Retail Internationalization and Its Consequences on the Food Chain

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Introduction

In order to meet with the obstacles of market saturation and the resulting cut-throat competition in the home countries of most of the top food retailers, they use the chance to participate in the increasing standard of living in Asia, South America and Central- and Eastern Europe. Thus, retail internationalization can be regarded as a growth strategy for top food retailers. However, opposite to manufacturers internationalization is for retailers still a new strategy so that globalization continues to accelerate. AT Kearney (2006) shows that since 2001 more than 50 different retailers have entered 90 new markets.
In this context our the aim of our paper is threefold. **First**, using different theories of internationalization we want to work out the courses **why the retailers internationalize**. Furthermore, by analyzing secondary data we will show the **actual degree** of internationalization. **Second**, using theories of the new institutional economics as well as strategic management we will **elaborate on its consequences** for the participants of the agri-food business. Building on the more general parts of our aim the **third** part contributes to the developments in **Central and Eastern Europe**. This includes a **detailed analysis** of the current situation and an **outlook** to future developments.

Keywords: *CEEC, consequences, retail internationalization*

Internationalization of food retailers

Already in 1905 the Swiss food processor Nestle has owned production sites in Germany, France, UK and US; the German food processing firm Dr. Oetker set up its first foreign base in 1908 and produced in seven countries already 1924. Unilever had operations in over 40 countries already in the year 1930. However, it is less than 20 years ago that almost all of the world's retail firms were pure national firms with a negligible share in foreign markets. Wal-Mart opened a first shop outside the US in Mexico City in 1991; Carrefour started its international business 1989 in Taiwan, and Rewe start the internationalization by the acquisition of Billa in 1996 (Rudolph and Einhorn, 2001). That has changed dramatically. Taking a look at the top 200 global retailer almost all players except the US retailers operate in numerous countries having established a noteworthy business capacity in foreign markets (Deloitte, 2006). For example, Metro increased its foreign sales volume from 5 % in 1997 to 39 % in 1999 and today the share is about 55 %. In general, retail firms start with a geographical expansion across the national borders but short after moved into more distant countries (Fernie et al. 2006).

The most important reason for internationalization can be found in the stagnating trade in the domestic food market and the thereof resulting enforced competition (AT Kearney 2006, Burt 1993, Davies/Finney 1998, Fernie et al. 2006, Robinson/Clark-Hill 1990)[1]. In fact, this push-factors have been effective in almost all western countries. But, there are remarkable differences in the degree of market saturation and exhaustion of food demand among the countries. Further on, the concentration process in the different national systems was not so strongly synchronized that these factors could be solely responsible for such a simultaneous and explosive internationalization of retailing in several countries. Rather the international retail market penetration is also determined by at least four pull-factors. These are:

a) Financially strong retailers – also called category killers - have the capability of disrupting the structure of any foreign market so that they can successfully install their own business ideas in new market environments on a grand scale like Wal-Mart in UK and Lidl in France (Fernie et al 2006, George and Diller 1993, Wrigley 2002).
b) The collapse of the socialistic central planning system in Middle and East Europe left behind an economic vacuum that offered the unique opportunity to establish an entirely new retail system being modeled on Western ideas. The Western retail firms took this opportunity and they established subsidiaries all over the countries (Rapp, 1995).
c) An additional investment possibility arose from the financial crises in South-East Asia. In particular, French and German retail firms took advantage of the situation that the Asian groups have temporarily been afflicted with shortage of money. By the way, they hoped to take advantage of their presence in the region when China was opening its markets (Lingenfelder, 1996).
d) The internationalization of the retail sector also profits from considerable progresses in WTO negotiations as to quality and safety standards that noticeably facilitate the trade of intermediate and convenience food products across borders (Fieten et al., 1997).

However, internationalization is not without danger. Some of the retail firms have already begun with re-arranging their influence spheres building regional cluster (KPMG 2004, Moore et al 2000, Palmer/Quinn 2005). The most prominent example is Wal-Mart which withdraw from several foreign markets with high financial losses. A problem is that retailers do not adopt their business system to the new business environment at all (Hurth, 2003). Hence, an improvement of the profit situation is not automatically given with the expansion to a new market but can be reached by an adequate adjustment to country characteristics as well as to positive synergy effects. Such synergetic effects are to be effectuated if some already emerging trends in retail business strategies are intensified with globalization. At least, three development tendencies offer outstanding opportunities for a more efficient use in conjunction with globalization: I) enhancement of global sourcing[1], II) sophisticated usage of supply chain management[2] / “verticalization” of retail firms, and III[3]) augmented use of retail brands[4].

These structural changes resulting from and connected with internationalization process are in the center of interest to the food industry. Therefore, the next sections will deal with supposable

1. Since a further concentration by merger and acquisition on the national market appeared to be impossible in face of the already realized degree of concentration, the jump over the borders seemed to be the easiest way to avoid the legal persecution by the Monopolies and Merger Commission (George 1997). In the first half of the nineties the national market share of the largest three retailers in almost all the West European countries clearly surmounted 50 percent, but if one considers West Europe as single market, the aggregated market share of the five biggest retail firms did not exceed 15 percent. In many cases the entering foreign retailer was a really newcomer in the respective market so that the Antitrust department had no reason to foreclose any acquisition.
1. ***‘Global sourcing’*** simply means that the recruitment of production factors and trade goods are executed under consideration of the global products on offer.
2. ***‘Supply chain management’*** deals with the management of materials, information and financial flows in a network consisting of suppliers, manufacturers, distributors, and customers.
3. ***‘Verticalization’*** denotes a system where a focal company coordinates the product flows as well as the information flows by building cooperative vertical networks (KPMG 2001).
4. The surge of ***’retail branding’*** is not only characterized by a rise in numbers of brands and an increase of the market share but also by a considerable augmentation of the standard quality.

changes in firm organization and behavior resulting from this process. Special attention is given to the thereof following consequences for the food industry and to threats and opportunities that may be expected.

Consequences of retail internationalization on processing industry

The described organizational and strategic changes in the retail sector that are to be expected with ongoing internationalization are effective upstream and downstream. However, we will confine our analysis to the expected and speculated impacts on the food processing industry. Differently adjusting to an international environment by retailers these impacts concern food processing firms to a very different extent and also in different directions. The discussion will be facilitated by subdividing the food processing industry in five categories of firms. The following categorization is very crude and imprecise but sufficient for our purposes[1]:

1. (1) The first category comprises very large multinational food processing firms that traditionally dispose over a large number of subsidiary companies that are worldwide distributed and engaged in many different food branches. Examples are Nestle, Unilever Bestfoods, and Danone.
2. (2) The second category includes firms that are more or less strictly concentrated around their kernel competence but are globally producing and supplying (Simon, 1996). These firms dispose over a remarkable market power that is based not on size but on consumers' appreciation. Typical examples are Ferrero and Haribo.
3. (3) The third category is made up of medium-sized firms that produce diverse food for the national or regional market. A considerable share of their products is marketed as retail brands or as no-name products. Examples are Freiberger and Nordmilch.
4. (4) The fourth category shall consist of small and medium specialized food processors that mainly produce by order of retail firms.
5. (5) The fifth and last category shall subsume all small food processing firms that serve local markets or are providing special niches in regional or national markets.

If retail procurement alternate from a predominantly national sourcing to ***global sourcing***, and if retail firms internationally centralize and re-organize the supply chain network, that will have of course serious consequences for food processing industries. The change distinctly increases the competitive pressure on suppliers because each firm must not only compete with its national antagonists but also with competing firms of several countries. If we consider the different firm categories, we can recognize remarkable differences within the food processing industry. Firms of the **first category** are only marginally touched by the concentration of retail procurement. The multinationals dispose of strong brands in almost all relevant national markets so that increasing international retail procurement will not cause a substantial effect on the quantity of sales. Hence, the relative position is also not significantly changed. Firms of the **second category** have more or less the same status as those of the first group. The volume of sales will probably not be seriously affected by the international pooling of retail procurement presupposed that they appropriately adjust their sales organization.

The most important effects of the change in retail procurement will likely ensue in the **third category**. Some food processing firms will substantially win in the altered situation, many firms will drastically lose. At first, we will address firms that hold a national cost leadership and do

1. We oriented us at the categorization of Hanf/Hanf (2004).

not dispose over strong producer brands. As long as national retail procurement systems prevail, a strong cost leadership protects these firms from existence threatening competition because they possess the necessary experience and the know-how to undercut the competitors' cost level and to counter any price war. If retailers unite their national procurement divisions to a multinational division, national processors with cost leadership will lose control over competitors as they will now be confronted with cost leaders from other countries that are skilled in the same way. In consequence, the market power and the price margin of national cost leaders radically shrink, and at least several of the former national cost leaders are forced out of the market. The surviving processors reside in a relatively positive situation although they have forfeited some market power but in return they win sales and turnover.

The situation is clearly different if we look at processing firms that compete with their business rivals on the national market by product differentiation. In an unified international procurement market the number of competitors also increases with the number of countries involved but only very few of them - if at all - are to consider as direct substitutes because they have rather similar products. In case that the product differentiation is narrowly adjusted to the national consumer habits and preferences, there is no reason to assume that fundamental and abrupt displacements in demand arise from changing procurement.

Small and medium-sized food processors that produce retail brands by contract with a retailer (**category four**) are usually among the winners of internationalization of the retail firm. Every time, when the retail firm invades a new country or enlarges its engagement in one of the countries, additional quantities of the retail branded product are needed and the necessary products are purchased from the primary supplier. For example, when in 2003 Lidl entered the Swedish market they were importing milk from Germany. Hanf and Maurer (1994) argue that this advantage is particularly important when the retail enters economically and politically unstable regions. By this, the respective food processors are able to grow with the growth path of the retailer without investments in market development. Finally, the small firms that are subsumed in **category five** will not be really concerned by the mode of procurement. Independent whether the retail procurement is internationally bundled or predominately nationally organized, a certain share of retail supply has to be of local origin and therefore locally purchased[1]. Similar applies for regional and national niche products. However, in some cases, a niche may become larger by the internationalization of retail, and in a piggyback process with the retail firm the small processor may use this larger niche. In other cases, a foreign competitor is introduced into a niche by the same piggyback process.

We have pointed out that also a forced introduction of ***supply management tools*** will result from an internationalization of retail. This development trend absolutely favors large, globalized firms that are ordered in our **first and second category**. The installation of the necessary co-ordination instruments like ECR and CPFR are very expensive and demand for high organizational expenditure. Small und medium-sized firms (**category 5**) are usually not willing and perhaps also not able to raise the necessary money (Hanf and Kuehl, 2002), especially because most of the arising costs are fixed costs and the investment in human capital is indivisible and has sunk cost character.

As the installation of such a co-ordination instrument also implies fixed costs on the side of retail system, the retail firm should do business as much as possible with partners that also have

1. One reason is that consumers demand local food. Another reason is that there are still a number of smaller but independent retailers under the roof of cooperative retail chains like Edeka, Rewe, and the purchasing association Spar.

installed the same co-ordination system or that are willing to do it[1]. Such a close and trustful relation may arise from a multitude of successful transactions over a long time. Multinational food producers with a broad product portfolio (**category 1**) and global specialists with world wide reputation (**category 2**) are natural candidates that are likely preferred by retail.

Food processors that produce retail brands under contract (**category 4**) are more or less obliged to introduce such a supply management system if it is required by the retailer. The investment costs thereby incurred are relatively small as most of these firms exclusively produce a very limited range of products for one single retailer. The same is true for the demanded knowledge of IT. However, many of the smaller contracting producers of retail brands will have considerable difficulties to fulfill the increasing logistic demands that result from the implementation of the supply management system and from the regional enlargement of the delivery duties in several countries.
Food processors of **category 3** are among the likely losers of the higher supply management requirements incurred by retail internationalization. Partly they cannot afford the additional financial obligations, partly they do not provide over a sufficiently trained labour force. In addition, they may have difficulties in persuading retailers of their trustiness, their capability to innovate and their flexibility to respond to sudden changes in demand. Especially large difficulties may occur if a domestically supplier has to negotiate with a globally oriented bulk purchaser.

Retail Internationalization in the CEEC

The third part addresses the developments in Central and Eastern Europe. Recent studies of management consultancies highlight the potentials for retailers in the former states of the Soviet Union. In a survey of AT. Kearney (2006) five of the most attractive countries for retailers are from CEEC. Analyzed variables have been country risk, market attractiveness, market saturation, and time pressure. Even though slightly different KPMG (2004) derived at a similar picture. In both study Russia was the second most attractive country[2].

Especially in the course of the EU accession the retail sector in these countries changed. Western retailers entered and are now dominating the retail landscape[3]. In Hungary for example not only all major players are foreign owned but also the first round of consolidation is taking place. The following example shows a similar development for Poland. Due to its heterogeneous market and thereof resulting loosely structured retail landscape first movers such as the German Dohle Group were able to succeed with hypermarkets. However, even though they had a strong market position they decided to sell their business to Tesco because the competition is getting very intensive and requires high financial spending (KPMG 2004).

When Western retailers enter a new market it is observable that they try to stick to their original business models. In the long run they expect their suppliers to meet the retailers global requirements on food quality and safety as well as on delivering terms. For example after entering the country five years ago today the Metro Group Russia already have installed the Metro Asset Management, Metro Buying Group, Metro Advertising, Metro Group Logistics as well as Metro Group IT. The 140,000 listed articles of the twenty-six cash & carry markets and the three

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1. This competitive advantage is still strengthened by the fact that the ECR and also the CPFR co-ordination system requires the existence of close and trustful relations between food supplier and retailer.
2. KPMG points out that in particular hypermarkets have great potentials. For example, within the first year the 40 million Euro worth store of the German AVA located in the South of Moscow had 120,000 customers per week with an annually sales volume of 55 million Euro so that a break even was achieved.
3. See appendix

super centers are delivered by 2500 suppliers. Only five percent of them are foreign manufactures while twenty percent of the article are regional specific. Thus, the Metro group carries out strong influence on the Russian agri-food business in general and because the markets are located mostly in the Moscow region on the local agri-food sector. This example shows that in the short and medium term different requirements and quality and process management are applied. But in the long run the suppliers have to meet the retailers home country standards. However, meeting these requirements competition not longer a one way street so that these suppliers are able to enlarge their sales volumes by exporting goods in the old member states.

The drafted development of retail internationalization in the CEEC indicates that the outlined general consequences are likewise relevant in the CEEC. Thus, in the following we will take a closer look on the implications of supply chain management, global sourcing, and retail branding on food processors in the CEEC. Because all most all western retailers are intensively using supply chain management tools so that intensive vertical coordination is taking place we will start our discussion with this topic. Because vertical coordination and the usage of (supply) chain management concepts demand that retailers have to align not only the actions of the players but also the interests of them retailers will carefully choose their suppliers. As Hanf and Dautzenberg (2006) have shown in particular on firm level such concepts demand that suppliers have to be willing to give away some entrepreneurial freedom and have to provide an high cooperativeness[1]. Because today's food quality and safety is not longer an intrafirm matter both aspects have to be analyzed as well in the light of interfirm partnerships. Thus, modern quality management – applied by Western retailers – demand similar requirements as supply chain management. As a result of these high requirements retailers favor - besides multinational companies - innovative and progressive local companies with good IT and total quality management knowledge. Thus, local suppliers meeting these demands have good chance to set up fair and profitable relationships. Due to the high technical demands as well as of their market importance we suppose that these suppliers are from category two. Suppliers from category three and four will face fierce competition because often they still operate with outdated process management tools and on a low quality level. To catch up with the demanded requirements not lucrative investments are needed. Suppliers from category five are mainly not effected. Chain management and the endeavors to strengthen vertical ties are providing already large and innovative companies with a competitive advantage.

Discussing global sourcing and retail branding[2] we want to differentiate between suppliers from the home country, suppliers from the new member states, and suppliers of the remaining CEEC. Often retailers have taken their suppliers into new markets. For example when Metro entered Russia Hochland AG has followed and has built a dairy planet near Moscow. In the first years they were protected however in the course of time when local producers were reaching equal quality and process management standards Hochland AG is in normal competition with them. As outlined before suppliers (branded ones as well as retail brand suppliers) are able to grow by retail internationalization. A well known German retailer is recently discussing in a grand scale the question about their retail brand suppliers. Starting their internationalization they used country specific retail brands in order to differentiate from their retail competitors. Today the German retailer changes the regional retail brands to one (the former German one) retail brand. For this brand one global food quality and safety standard is applied. Thus, every supplier has to meet the same standards – product and process ones. Thus, German suppliers are changed for

1. A full discussion on the demands on firm, dyadic and network level is provided in Hanf and Dautzenberg (2006).
2. Even though before we have separated both aspects in this more applied discussion we want to combine both aspects. The reason for this is that the most important question regarding retail brands is securing supply with goods of a comparable quality as in the home countries.

CEEC ones and visa versa. The quest for global cost leadership is on its way[1]. These examples indicate that the consequences are rather mixed as shown before. Multinationals (category one) will expand their sales because with rising discretionary income consumers in the CEEC are willing to spend more money on well known “western” brands so that retailers will carry them. As mentioned before their knowledge in SCM and ECR is a further argument to list them. Big processors disposing over nation-wide brands (category two) are under pressure on the one hand by global brands and on the other hand due to their rising quality standards by the retail brands. Thus, we suppose that major structural changes are forthcoming. Firms of category three face fierce competition by other cost leaders however due to their favorable cost structure in their CEEC home countries they have good changes to be the winner in this cost cutting game. We predict that innovative and modern cost leaders will prosper while the ones which do not dispose over adequate food quality and safety standards as well as efficient production processes will slightly pass out of the competition. Same applies for firms of category four. However, due to their small structure they face the danger to loose control over their firm growth[2]. Niche suppliers and specialty suppliers are mainly not affected. Some times retailers use them in their home countries to round off a particular category. For example, Real (the hypermarket subsidiary of Metro Group) carries in Germany a “Russian category”. Consisting mainly of major Russian brands the category still provides some shelve space for niche products and Russian specialties.

Summary and Conclusions

For about one decade the retail industry has performed an immense structural change. The former nationally orientated players have become suddenly global players. In many cases the global giants still act like an agglomerate of national tycoons but that will drastically change in the near future. Some of the organizational adjustments to the changed economic situation already become visible although most of the organizational measures are still pending to implement.
Future structural development of the food processing industry will be vigorously stamped from the ongoing globalization process of the retail sector. The distinct firm groups will be very differently affected. Large multinational food producers with a wide supply portfolio and worldwide acting, and specialized premium food processors are groups that can easily adjust to the changed requirements on the part of globalized retailers. Certainly, it will give individual winners and losers but the group as such will not be affected seriously. The most important impact of retail globalization is to be expected in the large group of national and regional food processing firms. A few firms will profit from the international retail development. On the one hand, processing firms will gain that success in asserting themselves as multinational cost leaders. On the other hand, such firms will survive that become accepted as differentiated brand producer in one or several national markets. The bulk of firms of this category will sooner or later vanish. A part of the small and medium-sized contract processors will disappear because they are not able to adequately extend their delivery to foreign countries. However, the majority of these firms will grow with the international growth of their contract giving retail firm. In the future it is likely that rather more than less of these firms are required because retail brands will conquer additional market shares. Hence, the competitive situation of specialized food contractors is rather promising presupposed the firms are capable to adjust to changing business obligations. Finally, small producers that deliver to local markets or whichever niche markets are not directly affected by the internationalization of retail.

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1. Because logistic / distribution costs are very important in the context of food products all supply decisions are allowing for them. Thus, most often it is rather the quest for the pan European cost leadership than the global one.
2. In Germany the bottled water supplier of a well known south German discounter grew enormously due to the vast German and global expansion of the discounter. However, because of the high investments in the end the supplier ran out of equity and cash so that the discounter to secure its supply had to overtake the supplier.

There is a given demand for local and niche products and that have to be offered regardless of the fact whether retail is nationally or internationally positioned.

In the Central and Eastern European Countries these general findings can be found. However, since the structures of the agri-food business are undergoing a dramatic change since the beginning of the 1990`s the impact of retailers` internationalization are even more striking. Rapid changes occur in the retail markets themselves as well as in the supplier structure. However, it is getting obvious that the western retailers are exporting their business models with the effect that structure of the agri-food business are getting comparable to the ones in the old member states. To some extend it looks as if in the CEEC the “new” European structure of the agri-food business is getting evident.

Literature

AT Kearney, 2006, Emerging Market Priorities For Global Retailers, Published Consulting Study

Burt, S.L., 1993, temporal trends in the internationalization of British retailing, International Review of Retail, Distribution and Consumer Research, Vol. 3(4), pp. 391-410

Davies, R. and M. Finney, 1998, The future of retailing, in Fernie (Ed.) Financial Times (Chapter 7), Retail and Consumer, London, UK

Deloitte, 2004, 2004 Global Powers of Retailing; http://www.deloitte.com/dtt/cda/doc/co

Deloitte, 2006, 2006 Global Powers of Retailing; http://www.deloitte.com/dtt/cda/doc/co

Fernie, J., Hahn, B., Gerhard, U., Pioch, E. and S.J. Arnold, 2006, The Impact of Wal-Mart’s Entry into the German and UK Grocery Markets, Agribusiness: An International Journal, Vol. 22 (2), pp. 247-266

Fieten, R., Friedrich, W. und Lagemann, B., 1997, Globalisierung der Märkte. Schriften zur Mittelstandsforschung Nr. 73 NF, Stuttgart, Schäffer-Poeschel

George, G. und Diller, H., 1993, Internationalisierung als Wachstumsstrategie des Einzelhandels. In: Trommsdorff, V. (Hrsg.), Handelsforschung 1992/93, Wiesbaden, Gabler, S.165-186

George, G., 1997, Internationalisierung im Einzelhandel: strategische Optionen und Erzielung von Wettbewerbsvorteilen. Berlin, Duncker und Humblot

Hanf, C.-H. and Maurer, O., 1994: Performance of the Domestic Food Sector and Internationalization. In: Agricultural University in Prague, Economic Faculty (Ed.), Agrarian Prospects III, p. 57-69

Hanf, C.-H. and J.H. Hanf, 2004, Internationalization of food retail firms and its impact on food suppliers, Paper presented at the 88th EAAE Seminar, Paris, France

Hanf, J.H. and R. Kühl, 2002, Consumer values vs economic efficiency in food chains and networks in J.H Triekens and S.W.F. Omta (eds.): Paradoxes in the food Chain and Networks, pp. 35-43, Wagening Academic Publishers

Hanf, J.H. and K. Dautzenberg, 2006, A theoretical framework of chain management. Journal on Chain and Network Science, Vol. 6(2), pp. 79-94

Hurt, J., 2003, Von der Notwendigkeit des Scheiterns – Wal-Mart Germany, WiSt, No 11, pp. 688-692

KPMG, 2001, Verticalization in the Trade, Published Consulting Study

KPMG, 2004, Internationalisierung im Lebensmitteleinzelhandel, Published Consulting Study

Lingenfelder, M., 1996, Die Internationalisierung im europäischen Einzelhandel: Ursachen, Formen und Wirkungen im Lichte einer theoretischen Analyse und empirischen Bestandsaufnahme. (Schriften zum Marketing, 42). Berlin, Duncker und Humblot

Moore, C.M., Fernie, J. and S.L. Burt, 2000, Brands without boundaries: The internationalization of the design retailer's brand. European Journal of Marketing, Vol. 34(8), pp. 919-937
Palmer, M., 2005, Multinational retailer expansion: learning from Tesco's experience, International Journal of Retail and Distribution Management, Vol. 33(1), pp. 23-48
Rapp, S., 1995, Internationalisierung von Einzelhandelsunternehmungen nach Ostmitteleuropa. Diss. Zürich
Robinson, T. and C.M. Clark-Hill, 1990, Directional growth by European retailers. International Journal of Retail and Distribution Management, Vol. 18(5), pp. 3-14
Rudolph, T. and M. Einhorn, 2001, Herausforderung im europäischen Einzelhandel, THEXIS 3-2001:2-7
Simon, H., 1996, The World's Best Unknown Companies, The Wall Street Journal Interactive Edition, 20.05.1996
Stank, T.P., Frankel R., Frayer D.J., Goldsby T.J., Keller, S.B. and J.M.Whipple, 2000, Supply Chain Integration in the Food and Consumer Goods Industries, Staff Paper 00-46
Wrigley, N., 2002, The landscape of Pan-European food retail consolidation, International Journal of Retail and Distribution Management, Vol. 30(2), pp. 81-91

Appendix

Table 1. German retail business, modification of Deloitte, 2004

Retailer	Netto-Sales 2003 in Mio. Euro	Percentage of Sales in Foreign Countries	Countries of Operation
Metro-Group	53,595	47.2	Austria, Belgium, Bulgaria, China, Croatia, Czech Rep., Denmark, France, Germany, Greece, Hungary, Italy, Japan, Luxembourg, Morocco, Netherlands, Poland, Portugal, Romania, Russia, Slovakia, Spain, Switzerland, Turkey, UK, Vietnam
Aldi	39,311	33.3	Australia, Austria, Belgium, Luxembourg, Netherlands, Rep. Of Ireland, Spain, UK, US
Rewe	39,180	25.6	Austria, Bulgaria, Croatia, Czech Rep., France, Germany, Hungary, Italy, Poland, Romania, Slovakia, Ukraine
Edeka	31,270	5.3	Austria, Czech Rep., Denmark, France, Germany, Poland
Schwarz-Group (Lidl, Kaufland)	24,675	34.8	Austria, Belgium, Croatia, Czech Rep., Finland, France, Germany, Greece, Rep. Of Ireland, Italy, Netherlands, Poland, Portugal, Slovakia, Spain, Sweden, UK
Tengelmann	24,054	52.1	Austria, Canada, China, Czech Rep., Germany, Hungary, Italy, Poland, Portugal, Slovakia, Slovenia, Spain, Switzerland, US

Table 2. Retail Market Poland, LZ-online 12.01.2007

Rang	**Company**	**Formats**	**Netto-Sales 2005 in Mio. Euro**
1	Metro Polska S.A.	Makro Cash & Carry, Real, Media Markt, Saturn	2.907
2	Jerónimo Martins Dystrybucja Polska S.A.	Biedronki	1.334
3	Tesco Polska Sp.z.o.o	Tesco, Savia	1.329
4	Carrefour Polska Sp.z.o.o.	Carrefour, Champion	1.168
5	Auchan Polska Sp.z.o.o.	Auchan, Schiever, Elea	1.133
6	Ruch S.A.	Ruch	950
7	Géant Polska Sp.z.o.o.	Geant, Leader Price	901
8	Eurocash S.A.	Eurocash, KDWT	809
9	Schwarz-Gruppe	Lidl, Kaufland	721*
10	Rewe Sp.z.o.o.	Minimal, Selgros	687

Table 3. Retail Market Hungary, LZ-online 12.01.2007

Rang	Company	Sales 2005 in Mrd. Euro	Number of outlets der Märkte
1	Tesco-Global Aruhazak Rt.	1,89	89
2	Metspa Supply and Trade Co. Ltd. (Metro/Spar)	1,83	181
3	CO-OP Hungary Rt.	1,5	4 970
4	Reál Hungária Élelmiszer Rt.	1,1	2 290
5	Provera	0,8	213
6	Auchan Magyarország Kft.	0,7	10
7	PennyMarket kft.	0,5	148
8	Plus Elemiszer Diszkont kft. (Tengelmann)	0,4	165
9	Honiker Kft.	0,23	1 970
10	Interfruct Kft.	0,2	22