

Market Study
Intensive Animal Production Chain (Pigs and Poultry)
in Slovakia

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1. Introduction

The submitted study has been elaborated at the request of the Office of the Ministry of Agriculture, Nature and Food Quality at the Royal Netherlands Embassy in Prague. The study provides a wide scale of information related to the pork and poultry sector in Slovakia. Its key part consists of analysis of development and current situation of the Slovak market, based on information gathered by the study's authors from the period 1993 up to 2004. The report also includes information on inputs, information on prices, foreign trade, technologies used in Slovakia, producers, meat processors and a prognosis for basic indicators of the sectors up to 2010.

Compared to other areas of animal production, **pig farming** in Slovakia has experienced, relatively speaking, smaller changes since 1989. A sharp decline in the number of pigs can be noticed only after 2002, when the excess supply of pork resulted in a crisis which brought a substantial reduction in farmers' prices and subsequently a reduction of the pig herd.

The reduction in number of pigs in Slovakia was caused by a mix of reasons – from the liquidation of entire herds due to economic transformation of companies, adverse price development, animal diseases and less strict technological, zootechnical and breeding discipline and therefore less performance.

The descending tendency in production of pork meat was contributed by a reduction of numbers of pigs in all categories, but also by weakened demand of consumers for pork meat.

Slovakia is a net importer of pigs and pig meat. The imports had a (strong) growing tendency.

As opposed to e.g. milk producers, the Slovak pork producers did not succeed in major expansion to the EU markets or to the countries in Central and Eastern Europe. Typically, there aren't any important foreign market players in the Slovak meat processing sector. The investors seem to be discouraged by low level of technology compared to the EU-15 countries, overlapping of responsibilities among the local authorities and central administrations, as well as by the complex nature of relationships between suppliers and consumers.

It appears that only those pig farmers who will maintain their costs below EUR 1.0-1.1 per kg of live weight are likely to succeed in other than domestic markets. To achieve reproduction performance of at least 22 weaning pigs per sow and year, litter frequency above 2.3 and daily fattening gain of 780-800 g will have to become unexceptional as it is exceptional nowadays.

A number of changes took place in **poultry sector** in recent years in Slovakia. The situation in poultry sector in 2001-2004 could be best described by fluctuations in average total number of poultry animals (from 15.1 million animals in 2001 to 16.2 million in 2003), continued gradual reduction of self-sufficiency in domestic hatching, increased imports of day-old-chicken, especially for fattening (broilers), and also increase in imports of poultry meat and poultry meat products. Accession to the EU and competition by foreign

manufacturers reduced the potential for sales of domestic products and resulted in a decline in number of manufacturers and companies processing raw materials.

Most of the processing companies have their own fattening facility, slaughterhouse, product manufacturing facility, cold storage, as well as the processing facility for poultry eggs and canned meat.

In 2003, the average slaughter weight achieved 1.91 kg and 1.98 kg in 2004. The meat yield ranges from 72.6% to 75.9%.

In recent years the structure of poultry production has substantially changed, with increased share (92.2%) of chickens in the total production, against 4.0% share of hens, 3.5% turkeys, and 0.2% of ducks. The production of turkeys recorded a substantial decline. Compared to 2001, the production in 2004 dropped down by 78.6%. Despite reasonable production costs, the production of geese declined to 2.0-4.0 t a year, which represents about 0.3% of the total poultry production.

The development of farm-gate prices paid to producers of poultry for slaughter has recorded a declining trend, while the costs per production unit were growing, which had a negative impact on the efficiency of production. In 2001-2003 the average consumer prices decreased, but in 2004 the prices recorded moderate growth due to level of poultry demand and supply in Slovakia.

The increased demand in Slovakia for poultry and growing consumption of poultry meat is mostly affected by better prices and traditional preference for poultry in Slovakia compared to other types of meat. In addition to increased consumer health awareness and efforts aimed at achieving the EU level of consumption, the consumption of poultry in recent years was largely driven by BSE prevalence in cattle population. At present (2004) the consumption of poultry per capita is estimated to amount 21.1 kg per year, which represents an increase by 14.1% compared to 2001.

The foreign trade of Slovakia in live poultry and poultry meat has recorded a negative balance. More than 50% of the balance is represented by the trade in poultry meat. The bulk of meat is imported from the Czech Republic, Hungary, France, and Asia as well. In particular, this includes frozen pieces and offal of chickens and turkeys.

The aspects important for **further development** of the pig and poultry sectors in the Slovak Republic, which arise from the current situation, include:

- ❖ **condition of raw material base** – according to the prognoses of RIAFE (The research institute of agriculture and food economics), production of pork meat in 2010 should exceed value of the year of 2004 by 14,8%. Production of poultry meat should achieve an increase by 18,4%. However, the production as well as consumption of poultry may grow less or decline once the Council Directive on the welfare of broiler chickens becomes effective and also due to possible expansion of avian influenza. Low results can be found in pig farming, where reproduction and yield parameters do not reach the standard common in EU 15. According to the RIAFE's prognoses, number of farrows per sow, number of born piglets as well as number of fattened pigs shall increase by the year 2010,

- ❖ **consumption of meat and meat products** – according to the RIAFE’s prognoses, consumption of pork meat should increase with per capita consumption in 2010 being 5,2 kg higher than in 2004. Poultry consumption per capita should increase by 2,9 kg over this period. Development of consumption shall be influenced by expected growth of income of inhabitants and increased demand and by activities of foreign retail chains, which in recent years started to establish themselves in Slovakia to a quite considerable extent,
- ❖ **structure of meat industry** – The structure of the industry is currently relatively fragmented and hinders possibilities for cost reduction and long-term usage of capacities,
- ❖ **different levels of usage of production capacities** – In 2004, the capacity for pig slaughtering was used at the level of 51,7%, for meat from carcasses at the level of 55,9%, for meat products at the level of 72,8%, for cans at the level of 66,8%. Production capacities of poultry industry were used in 2004 at the level of 88,9%.
- ❖ **availability of investors** – and arising possibilities of modernization of facilities and acquisition of needed investments for marketing and keeping positions in the meat market,
- ❖ **foreign trade** - Slovakia has a negative trade balance in live pigs, pork meat, live poultry and poultry meat especially during the last five years. The fastest growing imports can be noticed in particular in the category of semi-finished and finished products. Several factors favour that situation: trade liberalisation and weakening of customs barriers, penetration of foreign capital into shopping network/retail chains in the Slovak Republic along with simultaneous promotion of the products with fast turnover, massive acceptance by customers and thus advantageous for the retailer and lack of similar products of local provenience.

Both the pig and poultry sectors offer investment and participation opportunities for foreign capital, companies and skilled and experienced managers. Sub-optimal results can be found in primary production, processing as well as in the integration of the whole chain and also in the approach to consumers at its end.

The pig/pork sector seems to have reached the bottom of its decline during which pig herd numbers were decimated as well as yield and production parameters declined. The low degree of chain approach and chain integration in the pig/pork sub-sector may be indeed challenging. On both the ends of the chain foreign companies are present: as suppliers of inputs as well as retailers, only with still very little linkage to neither primary production nor processing.

The poultry sector is in a different situation: its rapid growth both in the primary and in the processing part of the chain with a relatively high degree of integration is foreseen to slow down, paradoxally mainly due to the expected increasing purchasing power of Slovak customers who might then be more inclined to start buying more expensive pork and beef meat and meat products. Using the poultry chain integration and managerial experience from similar campaigns abroad to succeed in offering the Slovak consumers more value added, sophisticated, tailor-made local poultry products in broad variety, at

desired quality and for attractive price in this situation might be not only extremely challenging but profitable too.

2. Inputs for the pork and poultry sectors in the Slovak Republic

In 2004, the consumption of agricultural production inputs has continued to decline.

2.1. Animal Feed

With regards to animal production inputs, the consumption of complete feed mixtures (CFMs) in 2004 dropped down by 14.6% (compared to 2003) for all livestock species and categories. This was caused by a year-on-year decline in the number of livestock (cattle by 8.9%, pigs by 20.4%, sheep by 1.3% and poultry by 3.5%). Overall, the consumption of feedstuffs dropped down by 16.8% year-on-year, with the largest decline in the group of products of animal origin (by 19.7%), feeding cereals (by 18.5%), extruded groats and pieces (by 5.9%) and dried products of food industry (by 1.9%). The consumption of extruded sunflower groats and pieces increased year-on-year (by 93.1%), as did the consumption of feeding leguminous vegetables (by 18.9%), dried sugar beet pulp shreds (by 12.3%) and dried grass (by 6.31%).

According to the *Central Agricultural Supervisory and Testing Institute (CASTI)*, 136 producers of feeding mixtures, 114 mediators and 60 entities producing feeding mixtures for their own needs were acting *in the Slovak market with feeding mixtures in 2004*. Feeding mixtures were sold through 1189 trading facilities. The major players in the feed market (about 55% market share) are Belar- Dunaj a. s., Agronovaz, a. s., Poľnonákupy Bebrava a. s., Rybany, Boskop Poľnonákup Trenčín, a. s., Považan, a. s., Gemernákup, a. s., Belar- Novpol, - Ripna, a.s. companies.

Significant part of the production of feeding mixtures is done by self-producers and small mixing plants. They produce feeding mixtures for their own need only and form an important group of purchasers of particular components of feeding mixtures, mainly premixes, mineral mixtures, extruded soy grits and products of food processing industry that are suitable for feeding mixtures.

Consumption of FM per production unit in kg

Table No. 1

Indicator	2001	2002	2003	2004
per kg of milk	0,17	0,18	0,18	0,18
per kg of increment in beef cattle fattening	1,41	1,55	1,55	1,37
per weaner	94,15	97,82	95,87	91,28
per kg of increment in pig fattening	2,79	2,72	2,83	2,66
per egg	0,118	0,119	0,106	0,094

Source: SO SR, KRMZ (MP SR) 1-04, own calculation

In addition to feed industry companies there are also companies active on the Slovak market that trade with feed additives, premixes and admixtures to feeds. These companies deliver to primary production (agricultural purchasers and self-producers of feed mixtures), offering a full range of goods from abroad. They have mostly only trade agencies in Slovakia. The most important companies include Schaumann (specialised in nutrition, selective breeding and breeding of stock animals), Biofeed®, a.s. (produces vitamin-mineral supplementary feed mixtures and feed mixtures for all kinds and categories of stock animals), MKM spol. s r. o. (distributes agricultural products and feed mixtures for live stock, disinfection means for food processing industry, agriculture and dairy industry), Mikrop Slovensko s.r.o. (offers mineral feed mixes, mainly to agricultural purchasers and self-producers's production units) PARTNER – vetagro, s.r.o. (makes raw materials used for production of feed mixtures, represents foreign companies with products for animal production and veterinary medicaments as well as companies focused on the area of disinfection and insect and rodent control), BIOFAKTORY spol. s r.o. (provides the most advanced technologies for production of premixes of feed additives, vitamin-mineral mixtures). The address list of companies is shown in Annex No. 1.

According to J. Bezák [18] (HYZA, joint stock company, Žilina), lifting of the ban on the use of meat-bone meal could bring about a relief for the poultry sector, as well as for the entire meat industry. Even though the ban was imposed as part of campaign to combat BSE, currently there are discussions held on the EU level to again introduce the original procedures, and the ban of meat-bone meal should only remain in effect in case of cattle. In fact, the poultry producers now have to pay extra charges to the animal recycling plants for liquidation of animal waste which can't be used in production of MBM. For example, the costs incurred by the poultry production plant THP Topoľčany, a.s. (joint stock company), increased by SKK 30 million a year due to the ban in effect. In addition, the poultry producers have to use expensive imported soy alternatives in fattening instead.

2.2. Breeding and insemination services

Breeding activities in Slovakia are covered by the State Breeding Institute of the Slovak Republic. Its main activity is to control yield and heredity of stock animals. Furthermore, it arranges animal identification, keeps basic documentation, assesses yield rate of animals, issues certificates and permissions for breeding, and maintains gene reserves of particular breeds in embryos and sexual cells.

Breeding activities are paid for by specific agricultural companies in accordance with the valid scale of fees, but execution of control of yield is contributed by grants paid in accordance with specific edicts of the Ministry of Agriculture.

Competences in the field of breeding in Slovakia were assigned to the Breeding Inspection, which is responsible for the state supervision over selective breeding and breeding of stock animals.

In the majority of agricultural companies, sows are being covered by their own breeding boars purchased on auction markets or inseminated by purchased insemination doses. There are 20 approved insemination stations with boars for pig breeding in Slovakia, which

produce insemination doses not only for their own production, but also for sale. The stations, for example, include **PIGSERVIS**, s.r.o. Okoč, **PIGAGRO**, s.r.o. Jesenské, **MÄSOPRODUKT** Spišské Vlachy, a.s., **INSEMA**, s.r.o. Banská Belá, **AGROTAURIS**, s.r.o. Rimavská Sobota **AGROKOMBINÁT** Torysa, **DAN-SLOVAKIA AGRAR** a.s., **HYBRAV** a.s. and others. Annex No 2 provides a list of insemination stations.

Insemination of poultry is mainly broadly used in turkey breeding. Sporadically, meat hens are inseminated. In egg-laying kinds, insemination is not yet used to a considerable extent. The electro ejaculation is used in the case of geese and ducks. Insemination of ducks is mainly used for acquisition of interbreed hybrids.

2.3.Veterinary drugs

It can be said that all the internationally known and renowned producers of veterinary medicines and vaccines are present with their products on the Slovak market. Big international pharmaceutical companies (e.g. Intervet, Bayer, Pfizer, SMB, Merieux/Merial etc) do have their representations in Slovakia who care about communication, registration, distribution, promotion of their products.

The sale/distribution of veterinary drugs and vaccines is done by the private veterinarians who prescribe them and deliver them to their clients/poultry farmers. Basically the administration of antibiotics and prescribed drugs is by law left to the veterinary practitioner.

Companies acting in the Slovak market in the field of medicine, companies dealing with distribution of veterinary medications and aids as well as companies acting in the area of disinfection, insect and rodent control are listed in annexes No. 3 and 4.

2.4.Technologies in pig and poultry breeding

Good results in particular breeds can not be achieved without usage of adequate technologies and suitable technological systems. According to the Census 2001 (no newer data are available while this part of the census is repeated in 5 years intervals), 19,5% of pig barns in Slovakia in 2001 was older than 40 years and 5% were younger than 5 years. As to poultry, barns over 40 years amounted 17,4%, while barns younger than 5 years amounted 4,6%.

In Slovakia, particular categories of *pigs* can be housed using one of the following housing systems:

Farrowing and nursing sows:

- bedded and unbedded individual farrowing pens with free, temporally restricted or permanently restricted movement of sows,
- bedded group pens for nursing sows in free group breeding .

Dry pregnant sows:

- bedded or unbedded group pens,
- unbedded (bedded) box pens,

- unbedded or bedded individual crates.

Weaners:

- single-floor elevated group pens with grid floor,
- unbedded group pens with firm lying area and grid area for rolling in the mud,
- group pens with deep or increasing bed or with daily bedding and disposal of manure,
- bedded group pen with manure treading,
- in weaning of piglets from sow – farrowing pens, where weaners are placed until transferred to fattening section.

Feeder pigs:

- unbedded group pens firm lying area and grid area for rolling in the mud or grid floor,
- group pens with deep or increasing bed or with daily bedding and disposal of manure,
- bedded group pen with manure treading.

According to prof. Ing. Štefan Mihina, PhD., Ing. Ján Huba, PhD., and Ing. Vojtech Brestenský, PhD., from the Research Institute of Animal Production in Nitra [20], detailed census in 1990 showed that only 50% of the facilities were technically feasible for animal production. Since 1990 until now, part of the animal housing capacity was modernised. The scope of modernisation by sectors is described below.

Of the total number of pigs, over 95% is kept at 5,000 farms. In 1995-2002, modernisation took place in farms with approximately 15% of the current number of pigs. The animal welfare research projects conducted by the Research Institute of Animal Production in Nitra have shown that the condition of equipment and animal husbandry in Slovak farms did not comply with the provisions of the Government Ordinance No 735/2002 on minimum standards of protection for pigs. Most of the discrepancies include inadequate animal housing areas, fixed flooring, area of grated floor sections, group housing for sows and breeding sows during the specified period, provisions for handling and mating of pigs. Major problems were found in provision of suitable microclimatic conditions. In most cases the animal housing areas will have to be modernised. Apart from welfare conditions the keepers should also take into account the latest knowledge on minimizing ammonia emissions by design modification of animal housing areas and faeces removal technology. Based on the modernisation proposals prepared by the Research Institute of Animal Production in Nitra, the average investment per sow amounts to SKK 37,000 and SKK 6,000 per stable intended for fattening pig. The modernisation of housing facilities for 85% of pigs kept in old facilities would require an investment of SKK 4,025 million.

The following housing systems are used *in poultry farming* (data from 2002):

Laying hens + broilers:

- cage (unenriched, enriched),
- barn (with deep bed, aviary, with perch),
- providing a grazing (semi-intense, with free run).

Alternative technologies, divided into following categories, are also used in keeping of *laying hens*:

- breeding on deep bed with possibility of combination with grid floor,
- aviary breeding,
- intense run breeding,
- run breeding.

In large-scale farming, cage technology (1 up to 3 floors and more) is usually employed for rearing of *chickens*. In breeds which are kept in lower concentration and in fattening of chickens (broilers), rearing predominantly on deep bed is applied.

Reared *young hens* are kept in cages (single and more floors, individual and group cages for 2 up to 5 heads) or on deep bed.

Breeding *hens* are mainly bred on deep bed, combined with grid floor on 2/3 of spaces, where technological lines are located (feeding apparatus, watering apparatus, hatching nests).

Turkeys

Parental pairs of turkeys are bred on deep bed, sometimes in combination with grid floor. At the present, two commercial types of turkeys are used, namely broiler turkeys of medium and heavy type and slaughter turkeys. Brood turkeys are bred in bedded air-conditioned halls without windows and in cages in air-conditioned halls without windows. In reproduction breeding, brood turkey cocks are housed in crates on deep bed or in cages.

Ducks

Ducks are reared and fattened in halls with deep bed, grid floor, deep bed combined with grid floor, with cage batteries. Brood ducks and drakes are incorporated into selective or reproduction farms. Brood ducks can be kept in halls with deep bed and hardened runs and with water run or in halls with grids and hardened run and with watering manger and combined system.

There are many companies in Slovakia that offer new machines and technologies from abroad. They, for example, include:

- **AGE SLOVENSKO s.r.o., Levice**, machines and devices for keeping of poultry and other animals,
- **AGF s.r.o., Vrábľe**, tractors, machines for soil cultivation, preparation and maintenance, spare parts for agricultural machines,
- **AGRA SLOVAKIA s.r.o., Nitra**, machines for batching and moistening of feeds,
- **AGRITECH SLOVAKIA s.r.o., Kráľovský Chlmec**, fibreglass silos, devices for animal production,
- **AGRO VOS s.r.o., Piešťany**, machines and devices for preparation of feeds,
- **AGROSLUŽBA Nitra**, production, import and sale of technological devices for watering, feeding with dry and moistened feeds, housing, dung removal and transport and ventilation for cattle, pigs and poultry,

- **AGROSTAR s.r.o., Chocholná Velčice**, silos, machines and devices for batching and moistening of feeds for pigs, machines and devices for disposal and transport of barn and liquid dung, milking, ventilation, heating of housing spaces,
- **ATAK s.r.o., Banská Bystrica**, animal watering apparatus, machines and devices for poultry breeding, ventilation and heating of buildings for housing of animals,
- **BAUER A. A. s.r.o., Tábor**, technology for pigs, poultry, cattle and application of liquid manure,
- **Big Slov-Tech a PIG TECH Nitra**, representation of **Big Dutchman** company in Slovakia, complex technologies for broiler fattening, including ventilation and cooling system,
- **DURÄUMAT SLOVAKIA s.r.o., Koš**, machines and devices for animal keeping,
- **EASY s.r.o., Praha**, complex technological equipment of halls for keeping of laying hens and raising of young hens, mounted halls, egg sorting and packing devices, inspection of quality of eggs,
- **KOVOBEL s.r.o., Nitra**, machines and devices for poultry keeping,
- **KOVOBEL v.d., Bělá nad Radbuzou**, technological devices for keeping of poultry and rabbits,
- **MÖLLER s.r.o., Staré Město**, designing, production and assembly of ventilation and heating devices for barns, technological lines for poultry keeping, thermal insulations,
- **OVISFARMA, s.r.o.**, arranges sale of tackles for animal keeping and farming,
- **S. T. S. s.r.o., Nitra**, tractors, machines and devices for animal production,
- **SCHAUER SLOVAKIA s.r.o., Nitra**, machines and devices for matching and moistening of feeds for pigs,
- **VETIS, Kostolné Kračany**, machines and devices for animal production,
- **WESTFALIA SLOVAKIA s.r.o., Nitra**, sale of milking, cooling machines and devices, disinfection and cleaning agents, automatic watering device for calves, feeding systems for pigs.

The addresses of best known companies are shown in Annex No. 5.

3. The pig sector

Pig keeping in Slovakia is an important sector of animal production. In the past years (2000-2004) the Slovak pig farming sector experienced a gradual decline both in size, performance and thus in competitiveness.

The total pig herd decreased from 1 488,4 thousand animals in 2000 till 1 149,3 thousand animals in 2004 which is a decline by 20,4%. Following the prognosis and first statistical results the decline stopped in 2005 and a slight growth is supposed to arise as of 2005 in the order of 0,1 to 2,0 % per year (prognosis: 2005:1 150 thousand animals, 2007: 1 192 thousand animals, 2010: 1 232 thousand animals).

Average yield and reproduction parameters in general were poor with 1,92 litters per sow per year, 15,83 weaned piglets per sow per year, 0,526 kg of weight gain per day and a high suckling mortality of 11,8% of born piglets. Here too the decline seems to be over and statistics in 2005 show a slight improvement of yield and reproduction parameters.

Inputs prices (energy, labour, feed, technologies etc) grew faster than farm gate prices which were very unstable, volatile and which experienced sudden important drops throughout the year. Pig farming in general was therefore not generating important profits, investments in its improvement were non-existing or poor and its competitiveness was stagnating/declining.

The chain of pig production still shows very little level of cooperation or integration. Inputs purchase as well as farm-gate trade are often opportunity markets: despite long term contracts with suppliers (of inputs) and buyers (of slaughter pigs) pig farmers buy the cheapest inputs based mainly on their poor financial capacities and sell their pigs to and for the best offer.

The pork processing industry main characteristics were low use of existing capacities which in the past were designed to produce for eastern markets, undercapitalisation which the industry explains by massive investments necessary before the EU accession to enable the sector to comply with production hygiene standards and lacking direct linkage with primary production and retail.

The pork consumption per capita per year decreased from 33,1 kg in 2000 to 30,8 kg in 2004, but the prognosis here too is slightly optimistic for 2005 with a figure reaching 32,0 kg.

Current figures on foreign trade show the sector dependence on imports throughout the whole production chain: from pig genetics, fattening piglets, slaughter pigs till meat/trimmings.

Expected improving purchasing power of Slovak consumers, forecasted slower growth of poultry consumption which in the past grew fast on the detriment of pork consumption and improving performance of the pig/pork sector are following the prognosis driving forces for growing demand for and increased consumption of pork and desired general 'renaissance' of the pig/pork sector in Slovakia.

The involvement of foreign capital and participation of foreign companies in the sector was and still nowadays is extremely low, limited to supply of inputs (pig genetics, feed, compounds for mixtures, technologies, veterinary medicines and vaccines) and export of piglets, slaughter pigs and pork to Slovakia. The study shows that the whole chain could benefit from a deeper and broader involvement of foreign capital and companies.

3.1.Pig production

According to the Central Register of the State Agricultural Institute SR, there were 6059 entities who kept pigs registered in Slovakia as at 31.12.2004. The farms housed 1 465 thous. registered pigs, including 70,9 thous. sows. However, the facilities also include units, where only one pig is housed.

Commercial pig farming was performed by 1468 reported units (Statistical Office SR) and 1021 units kept sows.

Number of pig farms sorted by number of pigs in a facility as at 31.12.2004

Table No. 2

Number of pigs	Number of facilities
1 - 10	463
11 - 50	334
51 - 100	97
101 - 500	246
501 - 1 000	124
1 001 - 5 000	172
5 001 - 20 000	31
over 20 000	1

Source: SO SR

Number of sow keeping facilities sorted by a number of sows in a facility as at 31.12.2004

Table No. 3

Number of pigs	Number of facilities
1 - 5	437
6 - 10	83
11 - 50	205
51 - 100	121
101 - 200	89
201 - 500	66
501 - 1000	11
over 1000	9

Source: SO SR

The pig number according to RIAFE slightly differentiate from the pig numbers recorded by the Statistical Office and are slightly higher.

Number of farms and total pigs by regions in SR in 2004

Table No. 4

Region	Number of farms	Number of pigs	Average number of pigs in farm
Bratislava	49	29 875	610
Trnava	299	280 885	939
Trenčín	123	118 592	964
Nitra	304	326 752	1 075
Žilina	99	37 977	384
Banská Bystrica	298	154 223	518
Prešov	199	87 773	441
Košice	238	113 205	476
Total SR	1 609	1 149 282	714

Source: RIAFE

Number of farms and fattened pigs by regions in SR in 2004

Table No. 5

Region	Number of farms	Number of pigs	Average number of pigs in farm
Bratislava	47	26 632	567
Trnava	284	248 120	874
Trenčín	120	106 770	890
Nitra	295	291 120	987
Žilina	93	35 375	380
Banská Bystrica	274	138 427	505
Prešov	189	80 111	424
Košice	230	103 960	452
Total SR	1 532	1 030 515	673

Source: RIAFE

During the previous 15 years, pig numbers were gradually decreasing. Since 1990 the number of pigs decreased by 1,4 mil. animals, i.e. by 91,4 thous. animals per year. Slight increases occurred only in the years of 1995 and 2002. The same development occurred with regards to the number of sows with the average annual decrease amounting 6,5 thous. animals. In the case of sows, the decrease didn't stop even in 2002, when the total number of pigs as well as number of fattened pigs started to rise as a consequence of the increase in prices paid to producers. However, the increase caused excessive offer followed by a decrease of prices paid to producers and selling difficulties. Producers rapidly started to decrease both the number of sows as well as the total number of pigs and many farm herds, mostly consisting of pigs with low yield rate, ceased to exist.

In 2004, the decrease in total number of pigs continued. As at 31.12.2004, the total number of *pigs* in Slovakia amounted 1149,3 thous. animals. It means a decrease of 293,7 thous. (20,4%) animals in comparison with 31.12.2003.

As at 31.12.2004, total number of *sows* in Slovakia amounted 82,2 thous. animals. It means a decrease of 23 thous. (21,9%) animals in comparison with 31.12.2003.

The average number of *fattened pigs* in 2004 amounted to 615,3 thous. animals, i.e. 121,9 thous. animals (16,5%) lower in comparison to 2003. The number of fattened pigs as at 31.12.2004 was 147,6 thous. animals (23%) lower than the number of fattened pigs as at 31.12.2003. Compared to quantities as at 31.12.2003, the numbers of pigs decreased in all weighting categories. The highest decrease occurred in the category of pigs over 110 kg (by 48,2%) and pigs with weight up to 20 kg (by 88,1 thous. animals, i.e. by 24,3%).

For the next years (till 2010) an increase in total number of pigs by 83 thous. animals compared to 2004 is expected and an increase in the number of sows by 6,8 thous. Animals (see also page 21).

Year-to-year changes in numbers of pigs in (as at December 31)

Table No. 6

Year	Total pigs			Sows			Fattened pigs ¹⁾		
	thous. Animals	Compared to previous year		thous. animals	Compared to previous year		thous. animals	Compared to previous year	
		thous. animals	%		thous. animals	%		thous. animals	%
2000	1 488,4	-73,7	-4,7	131,0	-6,2	-4,5	1 023,8	-67,0	-6,1
2001 ^{*)}	1 469,4	-19,0	-1,3	131,0	-0,1	0,0	1 009,2	-14,6	-1,4
2002	1 553,9	84,5	5,7	117,5	-13,5	-10,3	1 080,4	71,2	7,1
2003	1 443,0	-110,9	-7,1	105,2	-12,3	-10,5	1 004,9	-75,5	-7,0
2004	1 149,3	-293,7	-20,4	82,2	-23,0	-21,9	769,2	-235,7	-23,5
2005 ^{**)}	1 150,0	0,7	0,1	82,0	-2,2	-2,7	794,6	25,4	3,3
2006 ^{**)}	1 167,6	17,6	1,5	85,0	3,0	3,7	806,7	12,1	1,5
2007 ^{**)}	1 192,4	24,8	2,1	86,0	1,0	1,2	823,8	17,1	2,1
2008 ^{**)}	1 209,5	17,1	1,4	87,0	1,0	1,2	835,8	11,9	1,4
2009 ^{**)}	1 221,6	12,1	1,0	88,0	1,0	1,1	845,3	9,6	1,1
2010 ^{**)}	1 232,3	10,7	0,9	89,0	1,0	1,1	854,0	8,6	1,0

Source: SO SR; *) According to monthly statement Poľ 1-12; **) Prognosis (own calculations), 1) including pigs with weight up to 20 kg

Structure of pig herd in SR by segments^{*)}

Table No. 7

Date	Number (thous. animals)					Portion in total population (%)				
	Total agriculture	Regis try of farms	Legal entities	Natural persons – entr eneneurs	Unregistre d breeders	Total agriculture	Regis try of farms	Legal entities	Natural persons – entr eneneurs	Unregistre d breeders
	1	2	3	2 - 3	1 - 2	1:1	2:1	3:1	4:1	5:1
Total pigs										
31.12.2000	1 488,4	1 223,8	1 192,4	31,4	264,6	100,0	82,2	80,1	2,1	17,8
31.12.2001	1 469,4	1 209,1	1 168,7	40,5	260,3	100,0	82,3	79,5	2,8	17,7
31.12.2002	1 553,9	1 299,1	1 250,2	48,9	254,8	100,0	83,6	80,5	3,1	16,4
31.12.2003	1 443,0	1 186,1	1 133,4	52,7	256,9	100,0	82,2	78,5	3,7	17,8
31.12.2004	1 149,3	894,1	853,0	41,1	255,1	100,0	77,8	74,2	3,6	22,2
Sows										
31.12.2000	131,0	100,9	98,7	2,2	30,1	100,0	77,0	75,3	1,7	23,0
31.12.2001	131,0	101,2	98,0	3,2	29,8	100,0	77,3	74,9	2,4	22,7
31.12.2002	117,5	106,3	102,2	4,1	11,2	100,0	90,4	86,9	3,5	9,6
31.12.2003	105,2	93,8	89,6	4,2	11,5	100,0	89,1	85,1	4,0	10,9
31.12.2004	82,2	71,0	67,4	3,6	11,2	100,0	86,3	82,0	4,4	13,7

Source: SO SR; *) According to monthly statement Poľ 1-12

In 2004, 74 breeding pig herds and 106 reproduction pig herds were registered in Slovakia. The State Breeding Institute carried out a performance review for pigs and thus gained an overview of reproduction and production indicators for pigs, resulting in an individual breeding value which determines the quality and condition of pig population

in Slovakia. The Institute is now processing and evaluating the data for individual breeds and herd specifications. Detailed information can be found at <http://www.spusr.sk>.

The following breeds are kept in Slovakia: White pedigree, White, Slovakian white, Landrasse, Yorkshire, Pietrain, Duroc, Hampshire.

The biggest pig farmers in Slovakia Include: Agrokombinát Veľké Bierovce, PD Sokolce, Hybrav Nitra, Mäsoprodukt Prešov, Dona s.r.o. Veľké Revišťa, Agrotauris Rimavská Sobota, Agrospol, s.r.o. Bolkovce, Dan-Agro Slovakia Veľký Meder, Agrobán Bátka, Pigagro a.s., Jesenské.

Slovak pig herds in average do not reach the standards of the reared breeds in the area of reproduction and yield parameters. Unsatisfactory results can be mainly found in the number of litters per sow and the number of born piglets per litter per sow per year. There is also a high number of death losses of piglets before weaning, which adversely influence the total number of successfully reared weaners. Another unsatisfactory result can be found in average daily weight increment in fattening of pigs. The situation described by the indicators got temporarily better in 2002, but subsequent difficulties with the sale of slaughter animals (low farm-gate prices) were accompanied by a deterioration of production and reproduction parameters. There the 'vicious-circle' of undercapitalised, indebted and thus less performant primary sector started

In 2004 death losses of sows and exclusion of sows from herds for low quality /scrapping raised to 42,4%. Contrary to the above, there was slight increase in number of litters per sow, number of born piglets per litter and, number of born piglets per sow. Despite death losses of pigs reaching even a level of 11,8% of number of born animals, the number of successfully reared pigs per sow slightly increased compared to 2003.

Average Reproduction and Yield Indicators of Pig Farming in the SR

Table No. 8

Indicator	Unit	2000	2001	2002	2003	2004
Mating of young sows	Heads/100 sows	49,2	55,6	59,9	47,9	38,7
Mating of sows	Heads/100 sows	191,6	200,9	212,1	189,2	154,4
Transfer to sows	Heads/100 sows	43,2	44,0	48,1	44,1	34,7
Sows scrapping	Heads/100 sows	36,3	32,0	33,4	38,6	42,4
Sows mortality	Heads/100 sows	7,1	7,1	7,8	10,1	11,6
Sows confiscates	Heads/100 sows	0,6	0,4	0,5	0,8	0,3
Number of litters per sow	x	1,930	1,941	1,959	1,917	1,919
Born piglets	heads per litter	8,78	8,87	8,93	9,04	9,36
Born piglets	heads per sow	16,92	17,22	17,50	17,32	17,95
Suckling pigs mortality	% of born animals	10,8	10,5	10,4	11,3	11,8
Pigs rearing	heads per sow	15,09	15,41	15,68	15,36	15,83
Weight increment of feeder pigs	kg per feeding day	0,516	0,535	0,543	0,522	0,526
Weight of fattened pigs at slaughter	kg per animal	107,7	106,7	108,6	108,4	107,8
Average number of fattening pigs	thous. heads	742,7	714,8	742,2	737,2	615,3

Source: SO SR; *) Prognosis (own calculations)

In the year 2004 the average production costs per kg of live-weight of fattening pigs amounted to SKK 48,99. For an extensive overview of costs and returns of sows, fattening pigs and young pigs for breeding in the years 2003 and 2004 we refer to Annex No. 6-11.

For the next years an improvement of reproduction and yield parameters is expected. To become capable of competing with other EU member states, it is necessary to prolong the production age of sows, increase the number of litters per sow, improve the care of and, consequently, weaning of pigs and raise the average daily increases in fattening in order of shortening the fattening period. Since the current price of slaughter pigs in Slovakia is at the level of the average price in EU, more considerable increase of prices in next period are not to be expected. The only way to increase the profitability of pig farming will be through increase of the level of farming and making the best possible use of production potential of breeds, which are reared in the Slovak Republic. This will be the main challenge for the primary producers coming years.

Prognosis of development of indicators of reproduction and yield rate of pigs in SR

Table No. 9

Indicator	Unit	2005*	2006*	2007*	2008*	2009*	2010*
Mating of young sows	Heads/100 sows	47,9	50,0	52,4	53,2	54,0	54,8
Mating of sows	Heads/100 sows	183,3	166,0	161,6	161,1	160,6	160,2
Transfer to sows	Heads/100 sows	45,1	48,8	48,5	48,5	48,5	48,5
Sows scrapping	Heads/100 sows	33,1	32,9	32,5	32,2	32,1	31,9
Sows mortality	Heads/100 sows	8,5	8,4	8,2	8,1	8,0	7,9
Sows confiscates	Heads/100 sows	0,3	0,3	0,3	0,3	0,3	0,3
Number of litters per sow	x	1,956	1,961	1,979	1,985	1,990	1,995
Born piglets	heads per litter	9,55	9,95	10,10	10,32	10,54	11,01
Born piglets	heads per sow	18,69	19,52	19,99	20,49	20,98	21,97
Suckling pigs mortality	% of born animals	10,3	10,3	10,0	9,7	9,5	9,0
Pigs rearing	heads per sow	16,76	17,50	18,00	18,50	19,00	20,00
Weight increment of feeder pigs	kg per feeding day	0,564	0,570	0,575	0,578	0,580	0,582
Weight of fattened pigs at slaughter	kg per animal	108,0	108,0	108,0	108,0	108,0	108,0
Average number of fattening pigs	thous. heads	576,6	585,5	597,9	606,5	613,5	619,8

Source: RIAFE; *) Prognosis (own calculations)

Slight positive development was recorded in average weight increments per animal per day. Compared to 2003, an increase of 0,004 kg was recorded. The highest increase was reached in the fourth quarter of 2004.

Average weight increments of pigs in fattening stage (including pre-fattening) in SR
(kg per feeding day)

Table No. 10

Period	2000	2001	2002	2003	2004	2005 ^{*)}
1. Q	0,511	0,534	0,547	0,531	0,509	0,556
2. Q	0,516	0,543	0,553	0,532	0,529	0,568
3. Q	0,516	0,534	0,540	0,520	0,529	0,568
4. Q	0,520	0,530	0,536	0,506	0,538	0,568
Year	0,516	0,535	0,543	0,522	0,526	0,565

Source: SO SR; *) Prognosis (own calculations)

According to SO SR, 160 108 tons of slaughter pigs in live weight were sold in Slovakia in 2004. It represents a decrease of 22 058 tons (12,1%) compared to 2003. With respect to abovementioned sold quantity, 151 108 tons were sold by the organizations registered in the Registry of farms. It represents a decrease of 12,4% compared to 2003.

Production of slaughter pigs in the Slovak Republic

Table No. 11

Year	Sale	Home pig-slaughtering	Production	Difference with previous year		
				Sale	Home pig-slaughtering	Production
	live weight in tons	live weight in tons	live weight in tons	%	%	%
2000	181 013	60 000	241 013	-4,3	-14,3	-7,0
2001	170 312	55 000	225 312	-5,9	-8,3	-6,5
2002	174 692	52 250	226 942	2,6	-5,0	0,7
2003	182 166	50 000	232 166	4,3	-4,3	2,3
2004	160 108	40 000	200 108	-12,1	-20,0	-13,8
2005 ^{*)}	137 422	35 000	172 422	-14,2	-12,5	-13,8

Source: SO SR; *) Prognosis (own calculations)

3.2. Offer and usage of pork meat

Compared to 2000, total offer of pork meat in 2004 was 9,9 thous. Tons lower. The fall was caused by considerable decrease in production which was not even compensated by big imports of live pigs and pork meat.

Increased imports highly participated in the total usage of pork meat in 2004. Although the export represented only 4,3% of total usage in 2004, it was nevertheless several times higher than in previous years, when pork meat consumption had descending tendency.

Development of offer and usage of pork meat with bones (in tons)

Table No. 12

Indicator	2000	2001	2002	2003	2004 ^{*)}
Initial stocks	9 589	7 499	2 485	5 258	2 374
Production	163 603	153 012	154 310	158 073	136 435
Import	13 166	13 738	17 258	12 856	37 654
Total supply	186 358	174 248	174 053	176 187	176 463
Consumption	178 839	170 986	168 546	173 783	165 771
Export	20	778	249	30	7 386
Total use	178 859	171 764	168 795	173 813	173 157
Final stocks	7 499	2 485	5 258	2 374	3 306

Source: SO SR, Customs Directorate SR and own calculation; *) Prognosis = own calculation

It is foreseen that during the next years an increasing number of both total as well as fattening pigs shall be accompanied by a slight increase in total offer of pork meat. Compared to 2004, production of pork meat should be increased by 20,3 thous. tons by 2010, while import of pork meat should increase by 7,3 thous. tons. Total usage of pork meat shall increase too. When the export of pork meat stays at the level of 2004, the usage should increase by 28,3 thous. tons by 2010. This increase shall be the result of growth of the domestic consumption of pork meat. The consumption will be affected by higher income, higher purchasing power of the population and possible slow-down of the poultry consumption growth.

Prognosis of offer and usage of pork meat on the bone (in tons)

Table No. 13

Indicator	2005 ^{*)}	2006 ^{*)}	2007 ^{*)}	2008 ^{*)}	2009 ^{*)}	2010 ^{*)}
Initial stocks	3 306	3 000	2 480	2 199	2 733	2 390
Production	117 526	138 843	142 577	145 903	149 550	156 761
Import	61 441	40 000	42 000	45 000	46 000	45 000
Total supply	182 273	181 843	187 057	193 102	198 283	204 151
Consumption	172 273	172 363	177 857	183 369	188 893	194 428
Export	7 000	7 000	7 000	7 000	7 000	7 000
Total use	179 273	179 363	184 857	190 369	195 893	201 428
Final stocks	3 000	2 480	2 199	2 733	2 390	2 723

Source: RIAFE; *) Prognosis = own calculation

3.3. Processing of pork meat

Despite long term contracts between farmers and slaughterhouses do exist, and these contracts basically include both quantity and price indicators, this trade is often an opportunity market where contracts are not fulfilled and both sides act in a rather opportunistic way. They sell and buy for the most advantageous conditions in short term perspective. This reflects the low level of chain integration and absence of serious cooperation within the pig sector.

There are many companies acting in the Slovak market with meat. According to the State Veterinary and Food Administration, the companies engaged in production of fresh meat and meat products can be divided among approved facilities and permitted facilities. As at 17.5.2005, there were 89 approved facilities for fresh meat in Slovakia. The companies are allowed to export their production to the EU memberstates without limitation. In addition to these facilities, there are 240 permitted low-capacity facilities active on the market, which can sell their production only on the domestic market. Particular facilities can consist of slaughterhouse, meat chopping unit, freezing store and meat production unit, but many companies don't have a slaughter-house and just purchase fresh meat or they consists of cold and freezing stores only or they are only engaged in production of meat products, cans of meat and meat containing foods.

In the category of approved facilities, 30 facilities can slaughter animals. In addition to a slaughterhouse, they mostly also operate a meat chopping unit, freezing store, laboratory for Trichinella examination and meat production unit. The approval is specifically given for particular kind of animals, so 18 of the 30 facilities can slaughter cattle and 26 facilities can slaughter pigs, while sheep can be slaughtered only in 4 facilities in Slovakia.

Permitted facilities are divided according to the production capacity: low-capacity facilities processing up to 5 tons weekly, facilities processing up to 20 tons of livestock units weekly or 1000 tons yearly and facilities processing up to 30 tons of livestock units weekly or 1500 tons yearly.

The biggest Slovak meat processing facilities include: **Tauris a.s.** Rimavská Sobota, **Mäsokombinát Hrádok** Lučenec, **PM Zbrojníky s.r.o.** Banská Bystrica, **Mecom a.s.** Humenné, **Mäso Spiš s.r.o.** Spišská Nová Ves, **Sered'ský mäsový priemysel a.s.** Sered', **Svaman s.r.o.** Myjava. (Annexes No. 12-15).

The *Capacity* of the meat industry in 2004 increased by 32,7% compared to 2003. However, total production increased by 8,1% only. Capacities of particular facilities are used at very low level only and average usage doesn't reach even a level of 60%. For instance, in 2004 capacities for cattle slaughtering were used at the level of 49,7%, for pig slaughtering at the level of 51,7%, for meat from carcasses in total at the level of 55,4%, for meat products at the level of 72,8% and for cans at the level of 66,8%.

Since 2000, *the slaughter animals are being purchased* through the European system of percentual evaluation of conformation of carcasses, the so called EUROP. In 2004, slaughterhouses purchased 120,1 thous. cattle for slaughter, including calves, 1387,4 thous. slaughter pigs and 88,8 thous. slaughter sheep. Compared to 2003, there was an increase by 1,7 thous. animals in the cattle category and 15,6 thous. animals in sheep category and a decrease by 37,9 thous. animals in category of pigs.

Production of solid cut meat and meat intended for further processing in 2004 amounted 155,7 thous. tons, including 63,7 thous. tons of the jointed meat, 90,4 thous. tons of meat products and 1,5 thous. tons of cans of meat. Compared to 2003, total production of meat and meat products decreased by 2,6 thous. tons.

Offered meat and meat products in tons

Table No. 14

Indicator	2000	2001	2002	2003	2004
Quantity of stocks at the beginning of monitored period	1094,60	1 031,50	1 168,90	1 515,0	1 625,2
of which: cans of meat	306,60	263,10	263,30	205,2	192,2
Production	98051,20	109 454,80	126 532,80	158 219,9	155 652,4
of which: solid cut meat	29940,70	32 942,00	44 220,50	62 054,9	63 746,2
meat products	64979,30	73 933,50	80 219,20	94 482,1	90 445,9
canned meat	3131,20	2 579,30	2 093,10	1 682,9	1 460,3
Import	83,50	151,90	113,90	214,1	158,1
Other sources	2770,90	2 540,20	2 723,80	3 036,4	3 219,7
Total sources	102000,20	113 185,20	130 539,40	162 985,4	160 655,4

Source: RM (MP SR) 2 - 12

Production includes pork and beef solid cut meat, mutton, lamb and veal meat, supplied mainly to the domestic market, with low-consumption, but also to foreign markets.

Each production company is obliged to follow the quality system according to the international standards ISO 9001 and rules of compliance with a strictly inspected quality, in accordance with the HACCP standards.

Usage of meat and meat products in tons

Table No. 15

Indicator	2000	2001	2002	2003	2004
Sale for internal trade	97 321,4	109 741,6	125 083,3	159 447,2	153 357,6
of which: total jointed meat for int. market	29 176,9	32 288,1	41 606,8	61 182,3	61 282,1
Of which: beef	6 840,6	5 805,4	7 739,3	10 409,8	8 709,3
Pork	22 333,3	22 380,0	33 863,5	50 744,6	52 491,7
Meat products for internal market	65 125,0	74 892,8	81 343,7	96 586,0	90 623,4
Cans for internal market	3 019,5	2 560,7	2 132,8	1 678,9	1 452,1
Sale for prod. and operation of other branches /prod. consumption/	705,9	767,8	828,7	561,4	191,5
Export	222,8	35,6	36,8	49,6	3 100,5
Sale for state material reserves	53,4	0,0	0,0	0,0	0,0
Other usages	2 049,9	1 057,2	2 926,9	798,2	403,7
Losses at dispatch	605,7	458,6	400,3	503,8	499,1
Total consumption	100 327,3	112 060,8	129 276,0	161 360,2	157 552,4
Quantity of stocks at the end of monitored period	1 041,1	1 028,8	1 263,4	1 625,2	3 103,0
of which: cans	263,1	263,3	213,8	192,2	173,4

Source: RM (MP SR) 2 - 12

Sale of selected kinds of pork jointed meat in tons

Table No. 16

Indicator	2000	2001	2002	2003	2004
Processed front with knuckle, trotter, without head	4617,85	6 007,83	3 245,81	4 156,95	3 356,77
Leg with bone	2059,99	3 974,69	1 874,51	1 461,02	595,42
Loin with bone	4247,24	3 462,89	3 496,35	3 553,49	3 160,58
Neck with bone	3326,31	2 717,15	2 789,74	2 842,94	2 688,70
Hip with bone	5377,93	5 019,84	4 867,72	4 717,51	3 912,57
Leg carved into cuts without bone	4176,02	3 680,52	5 503,93	4 185,54	3 117,86
Shoulder without bones and without knuckle with skin	3545,06	3 159,49	3 218,88	3 017,05	3 100,06
a half of carcass with bacon, inner lard, skin, head and trotter	23682,84	32 343,63	41 376,10	45 983,05	46 166,96
a half of carcass with bacon without inner lard, head, trotter, with skin	515,03	485,57	595,77	1 131,84	1 657,55
a half of carcass without bacon, head and front leg	1416,30	1 345,42	1 307,75	1 250,68	1 344,43
Raw cut out bacon from back without skin	1865,04	1 569,67	2 022,86	1 949,38	1 786,23
Home-made lard	1097,98	878,15	905,09	2 294,56	924,01

Source: CM (MP SR) 3 - 12

In 2004, slaughterhouses in total sold 153,4 thous. tons of meat and meat products on the domestic market. The quantity consisted of 61,3 thous. tons of jointed meat, 90,6 thous. tons of meat products and 1,5 thous. tons of cans of meat.

The companies produce and process meat in accordance with the general regulation of the Food Index SR, as issued in form of particular edicts of the Ministry of Agriculture and the Ministry of Health.

Mr. Ivan Haluza, (Trend 25 August 2005) [21] states that many meat processing establishments were closed before the accession to the EU because the owners lacked adequate investment funds necessary to achieve compliance with the European hygiene standards. New business opportunities emerged after the opening of the European meat market. According to Viliam Pohly, Executive Director of the Slovak Union of meat processing companies, the Slovak meat plants still hold more than 90% market share in the Slovak retail sector. Apart from problems associated with the decline in domestic prices, the Slovak butchers scored their first points in foreign markets. For many years Slovakia has exported only live animals. However, last year saw the launch of export of Slovak meat products. While only a minimum amount of pork was exported in the preceding year, last year the volume of pork export amounted to almost 6000 t.

Strong foreign investors could bring new dynamics into the development of the meat processing sector. This, however, could result in fewer business opportunities for less viable companies. The Slovak meat processing plants have undergone modernisation, however, they need marketing resources and should expand their channels of foreign distribution. According to Viliam Pohly, smaller companies are more active in seeking investors.

The meat processing facilities sell part of their production to other companies of food processing industry, such as cooling facilities, refrigeration plants and producers of various

foods with meat content. Such companies, for example, include RADOMA s.r.o., MRAZIARNE Poprad, s.r.o., HAMÉ Slovakia s.r.o., KAUF LAND SR v.o.s., LIDL SR v.o.s., FOOD TRADE s.r.o., NOEMA s.r.o., atd⁷.

3.4.Live animal traders

In addition to the meat processing facilities, trade mediators are also engaged in trading with live animals. The State Veterinary Administration SR registers 47 mediators allowed to trade with cattle beef, pigs and sheep. The group consists of 42 trade mediators, who are allowed to trade with cattle beef, 25 allowed to trade with pigs and 16 allowed to trade with sheep. The mediators purchase live animals, selling them further to slaughterhouses or exporting them. The animals can be collected in 16 allowed collection centres for exchanges of live animals. The list of business intermediaries is shown in Annex No 6 and the list of collection centres for interchange of live animals is shown in Annex No 7.

3.5.Development and prognosis of consumption

The total consumption of pork meat in Slovakia in the years 1993 up to 1996 increased, with a peak in the volume of 200,7 thous. tons reached in 1996. Since 1996 it started to gradually fell, reaching a level of 168 thous. tons in 2003. Compared to 1993, the consumption in 2003 was 12,8% lower. Compared to 1996, it fell even by 16,3%. Temporary consumption in 2004 amounts 165,7 thous. tons. It means the decreasing tendency in consumption continued also in this year.

As main cause of the gradual shrinking of consumption we can consider low purchasing power causing a weaning interest in pork meat. During the period of 1993 up to 2004, the average consumption of pork meat in Slovakia amounted to 186 336 tons. Inter-yearly variations from the average ranged from -11,1% to +6,9%.

Compared to the Recommended Food Dose, the development in the case of pork meat is contrary to the development in the case of beef. Average annual consumption of meat in the monitored period has been exceeding the recommended dose by 12,1 kg, but the difference is diminishing. Consumption of pork meat in 2004 exceeded the RFD by 8,6 kg only.

Pork meat consumption was relatively stable and ranged from 30,8 kg to 37,3 kg per inhabitant per year. The average annual consumption amounted to 34,7 kg per inhabitant per year.

Development of consumption of pork meat with bones in SR in kg per inhabitant per year

Table No. 17

Years	Consumption in kg per inhabitant and year	RFD	Difference in kg	Difference in %
1993	36,15	22,7	13,45	59,27
1994	36,43	22,7	13,73	60,50
1995	36,81	22,7	14,11	62,16
1996	37,34	22,7	14,64	64,49
1997	37,21	22,7	14,51	63,92
1998	36,92	22,7	14,22	62,63
1999	35,93	22,7	13,23	58,26
2000	33,11	22,2	10,91	49,16
2001	31,78	22,2	9,58	43,17
2002	31,34	22,2	9,14	41,16
2003	32,31	22,2	10,11	45,53
2004*)	30,80	22,2	8,60	38,74

Source: SO SR, *) temporary data; own recalculations

It is anticipated that meat consumption in Slovakia shall increase by 10,3 kg per inhabitant per year by 2010. The highest portion of the increase shall be attributable to consumption of pork and poultry meat, which shall amount 85% of total meat consumption. Growth of pork meat consumption shall be mainly contributed by an increase in production due to growth of yield rate. Improvement of the economic situation of Slovak inhabitants shall lead to an increase in pork meat consumption and to gradual approximation of the consumption in Slovakia to an average consumption in EU. The overview of meat consumption by meat type in EU-15 is shown in Annex No 18.

Prognosis of pork meat production and consumption in kg per year

Table No. 18

Indicator	2005	2006	2007	2008	2009	2010
Production in tons	117 526	138 843	142 577	145 903	149 550	156 761
Production per inhab. in kg	21,8	25,8	26,5	27,1	27,7	29,0
Total consumption in tons	166 351	172 363	177 857	183 369	188 893	194 428
Consumption per inhab. in kg	30,9	32,0	33,0	34,0	35,0	36,0

Source: RIAFE

3.6. Foreign trade

From 1993 to 2004, the turnover in trade with pigs raised four times, when expressed in volume (from 1 592 tons to 6 397 tons) and more than five times, when expressed in value (from 63 019 thous. SKK to 331 533 thous. SKK). Differences between the increase expressed in volume and the increase expressed in value resulted from increase of both import as well as export prices per kg. However, foreign trade exchange realized from 1995 to 2003 was one-sided, as Slovakia is a pure importer of pigs during the given period. As can be deduced from comparison of border years of the realized analysis, imports had an obvious growing tendency.

According to the trade balance, Slovakia has realized the biggest volume of trade in monitored period with the Czech Republic, from which they have been importing 90% of pigs,

as expressed in live weight. At the present, Slovakia imports 8,9% of weight quantity from EU-15 countries. Compared to 1993, there is a growth by 7 percentage points. In 2004, 90% of Slovak export of pigs (in live weight) was sent to the Czech Republic and remaining quantities were sent to Hungary and EU-15 countries.

Portion of V4* and EU-15 countries in the Slovak foreign trade with pigs (Slovakia = 100%)

Table No. 19

Commodity / Year	Country / group	Import		Export		trade turnover	
		kg	SKK	kg	SKK	kg	SKK
<i>Living pigs</i> 1993	CR	96	74	0	0	84	72
	HUNGARY	0,8	2,3	0,5	1,1	0,8	2,3
	POLAND	0,0	0,0	57,8	10,3	7,2	0,3
	EU-15	1,9	12,0	10,5	8,9	3,0	11,9
	remainder of world	0,8	11,9	31,2	79,6	4,6	13,8
2004	CR	91	85	90	76	91	83
	HUNGARY	0,2	0,9	5,5	17,9	1,5	5,5
	POLAND	0,0	0,0	0,0	0,0	0,0	0,0
	EU-15	8,9	14,0	4,6	6,1	7,9	11,9
	remainder of world	0,0	0,0	0,0	0,0	0,0	0,0

Source: Customs Statistics RIAFE, own calculations

* V4: Poland, Czech Republic, Slovakia and Hungary

Foreign trade in live pigs in 2003

Table
No.20

Customs Code	Commodity	Country	Import in kilograms	Import in thousand SKK	Export in kilograms	Export in thousand SKK	Trade balance	
							in kilograms	in thousand SKK
103	Live pigs	AT	368	79	0	0	-368	-79
		CZ	2.046.428	88.808	0	0	-2.046.428	-88.808
		DE	830	250	0	0	-830	-250
		DK	77.479	14.008	0	0	-77.479	-14.008
		HU	5.740	885	0	0	-5.740	-885
In total			2.130.845	104.030	0	0	-2.130.845	-104.030
10391	Live pigs under 50 kg	DK	37.275	7.250	0	0	-37.275	-7.250
In total			37.275	7.250	0	0	-37.275	-7.250
10392	Live pigs	CZ	1.963.601	82.752	0	0	-1.963.601	-82.752
		DK	600	169	0	0	-600	-169
	over 50 kg					0	0	
						0	0	
In total			1.964.201	82.921	0	0	-1.964.201	-82.921

Source: Customs statistics, RIAFE own calculations

foreign trade in live pigs in 2004

Table No.
21

Customs Code	Commodity	Country	Import in kilograms	Import in thousand SKK	Export in kilograms	Export in thousand SKK	Trade balance	
							in kilograms	in thousand SKK
103	Live pigs	CZ	4.460.917	206.644	0	3.102	-4.460.917	-203.543
		DE	92	40	0	0	-92	-40
		DK	11.282	2.920	0	0	-11.282	-2.920
		HU	11.383	788	70.063	29.808	58.680	29.020
		NL	427.536	32.260	0	0	-427.536	-32.260
		QV	0	11.020	0	0	0	-11.020
In total			4.911.210	253.673	70.063	32.910	-4.841.147	-220.763
10391	Live pigs under 50 kg	DK	600	356	0	0	-600	-356
		NL	427.536	32.260	0	0	-427.536	-32.260
		QV	0	1.225	0	0	0	-1.225
In total			428.136	33.841	0	0	-428.136	-33.841
10392	Live pigs over 50 kg	CZ	4.429.000	203.218	0	3.102	-4.429.000	-200.117
		DK	600	335	0	0	-600	-335
		HU	10.992	606	70.063	29.808	59.071	29.202
		QV	0	8.093	0	0	0	-8.093
In total			4.440.592	212.253	70.063	32.910	-4.370.529	-179.343

Source: Customs statistics, RIAFE own calculations

As confirmed by the fact that a negative trade balance was recorded during the whole monitored period and the level of the negative balance increased almost three times during the period of 12 years, Slovakia is not able to compete in the world trade with live pigs. During the whole period, Slovakia also recorded a negative balance with the Czech Republic, the EU-15 and Hungary (except of the year 2004).

In the period of the years 1993 up to 2004, foreign trade of Slovakia in the segment of pork meat expanded considerably, as can be confirmed by a fivefold increase of trade turnover expressed in volume and almost nine-fold increase of trade turnover expressed in value. The increases were also contributed by a growth of prices per imported kg by 59% and prices per exported kg by 163%. As Slovakia was not able to compete in the monitored period in the pork meat trade in any of monitored countries and Slovakia permanently shows a deficit of trade in this segment, the intensification of trade resulted in negative effects causing continuous growth of the deficit of the trade balance up to the level of 2,4 bil. SKK in 2004 (with exception of the year 2004, when Slovakia succeeded to reach a positive trade balance with Hungary in the segment of pork meat, as confirmed by available data of Customs Statistics).

During the monitored period, Slovakia has started to trade with EU-15 countries more intensely. While in 1993 the EU-15 countries participated in value of total turnover with only 11,3%, their portion in 2004 reached a level of 56,7%. By the contrary, the level of trade with

the Czech Republic fell from 59,8% to 27,3%. Slovakia keeps a relatively stable level of trade with Hungary (9%).

Changing portions in values of import in the monitored period reflected changes in trade turnover. At the beginning of the analysed period Slovakia has been exporting pork meat in particular to other countries of the world (excl. V4 and EU-15), whose portion in the value of export amounted 86,6% in 1993. But in 2004 Slovakia exported pork meat solely to EU-15 countries (47,4%), the Czech Republic (27,8%), Hungary (19,9%) and Poland (4,9%). It should be noted in this connection that trade with Poland was not carried out in each year of the analysed period and with respect to the trade with Hungary and EU-15 countries Slovakia has only imported pork meat during a major part of the analysed period.

Detailed overview of foreign trade is shown in Annexes No 19 and 20.

Total foreign trade of Slovakia with pork meat

Table No. 22

	Import		Export		Balance		Trade turnover		Price per kg	
	tons	thous. SKK	tons	thous. SKK	tons	thous. SKK	tons	thous. SKK	import	export
Pork meat										
1993	5 905	241 236	959	34 666	-4 946	-206 570 -1 154	6 864	275 902	40,9	36,2
2004	27 625	1 799 139	6 790	644 932	-20 836	207	34 415	2 444 071	65,1	95,0
2004/93	468%	746%	708%	1860%	421%	559%	501%	886%	159%	263%

Source: Customs Statistics RIAFE, own calculations

Portions of V4 and EU-15 countries in foreign trade of Slovakia with pork meat (Slovakia = 100%)

Table No. 23

Commodity/ Year	Country/ Group	Import		Export		Trade turnover	
		kg	SKK	kg	SKK	kg	SKK
<i>Pork meat</i> 1993	CR	60,9	67,9	3,2	3,7	52,8	59,8
	MR	11,6	9,9	0,0	0,0	10,0	8,7
	PR	0,0	0,0	0,0	0,0	0,0	0,0
	EU-15	13,4	11,6	7,2	9,7	12,6	11,3
	remainder of world	14,1	10,6	89,6	86,6	24,7	20,2
2004	CR	23,8	27,1	21,2	27,8	23,3	27,3
	MR	5,9	5,9	10,6	19,9	6,8	9,6
	PR	8,6	6,9	5,8	4,9	8,1	6,4
	EU-15	61,7	60,1	62,4	47,4	61,8	56,7
	remainder of world	0,0	0,0	0,0	0,0	0,0	0,0

Source: Customs Statistics RIAFE, own calculations

3.7.Prices

3.7.1. Development of farm-gate prices

In general, the prices of pigs for slaughter paid to producers largely vary over the year. In spring they tend to decline to their lowest point in summer, then they start to rise and the peak level is achieved before Christmas.

Prices of Slaughter Pigs in the SR (SKK/kg of carcass weight)

Table No. 24

Period	Class S			Class E			Class U			Class R		
	2003	2004	2005	2003	2004	2005	2003	2004	2005	2003	2004	2005
Jan.	64,77	55,81	56,97	59,40	54,08	55,26	60,66	51,97	53,44	56,87	48,78	50,58
Feb.	57,51	55,60	57,08	53,49	51,40	54,69	51,36	48,47	52,62	48,13	45,74	50,54
Mar.	57,62	51,50	59,69	53,65	47,88	54,81	48,81	44,67	52,98	46,73	43,26	50,89
Apr.	57,03	54,67	58,41	52,84	48,36	54,05	48,21	45,76	52,68	46,22	44,10	50,79
May	50,59	49,76	54,55	48,85	47,76	52,25	46,47	46,86	50,15	45,30	44,60	48,42
Jun	51,95	51,11	53,76	50,10	48,49	52,33	44,09	46,55	50,63	40,94	45,02	48,06
July	53,64	59,50	56,73	51,32	56,47	54,55	48,14	52,17	52,42	44,85	49,56	50,25
Aug.	58,79	58,54	56,60	55,21	56,41	54,73	52,58	54,10	52,88	49,19	49,97	50,65
Sept.	61,20	58,90	56,92	59,21	56,61	55,41	55,66	54,35	53,56	50,91	50,49	51,21
Okt.	60,33	60,21		58,28	57,36		55,87	54,39		53,50	50,62	
Nov.	59,84	58,75		56,26	56,44		54,51	54,07		51,58	50,99	
Dec.	57,15	56,85		53,92	54,82		51,68	53,03		49,82	50,94	
Average	57,49	55,91	56,73	54,35	53,00	54,21	51,46	50,53	52,35	48,65	47,85	50,13

Source: SO SR

The production of pork exceeding the demand and stagnating interest of consumers in pork resulted in a decline of prices in 2003 at all stages of meat production and processing. Compared to December 2002, the prices paid for individual classes of meat quality dropped down by SKK 7.12 - SKK 16.58 per kg of slaughter weight by the end of March 2003. The drop in prices stopped in June/July 2003. Thereafter the prices were rising until September/October and then they were dropping again until the end of 2003. Throughout 2003 the prices never achieved the level of prices in 2002.

According to the data reported by the Slovak Statistical Office, the prices of pigs for slaughter in 2004, in all classes of quality, recorded similar development and not even the reduced supply and sales of pigs for slaughter were able to result in substantial price increase of pigs for slaughter. The steep decline slowed down in April and in July the prices recorded sharp increase. The prices stabilised in third quarter and again recorded a slight decline in fourth quarter. However, the average price of 2003 was not achieved in any class of quality.

The lower sales in first and especially in the second quarter of 2005 only had a minor impact on prices paid to producers for slaughter pigs. According to the data reported by the Slovak Statistical Office, the prices of pigs for slaughter in the first half of 2005 were higher than during the same period in 2004. However, in general, the prices recorded a slow decreasing trend, except for a slight increase in March.

3.7.2. *Development of processing prices*

In the monitored period of years 1995 up to 2004, the selling prices of pork meat had a tendency to increase, but their development can be shown in a form of sine wave. Reaching the first peak 1998, rising from 13,91 SKK per kg to 25,71 SKK per kg compared to 1995, and a drop in 1999 by 9,54 SKK per kg in average. Then, however, they began to rise again, reaching the second price peak in 2001, when they recorded an increase by 28,04 SKK per kg compared to 1995 and an increase by 7,56 SKK per kg compared to 1998. The increase in price of particular kinds of pork meat in 1998 was the result of increases of prices charged by producers and a drop in total production of slaughter pigs compared to pervious year. In 2001, the production of pigs reached its first minimum resulting in a relative lack of slaughter pigs and related increase in processing prices.

Processing prices of selected kinds of pork meat in SR (SKK per kg)

Table No. 25

Year	Loin	Neck	Hip	Boneless leg	Boneless shoulder
1995	98,42	85,30	57,36	118,80	102,07
1996	102,48	87,28	61,39	121,83	105,67
1997	115,50	97,09	67,14	134,74	120,58
1998	123,74	104,09	71,28	137,46	127,77
1999	115,44	96,57	62,85	125,30	116,48
2000	120,41	99,27	68,41	132,99	123,60
2001	133,21	111,02	77,69	145,85	134,38
2002	130,59	109,90	77,82	143,72	133,46
2003	117,66	98,52	68,01	128,35	116,62
2004	116,96	97,82	67,91	123,47	115,03

Source: CM (MP SR) 3-12

Development of processing prices of meat products was in general similar to the development of pork meat prices. In 1998 they reached their first peak, followed by a considerable drop in 1999. By the year of 2001, they increased again. Since 2001, they had a descending tendency analogously to pork meat prices.

3.7.3. *Development of consumer prices*

Analogously to the processing prices, the consumer prices had increasing tendency.

The highest prices were recorded in 2003, when they exceeded prices of 1993 by 68 SKK per kg. In the years of 1995 up to 2004 the consumer prices of particular kinds of pork meat exceeded (after deduction of VAT) the processing prices by an average margin ranging from 8,62 SKK per kg in the case of pork hip up to 15,76 SKK per kg in the case of boneless pork leg.

**Development of average consumer prices of particular kinds of pork meat in SR
(SKK/kg, including VAT)**

Table No. 26

Year	Loin	Neck	Hip	Boneless leg	Shoulder
1993	92,99	78,22	51,35	103,79	86,19
1994	109,70	95,73	64,79	127,24	109,01
1995	116,78	101,77	69,05	140,13	121,42
1996	123,24	105,07	72,32	145,74	127,72
1997	138,06	116,16	79,29	159,17	142,48
1998	146,47	123,13	83,92	165,98	149,83
1999	139,69	116,85	77,73	157,15	140,12
2000	148,29	122,60	84,49	166,63	149,42
2001	165,30	139,97	98,27	183,36	166,76
2002	160,20	137,81	98,69	177,14	161,90
2003	143,90	123,41	86,60	157,56	143,80
2004	148,39	125,78	90,67	158,73	141,13

Source: SO SR

Average prices of selected meat products partially copied development of prices of meat, although a slight price drop occurred in 1999 and 2002. However, the drop was not too noticeable and depends on the kind of a product in question as well.

4. The poultry sector

Contrary to the pig/pork sector, the poultry sector experienced a substantial growth in recent years which was characterized by an increase in production of slaughter poultry, growing offer of poultry meat in terms of quantity as well as widening of assortment of poultry meat and poultry products.

The total number of poultry grew (from 13 580 thousand heads in 2000 to 14 217 thousand heads in 2003), on the other hand figures concerning turkey and water fowl decreased. The prognosis for coming years concerning local production and consumption counts with slower growth of offer and demand.

The poultry sector shows a relatively high degree of integration and cooperation: the main companies are involved in the whole production chain from poultry feed production through hatching, broilers fattening and egg laying up to slaughtering and processing.

Inputs including day old chicken and parental stock as well as poultry farming and poultry processing technologies have been largely imported.

Poultry consumption still has a growing tendency (2000: 17,1 kg per capita per year, 2004: 21,1 kg per capita per year) which is satisfied mainly by increasing poultry meat production and more and more poultry products imports (2000: 14 148 thousand tons, 2004: 23 897 thousand tons).

The poultry processing industry is in a better position than the red meat slaughterhouses and processors: newer technologies, more specialized and value added oriented production and better use of existing capacities.

4.1.Poultry production

As at 31.12.2004, the SO SR registered 341 poultry farms (excluding small producers). Within this group of farms, hens were kept in 61 farms, hens and other poultry were kept in 274 farms, 67 farms kept only “other poultry” and 280 farms kept “other poultry” and hens in small numbers. Within the group of all poultry producers, almost 66,6% kept less than 100 heads of poultry amounting to 0,056% of total number of poultry. Within the category of poultry farms, 75 facilities (22,0%) kept more than 10 000 heads of poultry, farming 99,3% of total number of poultry. 0,61% of total heads of poultry were bred in facilities keeping from 100 to 10 000 heads of poultry. This group includes PS and GPS (breeding) animals, 10 farms with waterfowl and other farms with breeding of ostriches, quails and pheasants.

Total number of poultry keeping facilities registered in the Registry of Farms, sorted by heads of poultry in a facility as at 31.12.2004 (excluding small poultry keepers)

Table No. 27

Heads	Number of facilities
1 – 20	40
11 – 20	90
21 – 100	97
101 – 1 000	26
1 001 – 10 000	13
10 001 – 100 000	41
over 100 000	34

Source: SO SR

Total number of hen farms registered in the Registry of Farms, sorted by number of hens in a facility as at 31.12.2004 (excluding small poultry keepers)

Table No. 28

Heads	Number of facilities
1 – 10	103
11 – 20	91
21 – 100	39
101 – 1 000	6
1 001 – 10 000	4
10 001 – 100 000	21
over 100 000	10

Source: SO SR

Total number of poultry farms and poultry heads by regions in SR in 2004

Table No. 29

Region	Number of farms	Number of heads	Average number of heads per farm
Bratislava	29	375 292	12 941
Trnava	76	2 277 186	29 963
Trenčín	48	1 912 421	39 842
Nitra	60	3 717 636	61 961
Žilina	52	1 182 806	22 746
Banská Bystrica	76	1 423 169	18 726
Prešov	55	1 183 170	21 512
Košice	80	1 641 559	20 519
Total SR	476	13 713 239	28 809

Source: CD MP SR, RIAFE, Pol 14-01

Number of farms and slaughter poultry by regions of SR in 2004

Table No. 30

Region	Number of farms	Number of heads	Average number of heads per farm
Bratislava	9	8 327	925
Trnava	31	1 545 964	49 870
Trenčín	26	1 174 368	45 168
Nitra	31	1 749 871	56 447
Žilina	19	678 001	35 684
Banská Bystrica	24	562 203	23 425
Prešov	24	521 720	21 738
Košice	19	458 320	24 122
Total SR	183	6 698 774	36 605

Source: CD MP SR, RIAFE, Pol 14-01

Development of heads of poultry in SR by categories in thous. heads

Table No. 31

Indicator	2000	2001	2002	2003	2004
Breeding chickens	1 122	-	897	786	770
Chickens for fattening	6 018	7 004	6 134	6 689	6 699
Hens (egg-laying)	5 846	5 143	6 213	6 127	5 647
Total gallinaceous fowls	12 985	14 955	13 245	13 602	13 116
Turkeys	211	349	285	163	167
Goose	40	38	34	36	36
Ducks	246	248	253	251	249
Total poultry	13 580	15 590	13 959	14 217	13 713

Source: SO SR –Census of stock animals as at 31.12.,

Note: in 2001 as at 31.10.2001, Structural Census of Farms, SO SR

The number of producers registered in 2004 was 19,2% lower than in 2001. At present (2004), there are about 80 companies (according to records of departmental statistics) acting in the market with slaughter poultry. The highest average production per company ranges from 18,7 to 261 thous. ton. Of the total production in 2004, 87,7% of is produced by the five biggest companies. See Annex No. 21 for a list of accredited poultry farms. From the

territorial aspect, the highest number of producers of slaughter poultry are active in the region of Nitra (20%), followed by the regions of Trenčín - 16,3%, Trnava, Žilina, Banská Bystrica - 13,7%, Košice - 11,3% and Prešov - 8,8%. The lowest number of producers can be found in the region of Bratislava: 2,5%.

In the year 2004 the average production costs per kg of live-weight of slaughter poultry amounted to SKK 28,58. For an extensive overview of costs and returns of slaughter chicken in the years 2003 and 2004 we refer to Annex No. 22 and 23.

Genetics

According to available data from the departmental statistics (statements LIAH MP SR 1-2004), there are 12 hatching facilities annually producing about 32,1 mil. heads of Day Old Chicks (DOC's) predominantly of laying breeds. The data from some years do not include goose and turkeys due to protection of confidential information, as covered by the Act No. 540/2001 Col., on State Statistics. The scope of production in the facilities ranges from 13,3 mil. heads to 24,4 thous. heads with an average annual production of 2,9 mil. heads per facility. Production DOC's mostly consists of chicken. The production of other species considerably fell in recent years.

The average number of chicken in rearing during the period 2001 up to 2004 amounted 6 632,0 thous. heads (SO SR). Since 1990, there is a gradual decrease of average annual quantities of meat hens in reproduction flocks (GPS/PS), resulting not only in a weakening of self-sufficiency in the segment of domestic hatching, but also resulting in orientation to import of final products (in this context day-old-chicken) from abroad.

9 parent hybrid combinations (Arbor Acres, Hybro, Avian, Isa Vedette, Ross, Shaver, Starbo, Anak) were used in the year of 1999 (more recent data are not available). The production was realized by 8 hatching organizations.

As there is substantial lack of hen parent stock as well as of traditional grand parent stock of meat hens in Slovakia which could produce sets of parents for meat hens, big amounts of chicks need to be imported from abroad. In the period of 2001 up to 2004, in average 28,8 mil. heads of poultry with weight up to 185 g were annually imported to Slovakia (day-old-chicken). The development negatively influenced the balance of trade in the poultry segment. The biggest volumes were imported from the Czech Republic, Hungary and France .

Production of one-day-old chicks in the years of 2001 up to 2004 in intensive farms in heads

Table No. 32

Indicator	2001	2002	2003	2004
Hens	35 219 818	53 443 290	39 897	34 752 856
Turkeys	2 053 315	I	1 937 973	I
Goose	I	I	27 012	I
Ducks	622 788	I	309 177	I
Total	37 895 921	53 443 290	2 314 059	34 752 856

Source: LIAH (MP SR) 1-04

Note: I = confidential information

The known producers of one-day-old chicks in Slovakia include: **Hydina Súlovce, s.r.o.** (<http://www.ppdprasice.sk>) which annually produces 160 thous. chicks. One of the biggest customers of the farm is THP company headquartered in Topoľčany. **Hybrav a.s** (<http://www.hybrav.sk>) annually produces 3 960,0 thous. broiler chicks pertaining to ISA JV hybrids from eggs from its own reproduction flocks. **Branko, a. s.** (<http://www.fend.sk/branko>) operates its own hatching facility for turkey chicks, where about 2 000,0 thous. heads are hatched annually. Its production of turkey covers 82% of the Slovak market. The company operates reproduction flocks of BIG-6 parent turkey, purchasing them in the Great Britain from B.U. Chester company, which holds a leading position in the production of parent stock in Europe. It is also specialized in production of eggs for hatching in the volume of about 3 000,0 thous. eggs per year. **Liaharenský podnik, a.s., Nitra-Párovské Háje**, is engaged in hatching of chickens of the egg-laying type. **Gyron – Hyfa, s.r.o.** (<http://www.gyron.sk>) is focused on female chickens for egg-laying, young cocks, broiler chickens, turkey and ducklings). It is also engaged in keeping of layers, ducks, turkeys and goose.

4.2. Offer and usage of slaughter poultry

In the period of 2001 up to 2004, the total offer of slaughter poultry had an ascending tendency reflecting an increased demand of Slovak inhabitants for poultry meat. In addition to the producers registered in the registry of farms, also small and unregistered producers contribute to the total production of slaughter poultry. This group annually produced 17,0 thous. tons of living slaughter poultry in the period of 2001 up to 2003, as estimated by the SO SR.

According to the data on registered intensive farming (statement VOH MP SR 7-04), average annual production of meat of live slaughter animals amounted to 102 047 tons. Chicken have the highest portion in production (92,2%), followed by hens (4,0%), turkeys (3,5%) and ducks (0,2%). Production of slaughter turkeys recorded a sharp drop resulting mainly from unsuitable conditions of the technological equipment for meat processing which is not able to slaughter heavy kinds of turkeys with weight of 18 up to 20 kg, including turkey cocks. Production of goose is estimated to amount to 2,0 tons up to 4,0 tons per year, i.e. about 0,3% of produced poultry in total.

During the monitored period (2001-2004), 90,0%–95,5% of produced poultry was sold to trading and processing companies with other sales amounting about 4,0% and remaining

quantities were directly exported. The average slaughter weight in sale amounted to 1,91 kg in 2003 and 1,98 kg in 2004

Production of slaughter poultry in SR (in tons of live weight) on intensive farms

Table No. 33

Indicator	2001	2002	2003	2004
Number of companies	99	116	92	80
Total slaughter poultry	92 949	108 558	102 772	103 797
Of which: chickens	83 549	98 661	95 491	98 665
Turkeys	4 859	5 286	2 858	1 041
Ducks	580	127	92	70
Hens	3 961	4 161	4 331	4 021
Goose	0	323	0	0

Source: VOH (MP SR) 7-04

4.3.Processing of poultry

The processing facilities purchase living slaughter poultry from producers for slaughter and processing on contractual basis. According to the data from the departmental statistic investigation (statement Potrav MP SR 1-02), the usage of capacities in monitored slaughtering facilities in the period of years 2001 up to 2003 ranged from 80,3% to 98,3%, from 67,8% to 94,3% in freezing stores, from 54,0% to 84,3% in cold stores, and from 88,2% to 130,6% in products from poultry meat.

The majority of processing entities, mainly the bigger ones, operate their own rearing, slaughterhouses, production of products, freezing store, but also facilities for processing of hen's eggs for consumption and can products. Their production consists of both frozen as well as cooled products from chickens, turkeys and hens and products from poultry meat (salamis, sausages).

According to the State Veterinary and Food Administration, there were 48 approved facilities for fresh poultry meat in Slovakia as at 23.3.2005. The companies can export their production to EU countries without limitation (Annex No. 24). In addition to the facilities, there are 13 other low-capacity facilities for fresh poultry meat acting only on the Slovak market (Annex No. 25). Particular facilities can consist of a slaughterhouse, meat chopping unit, freezing store and meat production unit. Many companies do not have a slaughterhouse and just purchase fresh meat or they only have cold and freezing stores or they are only engaged in production of meat products, cans of meat and meat containing foods.

Within the group of approved facilities, only 5 facilities operate a slaughterhouse. The majority of them operate also a freezing store in addition to a meat chopping unit.

Permitted facilities are divided according to production capacity in low-capacity facilities processing up to 5 tons weekly, facilities processing up to 20 tons of livestock units weekly or 1000 tons yearly and facilities processing up to 30 tons of livestock units weekly or up to 1500 tons yearly.

Purchase of slaughter poultry for processing (in tons of live weight)

Table No. 34

Indicator	2001	2002	2003	2004
Number of facilities *	17	13	13	10
Total slaughter poultry	105 742	120 671	111 460	117 519
Of which: chickens	96 015	109 537	107 184	114 839
Turkeys	5 239	6 484	889	107
Ducks	226	58	57	
Hens	4 258	4 592	3 330	2 573
Goose	4	0	0	0

Source: VOH (MP SR) 7-04

* approved slaughterhouses

According to the available data, an average annual production of poultry meat from locally purchased and imported poultry amounted to 84,1 thous. tons. The meat yield ranged from 72,6% to 75,9%. The average share of chicken meat amounts to 93,7%, meat of hens 3,1%. There was a considerable drop in production of turkey meat from 5,4% in 2001 to 0,1% in 2004. Domestic offer of turkey meat is supplemented with import of meat from abroad with ascending tendency. In the years 2001 up to 2004 the import amounted to 17,1 thous. Tons on average.

In contrast to Hungary or Poland, the Slovak poultry sector [22] is based on chickens. Most of the turkeys, ducks and geese on sale were imported from abroad. The keeping of these poultry species in Slovakia was discontinued due to inefficient performance. In the past, Slovakia produced over 10,000 t a year. The meat is currently processed by a single company - HSH, limited holding company, Veľké Zálužie. Until 2003, turkey meat was also processed by the THP Topoľčany company.

Production of slaughtered poultry in tons

Table No. 35

Indicator	2001	2002	2003	2004	Index 04/01
Number of facilities	17	13	13	10	58,8
Slaughtered poultry	80 351	89 248	81 534	85 415	106,3
Of which: chickens	72 898	80 786	78 505	83 224	114,2
Turkeys	4 373	5 215	711	88	2,0
Ducks	162	42	40	0	
Hens	2 915	3 205	2 278	2 083	71,5
Goose	3	0	0	0	x

Source: VOH (MP SR) 7 - 04

The most important facilities processing slaughter poultry in Slovakia include:

- **Topoľčiansky hydinársky podnik (THP), a.s. Topoľčany** (<http://www.mesto.sk>) region of Banská Bystrica, district Zvolen. **Purchases of poultry of the company in 2004 amounted to** about 36,0 thous. tons. Its production covers 30,4% of the poultry meat market in Slovakia. It is an integrated facility in the sense that it combines a slaughterhouse, meat chopping unit and meat production. It also produces

- meat preparations in accordance with the Governmental Decision No. 317/2003 Col. (Directive 94/65/ES);
- **Hyza, a.s.-Žilina** (<http://www.fend.sk/hyza/>), region of Žilina, district Žilina. The facility annually processes more than 22 thous. tons of slaughter poultry, covering 19,4% of the poultry meat market in Slovakia. It is an integrated facility (slaughterhouse, meat chopping unit, meat production). It also produces meat preparations in accordance with the Governmental Decision No. 317/2003 Col. (Directive 94/65/ES).
 - **Hydina, ZK, a.s. Košice** (<http://www.hydinazk.sk>), region of Košice, district Košice. The company covers 15,2% of the poultry meat market in Slovakia. It is an integrated facility (slaughterhouse, meat chopping unit, meat production).
 - **Hydina, a.s. Cífer** (<http://www.hydinacifer.sk>), region of Trnava, district Trnava. The company focuses its activities on production of broiler chickens and processing of slaughter poultry. The company covers 12,7% of the poultry meat market in Slovakia. It is a facility with slaughterhouse, meat chopping unit and meat production.
 - **HSH, s.r.o.** (<http://www.hsh.sk>), Veľké Zálužie, region of Nitra, district Nitra. The company covers 10,1% of the poultry meat market in Slovakia. It focuses on production of fresh, frozen and deep frozen poultry and production of poultry products. The company processes chickens, turkeys and hens. It is an integrated facility (slaughterhouse, meat chopping unit, meat production). It also produces meat preparations in accordance with the Governmental Decision No. 317/2003 Col. (Directive 94/65/ES) and products from fresh meat, rabbit meat and products from meat of wild game.
 - **Zvolenská hydina, spol. s r.o.** (<http://www.hydinazv.sk>), region of Banská Bystrica, district Zvolen. The company covers 7,2% of the poultry meat market in Slovakia. It processes slaughter chickens and hens, produces frozen, cooled and carved poultry and poultry products (ham, salamis, boiled, smoked, soft). It is a facility with slaughterhouse, meat chopping unit and meat production.
 - **Podtatranská hydina, a.s.** (<http://www.hydinakk.sk>), region of Prešov, district Kežmarok. The company covers 3,7% of the poultry meat market in Slovakia. It produces slaughter poultry on its own farm in Spišské Tomášovce. It is an integrated facility (slaughterhouse, meat chopping unit, meat production),
 - **Hydinár a.s.** (<http://www.hydinar.sk>), Gbely, region of Trnava, district Senica. It covers 1,3% of the poultry meat market in Slovakia, The company is engaged in production and processing of poultry using its own slaughtering line and in production of eggs. It is a facility with slaughterhouse, meat chopping unit and freezing store.
- The list of most important poultry processors is given in Annex No 26.

Other well-known processing facilities include: Hydina Súlovce, s.r.o., with an annual production of 6000 tons, *Belim, s.r o.* (<http://www.belim.sk>), with a production programme aimed at chopped poultry and meat products, integrated facility (meat chopping

unit, meat production), products from fresh poultry meat and cold storage. **Hydina Prešov SVZ, a.s.**(<http://www.svssr.sk>), **FOOD Trade, s.r.o.**, produces products from fresh poultry meat and has cold stores. It is a company with foreign participation.

FEND group, which is the biggest producer of poultry meat products in Slovakia, was established in 1994. The group is composed of HYZA, a.s., THP, a.s., Branko, a.s., Považan, a.s. and Vitae, a.s. companies. It is a so-called vertical integration, which enables monitoring of the entire production process at all levels (eggs for hatching, chicks, feeding mixtures) to assure the highest quality from the egg up to the final product.

Products of the poultry industry are available for consumers mainly in the form of products from the first-level processing (whole poultry, jointed poultry, pieces, giblets, frozen, cooled). The second level of processing mainly includes products containing the products of poultry industry. It is a matter of production of meat pastes from hen's meat and giblets, salamis, creams from poultry meat, finished meals, semi-products etc.

According to V. Bašteňák (Union of Poultry Producers in Slovakia), Slovak products do not earn much recognition and brand development is not as vigorous as in other food industries.

Sale of poultry and poultry products is realized through the retail network or through the wholesale network. It is realized on a contractual basis and the majority of facilities use their own transport means. The production is also sold through retail networks of Coop Jednota, Billa, Tesco, Carefour, Ahold-Hypernova, CBA purchasing alliance and Metro. In addition to business partners, suppliers of feeding mixtures, technologies, packaging material (bowls, foils) and seasonings used in processing of products enter into the process too.

According to J. Bezák [23], the strongest market player in the Slovak poultry sector is the Bratislava-based FEND joint stock company which controls THP company (market leader), as well as Hyza Žilina. In total, these companies processed almost 60,000 tons of poultry for slaughter in 2004, which represents about half of the Slovak production.

According to the information supplied by the Slovak Anti Monopoly Office, by the end of 2005 the Bratislava-based Fend holding group was selling two largest poultry plants - THP Topoľčany and Hyza Žilina, to Agrofert, a Czech agrochemical concern. As said, these companies have a market share of about 50%. The reason behind the sale of the poultry plants could be the high loss incurred after many years of moderate profits. Despite the cumulated earnings of SKK 2.8 billion, these plants produced a total loss of SKK 236 million. This was mainly caused by large investments into bringing the equipment in compliance with hygiene standards, as well as by the development of poultry prices affected by cheaper imports from the Czech Republic and Poland. Even though both companies underwent modernisation, their new owner is an experienced player in the food sector. They could thus be involved in stronger distribution networks. Agrofert is a strong market player in the meat processing industry in the Central Europe. If successful, Agrofert could purchase poultry plants owned by Fend, as well as several companies active in chicken fattening, as well as Považan Žilina

company – a manufacturer of feed mixture - s and Branko Nitra, which is focused on export of one-day-old turkeys. According to A. Babiš – owner of Agrofert, his group considers other capital investments in Slovakia.

4.4. Development and prognosis of offer and usage of poultry meat

The volume of offer of poultry meat in the years of 2000 up to 2004 in average annually increased with 114,5 thous. tons. Domestic production had an average share of 80,5% in the total offer and imports a share 15,2%. Development of the total offer was mainly determined by an increasing demand for poultry meat. The demand was mainly influenced by a decreasing interest in beef meat due to occurrences of BSE disease and by promotion of dietary characteristics of poultry meat in comparison with other kinds of meat. It increasingly leads Slovak customers to prefer poultry meat over other kinds of meat. This tendency was also reflected in the increasing consumption of poultry meat per inhabitant per year. Regardless of the above, consumption in Slovakia does not reach the level of average consumption in the EU-15 countries. The total offer of poultry meat was annually supplemented with imports from abroad.

The development of total usage copied the development of offer and had ascending tendency. The average share of total consumption in total usage is 94,9%, which means that export of poultry meat is negligible. The high share of consumption in total usage can also be explained by attractive price levels of poultry compared to other kinds of meat in combination with the still low total purchasing power of the Slovak population.

Development of supply and use of poultry meat in SR (in tons)

Table No. 36

Indicator	2000	2001	2002	2003	2004
Initial stocks	4 145	3 212	4 946	7 707	4 494
Production	84 710	91 632	96 662	92 265	95 500
Import	8 780	14 148	18 022	22 189	23 897
<i>Total supply</i>	<i>97 635</i>	<i>108 992</i>	<i>119 630</i>	<i>122 161</i>	<i>123 891</i>
Total consumption	92 465	99 507	108 227	111 126	111 411
Export	1 958	4 539	3 696	6 541	11 389
<i>Total use</i>	<i>94 423</i>	<i>104 046</i>	<i>111 923</i>	<i>117 667</i>	<i>122 800</i>
Final stocks	3 212	4 946	7 707	4 494	1 091

Source: RIAFE

Based on the hitherto development of balance indicators it can be presumed that the total offer in the period 2005 up to 2010 will increase. The growth shall be influenced by a growing demand for poultry meat, as the usual annual (now slowed down) increase in consumption of poultry meat per inhabitant per year is anticipated. Growth of domestic production shall be the decisive factor, but also a considerable increase of import is expected.

Prognosis of supply and use of poultry meat (in tons)

Table No. 37

Indicator	2005	2006	2007	2008	2009	2010
Initial stocks	1 091	13 327	25 892	21 819	17 433	12 693
Production	92 800	96744	100 711	104 739	108 824	113 068
Import	45 000	47 205	31 769	32 627	33 867	35 221
<i>Total supply</i>	138 891	157 276	158 371	159 185	160 123	160 982
Total consumption	113 564	118 220	120 585	123 117	126 318	129 728
Export	12 000	13164	15968	18635	21113	23435
<i>Total use</i>	125 564	131 384	136 552	141 751	147 431	153 164
Final stocks	13 327	25 892	21 819	17 433	12 693	7 818

Source: RIAFE

4.5. Development and prognosis of poultry meat consumption

Consumption of poultry in Slovakia has an ascending tendency. During the monitored period, the average consumption of poultry meat per inhabitant per year amounted to 16,5 kg. Increasing consumption of poultry meat in Slovakia was mainly influenced by an increased total offer of poultry, favourable development of consumer prices and stable preference of poultry meat to other kinds of meat by Slovak inhabitants.

Development of poultry meat consumption (in value carcass weight) in kg per inhabitant per year

Table No. 38

Year	Consumption in kg	RFD	Difference in kg	Difference in %
1993	11,8	10,2	1,6	15,7
1994	11,9	10,2	1,7	16,7
1995	13,4	10,2	3,2	31,4
1996	14,4	10,2	4,2	41,2
1997	15,5	10,2	5,3	52,0
1998	16,0	10,2	5,8	56,9
1999	17,4	10,2	7,2	70,6
2000	17,1	15,0	2,1	14,0
2001	18,5	15,0	3,5	23,3
2002	20,1	15,0	5,1	34,0
2003	20,7	15,0	5,7	38,0
2004	21,1	15,0	6,1	40,7

Source: SO SR, year 2004 = temporary data

Note: Meat in value with bones is dead weight of carcass; it also included consumption of offal

Prognosis of production and consumption of poultry meat in SR in kg per year

Table No. 39

Indicator	2005	2006	2007	2008	2009	2010
Production in (tons)	92 800	96744	100 711	104 739	108 824	113 068
Production per inhabitant (kg)	17,2	18,0	18,7	19,4	20,2	20,9
Total consumption (t)	113 564	118 220	120 585	123 117	126 318	129 728
Consumption per inhabitant (kg)	21,3	21,9	22,4	22,8	23,4	24,0

Source: RIAFE

Based on the hitherto development of balance indicators, in the coming period of 2005 up to 2010 it can be presumed that not only the poultry meat production will annually grow, but also a growth of total consumption and consumption per inhabitant per year. However, according to made estimates the consumption of poultry per inhabitant per year in Slovakia in 2010 shall not reach the average level of consumption in the EU-25 countries. To be more precise, it shall only reach a level of 68,2% of the consumption projected by the OECD, despite the expected annual increase of poultry consumption.

The overview of meat consumption by meat type in EU-15 is shown in Annex No 18.

4.6.Foreign trade

The Slovak Republic permanently has a negative trade balance with live poultry, poultry meat, eggs and egg substances. More than 50% of the trade balance can be attributed to trade with poultry meat with long-term increasing tendency of imports. The main imported items include meat from the gallinaceous fowls (hens, cocks, chickens), meat from turkeys and, to a lower extent, meat from waterfowls (goose, ducks). From the territorial point of view, the highest volumes of poultry meat were imported from the Czech Republic, Hungary and France, but imports from Asia and other countries (China, Brasil, Thailand) were carried out too. The highest negative balance occurred in trade with frozen cuts and offal from chicken (item CN 0207 14) and frozen cuts and offal from turkeys (item CN 0207 27). Detailed division of foreign trade with poultry meat and live poultry is given in Annex No. 27 and 28.

Analogously to trade with meat, Slovakia also has long-term negative balance in foreign trade with live poultry, mainly day old chicks. Hatching eggs (custom tariff code 0407 00 19) are mainly traded with the Czech Republic, the Slovak export currently exceeds the import. Live poultry is mainly imported from the Czech Republic, Hungary, France, Austria and Poland.

Foreign trade of SR with live poultry and poultry meat

Table No. 40

Commodity	Year	Import	Export	Difference	Balance in thous. SKK
0105 92 00, 0105 93 00, 010599 Live poultry of Gallus domesticus sort weighting at most 2000 g and weighting over 2000 g and other (in tons)	1999	621	46	-575	-18 068
	2000	2 204	455	-1 749	-44 344
	2001	883	27	-856	-69 392
	2002	2 621	5	-2 615	-107 952
	2003	633	1 246	613	47 660
	2004	7 203	1 074	-6 129	-126 957
0105 11, 0105 12 00, 0105 19 Slaughter poultry weighting not more than 185 g (in thous. pieces)	1999	16 575	2 120	-14 455	-205 782
	2000	18 686	3 158	-15 529	-189 528
	2001	27 804	2 864	-24 940	-311 591
	2002	26 177	4 401	-21 776	-283 582
	2003	32 447	5 469	-26 978	-285 673
	2004	28 782	12 089	-16 692	-188 320
0207 eat and edible poultry offal No. 0105, fresh, cooled, frozen (in tons)	1999	3 404	2 747	-658	-59 866
	2000	6 469	1 578	-4 891	-293 413
	2001	11 790	4 455	-7 335	-326 413
	2002	15 143	3 555	-11 588	-548 002
	2003	18 508	5 353	-13 156	-596 606
	2004	23 021	11 286	-11 735	-347 320
Total(0105+0207)	1999				-283 716
Total(0105+0207)	2000				-527 285
Total(0105+0207)	2001				-707 396
Total(0105+0207)	2002				-939 536
Total(0105+0207)	2003				-834 619
Total(0105+0207)	2004				-662 597

Source: Customs Directorate SR, SO SR, RIAFE

Import of meat from poultry of Gallus domesticus sort (commodities from CN 0207 11 10 to CN 0207 14 99) by groups of countries in tons

Table No. 41

Indicator	2001	2002	2003	2004	Index 2004/03	Index 2004/01
<i>in thous. SKK</i>						
Total import	500 059	514 074	556 144	796 698	143,3	159,3
EU-25	192 733	271 007	317 904	568 651	178,9	295,0
Total third countries	307 326	243 067	238 240	228 047	95,7	74,2
Of which: Brasil	1 728	2 087	48 439	125 753	259,6	7 276,9
Thailand	-	1 191	105 879	102 294	96,6	X
China	305 598	239 789	83 922	-	x	X
<i>Unit price SKK/kg</i>						
Total import	60,92	47,59	45,63	52,37	114,8	86,0
EU-25	52,3	49,63	42,97	52,09	121,2	99,6
Total third countries	67,95	45,51	49,73	53,08	106,7	78,1
Of which: Brasil	40,1	40,14	58,31	50,96	87,4	127,1
Thailand	-	49,63	66,66	55,93	83,9	X
China	68,21	45,54	35,39	-	x	X

Source: Customs Statistics, Radela, s.r.o.
(04.08.2005)

According to THP, Topolčany ,a joint stock company, cheaper imports from the Czech Republic and Poland led to about 10% reduction in prices charged to the Slovak hypermarket chains. V. Bašteĸ, [22] Executive Director of the Poultry Union explains the low prices of Polish production by the fact that most of the Polish poultry sector was not separated from subsidized crop growing as was the case in Slovakia. The Polish mostly keep poultry in combined farms with crop production. As a result, they are able to indirectly subsidize their sales of poultry. Most of the poultry keepers in Slovakia operate independently and purchase feed from independent suppliers.

4.7. Development of prices

No big fluctuations occurred in development of farm-gate prices for slaughter poultry in the years of 1997-2004. In recent years, the prices for slaughter chicken and hens have had descending tendency, prices for ducks were slightly increasing and prices for slaughter turkeys fluctuated.

Average annual prices charged by agricultural producers in SR in SKK per ton

Table No. 42

Year	Slaughter chickens I.	Slaughter hens I.	Slaughter ducks I.	Slaughter turkeys I.
1997	31 263	15 875	40 718	43 396
1998	32 026	17 097	41 096	44 645
1999	28 968	17 584	42 730	45 994
2000	29 521	18 730	45 249	47 043
2001	33 424	18 961	45 305	48 857
2002	30 173	19 619 *	45 390	47 894
2003	28 593	19 298*	46 909	45 671
2004	28 354	19 146*	47 219	46 339

Source: SO SR

Development of consumer prices for the eviscerated chicken without giblets in the period of years 1997–2003 had a fluctuating tendency, copying basically the development of the consumer prices for agricultural products. Prices for the eviscerated chicken without giblets dropped under the level of the preceding year only in the years of 1999, 2002 and 2003. The drops were influenced also by a level of offer of and demand for poultry meat.

The comparison of consumer prices for individual types of meat is shown in Table No 43.

Development of average consumer prices of poultry, pork and beef meat in SR (SKK/kg including VAT)

Table No. 43

Year	Eviscerated chicken without giblets	Pork shoulder	Boneless pork leg	Beef from the rump	Boneless top sirloin
1997	64,43	142,48	159,17	150,72	74,80
1998	68,84	149,83	165,98	159,15	77,81
1999	61,42	140,12	157,15	169,70	82,36
2000	67,7	149,42	166,63	180,90	85,10
2001	79,25	166,76	183,36	178,32	83,16
2002	68,23	161,90	177,14	175,71	82,24
2003	67,6	143,80	157,56	182,40	87,57
2004	70,78	141,13	158,73	191,34	94,32

Source: SO SR

5. Selected Economic Results of Meat and Poultry Industry

5.1. Economic results of the meat industry

The meat industry has a long tradition in Slovakia. Due to its portion in production the industry ranks (along with dairy industry) among important production branches of the food processing industry in Slovakia, but the importance is diminishing. Economic results in this chapter cover data about production of pork and beef meat and meat products together because they are not monitored separately.

Portion of meat industry in production of food processing industry SR (%)

Table No. 44

1998	1999	2000	2001	2002	2003	2004	Difference 04-98
18,2	19,0	18,2	17,4	17,3	15,4	16,1	-2,1

Source: Potrav (MP SR) 1-02, CD MP SR, RIAFE - own calculations

5.1.1. Development of economic result

In the years 1998 up to 2000, meat industry companies showed losses that were increasing on inter-yearly basis. After a period of improved economy and profits in the years 2001 up to 2003, they again suffered losses in 2004 (-119 mil. SKK). Compared to 1998, the losses increased by 61 mil. SKK.

Development of economic result in meat industry SR (mil. SKK)

Table No. 45

1998	1999	2000	2001	2002	2003	2004	Difference 04-98
-58	-99	-381	60	287	327	-119	-61

Source: Potrav (MP SR) 1-02, CD MP SR, RIAFE

5.1.2. Structure of total costs

The highest item in the structure of total costs is the sum of consumption of materials, energies and other supplies, which can not be stored. Since 2001, the share is descending. In 2004 the item amounted 66,7% of the total costs. The share of wage costs was dropping since 1998 (6,6%) with stabilization achieved in the years of 2001 up to 2002. In 2004 they amounted 5,2% of total costs.

Structure of costs in meat industry SR (%)

Table No. 46

Indicator	1998	1999	2000	2001	2002	2003	2004	Difference 04-98
Production consumption	65,0	64,1	63,5	68,7	68,2	67,9	66,7	1,7
Wages and wage reimbursements	6,6	6,3	5,1	4,6	4,6	5,0	5,2	-1,4
Costs of sold goods	11,5	15,3	19,3	18,0	16,4	13,7	16,9	5,4
Other costs	16,9	14,4	12,1	8,7	10,8	13,4	11,2	-5,6

Source: Potrav (MP SR) 1-02, CD MP SR, RIAFE and own calculations

5.1.3. Development of investments and their influence on economy

After the volume of acquired investments had been decreasing, these started to rise again after 2000 with the highest growth in the last two years. In 2004 they reached a level of 1,6 bil. SKK. The development was the result of the accession of the Slovak Republic to the EU and connected obligation of meat producers to adapt operating facilities and adjacent spaces to standards applicable to the meat producers according to EU requirements.

Development of acquired investments in meat industry SR (mil. SKK)

Table No. 47

Indicator	1998	1999	2000	2001	2002	2003	2004	Index 04/98
Acquired investments	889	456	415	526	725	1394	1638	184,3
Acquired building and constructions	299	105	138	137	258	578	876	293,0
Acquired technologies	422	275	211	292	371	718	723	171,3

Source: Potrav (MP SR) 1-02, CD MP SR, RIAFE

As to the structure of the acquired investments, portion of acquired technologies exceeded acquisition of buildings and construction, except for the year 2004. After accession of the Slovak Republic to EU, there was an increase in investments into buildings and constructions (by 19,9 percentage point) connected with reduction of investments into machines and devices (by 3,4 percentage point).

Structure of main components of investments in meat industry SR(%)

Table No. 48

Indicator	1998	1999	2000	2001	2002	2003	2004	Difference 04-98
Acquired building and constructions	33,6	23,0	33,3	26,0	35,6	41,5	53,5	19,9
Acquired technologies	47,5	60,3	50,8	55,5	51,2	51,5	44,1	-3,4

Source: Potrav (MP SR) 1-02, CD MP SR, RIAFE and own calculations

Investments into machines, instruments and devices had favourable influence on development of labour productivity. Despite a decreasing number of employees, labour productivity increased both in terms of yields as well as in terms of production. Growth of average nominal wage (51,9%) lagged behind growth of labour productivity.

Labour productivity, employees and wage in meat industry SR (in thous. SKK; employees in numbers of persons)

Table No. 49

Indicator	1998	1999	2000	2001	2002	2003	2004	Index 04/98
Labour productivity from yields	1 633	1 801	2 194	2 779	2 858	2 717	3 141	192,3
Labour productivity from production	1 153	1 315	1 633	2 113	2 166	2 073	2 363	204,9
Monthly wage in SKK	8 978	9 497	9 587	10 533	10 832	11 070	13 639	151,9
Average number of employees	10 930	10 466	8 435	7 145	7 485	6 792	6 165	56,4

Source: Potrav (MP SR) 1-02, CD MP SR, RIAFE-own calculations

5.2. Economic results of the poultry industry

As to its share in total production, the poultry industry in the Slovak Republic ranks fifth behind the dairy industry, meat processing industry, brewing-malting industry and industry of sweets and baked goods. In the evaluated period of the years 1998 up to 2004, the portion was unstable, amounting to 7,4% in the year of 2004.

Portion of poultry industry in production of food processing industry (%)

Table No. 50

1998	1999	2000	2001	2002	2003	2004	Difference 04-98
7,6	6,7	6,8	8,1	7,4	6,9	7,4	-0,2

Source: Potrav (MP SR) 1-02, CD MP SR, RIAFE - own calculations

5.2.1. Development of economic result

Economic results were mostly loss-making except for two profitable years, namely 2000 and 2002. Each of them, however, was followed by a loss-making year again. In the years 2003-2004 the losses were the highest ones for all the monitored period and in 2004 it even increased to -183 mil. SKK. Compared to 1998, the economic result of poultry industry in 2004 dropped by 180 mil. SKK.

Development of economic result in poultry industry SR (mil. SKK)

Table No. 51

1998	1999	2000	2001	2002	2003	2004	Difference 04-98
-2	-28	131	-74	22	-153	-182	-180

Source: Potrav (MP SR) 1-02, CD MP SR, RIAFE

5.2.2. Structure of total costs

The highest share in total costs in 2004 was generated by production consumption (67%) and costs of sold goods (22%). The share of wage and other costs amounted to about 10%. Shares of production consumption and wages in total costs were growing by 2001, then they started to drop.

Structure of costs of poultry industry SR (in %)

Table No. 52

Indicator	1998	1999	2000	2001	2002	2003	2004	Difference 04-98
Production consumption	66,4	66,9	68,0	74,1	74,7	71,3	67,1	0,7
Wages and wage reimbursements	5,5	6,3	7,1	7,6	6,7	6,5	6,2	0,7
Costs of sold goods	11,8	5,0	18,4	31,6	14,8	14,2	21,9	10,1
Other costs	16,3	22,5	6,5	-13,2	3,8	8,0	4,9	-11,4

Source: Potrav (MP SR) 1-02, CD MP SR, RIAFE and own calculations

5.2.3. Development of investments and their influence on economy

Compared to 1998, the acquired investments in 2004 fell by almost one half to 463 mil. SKK. Rapid drop was recorded already in 1999. Despite subsequent gradual development, the amount of 791 mil. SKK, realized in 1998, was never reached again. While investments into buildings in 2004 considerably dropped (70,6%), investments into machines and devices increased by 8,2%.

Development of acquired investments in poultry industry SR (mil. SKK)

Table No. 53

Indicator	1998	1999	2000	2001	2002	2003	2004	Index 04/98
Acquired investments	791	173	214	262	323	426	463	58,5
- Acquired building and constructions	470	59	39	63	59	275	138	29,4
- Acquired technologies	244	100	162	178	238	139	264	108,2

Source: Potrav (MP SR) 1-02, CD MP SR, RIAFE

Within the structure of acquired investments, in 2004 the portion of acquired machines and devices exceeded the share of acquired buildings and constructions in the ratio of 57% to 30%. Although development was not so straight, it can be declared that the share of acquired building decreased during the monitored period, while the share of investments into machines, instruments and devices grew.

Structure of main components of investments into poultry industry SR in %

Table No. 54

Indicator	1998	1999	2000	2001	2002	2003	2004	Difference 04-98
Acquired building and constructions	59,4	34,1	18,2	24,0	18,3	64,6	29,8	-29,6
Acquired technologies	30,8	57,8	75,7	67,9	73,7	32,6	57,0	26,2

Source: Potrav (MP SR) 1-02, CD MP SR, RIAFE and own calculations

Labour productivity from yields and production grew even when the number of employees was decreasing (18,5%), but the growth was slower than growth of the average nominal monthly wage (72,9%).

Labour productivity, employees and wage in poultry industry SR

(in thous. SKK; employees in numbers of persons)

Table No. 55

Indicator	1998	1999	2000	2001	2002	2003	2004	Index 04/98
Labour productivity from yields	1 947	1 793	1 887	1 850	2 229	2 260	2 933	150,6
Labour productivity from production	1 459	1 310	1 528	1 953	2 033	2 072	2 275	155,9
Monthly wage in SKK	8 877	9 453	10 880	11 802	12 334	12 546	15 351	172,9
Average number of employees	3 598	3 694	3 378	3 609	3 404	3 050	2 932	81,5

Source: Potrav (MP SR) 1-02, CD MP SR, RIAFE-own calculations

6. Entry of foreign capital in the meat industry and further prospects

According to the data from departmental reporting, 44 companies with foreign capital participation acted in food processing segment in Slovakia in 2004. This is 11% of the reported number of food processing companies. Compared to 2000, there is an increase by 9 companies .

As indicated by the data from departmental reporting, the amount of foreign capital in the Slovak food processing industry in 2004 totalled 16 175,54 mil. SKK, exceeding the value of the year of 2000 by 5 437,72 mil. SKK. It represents an increase of foreign capital by more than 50%. The highest amounts were invested into brewing-malting industry and industry of non-alcoholic beverages, totalling in 2004 the amount of 8 961,45 mil. SKK, i.e. 55% of the foreign capital in the food processing segment in total. Foreign capital investments in the meat industry are stagnating, totalling 34 mil. SKK since 1999, i.e. 0,2%. Foreign capital participation in poultry industry dropped to 174 061 mil. SKK and do not reach the levels of above mentioned branches.

The possibility to analyse food processing companies with foreign capital participation is limited by the Act No. 540/2001 Col., on State Statistics in relation to protection of confidential data. Statistical data for meat and poultry industries therefore can not be analysed.

In contrast to other Slovak food sectors, there were no multinational competitors to the domestic meat industry (2004). The only foreign owner (Czech and Slovak American Enterprise Fund) was established in Mäso Spiš plant and in Hydina ZK plant, Košice (European Bank for Reconstruction and Development) which owns 40% of shares in the company.

According to V. BašteĎ,[23] Executive Director of the Union of Poultry Producers in Slovakia, export of final products could build on experience of strong multinational investors with established distribution channels abroad. Upon integration into the EU of Slovakia, the interest of Western investors has increased. However, the foreign investors (the French, Americans) so far only did business with the Polish meat industry. According to BašteĎ, little interest of multinational players in poultry plants in the former socialist countries may be explained by the fact that the poultry processing capacity in Western Europe itself has exceeded demand by 20%. Upon integration into the EU of Slovakia some Slovak poultry producers were able to gain a position of contracted producers for their foreign partners.

Development of number of food processing industry with foreign capital

Table No. 56

Production branch	Companies with foreign capital					Portion in number of companies in branch in %				
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
Dairy	5	9	11	11	11	8,20	15,25	20,75	23,91	26,83
Sugar making	3	2	3	3	3	50,00	40,00	75,00	75,00	100,00
Production of sweets and baked products and production of coffee and coffee substitutes	2	2	2	1	1	15,38	16,67	16,67	9,09	10,00
Poultry	2	1	1	1	2	16,67	5,88	7,69	9,09	18,18
Meat	1	1	1	1	1	0,93	0,96	1,11	1,59	1,82
Milling	0	0	0	0	0	0	0	0	0	0
Baked goods -confectionery	3	2	2	2	2	2,5	1,71	1,75	1,89	1,96
Canning	1	2	2	2	2	8,33	11,11	13,33	15,38	10,53
Starch	3	3	3	2	2	42,86	42,86	42,86	33,33	40,00
Distilling	5	4	5	3	4	14,71	8,33	12,20	8,11	10,53
Refrigerating and fish-processing	0	0	0	0	0	0	0	0	0	0
Brewing and malting	4	2	4	5	6	26,66	14,29	33,33	38,46	42,86
Production of non-alcoholic beverages	3	3	3	4	7	12,00	11,53	10,71	13,79	25,93
Fats and cosmetics	2	3	3	3	2	33,33	42,86	33,33	30,00	22,22
Wine production	1	1	1	1	1	3,45	4,17	4,00	4,17	4,55
TOTAL SR	35	35	41	39	44	7,14	6,93	8,78	9,22	10,84

Source: RIAFE, CD MA SR, Potrav 1-02

In the middle-term horizon (future 5 to 10 years), some alternatives of the development of the Slovak meat industry can be taken into consideration.

1. Conservation of the current situation with a gradual reduction of the number of slaughterhouses and other facilities due to gradual termination of activities of non-profitable entities.

Possible entry of strong entrepreneurial groups (probably foreign investors) into the meat industry could lead to a considerable reduction in the number of high-capacity industrial slaughterhouses. With respect to the welfare of animals connected with limitations in their transport for slaughter, at least 3 slaughterhouses should be kept in Slovakia. They should be optimally located and cover all the territory of Slovakia. Moreover, a very low number of slaughterhouses could lead to their monopoly position and dictating of prices. In addition to the industrial slaughterhouses, a reduced number of low-capacity regional slaughterhouses in Slovakia would remain (for example, at agricultural cooperatives with their own production facility for supplies of meat products to regional markets). From the viewpoint of specialization, smaller meat chopping and processing facilities are more likely to remain in the market than small slaughterhouses.

2. The second variant presumes that big slaughterhouses are suffering long-term losses within the competitive fight, due to the low level of selling prices. This situation leads to gradual decline of the number of facilities. If they fail to recover from the situation or when a strong (foreign) investor is not found, smaller regional slaughterhouses, supplying in particular small over-the-deck shops, are the only objects remaining in the market. Hypermarkets and supermarkets are supplied from slaughterhouses in neighbouring countries. This alternative could subsequently lead to a more considerable reduction of the number of livestock.

As to the production of meat products, it is very difficult to estimate the number of industrial processors. In middle-term horizon, their number shall depend on their economic results influenced by level of costs, purchasing power of inhabitants and quality of products. Only processors who will be capable to produce high-quality products for optimum price using modern formulas complying with health nutrition criteria, should be able to stay in the market. However, if earnings of inhabitants shall not grow quickly enough and the meat industry shall continue to produce less quality products in order to keep an optimum level of production costs, eating habits of inhabitants could change in the long-term horizon. It could lead to a reduction in meat consumption, thereby respecting principles of a more healthy life style without consumption of hidden fats and smoked products with high salt content. The situation could lead to further reduction of the number of industrial meat processing facilities. Even if consumers' eating habits remain unchanged, purchase of imported meat products in higher quality for more favourable prices is likely. As to specialisation of processing facilities, the entry of foreign capital would make this very likely.

7. Institutional Coverage

The Ministry of Agriculture SR (MA SR) is the central body of state administration for agriculture, food processing industry, land reclamation, forestry, fishery and game keeping. As at 1.1.2004, substantial change of internal organization of the MA SR has been made with respect to an increase of efficiency of performance of activities under conditions of membership in the European Union. Within the organigram of the ministry, the

Agriculture and Trade Section and its Animal Commodities Department are the relevant policy responsible bodies. <http://www.mpsr.sk>

The Agricultural Payment Agency (APA) has been established on the basis of the Act No. 473/2003 Col. (effective as from 1.12.2003), which lays down its establishment, organization, competence and budget, provision of funds for development programmes in agriculture and countryside, support to business activities in agriculture, food processing industry and forestry from the state budget (national support) and activities for the provision of funds for agriculture from the EU budget. The APA is a.o. responsible for the payments in the framework of the SAPS (Single Area Payment System) and the Structural Funds for agriculture. Since February 1, 2005, the APA has 18 regional offices. As a budgetary organization, APA is linked to the state budget through a budgetary chapter of the Ministry of Agriculture. <http://www.apa.sk>

The Intervention Agency (IA) has been established at 1.1.2004 as budget organization of the Ministry of Agriculture, whose basic goal is fulfilment of tasks in the segment of public services connected with provision of returnable financial support for goods pledged in public warehouses in accordance with the Act No. 144/1998 Col., on Warehouse Debenture Bond, Goods Debenture Bond and Addition to Some Other Laws, as later amended. Based on permission of the European Commission, the Slovak Republic is allowed to use the system of Warehouse Debenture Bonds (WDB) and Goods Debenture Bonds (GDB) by 2006. The IA also arranges administration and execution of state receivables (contractually transferred from APA) and prepares and realizes programmes of common agricultural marketing (CMO's) in domestic and foreign market on the basis of agreement with the APA. An important activity is the *campaign of the National programme of support to agricultural products and foods* associated with bestowing the „Mark of Quality“ logo confirming that a product marked with this logo is safe, has high quality and is of Slovak origin. The logo is bestowed after fulfilment of criteria, which are further monitored for compliance, and right to use the logo can be withdrawn. The mark was hitherto acquired by 10 producers for 30 products, mostly for dairy and milling industry. <http://www.mpsr.sk>

Subordinate state administration bodies under the Ministry of Agriculture and state organizations authorized to execute state administration in specified area include :

The State Veterinary and Food Administration SR, whose main mission is planning, implementation, management and evaluation of activities in the area of veterinary care, health and protection of animals, hygiene of feeds, ecology, veterinary pharmacology, food supervision and hygiene of foods of animal and vegetable origin, special commodity regimes, respective laboratory diagnostics and the rapid alert system. The organization approves facilities producing or handling products of animal origin for export to member states of the European Union. <http://www.svssr.sk>

Breeding Inspection SR performs state supervision in the field of breeding and selective breeding of stock animals. In 2004, 626 monitored farms were entered into the Central Registry and the registry of stock animals SR. <http://www.pisr.sk>

Central Agricultural Supervisory and Testing Institute, whose main task is performance of specialised state supervision and testing, approving and registration of inputs into the vegetable and animal production as well as specialised state supervision over quality of substances entering into agriculture, such as fertilizers, plant protection means, feeds. In accordance with the global development and strategy of supervision and testing in the EU, the institute improves control components connected with safety of foods and feeds as well as environmental safety. <http://www.uksup.sk>

Agricultural Technical and Testing Institute, SKTC-106 Rovinka, deals with technical issues of replacement and usage of agricultural machines and devices and usage of agricultural biomass as important factor of reduction of costs in the agricultural production. <http://www.sktc-106.sk>

Institute for State Control of Veterinary Biologicals and Medicaments performs state supervision in the field of veterinary pharmacology and carries out control activities in production and wholesale distribution of veterinary medicaments and veterinary medical aids, permits clinical testing of veterinary medications and keeps a list of registered veterinary medications, approving veterinary preparations and medical aids. <http://www.uskvbl.sk>

State Breeding Institute SR is the authorized breeding organization, whose main goal is executing activities related to the breeding and selective breeding of farm animals (inspection of yield rate, genetic assessment, identification, keeping the central registry of farms and the registry of stock animals, including supplying data to the IACS database. Especially in the case of poultry, the institute monitors the reaching of yield and quality parameters in selective breeds and parent breeds, keeps continuous records, inspects compliance with technological procedures during rearing and keeping of poultry, issues the documents for poultry approving committees for the purpose of approval of selective breeds. <http://www.spusr.sk>

7.1.Science and research

Since 2005, there are 5 research institutes active in the field of agriculture and food processing in Slovakia. The Research Institute of Animal Production in Nitra (<http://www.vuzv.sk>) with branches in Košice, Liptovský Hrádok, Trenčín, Ivánka pri Dunaji and Bratislava is engaged in research activities in the field of biology and breeding of stock animals, including pigs and poultry. Its activities mainly relate to research and resolving of issues of genetics, selective breeding, reproduction, biochemistry and physiology of nutrition, ethnology, ecology and technology of animal production. Based on bilateral treaties, the institute cooperates in resolving of specific research issues with scientific institutions a.o. in Germany (maintenance of the genofund, biotechnology, nutrition of animals), the Netherlands (technology of animal production) and other countries. Via participation in foreign grants, the institute cooperates in the areas of quality of meat of pigs (USA), metabolism of skeletal muscle of pigs (France), the physiology of pig nutrition, reproduction, estimation of breeding value (Germany).

Consultancy

There is a network of advisors for agriculture in Slovakia, consisting of natural persons as well as companies acting in the Slovak market and engaged in the sale of feeding components, fertilizers, medication, protective chemical agents and agricultural devices and machines. The registry of advisors contains 353 natural persons and 116 organizations providing advisory services in 11 areas of activity, such as animal production and breeding of animals, plant production and cultivation, veterinary issues, gardening, soil and water, machines and constructions etc. <http://www.agroporadenstvo.sk/porad>

7.2. Activity of associations in Slovakia

The Association of Pig Breeders – Družstvo, (Andrej Imrich, Výskumný ústav živočíšnej výroby, Hlohovecká 2, 949 01 Nitra, Tel.: 037/654 62 31, Fax: 037/654 62 31, e-mail: masoprodukt@nexta.sk) in Slovakia, is aimed at supporting development of pig farming realized by its members. Other activities include advisory services, organization of specialized seminars, publications, organization of exhibitions and cooperation in selection of animals for exhibitions. It promotes the interests of its members with respect to governing bodies, providers of services, suppliers and customers.

Meat processing companies are associated in the ***Slovak Association of Butchers*** (Edita Ohrablová, Blumentálska 19, 816 13 Bratislava 1, Tel.: 02/ 556 42 887, Fax: 02/ 556 42 889, e-mail: masozvaz.ohrablova@stonline.sk), which represents small meat processing facilities and has 30 members, and in the ***Slovak Association of Meat Processors*** (Viliam Pohly, Záhradnícka 21, 811 07 Bratislava 1, Tel.: 02/ 556 71 158, Fax: 02/ 556 71 158, e-mail: szsm21@stonline.sk), which represents the biggest Slovak companies and has 7 members. Both associations represent the interests of their members with respect to state administration bodies, mainly in the area of legislation related to taxes, prices, raw materials, as well as with respect to other economic associations, associations of employers and association of employees and to public.

Primary producers of poultry and eggs are associated in the ***Union of Poultry Breeders*** in Slovakia (Vladimír Baštecký, Únia hydínárov Slovenska, Krížna 52, 821 08 Bratislava 2, Tel.: 02/ 555 63 944, Fax: 02/ 554 10 403, e-mail: unihyd@pluto.sk), which represents the interests of its members and supports them in the domestic as well as foreign market. Moreover, the union elaborates analyses and overviews of the poultry industry in Slovakia and worldwide.

The ***Slovak Association of Breeders (SZCH)*** (Michal Straka, CSc., Krížna 44, 824 76 Bratislava 26, Tel.: 02/ 555 71 158, Fax: 02/ 555 71 158, e-mail: szch@szch.sk) registers about 6 000 poultry farmers, who are organized in basic organizations. The farmers are associated in SZCH for purposes of breeding and maintenance of genofund of purebred breeds and species of poultry.

Breeders engaged in the farming of purebred breeds of goose and ducks, their selective breeding and maintenance of genofund are associated in the ***Slovak Club of Breeders of Goose and Ducks*** based in Trenčianske Stankovce.

8. Distribution and Retail

8.1. Activity of Multinational Shopping Chains in Slovakia

The retail chains have started to penetrate into the Slovak market at the beginning of 90's. However, the penetration of super- and hypermarkets progressed slowly. Instable political environment, changes in transformation strategy and economic policy, including establishment of an independent Slovak Republic, didn't arouse sufficient confidence of foreign investors. The facts caused that more intensive entry of foreign investors into the market, connected with development of own shopping facilities (hypermarkets and supermarkets), started only from the year 2000, so a few years later than in Czech Republic and Hungary. From the long-term view, the delayed entry of the multinational chains offers the advantage that they are entering the Slovak market already with certain experiences from neighbouring countries and, making their investments, they have more eye for local differences.

At present the biggest foreign chains established in Slovakia, which are engaged in trading with food and consumable goods, include Tesco Stores, Metro and Billa. In 2004, their ranking within the TOP 10 was as follows:

Company shops	Turnover	Growth index	Number of	
	in bil. SKK	2004/03	2003	2004
1 Tesco Stores SR	19,4	105,1	23	30
2. Metro C & C Slovakia	15,7	114,1	5	5
3. Billa	10,2	109,6	55	65
4. Kaufland	8,0	111,1	16	23
5. Ahold Retail Slovakia	6,5	112,1	15	19
6. Carrefour Slovensko	6,0	89,5	4	4
7. M – Market*	4,8	95,8	198	195
8. Tabak Barczy*	4,0	106,8	:	66
9. BauMax SR	3,7	105,7	:	10
10. Labaš*	3,3	100,0	2	3

* domestic capital

Source: TERNO (market surveying agency), In.: HN, 11.1.2005, SME 25.6.2005

Localization of shopping network is influenced by several factors. Decisive factors of their development mainly include number of inhabitants, infrastructure, average wage level in the respective region (purchasing power of inhabitants) as well as unemployment rate. According to available data, the highest number of shops in Slovakia, pertaining to particular chains, can be found in the region of Bratislava. Bratislava has the lowest unemployment rate and the highest average wage per inhabitant in Slovakia in 2004. The number of inhabitants per shop amounted 13 thousands. In the regions with higher unemployment rate (Košice, Prešov, Banská Bystrica), the number of shops is considerably lower and the number of inhabitants per shop exceeded 30 thousands.

Numbers of inhabitants and shops pertaining to shopping chains in SR in 2004 by regions

Table No. 57

Region	Number of inhabitants in thous. ¹	Average nominal monthly wage in SKK ²		Unemployment rate in % v %	Number of shops in shopping chains ³	Number of inhabitants per shop in thous.
			Index 04/03			
Bratislava	599,8	21 016	111,3	7,4	46	13,0
Trnava	552,0	14 670	109,8	11,3	20	27,6
Trenčín	602,2	13 907	109,2	7,9	21	28,7
Nitra	709,8	13 252	109,1	18,4	22	32,3
Žilina	693,5	13 930	110,6	17,1	30	23,1
Banská Bystrica	659,0	13 309	108,7	24,3	20	32,9
Prešov	794,8	12 535	110,1	22,1	22	36,1
Košice	769,1	15 440	109,2	25,2	25	30,8
<i>Total SR</i>	<i>5 380,1</i>	<i>15 825</i>	<i>110,2</i>	<i>17,1</i>	<i>206</i>	<i>26,1</i>

Note: chains include Tesco, Carrefour, Hypernova, Kaufland, Lidl Billa, Terno, Ikea, Hornbach, Kenvelo, Newyorcker, Delvita, Datart, Nay electric appliances shops and big shopping malls, RIAFE's calculations

Source: 1) SO SR, condition as at 1.1.2004

2) SO SR, without income from business activities

3) SME, No. 217/2004

The number of hypermarkets considerably rose up in the years 2001 and 2002. In 2001, an increase in other types of retail-sale facilities occurred, mainly discounts, supermarkets and cash & carry facilities expanded. As to the number of hypermarkets per million of inhabitants, Slovakia ranks second behind the Czech Republic. According to ACNielsen's report, the number of shops per million of inhabitants (hypermarkets and supermarkets, discount shops) in 2003 in Slovakia and neighbouring countries was as follows :

	Hypermarkets	Supermarkets	Discount shops
Slovakia	14	41	5
Czech Republic	6	76	34
Poland	5	39	31
Hungary	8	41	38

Source: ACNielsen (market surveying agency)

8.2. Position of Slovak retail enterprises

When foreign retail chains started to establish in Slovakia, the Slovak retail was very fragmented. It was mostly composed of small undercapitalized entities (shops bought in auctions in the framework of the small privatization program, shops of the Jednota chain) without access to credit sources. Economic pressure from foreign shopping chains has forced Slovak retailers to form their own alliances.

Further integration steps led to the formation of COOP, the common chain of supermarkets, on the basis of former consumer cooperatives and, in 2000 to the establishment of the international purchasing centre COOP Euro, a.s., headquartered in Bratislava. It is an international association of purchasers in the region of middle Europe, acting in favour of

three cooperating retail-sale systems in the Slovak Republic, the Czech Republic and Hungary. In addition to COOP Jednota Slovensko, its shareholders also include COOP Hungary and COOP Centrum družstvo Praha.

Foreign competitors thus forced domestic retailers to fight for customers, to accept rules of the foreign competitors' game, against which they were originally seeking for protection, and begin to apply the rules in markets uncompromisingly.

Considering turnover in the years 2000 up to 2004, the most successful Slovak retail companies include COOP Jednota Slovensko, M-Market, Prima Zdroj Holding, Labaš, Zdroj HOS, Smoker Trenčín and KON-RAD.

The condition of the Slovak shopping network is directly proportional to the investment strength of the retail companies. Retail-sales provided by international companies offers good international standards, but it can't always be said about domestic retailers. Jednota, the successful shopping network of consumer cooperatives, persists in using proven network of supermarkets, giving no priority to usage of hypermarkets. Technical condition of individual shops remains at a lower level.

8.3. Analysis of retail-sale turnover and revenues in Slovakia

The highest growth rates since 2000 were experienced by hypermarkets, the lowest ones by department stores. In 2003, revenues of groceries with wide assortment and of shops with mixed assortment decreased in comparison with previous year.

It should be noted that figures related to foreign companies are usually estimates made by market surveying agencies, as the companies are not obliged to report their figures for Slovakia. Instead of it they publish exact data about whole multinational group or common figures for the Czech Republic and Slovak Republic.

In foreign companies, food goods in general participate in total turnover to a lower extent than in the case of companies with Slovak capital. While portions of food assortment in total turnovers of Tesco Stores, Ahold and Carrefour trading companies ranges from 60% to 65% only, in the case of Slovak companies (except of COOP Jednota Nové Zámky) the portions of food assortment in total turnovers amount at least 90%.

Ranked by total turnover, the most important positions of international companies in Slovakia are held by Tesco (19,4 bil. SKK), Metro (15,7 bil. SKK) and Billa (10,2 bil. SKK). The highest amount of turnover from food assortment in 2004 was generated by Metro (12,6 bil. SKK), followed by Tesco (11,6 bil. SKK) and Billa (8,2 bil. SKK).

The strongest trading companies continue to fix their positions. Since 2000, total turnover of monitored international companies in Slovakia increased more than three times, turnover from food goods almost four times. Opening of new shopping malls, hypermarkets and supermarkets considerably contributed to the increase. Intensive investment activities were registered in the case of Tesco and Ahold, mainly in connection with expansion of the shopping network of hypermarkets. Both companies expand their operations also into smaller towns and regions with higher unemployment rate. Having opened the central store and logistic centre in Bratislava, Billa also successfully expands its retail-sale network composed

of supermarkets. Metro also increases its turnover on the year-to-year basis, using an improvement of activities and services instead of expansion of network of facilities. Metro also flexibly responds to requirements of independent traders and operators of public catering establishments.

The biggest trading companies in Slovakia pursuant to turnover (bil. SKK)

Table No. 58

Trading companies	Total turnover					Portion of foods (%)	Portion of food goods *				
	2000	2001	2002	2003	2004		2000	2001	2002	2003	2004
<i>Foreign</i>											
Tesco Stores SR, a.s.	11,0	14,6	16,5	17,8	19,4	60	6,6	8,8	9,9	10,7	11,6
Metro C&C Slovakia, s.r.o.	1,0	8,3	10,9	13,6	15,7	80	0,8	6,6	8,7	10,9	12,6
Billa, s.r.o.	4,1	6,2	8,0	9,3	10,2	80	3,3	5,0	6,4	7,4	8,2
Kaufland SK, v.o.s.	0,5	3,9	7,0	7,2	8,0	70	0,4	2,7	4,9	5,0	5,6
Ahold Retail Slovakia, k.s.			4,5	5,8	6,5	65			2,9	3,8	4,2
Carrefour SK, s.r.o.	1,0	4,0	6,5	6,7	6,0	65	0,6	2,6	4,2	4,4	3,9
Delvita SK, s.r.o.	1,8	1,9	1,7	1,7	1,6	85	1,5	1,6	1,5	1,4	1,4
Interfruct Slovakia, s.r.o.		0,9	1,3	1,3	1,3	95	0,0	0,9	1,2	1,2	1,2
Rema 1000	0,6	0,8	0,7	-1,0	.	95	0,6	0,8	0,7	-1,0	
Lidl Slovenská republika, v.o.s.					1,2	92					1,1
<i>Slovak</i>											
COOP Jednota Slovensko			29,63	30,96	30,27	95			28,1	29,4	28,8
COOP Jednota Nové Zámky, SD	2,0	2,3	2,5	2,7	2,5	81	1,6	1,9	2,0	2,2	2,0
COOP Jednota Bratislava, SD	1,6	2,1	2,4	2,7	2,6	95	1,5	2,0	2,3	2,5	2,5
M-Market, a.s.	2,9	3,6	4,4	4,8	4,8	94	2,7	3,4	4,1	4,5	4,5
Prima Zdroj holding, a.s.	4,0	4,0	4,1	3,6	2,7	92	3,7	3,7	3,8	3,3	2,5
Labáš	2,1	2,5	3,1	3,3	3,2	98	2,0	2,5	3,0	3,2	3,1
Zdroj HOS Chynorany, a.s.	2,7	2,6	2,7	2,7	2,4	95	2,6	2,5	2,6	2,5	2,3
Smoker	2,4	2,5	2,0	2,0	1,9	100	2,4	2,5	2,0	2,0	1,9
Kon-Rad, s.r.o.	2,0	2,1	2,3	2,3	2,4	95	1,9	2,0	2,2	2,2	2,3

Source: TERNO, In: Trend 2001 up to 2004 (www.etrend.sk); Moderní obchod 5/2005

*own calculations

Carrefour's total trading turnover fell by 0,7 bil. SKK in 2004 compared to previous year. The decrease was caused by a reduction of investment activities (discontinuation in expansion of network of facilities) and not in the least by increasing competition from other shopping chains.

In 2004, the German company Lidl, which entered into the Slovak market in September 2004 and generated a turnover of about 1,2 bil. SKK during the first 4 months of its activities, ranked among the leading retail companies too. Market surveying agencies and Association of Trade and Travel Industry say the so called price war that arrived in Slovakia in the previous year offered Lidl a very just reason to enter the Slovak market. Contrary to expectations connected with the Slovak accession to EU, the war caused unexpectedly low growth of food prices and, in some categories of foods, even decrease of prices. According to the agency Fessel-GFK, that monitored the entry of the discount network into the Slovak market at the end of previous year, Lidl's policy stands on two pillars. Firstly, cheap foods

and other products, whose quality is on the edge of allowed quality standards, are being sold for the absolutely the lowest price in the segment. And secondly, the products whose quality is comparable with standard quality of products in competitive network, are being sold for lower price compared to competitors. It is assumed that the activities of discount network Lidl in Slovakia shall quickly contribute to further reduction of the number of traditional small shops.

The most important Slovak retail companies include M-Market, Prima Zdroj, Zdroj HOS, Labaš, Smoker, KON-RAD and consumer cooperatives integrated under the COOP Jednota Slovensko company. In 2004, COOP Jednota Slovensko generated a consolidated turnover from food goods to the amount of 28,8 bil. SKK, exceeding the turnover generated by Metro, one of the most successful foreign companies, more than two times. COOP's most productive facilities include COOP Jednota Bratislava (2,6 bil. SKK), COOP Jednota Nové Zámky (2,5 bil. SKK) and COOP Jednota Nitra (2,1 bil. SKK).

8.4.Structural development of retail in Slovakia

Entry of foreign companies, expansion of network of supermarkets and hypermarkets caused serious structural changes not only in the field of retail sale market, but also in wholesale market and market of suppliers to the retail network. According to data provided by the SO SR, shopping space of all retail-sale operational units increased 1,73 times from 2000 to 2003. As to particular types of facilities, the biggest enlargement was experienced by spaces of hypermarkets (3,4 times) and supermarkets (1,45 times). Portion of shopping space of hypermarkets in total retail-sale shopping spaces increased from 11% to 21,7%. In the case of other types of facilities, the portion decreased.

Storage spaces of all retail-sale operational units increased by 17,4% from 2000 to 2003. Considering particular types of units, storage spaces of hypermarkets were enlarged three times (3,1 times), storage spaces of supermarkets were enlarged 1,47 times. Reduction of storage spaces was recorded only in the case of department stores (by 15%). Portion of storage spaces of hypermarkets in total retail-sale storage spaces increased from 5,3% to 13,9% (in the case of supermarkets from 5,7% to 7,2%).

Certain changes occurred in the development of the shopping network in the course of the last 5 years. The most important change was represented by the start-up of a network of hypermarkets in Bratislava and bigger towns. Expansion of hypermarkets in Slovakia contributed to a reduction of network of discount shops, whose number decreased by more than 50% since 2001. Discounts shops are expected to blossom again in connection with the entry of Lidl. The assumption can be also supported by the development and position of discount shops in western Europe.

Considering the traditional retail network, the position of classic self-service shops was weakened to a high extend and they continue to fall. Results of a survey made by the GfK Slovakia agency (Shopping monitor 2004) showed that one third of consumers used to purchase in shops of Jednota, COOP and Terno networks. The attendance rate of other types of shops doesn't exceed 10% (Tesco hypermarket, Billa, local private-owned shop, Kaufland, M-market), or 5% (Hypernova, Billa, Tesco OD, Lidl). Regardless of the trademark (name) of

the shop, the customers spent the biggest portion of their food expenses (about 55%) in supermarkets. Compared to 2003, the customers also spent higher amounts on purchase of foods in hypermarkets. Due to the approach, the customers reduced their purchases in over-the-desk shops, but mainly in self-service shops. In the case of self-service-shops the change is dramatic, as in the year of 2003 the customers spent 45% of their food expenses in self-service shops, while in the year of 2004 they spent there less than 10% of their food expenses.

In connection with the development of retail, various approaches and steps taken by retailers for acquisition and keeping of customers are discussed from time to time. Growing dominance enables shopping chains to apply a policy of low market prices (that represents certain benefit for consumer), but prospectively it represents a danger of application of high monopoly prices and seeking for high profits to the prejudice of primary producers and food processing companies. Possible adverse impacts of monopoly prices to consumer is considerably eliminated by growing mutual competition between expanding networks of shopping chains. However, even influence of competition is disputable in the last years due to interlinking of ownership relations and creation of financial groups behind shopping chains. Various mergers and acquisitions lead to concentration of ownership rights in financial groups, for which food products are one of the strategic goods.

There is a growing price pressure applied by shopping chains to domestic food producers, which is also connected with the frequently used possibility of cheaper imports, but also with the possibility of unusual price practices. In addition to advantageous shopping hours, the chains permanently introduce and offer to their customers new untraditional services (thermal processing of foods, customer cards, various bonuses), event prices and diversify and expand their assortment in order to strengthen their position and assuring growth of profits. One successful method used in the last 4-5 years is the introduction of own, private trademarks (Clever, Aro, Tesco, Terno, COOP). The part of these products in the assortment and in turnover of shopping chains increases. According to published results of market surveying agencies, the private trademarks participate in markets of western Europe even in the extent of 22,6% (In the Great Britain they represent more than 40% of total sales of products).

Within the region of Central Europe, Slovakia experienced the highest growth of market participation of private trademarks in total sales in 2004. the following overview shows the development during the last 3 years and comparison with neighbouring states:

Participation of private trademarks in total sales in %

	2002	2003	2004
Slovakia	5,5	5,2	6,8
Czech Republic	5,0	5,5	6,2
Hungary	9,8	11,1	12,3
Poland	2,4	3,1	3,3

Source: ACNielsen

Development in Slovakia documents that only international trading companies and partially consumer cooperatives are capable to invest into development and improvement of

the shopping network. It can be demonstrated by an overview of development of the retail structure, where growth in comparison with the previous period was solely experienced by *hypermarkets*.

Structural development of retail-sale (number of facilities by type)

Table No. 59

Type of facility	1999	2000	2001	2002	2003	2003/99
Hypermarkets	2	8	13	50	57	2850,2
Supermarkets	207	222	238	255	204	98,5
Self-service shops	1712	1685	1710	1841	1583	92,5
Department stores	13	17	24	15	14	107,7
Over-the-deck shops	.	604	632	655	634	105,0
Discount shops	55	59	72	49	31	56,4
Cash&carry	79	80	92	87	80	101,3

Source: TERNO (www.etrend.sk)

In this regard, obvious dominance is kept by Tesco Stores SR with 26 hypermarkets. As declared by representatives of the company, Tesco Stores's shopping network in Slovakia shall continue to be expanded by development of smaller hypermarkets and networks of supermarkets with size up to 3 000 m², mainly in localities in which Tesco is hitherto not established. A network of hypermarkets is also successfully operated by Ahold Retail Slovakia company, holding a position in the first half of TOP 10 list with nineteen Hypernova supermarkets. In the course of the last 2 years, Carrefour Slovensko did not continue the expansion of shopping network of hypermarkets in Slovakia. In the recent period it has focused on its 4 hypermarkets: on improvement of sale as well as assortment of production with emphasis on food assortment. Although its location in bigger shopping malls contributes to keeping customers, in 2004 its turnover expressed in form of index decreased by about 10% compared to 2003. Tesco is now in the process of taking over the Carrefour shops in Slovakia.

Supermarkets experienced visible growth up to 2002. At that year 255 big and small supermarkets operated in Slovakia. In 2003 the number fell to 204 facilities. The fact is also connected with low investment activities of the domestic retail network, which is mostly engaged just in supermarkets. Investment activities of multinational trading companies were rather focused on expansion of network of hypermarkets. However, there was a general improvement of the network of supermarkets, mainly by reconstruction of the interior of existing shops. Analyses made by marketing agencies show that certain dominance in this group is kept by the Billa company with 65 supermarkets. Its marketing strategy is focused on addressing the customers who give priority to quality. The most recent marketing step was the purchase of the network of supermarkets owned by the Belgian company Delhaize (Delvita) and expansion of the Billa shopping network with an extra 11 shops. COOP Jednota Slovensko, the shopping chain of consumer cooperatives is the domestic leader and successful operator of big and small supermarkets. Cooperative philosophy of trade of consumer cooperatives and territorial deployment of a shopping network represents both an advantage enabling the company to resist foreign competitors as well as certain advantages with respect to the domestic network of private shops. M-Market, Zdroj HOS and Prima Zdroj

are the main companies representing private shops with Slovak capital within the network of supermarkets .

The market share of classic *department stores* with wide assortment in Slovakia is decreasing. According to partial analyses made by market surveying agencies, they do not hold important position in retail, except for the Tesco department stores. Attendance and standard level of other department stores were supported by Delvita supermarkets, usually located in the stores. Trading cooperatives do not expand existing network of department stores and existing department stores of consumer cooperatives lease out spaces for supplemental shopping.

As to density of shopping network of *discount shops*, Slovakia is lagging behind neighbouring states. Surveys made by ACNielsen in the last year show that about one half of employees refuse to purchase in the shops. Following the entry of Kaufland, the process of opening of new shops based on discount philosophy slowed down and many unsuccessful facilities stopped their business activities after the year 2002. The discount shops are more popular in regions with higher portions of less solvent inhabitants. However, It is assumed that the entry of the German discount network Lidl will lead to a success of this type of sale after 2004. It is also indicated by the commotion the entry of Lidl caused in the market. Massive advertisement campaign and event prices shall break existing barriers and distrust of Slovak consumers analogously to previous development in western Europe.

Cash & carry shops are an inherent part of the Slovak shopping network. Metro Cash&carry Slovakia company has been developing since 2000 and its turnover has been increasing on the year-to-year basis and the company has been expanding assortment of products and services for customers. Metro uses its proven methods of communication with small and middle entrepreneurs in the field of trade, gastronomy and services and gradually also succeeded to create a broad network of customers from the ranks of operators of various buffets, seasonally operated facilities and so like. As to other Cash & carry facilities, facilities of Interfruct and KON RAD companies belong to the most important ones.

Despite the massive entry of abovementioned forms of sale, small sized shops with mixed goods and other small-sized shops (self-service stores and over-the-deck shops) still represent the most numerous group of shopping units in Slovakia. In structure of *self-service stores* the strongest positions are held by facilities with Slovak capital, such as M-Market and Prima Zdroj Holding and several shops of the cooperative shopping chain Jednota, located in several districts and regions of Slovakia. However, number of shops of this type is decreasing since 2003.

Although *over- the- deck shops* experienced the lowest drop, their quality stagnates already for several years. This form of sale certainly has no decisive portion in total turnovers in retail, but it has its position in the market from the view of availability, shopping time as well as basic assortment and satisfies local needs of everyday purchase. It also includes local shops of the convenience store type. An overview of the numbers of shops in 2004, divided by foreign and domestic trading companies, is given in the table No. 58.

Number of shops in particular shopping chains in 2004

Table No. 60

Company	Shopping network	Number of shops
<i>foreign</i>		
Tesco Stores SR, a.s.	Tesco HM+ Tesco OD	25 + 5
Metro C&C Slovakia, s.r.o.	Metro	5
Billa, s.r.o.	Billa	65
Kaufland SK, v.o.s.	Kaufland	23
Ahold Retail Slovakia, k.s.	Hypernova	19
Carrefour SK, s.r.o.	Carrefour	4
Delvita SK, s.r.o.	Delvita	16
Interfruct Slovakia, s.r.o.	Interfruct	4
Lidl Slovenská republika, v.o.s.	Lidl	39
<i>Slovak</i>		
COOP Jednota Slovensko		2 365
COOP Jednota Nové Zámky, SD	COOP Jednota	107
COOP Jednota Bratislava, SD	Terno + COOP Jednota	3 + 21
M-Market, a.s.	M-Market	195
Prima Zdroj holding, a.s.	Prima Zdroj	114
Labaš	Labaš	3
Zdroj HOS Chynorany, a.s.	Sama + Zdroj HOS	37 + 8
Smoker	Smoker	4
KON-RAD, s.r.o.	KON-RAD	5

Source: Moderní obchod 5/2005

9. SWOT analysis

For the pig and poultry sector the following SWOT analysis was elaborated based on information acquired and processed in entire vertical structure of pork and poultry sectors. It should be noted that the SWOT analysis is made from the **Slovak perspective**.

Business entities engaged in production of slaughter pigs

Strengths:

- increase of investments into development and modernization through EU funds and state authorities,
- academically educated management,

Weaknesses:

- Reduction in number of pigs in total, and reduction in number of sows, inadequate use of housing capacity,
- Slovak pig farmers do not reach the breeding standard of the reared breeds in the area of reproduction and yield parameters,
- Unsatisfactory results can be mainly found in a number of litters per sow and a number of born piglets per litter and per sow and year,

- there is also high number of death losses of piglets before weaning, which negatively influences the total number of successfully reared weaners,
- also the average daily weight increment in fattening of pigs is unsatisfactory,
- reduction of production of pigs for slaughter,
- obsolete equipment in housing facilities,
- reduction of pork meat consumption in the past,
- indebtedness of producers,
- low share of foreign investors and capital in agricultural primary production companies,
- unsatisfactory results of sales of animals for slaughter in terms of low prices and also low numbers (2003, 2004),
- animal diseases (eg classical swine fever),
- increase in pork imports,
- Inadequate use of capacity available for pig slaughtering (51.7%), meat processing (55.4%), meat products (72.8%), and canned meat (66.8%),
- increased input prices in primary production resulting in increased production costs,
- weak competitiveness in foreign markets.

Opportunities:

- improve results/achieve breeding standards,
- cooperation of suppliers of living stock animals with managements in the meat processing industry.
- export of live slaughter pigs to foreign markets and EU markets,
- estimated increase in consumption of pork per capita in 2010,
- improved development of the per capita income.

Threats:

- foreign competitors exporting mainly live slaughter pigs and porkmeat in high quality and wide assortment to the Slovak market,
- lower prices for slaughter pigs imported from abroad than prices for slaughter pigs produced by domestic producers,
- problematic economic situation of meat processing companies in Slovakia.

Business entities engaged in production of slaughter poultry

Strengths:

- increase of production of healthy and high-quality slaughter poultry, mainly chickens,
- regular supplies of slaughter poultry to processing facilities,
- increase of investments into development and modernization through EU funds and state authorities,
- academically educated management,

- cooperation of suppliers of living stock animals with managements of the poultry processing industry,
- increase of demand for and consumption of poultry,
- lower consumer prices of poultry meat compared to other types of meat.

Weaknesses:

- low production of one-day-old poultry and high import,
- decrease in production of turkey hens and aquatic poultry for slaughter ,
- indebtedness of producers,
- increased import of whole and chopped poultry meat,
- low share of foreign investors and capital in agricultural primary production companies,
- increased input prices in primary production resulting in increased production costs,
- decrease in farm-gate prices of poultry for slaughter,
- insufficient use of capacity available to slaughter poultry (80.3-98.3%), frozen poultry (67.8-94.3%), and cooling of poultry meat (54.0-84.3%),
- weak competitiveness in foreign markets.

Opportunities:

- increased level of production parameters,
- expected increase in consumption of poultry meat in the years to come,
- Export of live slaughter animals to foreign markets and EU markets.

Threats:

- foreign competitors exporting one-day-old poultry and poultry meat to the Slovak market in wide assortment,
- lower prices of imported poultry meat than prices of domestic producers.

Facilities in meat industry (pork and poultry meat processing)

Strengths:

- increase of investments into development and modernization through EU funds and state authorities,
- good quality of meat and meat products,
- wide assortment of meat and meat products,
- cooperation with suppliers of live animals,
- consumers' interest in high quality Slovak meat products,
- certification of meat and meat products for export to EU and rest of the world (HACCP/ISO 9000).

Weaknesses:

- excess of processing capacities,

- in order to dismantle and remove obsolete and non-compliant equipment, the companies spent a lot of money and energy that is now needed elsewhere,
- high credit load on meat processing companies,
- low proportion of foreign investors/capital in the meat processing industry,
- high prices of meat and meat products with respect to actual economic situation of the Slovak population,
- multinational hypermarket chains dictating price and sales terms.

Opportunities:

- incorporation into European structures, expansion of market opportunities,
- increase of efficiency of production, usability of production capacities, increase of labour productivity, lower cost demands of production,
- better positioning of products in domestic and foreign shopping chains,
- expansion of assortment with production of semi and finished meat products,
- prioritization of regional and national specialties, their presentation in exhibitions and fairs organized in Slovakia and abroad,
- usage of modern information and communication technologies.

Threats:

- import of meat and meat products from abroad,
- lower prices of meat and meat products imported from abroad through shopping chains established in the Slovak market,
- increase of costs of energy inputs and its impact on economy of production of meat and meat products,
- economic situation / purchasing power of Slovak consumers.

Trade with pork and poultry meat and meat products

Strengths:

- quality of meat and meat products,
- wide assortment of meat and meat products produced in Slovakia, processed in various way and delivered in various packages (fresh, frozen, cooled, carved, parts, giblets, semi-products for fast preparation etc.),
- interest of consumers in Slovak products,
- broad shopping network of domestic and foreign supermarkets, hypermarkets, specialised shops and other commercial facilities offering meat and meat products,
- high knowledge of event prices influencing customer's decision-making about purchase of meat and meat products through leaflet actions and mass media.

Weaknesses:

- in some local facilities, usage of communication tools in mass media in sale of meat and meat products is at low level,
- insufficient public education focused on consumption of meat and meat products,

- high prices of some kinds of meat (beef, pork) and products with respect to actual economic situation / purchasing power of Slovak consumers,
- insufficient sales culture in small commercial facilities and insufficient level of advertisement (often only hand-written notice stuck on shop windows),
- low level of communication and professionalism between personnel and customers in small shops.

Opportunities:

- freshness and safety of pork and poultry meat and meat products,
- to modify and frequently innovate products made from meat,
- to offer national meat specialties,
- to intensify influence on a customer by price and events,
- use attractive packages for fresh meat with labels containing data required by customers, mainly about price, name of product and its origin,
- supplement assortment with "convenience" meat products in form of semi-products and finished products,
- to carry out public education connected with meat consumption in accordance with rational nutrition and nutritional trends,
- to impress consumers by colour, smell, taste of meat and meat products,
- to address target groups of customers through suitably selected tools of communication mix,
- to accomplish high level of sales culture (making sale of meat and meat products more attractive),
- to intensify linkage of traders with Slovak producers of meat and meat products,
- to apply scenario of win and benefits in purchase in same shopping facility as base for relationship between producer/supplier and shop,
- achieve repeated visits of shops through offer of advantageous purchases and rebates, e.g. in form of customer cards and by collection of points for purchases.

Threats:

- import of cheap meat and meat products from abroad,
- low-quality products placed on racks in a shop,
- contaminated and genetically modified products arousing customer's distrust in products,
- breach of health, sanitary and technical parameters of producers and suppliers,
- usage of win-loss scenario within relationship between shop and producer/supplier,
- increase in portion of private trademarks can lead to decrease of customer's interest in meat products or to growing dependence of a producer on the retail chain.

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11. Enclosures

- 1) The list of major feed producers in the Slovak Republic
- 2) Insemination stations (centres) of boars
- 3) The list of holders of the licence for production of veterinary medicines and veterinary preparations
- 4) The list of holders of the licence for the large distribution of veterinary medicines, veterinary preparations and veterinary health-care facilities
- 5) Best known companies in Slovakia offering new machinery and technology from abroad
- 6) Costs and returns in SKK per 100 feeding days (FD) and per kg of live weight - Sows in 2003
- 7) Costs and returns in SKK per 100 feeding days (FD) and per kg of live weight - Sows in 2004
- 8) Costs and returns in SKK per 100 feeding days (FD) per kg of fattening gain and per kg of live weight - Fattening of pigs in 2003
- 9) Costs and returns in SKK per 100 feeding days (FD) per kg of fattening gain and per kg of live weight - Fattening of pigs in 2004
- 10) Costs and returns in SKK per 100 feeding days (FD) per kg of fattening gain and per kg of live weight - Young pigs for breeding in 2003
- 11) Costs and returns in SKK per 100 feeding days (FD) per kg of fattening gain and per kg of live weight - Young pigs for breeding in 2004
- 12) The list of plants accredited for fresh meat
- 13) The list of accredited (approved) low capacity plants for fresh meat up to 30 cattle units per week and up to 1500 cattle units per year
- 14) The list of accredited (approved) low capacity plants for fresh meat up to 5 tonnes per week
- 15) The list of accredited low capacity plants for meat products
- 16) The list of jobbers - trade with live animals
- 17) The list of collecting centres for the exchange of live animals
- 18) Consumption of individual sorts of meat in the SR and the EU-15
- 19) Agrifood trade between Slovakia and EU-15 in live pigs and pork
- 20) Agrifood trade between Slovakia and rest of the world in live pigs and pork
- 21) List of accredited poultry farms in Slovakia
- 22) Costs and returns in SKK per 1,000 feeding days (FD) and per kg of live weight - Chickens fattening in 2003

- 23) Costs and returns in SKK per 1,000 feeding days (FD) and per kg of live weight - Chickens fattening in 2004
- 24) List of plants accredited for fresh poultry meat
- 25) The list of accredited low capacity plants for fresh poultry meat
- 26) List of major poultry processing plants in Slovakia
- 27) Foreign trade of the Slovak Republic with poultry meat in 2003
- 28) Foreign trade with poultry meat in 2004