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Vera Belaya, Taras Gagalyuk, Jon Hanf

Leibniz Institute of Agricultural Development in Central and Eastern Europe (IAMO)  
Theodor-Lieser-Str. 2, 06120 Halle (Saale), Germany  
belaya@iamo.de, gagalyuk@iamo.de, hanf@iamo.de

## Supply Chain Networks: European Influence on the Russian Agri-food Business?

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**Abstract:** *In the context of retail internationalization it is observable that retailers from West European countries take their business models known from their home countries into the newly entered markets. In this sense there are at least three development trends in conjunction with globalization, which include global sourcing, retail branding and establishing of strictly coordinated vertical linkages (supply chain networks or netchains). In our paper we firstly describe the internationalization process of the retail business, and based on this, elaborate on structural changes resulting from and connected with internationalization process that are in the center of interest to the food industry. Further on, we focus on the situation in the agri-food business of Russia and describe whether the main tendencies of European retail development and the consequences of their influence are found there, as well as discuss outlook of future development of the Russian agri-food business in the context of supply chain management.*

**Keywords:** *Supply Chain Networks, Agri-food Business, Retail Internationalization, Russia*

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### Introduction

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; Metro increased its foreign sales volume from 5% in 1987 to 47% in 2003; Tesco had its first hypermarkets in 1997 and Rewe started the internationalization by the acquisition of Billa in 1996 (Rudolph and Einhorn, 2001). The ranking of the world's largest retailers by Deloitte (2005) reveals that almost all players operate in numerous countries having established a noteworthy business capacity in foreign markets. However, the process is still a rather new one and it is to foresee without a great gift of prophecy that the process will further proceed, perhaps not in such a turbulent way like in the last decade.

In the context of retail internationalization it is observable that ‘western’ retailers are taking their business models known from their home countries into the newly entered markets. Thus, one can say modern management concepts are exported. The following example of Metro Group Russia is underlining this point. After entering the country five years ago, the Metro Group Russia has already 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 2500 suppliers deliver the three super centers. Only 5% of them are foreign manufacturers while 20% of the articles are region-specific. Thus, the Metro Group exerts a strong influence on the Russian agribusiness in general and on the local agri-food sector because the markets are located mostly in the Moscow region. This example supports that being in their fledgling stages, western enterprises try to impose their procurement and logistic business concepts on the local suppliers.

The aim of our paper derives from the above scratched development. We want to firstly describe the internationalization process of the retail business. Based on this we want to elaborate on structural changes resulting from and connected with internationalization process that are in the center of interest to the food industry. Further on, we would like to focus on the situation in the agri-food business of Russia and describe the main tendencies of retail development as well as discuss future prospects and outlook of further development of the Russian food sector in the context of supply chain management.

The structure of our paper arises from the aims of the paper. In the following chapter we will deal with the causes and triggers of the globalization and its impact on the organizational structure of the retail firms themselves. Afterwards we will analyze the consequences on the food sector. Additionally, we will introduce supply chain networks as strategic networks. In this context, we will firstly analyze these elements in a more general way. Afterwards we will address them in a more managerial context. The next chapter outlines a picture of the Russian agri-food business and elaborates on managerial challenges for supply chain management. Giving a short summary and drawing some conclusions will end the paper.

## **Internationalization of the retail business**

### **Causes and impetus of the global expansion**

Except for some smaller subsidiaries in close-by countries, the retail firms only started in the 1990’s with a geographical expansion across the national borders. Whereas 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, the aggregated market share of the five biggest retail firms of the single “Western Europe” market did not exceed 15 percent. Therefore, 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. 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. Thus, George (1997) concluded that in particular the stagnating trade in the domestic food market was the main driving force for that internationalization. However, 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. On account of this, we assume that additionally at least three pull-factors are effecting this development. First, the degree of concentration and the organization structure of the retail sector considerably vary among West European countries in spite of the proceeding assimilation of consumption habits and food purchasing behavior. Thus, financially strong retailers can utilize this adjustment process to successfully install their own business ideas in new market environments on a grand scale (George and Diller, 1993) like Wal-Mart in UK and Lidl in France. Second, 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). Third, an additional investment possibility for western retailers arose from the financial crises in South-East Asia as the Asian groups have temporarily been afflicted with shortage of money (Lingenfelder, 1996).

As already mentioned above, the internationalization process of the retailing sector is still in its turbulent starting phase with first signs of a beginning consolidation. The larger retail firms are in fact 'internationalized' but only in so far that they are composed of a number of business units that are active in different countries often with different business conduct and behavior. Only a few of the retailers have succeeded in internalizing this process until now and to accordingly adjust their organizational structure.

### Organizational changes due to the internationalization

As different strategies of internationalization exist they also imply specific organizational changes. However, it is observable that retailers stick to their business model when they enter foreign countries. In this sense there are at least three developments in common which offer outstanding opportunities for a more efficient use in conjunction with globalization.

The progresses in WTO negotiations in regard to quality and safety standards noticeably facilitate the trade of intermediate and convenience food products across borders (Fieten et al., 1997) so that today retailers are able to procure worldwide. This can be understood as '*global sourcing*'. Even though the retailers have always bought products from all over the world global sourcing has



a wider meaning. Lingenfelder (1996) emphasizes that global sourcing applied as a strategic option can contribute to the added value not only by cost reduction but also by value enhancement. This is resulting from quality differentiation and early adaptation to changes in food trends and fashions. In case that a national retailer converts to a multinational or even global firm the procurement situation considerably changes. Retail firms also try to reach synergy effects by introducing simultaneously centralized procurement divisions for several countries. It is often observable that the number of employees in the domestic, centralized procurement department is more or less stable although the number of countries to be managed and the quantities to be coordinated are increasing. This development has the consequence that retailers take along their own suppliers to the foreign countries since the total number of suppliers should be more or less unchanged for the above mentioned economic reasons. On account of this, the quantity delivered by one supplier increases. Hence, the suppliers have to continually increase their level of professionalism and their IT-infrastructure. Having a centralized procurement department additionally creates the desire to negotiate the listing conditions for a greater territory. For example, in the past Schlecker – Germany’s biggest drug store company – bought all of their goods in Germany and distributed it all over Germany and France. However, in future Schlecker would like to negotiate on Pan-European terms hoping to economize on cost advantages (Manager Magazin, 2004).

One of the most remarkable trends in retailing of the last years in all European countries is the steadily increasing dissemination of ‘*retail brands*’. This development is self-evident as several empirical studies convincingly demonstrate that an increasing share of retail brands lead to rising profit shares (Mei-Folter and Barber, 1991). The positive relation between retail brand and profit holds true for national and international retail groups as well. Global retail firms can offer a retail brand in several countries. The thereby sold quantities probably exceed that of a national competitor and the achieved sale volumes are often in the same size like that of the leading producer brands. If the retail branded products are manufactured under contracting system, under these circumstances it might be possible to procure the necessary quantities to an incomparably low cost price. Additionally, 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. Being a focal company, retailers have to accept the responsibility for the correctness of the products sold under their own label. Therefore, retailers have to alter their conventional supply systems from purchasing on spot markets to utilizing cooperative supply chain networks (Hanf and Köhl, 2005). Retailers as focal companies have to coordinate the product flows as well as the information flows by building cooperative vertical networks. If retailers take over this function they can be considered as the major and determining force in the food chain (KPMG, 2001). That can be characterized as the evolution of retail “eco-systems” (Eagle et al., 2000).

## Chain organizations and their management

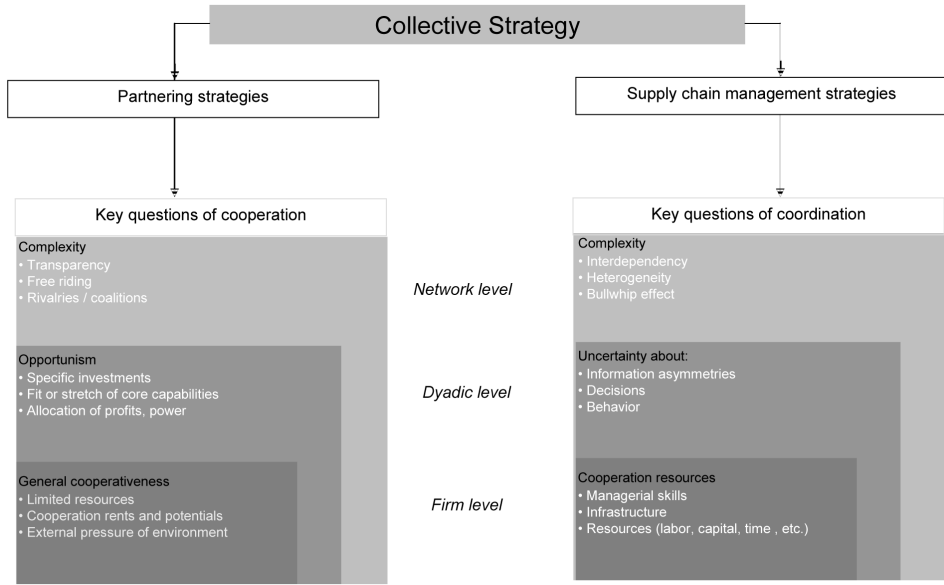
### Supply chain networks

The described trends indicate that food products are usually not produced in vertically integrated food chains but rather in vertical cooperating networks. A self-evident reason for the formation of vertical networks instead of single line chains is the differing size of firms along the food chain. We will use the term network in the following sense. Networks are “specific properties of the transaction relationships, typified by relational relationships in which formal and informal sharing and trust building mechanisms are crucial” (Zylbersztajn and Farina, 2003). Therefore, they are addressing all questions on inter-organizational relationships of more than two firms (Omta et al., 2001). In order to narrow the discussion on networks we will further use an approach by Burr (1999) who classifies four typologies i.e. the spontaneous network, the self-organizing network, the project-orientated network, and the strategic network.

Because in the context of retail internationalization strictly coordinated vertical linkages are relevant on the one hand to guarantee the consumer the correctness of credence attributes like organic produced and on the other hand in order to gain cost advantages generally networks herein are strategic networks being defined by various authors as “supply chain networks” (SCN) or net-chains (Lazzarini et al., 2001; Hanf and Kühn, 2004). Strategic networks can be characterized as pyramidal-hierarchic collaborations (Jarillo, 1988). On account of this, they possess a focal firm coordinating the network firm in an hierarchical style. Additionally, the intensity of the relations within strategic networks is rather high and recurrent interactions are inherited in them (Burr, 1999). The focal firm is in general that firm that is identified by the consumers as being ‘responsible’ for the specific food item, e.g. the producer in the case of a producer brand and the retail firm in the pyramidal-hierarchic case of private brand. The other network actors are more or less heavily dependent on the focal company because of (long lasting) explicit or implicit contracts. The level of dependency is usually higher for vertical than for horizontal ties (Wildemann, 1997). As the focal company is the core element of the SCN in the agri-food business it has also the power to align the actions of the network partners so that it has the ability to coordinate the network in order to realize the strategic objectives.

### Chain management as the third trend of retail internationalization

As explained, the trends of global sourcing as well as retail branding foster the establishment of tightly coordinated chain organizations. Thus, the resulting need to steer and manage the resulting supply chain networks can be seen as one of the most important trends of retail internationalization. In this context it is obvious that ‘western retailers’ export their business models of ‘*chain management*’ both in the sense of the enhancement of the efficiency as well as regarding the establishment of ‘global’ chain quality concepts.



**Figure 1.** Framework of chain management (Hanf and Dautzenberg, 2006)

The challenge for chain management concepts lies in the point that simultaneously the interests of the involved partners and their actions have to be aligned. Thus, cooperation – the alignment of interests – and coordination – the alignment of actions – are two sides of the same coin (Gulati et al. 2005) so that both aspects have to be integrated in chain management concepts (Hanf/Dautzenberg 2006). In the context of chain management Duysters et al. (2004) have shown that collaborations have to be analyzed on three different levels namely firm, dyadic and network level. In conclusion, it can be said that the focal company that wishes to construct a strategic chain management must work out a collective strategy that addresses cooperation aspects (partnering strategy) as well as coordination aspects (supply chain management strategy), allowing for the demands of the three different network levels (Hanf and Dautzenberg, 2006).

## Retail Internationalization and an outlook on its consequences in Russia

### Development of food retail in Russia and the extend of Retail Internationalization

The Russian retail market is dominated by small and medium-sized traditional stores, open markets, kiosks or other specialized stores because of their convenient location, as well as at consumer goods markets, because of low prices. Household spending habits for Russia's urban population, particularly for food illustrate the role of the primary retail channels in Russia's grocery stores, produce markets and supermarkets. At the moment about 37 percent of such spending takes place at small, multipurpose grocery stores, while "wholesale" produce

markets (or farmers' markets) account for 24 percent of such spending, and another 12 percent of these purchases belong to large-scale grocery stores, or supermarkets.

However, due to the dynamical growth of retail commodity circulation in Russia, caused by the increase of the population incomes, by sharp increase of the volumes of export transactions and of consumer crediting, has strengthened the developing tendency of trading business as a whole, and its most quickly developing sector – retail trade. In this context, an increasing tendency of shifting towards modern forms of distribution such as super and hyper markets of large retail chains is observed. The most visible sign of growth in the retail food sector has been the rapid introduction and expansion of supermarket chains<sup>1</sup>. Now retail-trading systems of modern formats are in a stage of active development, commodity circulation of largest of them surpasses turnovers of the majority of the domestic enterprises – manufacturers of consumer goods. Thus, market influence of retailers steadily increases, and their requirement standards to suppliers become more and more rigid in respect to quality of the goods and to price policy.

Having outlined the recent developments we also want to address some tendencies in the market. Because it is estimated that only 6 percent of Russian customers do shopping in larger retail outlets such as supermarkets or department stores we expect that the 'modern' retail sector continues to grow and that even smaller retailers find themselves pressured to update and upgrade equipment and fixtures. Additionally, Russia is witnessing the rise of a new consumer channel-medium-sized discount supermarkets, such as Pyaterochka, Kopeyka. Today, Pyaterochka is one of the largest local food retail chains in terms of sales and number of stores (260 stores in Moscow, St. Petersburg, and several regional cities). Unlike Sedmoy Kontinent and other high-end Russian food retailers, Pyaterochka has geared its focus toward the rapidly emerging Russian middle class. This example shows that one can expect in future that particularly the growing middle class will be targeted by the retailers. Moreover, we expect that in this context retailers will foster the promotion of retail own branded products and its own brand. Therefore, we expect that the demand on product but also process quality will increase significantly in future. The following table shows the ten biggest food retailers in Russia in 2005.

Having outlined the general market situation in Russia, now we want to elaborate on the extent of retail internationalization in Russia.

Russia represents the largest and fastest growing retail market opportunity among the Central and Eastern European economies. This, combined with sensi-

<sup>1</sup> Supermarket chains first appeared in Moscow in 1994, when the first Sedmoy Kontinent store was opened. By the end of 2002, there were 28 retail food chains comprising a total of 384 supermarkets; and by the end of 2003, the number of stores rose to 550, an annual increase of 45 percent (for 2003).

**Table 1.** Ranking of food retailers in Russia according to turnover in 2005

No	Name of network	Country of origin	Year of entering Russian market	Format	Turnover, \$ mio.
1	Metro Cash & Carry	Germany	2000	Cash & Carry	1815,0
2	Magnit	Russia	1994	Discounter	1552,6
3	Pyaterochka	Russia	1999	Discounter	1359,3
4	Auchan	France	2002	Hypermarket	1350,0
5	Perekrestok	Russia	1995	Multi-format	1015,0
6	Diksi, Megamart	Russia	1998	Multi-format	860,0
7	Sedmoy Kontinent	Russia	1994	Multi-format	713,0
8	Lenta	Russia	1993	Hypermarket	649,0
9	Kopeyka	Russia	1998	Multi-format	646,0
10	Viktoria C & C	Russia	1993	Multi-format	607,6

Sources: Logistics and Supply Chain Management in Retail Trading Nets (Malkov S. 2005); The Top 50 Russian Retailers (Kommersant, March, 2006)

ble fiscal and monetary management of Russia's economy, has rendered the country quite attractive to foreign investors. Global retailers have accelerated their activity in Russia. Although Russia's government has taken steps that scare investors about the country's commitment to the rule of law and protection of property rights, these issues have mainly involved the resource sector. The consumer sector has been left alone. However, investment risk resulting from poor infrastructure, corruption, and regulatory hurdles has discouraged many retailers from investing in Russia until recently. Continued efforts to reduce investment risk will attract more foreign retailers looking to tap the country's huge potential (Deloitte, 2006) According to the A.T. Kearney 2007 Global Retail Development Index Russia remains strong and retains the number 2 position on the index among the top 30 emerging markets worldwide, which it has held over the past two years. Consumer spending has risen rapidly for the past two years, fuelled by an income growth rate of 10 percent last year and 11 percent the year before. More spending by Russian consumers has led to the overall retail growth rate of 13 percent last year and is expected to grow by at least 10 percent this year (A.T. Kearney, 2007) The importance of foreign owned retailers for the Russian food retailing is mirrored by the fact that already Metro is market leader and other retailers such as Auchan, Marktkauf are heavily investing in this market (KPMG 2004). As the example of Metro in the introduction is showing the foreign retailers are exporting their business strategies and concepts getting supplied mostly by Russian companies.

### Consequences of retail internationalization

Because the import of goods by foreign companies is complicated by the existing tax and customs regulations in Russia, some of the international supermarket chains are forced to use the resources and goods produced locally. Therefore,



the majority of suppliers of the international retailers are of Russian nationality. Being forced in the medium term to produce according to the retailers' private (global) standards these suppliers have the opportunity to supply not only the Russian market but also the global market. Thus, the global sourcing policy of international retailers enables Russian producers to internationally expand if they can achieve a cost efficient – better to say a cost advantage – production. However, as the flipside of the coin one can also observe that retailers are trying to bring their established supplier relationships with them to new countries. Thus, foreign food processors are establishing plants in Russia producing international brands as well as they produce the retailers own brands.

In their effort to become a recognized retail brand international retailers are carrying besides some international brands such as Nestle and Danone also retailers own brands. These retailer branded products have to be produced accordingly to the global quality standards of the retailers and are mostly positioned in the lower price segments. In addition, because local brands are currently perceived as high quality, a good value-for-money, and benefit from Russians' patriotic impulse to buy "Russian-made" products, international retailers carry also national Russian brands.

Summarizing the trends of global sourcing and retail branding one can conclude that international retailers have to work hard to build up a functioning quality management. However, because today quality management of food products demands efforts along the whole food chain one can easily see that international retailers have to establish a chain quality and supply management concept. As the example of Metro Russia shows they are establishing all elements of the 'western' supply and quality chain management in Russia at all suppliers. This means that Russian suppliers have to be willing to accept that Metro is the chain captain setting the process standards throughout the whole supply chain. Because modern chain management (both supply chain and quality management) demands high investment in IT and technology infrastructure only a minority of Russian suppliers will be able to stay in the chain in the medium and long term. However, this development also demands that Metro as the focal company has to motivate its Russian suppliers to comply with its rules and standards. Incentives for the cooperation can be opportunity of international as well as national growth, the prompt and mere payment of the supplied goods, reputation effects etc. Additionally Metro has to work out mechanisms to coordinate its suppliers. Hereby especially the long distances combined with bad road infrastructure (even Siberia has to be delivered) are major challenges. Because IT infrastructure is rather in its beginning Metro has to accomplish a tremendous task to install its IT demands. For example, Metro has already established its supplier portal (enables e.g. electronic data interchange (EDI)) in Russia (LZ 2007).



The present process of retail internationalization has brought about new trends on the agri-food sector such as global sourcing and retail branding, which automatically generated the necessity for quality of the produced goods and pointed out the importance of vertically coordinated food chains and the applicability of the supply chain management concept implemented by a focal company usually represented by a retailer company.

Recent developments in the agri-food business sector of Russia such as the increase of sales levels of consumer goods, growth of per capita income and of the demand for high-quality retail outlets as well as entrance of foreign investors into the country's consumer goods market, bringing with them new technologies and name brands, have created the conditions for large-scale changes in the wholesale and retail infrastructure of the country. The changes in the retail sector have been most evident, since this sphere is the most visible one. One can safely say that supermarkets, hypermarkets, and discounters are now becoming an integral part of Russian life, at least in large cities.

Although the growth in large-scale chains may eat into the nominal market share of wholesalers, this will be more than offset by even greater growth in the consumer goods market as a whole. Regional distributors should not see a threat in the recent growth of large retail chains. First, Russia is geographically too large, and in the regions there are too many variations in local conditions, to allow one company to take on the role of a true national player. Even the most formidable chains in Moscow and St. Petersburg do not have sufficient resources to undertake large-scale expansion into the regions. In the provinces, local – as opposed to national or international retail chains are most common, and even for them their total market share is relatively quite small. Second, sophisticated distributors have good opportunities for growth even if the market structure changes substantially. The market itself is growing larger, and there is sufficient room for everyone. In addition, small and uncompetitive players are also being weeded out. Therefore, despite the rapid development of retail chains that try to eschew wholesalers, flexible distributors can in fact benefit from this growth as well.

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