

Ludwig Theuvsen¹

Matthias Heyder

Department of Agricultural Economics and Rural Development

Georg-August-University

Goettingen, Germany

Internationalisation of German agribusiness firms after the EU enlargement: strategies, challenges and success

Abstract. In recent years, the internationalisation of firm activities has been a significant trend in the agribusiness sector. To a great degree, this development has been fuelled by trade liberalisations and the EU enlargement, but also by the strong economic growth in many transforming and developing economies. Against this background, this paper identifies the strategies and instruments that agribusiness companies currently use when internationalising their business. The paper presents the empirical results of a survey that was undertaken between April and August 2010 with the participation of 113 German agribusiness firms. The majority of respondents expect that the globalisation of agricultural markets will increase remarkably in the future. For developing international business activities, comparatively simple strategies, such as direct and indirect exports, are most widely used. Agribusiness firms face various challenges in international markets, including problems with quality control, corruption, tariff and non-tariff trade barriers, as well as low availability of qualified workers and managers and a lack of legal security. Despite these difficulties and challenges, three-fourths of those interviewed indicated that they had either reached or exceeded the goals set for their international expansion.

Key words: exports, foreign direct investments, internationalisation, strategic management

Introduction

Companies in nearly all industry sectors face increasing globalisation. As a consequence, the world trade has nearly quadrupled since the early 1990s, and it is assumed that it will reach a new all-time high in 2011 with imports and exports adding up to more EUR than USD 16 trillion. Similar developments can be observed in international trade in agricultural and food products. German food imports, for instance, increased from EUR 36.5 billion in 1996 to EUR 62.3 billion in 2010. During the same time period, food exports increased from EUR 21.4 billion to EUR 53 billion in 2010 [Situationsbericht... 2011]. Although these numbers are influenced by inflation and changes in exchange rates, they reflect a remarkable development of international trade in agricultural and food products. There are various reasons for this internationalisation of agricultural and food markets, including the liberalisation of agricultural policies, the establishment of free-trade areas such as the European Union and the strong growth of demand due to high growth rates, higher incomes and changing consumer preferences in many transforming and developing economies, as well as the need for food manufacturers to develop new markets and realise economies of scale (push and pull forces [Etemad 2004]). Estimated high GDP growth rates in Central and Eastern European countries in 2011 (for instance Poland: 3.8%, Estonia: 6.5

¹ Professor, DrSc, address: University of Goettingen, Department of Agricultural Economics and Rural Development, Platz der Goettinger Sieben 5, D-37073 Goettingen.

[Brueggmann 2011]) have contributed to the attractiveness of these markets. Furthermore, the so-called BRIC countries (Brazil, Russia, India and China), which have developed into the power houses of the global economy, have enjoyed growing attention from agribusiness firms. With shares of 40% of the global population, 26% of the global area and currently 15% of the global gross domestic product, as well as annual economic growth rates between 5% and 10%, these countries are perceived as important future markets. In these countries agribusiness firms strongly benefit from available land resources, large populations and changing lifestyles, such as an increasing consumption of products of animal origin [Database... 2011].

As a consequence of the development described above, firms in the agribusiness sector are ever more exposed to the challenges and opportunities of international business activities [Rama 2005A; Carruth 2006]. Many empirical studies deal with the internationalisation of firm activities [Li 2007; Glaum & Oesterle 2007]. These studies focus on various subjects, such as the strategies firms choose when entering international markets, the competitive strategies firms employ in non-domestic markets, the global standardisation versus national differentiation of strategies and activities [Grant 2005], the relationship between internationalisation and firm performance [Li 2007; Oesterle & Richta 2009] and the challenges of international management, such as the development of adequate international human resource management practices [Tung 1984; Milliman et al. 1991]. However, only a few studies focus on the agribusiness sector [e.g. Theuvsen & Ebneith 2005; Guillouzo & Ruffio 2005; Rama 2005B; Ebneith & Theuvsen 2007] even though increasing their international business activities has become an important issue for agribusiness firms [Heyder et al. 2011].

Nevertheless, at present, the majority of agribusiness companies from developed countries still find themselves in very early stages of internationalisation, just beginning to enter international markets. One reason could be that internationalisation is faced with numerous challenges, for instance, identifying and analyzing promising foreign markets, formulating and implementing international strategies and determining optimal management systems that will suit the peculiarities of the international business environment.

Learning to better tap the potential of international markets will be a crucial issue for agribusiness firms in the upcoming years. In this context, this paper presents results of an explorative empirical study of the status quo and the development of internationalisation in the German agribusiness sector. Although the study is explorative in nature, it is based on a general hypothesis that the degree of internationalisation has increased in many agribusiness firms but, nonetheless, significant differences exist between agribusiness sub-sectors. The study provides insight into the extent and development of internationalisation strategies in the German agribusiness. The paper adds substantially to our knowledge of internationalisation in the food industry and other agribusiness sub-sectors. It also has interesting managerial implications, for it allows firm managers to benchmark their own strategies against industry standards. Finally, it can serve as a starting point for future research in which more specific, theoretically derived hypotheses regarding internationalisation patterns in the agribusiness sector can be examined.

The paper is organised as follows: After the introduction we introduce our sample and the methodology applied in section two. Empirical results are presented in the third section. Finally, in the fourth section we discuss our findings and conclude with some remarks concerning internationalisation in the agribusiness sector.

Sample and methodology

The explorative study under consideration is based on a large-scale survey in the German agribusiness sector that was conducted between April and August 2010. During this period, about 1,100 German agribusiness firms from various industry sub-sectors were surveyed. The 113 respondents (response rate: about 10%) were polled using a standardized questionnaire online and via telephone interviews. The firms in our sample stem from the upstream industries of the agribusiness sector (agricultural machinery and other input industries, such as feed, plant protection, seed, fertilizers, etc.), downstream industries (food industry, agri-trade and wholesaling) and the bioenergy sector (bioenergy production and manufacturers of capital goods, like biogas plants). Since they do not pursue internationalisation strategies, agricultural enterprises were not included in the survey. By far the most prevalent are firms from the food industry (43.4%). Companies from the input industries of agriculture (20.8%), agricultural machinery (15.1%), agri-trade and wholesaling (11.3%) as well as the bioenergy sector (9.4%) were also represented.

Regarding the firm size, the sample includes very small enterprises as well as large multinational corporations (Table 1). The majority of respondents are from small and medium-sized companies; two-thirds of the companies surveyed see turnovers between EUR 1 million and EUR 100 million. About 45% of the companies surveyed generate a turnover lower than EUR 25 million. Therefore, our sample reflects the general situation in the European agribusiness sector, which is characterized by many small and medium-sized enterprises and a few very large companies, as well as by very diverse sub-sectors. Nevertheless, in its scope the sample is a non-random 'convenience sample' [Fowler 2002] and does not fulfil the strict criteria of representativeness.

Table 1. Annual turnover in responding firms, EUR

Range of annual turnover	Share in number of companies sampled
< 500,000	6.5%
500,000 – 1 million	4.6%
1 million – 2.5 million	8.3%
2.5 million – 5 million	6.5%
5 million – 10 million	7.4%
10 million – 25 million	13.0%
25 million – 50 million	10.2%
50 million – 100 million	11.1%
100 million – 250 million	9.3%
250 million – 500 million	8.3%
500 million – 1 billion	6.5%
more than 1 billion	8.3%

Source: own study.

The predominant legal forms are private limited companies (GmbH: 42.5%) and limited partnerships with a limited liability company as a general partner (GmbH & Co. KG: 27.4%). Public limited companies (Aktiengesellschaft: 11.5%), sole proprietorships

(5.3%), registered cooperative societies (E.G.: 3.5%), limited partnerships (Kommanditgesellschaft: 2.7%), and other legal forms (7.1%) were also included in our sample. The respondents in our survey are mainly members of the firms' top-management teams: 59.3% work in management, 15% in sales, 8.8% in business development/strategy and 7.1% in marketing and market research.

The questions in our survey can be divided into three parts. The survey first focused on how the agribusiness companies perceive the importance of various international markets before questioning which strategies and instruments for coping with internationalisation they apply and how successful they have been. The final section contained descriptive questions concerning the characteristics of the respondents' companies. The data was analysed using SPSS 18.

Empirical results

Going West, going East: concentric internationalisation of German agribusiness firms

The empirical results show that in recent years the internationalisation of agribusinesses has significantly increased. In 2004, the agribusiness firms surveyed generated 28% of their turnover outside their domestic markets. By 2009, the ratio of foreign sales to total sales in the agribusiness firms surveyed had increased to 36% (median: 30%). This ratio is already a bit higher than the average of all sub-sectors of German industry. It also reflects a remarkable development for what was once, to a high degree, a local industry sector. The dynamics of tapping foreign markets are underscored by glancing into the future. Within five years, the respondents expect the share of sales generated outside their home markets to increase to almost 45%. This expectation is in line with the opinion of a broad majority of those surveyed (75%), who agree with the statement that agribusiness is an emerging industry with considerable growth potential.

Agribusiness presents itself as an attractive and comparatively crisis-proof industry sector. Even during the last financial and economic crises, turnover in German agribusiness decreased only very slightly [Theuvsen et al. 2010]. Central growth steps are being undertaken abroad. Differing goals were determined as the firms' international business activities increased. According to those surveyed, the top three motives for internationalisation include the desire to open new markets (scale 1 to 10; mean value (m.v.): 8.24; standard deviation (s.d.): 2.20), internationalisation of important customers (m.v.: 6.05; s.d.: 2.82) and occupying strategic positions (m.v.: 5.68; s.d.: 3.01). This shows that for firms that are active primarily in saturated home markets with an ageing population, the fact that foreign markets offer substantial sales opportunities is a major driver of internationalisation of firm activities.

Also, with regard to the BRIC countries which have quickly gained an economic relevance, the possibility of opening up new market opportunities is clearly the dominant motivation for being active on these markets (Brazil 43.9%; Russia 68.1%; India 58.8%; China 52.6%). Likewise, occupying strategic positions, a goal mentioned by some companies, must surely be seen in this light. All other goals, including cost reduction, natural hedging or securing of supplies, are, despite slight differences with regard to their relevance between individual countries, only of secondary importance and only in specific cases a reason for German agribusiness enterprises to get involved in BRIC countries. It

thus becomes clear that it is the enormous market potential that these countries offer that triggers the agribusiness firms' market entry, but not the potential function these countries could have as suppliers of agricultural resources due to their large size and production potential.

With regard to the question where the companies surveyed see possibilities for further growth and where they perceive the future markets as being promising, a concentric internationalisation pattern is revealed (Table 2). This means that, despite the ongoing internationalisation process, for a majority of enterprises the domestic market will remain by far the most important sales market. Besides their home country, the other established markets in Europe, mainly the Western EU countries, Switzerland and Scandinavia are important for German agribusiness firms. The emerging countries in Central and Eastern Europe then follow, where German companies can profit from their geographical proximity and, especially in some input industries, technological advantages over local competitors and where they can serve the needs of a growing number of demanding customers with higher incomes. Furthermore, the EU accession of most of the Central and Eastern European countries has made it much easier and less risky to serve these markets.

Until now, other regions of the world have not played a dominant role in the plans of most German agribusiness firms. The highest potential is probably seen in Russia, where one third of the companies identify a sales market of high or very high importance. This positive assessment is already reflected by German agricultural trade statistics. For German pork producers, for instance, Russia has become the most important sales market outside the European Union. Exports to Russia increased in 2009 by about 17%. In that year Russia imported 81,000 tonne of German pork, even at the height of the world economic crisis. This represents more than 5% of all German pork exports, amounting to 1.44 million tonne [Jahresbericht... 2010]. Similar developments can be observed in the dairy sector. Traditionally, Russia is the biggest buyer of German dairy products outside the EU. Exports of cheese from Germany had in 2009 the highest market shares in Russia (16%), Japan (13%), USA (12%) and the 27 EU states (6%) [Fahlbusch et al. 2011].

Other markets, mainly in Africa and the Near East, but also in North America, Asia and Brazil are attributed only a moderate importance in the future. All in all, this underpins the concentric internationalisation concept, in which the domestic market serves as a starting point and a solid home base, before addressing foreign markets in Western, Central and Eastern Europe which are characterized by geographical and cultural proximity and which, therefore, share many similarities with the firms' domestic markets. Foreign markets that are less well understood and more difficult to serve are only addressed with due caution, and international business activities in these markets are only developed incrementally. Obviously, Russia is often chosen as a starting point for tapping the potential of large future markets in BRIC countries due to long-standing cultural, political and trade relationships with Russia.

Moreover, comparison of mean values (analysis of variance) revealed some significant differences between agribusiness sub-sectors. These differences were found with regard to the future prospects of the Central and Eastern European, the Russian and the North American markets for the sub-sectors included in the survey (Table 2). This reflects differences between the pioneers of internationalization (for instance the agricultural machinery industry) and those industries that are in a catch-up position (for instance bioenergy).

Table 2. Expected importance of different regions as sales markets in five years²

Country or group of countries	Inputs industry	Food industry	Trade	Agricultural machinery	Bioenergy
Germany	8.41 (2.46)	8.55 (2.35)	7.30 (3.80)	9.36 (1.02)	8.13 (1.80)
Western Europe	7.67 (2.81)	7.21 (1.97)	6.89 (3.21)	8.58 (1.31)	8.25 (1.28)
Central and Eastern European countries (exc. Russia)**	6.71 (2.00)	5.74 (2.54)	5.56 (2.60)	8.00 (1.34)	6.12 (1.88)
Russia**	5.58 (2.17)	4.67 (3.00)	4.44 (3.32)	6.92 (2.93)	3.25 (1.88)
Asia (exc. China, India)	3.11 (2.35)	4.13 (2.58)	2.71 (3.14)	3.75 (2.84)	2.88 (2.32)
China	3.47 (2.93)	3.74 (2.86)	2.63 (3.29)	5.50 (3.75)	2.88 (2.47)
India	2.68 (2.60)	2.92 (2.35)	2.63 (3.29)	3.92 (2.61)	2.50 (2.00)
Africa and Near East	3.74 (2.68)	3.97 (2.67)	4.67 (3.50)	4.25 (3.36)	2.63 (2.26)
North America*	3.84 (3.43)	2.79 (2.65)	4.43 (4.07)	5.36 (3.23)	5.50 (2.72)
Central and South America (exc. Brazil)	2.61 (1.94)	2.36 (1.82)	3.88 (3.79)	4.00 (2.52)	3.13 (3.18)
Brazil	3.84 (3.32)	2.79 (2.51)	4.38 (3.62)	3.67 (2.77)	3.25 (3.24)

Mean values for ratings: from '1=very low importance' to '10=very high importance'; standard deviation in brackets. Significance $p < 0,1^*$; $p < 0,05^{**}$; $p < 0,01^{***}$.

Source: own study.

Exports first: internationalisation strategies of agribusiness firms

Agribusiness firms can choose between a wide spectrum of alternative market entry strategies. Some of these strategies are based on transactions through which the foreign markets can be developed from the firms' domestic markets. Examples for this are exports and drawing up of licensing agreements, for example concerning the use of brands in the food industry. Other strategies for entering into international markets are related to foreign direct investments, for example for setting-up joint ventures with local partners or wholly owned subsidiaries in foreign markets. Joint ventures as well as wholly owned subsidiaries can be restricted to marketing and sales activities or include other activities, such as processing or product development [Grant 2005; Volberda et al. 2011].

Although some statistically significant differences between agribusiness sub-sectors exist, the overall preferred forms of market entry by the firms surveyed are direct and indirect exports that do not require the physical presence of the exporters in the target markets (Table 3). Whereas direct exports are transacted by the company itself, the indirect exports depend on the engagement of domestic or international trading houses or importers in the target market. For 76% of those surveyed, exports are of great or even very great importance. Export strategies are typical of businesses that find themselves in relatively early stages of internationalisation [Cavusgil 1980], which is especially characteristic of the food industry. Export strategies have the advantage of not straining the sometimes limited capital resources available to agribusiness firms. This is an especially persuasive argument

² Tables 2, 3, 4 and 5 show the results of mean value comparisons using an analysis of variance (ANOVA) that examined the general hypothesis that mean values are different between agribusiness sub-sectors. ANOVA employs multiple two sample t-tests and provides beyond mean values and standard deviations, based on the multiple t-tests comparison of mean values, an examination of whether the mean values between the agribusiness subsectors included in the survey are significantly different.

for German dairy and meat firms as well as for other cooperatives [Heyder et al. 2011]. In addition, having exports as a dominant strategy for internationalisation allows for a gradual development of management know-how. An export-based market entry strategy is also very much in line with the concentric internationalisation approach that many agribusinesses pursue. Another reason for the importance ascribed to exports is, especially in the food industry, that they often take place in a form in which the producers can follow their most important customers, especially major food retailers, as these customers expand into new foreign markets. In such cases, exports are merely an “extension” of domestic trade relationships and a consequence of domestic framework contracts with retailers.

Table 3. Importance of different international market entry strategies

Strategy	Inputs industry	Food industry	Trade	Agricultural machinery	Bioenergy
Direct and indirect exports**	7.71 (2.39)	7.98 (2.41)	7.56 (2.83)	8.42 (2.61)	4.63 (3.58)
Wholly-owned subsidiaries overseas***	6.14 (3.78)	3.35 (2.66)	2.33 (2.87)	4.33 (2.53)	4.25 (2.71)
Joint ventures and licensing agreements***	6.71 (3.62)	3.83 (3.03)	2.78 (2.68)	4.83 (3.43)	6.00 (3.62)

Mean values for ratings: from ‘1=very low importance’ to ‘10=very high importance’; standard deviation in brackets. Significance $p < 0,1^*$; $p < 0,05^{**}$; $p < 0,01^{***}$.

Source: own study.

In light of this, it is not surprising that other strategies are comparatively less important. Forming wholly owned subsidiaries overseas was seen by only 40% of the surveyed enterprises as being of great or very great importance. Empirical studies from many other industries have shown that foreign direct investments, particularly those with their own production plants, seldom occur at the beginning of the internationalisation process, but usually toward the end [Cavusgil 1980].

Only 28% of the respondents in our survey saw the establishment of joint ventures and licensing agreements as important. Aside from the mandatory cooperation with local businesses when making direct investments in some countries with restricted, by the government, access to markets, international joint ventures have often in practice proved to be instable due to factors such as the limited influence the business enterprise has on its partners [Inkpen & Beamish 1997]. Therefore, joint ventures are often established only in the initial phase of entering a market or as preparation for a retreat from the market. On the other hand, licensing agreements are often more important in the service sector, for example in franchise gastronomy and in some cases within the food industry, the inputs industry or the bioenergy sector, which require great expenditure on marketing or on research and development.

As a large majority of enterprises have transferred or increased their activities abroad, it is of interest to determine which parts of the supply chain profit most from foreign direct investments. In view of the relative lack of foreign experience on the part of agribusiness firms, with exception of the input and agricultural machinery industries, it follows that a decreasing importance is given to sales, purchasing, production and research and development (in that order; Table 4). Next to sales, the strong globalisation of markets for agricultural products is especially reflected in the context of strong international

purchasing, which also applies to companies that otherwise exhibit very few international business activities but regard an international acquisition as a matter of course. A comparison of mean values revealed differences significant at the 0.05 level with regard to the international dislocation of production activities.

Table 4. Importance of different parts of the supply chain regarding foreign direct investments

Link of supply chain	Inputs industry	Food industry	Trade	Agricultural machinery	Bioenergy
Sales	6.81 (3.25)	4.50 (3.67)	4.13 (4.08)	6.40 (3.64)	6.43 (3.58)
Purchasing	3.81 (2.85)	3.68 (3.11)	3.38 (3.81)	3.80 (2.25)	3.57 (2.93)
Production*	5.50 (3.36)	3.12 (2.93)	2.50 (2.82)	3.30 (2.45)	3.13 (2.25)
Research and development	3.63 (3.00)	2.21 (1.73)	2.25 (2.76)	3.10 (2.55)	2.57 (2.69)

Mean values for ratings: from '1=very low importance' to '10=very high importance'; standard deviation in brackets. Significance $p < 0,1^*$; $p < 0,05^{**}$; $p < 0,01^{***}$.

Source: own study.

Competitive strategies contain general statements regarding the question how enterprises intend to compete in their respective industries in order to prevail over competitors and how to obtain a better-than-average return on investment [Porter 1980]. This strategic positioning in international competition is especially significant in markets in which enterprises have to deal with competitors not only from other industrialized nations, but also from developing and transforming economies, which often have low production costs. Without having a strategy tailored to their definite competitive situation and key competencies, the enterprises will not be able to successfully trade in international markets [Porter 1998].

Table 5. Importance of different competition strategies in foreign markets

Competition strategy	Inputs industry	Food industry	Trade	Agricultural machinery	Bioenergy
We are striving for cost leadership in order to survive in international markets	5.63 (2.49)	5.51 (2.94)	6.43 (3.59)	4.50 (1.78)	5.14 (2.41)
In international competition we apply innovation and quality leadership	8.53 (2.11)	7.50 (2.45)	8.86 (1.46)	9.09 (1.04)	7.57 (1.90)
We serve specific niches in international competition*	7.60 (2.93)	6.14 (3.10)	7.12 (3.48)	7.18 (2.40)	4.25 (3.45)

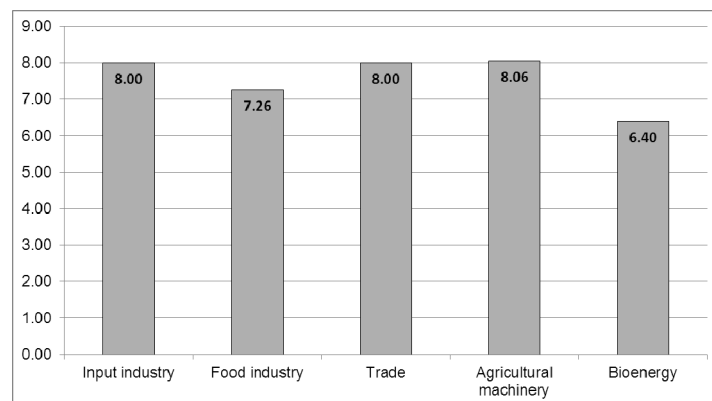
Mean values for ratings: from '1=very low importance' to '10=very high importance'; standard deviation in brackets. Significance $p < 0,1^*$; $p < 0,05^{**}$; $p < 0,01^{***}$.

Source: own study.

The overwhelmingly favourite strategy of the firms surveyed is that of differentiation with high-quality and innovative products (Table 5). For German agribusiness firms which often are only able to produce at costs that are not internationally competitive, or only to a limited degree, this is often the only practicable way to see success in the market other than the targeted use of market niches. Nonetheless, in some cases German agribusiness also relies on cost leadership strategies. This is often the case in the food industry; here German competitors often have low production costs, at least compared with their European competitors. The reasons that are usually given are the strong price pressures exerted by the

German discount chains and a lack of willingness in a part of German consumers to pay more than necessary for food. These factors have forced the food producers to strictly control costs and develop competitive production and financial structures. In some cases, for example in the meat industry, German food processors enjoy lower salaries when competing with other important European exporters, such as Denmark and France. Helped by these advantages, German food manufacturers can often achieve a strong cost leadership position in the market, which supports the companies in their efforts to internationalise.

Although many of the companies surveyed have a strong focus on German and other Western and Eastern European markets, they do not assume that the globalisation of agribusiness markets will remain confined to the European Union. Therefore, the respondents think that the importance of markets in the BRIC countries will increase significantly in the future. This view is expressed by 70% of the enterprises surveyed. Only 9% of those surveyed disagree with this opinion. Thus, it is attested that the new markets in Brazil, Russia, China and India will be of great importance in the future. In particular, this viewpoint is popular in the agricultural machinery sector, the input industries and among agri-traders, but it has also gained a considerable support in the food industry (Figure 1). Only those surveyed from the bioenergy sector are more reserved in their opinion. Therefore, although today's economic success of the companies surveyed generally strongly depends on markets in the 27 EU member states, it can be assumed that tomorrow's economic survival will be determined to a much greater degree by success in the markets of the BRIC countries.



Mean values of ratings between '1=very low importance' and '10=very high importance'

Fig. 1. Expected importance of markets in the BRIC countries for agribusiness

Source: own study.

The BRIC countries, therefore, have become attractive future sales markets for all agribusiness sub-sectors. Currently these new markets are being served predominantly through export activities. Despite several spectacular foreign direct investments by German firms, mainly in Russia, the exceptionally high relevance of exports with regard to the Russian market (74.4%) is striking (Table 6). In contrast, foreign direct investments in wholly owned subsidiaries are of greatest importance in China and India. This might be due to the large geographic and cultural distance between Germany and these countries, which makes it easier to successfully serve these markets if companies have invested in local

infrastructure, at least for marketing and sales. Joint ventures are of comparably high relevance in Brazil and India. The high relevance of more advanced international market entry strategies can be taken as evidence of difficulties encountered in opening these markets. In many cases, legal regulations require the involvement of local partners. Furthermore, local activities can have cost advantages due to the low price of labour and various overheads in those countries. In contrast, the large percentage of exports to Russia could be due to the intensive and long-standing relationships with this trade partner, which allow even small and medium-sized firms to export their products to this emerging market.

Table 6. Most preferred market entry strategies in the BRIC countries, % share

Market entry strategy	Target country			
	Brazil	Russia	India	China
Direct and indirect exports	55.6	74.4	50.0	42.9
Wholly owned subsidiaries overseas	11.2	12.8	25.0	21.4
Joint ventures and licensing agreements	33.2	12.8	25.0	35.7

Source: own study.

Challenges and success of internationalisation strategies

Concerning the dominant challenges that emerge when beginning to conduct business outside domestic markets, various obstacles are mentioned by the agribusiness firms surveyed (Table 7). The lack of protection of property rights, bureaucracy, currency risks, tariff and non-tariff trade barriers and corruption are perceived as the top five challenges for internationalizing business activities in the agribusiness sector.

Table 7. Challenges of international business activities

Obstacle or challenge	Rating
Lack of protection of intellectual property rights	6.00 (2.82)
Bureaucracy in foreign markets	5.57 (2.44)
Currency risks	5.52 (2.23)
Tariff and non-tariff trade barriers	5.37 (2.66)
Corruption	5.30 (2.65)
Quality control	4.82 (2.74)
Availability of qualified workers and managers	4.76 (2.72)
Financing of international activities	4.70 (2.59)
Local demand characteristics	4.67 (2.27)
Cultural distance (language, norms, habits)	4.42 (2.50)
Political instability	4.37 (2.33)
Implementation of international controlling and reporting systems	4.33 (2.40)
Safety	4.28 (2.47)
Geographical distance, different time zones	3.36 (2.09)

Mean values for ratings: from '1=very low importance' to '10=very high importance'; standard deviation in brackets. Significance $p < 0,1^*$; $p < 0,05^{**}$; $p < 0,01^{***}$.

Source: own study.

With regard to the obstacles to successful business activities in BRIC countries, the agribusiness firms surveyed perceive significant differences between the four countries. Widespread corruption is considered the greatest obstacle to successful market entry in Russia. Furthermore, bureaucracy, financing and legal security are also major issues there. In India, problems with quality control, corruption and tariff and non-tariff trade barriers are of greatest importance. Cultural distance, lack of legal security and trade barriers are major challenges with regard to the Chinese market. With regard to Brazil, various challenges were identified, representing a wide range of problems that have to be dealt with in order to be successfully involved in this emerging market. Although usually based on only a very limited number of observations, the perceptions of the respondents in our survey are very much in line with the most problematic factors that have been identified by the World Economic Forum [The Global... 2011].

Despite various difficulties and challenges the companies face in international markets, the success of international activities by German agribusiness can currently be viewed with some optimism. This success can be measured through the increasing internationalisation of the sector, which not only reflects the growing international integration of the industry but can also be regarded as a proxy for the international competitiveness of German firms [Martin et al. 1991]. This impression is confirmed by the self-assessments of the businesses surveyed. Almost three-fourths of those interviewed indicate that they have either reached (64%) or exceeded (8%) the goals set for their internationalisation strategies. This success reflects realistic goal-setting and well-planned preparation before launching the firms' international expansion. Similarly, it is a widely shared view that the actual difficulties encountered when entering international markets were as great as those anticipated by three-fourths (78%) of those surveyed. Nonetheless, almost every sixth (16%) enterprise had to face challenges which were much greater than expected. This is surely one of the reasons why more than one-fourth of the firms were not successful in meeting their own goals with regard to internationalisation.

Compared to other markets, the market entry seems to be much more difficult in the BRIC countries. 42% of the agribusiness firms surveyed say that expansion into these markets did not proceed as quickly as they had hoped. This is in line with the international management theory which proposes that international business activities become more and more difficult, and therefore more and more costly, with increasing cultural gaps between the home market and the foreign markets [Sullivan 1994]. As international expansion increases, governance and transaction costs increase exponentially due to the geographical and cultural dispersion of various principals and agents in a multinational firm. Addressing the external costs of internationalization, researchers further emphasize the financial and political risks accompanying foreign expansion [Reeb et al. 1998; Ruigrok & Wagner 2003]. Enterprises that have up to now primarily traded in neighbouring Western and Eastern European countries will, therefore, likely find that entering BRIC markets is a much more difficult endeavour.

Discussion and conclusions

This study reveals a remarkable prevalence of concentric internationalization strategies in various agribusiness sub-sectors. Most companies surveyed still have a strong focus on their domestic markets. Furthermore, they have expanded their business activities to

neighbouring Western and Eastern European markets. This development has been enabled to a great degree by the enlargement of the European Union, which has made it much easier for the firms surveyed to seek business opportunities throughout Europe.

But, the study also shows remarkable differences between agribusiness sub-sectors with regard to internationalisation. Whereas the agricultural machinery industry and other input industries have a long-standing tradition of serving international markets and have become truly global players, the food industry is obviously in a catch-up position with regard to international expansion. Nonetheless, for firms that have been a national or even a local industry, strongly influenced by different local and regional consumer preferences, this is a remarkable development. Such internationalisation is driven by such factors as the global harmonization of consumer preferences and the international expansion of retailers [Reardon et al. 2003] who prefer their existing domestic suppliers and want them to deliver to their newly opened outlets in the new markets [Colla 2003; Hanf & Belaya 2008].

The BRIC countries are currently the driving forces of the world economy. According to the companies in our sample, this trend will increase; 70% of those surveyed agree with the statement that the BRIC countries will gain great importance for agribusiness. The study also reveals several pioneers with regard to expansion in BRIC markets. The agricultural machinery industry is such a pioneer. For this industry, the Russian and Chinese markets have already gained considerable importance, but even this industry has hardly discovered the Brazilian and Indian markets. Other pioneers can be found in the plant protection industry. In 2009, the German plant protection companies were already sending 21.6% of their exports to Asia and Australia, 13.1% to Middle and South America and 12.2% to Eastern Europe. Even though Western Europe still dominates as by far the most important sales market (37.2%), the markets in North America have already decreased in significance (11.9%) and stepped down to fifth place [Jahresbericht Agrar... 2010].

Whereas exports to the EU markets have become a comparatively simple exercise, companies that are already active in the BRIC countries often face remarkable challenges. Also, the Worldbank [Doing... 2010] indicates that doing business in the BRIC countries. In a ranking on the ease of doing business in 183 countries, China ranks 79th, Russia 123rd, Brazil 127th and India 135th. This could be one central reason that, contrary to the expectation of immense growth potentials, the BRIC countries have not yet come to play a very large role in plans and current business activities of the vast majority of agribusiness firms; only Russia presently receives a comparatively large degree of attention from German agribusiness firms.

According to the strategic management literature, firm strategies are not only influenced by market conditions, such as competitive forces [Porter 1980] or new customer needs worldwide [Etemad 2004] and other characteristics of the external environment [Grant 2005], but also by firm resources and capabilities [Wernerfelt 1984; Barney 1991]. Due to the prevalence of small and medium-sized enterprises in the German food industry, a lack of financial and management resources can become an obstacle to the international expansion of these companies. Nonetheless, several studies have analyzed the relationship between firm size and internationalisation (for instance study by Calof [1993]) and they found their positive relationship but, at the same time, they concluded that smaller firm size does not have to be an obstacle in the process of internationalisation and, therefore, could not be used as an explanation for differing degrees of internationalization. With regard to the limited financial resources and important investment disincentives [Cook & Chaddad 2004], similar arguments have been raised with regard to many cooperatives, which play an

important role in the German meat and dairy industries [Theuvsen & Ebneht 2005] as well as in many other food industries in Europe [Hendrikse 2006].

This study has interesting managerial implications. First, the decision to operate in international markets should be made after thoroughly considering not only all opportunities but also all risks. One of the most important aspects of the study at hand is that it allows managers to benchmark their firms' internationalisation strategy against the industry average and to identify strengths and weaknesses in their own firms' strategies. Nevertheless, we can not say which internationalization strategy leads to higher gains: directly investing in foreign countries or just exporting to foreign markets. But pioneering industries, like the agricultural machinery industry and other input industries, can serve as role models for the international expansion of sub-sectors that are currently less internationalized.

With the growing importance of internationalisation, it can generally be expected that more challenging forms of business, such as those requiring more capital or know-how transfers, will be of increasing importance for entering international markets. Therefore, making agribusiness firms ready for international expansion through such practices as setting up adequate controlling and reporting systems and implementing required human resource management strategies could be a starting point for agribusiness firms seeking to tap the profit potentials of international markets. But one should keep in mind that internationalisation is sometimes seen as 'the consequence of a process of incremental adjustments to changing conditions of the firm and its environment' [Johanson & Vahlne 1977, p. 26]. Therefore, agribusiness firms might be well advised to develop and implement their internationalisation processes and increase their degrees of internationalisation step by step instead of trying to catch up quickly.

Due to the limited size and lack of representativeness of the sample and the explorative approach, the study has clear limitations. Therefore, future research should seek to increase the number of respondents in order to present a broader and more balanced picture. Furthermore, hypotheses should be derived from existing internationalisation theories and tested in more advanced empirical studies. The relationship between the degree of internationalisation and firm performance, for instance, deserves more in-depth analysis. Existing studies present a very mixed picture of the relationships between both variables (for an overview see studies by Li [2007], Gerpott & Jakopin [2005], Ebneht & Theuvsen [2007]). Last but not least, the internationalisation strategies of companies, attitudinal attributes of managers and structural characteristics of firms could be analysed and combined with the quantitative findings in order to shed more light on the drivers of internationalisation strategies and the relationship between internationalisation and performance in the European agribusiness.

References

- Barney J.B. [1991]: Firm Resources and Sustained Competitive Advantage. *Journal of Management* no. 17, pp. 99-120.
- Brueggmann M. [2011]: Die Ost-Staaten werden zum Wachstumsmotor Europas. *Handelsblatt* no. 99, May 23.
- Calof J.L. [1993]: The Impact of Size on Internationalization. *Journal of Small Business Management* no. 31 (4), pp. 60-69.
- Carruth R.A. [2006]: Globalization and Food Safety in Global Agri-Food Industries. [In:] *Global Governance of Food and Agriculture Industries*. R.A. Carruth (ed.). Edward Elgar, Cheltenham, pp. 42-96.

- Cavusgil S.T. [1980]: On the Internationalization Process of Firms. *European Research* no. 8, pp. 273-281.
- Colla E. [2003]: International Expansion and Strategies of Discount Grocery Retailers: The Winning Models. *International Journal of Retail & Distribution Management* no. 31 (1), pp. 55-66.
- Cook M.L., Chaddad F.R. [2004]: Redesigning Cooperative Boundaries: The Emergence of New Models. *American Journal of Agricultural Economics* no. 86 (5), pp. 1249-1253.
- Database. [2011]. Worldbank [Available at: <http://data.worldbank.org/>]. [Accessed: January 28, 2011].
- Doing Business 2011. Making a Difference for Entrepreneurs. [2010]. Worldbank. [Available at: <http://www.doingbusiness.org/reports/doing-business/doing-business-2011>]. [Accessed: January 28, 2011].
- Ebneth O., Theuvsen L. [2007]: Multinationality and Financial Performance: Findings from a Set of Listed Brewing Groups. [In:] Good Governance in der Agrar- und Ernährungswirtschaft. F. Kuhlmann, P.M. Schmitz (eds.). Landwirtschaftsverlag, Muenster-Hiltrup, pp. 359-368.
- Etemad H. [2004]: Internationalization of Small and Medium-sized Enterprises: A Grounded Theoretical Framework and an Overview. *Canadian Journal of Administrative Sciences* no. 21 (1), pp. 1-21.
- Fahlbusch M., Steffen N., Bruemmer B., Spiller A. [2011]: Der Markt für Milch und Milcherzeugnisse, *German Journal of Agricultural Economics* no. 60 (1), Supplement, pp. 52-71.
- Fowler F. J. [2002]: Survey Research Methods, 3rd ed., Sage, Thousand Oaks, CA.
- Gerpott T.J., Jakopin N.M. [2005]: The Degree of Internationalization and the Financial Performance of Mobile Network Operators. *Telecommunications Policy* no. 29, pp. 635-661.
- Glaum M., Oesterle M.J. [2007]: 40 Years of Research on Internationalization and Firm Performance: More Questions than Answers? *Management International Review* no.47 (3), pp. 307-317.
- Grant R.M. [2005]: Contemporary Strategy Analysis, 5th ed., Blackwell, Malden, MA.
- Guillouzo R., Ruffio P. [2005]: Internationalization of European Dairy Co-operatives. *International Journal of Co-operative Management* no. 2 (2), pp. 25-32.
- Hanf J., Belaya V. [2008]: Retail Internationalization and Its Impact on the Russian Agri-food Business. *Journal of East European Management Studies* no. 13 (3), pp. 239-252.
- Hendrikse G. [2006]: Challenges Facing Agricultural Cooperatives: Heterogeneity and Consolidation. [In:] Unternehmen im Agrarbereich vor neuen Herausforderungen. E. Bahrs, S. von Cramon-Taubadel, A. Spiller, L. Theuvsen, M. Zeller (eds). Landwirtschaftsverlag, Muenster-Hiltrup, pp. 31-41.
- Heyder M., Makus C., Theuvsen L. [2011]: Internationalization and Firm Performance: Empirical Evidence from European Cooperatives. Paper presented at 5th International European Forum on System Dynamics and Innovation in Food Networks, Innsbruck-Igls, Austria, February 14-18, 2011.
- Inkpen A.C., Beamish P.W. [1997]: Knowledge, Bargaining Power, and the Instability of International Joint Ventures. *Academy of Management Review* no. 22 (1), pp. 177-200.
- Jahresbericht Agrar 2009/2010. [2010]. Industrieverband Agrar. [Available at: <http://www.iva.de/publikationen/iva-jahresbericht-20092010>]. [Accessed: November 15, 2010].
- Jahresbericht 2009/2010. [2010]. VdF. [Available at: www.v-d-f.de/jahresbericht/]. [Accessed: November 16, 2010].
- Johanson J., Vahlne J.E. [1977]: The International Process of the Firm: A Model of Knowledge Development and Increasing Foreign Market Commitments. *Journal of International Business Studies* no. 8, pp. 23-32.
- Li L. [2007]: Multinationality and Performance: A Synthetic Review and Research Agenda. *International Journal of Management Review* no. 9 pp. 117-139.
- Martin L., Westgreen R., Duren van E. [1991]: Agribusiness Competitiveness across National Boundaries. *American Journal of Agricultural Economics* no. 73, pp. 1457-1464
- Milliman J., Glinow, van M.A., Nathan M. [1991]: Organizational Life Cycles and Strategic International Human Resources Management in Multinational Companies: Implications for Congruence Theory. *Academy of Management Review* no. 16 (2), pp. 316-339.
- Oesterle M.J., Richta B.T. [2009]: Erfolgswirkungen internationaler Unternehmenstätigkeit: Stand der empirischen Forschung und Notwendigkeit verbesserter Forschungsansätze. [In:] Management der Internationalisierung. S. Schmid (ed.). Gabler, Wiesbaden, pp. 51-85.
- Porter M.E. [1980]: Competitive Strategy: Techniques for Analyzing Industries and Competitors. Free Press, New York.
- Porter M.E. [1998]: The Competitive Advantage of Nations. Free Press, New York.
- Rama R. [2005A]: Multinational Agribusinesses. Haworth Press, New York.
- Rama R. [2005B]: The Performance of Multinational Agribusinesses: Effects of Product and Geographical Diversification. [In:] Multinational Agribusinesses. R. Rama (ed.). Haworth Press, New York, pp. 73-113.
- Reardon T., Timmer C.P., Barrett C.B., Berdegue J. [2003]: The Rise of Supermarkets in Africa, Asia, and Latin America. *American Journal of Agricultural Economics* no. 85, pp. 1140-1146.

- Reeb D.M., Kwok C.C.Y., Baek H.Y. [1998]: Systemic Risk of the Multinational Corporation. *Journal of International Business Studies* no. 29, pp. 263-279.
- Ruigrok W., Wagner H. [2003]: Internationalization and Performance: An Organizational Learning Perspective. *Management International Review* no. 43, pp. 63-83.
- Situationsbericht 2011: Trends und Fakten zur Landwirtschaft. [2011]. DBV, Berlin.
- Sullivan D. [1994]: The 'Threshold of Internationalization': Replication, Extension and Reinterpretation. *Management International Review* no. 34 (5), pp. 171-180.
- The Global Competitiveness Report 2010/2011. [2011]. K. Schwab (ed.). World Economic Forum, Geneva.
- Theuvsen L., Ebneith O. [2005]: Internationalization of Cooperatives in the Agribusiness. Concepts of Measurement and Their Application. [In:] *Strategies for Cooperation*. T. Theurl, E.C. Meyer (eds.). Shaker, Aachen, pp. 395-419.
- Theuvsen L., Janze C., Heyder M. [2010]: *Agribusiness in Deutschland 2010: Unternehmen auf dem Weg in neue Märkte*. Joint Study with Ernst & Young, Hannover.
- Tung R.L. [1984]: Strategic Management of Human Resources in the Multinational Enterprise. *Human Resource Management* no. 23, pp. 129-143.
- Volberda H.W., Morgan R.E., Reinmoeller P., Hitt M.A., Ireland R.D., Hoskisson R.E. [2011]: *Strategic Management: Competitiveness and Globalization*. Cengage Learning, Andover, UK.
- Wernerfelt B. [1984]: A Resource-Based View of the Firm. *Strategic Management Journal* no. 5 (2), pp. 171-180.