Farmers’ Strategies in Globalizing Markets: Empirical Results from Germany

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Abstract. Today the European agrofood sector is increasingly confronted with the threats as well as the opportunities of liberalizing markets. Therefore, competitiveness on global markets is becoming of paramount importance for European farmers. The challenges of global markets are accompanied by a growing array of new developments in farmers’ economic and political environments, such as accelerating structural changes in the farm and agribusiness sectors, a new EU agricultural policy (decoupling and cross-compliance) and new market opportunities due to the breakthrough of renewable energies. In this paper we deal with strategic decision-making by German farmers who are confronted with new threats and opportunities. We develop a theoretical framework of strategic farm management based on the differentiation between different levels of strategic management, namely corporate, competitive, functional, and cooperative strategies. We present the results of a large-scale empirical study in the German state of North Rhine-Westphalia. The empirical results show that farmers employ a broad spectrum of corporate, competitive, functional and cooperative strategies to reposition their farms in the face of changing economic and political environments. Factor analysis reveals five dominant strategic factors and cluster analysis five strategic groups in the region under survey. The results of the study allow farmers to benchmark their farms and to identify strategic gaps in the face of globalizing markets.

Keywords: Competitive strategy; cooperation; corporate strategy; farm management

1 Introduction
During the last few years, the basic conditions for farms have undergone lasting changes. Many farms are faced with the challenge of having to adapt their existing internal resources and orientation to new and continually changing market situations. With a negative trend in the development of product and factor prices, the decoupling of premiums from production, cross-compliance requirements, the EU eastward expansion and international competition in increasingly globalized raw material markets from countries like Brazil, Argentina or New Zealand, production conditions and existential prerequisites for farms have changed extensively. Competition will presumably continue to increase due to the reduction of internal price support, reduced export subsidies and a cut in outside protection.
Analyses in relevant literature show that strategic corporate management has arisen from the further development of strategic corporate planning and deals with all aspects of the relationship between company and environment \[13\]. Due to the changes described, in future strategic management parameters and questions regarding strategic corporate management will gain increased importance for farms. The basic external conditions (chances, risks) as well as the strengths and weaknesses within the farm determine its strategic orientation.

Against this background, we conducted an empirical survey of strategic management of farms in the German state of North Rhine–Westphalia. The subjects of the study were the varying strategic orientation of farms and the possibility of clustering farms in strategic groups with similar strategic conditions. The competitive advantages and mobility barriers among the individual groups were also described, as were possible differences in profitability and competitive intensity amongst the individual positions of the farms.

2 Strategic farm management: a framework

Our study was based on the analytical framework shown in Figure 1. Accordingly, external conditions such as industry structure and market environment, corporate resources and the capabilities and qualifications of management determine the strategies of a farm; on the other hand, the strategies also influence the competitive conditions of the industry, such as price pressure or the intensity of leasehold competition and the equipment of farms with resources. However, the success of a farm depends on which strategies are followed, how well these are adapted to the current situation and implemented on the farm, and on the overall development of the industry. The connection between the strategies followed and corporate success is also determined by the form of strategy formulation and implementation employed.
3 Contingency factors

The importance of a firm’s external conditions is especially emphasized by the market-based approach in strategic management [28]. Accordingly, strategy formulation follows the systematic analysis of the structural industry conditions. A firm’s strategies serve to ensure or improve the firm’s competitive position against the background of the individual market conditions. With this in mind, Porter (1980) developed a framework concept for the identification of structural industry characteristics. According to Porter’s concept, intensity of rivalry in an industry is determined by five competitive forces:

- Threat of market entry of new competitors
- Bargaining power of buyers
- Bargaining power of suppliers
- Threat of substitute products
- Intensity of rivalry amongst existing competitors

Additionally, important environmental factors—which also influence market development and business and which must therefore also be taken into consideration in strategic positioning, for example, basic political and legal conditions—can also be included in the study [34]. Which of the factors mentioned are of importance in each case depends on the industry concerned.

However, corporate success is not only determined by market structure and other contingency factors, but also by internal resources. The study of the importance of internal resources for the strategy and success of a farm forms the focal point of the resource-based approach [27, 35]. In this strand of strategy research, resources are understood as all goods owned by a farm that can be used to achieve sustained competitive advantages [14]. In order to systematize the resources, the resource-based view of strategic management differentiates between tangible resources—such as land, buildings, machinery and supplies—and intangible resources—like marketing or production know-how. Human resources are considered separately; these include the capabilities, knowledge and motivation of the farm manager and, where applicable, the members of his family as well as employees [32].

For farms there is no question that, in addition to the farm manager, the land resources and other characteristics of location are of extreme importance [9]. Favorable transport connections with producing and processing firms can help avoid long-distance transportation, and
connections to urban areas can determine various diversification possibilities, such as direct marketing activities. The natural climatic conditions and ground fertility also influence cultivation possibilities and production conditions.

The special significance of farm management as the resource which significantly determines the success of the farm is emphasized by the human resources approach. Various analyses have shown that in agriculture not all farm managers are able to cope with new market conditions and the resulting decision-making pressure, and thus they succumb in the face of competition. Farm management capabilities gain in importance to the same degree by which the support level determined by the EU agricultural policies is reduced. For this reason it is of major importance that farm management should recognize competitive advantages and opportunities on the market and adjust internal resources correspondingly.

4 Strategies
Strategies are basic decisions applicable on a long-term basis that form the framework for ensuing operative decisions and ensure the long-term success of an organization. Hofer and Schendel (1978) identify three strategy levels: corporate, competitive and functional. These different strategy levels complement each other and should result in a consistent whole.

Corporate strategy comprises the definition of a firm’s businesses, such as the definition of its product and market combinations: “What are we producing and for whom?” Choosing between diversification and specialization (or concentration on core competencies) is one of the central corporate-strategic questions. In the course of time, furthermore, as far as corporate strategy focus is concerned, it is also necessary to differentiate between growth, stability and retrenchment. In view of increasing changes in structure and new opportunities (such as the production of bio-energy), among other things, both questions are of particular relevance for agriculture.

Through its competitive or business strategy, a firm’s position within an industry is defined. In dealing with the five competitive forces, according to Porter (1980) there are three generic strategic approaches. These are cost leadership, differentiation and focus strategies to ensure or improve the firm’s competitive position. With the cost leadership strategy, the competitive advantage of a farm or firm depends on it being able to produce a product that corresponds in all relevant economic aspects to that of a competitor—or one that is at least considered acceptable by consumers—at a lower cost than other competitors and to offer it at a correspondingly low price. On the other hand, the competitive advantage of the differentiation strategy is that the customer considers the firm’s products to have unique characteristics; this creates customer commitment and a higher willingness to pay. With a focus strategy, a firm
targets a certain industry segment or market niche—for example, a specific consumer group—and tries to achieve a cost or differentiation advantage with regard to this segment and its specific requirements. Some companies have been successful in following more than one type of strategy simultaneously (so-called hybrid competitive strategies)\(^8,\,29\).

Farms are in a special situation from a competitive strategic point of view, as they very often act as producers of commodities that are subject to international price competition. The cost leadership strategy is thus often considered a “natural” competitive strategy in agriculture. For a small number of farms, opportunities are provided by following a differentiation strategy, such as developing own brands\(^{16}\) or joining quality programs, like the Eifel farmers who joined the Eifel Premium Schinken GmbH and who, with their strict production criteria, intend to distance themselves from mass producers in the region\(^3\). For some, a focus strategy is an alternative, such as employing direct marketing techniques or changing over to organic farming\(^{4,\,30,\,31}\).

Finally, functional strategies determine the long-term procedures in a firm’s functional areas; examples of this are procurement and marketing strategies. Deciding between high performance and low-cost pasture farming discussed by dairy farmers\(^{25}\) belongs to the area of functional strategies. In particular cases, functional strategies are often strongly influenced by competitive strategy.

For every company, within the framework of determining the cooperation strategy, the question arises as to how the strategies can be executed on the corporate, competitive and functional levels. Here, farmers can decide whether or not they will cooperate with other farms. Cooperation with other farms can, on the one hand, take place with certain work being outsourced to external service providers such as contractors (outsourcing). On the other hand, it is also possible to choose from a wide spectrum of horizontal forms of cooperation and to choose more or less close forms of cooperation with other farms\(^{10,\,33}\).

**Performance**

There is a wide range of absolute and relative parameters to measure the success of a farm. On family farms, not only profit margins, but net profits in particular count as the major specific values, as does the resulting increase or loss of equity capital, taking private expenditures into consideration\(^{20}\). Empirical studies have shown that the strategy followed is relevant to a large extent, but that many contingency factors also affect success\(^5\).

5 **Sample**

In spring 2005, an empirical study was carried out in North Rhine–Westphalia, concerning the strategic management of farms and taking
internal resources, farm manager typologies and environmental conditions into consideration. A written questionnaire was sent to a total of 900 farms; 292 of these participated in the study with analyzable questionnaires. This resulted in a rate of return of 32.44 percent.

At 88.83 ha, the average farm in the study was clearly over the growth threshold of 75 ha and well over the average farm size in North Rhine-Westphalia (32 ha). In the study the average farm size is strongly influenced by 46 farms with a farmed area of more than 125 ha although more than half the farms surveyed cultivate between 25 and 75 ha and are still trying to overcome the growth threshold. Of the respondents 92 percent are livestock farmers, mostly dairy and pig farmers. On average 78 breeding sows, 289 rearing pigs and 37 dairy cows were kept. Similar to the German average, 94 percent of the farms operate conventionally, and 92 percent are managed as family-owned farms with an average of two family members working for them.

6 Result
10.1 Contingency factors

Environmental conditions

Within the environmental conditions, emphasis was placed on the farmers’ perceptions of agricultural-political and economic conditions. Here it emerged that the respondents expect a further intensification of competition and negative effects resulting from EU enlargement in Middle and Eastern Europe. They also complain about unfavorable local conditions in global competition, as well as too strong an ecological approach in agricultural policy. The general economic situation is considered to be somewhat unfavorable (Fig. 2).

![Fig. 2: Evaluation of external conditions](image)

Internal Resources

7
On average, the agricultural areas of the farms analyzed have an adjusted **yield index** of over 48 points (*Bodenpunkte*). Most respondents ranked their farm location better than those of comparable farms (Fig. 3). All the same, 70 percent of the farms admit to various location problems, which result mainly from domestic political conditions, as well as proximity to residential areas, lack of land, lack of arondation and high production conditions in the fields of water, emission and environmental protection, or lack of building permission for many farms.

![Fig. 3: Comparison of farm locations](image1)

For growth-oriented farms, the problems of lack of local expansion possibilities is of particular importance. Due to the manifold stakeholder groups, the supply of agricultural **leasehold** and **areas for sale** is very limited or the prices are very high (Fig. 4). Expansion by leasehold areas is preferred, but the limited supply results in high leasehold fees.

![Fig. 4: Supply and prices for leasehold land](image2)

The **capital supply** of the farms essentially determines their investment behavior. Contrary to the German trend, the farms in the study have invested above average amounts in the past and will do so in future. Most investments are in the fields of machinery, agricultural area and rearing places (Fig. 5).
Farms with high investments can be characterized as having a stronger competitive orientation and greater risk acceptance. Debt capital increased proportionally with increasing farm size. In particular, farms with high growth rates showed high investments that could not be financed by equity capital.

Farms with modern and high-quality farm equipment (especially stables and technology) show pronounced growth intentions, had a high competitive orientation and achieved return on investments.

Farm management

Compared to the national average, the agricultural farm managers in the study have a generally higher professional qualification, with diplomas as agricultural business economists (14 percent), technical college diplomas (30 percent) and agricultural master’s degrees (35 percent).

Risk acceptance, that is, being willing to make decisions which may not prove advantageous, was only partially present among the farm managers. Although a significant correlation between willingness to accept risks and economic success was found in the farms surveyed, a large proportion of farm managers only attributed to themselves an average or slightly negative risk acceptance (Table 1).

Table 1: Risk acceptance among farm managers

<table>
<thead>
<tr>
<th>Risk willingness</th>
<th>Positive answers</th>
<th>Indifferent answers</th>
<th>Negative answers</th>
<th>Mean value</th>
<th>Median</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 290</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“I am prepared to take a risk...”</td>
<td>128 (44,2%)</td>
<td>76 (26,2%)</td>
<td>86 (29,7%)</td>
<td>0,35</td>
<td>0,00</td>
<td>1,45</td>
</tr>
<tr>
<td>“If you are prepared to take a risk, you will be economically successful”</td>
<td>147 (50,7%)</td>
<td>112 (38,6%)</td>
<td>31 (10,7%)</td>
<td>0,65</td>
<td>1,00</td>
<td>1,15</td>
</tr>
</tbody>
</table>
The motivation of the farm managers strongly referred to the production of high quality produce. However, only those farm managers who view the continuing development of their farms positively are prepared to increase their future work input. A similar trend was seen in the competitive orientation. In particular, farm managers whose farms are to continue to grow in the future are very interested in market development and follow it with interest. Furthermore, these farms are more prepared to compete with other farms. Farm managers who are more open to new ideas and prepared to learn and use new things tend to be more interested in market development and the growth of their own farms and show a stronger competitive orientation.

In the field of self-organization more than 50 percent of farm managers had difficulty with consistent decision-making and enforcement. In the field of strategic development, decision-making – even after weighing up diverse possibilities – is often especially difficult. This behavior was often due to the farm management’s general uncertainty with regard to political conditions and developments. How can long-term strategic decisions be made, when the result and future development of the agricultural reform after 2013, with decoupling of premiums from production, and so forth, is still unclear? These last few years, many farms have taken recourse to the support offered by private consultants for their strategic planning. This applies especially to farms with higher annual returns on investments.

6.0 Strategies

What strategic measures have the farms in the study taken or planned for the future? Below are some selected results, taken from the comprehensive data collected in the survey.

Of the respondents 95.1 percent (n= 272) want to continue to operate as full-time farmers for the next five years and are thus following growth and stabilizing strategies. In the long run, encompassing generations, only 198 farms (67.8 percent) can imagine continuing as full-time farmers. Of the farm managers 25 percent (n = 74) have no idea about future orientation in this long-term perspective and concentrate more on short-term planning. Furthermore, sixteen farms (5.5 percent) have planned retrenchment strategies for the future. Among these are five farms (1.7 percent) that want to stop their operations step by step. Nine farms (3.1 percent) plan to switch to part-time farming. In the long run, two owner-managers (0.7 percent) want to sell their farms.

Of the farms in the study, 26.3 percent (n = 77) have tried to grow or to stabilize their situations through diversification, for instance, by offering communal or private services. Their diversification directions embrace agricultural activities, such as bio-gas plants, seed reproduction or offering contractor services, non-farming businesses such as photo-
voltaic or direct marketing (Table 2). Only 25 percent of the farms make more than 25 percent of their profits with these new activities, so that the agricultural core business continues to have highest priority for most diversifiers.

Table 2: Farm diversification

<table>
<thead>
<tr>
<th>Type of diversification</th>
<th>Existing or planned diversification</th>
<th>Agricultural sector</th>
<th>Non-farming sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horizontal</td>
<td>Existing</td>
<td>25 (22.3%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td></td>
<td>Planned</td>
<td>1 (4.3%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Vertical</td>
<td>Existing</td>
<td>8 (7.1%)</td>
<td>19 (16.7%)</td>
</tr>
<tr>
<td></td>
<td>Planned</td>
<td>1 (4.3%)</td>
<td>5 (21.73%)</td>
</tr>
<tr>
<td>Lateral</td>
<td>Existing</td>
<td>22 (19.6%)</td>
<td>38 (33.4%)</td>
</tr>
<tr>
<td></td>
<td>Planned</td>
<td>5 (21.73%)</td>
<td>11 (47.82%)</td>
</tr>
<tr>
<td>Total</td>
<td>Existing</td>
<td>55 (49%)</td>
<td>57 (51%)</td>
</tr>
<tr>
<td></td>
<td>Planned</td>
<td>7 (30.4%)</td>
<td>16 (69.6%)</td>
</tr>
</tbody>
</table>

In addition to diversification—in livestock as well as arable farming—clear specialization tendencies can be observed. Activities in the area of bull and cattle fattening, for example, were clearly reduced, whereas the size of pork and dairy farming operations increased remarkably.

However, of the full-time farmers, only 57 percent have clear ideas of how exactly a future livelihood will be possible. Due to the uncertainties regarding the development of future external conditions, coupled with a lack of reasonable reaction possibilities internally, no clear strategic orientation and perspectives are possible. Fewer than half the farms (n = 105) feel strategically well positioned and would like to adhere to the previous strategy.

Of the farms in the study, 94.2 percent pursued the strategy of conventional farming; in international competition, they are really only competing with one factor: low prices for good quality. Only 5.8 percent pursue the focus strategy of organic cultivation methods.

Most of the farms in the study use a broad spectrum of distribution channels, thus reducing risks and dependency from a single provider, but only a small number (33 farms, 11.2 percent) use more than three distribution channels. All in all, the distribution channels for the marketing of the produce vary greatly. Seventy farms distribute their goods solely through dairies and slaughter houses and do not use any alternative distribution possibilities. Eleven farms use the Raiffeisen cooperatives as the sole outlet for their goods, 109 farms market part of their goods directly, and five farms market their complete produce directly to the consumer.
Of the farms 46 percent now cooperate with other farms or organizations; 32 percent of the farms are not planning any cooperation. Existing and planned cooperation activities focus strongly on the use of machinery. The outsourcing of work, through, for instance, the use of private contractors, is becoming more and more popular. Cooperative field work, farming cooperatives in livestock farming or contract production for the food industry are, however, only rarely used, and cooperation potential in these areas is generally considered low.

6.1 Strategic groups in agriculture

Strategic Groups

A strategic group encompasses all companies in an industry that pursue the same or very similar strategies. Usually, an industry consists of several strategic groups whose strategies—and often also performances—differ. The similarity of the strategies implemented is demonstrated by similar characteristics among the strategic variables and the resulting competitive behavior\cite{28}. Identification of strategic groups often takes place using cluster analysis; this method has already been used successfully in agricultural economics\cite{18, 23}.

Typically there are mobility barriers between the diverse strategic groups in an industry\cite{6}. Mobility barriers refers to the factors that prevent the transition from one strategic group to another and the entry of an external company into an industry\cite{24}. The presence of mobility barriers among strategic groups can explain the persistence of profitability differences in an industry\cite{7}.

Recently the concept of strategic groups has enjoyed further development. Therefore, reference has been made to industrial economics\cite{11} and the resource-based view in strategic management in order to explain the conditions under which strategic groups exist, behavioral uniformity within strategic groups or the continued membership of companies in specific groups.

Strategic Factors in Agriculture

In order to cluster farms with similar strategic orientations, the strategy variables representing the diverse strategy levels defined above were selected from the questionnaire. Factor analysis was used to extract relevant group-forming clusters of variables from the wide range of strategic variables analyzed and reduce them to a few more general factors.

Keeping to adequate quality criteria such as the KMO-criterion, the Bartlett Test and KMO eigenvalues, using factor analysis it was possible to extract five factors with a total of sixteen different variables (Table 3).
The quality of the individual factor variables reached a KMO value of 0.688, a very good result\textsuperscript{[1]}. Of the 55 strategy variables involved at the beginning of the analysis, the extracted factors were able to explain a total of 55.25 percent of the total variance with regard to all output variables.

Table 3: Rotated component matrix after varimax rotation

<table>
<thead>
<tr>
<th>Factors</th>
<th>Item description</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Growth</strong></td>
<td>Previous investments in machinery and equipment</td>
<td>0.643</td>
</tr>
<tr>
<td></td>
<td>Previous investments in agricultural areas</td>
<td>0.661</td>
</tr>
<tr>
<td></td>
<td>Planned investments in machinery and equipment</td>
<td>0.598</td>
</tr>
<tr>
<td></td>
<td>Planned investments in agricultural areas</td>
<td>0.588</td>
</tr>
<tr>
<td></td>
<td>Previous acreage growth through leasehold</td>
<td>0.673</td>
</tr>
<tr>
<td></td>
<td>Planned acreage growth through leasehold</td>
<td>0.550</td>
</tr>
<tr>
<td><strong>Diversification</strong></td>
<td>Existing and planned business other than core business</td>
<td>0.841</td>
</tr>
<tr>
<td></td>
<td>Previous investments in new business</td>
<td>0.788</td>
</tr>
<tr>
<td></td>
<td>Planned investments in new businesses</td>
<td>0.607</td>
</tr>
<tr>
<td><strong>Cooperation</strong></td>
<td>Cooperative use of machinery</td>
<td>0.804</td>
</tr>
<tr>
<td></td>
<td>Cooperative cultivation of agricultural areas</td>
<td>0.734</td>
</tr>
<tr>
<td></td>
<td>Outsourcing farm activities</td>
<td>0.603</td>
</tr>
<tr>
<td><strong>Retrenchment</strong></td>
<td>Planned investments in stables and rearing</td>
<td>-0.598</td>
</tr>
<tr>
<td></td>
<td>Unclear future perspectives</td>
<td>0.704</td>
</tr>
<tr>
<td></td>
<td>Profits not re-invested</td>
<td>0.709</td>
</tr>
<tr>
<td><strong>Outsourcing</strong></td>
<td>Planned acreage growth through leasehold</td>
<td>-0.463</td>
</tr>
<tr>
<td></td>
<td>Outsourcing farm activities</td>
<td>0.576</td>
</tr>
<tr>
<td></td>
<td>Potential for outsourcing farm activities</td>
<td>0.751</td>
</tr>
</tbody>
</table>

**Strategic Groups in Agriculture**

The strategy factors extracted from the factor analysis were used to identify strategic groups amongst the farms involved in the survey. Of the 292 farms studied, a total of 278 farms (95 percent) could be used for the cluster analysis. Ward’s method was used for the hierarchical cluster analysis clearly indicated a five cluster solution in dendrogram and elbow criterion, which also seemed to make sense allowing for plausibility considerations (Table 4). The discrimination analysis confirmed the group allocation by 88.1 percent. All cluster-forming variables divide with a mean comparison value of 0.000, significant at the 1 percent level\textsuperscript{[1]}. A heterogeneity and selectivity test produced a very favorable result (value 2.082; canonical correlation 0.822) for the calculation and analysis of the coefficients of the discrimination function. The single-factor ANOVA also
produced a clear distinction between the groups, with a significance level of 0.000.

<table>
<thead>
<tr>
<th>Cluster 1</th>
<th>Cluster 2</th>
<th>Cluster 3</th>
<th>Cluster 4</th>
<th>Cluster 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>74,16 ha</td>
<td>72,31 ha</td>
<td>86,86 ha</td>
<td>138,55 ha</td>
<td>93,19 ha</td>
</tr>
<tr>
<td>n = 50 (18%)</td>
<td>n = 74 (27%)</td>
<td>n = 29 (10%)</td>
<td>n = 33 (12%)</td>
<td>n = 92 (33%)</td>
</tr>
</tbody>
</table>

The strategic groups 1, 3 and 5, which encompass 61 percent of the surveyed farms, have developed new strategic behavioral patterns in order to survive the future challenges in agriculture. While one group (Cluster 1) has developed new businesses and attempts in this way to compensate for income losses in primary production, Clusters 3 and 5 tend towards a cooperative approach with other farms or the outsourcing of certain farm activities. Both clusters are clearly above the growth threshold of 75 ha, while Cluster 1 lies below this level.

Two other strategic groups (Clusters 2 and 4), a total of 39 percent of the farms analyzed, are at present trying to independently overcome the future challenges in their core agricultural businesses. The group of expanding lonely fighters (Cluster 4) demonstrates in both livestock and plant production that they are seeking to cope with future challenges through farm growth and without cooperating with other farms. The other group (Cluster 2) is composed of relatively small farms whose future success, in view of the upcoming challenges, is uncertain. The strategic perspective, however, of future corporate development is at present still unclear; cooperative or diversifying measures have not been planned so far.

7 Conclusion
The empirical results of our study have allowed interesting insights into farm strategies. Furthermore, with recourse to a limited number of cluster-forming strategic variables, it was possible to cluster those farms taking part in the study in five strategic groups. Farms can use these results as a guide in the face of intensifying competition and as support in establishing and developing their own strategic positions. A comparison with other strategic groups, or perhaps more successful competitors, clarifies for the individual farms what internal measures need to be taken in order to fill strategic gaps and overcome mobility barriers between strategic groups. Furthermore, the study results allow
agricultural politicians and consultants to fine-tune their instruments and develop innovative ideas for agriculture.

References