Retail Sector Transformation in Russia

Komendrovskaya Irina
Leibniz-Institut für Agrarentwicklung in Transformationsökonomien(IAMO), Halle

Ihtiyor Bobojonov

Leibniz-Institut für Agrarentwicklung in Transformationsökonomien(IAMO), Halle

Thomas Glauben

Leibniz-Institut für Agrarentwicklung in Transformationsökonomien(IAMO), Halle

Kontaktautor: Komendrovskaya@iamo.de

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Abstract

Russia's agrifood industry, including processing, wholesale, and retail underwent tremendous changes since the collapse of the Soviet Union. In this transition from the planned to a market economy, supermarkets emerged as important players in Russia, affecting agrifood system via organizational and institutional changes including centralization of procurement from farmers and demanding private standards on product quality and safety. The importance of retail sectors became especially explicit since agricultural import embargo, introduced by Russia as a result to Western sanctions. Since then Russian government is introducing several reports in order to improve the function of the agricultural supply chains for national food security. Taking into account growing share in retail, supermarkets can exert power on various supply chain components as a key link in the whole food supply chain. Therefore it is of great importance to get insight into their transformation process not yet investigated in detail in case of Russia. In order to fill this research gap, this study examines the penetration of supermarket chains and factors contributing to development of modern retailing in Russia. The panel data at regional level is used in order to investigate the factors influencing on modernization of retail sector in Russia.

Keywords

Agrifood system, food supply chain, food security, sanctions, import.

1 Introduction

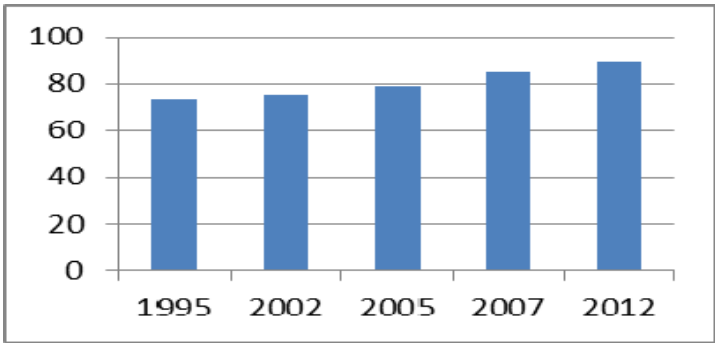
The rapid rise of supermarkets in the developing countries has been documented in a variety of studies(TRAIL (2006); DRIES et al. (2004); REARDON and BERDEGUE 2002; REARDON et al. (2003); HU et al. (2004); REARDON and HOPKINS (2006); GODRON et al. (2004)).

Reardon et al. (2002) identify the factors contributing to the spread of supermarkets. Demand side factors comprise such variables as increase in income per capita, urbanization, share of women in the workforce and growing number of refrigerators ownership. On the supply side the rise of supermarkets was driven primarily by FDI in food retailing.

In the 1990s agriculture industry sector in Russia was privatized followed by the emergence of modern retail formats. After the communist system ceased to exist, retailers got the opportunity, to be legally engaged in economic operations of selling and buying goods, which led to a massive increase in retail turnover and to a vast growth of retailers subsequently (MCKENZIE and DUKEOV, 2015:178) The retail turnover of trading organizations of all economic operators in Russia amounted to 21394,526 Billion Rubles in 2012. For 90 percent from the sum accounted trading organizations, conducting activities outside of marketplace (Figure 1).

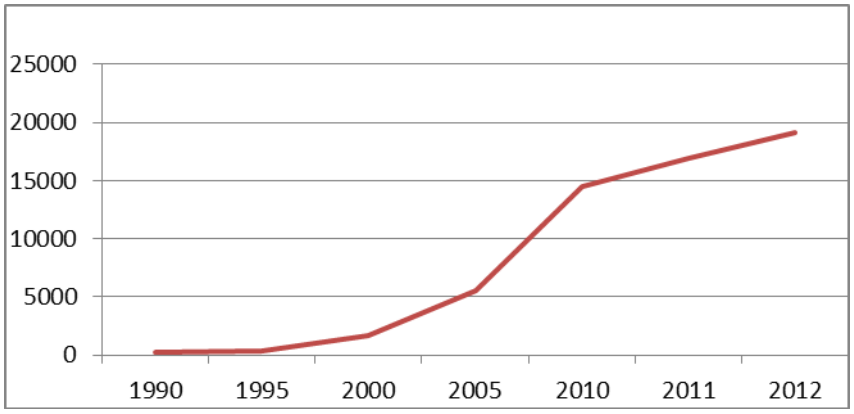
The illustration of the development dynamics of retail turnover generated by trading organizations, conducting activities outside of marketplace is presented in Figure 2.

Figure1: The percentage share of trading organizations in total retail turnover over period 1995-2012, %



Source: own illustration based on data of Goskomstat (Russian state statistics committee)

Figure 2: The Dynamics of retail turnover, generated by trading organizations over period 1990-2012, Billion Rubles



Source: own illustration based on data of Goskomstat (Russian state statistics committee)

Whereas the turnover of trading organizations, conducting activities outside of marketplace equaled to 232 Billion Rubles 1990, this indicator increased by almost 8 times to 1735,155 Billion Rubles over the period of 10 years. Additional to growing retail turnover, large structural changes are also observed since the collapse of the Soviet Union. For example, 73 percent of retail belonged to the share of trading organizations in year 1995 and nowadays about 90 percent belong to trading organizations, conducting activities outside of marketplace, which are considered as modern form of retail in the existing literature.

As far as supermarket chains are concerned, the same growing trend is observable. However the data on the percentage share of supermarket chains in total retail turnover is provided by Russian state statistics committee only since 2009. According to Goskomstat the percentage share of supermarket chains in total retail turnover amounted to 21,5 percent in 2013, which is 6 percent more than 2009.

2 Data and methodology

All data were obtained from Goskomstat, the Russian state statistics committee. The panel data set for the 2009-2013 period using indicators for 78 Russian oblasts and two cities (Moscow and St. Petersburg) was compiled, which comprises 389 observations.

The OLS linear regression analysis is used to analyze the development of supermarket chains in Russian Federation during 2009-2013.

$$Y_{it} = \bar{\alpha} + X_{1it}\beta_1 + X_{2it}\beta_2 + X_{3it}\beta_3 + X_{4it}\beta_4 + e_{it}$$

Where $\bar{\alpha}$ and β are the intercept and slope of this simple linear relationship between Y and X; i represents oblast and t a year; e stands for a random error.

The dependent variable is defined as the percentage share of supermarkets in the retail trade turnover (Y_{it}). Independent variables are average income per capita (X_{1it}), urban share of the population (X_{2it}), population density (X_{3it}), density of public service hard surface roads (X_{4it}). All data are given per annum except for the average income per capita, which was generated monthly. Average money income per capita is measured in thousand rubles, the percentage share of supermarkets in the retail trade turn over in percent and population density in men per 1 squared km. Density of public service hard surface roads is defined as length of public service hard surface roads in kilometers per unit of 1000 square km land area of Russian Federation or region of Russian Federation.

3 Results

For the purpose of conducting the analysis the above described equation was log transformed and a fixed effects model was used to estimate the influence of indicators, defined in the model, on the share of supermarkets in the retail trade turn over. The presentation of the results estimated for the model is shown in Table 1.

Table 1: Regression results of supermarket chains penetration in Russia over oblast 2000-2013

Independent variable	Coefficient	t-value
Average income per capita	1,427	7,76
Urban share of the population	-0,09	-0,11
Population density	8,069	3,67
Density of public service hard surface roads	-0,187	-1,34
Constant	-30,947	-4,44
R-squared	0,2805	

The estimation results show that two parameters of the regression model are significant: a 1 % increase in average income per capita induces 1, 43 % increase in the percentage share of supermarkets in the retail trade turn over and a 1 % increase in population density leads to 8 % increase in in the percentage share of supermarkets in the retail trade turn over. The other variables are statistically insignificant.

With the growing income per capita the demand for processed foods increases, following Bennett's Law. As a consequence of this supermarkets entry the market, since they can offer these goods at lower price and in a wider range than traditional merchants due to economies of scale.

According to Goskomstat during the last decade the average income per capita has been growing in Russia by 20% on average.

Another factor influencing the growth of supermarket chains is the population density. In order to be profitable supermarkets need a minimum amount of clients. The Russian population is extremely unevenly distributed over the vast country. The Federal district with the highest population density is the Central federal District with 59, 66 men per 1 square km (including Moscow). The structure of Russian retail sector is such, that the supermarket chains are concentrated mostly in the Central federal District and Moscow city, where the population density and average income per capita are the highest ("Regiony Rossii. Sozialno-Economitcheskie Pokazateli 2014", Russian Statistical Year Book).

4 Conclusions

The regression analysis showed that both average income per capita and population density have significant impact on supermarket penetration in Russia. Despite high growth rates, retail sector in Russia is far from being saturated. There are a lot of opportunities for further growth. However the recent sanctions on imports to Russia showed that Russian agrifood system is subjected to some serious challenges (such as high dependence on imports of various supply chain components, including supermarkets). Yet, relations to local food producers are not well developed. This is mainly explained by large territory and poor infrastructure in Russia. Importing food products may be less expensive than collecting them from local producers at the absence of rural infrastructure. In order to ensure food security, these challenges must be addressed by policy makers.

References

DRIES, L., T. REARDON and J.F.M. SWINNEN (2004):The Rapid Rise of Supermarkets in Central and Eastern Europe Implications for the Agrifood Sector and Rural Development. Development Policy Review 22 (5): 525-556.

GODRON, J.M., Z. BOUHSINA, F. FORT, E. COUDEL and A. PUECH(2004): Supermarkets in Low-Income Mediterranean Countries: Impacts on Horticulture Systems. Development Policy Review 22 (5): 587-602.

HU, D., T. REARDON, S. ROZELLE, C.P.TIMMER and H.WANG(2004): The Emergence of Supermarkets with Chinese Characteristics: Challenges and Opportunities for China's Agricultural Development. Development Policy Review 22(5): 557-586.

MCKENZIE, B. and I. DUKEOV (2015): Retail Strategy and Policy in Russia. In: Mukherjee M., R. Cuthberston and E Howard(eds): Retailing in Emerging Markets: A Policy and Strategy Perspective.KentGreenGate Publishing Services: 176-199.

REARDON, T. and J. BERDEGUE (2002): The Rapid Rise of Supermarkets in Latin America: Challenges and Opportunities for Development. Development Policy Review 20 (4): 371-388.

REARDON, T., C. P. TIMMER, C. BARRET and J. BERDEGUE (2003): The Rise of Supermarkets in Africa, Asia and Latin America. American Journal of Agricultural Economics 85(5): 1140-1146.

REARDON, T. and R. HOPKINS (2006): The Supermarket Revolution in Developing Countries: Policies to address emerging Tensions among Supermarkets, Suppliers and Traditional Retailers. European Journal of Development Research 18 (4): 522-545.

Regiony Rossii. Sozialno-Economitcheskie Pokazateli 2014. Russian Statistical Year Book. Goskomstat(Russian State Statistics Committee).

Regiony Rossii. Sozialno-Economitcheskie Pokazateli 2010. Russian Statistical Year Book. Goskomstat(Russian State Statistics Committee).

Regiony Rossii. Sozialno-Economitcheskie Pokazateli 2000. Russian Statistical Year Book. Goskomstat(Russian State Statistics Committee).

TRAIL, W.B.(2006): The rapid Rise of Supermarkets? Development Policy Review 24 (2): 163-174.