

CURRENT TRENDS OF MEAT MARKET DEVELOPMENT IN THE REPUBLIC OF TATARSTAN

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ABSTRACT

The article reveals the basic sector-wide problems of meat industry in the Republic of Tatarstan, related to the insufficient productive capacity use as well as to inefficient cost structure in terms of fixed and variable costs ratio. As evidenced by the conducted analysis the operation of most meat-processing enterprises of Tatarstan Republic is instable and the proposed strategic development programs lack sufficient justification. This carries inference that the system of business processes management is inefficient. Sector-wide indicators of prime cost, sales and output profitability prove the consistent decline in efficiency of meat-processing plants in the Tatarstan Republic.

Key Words: *Output Profitability, Prime Cost, Sales, Production Costs, Competitiveness of Domestic Companies, Meat-Processing Plant, Meat Products, Enterprise Efficiency*

INTRODUCTION

Food Industry in the Republic of Tatarstan is strategically significant for the economic policy of the region and the country as a whole. The economic sanctions applied to Russia by some foreign countries and the resulted import substitution policy makes the problems of food industry even more relevant and acute. The current trend in the food industry determines the level of Russian economic and food security. The economy of the studied food industry is characterized by a number of problems that have various regional differences. The most important of these is the limitations in the domestic meat supplies. The statement of this problem is caused, first of all, by non-competitive products of the Russian agricultural producers.

During the years of economic reforms, the production in most republican agricultural branches has decreased, with live-stock breeding suffering the most. The main reason is the inefficient use of productive capacity in the current cost structure, especially in terms of fixed and variable costs ratio. This problem requires a fundamentally different quality of agricultural policy, where a tool to increase competitiveness should be the main criterion for effective state regulation and support, that is, reduction of production costs per unit, improvement of agricultural producer's financial standing and production profitability increase.

MATERIALS AND METHODS

The issues of the processed meat market development were touched upon in the papers of Keramidou, I., Mimis, A., Pappa, E., Filios, S., Goldsmith, P., Salvador, A., Knipe, D., Kendall, E. who investigated the development of this industry. At the same time the problem of non-competitive domestic producers remained unsolved. For this we have studied the publication of

Kapaj, I., Kapaj, A.M., Muca, E.D., Kurmangaliyev, S.G., Mizambekova, S.K., Akylbaev, R.S., Turysbecova, G.K., who researched the questions of enterprises competitiveness in current conditions and the problems associated with the development of the meat market.

RESULTS

Statistical analysis of meat production has shown that the greatest potential for increasing raw material base of the meat industry is in poultry and pig production. According to some estimates, there is a possibility of annual increase in the supply of poultry by 10% (Keramidou, 2010).

Table 1
CATTLE AND POULTRY STOCK IN THE FARMS OF ALL CATEGORIES IN THE REPUBLIC OF TATARSTAN IN 2010-2014, THOUS

Year	Cattle	including			Poultry
		Cows	Pigs	Sheep and goats	
2010	1214,5	493,9	750,1	451,1	10686,1
2011	1196,3	478,3	755,6	428,7	9739,5
2012	1174,7	469,3	757,2	417,8	9267,0
2013	1150,1	460,1	720,7	397,9	9098,9
2014	1116,6	447,5	695,1	378,4	9061,7

The situation in the farms of Tatarstan predetermines the state of main livestock products manufacturing, as shown in Table 2.

Table 2
MANUFACTURING OF THE MAIN LIFE-STOCK PRODUCTS IN THE REPUBLIC OF TATARSTAN IN 2010-2014, THOUS. TONS

Indicators	2010	2011	2012	2013	2014
Cattle and poultry for slaughter, live weight	274,4	281,3	289,1	305,6	307,3
Carcass weight	171,0	179,8	183,7	194,9	198,2
Including :					
cattle	74,9	86,1	84,4	86,0	83,7
pigs	46,4	54,1	56,4	57,4	57,9
sheep and goats	10,1	9,1	8,7	10,1	8,7
poultry	37,8	28,5	32,2	38,9	45,3

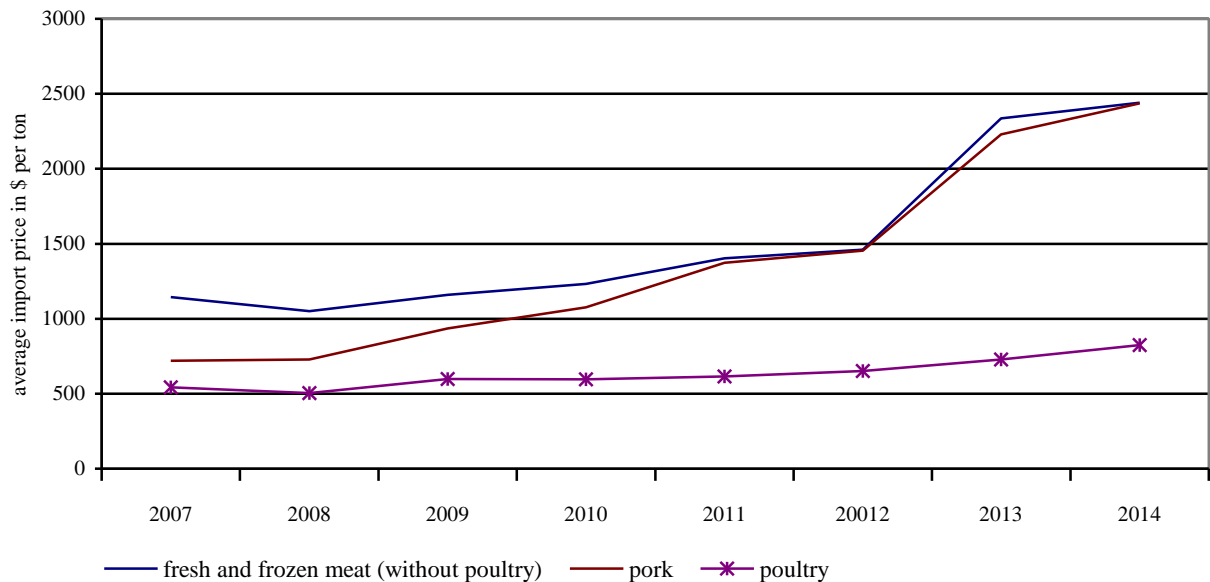
One should highlight the sector-wide downward trend in lamb production. Despite this, some farms specializing in growing and fattening sheep remain viable and competitive in current market conditions (Strandskov, J., 2006).

A more favorable situation is observed in the production of pork. Compared to 2009, the production of pork in 2014 increased by 11% despite the fact that the overall situation in the sector in the period of economic reforms has worsened (a sharp decline in the mixed feed production, worse quality, decrease in the average daily weight gain in growing and fattening), which is caused by a relatively small period of the fattening and decreased costs.

Over the last four years (from 2010 to 2014) the production of beef and poultry has also increased by 12% and 20% respectively (Kurmangaliyev, S.G., 2013).

To support local producers and improve the profitability of the domestic live-stock breeding in Russia quotas on imported products were introduced, which resulted in a shortage of raw materials and a sharp rise in the prices for meat products (Jin H.J., 2008). From 2009 to 2014 prices for imported raw meat more than doubled (Figure 1).

Figure 1
DYNAMICS OF AVERAGE IMPORT PRICES FOR MEAT FROM 2007 TO 2014



Epizootic has also affected the world prices for meat, as it was the reason for temporary banned supplies from various countries. For the period under review the whole regions were excluded from the meat supplies – South Asia with poultry, the USA with beef and Brasilia, which is the largest world exporter, with all sorts of meat. Prices for the imported meat rose due to an increase in transportation costs (high fuel prices) and currency rate growth (Ding, M.J., 2014).

During 2007-2014 the average retail price for all types of Russian sausage products increased almost two-fold. This is due to rising prices for basic raw materials as imported meat is mainly used for the production of sausages. Thus, for the period under review the price of imported beef and pork increased by 30%, for poultry - by 20%, for domestic beef prices rose by 126%, for pork - by 130% and for poultry - by 89%. Another reason for the rise in prices for sausage products is an increase in the inflation rate, which tends to grow by the end of the year (Marchant S. R., 2007).

The sharp rise in raw materials prices has resulted in the situation when almost all manufacturers of meat products ended in 2014 with a slight advantage, and some - with a negative margin. However the market experts indicate that the rise in prices for raw materials and for finished products of meat processing industry was disproportionate. Despite the fact that profitability falls, producers cannot raise the price of their products for consumers, since this will reduce the demand (Shchetinina C., 2013).

We will consider the performance of the meat-processing enterprises in the Republic of Tatarstan in recent years. According to the statistics 39 meat-processing enterprises were operating in the Republic in 2014. Since 2008 the number of enterprises in the meat industry has increased 1.6 times. In 2014 meat processing enterprises of Tatarstan Republic produced the products totaling 3 425.1 million rubles (Table 4).

Table 4
DYNAMICS IN THE VOLUME OF OUTPUT IN THE MEAT INDUSTRY (IN ACTUAL SALES PRICES) IN RUSSIA AND IN THE REPUBLIC OF TATARSTAN, THOUS. RUB

Years	Russian Federation	Republic of Tatarstan	Percentage, %
2008	37 935 192	859 399	2,27
2009	56 006 719	1 261 512	2,25
2010	79 146 945	1 816 280	2,29
2011	111 466 901	2 619 550	2,35
2012	123 917 444	2 705 387	2,18
2013	150 443 496	4 073 246	2,71
2014	195 960 971	3 425 141	1,75

Meat products manufacturing in the Republic of Tatarstan has an instable trend. The increase in meat production from 2009 to 2012, in sausage production from 2009 to 2014 and a decrease in their production during the last two years and in semi-finished meat products since 2012 (Table 5) is due to the fact that production volumes of meat products in physical terms have a significant tendency to decrease with an increase in the market price for the products. (Theuvsen, L., 2007) According to the statistics in Table 5, the rise in producer prices lags behind the growth of consumer prices in the market. We have considered the statistical sample for the meat-processing enterprises of the Republic of Tatarstan, which accounted for about 80% of the manufactured products (Hartmann, M., 2004).

Table 5
PRICE INDICES (DECEMBER OF THE CURRENT YEAR TO DECEMBER OF THE PREVIOUS YEAR; %)

Type of product	Years					
	2009	2010	2011	2012	2013	2014
Consumer price index						
Meat and poultry	128,3	128,5	102,7	108,9	119,6	118,6
Sausage products	123,8	122,4	106,0	107,0	119,4	110,1
Meat producers price index						
Meat	137,5	121,8	97,8	112,1	122,0	110,6
Cooked sausage products	134,6	121,1	105,3	106,6	121,6	107,8
Farmers price index						
Live-stock products	122,1	130,4	104,9	105,3	119,5	117,5

The business process of meat-processing enterprises material procurement (raw materials, main and secondary materials) is essential as the quality of raw materials, supply stability and prices for resources predetermine the effectiveness of the other processes and products competitiveness.

The share of unprofitable enterprises in 2014 amounted to 41.2%, whereas in 2010 this figure was 33.3% (Table 6).

Table 6
KEY FINANCIAL INDICATORS FOR MEAT INDUSTRY IN THE REPUBLIC OF TATARSTAN FOR 2010-2014

	2010	2011	2012	2013	2014
Net financial result, mln. rub.	33,1	48,2	46,1	22,7	26,8
Number of unprofitable enterprises, units.	3	1	3	8	7
Share of unprofitable enterprises in the total number of enterprises, %	33,3	9,1	21,4	61,5	41,2
Losses, mln. rub.	18,8	18,0	6,3	35,0	33,1
Selected indicators of solvency and financial stability of industrial enterprises at the end of the year, %					
Current liquidity ratio	83,1	76,5	108,5	113,3	136,2
Working capital to current assets ratio	-51,2	-58,7	-35,2	-9,4	1,0
Total debt to equity	37,0	35,7	53,5	59,8	55,0

CONCLUSIONS

Thus, over the past three years from 2012 to 2014, there is a downward trend in gross income of most meat processing enterprises of Tatarstan. The pattern of change in the profit of sales indicator, cost per 1 ruble of marketable products and profitability for the period under review lack any clear cut regularities

The analysis indicates instability of large meat-processing enterprises of the Republic of Tatarstan, the absence of strategic development programs, which leads to the conclusion about the inefficient management of business processes (Goldsmith, P., 2002).

The price situation on the market of meat and meat products is influenced by the level of costs, which are the basis for the distribution of revenue from sales and for determining the economic efficiency of the industry (Lozynska, I., 2014).

In this regard, it is necessary to analyze the cost composition of output by cost elements, in order to outline the reserves for increasing profitability and competitiveness, and to identify the opportunities for industry development. The data on the cost composition of meat output in the Republic of Tatarstan are presented in Table 7.

Table 7
COST COMPOSITION OF MEAT OUTPUT BY COST ELEMENTS FOR TATARSTAN ENTERPRISES, %

Cost item	2012	2013	2014
Raw materials cost	77,22	66,53	69,03
Fuel, power, water cost	2,91	5,97	6,14
Payment for intangible services, and other items of intermediate consumption	2,36	5,95	2,58
Labour cost	9,31	10,25	12,66
Amortization of fixed assets	1,99	3,22	2,83
Taxes and fees included in the unit cost of goods (work, services)	0,84	0,82	1,28
Other costs	5,37	7,26	5,48

The data in Table 7 give evidence to the fact that the largest share (more than 2/3 of the total cost) is due to the cost of raw materials. During the study period, this position has decreased by 8%. (Rudych, O.O., 2014). This suggests that the decline in the cost of raw materials will increase the competitiveness of the enterprise, which can be achieved through the development of raw material base and improvement of sales channels of raw materials between the supplier and the processor. One may experience a situation where farmers and meat processing companies, having common interests to increase the volume of production and sales, cannot determine a mutually beneficial terms of cooperation, promoting the development of enterprises (Sadler, I., 2002).

The economic efficiency of the industry, as noted earlier, is determined by the ratio of costs and profits from the sale (Kapaj, I., 2013). Industry indicators of prime cost, sales volumes and meat output profitability are given in Table 8.

Table 8
INDICATORS OF PRIME COST AND SALES FOR LARGE AND MEDIUM-SIZED ENTERPRISES OF THE REPUBLIC OF TATARSTAN, MLN. RUB

Indicators	2012	2013	2014
Output of goods and services	1 359	1 158	1 348
Prime cost	1 342	1 164	1 397
Profit	16,327	-6,627	-48,441
Profitability , %	1,2	-	-

Indicators from Table 8 confirm the downward trend in the profitability of production for the meat industry enterprises in Tatarstan, due to the disparity of prices for raw materials and finished products (Horská, E., 2008).

It should be noted that the profitability of production in the whole country tends to decrease. Profitability is an indicator for measuring the efficiency of using company's assets and liabilities (Battalova, A.R., 2015).

Overall profitability shows how much of net profit (net economic benefit) accounts per one ruble of invested total capital in the company (Kundakchyan, R.M., 2014):

$$R = \frac{P}{C} \cdot 100\% \quad (1)$$

Where R – overall profitability;

P – sales profit;

C – cost of products sold.

Thus, the overall profitability shows the performance of the enterprise.

In our view it is possible to improve the profitability of output and to increase the production of the company by purchasing the equipment of increased capacity, allocating additional production areas and improving the supply of raw materials, as well as by attracting additional financial resources, which might be government subsidies or investments of the third business entities (Bagautdinova, N.G., 2013).

Analysis of this issue at the international level shows that in developed countries agribusiness has been heavily subsidized by the government for many years. However, in the Republic of Tatarstan, as well as in Russia as a whole, the situation is different: the volume of public subsidies to domestic agricultural producers does not allow them to develop their potential. Therefore, raising investment from domestic and foreign producers could be one of the solutions to the problem (Nesterov, V.N., 2015).

SUMMARY

Considering everything mentioned above, we can conclude that the meat processing enterprises of Tatarstan require a detailed marketing analysis of their own capabilities, because it is important for domestic and foreign investors to have complete and accurate information about the prospects of the funded projects. The methods of marketing analysis allow giving a reliable estimation to the company potential, to develop and implement a marketing strategy in the company management practice that could provide a competitive advantage in the meat market.

CONFLICT OF INTERESTS

The author confirms that the provided data do not contain any conflict of interests.

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REFERENCES

- Bagautdinova, N.G., Malakhov, V.P., Kundakchyan, R.M. (2013). Development of management system of manufacturing companies on the basis of management accounting elements. *World Applied Sciences Journal*, 27(13), 53-57.
- Battalova, A.R., Kundakchyan, R.M. (2015). The problem of food security in Russia. *Mediterranean Journal of Social Sciences*, 6(3), 773-776.
- Ding, M.J., Jie, F., Parton, K.A., Matanda, M.J. (2014). Relationships between quality of information sharing and supply chain food quality in the Australian beef processing industry. *International Journal of Logistics Management*, 25(1), Article number 17112099, 85-108.
- Goldsmith, P., Salvador, A., Knipe, D., Kendall, E. (1 December 2002). Structural change or logical incrementalism? Turbulence in the global meat system. *Journal on Chain and Network Science*, 2(2), 101-115.
- Hartmann, M., Schornberg, S. (2004). Is meat processing in Central and Eastern European new member states competitive after EU accession? *EuroChoices*. Volume 3(1), 26-31.
- Horská, E., Orémus, P. (2008). Processes and problems of the marketing management adaptation at the EU market: The case of the Slovak meat processing industry. *Agricultural Economics*, 54(8), 392-398.
- Jin, H.J., Kim, J.-C. (February 2008). The effects of the BSE outbreak on the security values of US agribusiness and food processing firms. *Applied Economics*, 40(3), 357-372.
- Kapaj, I., Kapaj, A.M., Muca, E.D. (October 2013). Quality management systems in meat processing industry in Albania - Quantifying factors that influence its implementation. *Mediterranean Journal of Social Sciences*, 4(10), 470-472.
- Keramidou, I., Mimis, A., Fotinopoulou, A., Tassis, C.D. (2013). Exploring the relationship between efficiency and profitability. *Benchmarking*, 20(5), 647-660.
- Keramidou, I., Mimis, A., Pappa, E., Filios, S. (2010). Efficiency of meat products industry in Greece: A bootstrap DEA approach. *International Journal of Interdisciplinary Social Sciences*, 5(9), 15-28.

- Kundakchyan, R.M., Zulfakarova, L.F. (2014). Current issues of optimal capital structure based on forecasting financial performance of the company. *Life Science Journal*, 11(6), 368-371.
- Kurmangaliyev, S.G., Mizambekova, S.K., Akylbaev, R.S., Turysbecova, G.K. (2013). About the Status of Meat Industry in Kazakhstan and in the World. *Middle East Journal of Scientific Research*, 17(4), 434-439.
- Lozynska, I. (2014). Basic ways and mechanisms to overcome economic and legal problems in meat and dairy sectors. *Economic Annals-XXI*, 9(10), 52-55.
- Marchant S. R. (September 2007). Scale economies estimation in the pork meat industry in Chile. *Agricultura Technica*, 67(3), 292-299.
- Nesterov, V.N., Akhtyamova, A.S., Domracheva, E.S. (2015). Accounting and analysis in managing the cost of innovation. *Mediterranean Journal of Social Sciences*, 6(1S3), 217-221.
- Rudych, O.O. (2010). Methodical approaches to competitiveness estimation for meat-processing enterprises. *Actual Problems of Economics*, (8), 150-157.
- Sadler, I., Hines, P. (2002). Strategic operations planning process for manufacturers with a supply chain focus: concepts and a meat processing application. *Supply Chain Management*, 7(4), 225-241.
- Shchetinina, C., Starikova, M., Ponomareva, T., Tumanov, S. (2013). Peculiarity of market positioning of the food industry in Russia. *Middle East Journal of Scientific Research*, 17(8), 1138-1148.
- Strandskov, J. (2006). Sources of competitive advantages and business performance. *Journal of Business Economics and Management*, 7(3), 119-129.
- Theuvsen, L. , Franz, A. (2007). The role and success factors of livestock trading cooperatives: Lessons from German pork production. *International Food and Agribusiness Management Review*, 10(3), 90-112.