THE FOOD MARKET IN POLAND: GENERAL DESCRIPTION OF THE FOOD CHAIN

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Abstract

The food market in Poland is under the substantial changes. The paper shows the nature, direction and scope of the changes the entire food marketing system is undergoing currently, as a result of the decentralization, demonopolization and privatization endeavours. The recent changes in farm production, processing, distribution and consumption of food products are discussed. It is hoped that the general picture of the food market in Poland will help better understand the challenges and opportunities created in this sphere by the process of transformation in Poland.

Résumé

Le marché alimentaire en Pologne est en train de subir des changements profonds. Ce travail illustre la nature, la direction et l'importance de ces changements qui intéressent tout le système de la commercialisation alimentaire, à la suite des efforts de décentralisation, démonopolisation et privatisation. Ce travail expose aussi les changements récents de la production agricole, de la transformation, de la distribution et de la consommation des produits alimentaires. A travers la description du cadre général du marché alimentaire en Pologne, on espère réussir à mieux comprendre les défis et les opportunités créées par le processus de transformation qui intéresse la Pologne.

In the wake of the transformation of the Polish economy important changes are also taking place in the food sector. These changes started in 1990 and are manifested in deconcentration, demonopolization, and privatization on all levels of the food market. Changes are taking place in the entire food marketing system, but their scale varies. An important stage of the transformations in the food sector was the liquidation of the central union of cooperative societies. This decision initiated the process of deconcentration of the food sector. The role of the private sector in the food chain has been increasing since 1990, but state and cooperative entities, often acting as monopolists, still play a vital role at the purchase and processing level of agricultural and food products.

Suppliers

The first link in the food chain is the farm. About 76% of agricultural land of Poland belongs to individual farms. Small private farms with an average size of less than six hectars dominate in the agrarian structure of the country. Thus Polish farming is fragmented and deconcentrated. Due to the dominance of the private sector, most purchases of agricultural products are from this sector. In 1991 nearly 70% of all plant production and 76% of animal production (**Table 1**) were purchased from this sector. A sizable amount of the market production also came from state farms (around 27% of all plant production and less than 20% of animal production in 1991). Producers' cooperatives play the least important role at the level of agricultural production. Less than 4% of total purchases of plant and animal production in 1991 came from these entities (**Table 1**). In January 1992 the Agricultural Property Agency of the State Treasury was established to create new conditions and possibilities for structural transformations of state farms. Regional offices of the Agency have been already started and legislation efforts are under way which will permit to privatize and restructure the farmland and production inputs belonging to state farms. The process of privatization of state sector runs slow, with difficulties, but as a consequence of that, a lot of these entities have been liquidated since 1992. At the

Table 1 ***Purchase of agricultural products in 1991.***

Specification	Constant prices 1985-89 = 100	Constant prices 1990=100	Structure total	Structure plant	Structure animal
Total	67,8	106,4	100,0	100,0	100,0
of which of:					
State farms	72,4	99,5	21,9	27,2	19,7
Cooperative farms	66,3	99,7	4,1	4,1	4,2
Individual farms	66,6	109,1	74,0	68,7	76,1

Source: GUS, Concise Statictical Yearbook, Warsaw 1992.

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same time it should be emphasized that the share of the state sector in agricultural production in Poland is constantly decreasing.
As it was said the farm in Poland is characterized by small size farms. It precludes effective utilization of modern technology and besides, it is impossible to assure an appropriate "factor-mix" on such the farms. This situation implies high costs of agricultural production and hence, low agricultural income. High costs of production cause an ineffective sale of agricultural products. Accordingly, low incomes, do not allow for improvement of technology or for modernization of production whatever. Technological gap is still increasing.
When we follow movements in price relation there is observed a big discrepancy between prices received by farmers and prices paid for production and consumption commodities. This process of a rapid deterioration of the price relation against farmers was started in 1990 (see **Table 2**). It was connected with the process of freeing prices at all levels of food market initiated in 1989. Before this period, the food policy in Poland was sustained by subsidies to agriculture, to the industries producing agricultural inputs, to food processing and to foodstuffs themeselves. On the other hand cheap imported food from EC countries dictated low purchase prices for Polish produce Food imports caused the prices received by Polish farmers rosed, during analysed period, far more slowly than prices paid by farmers for production and consumption commodities. It resulted in widening price spread at the farm and retail level.
An essential link of food economy is food-processing industry. Despite the large number of private firms being established in the food industry, their share in food production is still smaller than that of state enterprises. In 1991 97% of the organizational units of the food industry were in the private sector, and only 3% in the state sector. At the same time, however, the share of the private sector in the sale of products and services of the food industry in 1991 only came to 44%, with the share of the public sector still impressive 56% (**Table 3**).
Still a weak spot of the Polish food processing industry is the lack of so-called «convenience food». The main reason for this is the fact that the food industry is underinvested and inefficient. There is observed in food-processing industry permanent increase of costs of production level, especially costs of machinery, packing, energy and labour. The food-processing industry strives to keep its profit-earning capacity by increasing process of manufactured goods and shifting the high costs of production on its partners, especially to farmers supplying raw materials and consumers of the final products. Small adaptative ability is shown by the state units which have inefficient equipment and outdated technologies. Some of these state units have made a progress since 1991 in adjusting to the changing market conditions; especially it has been observed in processing of meat, chicken industry, brewery, confectionery and bakery industries. Food industry in Poland is under transformation and still requires technical and technological reconstruction in connection with changes in property structure.
Much more tangible changes have taken place recently in food distribution than in processing. The private sector is capturing an ever large share of food sales. New supermarkets are opening up that meet Western standards, and the number of fast food chains is increasing.
Changes in the ownership structure of wholesale trade are pictured in **Table 4**, which shows the growing importance of private wholesalers. In 1991 the share of the public sector in total sales constituted 52%, the share of the private sector at the same time – 48%. In 1992 further changes took place in the ownership structure of wholesale trade to the adventage of the private sector. If we examine the structure of wholesale sales according to sectors of ownership, we see that nonfood articles made up the bulk of wholesale sales of state enterprises in 1991 – 83%. Food products constituted only 11% of the total sales of this sector. The structure of private wholesale sales differs essentialy from the structure of state trade. Although nonfood articles also dominate in private wholesale trade, their share is 13 percent lower than in the state sector. Food products are an important item in private wholesale trade, making up 21% of the total sales of this sector, nearly twice as much as in the state sector (GUS, Statistical Yearbook, Warsaw 1992).
During the period 1990-1991 a revolution took place in the ownership structure of retail trade. In 1992 this trend continued. In 1991 nearly 86% and in 1992 more than 90% of the retail trade was in private hands, whereas only a few years ago the situation was just the opposite, i.e., state firms controlled 90% of the retail trade (**Table 5**).
The role of foreign suppliers of food products till 1991 was important. It was caused by changes in the foreign trade system initiated in 1990. These changes were connected with radical liberalization of the

Table 2 ***Price indices in agriculture.***

Specification	1990 1989 = 100	1991 1990=100
	percentage	
Indices of price received by farmers	378,7	129,4
Indices of price paid by farmers	764,3	173,0
Indices of price relation received and paid	49,5	74,8

Source: GUS, Statistical Yearbook, Warsaw 1992.

Table 3 ***Food industry's production for sale in 1991.***

Total	Public sector	Private secto
	percentage	
100,0	56,0	44,0

Source: Own calculations based on: GUS, Concise Statistical Yearbook, Warsaw 1992.

Table 4 ***Wholesale sales of commodities in 1991.***

Total	Public sector	Private secto
	percentage	
100,0	52,0	48,0

Source: Own calculations based on: GUS, Statistical Yearbook, Warsaw 1992.

Table 5 ***Retail sales of commodities (current prices).***

Specification	1990 thous.	1991 million zlotys	Structure of retail sales 1990	 1991
Total	220575,0	416742,4	100,0	100,0
of which:				
Public sector	57962,5	59169,4	26,3	14,2
Private sector	162612,5	357573,0	73,7	85,8

Source: Own calculations based on: GUS, Statistical Yearbook, Warsaw 1992.

foreign trade conditions, which meant decreasing the custom duties and liquidating some quantitative restrictions for imports. It resulted in large uncontrolled imports of food products and created a real competition for domestically manufactured products. The negative effects of food imports were restrictions in demand for Polish foodstuffs. Poland's total food imports from the EC in 1991 were substantially greater than her food exports to the EC countries. This situation was radically changed in 1991 when, as a result of farmers demand of some level of protection from foreign competition. In May and August 1991 the level of custom duties on imported agricultural products was increased. It resulted in a sharp decrease of imports in 1992. This increase in custom duties in the main part was transfered to consumers, because the higher customs were entirely incorporated into retail prices for food.
At present there is noted the increase in demand for domestically produced food but still the offer in the Polish food market enrich imported tropical fruits and convenience foods.

Customers

The final link in the food chain are the direct consumers. The position of the consumer on the food market is determined by the relation between income and prices, which in turn determine the demand for food. In 1990-1992 the prices of consumer goods, including food, rose dramatically. The rapid increase of prices was accompanied by a much slower rose of nominal incomes. As a consequence, the real incomes of all major groups of the population rose more slowly than prices. This process was already initiated in 1989, and the next years followed it (Kos, Cz., and J.Szwacka-Salmonowicz, 1992). The data show that in comparison with 1990 in 1991 real incomes in peasant households and worker-peasant households fell (by 8 and 6% respectively). On the other hand in the same period the real incomes of retired and pensioners increased by 13% and those of worker households by a slight 1% In 1992, however, the real incomes of all types of households fell. The greatest decline (18%) was recorded in the incomes of peasant households, the smallest one (4%) in the incomes of worker households (see **Table 6**).
There was a deep diversification in incomes of all types of households in analysed period. Growth of incomes diversification resulted in development of poverty both in the rural and urban areas. In 1991 the percentage of peasant households that received insufficient incomes (¹) was two times higher than the percentage of worker households (respectively 21% of rural population and 11% of urban population). All of these households suffer from certain shortcomings in their level of nutrition.
The decline of incomes was followed by a clear decline in expenditures for food both in absolute terms,and in the percentage of total expenditures. During the period studied (1990-1992) there was a constant decline in the share of expenditures for food in the total expenditures of households (**Table 7**). The scale of the decline differed depending on the type of household. The greatest relative decline in expenditures for food (nearly 10%) in 1991 in comparison with 1990 was noted in households of retired and pensioners. The smallest relative decline of expenditures for food in 1991 took place in peasant households (only 1%). This situation hardly changed at all in 1992. The share of expenditures for food in the total expenses of households of workers, peasants, and retired and pensioners continued to decline, but rose slightly (2%) in the households of worker-peasants. The greatest relative decline of food expenditures in the first quarter of 1992 in comparison with the same period of 1991 took place in worker households (nearly 5%), the smallest decline in peasant households - only 1,5%. In comparison with other households peasant families have been the most successful in protecting their previous consumption patterns.
The cross-section analysis of four groups of households with different levels of incomes showed:
1) over time 1990-1992 the quantity of food consumed and the level of the rationalization in food consumption in low-income households was decreased,
2) high-income households were more successful in protecting their previous consumption patterns in period studied.
In diet of low-income households dominated necessities: as cereals products, potatoes, animal fats, dairy products and eggs. On the contrary in high-income households the process of substitution of necessities for luxuries was observed in period studied. There were noted the quality changes in food consumption in these families. In the diet of high-income households important role played: fish and fish-based products, meat and meat-based products, fruit and vegetables.
However, the decline of real incomes in 1990-1992 did not cause a significant decline in the demand for food in the four basic types of households. Today, even in 1993, the potential demand for food in

Table 6 ***Average per capita real income by household type in 1991-1992.***

Households of	Income in 1991 in relation to 1990	Income in I quarter of 1992 in relation to I quarter of 1991
	percentage	
Workers	101	96
Worker-peasant	94	91
Peasant	92	82
Retired and pensioners	113	92

Source: GUS, Raports of the Department of Social and Demographic Statistics, Warsaw 1992.

Table 7 ***Average per capita expenditure for food as a percentage of total expenditure in 1990-1992.***

Households of	1990	1991	I quarter 1992
		percentage	
Worker	48,0	41,4	36,6
Worker-peasant	50,8	46,1	47,9
Peasant	51,8	50,5	48,9
Retired and pensioners	57,8	47,7	43,1

Source: GUS, Raports of the Department of Social and Demographic Statistics, Warsaw 1992.

(¹) Insufficient incomes mean that per capita incomes in these households are on average lower than the minimum income calculated by the relevant department of the Ministry of Labour and Social Affairs.

Poland is still high, which is due to the relatively high income and price elasticity of demand and consumption of food products. Income elasticity of consumption factors for 1987 for the four main types of social and economic groups are presented in **Table 8**. Preliminary estimates suggest that these factors have not changed much during the present period.

Table 8 ***Income elasticity of consumption in 1987.***

Foodstuffs	Households of worker	worker-peasant	peasant	retired and pensioners
Bread	0,18	0,36	0,37	0,17
Wheat flour	0,23	0,40	0,44	0,27
Rice	0,41	0,41	0,35	0,25
Potatoes	0,31	0,28	0,23	0,48
Pulses, vegetables, mushrooms	0,66	0,71	0,71	0,71
Fruit and products	0,79	0,73	0,87	0,92
Meat, offals and products	0,50	0,76	0,83	0,44
Fish and products	0,91	0,96	0,97	0,81
Edible fats	0,39	0,54	0,54	0,29
Animal fats excluding butter	0,14	0,44	0,29	0,23
Vegetable fats	0,51	0,64	0,69	0,42
Butter	0,45	0,58	0,70	0,42
Cheese	0,58	0,47	0,50	0,52
Eggs	0,51	0,63	0,74	0,53
Sugar, confectionery and honey	0,30	0,24	0,48	0,59
Sugar	0,37	0,46	0,65	0,41
Fresh vegetables	0,69	0,76	0,78	0,75
Processed vegetables	0,55	0,56	0,42	0,39
Fresh fruit	0,75	0,63	0,88	0,92
Processed fruit	0,59	0,51	0,68	0,80
Pork meat	0,43	1,00	0,86	0,48
Beef meat	0,58	0,45	0,52	0,31
Poultrymeat	0,62	0,87	1,08	0,68

Source: Czeslaw Kos: Changes in food consumption in Polish households. Polish Academy of Sciences, Warsaw 1991.

Conclusions

1. In the wake of transformation of the Polish economy changes are taking place in the entire food marketing system, but their scale varies.
2. Agriculture in Poland is characterized by small private farms, with an average size of less than six hectars.
3. At present, farms in Poland have high costs of production and they are subdued to ineffective sale of agricultural products. Accordingly, low incomes, do not allow for improvement of technology or for modernization of production.
4. It was observed a rapid deterioration of the price relation against farmers in studied period. It was resulted in widening price spread at the farm and retail level.
5. Food industry in Poland is under changes but still requires technical and technological reconstruction in connection with changes in property structure.
6. Much more tangible changes have taken place recently in food distribution than in processing. It results in growing importance of private whole-salers. During 1990-1992 a revolution took place in the ownership structure of retail trade. It means that more than 90% of the retail trade is in private hands.
7. Radical liberalization of the conditions in the foreign trade in Poland caused the role of foreign suppliers of foodstuffs to increase till 1991. Changes in the foreign trade in the half of 1991 resulted in a sharp decrease of imported food in 1992.
8. During the studied period a rapid fall of real incomes of all major groups of the population was observed. The greatest decline was recorded in the incomes of peasant households, the smallest one in the incomes of worker households.

9. There was a deep diversification in incomes of all types of households in analysed period. It resulted in development of poverty both in the rural and urban areas.
10. The decline of incomes was followed by a clear decline in expenditures for food both in absolute terms and in the percentage of total expenditures. The scale of the decline differed depending on the type of household. In comparison with other households peasant families have been the most successful in protecting their previous consumption patterns.
11. The cross-section analysis of four groups of households with different levels of incomes showed that over time 1990-1992 the quantity of food consumed and the level of the rationalization in food consumption in low-income households had decreased. On the contrary the high-income households, even during recession, protected their consumption patterns.
12. Today, even in 1993, the potential demand for food in Poland is still high, which is due to the relatively high income and price elasticity of demand and consumption of food products. ●

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