: 74.27

* The mean difference is significant at the 0.05 level ($p < 0.05$)
* The statistical significance of the differences between the formed groups was measured by the Kruskall-Wallis test. The minimum and maximum of x^2- and p-values are presented for 2004–2008.

Key results

Our findings indicate that the three farm groups constructed differ from each other in terms of future orientation and in terms of structural and economic development.

	Group 1: Traditional and environmentally oriented farms	Group 2: Economic success oriented farms	Group 3: Growth and development oriented farms
Future goals within group (based on questionnaire definitions)	Mental satisfaction of being a farmer, taking care of the environment	Good profitability, good liquidity and sufficiency in income financing, reasonable subsistence	Continuing growth, rationalisation of production, developing professional skills, continuity of family farm
Planning perspective and foresight approach	Operational and strategic planning practice, reactive approach to changes, passive in information retrieval	Operational, strategic and visionary planning practise, from reactive to preactive approach to changes, most active in information retrieval	Strategic and operational planning practise, from reactive to preactive approach to changes, rather active in information retrieval
Structure of farm enterprise (years 2004–2008)	Clearly smallest farms as for economic size (turnover), farm size (area under cultivation), no growth in cultivated area or turnover	Clearly highest number of working hours, biggest in economic and farm size (turnover and area under cultivation), steady growth in cultivated area, quite rapid growth in turnover	Least working hours, by turnover bigger than Group 1, by farm size almost as big as Group 2, rather big in economic size, steady growth in cultivated area and in turnover
Phase of life cycle on farm (years 2004–2008)	Most farms cannot define the point in time for transferring the farm to a descendant, precious little recently or in near-future transfers, the statement "farming is coming to an end" describes the farms	Significantly many of transfers are planned to happen in 5–15 years' and more than 15 years' time, just 9% of farms in group recently conducted the transfer of the farm to a descendant	Significantly many of transfers are planned to happen between 5 to 15 years
Economic situation of farm (years 2004–2008)	By far poorest profitability, but most self-sufficient and lowest indebtedness ratio	Highest farm family income, good self-sufficiency, satisfactory indebtedness ratio	Best in return on total assets, biggest changes in profitability between years, good self-sufficiency, good/satisfactory indebtedness ratio

Conclusions

Our findings indicate that the stated future goals are also visible in farm performance. As the future goals and the foresight approach were a farmer's subjective statement, it also tells the farmer's motivation to improve and develop farm management behind the goals.

	Strengths	Weaknesses
Traditional and environmentally oriented farms	Very self-sufficient, relatively low indebtedness ratio, possibilities to capitalise achieved wealth	Poor profitability, passive in information retrieval, foresight activities minor, poor productivity
Economic success oriented farms	Planning focuses on operational, strategic and visionary time frame, steady growth, good self-sufficiency, active in information retrieval, relatively steady and also best profitability of farm groups	Satisfactory indebtedness ratio, still poor profitability level
Growth and development oriented farms	Willingness to invest in increasing farm size, benefits most of changes in market environment, good self-sufficiency	Suffers most from negative changes in market prices, considerable indebtedness ratio

In this study the FADN data gave an opportunity to examine economic and structural development in the defined farm groups with several indicators.

European level FADN system and its database give farms opportunities to diversely benchmark their structural and economic performance between farms and production lines, and thus improve their managerial competence and planning practises.