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Heyder, Matthias; Theuvsen, Ludwig

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"Will the 'BRICs Decade' continue? – Prospects for trade and growth" 23-24 June 2011 | Halle (Saale), Germany

Strategies and Challenges of Internationalisation in BRIC-Countries: Empirical Results from the German Agribusiness

Matthias Heyder* and Ludwig Theuvsen**

Georg-August-University of Goettingen,
Department of Agricultural Economics and Rural Development,
Management in Agribusiness
Platz der Goettinger Sieben 5, 37073 Goettingen, Germany
mheyder@uni-goettingen.de*; theuvsen@uni-goettingen.de**

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Abstract

The objective of this paper is to identify the strategies and instruments that agribusiness companies currently use to cope with the globalisation of agricultural markets. This aim is achieved by means of presenting the empirical results of an online and telephone survey that was undertaken between April and August 2010 with the participation of 113 German agribusiness firms. The majority of respondents expect that the importance of the markets in the BRIC countries will increase remarkably in the future. For developing international business activities, comparatively simple strategies such as direct and indirect exports via domestic and international traders are most widely used. This may be the result of challenges the agribusiness companies are facing in the context of handling international markets, especially in BRIC countries.

Keywords: agribusiness, internationalisation, firm strategy, BRIC; **JEL:** Q13, L10

1 INTRODUCTION

Today, companies in all industry sectors face increasing globalisation, shortened product lifecycles, growing R&D and marketing investments as well as low growth rates and intense competition in their domestic markets. With this in mind, internationalisation has become a major issue for companies if they wish to maintain their competitiveness and develop new growth opportunities (HORVATH 1989; KUTSCHKER and SCHMID 2008). In recent years this development has also affected the agribusiness sector. As a consequence, international trade flows in the agribusiness sector have increased and firms in the agro-food sector are ever more exposed to the challenges and opportunities of international business activities (RAMA 2005; CARRUTH 2006; HEYDER et al. 2011). Various empirical studies deal with the internationalisation of firm activities (for an overview see, for instance, LI, 2007 or GLAUM and OESTERLE 2007). These studies focus on various aspects, such as the strategies firms choose when entering international markets, the competitive strategies firms employ in non-domestic markets, the globalisation versus national differentiation of strategies and activities (GRANT 2005), the relationship between internationalisation and firm performance (LI, 2007; OESTERLE and RICHTA

2009), and challenges of international management, such as the development of adequate international human resource management practices (Tung 1984; Milliman et al. 1991). Nonetheless, only a few studies focus on the agribusiness sector (e.g., Theuvsen and Ebneth, 2005; Guillouzo and Ruffio 2005; Ebneth and Theuvsen 2007), although increasing their international business activities has become an important issue for enterprises in the agribusiness (Heyder et al. 2011).

Considering the increasing globalisation, the so-called BRIC-countries – Brazil, Russia, India and China have recently developed into the new power houses of global economy. 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 without doubt important future markets. This is particularly true for companies in the agribusiness sector which strongly benefit from available land resources, large populations and changing lifestyles, such as an increasing consumption of animal proteins (WORLDBANK 2011). Nevertheless, at present, the majority of agribusiness companies from the established industrialised countries of the Western hemisphere still find themselves in the very early stages of internationalisation, just beginning to enter the markets in the BRIC-states. One reason could be that internationalisation is faced with numerous challenges, for instance, how to identify and analyze promising foreign markets and to formulate and implement international strategies, and determining optimal management systems which fit the peculiarities of the international markets. Learning to better tap the future markets in the BRICs will be a crucial issue for agribusiness firms in the upcoming years. In this context, we conducted an explorative empirical study to analyse the status quo and development of internationalisation in the German agribusiness sector. We surveyed a total of 113 agribusiness firms in Germany. All companies surveyed are active either on upstream or downstream steps of agriculture within the food value chain. In particular, the companies in our sample belong to five sub-sectors: (1) input industries (feed, plant protection, seed, fertilizers, etc.), (2) agricultural machinery, (3) food industry, (4) bioenergy, and (5) agri trade and wholesalers.

The empirical study at hand provides insights into the extent and the development of internationalisation strategies in the German agribusiness. With its special consideration of the BRIC-countries the paper is innovative, thus adding substantially to the knowledge of internationalisation in the food industry. It also has interesting managerial implications, for it allows firm managers to benchmark their own strategies against industry standards.

The paper is organised as follows: After the introduction we give an overview of the economic key data of the BRIC states. In section 3 we introduce our sample and the methodology applied. Empirical results are presented in section 4. Finally, in section 5 we discuss our findings and conclude with some remarks concerning internationalisation in the agribusiness sector.

2 BRIC: DEVELOPMENT OF ECONOMIC KEY DATA

The acronym BRIC was coined by Jim O'Neill, previously head of global economic research and commodities and strategy research of Goldman Sachs, in order to describe the emerging power houses of global economy: Brazil, Russia, India, China (O'Neill 2001). With annual economic growth between 5 to 10%, these countries developed into the leading forces of the global economy. Together the BRIC-states represent about 40% of the global population and 15% of the global economic power. Regarding the gross domestic product (GDP) measured in US-\$, each of the BRIC-countries ranks among the global top-12. When relative purchasing-power parity is considered, they are even on the ranks 2 (China), 4 (India), 8 (Russia) and 10 (Brazil) (DEUTSCHE BANK RESEARCH 2010). Furthermore, in terms of production and processing agricultural produce, it is important to note that the BRIC-countries are without exception large territorial states and therefore important agricultural producers as well. With a combined area of more than 38.5 million km² they cover almost 26 % of the global area (WORLDBANK 2011).

Table 1: Gross Domestic Products of the World's Leading National Economies

Country	Nominal GDP	% world GDP at PPP
1 United States	14.3	20.5
2 Japan	5.1	6.0
3 China	4.9	12.5
4 Germany	3.4	4.0
5 France	2.7	3.0
6 UK	2.2	3.1
7 Italy	2.1	2.5
8 Brazil	1.6	2.9
9 Spain	1.5	2.0
10 Canada	1.3	1.8
11 India	1.2	5.1
12 Russia	1.2	3.0
13 Australia	1.0	1.2
14 Mexico	0.9	2.1
15 Korea	0.8	1.9

Source: Deutsche Bank Research 2010 (IMF 2009 estimates as of WEO April 2010)

Thus, the BRIC countries have developed into driving forces of the global economy through their demand for a wide spectrum of high-tech goods for use in investments. This also includes products of the agricultural machinery industry and other high-end products of the input industries which help BRIC-countries to increase the productivity of their agriculture. At the same time, a new middle class has evolved which has a relatively high buying power and orients itself towards the Western lifestyle and diet. The BRIC countries have, therefore, become attractive sales markets for all branches of the agribusiness sector (THEUVSEN et al. 2010).

With this in mind, it is not astonishing that the precursors of internationalisation in agribusiness have already identified the BRIC-countries as drivers of their corporate growth. For instance in 2009, the German plant protection companies already achieved 21.6% of their exports in Asia and Australia, 13.1% in Middle and South-America and 12.2 % in Eastern Europe. However, Western Europe still dominates as most important sales market by far (37.2 %), while the markets in North America decreased in significance (11.9%), dropping to fifth place (INDUSTRIEVERBAND AGRAR 2010). According to data, the companies of the food industry find themselves in the earlier stages of internationalisation. Even so, several sub-sectors of the food industry have been able to significantly increase their exports to the BRIC-countries. For instance, for German pork producers, Russia has become the most important sales market outside the European Union: In 2009 exports to Russia increased by about 17%. In that year Russia imported 81.000 tons of German pork even at the height of the world economic crisis, representing more than 5% of all German pork exports which total to about 1.44 million tons (VERBAND DER FLEISCHWIRTSCHAFT 2010). Similar developments can be observed in the dairy sector. Traditionally, Russia is the biggest buyer of German dairy products outside the EU. Concerning cheese, in 2009 exports from Germany had the highest market share in Russia (16%), Japan (13%), USA (12%), EU-27 (6%) (FAHLBUSCH et al. 2011). Further significant possibilities for future growth are seen in China (BMELV 2008). Several food scandals, for instance concerning melamine, resulted in Chinese consumers losing trust in their domestic products. They now place more trust in imported products. Therefore, China already imported German dairy products worth € 24.7 million in 2010, although their imports in 2007 totalled only € 9.8 million (BMELV 2010; BMELV 2008). All in all, it can be summarised that the BRIC

countries provide interesting business opportunities for German agribusiness firms from upstream as well as downstream industries. In the remainder of this paper we will analyse how agribusiness firms have tapped these market opportunities, which challenges and opportunities they perceive on BRIC markets, and how successful companies have been in internationalising their business activities.

3 SAMPLE AND METHODOLOGY

The explorative study under consideration is based on a large-scale survey in the German agribusiness that was conducted between May and July 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 (input industries) and downstream (food industry, agri-trade, and wholesaling) sectors of agribusiness. Since they are only indirectly affected by the internationalisation of the agribusiness sector, agricultural enterprises were not included in the survey. Prevailing by far are enterprises from the food industry (43.4%). Companies from the input industries of agriculture (seed, plant protection, fertilizers, feed, etc.) (20.8%), agricultural machinery industry (15.1%), agri-trade and wholesaling (11.3%), and the bioenergy sector (9.4%) were represented, respectively.

The respondents in our survey are mainly members of the firms' top-management teams: 59.3% work in the management department, 15% in the sales department, 8.8% in the business development/strategy department and 7.1% in the marketing and market research department.

Concerning legal forms, private limited companies (*GmbH*: 42.5%) and limited partnerships with a limited liability company as general partner (*GmbH* & Co. KG: 27.4%) are predominant. Furthermore, 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.

It is noteworthy regarding firm size that the sample includes very small enterprises as well as large multinational corporations. Nonetheless, the majority of respondents are from small and medium-sized companies; two-thirds of the companies surveyed see turnovers between €1 million and €100 million. About 45% of the companies surveyed generate a turnover lower than €25 million. Therefore, our sample reflects the general situation in the German 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 2: Annual turnovers of responding firms in €

< 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: Authors' calculations

The questions of our survey can be divided into three parts. The survey first focused on how the agribusiness companies perceive the importance of different international markets, before questioning which strategies and instruments for coping with internationalisation they apply and how successful they have been. Finally, descriptive questions concerning the characteristics of the enterprises in our survey were asked. For data analysis SPSS 18 was used.

4 EMPIRICAL RESULTS

4.1 Status Quo of internationalisation in the German agribusiness sector

The empirical results show that in recent years the internationalisation of the agribusiness has significantly increased. With this in mind, the respondents in our survey meanwhile generate significant amounts of their turnover outside their domestic markets. In 2009, the agribusiness firms surveyed already had a mean value of 36% of foreign sales to total sales (median: 30%). This ratio is a bit higher than the average of all sub-sectors of the German industry. It also reflects a remarkable development for a traditional, and to a high degree local, industry sector. The dynamics of tapping foreign markets is underscored by glancing back to the past as well as into future: Five years ago the firms in our sample only averaged foreign sales of 28%, but within five years the interviewees expect an increase to almost 45 %. This expectation is in line with a broad majority of those surveyed (75%) that agree with the statement that agribusiness is an emerging industry with considerable growth potentials. Therefore, it is not astonishing that only a minority of the respondents (36%) agrees with the statement that the economic crisis had strong effects on the operations of their business.

The agribusiness presents itself as an attractive and comparatively crisis-proof industry sector. Even during the last financial and economic crises, the turnover of the German agribusiness decreased only very slightly (THEUVSEN et al. 2010). Central growth steps are being undertaken abroad. Differing goals could be determined as the international business activities of the enterprises increased. According to those surveyed, the top 5 motives for internationalisation included the desire to open new markets (μ = 8.24; σ = 2.20), internationalisation of important customers (μ = 6.05; σ = 2.82), occupying strategic positions (μ =5.68; σ = 3.01), reducing purchasing costs (μ = 5.32; σ = 3.11) and securing the basis for resources (μ = 5.17; σ = 3.26). This expresses how aware the enterprises are of the fact that foreign markets offer substantial sales opportunities.

With this in mind, the key question is where the enterprises see possibilities for further growth and where they perceive the future markets for the German agribusiness will be.

Despite the ongoing internationalisation, for a majority of enterprises the domestic German market maintains its dominating significance. According to the perception of the respondents, the German 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 the German agribusiness. The emerging countries in Middle and Eastern Europe then follow, where German companies can profit from their geographical proximity and technological advantages over local competitors and can serve the needs of growing number of demanding customers with higher incomes.

Table 3: Expected importance of different regions as sales markets in five years

•	Inputs Industry	Food	Trade	Agricultural	Bioenergy
		Industry		Machinery	
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)
Middle and Eastern	6.71 (2.00)	5.74 (2.54)	5.56 (2.60)	8.00 (1.34)	6.12 (1.88)
European Countries					
(exc. Russia)**					
Russia**	5.58 (2.17)	4.67 (3.00)	4.44 (3.32)	6.92 (2.93)	3.25 (1.88)
Asia (exc. China,	3.11 (2.35)	4.13 (2.58)	2.71 (3.14)	3.75 (2.84)	2.88 (2.32)
India)					
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	2.61 (1.94)	2.36 (1.82)	3.88 (3,79)	4.00 (2.52)	3.13 (3.18)
America (exc.					
Brazil)					
Brazil	3.84 (3.32)	2.79 (2.51)	4.38 (3.62)	3.67 (2.77)	3.25 (3.24)

Mean values "1=very low importance" to "10=very high importance"; standard deviation in brackets Significance p<0,1*; p<0,05**; p<0,01***

Source: Authors' calculations

Until now, other regions of the world do not play a dominant role in the plans of most German agribusiness enterprises. The highest potential is most likely seen in Russia, where one third of the companies identify a sales market of high or very high importance. Other markets, mainly in Africa and the Near East, but also in North America, Asia, and Brazil, are attributed only moderate importance in the future. All in all, this reflects a concentric internationalisation concept in which the domestic market serves as a starting point and solid home base, before addressing foreign markets that are characterized by geographical and cultural proximity, which therefore, share many similarities with the domestic market. Other foreign markets which 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 step-by-step.

4.2 Internationalisation strategies

In order to open up new markets, businesses can fall back on a wide spectrum of alternative forms of market entry. Part of the strategy is based on transactions through which the foreign markets can be developed from the domestic market. Examples for this are exports and the drawing up of licensing agreements, for example concerning the use of brands. Other strategies for entering into international markets are related to direct foreign investments, for example for development capacity for assembling and processing in the targeted foreign market.

Table 4: Importance of different international market entry strategies

	Inputs	Food	Trade	Agricultural	Bioenergy
	Industry	Industry		Machinery	
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 "1=very low importance" to "10=very high importance"; standard deviation in brackets Significance p<0,1*; p<0,05**; p<0,01***

Source: Authors' calculations

The preferred forms of market entry by those surveyed are direct and indirect exports which do not necessarily require the physical presence of the business in the land receiving the imports. Whereas direct exports are processed by the business itself, the indirect exports depend on the engagement of German or international trading houses or domestic importers. For 76% of those surveyed, exports are of great or even very great importance. Export strategies are typical for businesses which find themselves in a relatively early stage of internationalisation such as is especially characteristic for businesses in the food industry. Export strategies have the advantage of not straining the sometimes small amount of capital resources in the business (MEISSNER and GERBER 1980; JOHANSON and VAHLNE 1977). This is a strong argument for Germany dairy and meat firms, especially because many of them are cooperatives (HEYDER et al. 2011). In addition, having exports as the dominant strategy for internationalisation, allows for a gradual development of management know-how. Another reason for the importance ascribed to exports is that they take place in a form in which the producers can follow their most important customers, especially those in the food retail market, during the expansion in new foreign markets. In this case, exports are merely an "extension" of domestic trade relationships and the consequence of domestic basic agreements which were reached.

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 also in the food industry have shown that foreign direct investments, particularly those with their own production plants, are more an "exercise for those advanced" and occur quite seldom at the beginning of the internationalisation of an enterprise, but usually rather toward the end of this process (ZANGER et al. 2004).

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 by the government when making direct investments in some countries with restricted access to markets, international joint ventures have often in practice proved to be instable due to the limited influence which the business enterprise has on the partners. Therefore, joint ventures are often established only in the initial phase of entering a market or as preparation for the retreat from a 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 expenditures for marketing or 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 of agribusiness enterprises — with exception of the input and agricultural machinery industries — it follows that decreasing importance is given to sales, purchasing, production and research and development (in that order). Next to sales, the strong globalisation of the markets for agricultural products is especially reflected in the context of the strong international purchasing, which also applies to enterprises which otherwise exhibit very little international business activities, but regard international acquisition as a matter of course.

Table 5: Importance of different parts of the supply chain regarding foreign direct investments

Inputs	Food	Trade	Agricultural	Bioenergy
Industry	Industry		Machinery	
6.81 (3.25)	4.50 (3.67)	4.13 (4.08)	6.40 (3.64)	6.43 (3.58)
3.81 (2.85)	3.68 (3.11)	3.38 (3.81)	3.80 (2.25)	3.57 (2.93)
5.50 (3.36)	3.12 (2.93)	2.50 (2.82)	3.30 (2.45)	3.13 (2.25)
3.63 (3.00)	2.21 (1.73)	2.25 (2.76)	3.10 (2.55)	2.57 (2.69)
	Industry 6.81 (3.25) 3.81 (2.85) 5.50 (3.36)	Industry Industry 6.81 (3.25) 4.50 (3.67) 3.81 (2.85) 3.68 (3.11) 5.50 (3.36) 3.12 (2.93)	Industry Industry 6.81 (3.25) 4.50 (3.67) 4.13 (4.08) 3.81 (2.85) 3.68 (3.11) 3.38 (3.81) 5.50 (3.36) 3.12 (2.93) 2.50 (2.82)	Industry Industry Machinery 6.81 (3.25) 4.50 (3.67) 4.13 (4.08) 6.40 (3.64) 3.81 (2.85) 3.68 (3.11) 3.38 (3.81) 3.80 (2.25) 5.50 (3.36) 3.12 (2.93) 2.50 (2.82) 3.30 (2.45)

Mean values "1=very low importance" to "10=very high importance"; standard deviation in brackets Significance p<0,1*; p<0,05**; p<0,01***

Source: Authors' calculations

Competitive strategies contain general statements regarding how enterprises want to compete in their respective industries in order to prevail over competitors and how to obtain a better-thanaverage rate of return for their branch (PORTER 1980). This strategic positioning in international competition is especially significant in international competition in which enterprises have to deal not only with competitors from industrialized nations, but also from aspiring newly industrialised and transformational countries which often have very 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). The overwhelmingly favourite strategy of our interviewees is that of differentiation with highquality innovative products. For German agribusiness firms that 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 other than the targeted use of market niches to see success in the market. Especially businesses in the German food industry have low production costs at least compared with their European competitors. Reasons which are usually given are the strong cost-cutting measures by the German discount stores and the lack of willingness of the German consumers to pay more than necessary for food. This forced the food producers to strictly control costs and develop competitive production and financial structures. In some case, for example in the meat industry, the lower (salary) expenditures compete with other important European businesses, such as in Denmark. Helped by these advantages, the German producers can often achieve a strong position in the market, which supports the German enterprises within food industry in their efforts to internationalize.

Table 6: Importance of different parts of the supply chain regarding foreign direct investments

	Inputs	Food	Trade	Agricultural	Bioenergy
	Industry	Industry		Machinery	
We are striving for cost	5.63 (2.49)	5.51 (2.94)	6.43 (3.59)	4.50 (1.78)	5.14 (2.41)
leadership in order to survive					
in international markets					
In international competition	8.53 (2.11)	7.50 (2.45)	8.86 (1.46)	9.09 (1.04)	7.57 (1.90)
we apply innovation and					
quality leadership					
We are serving specific	7.60 (2.93)	6.14 (3.10)	7.12 (3.48)	7.18 (2.40)	4.25 (3.45)
niches in international					
competition*					
Many values 1—very law importance" to 10—very high importance"; standard deviction in breaksts					

Mean values ",1=very low importance" to ",10=very high importance"; standard deviation in brackets Significance p<0,1*; p<0,05**; p<0,01***

Source: Authors' calculations

4.3 Internationalisation in BRIC countries

Although many of the companies surveyed have a strong focus on the German and other Western European markets, they do not assume that the globalisation of the agribusiness markets will remain confined to the European Union. Therefore, the importance of the 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. In this sense, it has been 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 considerable support in the food industry. 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 EU-27 member countries, it can be assumed that tomorrow's economic survival will be much more determined by success in the markets of the BRIC countries.

9,00 8,00 7,00 6,00 5,00 4,00 8,06 8,00 8,00 7,26 6,40 3,00 2.00 1,00 .00 Bioenergy Input industry Food industry Trade Agricultural Machinery

Figure 1: Expected importance of markets in the BRIC countries for agribusiness

Mean Values "1=very low importance" to "10=very high importance"

Source: Authors' calculations

The BRIC countries, therefore, have become attractive sales markets for all sub-sectors of agribusiness. Currently these new markets are predominantly being served through export activities. Despite several spectacular foreign direct investments of German enterprises in Russia, the exceptionally high relevance of exports with regard to the Russian market (74.4%) is striking. In contrast, foreign direct investments in wholly-owned subsidiaries are of greatest importance in China and India. 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 for the difficulties encountered in opening these markets. In many cases, legal regulations require the involvement of local partners; furthermore, there can be cost advantages of local activities. In contrast, the large percentage of exports to Russia could be due to the intensive and long-standing relationships to this trade partner which allows even small and medium-sized firms to export their products to this emerging market.

Table 6: Importance of different market entry strategies in the BRIC countries

	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%

A consideration of the most important motives for the development of activities of German agribusiness firms in the BRIC countries yielded interesting results: 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, the occupying of strategic positions mentioned by some companies must surely be seen in this light. All other goals, including, for instance, cost reductions, natural hedging or securing of supply, 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 which motivates German agribusiness firms, but not the potential function these countries could have as suppliers of agricultural resources due to their large size and production potential.

Considering the dominant challenges which emerge when beginning to conduct business with the BRIC countries, significant differences between the four countries become obvious:

- The main problem for market entry in **Brazil** is the lack of qualified workers and managers. A possible cause could lie in the required Portuguese language skills. In addition, many other challenges were named so that a wide range of problems have to be dealt with in order to be successfully involved in Brazil.
- Those surveyed consider the wide-spread corruption in Russia the greatest obstacle to successful market entry. Besides the bureaucracy and the hindrances to trade coming from tariffs and other measures, financing is seen as another main challenge for activities in the Russian market.
- In **India**, problems with quality control, corruption, and tariff and non-tariff trade barriers are of greatest importance.
- As anticipated, the lack of legal security, including the related problem of a lack of protection of intellectual property rights and the danger of plagiarism, was viewed as being by far the greatest challenge of the **Chinese** market.

By this, the perceptions of the respondents in our survey are very much in line with the most problematic factors that have been identified by the scientists of the world economic forum (SCHWAB 2011).

4.4 Success of Internationalisation

Despite various difficulties and challenges companies face on international markets, the success of the international activities of the German agribusiness can currently be viewed with a guarded optimism. This success can be measured through the increasing degree of 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 the German enterprises (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 had either reached (64 %) or even overachieved (8 %) the goals set for their internationalisation strategies. This success reflects a realistic goal-setting procedure and a 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 difficulties as three-fourths (78%) of those surveyed anticipated them. Nonetheless, almost every sixth (16 %) enterprise had to face challenges which were more immense than previously expected. This is surely one of the reasons why more than one-fourth of the enterprises were not successful in meeting their own goals with regard to internationalisation.

Compared to other markets, market entry seems to be much more difficult in the BRIC countries. 42 % of those surveyed say that the expansion in 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 costly, with increasing cultural gaps between the home market and foreign markets (SULLIVAN 1994). Enterprises that have up to now primarily traded in neighbouring Western European countries and will, therefore, likely experience that going to BRIC markets is a much more difficult approach. This can result in a rude awakening with regard to success on international markets and can require these companies to revise their plans.

5 DISCUSSION AND CONCLUSIONS

The BRIC countries are currently the driving forces of the world economy. According to the estimation of the companies in our sample, they will increasingly be so; 70% of those surveyed agree with the statement that the BRIC countries will gain great importance for agribusiness. Nevertheless, companies that are already active in the BRIC countries often face remarkable challenges. Also the Doing Business Report of the Worldbank indicates that doing business can

be difficult in the BRICs countries: In a ranking on the ease of doing business of in total 183 countries China is on rank 79, Russia on 123, Brazil on 127, and India on 135 (WORLDBANK 2010). This could be one central reason that contrary to the expectation of immense growth potentials, the BRIC countries so far do not play a very large role in the plans and current business activities of the clear majority of the agribusiness firms. Outside the bioenergy industry, only Russia presently already receives a comparatively large portion of attention by the German agribusiness enterprises.

Moreover, the empirical study shows remarkable differences between agribusiness sub-sectors with regard to internationalisation. Whereas the input industries and the agricultural machinery industry have a long-standing tradition of serving international markets, the food industry is in a catch-up position with regard to international expansion. Nonetheless, having once been a national or even local industry strongly characterized by different consumer preferences, this is a remarkable development. This development is driven by, for instance, the international harmonization of consumer preferences and the international expansion of retailers which prefer their once domestic suppliers and offer them to deliver to their newly opened outlets in the new markets (COLLA 2003; HANF and BELAYA 2008).

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 the Chinese markets have already gained considerable importance, but even this industry has hardly discovered the Brazilian and the Indian markets. Those enterprises that are already active in these countries take on a pioneering role with the potential for not only reaping the gains of this position but also bearing the costs.

From the point of view of the strategic management literature, firm strategies are not only influenced by market conditions such as competitive forces (PORTER 1980), but also firm resources and capabilities (WERNERFELT 1984). 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 future international expansion of these companies. Nonetheless, several studies have analyzed the relationship between firm size and internationalisation (for instance CALOF 1993) and found a positive relationship but, at the same time, 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 internationalisation. Therefore, with regard to the limited financial resources similar arguments have been raised of many cooperatives which play an important role mainly in the German meat and dairy industry (Theuvsen and Ebneth 2005).

The study has interesting managerial implications. First, the decision to operate in international markets should only be made after thoroughly considering 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 industry average and to identify strengths and weaknesses of the own strategies. Nevertheless, we cannot say which internationalisation strategy leads to higher gains—directly investing in foreign countries or just exporting to foreign markets. But pioneering industries such as the agricultural machinery and the inputs industries can serve as role models for the international expansion of so far less internationalised subsectors. Furthermore, it generally can be expected with the further increasing importance of internationalisation, that more challenging forms of business, for example those requiring more capital or know-how, will be of increasing importance for opening international markets also in the agribusiness sector. 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 the profit potentials of international markets. But one should keep in mind that internationalization is sometimes seen as "the consequence of a process of incremental adjustments to changing conditions of the firm and its environment" (JOHANSON and VAHLNE 1977, 26) rather than the result of a strategy for optimal allocation of resources.

Due to the limited size and lack of representativeness of the sample, the study has its clear limitations. Therefore, future research should aim at increasing the number of respondents in order to present a more balanced and broader picture. Furthermore, the relationship between the degree of internationalisation and firm performance deserves more in-depth analyses. Existing studies present a very mixed picture of the relationships between both variables (for an overview see LI 2007; GERPOTT and JAKOPIN 2005). Last but not least, the internationalisation strategies of companies and attitudinal attributes of managers could be analyzed and combined with those quantitative findings to shed even more light on the internationalisation-performance relationship in European agribusiness.

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