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European Markets for Meat: Real Opportunities for Ukraine?

Sebastian Hess, Bernhard Voget and Anna Kuznetsova

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Institute for Economic Research and Policy Consulting

Reytarska 8/5-A,
01034 Kyiv, Ukraine
Tel: +38 044 / 278 63 42
Fax: +38 044 / 278 63 36
institute@ier.kiev.ua
<http://www.ier.kiev.ua>

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The German-Ukrainian Policy Dialogue in Agriculture is advising Ukrainian state authorities and business associations on reforming agricultural policy and legislation, taking into account international experience of Germany and other countries as well as international practice (EU, WTO), in accordance with principles of market economy. The project is funded by the German Federal Ministry of Food, Agriculture and Consumer Protection under its Cooperation Program and by the German Centre for International Migration.

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Reytarska 8/5-A,
01034 Kyiv, Ukraine
Tel: +38 044 / 235 75 02
Fax: +38 044 / 278 63 36
agro@ier.kiev.ua
<http://www.ier.kiev.ua>

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Executive Summary

1. Meat products constitute an important part of the diet of the majority of European consumers. The most common sources of meat consumed in the European Union (EU) are beef and veal, pork, poultry (of which chicken and turkey are by far most important) as well as lamb. In addition, various niche markets, e.g. for game, exist.
2. For each animal production sector the Common Agricultural Policy (CAP) of the EU has different approaches with regard to protection of producers and consumers. Traditionally, market protection in favor of EU producers had been high for beef and sheep production, but low for pork and poultry production.
3. The supply of beef within the EU is closely related to the size of the European dairy herd due to the number of calves not retained for dairy cow replacement and due to the number of cows that exit milk production. Both contribute an important share of EU beef supply. Therefore, the EU dairy policy also partly influences the EU markets for bovine meat.
4. Similarly, EU agricultural policy with regard to grain and oilseeds directly affects fodder prices for pork and poultry production, but also for beef, since a large share of EU beef comes from 'intensive' in-door production based on feed ratios rich in corn and grain. Beef production based on 'extensive' pasture is common especially in Britain and Ireland.
5. Within the European public, for at least twenty years a wide range of controversial political discussions has been going on about whether meat production should be taxed or subsidized. Important elements of these discussions are that animals absorb scarce natural resources that could well be used for the making of plant-based products for human consumption or for bio-energy purposes, and large scale meat production is known to pollute water (nitrification) and add greenhouse gases to the atmosphere (especially methane). On the other hand, the EU Commission emphasizes that beef and sheep production in particular can be beneficial in order to maintain the multifunctional character of the countryside in marginal areas.
6. Recent food scandals involving the illegal distribution of rotten meat, cases of humiliation of animals during transport and production as well as animal diseases with potentially hazardous effects for humans such as BSE have received considerable media attention in Europe and have contributed to the fact that the average European consumer can perhaps be described as having comparatively high purchasing power and generally high preferences for meat and meat products, but only as long as these products can be regarded safe for health and environment.
7. The CAP addresses these issues in its recent and ongoing policy reforms. The former system of market price support and export subsidies especially for beef has been almost completely eliminated. Import preferences based on Tariff Rate Quotas (TRQs) are increasingly granted, and European producers receive direct payments that will remain coupled to production only to a small extent after the so called 'health check' of the current CAP system. At the same time, EU wide regulations with regard to the quality and traceability of meat from domestic and imported sources have been tremendously increased, now typically posing much higher barriers to market access than conventional, tariff-based import restrictions.
8. Beyond these political and administrative aspects, self sufficiency of the EU with regard to most meat products is expected to remain high. Nevertheless, due to the vertical integration of the European meat industry there are a vast number of market opportunities for importers, especially if very specific segments of the meat processing chain can be served at competitive prices, or if special processed products can be advertised and sold successfully to European consumers.
9. The EU is likely to remain not only the largest single market for meat products, but also the most demanding in terms of safety standards, and one of the most competitive ones in

terms of prices in the near future. This is because all large exporters of meat such as Brazil and Australia are seeking market shares in the EU. Global projections of supply and demand for meat products are, however, carefully optimistic about rising world meat prices in the next decade.

10. Ukraine may consider the implementation of EU standards as a benchmark. If Ukraine can establish the structures required for exporting meat into the EU, it will easily be able to match the standards of all other potential export destinations that are currently emerging world wide. Despite the fact that for 2006-2008 meat imports prevailed over its exports, meat external trade became more differentiated, gradually switching destinations from CIS to EU Countries.

Authors

Sebastian Hess	shess1@qwdg.de	+49 (0) 551 39 4046
Bernhard Voget	BVoget@uni-goettingen.de	+49 (0) 171 48 06 72 5
Anna Kuznetsova	kuznetsova@ier.kiev.ua	+38 095 410 401 9

Lector

Heinz Strubenhoff	strubenhoff@ier.kiev.ua	+38 044 235 7502
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1 Introduction

Meat production and meat processing together constitute one of the most important sectors of modern global agribusiness. Meat from pigs, poultry, cattle, sheep, and game does not only account for a large proportion of agricultural value added, it also absorbs an important share of consumers' expenses for food, and this share has been observed to rise along with income. But meat is not only from an economic point of view an important part of the agricultural supply chain, it also has humans ever since allowed to utilize grazing land that was otherwise of little value for food production. Furthermore, meat production tends to be labor intensive, and thus potentially helps to secure jobs on farms and within rural areas.

However, critical aspects have in recent years been added to these positive sides of meat production: Environmental concerns due to Nitrogen emissions, food safety issues and other environmental problems are rising as meat production globally expands. Furthermore, meat production nowadays faces high opportunity cost because pigs, poultry and cattle from intense production systems increasingly compete with humans for grain and oilseeds, and the rising demand for bioenergy may in the long run suggest alternative utilizations for grazing land other than feeding cows.

Political interference with meat markets has traditionally been high in many countries such as in Ukraine and in the EU. However, due to these ongoing trends it can increasingly be observed that political actions with regard to meat production are shifting their focus away from producer support towards the protection of consumers and the environment through tight quality controls of domestically produced and imported meat products.

This policy paper therefore examines ongoing trends within world meat markets in general and, more specifically, within the world's largest market for meat: The European Union. In this context, it is the goal of this paper to evaluate potential opportunities for Ukrainian meat producers that may arise not only from the geographical proximity of these two neighboring regions, but also from the large potential that Ukraine has with regard to agricultural production. In addition, this paper seeks to provide Ukrainian policymakers with an easily accessible and up to date summary of the most important trends and facts about EU meat policies that might be relevant with regard to strategic policy design for Ukraine.

The paper is organized as follows: the next section summarizes facts and figures about the current structure of Ukrainian meat production and trade; the subsequent chapter presents equivalent information for the European Union. Building on this information, a detailed analysis of ongoing trends especially within European policymaking and within the European food processing business is undertaken. Finally, conclusions are drawn with regard to the potential opportunities that may arise from these trends to Ukrainian producers.

2 Recent Meat Market Developments in Ukraine

As a result of WTO accession, Ukraine recently had to reduce import tariffs for bovine and poultry meat down to 12-15%, for pork to 12%, for sheep and goat meat to 10%¹. Before that, the declared *ad valorem* rate was between 10% and 30%. Thus, the adoption of new import duty rates together with the removal of free economic zones is currently leading to the formation of a

¹ See Report of the Working Party on the Accession of Ukraine http://www.wto.org/english/thewto_e/acc_e/a1_ukraine_e.htm These tariffs are applicable by the Order # 14/655-EP but "old" Custom Tariff still remains in force (see the Law of Ukraine # 1109-V "On the Custom Tariff of Ukraine" from May, 31 2007) that creates a contradiction in Ukrainian legislation.

more transparent and more competitive market² for (imported) meat within Ukraine that could potentially set out for a dynamic development in the near future. This chapter therefore analyses the preconditions that meat production in Ukraine currently faces in terms of production, consumption, trade, and policy settings.

2.1 Production

Bovine, swine and poultry meat constitute the by far largest share of total Ukrainian meat production. In 2007 poultry meat accounted for the largest share of 36%, followed by swine with 33% and bovine for 29%. Other sources of meat (like mutton and goat, rabbit, horse) have never exceeded 2% of total meat production in Ukraine. Agricultural production of meat demonstrated stable annual growth of 11-12% in the period 2006-2008³. Slaughter weight meat production increased by 24% for this period. However, production of the meat processing industry fluctuated somewhat after a growth of 26% during 2006-2007 and a decline of 21% afterwards until November 2008.

General problems for meat production in Ukraine are its prevailing concentration in households and frequently changing government regulations. Meat producers benefited from less pricy feeds during active grain export quotas (the strongest lobbying force for that was from the side of poultry producers), but they lost from uneven production and trade policies. Existence of 15% trade margin ceiling, high loan rates (despite governmental programs), and governmental disability to secure smooth subsidy flows are just some examples that currently limit production incentives. However, the picture differs substantially between the major meat categories, as the subsequent analysis will reveal.

Pork and Poultry Production in Ukraine

During 2006-2007 agricultural poultry meat production increased by 17%, pushing its market share from 34% to 36%, while almost at the same time the processing industry grew by 24% during 2006-2008. In particular, fresh poultry meat grew by 41%, while frozen poultry meat declined by 36%. In general, Ukrainian poultry shows a tendency towards increased industrial production (= production in large agricultural enterprises). This overlaps with an observed decrease in household production. Poultry production in Ukraine is mostly carried out by two big vertically integrated companies (Myronivsky Khleboproduct and Agromars) which invest a lot to improve their poultry production. Remaining household poultry production in Ukraine is considered to be low-cost. Thus, poultry meat production is rather effective.

Slightly different from poultry, pork meat production still depend much more on household production. Together with the increase of agricultural swine meat production by 21%, it added 2% more to its production share, reaching 33% of total meat production in 2007. However, for 2006-2008 overall the fresh pork production has declined by 17% and frozen pork production went even down by 54%.

Bovine Meat Production in Ukraine

Bovine meat production has demonstrated no sign of recovery in 2008. The number of animal heads continues to fall. Partly, the bovine industry remains to be a derivative of the dairy industry, being highly dependent on milk prices. Special beef animals account for a very low number in the total livestock herd, making Ukrainian beef production a residual of milk production with very little high quality beef being produced.

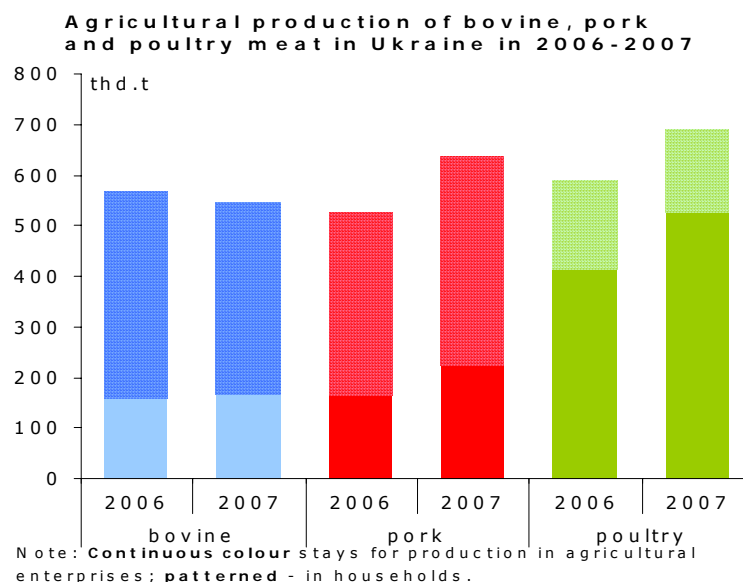
Bovine meat production in agriculture declined by 4% in 2006-2007, while the processing industry grew slightly by 10%. Relying on rather inefficient households remains the major problem for Ukrainian meat production. Households are not able to apply modern production methods; they

² According to the Law of Ukraine # 923-VI "On the introduction of changes to some Ukrainian laws to improve the state of Ukrainian balance of payments connected with the World financial crisis" from February, 4 2009, import tariffs on bovine meat (frozen), pork (fresh), bovine, pork, sheep, goat, horse, donkey and mule subproducts, poultry meat and poultry subproducts, other meats and subproducts, different kinds of fat and so on is to increase by 13% from March, 6 2009 to renew the equilibrium of balance of payments, the state of which is defined as critical (according to active norms).

³ 2008 year is considered here as January-October of 2008.

are also often not using high quality genetics nor can they comply with veterinary regulations. The majority of these producers do not manage to invest at a larger scale into the technological improvement of their production process. Despite the positive tendency of household shares to decrease throughout 2006-2007, they will remain major producers of bovine and pork meat in 2009. In 2007 their shares were 69% and 65% for bovine and pork meat respectively (for small-scale meat varieties, such as rabbit, horse-flesh, mutton and goat, in 2007 households possessed 99%, 87% and 95% respectively (see Figure 2.1).

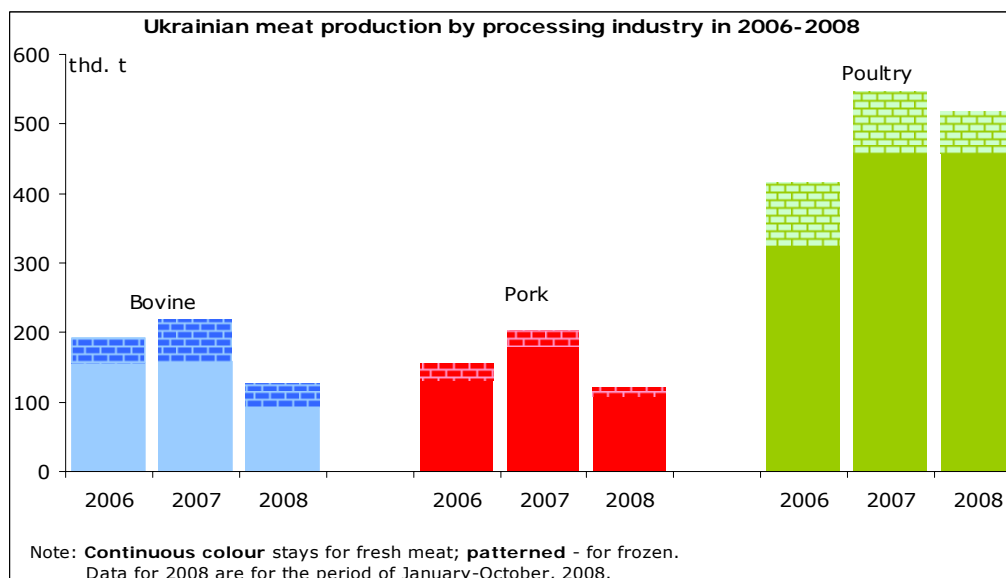
Figure 2.1 : Agricultural production of meat in Ukraine in 2006-2007.



Source: State Statistics Committee of Ukraine.

As for other kinds of meat (rabbit, horse-flesh, mutton and goat) each production share is about 1% only. The majority of such meat (up to 99%) is produced by households, but their share is decreasing.

Figure 2.2: Ukrainian bovine, pork and poultry meat production by processing industry in 2006-2008.



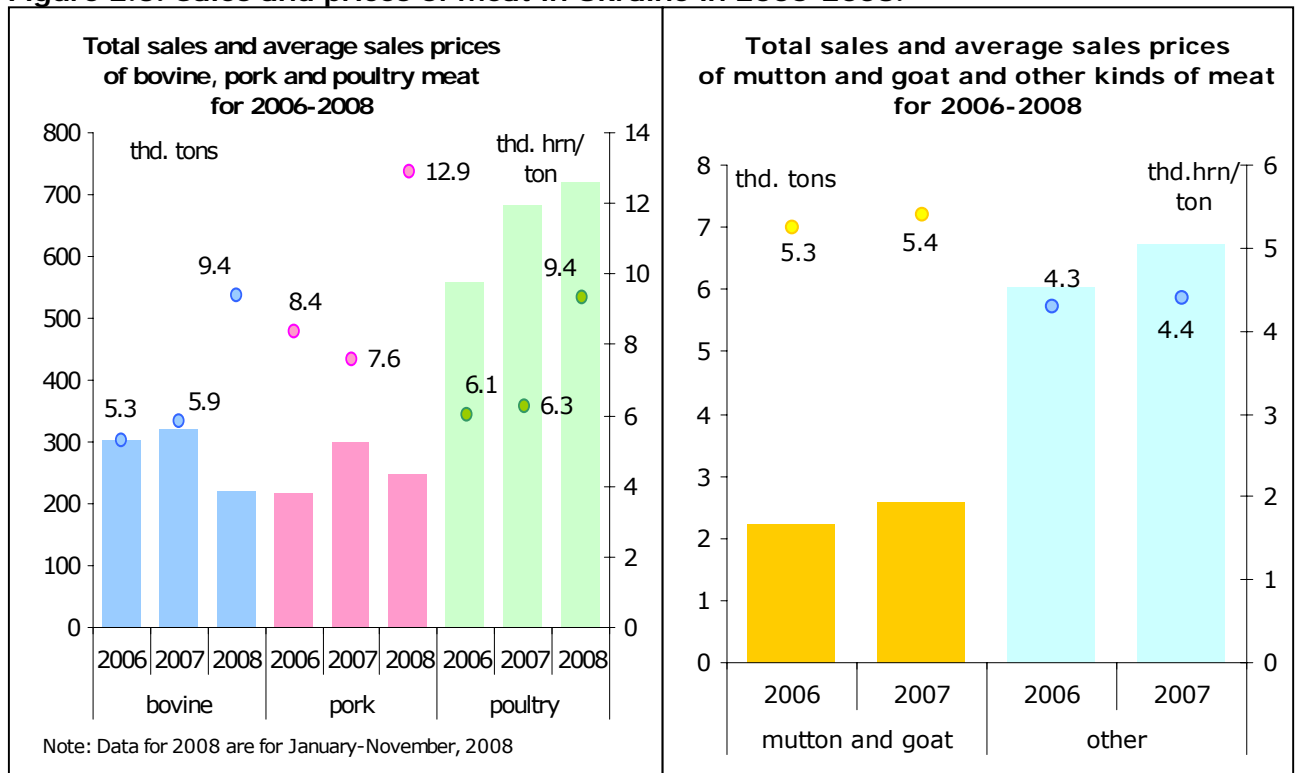
Source: State Statistics Committee of Ukraine.

In general, in 2006-2008 frozen meat accounted for a lower production share than the fresh meat. Also for bovine, pork and poultry meat there was a similar tendency of production increase between 2006 and 2007, but a decrease by the end of 2008 in comparison with 2007.

2.2 Sales and Consumption

As a result of rising prices, sales of most types of meat have been declining in Ukraine recently (e.g. sales of bovine and pork meat in 2008 have decreased by 31% and 17% respectively compared to the pre-year level. The crisis within the bovine meat market, however, started long ago: sales have dropped even in comparison with 2006 (by 27%). For the same time pork sales grew by 14%. Poultry meat sales were showing a more stable growth pattern: in 2008 they increased by 29% in comparison with 2006, and by 6% in comparison with 2007.

Figure 2.3: Sales and prices of meat in Ukraine in 2006-2008.



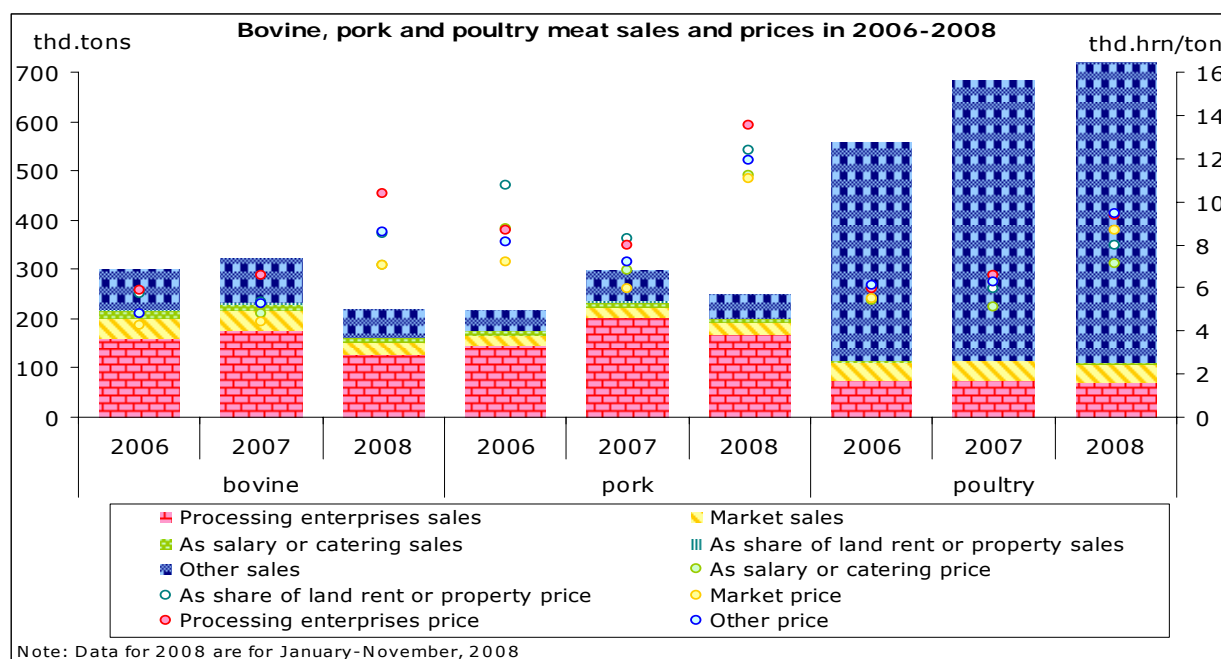
Source: State Statistics Committee of Ukraine.

Average nominal income of Ukrainian consumers grew in January-October, 2008 by 42.1%. At the same time, consumer prices each month grew by 1-2%. Moreover, pushed by the financial crisis the level of unemployed is currently rapidly increasing. Thus, the demand for meat is unlikely to rise sharply in the nearest future.

Traditionally, Ukrainian consumers favor pork over other types of meat. During the last years the price gap between pork and poultry meat increased from 2.36 thd. hrn per ton in 2006 and 1.33 thd. hrn per ton in 2007 to 3.52 thd. hrn per ton in 2008. Together with economic difficulties imposed by the financial crisis, it leads some consumers to shift from pork to poultry meat. In addition, despite lower price gap between bovine and poultry meat, some consumers prefer poultry due to lower quality of bovine meat.

During 2006-2008 pork, bovine and poultry meat were mainly sold by Ukrainian producers to processing enterprises. Smaller quantities were sold at regional markets, for catering (or as salary) needs, as shares of land rent or property, etc. (for details see Figure 2.4).

Figure 2.4: Sale channels of bovine, pork and poultry meat in Ukraine in 2006-2008.

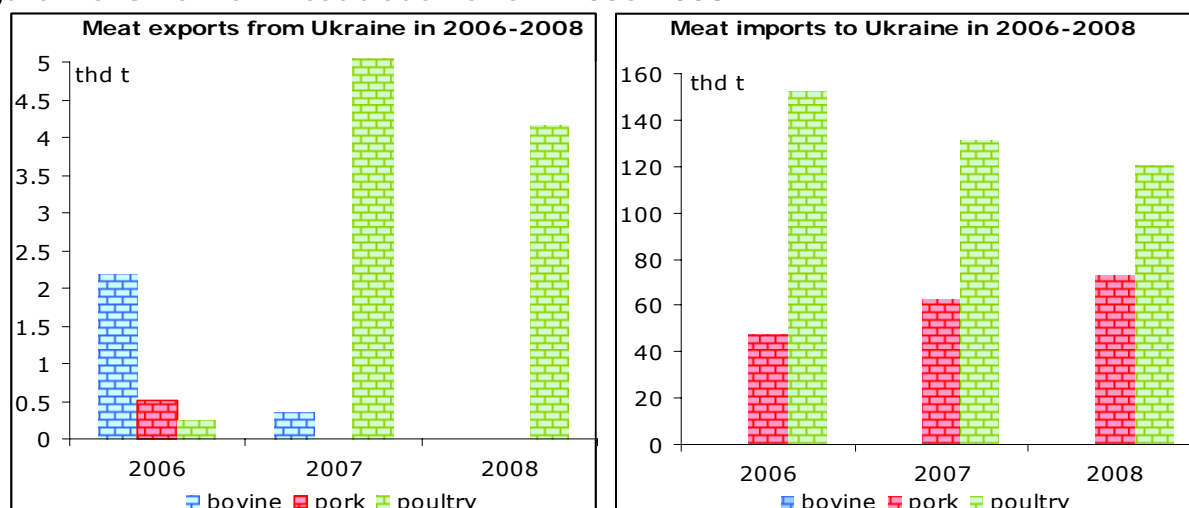


Source: State Statistics Committee of Ukraine.

2.3 Export and Import Trends

In 2006-2008 import flows for almost all kinds of meat have been prevailing over export flows (except bovine meat in 2006-2007). International trade in poultry meat constitutes the largest part in Ukrainian meat trade. Its import flow has exceeded 1.7-3.2 times imports of pork, and up to 1.5 mln times bovine meat imports for 2006-2008. Except for 2006, its exports have been also above the bovine and pork export volumes.

Figure 2.5: Ukrainian meat trade flows in 2006-2008.



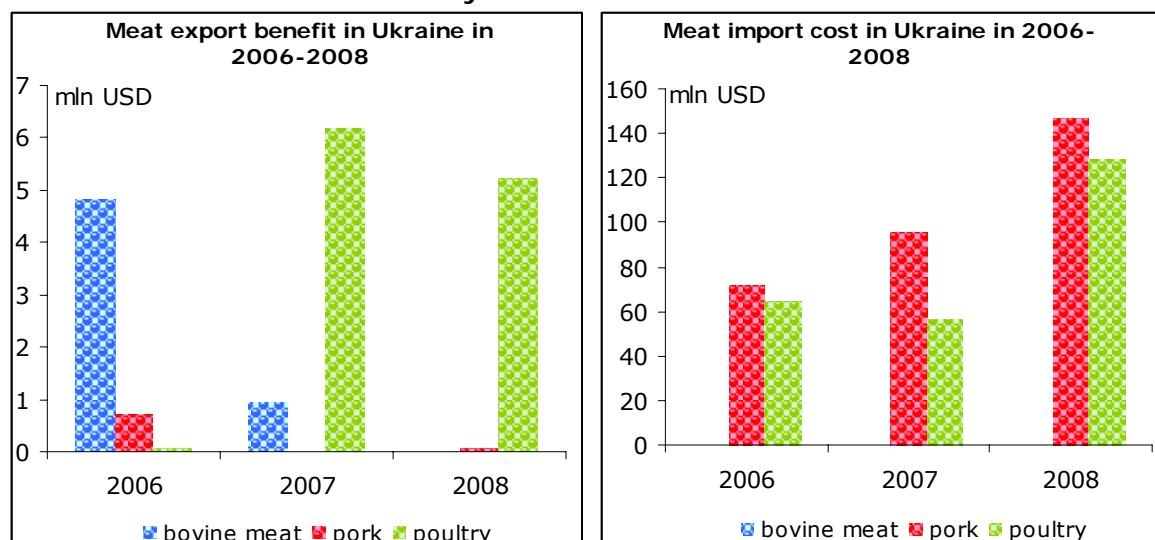
Source: State Statistics Committee of Ukraine.

Poultry export volume increased 19 times from 2006 to 2007, and after that decreased by 18% by August, 2008. Its import volume has been slightly decreasing throughout 2006-2008. Thus, it showed 13% decrease between 2006 and 2007, and 8% more decrease by August, 2008.

Pork export volume dropped between 2006 and 2007, and after that it grew 134 times by August, 2008. In contrast, pork imports were always growing: by 32% from 2006 to 2007, and by 17% from 2007 to 2008.

Bovine exports decreased by 84% from 2006 to 2007, and by 100% for 2007-August, 2008. Its import volume showed 40% drop during 2006-2007, and after that 37 times growth till August, 2008. Together with bovine, pork and poultry meat export decline, monetary export benefit also decreased. Thus, bovine meat export benefit decreased 2 times during 2006-2008, i.e. by 81% from 2006 to 2007, and by 99% from January, 2007 to August, 2008. Pork meat export benefit showed a decline as well. Bovine imports constitute a lower share than pork and poultry in total Ukrainian meat imports. Nevertheless imports fluctuate a lot. Pork import cost was constantly increasing in line with pork import volume growth: by 34% and 53% in 2006-2007 and 2007-2008 respectively, making in total 106% growth. Poultry import cost increased 98% during 2006-2008 (i.e. after 13% decrease in 2006-2007, it showed 127% increase in 2007-2008).

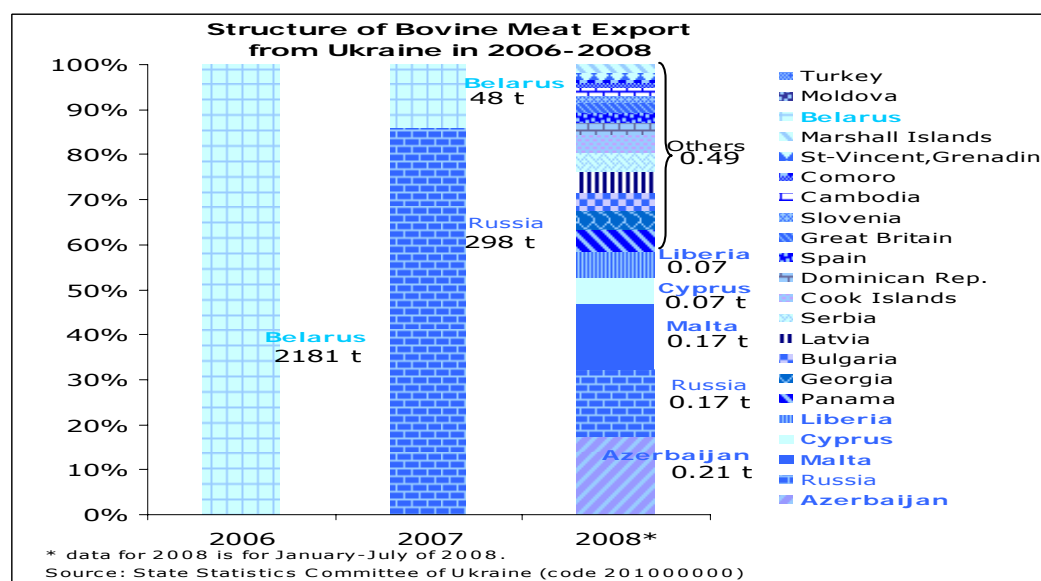
Figure 2.6: Ukrainian meat monetary trade flows in 2006-2008.



Source: State Statistics Committee of Ukraine.

The structure of bovine meat exports became more differentiated from 2006 to 2008. The number of export partners increased from 3 to 19. In 2006-2007 only CIS countries (except 25 kilos directed to Turkey in 2006) were Ukrainian trade partners in beef and veal exports. In particular, in 2006 main export partner was Belarus; in 2007 one additional big partner, Russia, appeared.

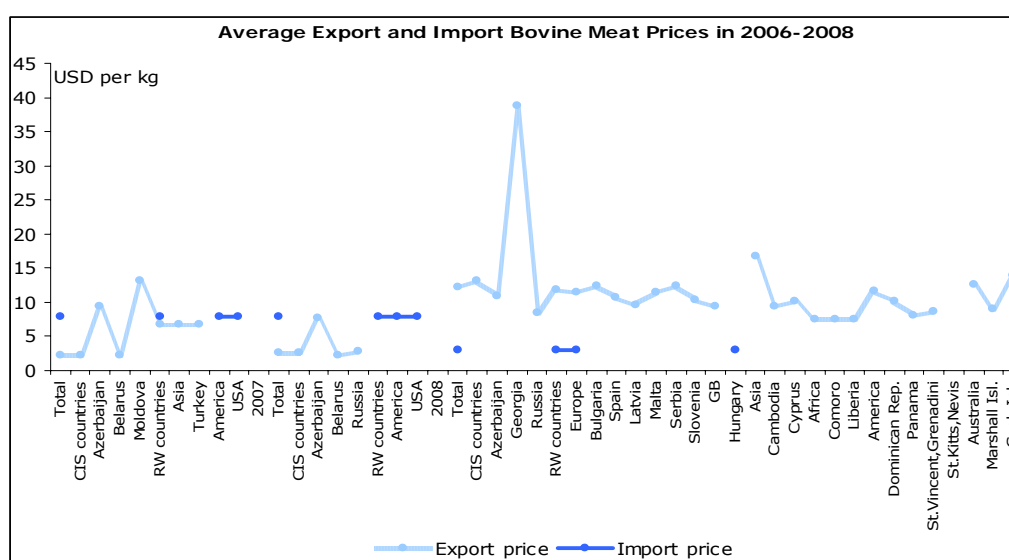
Figure 2.7: Geographical structure of bovine meat export from Ukraine during 2006-2008.



In 2008 Azerbaijan, Russia and Malta were the top three. Moreover, in 2008 export to RW countries (Rest of the World) prevailed over CIS exports. Especially, 33% directed to European countries, 8% to Asian and African countries, and 9% to American.

Ukraine has had only two partners in bovine meat imports for 2006-2008. They are USA for 2006-2007 and Hungary for 2008. About 1.5 t and 0.9 t of bovine meat were imported from USA in 2006 and 2007 respectively. Hungary delivered 33.6 t for seven months of 2008. Average import prices exceeded average export prices by 262% and 195% in 2006 and 2007 respectively. During 2006-2008 average export prices increased by 434%, and average import prices decreased by 62%. It led to the fact that in 2008 average bovine meat export prices prevailed over its average import prices by 75%. Bovine meat import pricing did not show significant variation across different countries of origin through 2006-2008. But export prices varied a lot. A more detailed picture on export and import price variation across Ukrainian trade partners can be found in Figure 2.8.

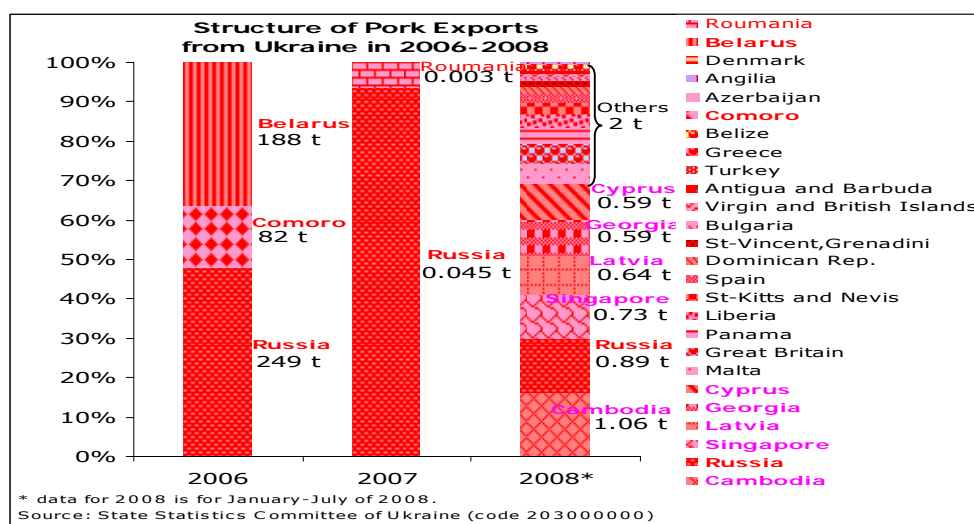
Figure 2.8: Average export and import bovine price trend during 2006-2008.



Source: State Statistics Committee of Ukraine

Pork similar to the bovine meat export structure showed the tendency towards trade partner diversification during 2006-2008. Thus, in 2006 and 2007 main pork export partners were mostly CIS countries and in 2008 the number of export partners increased from 2 to 24 with 24% of exports directed to the European countries.

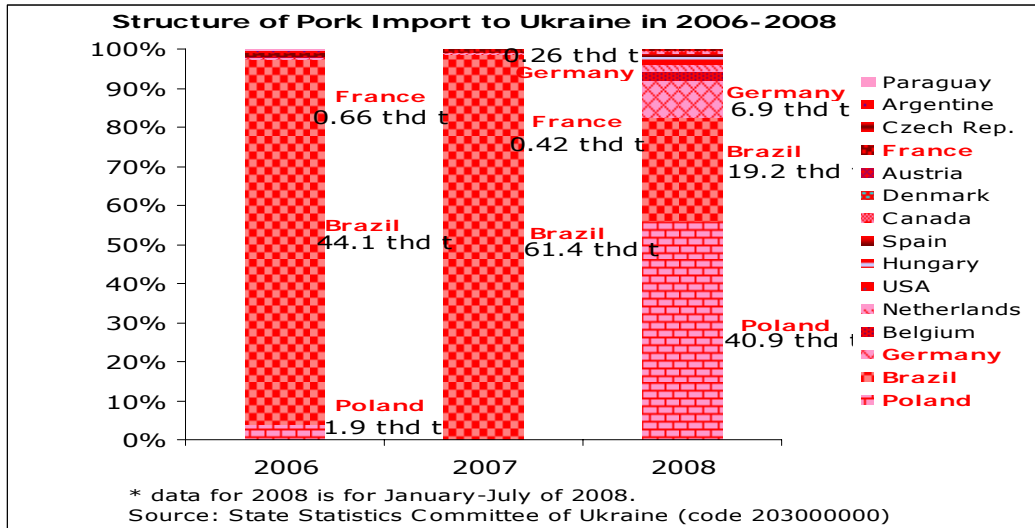
Figure 2.9: Geographical structure of pork export from Ukraine during 2006-2008.



* data for 2008 is for January-July of 2008.
Source: State Statistics Committee of Ukraine (code 203000000)

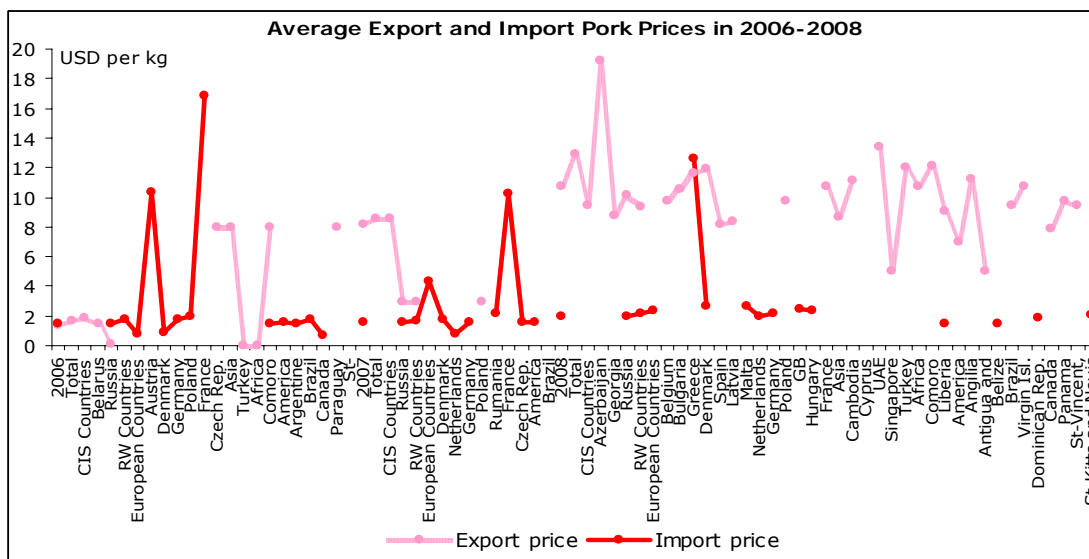
Pork imports from European countries increased by 18 times within the first 7 months of 2008 relative to 2006. Average export prices exceeded average import prices by 81% in 2007 and 2008. In 2006 the inverse relationship was still present. Through 2006-2008 average export prices grew by about 7 times: from 1.4 to 10.8 USD/kg. Average import prices demonstrated less growth of only 33%: from 1.5 to 2 USD/kg. 37% of total 2008 pork export directed to Asian countries, 24% to European, 12% to American and 4% to African countries.

Figure 2.10: Geographical structure of pork import to Ukraine during 2006-2008.



Important export partners of 2008 were Cambodia, Russia, Singapore, Latvia, Georgia and Cyprus. Detailed geographical structure of pork exports through 2006-2008 is presented in Figure 2.9. Through 2006-2008 pork imports have been geographically more differentiated than bovine meat imports. Brazil was always in the top three. European countries like Poland, Germany and France remained among leaders for 2006-2008. There were no imports from CIS countries. Pork import from European countries increased 18 times in the first 7 months of 2008 in comparison with the whole year of 2006. A more detailed geographical structure is presented in Figure 2.10. The most expensive imports in 2006 and 2007 were received from Czech Republic in 16.9 and 10.3 USD/kg respectively. In 2008 the most expensive import came from Denmark with the price of 12.7 USD/kg.

Figure 2.11: Average export and import pork price trend during 2006-2008.

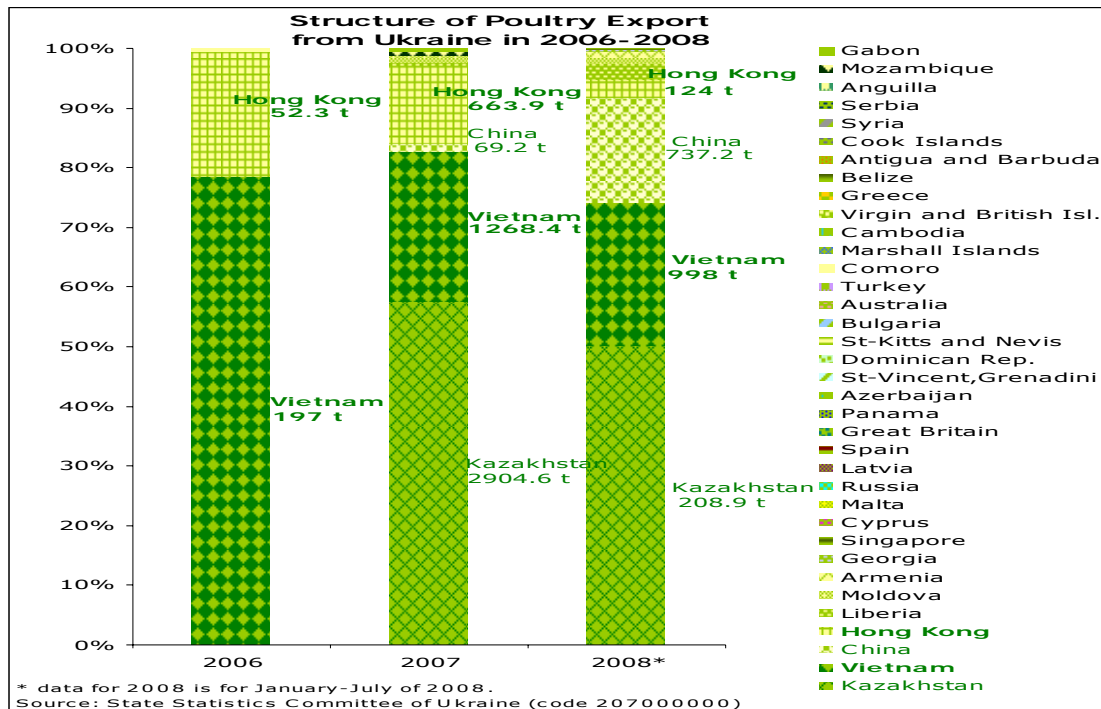


Source: State Statistics Committee of Ukraine

The most beneficial export in 2006 was directed to Asian and American countries (i.e. Turkey and St. Vincent Islands) with the price of 8 USD/kg; in 2007 and 2008 – to CIS countries (i.e. Russia and Georgia) in 8.5 and 19.2 USD/kg respectively. The shares of those countries in total export differ (0.007%, 94% and 9%), but not very low, thus influencing total benefits from pork exports. Broader picture on price variety and increasing gap between average export and import pricing across different countries during 2006-2008 can be found on Figure 2.11.

The number of poultry export partners increased from 7 to 34 during 2006-2008. But Vietnam, China (and Hong Kong) and Kazakhstan remained among leaders. Only in 2006 RW exports prevailed over the CIS's: its common share decreased from 99.97% in 2006 to 41.27% in 2007, and therefore increased to 47.37% in 2008. The quantity exported to Vietnam decreased 4 times between 2006 and 2008, which made the decrease of Vietnam share in total poultry exports from 79% to 24%.

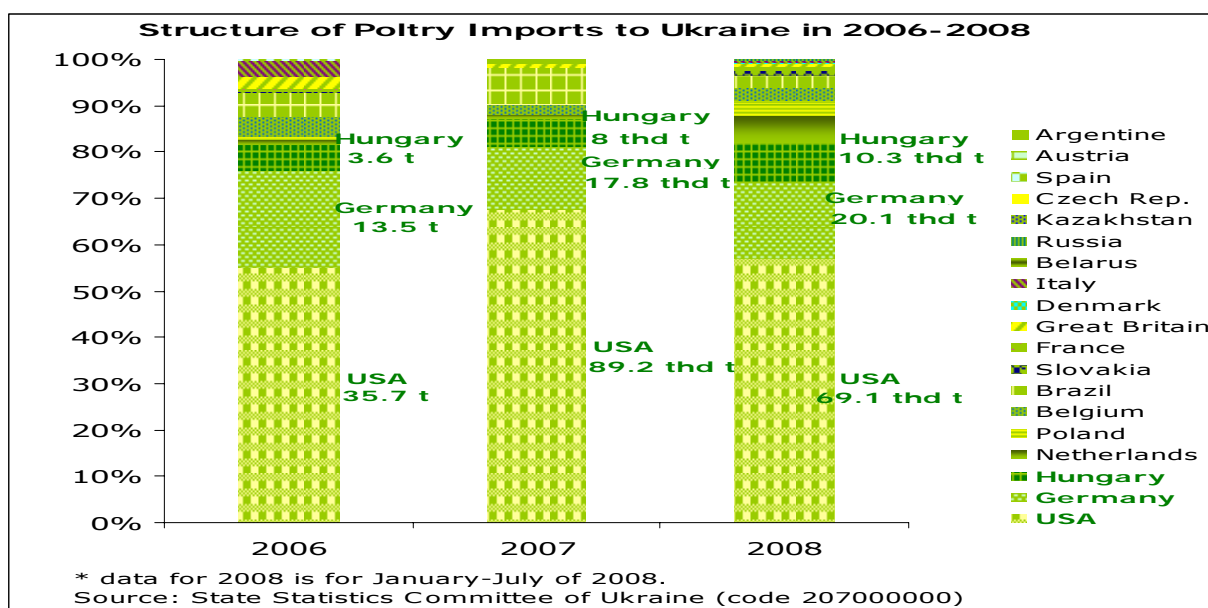
Figure 2.12: Geographical structure of poultry export from Ukraine during 2006-2008.



The poultry export quantity to China (including Hong Kong) increased by 94%, however, its share in total poultry exports decreased by 1% through 2006-2008, and equaled to 20.7% or 0.86 thd t for 7 month of 2008. Poultry exports to Kazakhstan decreased by 28%, thus making reduction in total poultry exports from 58% in 2007 to 50% in 2008. However, poultry exports became more differentiated signaling about poultry export development (see Figure 3.12).

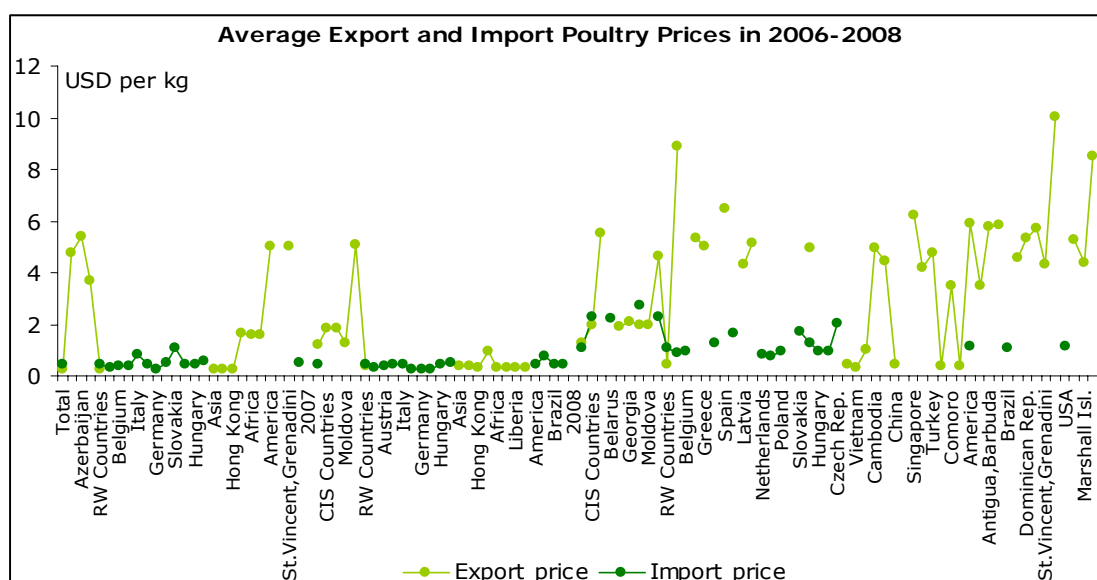
The geographical structure of poultry imports does not demonstrate so huge and noticeable trade partners' increase as its export structure. The increase through 2006-2008 was just from 12 to 16 partners. It speaks for better development of poultry import flows in comparison with its exports. It differs by sustainable partnership with USA, Germany and Hungary being in top three for the whole period from 2006 to 2008. The exception was 2007 when Hungary was shifted by Brazil. In general, the largest poultry import share belongs to USA. It had 47% in total poultry imports in 2006, 68% in 2007 and 57% in 2008. Germany accounted for 32% in 2006, 14% in 2007 and 17% in 2008. Hungary had the smallest but constantly growing among leaders share: 5% in 2006 6% in 2007 and 9% in 2008. Their changes in shares are associated with changes of imported by Ukraine poultry volumes. For visual a presentation see Figure 3.13.

Figure 2.13: Geographical structure of poultry import to Ukraine during 2006-2008.



Average import prices for poultry meat exceeded average export prices only ones, in 2006 by 65%. In 2007 and 2008 there was normal reverse relationship between them: average export prices were over average import prices by 65% and 16% respectively. Average export prices grew about 4 times between 2006 and 2008: from 0.26 to 3.88 USD/kg; average import prices grew about 1.5 times: from 0.43 to 1.06 USD/kg.

Figure 2.14: Average export and import poultry meat price trend during 2006-2008.



Source: State Statistics Committee of Ukraine

The highest poultry export price was set for Azerbaijan in 2006, Russia in 2007, and for St. Kitts and Nevis in 2008. However, their common share in total exports was just 0.024%. In contrast, export pricing of top trade partners (Vietnam, China (incl. Hong Kong) and Kazakhstan) was much lower, but total export benefit from them for 2006-2008 accounted for 10.77 mln USD or 94% of cumulative poultry export benefit for this period. For more details see Figure 2.14.

Export quantities of mutton and goat's meat are very small. However, import quantities of mutton and goat meat increased about 58 times during 2007-2008 while import volume growth has not

stipulated a diversification of trade partners since the world market for these products is dominated by Australia and Oceania.

Ukraine is involved in export-import operations with by-products of different kinds of meat (i.e. bovine, pork, sheep, goat, horse, donkey, and mule). Total by-product exports decreased by 89% from 2006 to 2008. In contrast, their imports increased by factor 1.6 during this period. Main export partners of Ukraine in its by-product trade were CIS countries in 2006 and 2007 (Azerbaijan and Georgia accounted for 99% and 90% respectively), and in 2008 the exports were almost equally distributed between CIS and Asia⁴. Average export price charged in 2006 was 0.52 USD/kg, in 2007 – 0.45 USD/kg and in 2008 – 0.5 USD/kg. Standard deviation of those prices was around 3.01 in 2006, 2.3 in 2007 and 3.55 in 2008. Main Ukrainian import partners in meat by-products trade were Argentine, Poland and Hungary in 2006, Argentine, USA and Hungary in 2007, and Poland, Germany and USA in 2008. Meat by-product import cost increased by 2.2 times.

In summary, Ukrainian exports during 2006-2008 declined for pork and bovine meat but tend to fluctuate strongly. Poultry exports have grown in total by factor 15 during the years 2006-2008. Despite remaining technical barriers to trade on Ukrainian side, imports of meat products were constantly growing throughout 2006-2008. However, it should be noted that export and import prices during the last three years have occurred under the so called 'World Food Crises' which implied high world market prices for agricultural raw materials between 2007 and early 2008. The near future may likely show a further increase of pork and poultry imports to satisfy domestic Ukrainian demand. Exports will go down due to unsatisfied domestic demand, but also due to low and inefficient production that often fails to comply with foreign quality standards. Bovine meat exports are currently unlikely to occur at a larger scale. However, after WTO-membership Ukrainian meat markets remain sensitive to changes on foreign markets, but also to domestic (trade) policy changes.

2.4 Ukrainian Meat Market Policies

The Ukrainian meat markets are still heavily influenced by the government. According to specific regulations on local levels, extra charges to finished meat products are limited to 15%. This concerns extra charges to wholesale producer prices (or custom value) for bovine, pork and poultry meat (not taken transportation costs). Limited to 10% extra charges to competitive sales price of State Reserve are also set by the government. Finally, wholesale prices for bovine, pork, poultry meat and cooked meats are under government control by the same law⁵.

Technical trade barriers have created obstacles for meat exports into Ukraine. Previously, trade in beef and pork was a sensitive political issue and the volume of imports was directly correlated to court decisions and political deals associated with the free economic zones (FEZs) privileges. In late 2007 FEZs that accounted for over 90% of pork imports in 2006 were closed, which allowed Ukraine to get rid of grey import schemes. But some governmental measures (such as state purchased imports of red meat, the recent intention to introduce a pork import quota, recently introduced and then cancelled 13% increase to import tariffs etc.) still have a great impact on trade of meat. In addition, the Ukrainian government was criticized for high meat prices and high inflation, and for significant state purchases of poultry meat. Therefore, trade forecast for 2009 highly depend on crucial Ukrainian trade policy changes.

Meat producers often blame Ukrainian government for low levels of financial support. They demand privileged credits, an increase of direct subsidies, as well as guaranteed minimum prices and stepped-up import restrictions. As a response by the Budget Law for 2009⁶ (in comparison

⁴ The largest export destinations in 2008 were China (47.8%) and Georgia (50.3%) while total number of export partners equaled 17 (in comparison, in 2006 and 2007 number of export partners for meat by-products was 3 and 4 respectively). Together with total export quantity decrease, total export benefit decreased by 90% from 100.8 to 10.4 thd USD.

⁵ Resolution of the Cabinet of Ministers of Ukraine # 1548 "On empowerment of executive bodies and executive local bodies to regulate prices (tariffs)" from December 25, 1996 (with last changes made by Resolution # 36-2009-n from January, 28 2009).

⁶ Law of Ukraine # 835-17 "On State Budget of Ukraine for 2009" from December 26, 2008.

with the last changes introduced in the Budget 2008⁷) support of cheaper credit resources was decreased by 82% to 0.3 bln. hrn. and the budget for animal subsidies was reduced by 84% to 0.5 bln hrn. Also 30 mln hrn are aimed at selection purposes of animal breeding and poultry farming, 20 mln hrn to support of farming (households), 1.5 mln hrn to prevent animal illness extension, and the total of 1.1 bln hrn for different veterinary purposes. Thus, the WTO requirement to gradually decrease yellow box measures is fulfilled even at a faster than expected pace.

The Law of Ukraine # 922-VI (the correspondent Draft Law number is 3353) "On introduction of changes to some laws of Ukraine regarding the prevention of negative consequences of World financial crisis for agricultural development" was signed by the Head of Verkhovna Rada of Ukraine on February, 7 2009 (but the President has already vetoed it two times; the veto was overcome by Verkhovna Rada on March, 3 2009, and, finally, the Law was signed by the President on March, 13 2009.). According to this Law, meat and meat products are not allowed to be imported by the scheme "goods made on commission". Also from the time of Law adoption prices for services of veterinary medicine and quarantine inspection will be under governmental control. Besides, commercial banks are to prolong credits for agricultural businesses attracted in 2005-2008 with no change of interest rates and any other extra charges for a one year period (National Bank of Ukraine will provide refinancing to these banks). Also new standards for meat products will have to be worked out, and VAT tax paid by processing enterprises for sold meat products will be directed to agricultural producers as a subsidy.

In addition, some other governmental initiatives may lower Ukrainian meat industry competitiveness (imposition of minimal prices and "hand" price regulations, a complicated VAT system, intention to increase import tariffs for some goods, etc.) However, while much still needs to be done, the Ukrainian meat industry has demonstrated a positive development, including slow but gradual shift of agricultural meat production from households to industry, improvement of quality and effectiveness of meat production at several processing enterprises and so on. Suspended governmental policy can facilitate further positive trends. Thus, the government should utilize the benefits from WTO membership, such as increased export opportunities, to push for the development of a competitive Ukrainian meat industry. Meanwhile its current legislative work is intended to minimize the negative effect of the financial crisis, and also to provide food security and competitive agricultural production⁸ through provision of sustainable financing of agricultural businesses, purchases of high genetic quality cattle and poultry by financial leasing schemes, gradual shift from general governmental support to direct subsidies, partial compensation of development expenses for agricultural producers (including investment projects), development of the insurance system, etc. In this context, collaboration with international organizations and foreign countries will also hopefully contribute to a rising competitiveness of the Ukrainian meat industry.

⁷ Law of Ukraine # 589-VI "On introduction of changes to the Law of Ukraine on State Budget of Ukraine for 2008" from September 24, 2008.

⁸ Draft Resolution of the Cabinet of Ministers of Ukraine # 1360 "On the Program of activity of the Cabinet of Ministers of Ukraine "On the overcoming of influence of the World financial-economic crisis and sustainable development" from December 23, 2008.

3 Meat Production in the EU: Facts and Figures

For decades, the meat sector has been one of the most important of the European Union's (EU) agriculture. Half of all EU farms have livestock. Some 90 % of farmers with ruminant animals (cattle, sheep and goats) are specialist livestock producers. And livestock and meat products also have been among the fastest growing components of the global agri-food industry.

Traditionally, meat is a major source of protein and constitutes an important part of the European diet. Therefore, the policies of the EU in the meat sector and especially under the regime of the Common Agricultural Policy (CAP) are designed to encourage the production of safe, nutritious and affordable meats.

Nowadays, a large number of animals in the EU is being kept indoors and/or being fed with prepared feeds (e.g. grain). The white meats (pork and poultry) tend to be produced away from the land (i.e. in a number of types of barn or enclosed systems), though outdoor husbandry is increasing gradually – especially as part of ecological farming systems. Feeds are prepared from home-grown or purchased ingredients, often grain-based, or bought in as prepared 'compound' feedstuff.

The modern European consumer demands a higher share of convenience products and eats out more frequently, which does have an impact on the industry. By increasing product development, showing larger market flexibility and improving responsiveness, producers try to optimize their focus on meeting the consumer need.

In the EU, however, consumer confidence in the industry has declined in recent years as a number of animal diseases, such as Bovine Spongiform Encephalopathy (BSE), foot-and-mouth disease (FMD), avian influenza or the severe acute respiratory syndrome (SARS), have all had a dampening effect on overall meat demand and prices. Hence, the development in the European meat sector is characterized by changes in demand, consumption and demographics towards more attention to soft product quality traits such as animal welfare, "ethical products" and product origin.

Today, politicians but also most market participants are aware of the fact that animal health scares can potentially destabilize the industry and put it under pressure. So to safeguard animal and public health the EU maintains its strict legislation, a high level of standards and a policy to fulfill consumer needs for enhanced information, while producers try to improve both the quality of farm management and the vertical integration of the whole production chain.

Together the four major meat types bovine, pig, poultry as well as ovine account for 25 % of total EU agricultural output. In addition, there is a small volume niche market for a wide range of (farmed) game traded at premium prices. Of course, the markets for these five meat categories exhibit different development paths. On the supply side, this is due to individual biological production cycles; differences in feedstuffs used as well as feed conversion efficiencies but also varying sales channels and marketing contracts. In the following paragraphs the EU meat market and the four plus one meat categories will be considered in more detail.

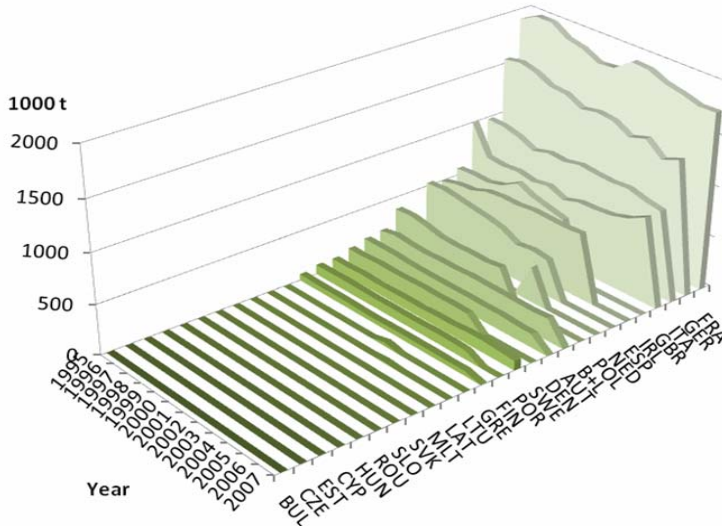
3.1 Bovine Meat

World production of bovine meat rose by 2.3 % in 2007, and is projected to rise a further 1.1 % in 2008 to 68 million tons. All of the increase in production will take place in developing countries, which now account for 56 % of the global total.

In the EU, bovine meat production continues to display a slight downward trend with a decline in production of less than 1 % because animals are being retained to increase the size of the dairy herd, following the increase in milk quotas. But since there are reduced imports from Brazil this should have a stimulating effect on the industry.

Figure 3.1 shows that the largest producers are Germany and France but each with declining production levels since the mid-1990. On the contrary, beef production in Great Britain and Ireland has been on the rise again after the BSE crisis in 2001.

Figure 3.1: Bovine Meat Production in the EU 1995-2007



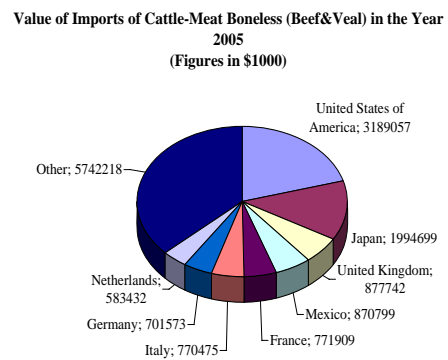
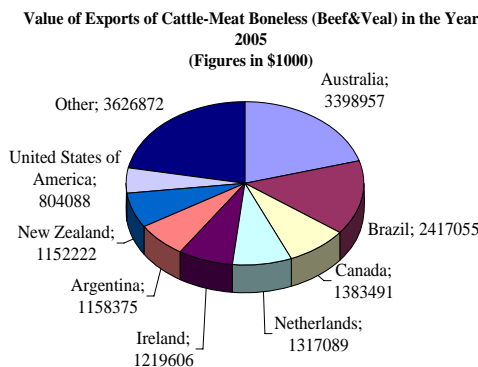
Source: Eurostat (2008).

Neither in the new Central and Eastern European (CEE) member states nor in Scandinavia beef production plays a major role. At a first glance, this seems to be surprising because these countries all have relatively abundant grazing land.

As indicated by Figures 3.2a and 3.2b, the market of beef and veal exports is much more concentrated than the same market on the import side.

While the eight largest beef exporters account for roughly 80 % of world beef exports, on the import side the eight largest importers absorbed about 33 % of world imports. Furthermore, the United States as well as the Netherlands appear to be large exporters as well as large importers all at once, which can be explained by the fact that beef and veal are by no means homogeneous products. Instead, intra-industry trade plays an important role and points to the fact that different beef varieties as well as the structure of the processing industry have their own impact on trade data.

Figures 3.2a and 3.2b: World's Largest Importers and Exporters of Beef and Veal
In Terms of Value

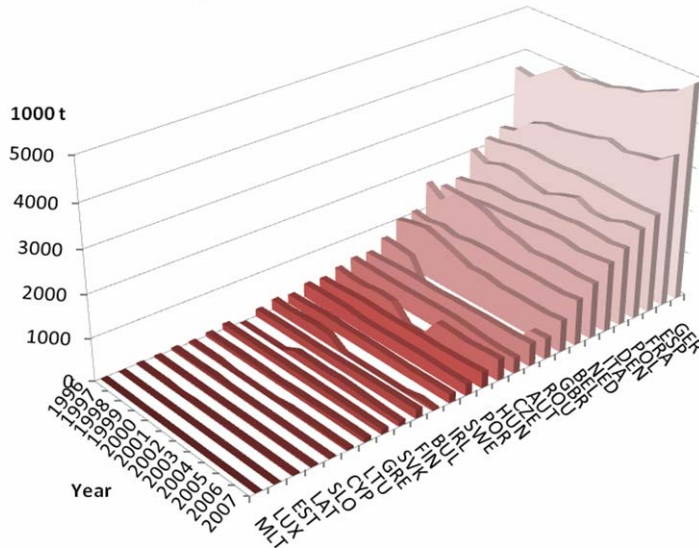


Source: Own depiction based on FAOSTAT.

3.2 Pork

Pork is the most widely eaten meat in the world, providing about 38 % of daily meat protein intake worldwide, although consumption varies widely from place to place. This is despite religious restrictions on the consumption of pork and the prominence of beef production in the West.

Figure 3.3: Pigmeat Production in the EU 1996 - 2007



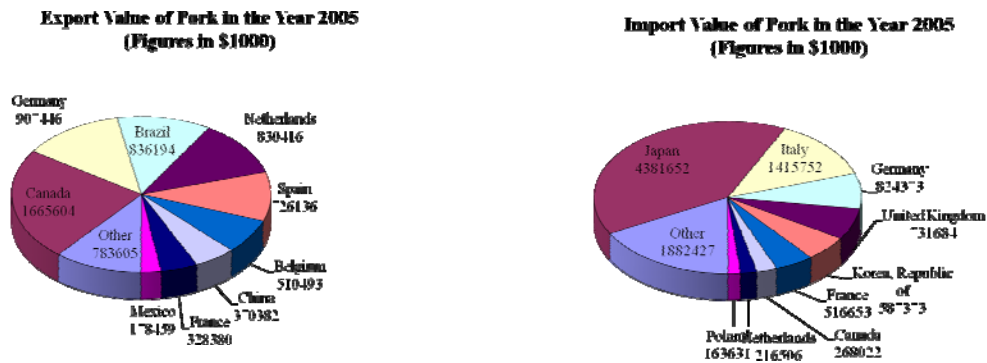
Source: Eurostat (2008).

The EU has a high degree of self-sufficiency with regard to pork and therefore imports only small amounts. Import quotas are not filled because some licensed countries do not meet the veterinary standards. Therefore, imports are effectively banned, although tariff rate quotas would be favorable. The EU does not interfere with the domestic market for pork, nor do export subsidies play a major role. But EU exports by themselves are also vulnerable to sanitary and veterinary restrictions imposed by importing countries.

Figure 3.3 shows the contribution of each member state to the European pork output in 1000 metric tons. Again, the largest countries tend to be the largest producers, with significant shares contributed by Poland and Romania, the Czech Republic and Hungary. On the other hand, especially the Danish and Dutch pork industries are export driven. Denmark, for example, is one of the world’s largest pork exporters with over 75 % of its output going to some 100 countries.

Figures 3.4a and 3.4b display the world’s largest importers and exporters of pork, respectively. Pork in the definition used here refers to slaughtered meat from pigs at a low level of processing.

Figures 3.4a and 3.4b: World’s Largest Importers and Exporters of Pork
In Terms of Value



Source: Own depiction based on FAOSTAT.

International trade statistics show various other categories of meat from swine. Compared to the world's trade with beef and veal, trade of pigmeat is even more concentrated on a small number of countries. This is supported by the fact that the share of other countries is in either case less than 20 %.

In addition, intra-industry trade also plays an important role, but it appears that some major players such as Germany, the Netherlands and France, all are part of the EU. It should also be noted that the importance of China for global pork exports might be somewhat understated by Figure 3.4a due to exchange rate effects when converting all exports into US dollar values. In terms of quantity in metric tons China is a leading and major exporter of pork.

On the import side, a number of European countries also appear to be large markets, while the share of "other" countries points to at least limited alternatives for potential Ukrainian exports. Due to geographical proximity especially Poland may qualify as an emerging market for Ukrainian pork producers.

3.3 Poultry

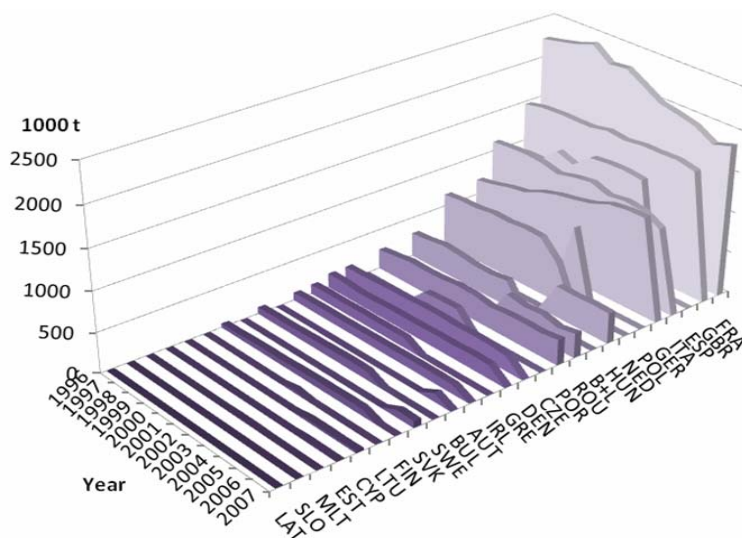
Poultry meat is a heterogeneous group of meat varieties, ranging from chicken, turkey, geese, ducks to guinea fowls. Chicken meat accounts for 70 % of EU poultry production, turkey meat follows with 20 %. All others constitute the remaining 10 % of EU poultry output. Poultry production is typically vertically integrated, with specialized operations for each part of the bird life cycle: breeding and hedging stations deliver the birds to feeding operations.

From there, specialized transportation companies bring them to slaughterhouses. With the exemption of organic production systems, poultry production in Europe is a pure indoor activity, typically along with a high concentration of birds at a certain place.

Therefore, from a civil-society perspective, a number of environmental concerns are associated with poultry production. Because they are afraid of expected emissions from new poultry operations, local residents in a large number of cases have already politically opposed the expansion of existing poultry farms.

On the other hand, EU agricultural policy does not directly interfere with poultry markets through price support or direct payments. However, feed costs are crucial for this sector and therefore EU policies with regard to grain and oilseeds certainly have a severe impact on the poultry sector as well.

Figure 3.5: Poultry Production in the EU 1996 - 2007



Source: Eurostat (2008).

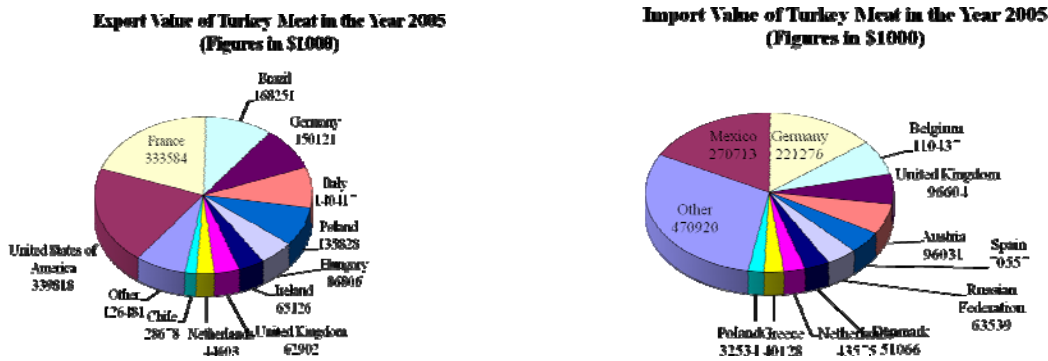
Figure 3.5 shows the contribution of each member state to the European poultry output in 1000 metric tons. Major producers are France and Great Britain followed by Spain, Italy and Germany. Intra-industry trade for poultry is significant within the EU, with Poland and Hungary.

The market for poultry has been especially fast growing in recent years in Europe because chicken and turkey meet the changing preferences of health-aware European consumers, who demand lean, white meat that is associated with a well-balanced diet.

On a side note, in Germany during Christmas time, consumption of goose and duck meat traditionally reaches its annual peak and is mainly accommodated with demand for imports from Poland and Hungary.

As indicated by Figures 3.6a and 3.6b, the USA, France and Brazil dominate half of the market for turkey exports, while Mexico, Germany, Belgium, the UK and Austria as the largest importers absorb about 50 % of world imports. From a Ukrainian perspective it is noteworthy that the Russian Federation in 2005 has received turkey meat imports to the amount of more than 63 million USD making it the eighth biggest importer on a global scale.

Figures 3.6a and 3.6b: World's Largest Importers and Exporters of Turkey
In Terms of Value



Source: Own depiction based on FAOSTAT.

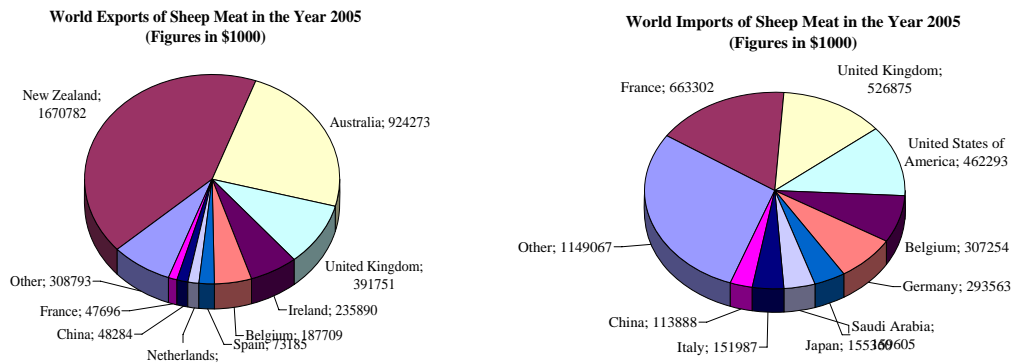
3.4 Ovine Meat

According to the EU Commission, the European ovine meat sector shows a shrinking tendency in the long run. This is primarily due to relatively small incomes being generated from sheep husbandry while costs for feed and energy are on the increase. Furthermore, European sheep keepers display a rising average age indicating that young farmers do not invest into the sheep business any more. The meat industry anxiously watches the decline in sheep and goat numbers as managers are afraid of inefficient slaughterhouse and plant utilization possibly preventing them from cost-effective production in the near future.

Several large countries within the EU exhibit comparatively small levels of sheep production. Exemptions are Great Britain and Spain. However, in the UK, sheep production has severely suffered from Scrapy along with the BSE crisis. The world market for sheep displays an unusual structure: Sheep and goats are small ruminants that are able to live and grow even on marginal land. Therefore, raising them is less capital and labor intensive than many other branches of agriculture. So theoretically, a large number of countries could potentially build a competitive sheep producing industry in those geographical areas where the opportunity costs of sheep production are low. However, so far only Australia and New Zealand have managed to build such an industry, and currently those two countries are by far the most competitive suppliers of premium quality sheep meat exports (see Figure 3.7a).

On the other hand, world imports largely follow the overall market size for food, implying that domestic sheep production in none of the EU countries actually meets domestic demand. Furthermore, in European countries that are experiencing a mounting immigration of Muslims, a growing market exists for less than premium sheep meat.

Figures 3.7a and 3.7b: World's Largest Importers and Exporters of Sheep Meat In Terms of Value



Source: Own depiction based on FAOSTAT.

For instance, Germany nowadays has more than 3 million residents that have strong cultural preferences for sheep meat consumption. At the same time it is estimated that 30 % - 40 % of domestic sheep production in Germany is marketed through informal channels, serving especially the Muslim community. Therefore, reliable data about sheep production and consumption in Germany are not available. But it can be assumed that a large share of this production does not constitute premium quality lamb.

For Ukraine as a potential exporter especially the market for high quality lamb could open interesting perspectives for certain Ukrainian enterprises that may face a competitive advantage in sheep production and at the same time manage to provide quality that matches the high level of exports from Oceania.

3.5 Game

Game meat potentially constitutes an interesting niche market because game typically sells for premium prices. Therefore, as Figures 3.8a and 3.8b reveal import and export values of game to and from Europe are quite substantial, e.g. in comparison to poultry or ovine meat. Venison is bought by consumers with comparatively high income, and a large share of game is consumed directly in restaurants.

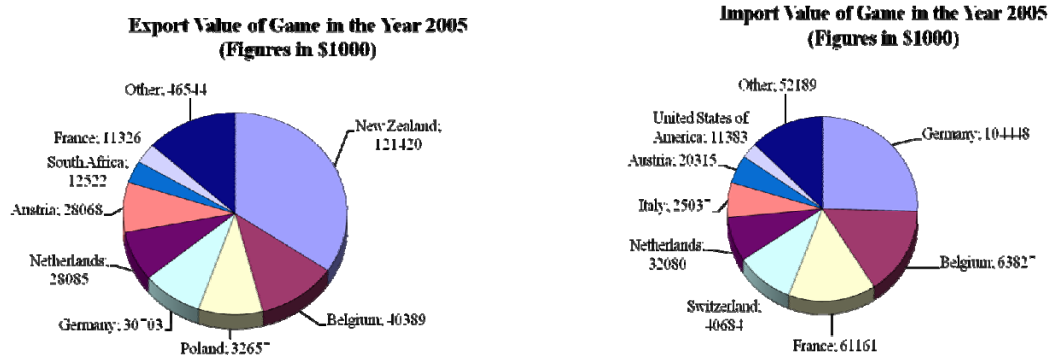
Figure 3.8a points to Belgium and the Netherlands as major game exporters, which deserves explanation, since neither of these two countries is known for vast areas of wilderness as a potential habitat of wild animals: The EU administration clearly distinguishes between meat from wild game, and meat from farmed game animals:

"Farmed game" means land mammals or birds which are not considered as domestic, but which are farmed as domestic animals. "Wild game" means wild land mammals which are hunted, but also wild mammals living within an enclosed area under conditions similar to those they would have in freedom. Also considered "wild game" are wild birds which are not covered by the EU farmed game meat directive.

In other words, it is common in the EU to keep especially deer and wild boar, but also rabbits and various wild birds in fenced-in areas in order to control the process of game meat production much more closely than it would be possible with animals living in forests or elsewhere without control. However, with regard to gourmet restaurants or delicacy stores, consumers often still distinguish between the quality of farmed game meat and the premium quality of 'true' venison.

Due to its proximity to the EU market and due to its abundant nature Ukraine may have a large potential to export either farmed or 'true' game to this premium market in the EU. Thus, this sector may constitute an interesting alternative for some Ukrainian enterprises to specialise in. However, key requirements to export venison to the EU are identical to the general principles for exporting other meat products, which are outlined in Chapter 4.

Figures 3.8a and 3.8b: World's Largest Importers and Exporters of Game



Source: Own depiction based on FAOSTAT.

4 Meat Markets, Policies and Regulations in the EU

Europe constitutes the largest single market in the world and at the same time qualifies as one of the largest agricultural exporters in the world. Due to the growing liberalization of world markets and the continuing European integration, agriculture in the EU is undergoing constant restructuring in order to meet the demands of global competition. The competitiveness of market participants is dependent on efficient production and marketing processes. Apart from that, it is also determined by process efficiency on the input supplying (farm), and output demanding (retail) level to a large extent.

However, farm handouts under the CAP remain the single biggest spending item in the combined EU budget, accounting for about 43 % of the whole - around 40 billion EUR.

4.1 How the EU's Common Agricultural Policy addresses the Meat Sector

When the Marrakesh Agreement of 1994 brought an end to the General Agreement on Tariffs and Trade (GATT) Uruguay Round and created the World Trade Organization (WTO), trade disciplines were put in place that also apply to the EU's meat sector.

In the beef sector, this has brought about reduced expenditure on domestic market support, put downward pressure on export refunds and lowered border protection via tariff cuts and increased access to EU markets.

Due to the lack of domestic market support in the pig meat sector, here the reduction of export refund has had the biggest impact.

For the poultry meat sector that is also without particular domestic market support measures, the pressure has come via increased competition on the EU market from imported products.

While gradually phasing out conventional market support for meat, the EU has started build a reputation for high quality goods and tries to keep risks to a minimum through a comprehensive food safety strategy. The food and hygiene standards apply 'from the farm to the fork', whether the food is produced in the EU or is imported from a non-member state.

The following chapters summarize important components of the CAP on the one hand, and of the 'farm to fork'-system to monitor meat quality on the other.

4.1.1 Development and Principles of the CAP

The CAP went into effect in 1962 with the introduction of the first Common Market Organisations (CMOs) and qualifies as an integral part of the agreements that established the European Community (EC). It is among the most expensive EU policies commonly administered and funded by member states. The four initial objectives of the CAP were already laid out in 1953 in Article 39 of the Treaty of Rome. They include:

- increasing agricultural productivity through technical progress and efficient allocation of resources in order to ensure a fair standard of living for farmers;
- stabilizing internal markets;
- assuring availability of food supplies; and
- ensuring reasonable prices to consumers.

As a consequence, this led to efforts to comprise fluctuations in terms of the absolute level of prices as well as in terms of variations over time that could potentially harm individual producers. The CAP is based on three fundamental principles: free trade within the Community based on common prices, preference for Community produce in Community markets, and joint financial responsibility.

Until the CAP reform of 1992 (for beef and veal) and 2001 (for sheep meat and goat meat), support systems for cattle and sheep farmers linked prices and/or production levels. The market regimes were geared towards either sustaining a high price for the animals and their meat respectively, or making support payments direct to farmers based on the number of animals they kept on their farms. This has been gradually reduced and farmers are now offered direct aid payments instead to sustain their incomes.

The EU's assistance to the sector has been limited to export refund (i.e. one form of export subsidy used by the EU) and border protection, and limited use of aid for private storage (for pig meat mainly), which help to stabilize the internal EU market price. These trade-related measures are subject to World Trade Organization (WTO) disciplines.

The EU beef support regime with the practice of subsidized 'intervention' buying of surplus beef from the market was altered significantly in 1999 and being reduced to a minimal 'safety net' as part of the 'Agenda 2000' CAP reform process. Since then, farmers receive direct aid in the form of premiums based on the number of cattle they held in a certain pre-reform reference period as compensation for the reduction in market price support.

The ovine meat support regime was reformed in 2001. The previous system of premiums paid to farmers on the basis of the market price was replaced by a single premium fixed for several years ahead.

Given their historical lack of direct support systems, the pork and poultry sectors (the white meats) have been relatively unaffected by the CAP reform process. Implicitly, however, producers of pig meat and poultry meat have benefited from the reduction in cereals prices resulting from CAP reforms in 1993 and 1999 as this has lowered feed costs.

4.1.2 Ongoing and Future Reforms: 'Mid-Term-Review' 2003 and 'Health Check' 2008

The 2003 'Fischler reform' or 'Agenda 2000 Mid-Term-Review' (MTR) has completely changed the way the EU supports the agri-rural sector. All livestock and other direct aid payments under the CAP are being converted, over time, into a 'single farm payment'. Today, aid payments are no longer linked to what farmers actually produce (i.e. they are 'decoupled' from production) but to the total of land they farm plus certain cattle premiums.

Under the so called 'cross compliance concept' aid payments are linked more closely to farmers' delivery of environmental and welfare benefits. Farmers receive the direct payment as long as they manage their land in an environmentally correct way. In the case of livestock they also have to meet minimum animal husbandry welfare standards. Farmers who do not respect the rules face cuts in their support.

Direct support to farmers by the EU is thus increasingly aimed at offering a predictable level of aid to supplement their income from the meat markets. The certainty of aid payments over a period of years allows farmers to concentrate on improving their production methods, product quality and marketing. Assistance is also made available via the rural development measures co-funded by the EU and Member States.

Although it can be assumed that CAP measures in connection with the meat sector will be subject to further reforms in the future, currently it does not seem that the EU will completely eliminate

its original market intervention policy for the markets in beef and veal (Council Regulation (EC) No 1254/1999 of 17 May 1999), pig meat (Council Regulation (EEC) No 2759/75 of 29 October 1975), poultry meat (Regulation (EEC) No 2777/75 of the Council of 29 October 1975) as well as sheep meat and goat meat (Council Regulation (EC) No 2529/2001 of 19 December 2001). In addition, the various regulations with regard to veterinary standards, animal welfare and cross compliance are likely to persist and to be extended - following consumer demand.

The ongoing and future political reforms called the CAP Health Check will further break the link between direct payments and production and thus allow farmers to follow market signals to the greatest possible extent. For the meat sector, the following projected measures are of importance:

Decoupling of support: The EU Commission proposes to remove remaining 'coupled' payments and shift them to the so called 'single payment scheme' described above. For suckler cow, goat and sheep premia, however, member states may maintain current levels of coupled support.

Cross Compliance: The so-called 'cross compliance' will be simplified, by withdrawing standards that are not relevant or linked to farmer responsibility. New requirements will be added to retain the environmental benefits of set-aside and improve water management.

Assistance to sectors with special problems: Currently, Member States may retain by sector 10 percent of their national budget ceilings for direct payments for environmental measures or improving quality and marketing of products in that sector. The Commission wants to make this tool more flexible. The money would no longer have to be used in the same sector; it could be used to help farmers producing beef, goat and sheep meat in disadvantaged regions; it could also be used to support risk management measures such as mutual funds for animal diseases.

Intervention mechanisms: The Commission proposes to abolish intervention for pig meat. For feed grains, intervention will be set at zero.

It seems that traditional CAP spending through price interventions and direct transfers ('first pillar') has become unpopular among voters in Western Europe. So currently there even is no need for the WTO to pedal the EU to induce further CAP reforms. These reforms will not phase out spending on agriculture but shift payments towards the so called second pillar of the CAP - a budget largely flexible with regard to local initiatives and not tied to agricultural output.

The EU Commission is constantly increasing market orientation of farm policy and currently proposes the removal of most of the remaining production control mechanisms.

Besides other reforms that all target towards market orientation but are not explicitly related to the meat sector, the Commission is also proposing to cut higher total sums of subsidies per farm ('modulation') above EUR 100,000 in order to address taxpayer concerns. This will likely be done through a progressive rate starting from 3 % per EUR 100,000.

4.1.3 CAP Regimes for Major Meat Categories

The CAP is an integrated system of measures which works by maintaining commodity price levels within the EU and by subsidizing production. There are a number of mechanisms that cover only certain agricultural products. Following is an overview of the major policy regimes for each meat category; however, a detailed coverage of each of these policy systems is beyond the scope of this paper. Therefore, EU websites that briefly summarize the CAP regime for each one of the major meat categories and list the relevant EU legislation may provide further information.

Bovine Meat

The sector formerly benefited from direct payments to producers that now have been transformed into a single monetary aid per farm, based on a reference period of beef and veal produced in the past.

In addition, border protection through import tariffs is still in place and Tariff Rate Quotas (TRQs) have been granted for long; e.g. the 'Hilton' quota for premium beef.

- Summary of legislation: <http://europa.eu/scadplus/leg/en/lvb/l60009.htm>
- List of relevant legislation: <http://eur-lex.europa.eu/en/legis/latest/chap036057.htm>

Pig Meat

The CAP aims to stabilize prices and secure income levels for pig farmers mainly through border measures (tariffs) and special trade agreements with third countries. No other domestic subsidies apply to pig production directly.

- Summary of legislation: <http://europa.eu/scadplus/leg/en/lvb/l11046.htm>
- List of relevant legislation: <http://eur-lex.europa.eu/en/legis/latest/chap036052.htm>

Eggs and Poultry

Similar to regulations for pig meat, trade with non-EU countries is regulated through a system of preferential trade agreements. Direct subsidies to EU producers do not play a major role.

- Summary of legislation: <http://europa.eu/scadplus/leg/en/lvb/l11057.htm>
- List of relevant legislation: <http://eur-lex.europa.eu/en/legis/latest/chap036053.htm>

Ovine Meat

Similar to beef and veal policies, direct payments have been transformed into single farm aid based on a reference period. Trade is regulated through a system of preferential agreements.

- Summary of legislation: <http://europa.eu/scadplus/leg/en/lvb/l11067.htm>
- List of relevant legislation: http://europa.eu/eur-lex/en/lif/reg/en_register_036068.html

At this point, it should be stressed that most economists and even EU-policymakers would agree that the CAP is far from being perfect. In fact, throughout EU member states, subsidies from Brussels allow many small, outdated, or inefficient farms, which otherwise would not be viable anymore, to continue to operate. From a textbook of economics' point of view, it would certainly be better to end the political interference allowing the market to find its own price levels, and for uneconomic farming to cease. Parts of the EU budget currently used in the agri-rural sector could then be allocated to other sectors, such as infrastructure, education or healthcare, which might serve the public's general interest much better.

4.2 Principles of EU Food Law, Trade Conditions and Pertinent Requirements

EU agricultural and food policies address not only prices that domestic producers receive, but cover the whole "food chain". The EU has laws covering how farmers produce food (including what chemicals they use when growing plants and what they feed their animals), how food is processed, how it is sold and what sort of information is provided on the labelling. The EU also has laws regulating the safety of food imported into the EU, laws to prevent the spread of animal and plant diseases in the EU and laws on the humane treatment of farm animals.

The EU's 'farm to fork' or 'stable to table' strategy to maintain consumer confidence in the safety of food products is based on a combination of high standards for food, animal health and welfare, and plant health. These standards apply both to food produced inside the EU and food imports. There are three pillars to this strategy:

- legislation on the safety of food and animal feed;
- sound scientific advice on which to base decisions;
- enforcement and control.

This means that every single food and feed business has to guarantee that all foodstuffs, animal feed and feed ingredients are traceable right through the food chain. In addition to the umbrella legislation for all food and feed, a targeted legislation on specific food safety issues and foodstuffs has been adopted by the EU. It comprises the use of pesticides, food supplements, colorings, antibiotics and hormones in food production, addition of vitamins, minerals and similar substances to foods, products in contact with foodstuffs, such as packaging, meat, gelatin and dairy products. In addition, there are stringent rules governing release, marketing, labeling and traceability of crops and foodstuffs containing genetically modified organisms (GMOs).

But from a socio-political point of view, maintaining consumer confidence involves more than a meticulous legislation and harmonized standards to reassure health aspects but has to focus on animal welfare concerns and environmental protection as well. Besides, a watchful media and highly active consumer, animal rights and ecology lobby groups force producers to meet the strict food production requirements in the EU.

Animal welfare in particular has been a main topic of the discussions over the future of the meat sector. In response to concerns voiced by the public, the EU Commission has continuously upgraded the legal requirements. For example minimum standards for living space, a minimum weaning age or the necessity of higher levels of training and competence amongst stockmen in charge of the animals were introduced and export subsidies on cattle destined for slaughter were restricted in order to decrease the number of live animal transports.

4.2.1 Shedding Light on the EU's Approach to Imports of Meat and Meat Products from Non-Member States

This chapter intends to address some of the practical matters involved when a country's meat producing industry wants to implement adequate capacities and processes to meet the criteria that need to be fulfilled in order to become an officially approved exporter of meat and meat products to the EU.

The pertinent regulations merely reflect the growing concern of EU policy makers to protect consumers from any harmful effect that may arise from the consumption of food regardless of whether it has been produced within or without the borders of the EU.

The European Food Law forms the basis for EU import rules. Import rules for meat and meat products are fully harmonised and the European Commission acts as the competent authority on behalf of the 27 member states. Thus, the EU Commission is the sole negotiating partner for all non-EU countries in questions related to import conditions for meat and meat products.

Detailed EU legislation in the veterinary field lays down the conditions that apply to the imports of live animals and products of animal origin from third countries. The responsibility for this area as well as for food safety lay within the domain of the European Commission's Directorate-General (DG) for Health and Consumer Protection.

The DG has issued a so called „Guidance Document“ which is directed at competent authorities and food businesses in the EU member states and in third countries. It aims to give guidance on certain key questions with regard to the implementation of the new food hygiene import requirements and on official food controls. The document can be downloaded from:

http://ec.europa.eu/food/international/trade/interpretation_imports.pdf .

The import rules for meat and meat products are designed to guarantee that all imports fulfill the same high standards as products from EU member states. The import rules do not only focus on hygiene and all aspects of consumer safety but also on the animal health status.

In order to export their products to the EU, companies have to meet all pertinent EU requirements by adequately addressing the rules and regulations that result from this legal framework.

Along these lines, The EU Commission has also published an easily accessible user guide for the import of live animals and animal products from non-EU countries. This document provides guidance to the national authorities in those countries that are interested in exporting say domestic meat products to the EU. It can be downloaded at the following website:

http://ec.europa.eu/food/international/trade/guide_thirdcountries2006_en.pdf .

Besides the efforts of the EU itself, countries that are already exporting meat products to the EU commonly also make the required information available online for their national enterprises and keep this information up to date. An example is the "Export requirements for the European Union" as issued by the Food Safety and Inspection Service (FSIS) of the United States Department of Agriculture (USDA). The entire material can be accessed online at:

http://www.fsis.usda.gov/regulations//European_Union_Requirements/index.asp#XV .

This collection of publicly available websites is also an example of how the US administration, for example, tries to help its domestic industry to stay competitive on EU markets. Similar material, however, can be obtained from Australian or Canadian official websites. It might be interesting for the Ukrainian government to also engage in such a way and to offer this kind of information to domestic stakeholders of the agri-rural sector.

Generally speaking, the EU is open for and interested in receiving imports from non-EU countries. Imports to the EU require that a consumer or a company within the EU is willing to buy the relevant goods and that the various quality criteria are matched. Especially in times of high international food prices, exports to the EU are likely to become easier than in times of low prices.

Nonetheless, exporters of meat and meat products from non-EU countries should anticipate that market conditions within the EU reflect the market situation outside the EU only partially. This is due to the system of the CAP. Understanding markets for agricultural products and especially for animal products within the EU therefore requires understanding the goals, instruments, and future directions of the CAP (see Chapter 3.1).

According to the EU Commission, inquiries from competent veterinary authorities of third countries concerning imports of animals and animal products into the European Union or their transit should be addressed, in the first instance, to: Directorate D, Health and Consumer Protection Directorate-General, European Commission

Internet: http://ec.europa.eu/food/index_en.htm

All other interested parties and private businesses should contact their competent veterinary authority.

The European Community provides technical assistance and facilities for institutional capacity building to help developing countries comply with EU rules. Additional, national and regional development programs of the EU are available in individual countries, as well as bilateral aid projects of the member states. The delegations of the EU can provide detailed information on such assistance. Further information is available under:

http://europa.eu.int/comm/external_relations/delegations/intro/web.htm .

General guidance on EU import and transit rules for live animals and animal products from third countries can be found at the following website address:

http://ec.europa.eu/food/international/trade/importing_en.htm .

The EU also assists third countries to familiarize themselves with EU import requirements. For this purpose, training organized for member states in the EU are often also open to participants from third countries. Specific training sessions may also be organised for third country participants on the spot. For more details, see:

http://ec.europa.eu/food/training/index_en.htm .

4.2.2 Key Obligations of Food and Feed Business Operators

Whether they produce in the EU or import their products from a non-member state, food and feed business operators can derive seven key obligations from the EU food safety legislation. The European Commission's Directorate-General (DG) for Health and Consumer Protection accurately verbalizes these key obligations as follows:

Safety: Operators shall not place on the market unsafe food or feed.

Responsibility: Operators are responsible for the safety of the food and feed which they produce, transport, store or sell.

Traceability: Operators shall be able to rapidly identify any supplier or consignee.

Transparency: Operators shall immediately inform the competent authorities if they have a reason to believe that their food or feed is not safe.

Emergency: Operators shall immediately withdraw food or feed from the market if they have a reason to believe that it is not safe.

Prevention: Operators shall identify and regularly review the critical points in their processes and ensure that controls are applied at these points.

Co-operation: Operators shall co-operate with the competent authorities in actions taken to reduce risks.

Of course, these obligations are further detailed in the guidance document on the implementation of the main General Food Law requirements that can be downloaded from the following website:

http://ec.europa.eu/food/food/foodlaw/guidance/guidance_rev_7_en.pdf .

4.3 **Industry Standards to Control Meat Product Quality**

From a non-EU perspective, the various quality regulations imposed by EU legislation may appear largely as an attempt to protect European markets against competing imports from abroad without having to rely on obvious measures such as tariffs that could be subject to WTO complaints. However, the vast number of quality schemes that have evolved and are in place besides and on top of the existing legal framework in Europe suggest that conventional protectionism is unlikely the main reason for the increase in quality legislation. Instead, efforts to establish even stricter quality regulations are undertaken not only by the EU Commission but also by European meat processing firms, local producer associations and retailing chains. In other words, the growing number of meat labels and certification schemes within the meat processing industry can be interpreted as the industry's attempt to exploit willingness to pay that various groups of consumers have for specific aspects of product quality, processing standards or environmental benefits of the final products that they consume.

In fact, with regard to the standard setter it can be distinguished between *private and public standards*. Public standards are laid down by the EU (Regulations (EC) 2092/91 and 510/2006) or by national or regional governments. Private standards can be laid down by customers (BRC Global Standard, International Food Standard), suppliers (Assured Farm Standards in the UK), norming institutions (ISO 9001, ISO 22000), inspection and certification institutes (Food TUEV Tested; Fresenius Quality Seal) or nongovernmental organizations (NGOs), e.g. (Fair Trade, Freedom Food). The German Q&S system provides an example of industry associations representing different stages of the supply chain that have jointly set a standard. Another example in this regard is the French Label Rouge (various organizations together seek to ensure high quality of their food products). (Theuvsen, Plumeyer and Gawron 2007)

Figure 4.1 illustrates this duality of public and private quality enforcement within the stylized supply chain for meat that is marketed in Europe. The figure presents in a stylized manner the supply chain from feed input to the final meat product which is sold in a retail store.

The two columns on the right hand side of Figure 4.1 depict typical aspects of quality control that take place at various stages. It can be seen that in principle the legal frameworks constitute also minimum standards for the private quality scheme. However, in few regards private and public standards deviate from each other and require parallel structures for their implementation. In other words, in reality a firm exporting and selling meat products to markets in the European Union will most of all be concerned about complying with the private standards that are imposed e.g. by the retail chain buying and selling the final product because these private standards will normally comprises most of the legal requirements anyway.

According to Den Hartog (2004), a successful future of pork (and other meat) production rests on the following components:

- food safety,
- quality assurance and transparency,
- sustainability in production, and
- a variety of products which are easy to prepare (convenience food).

These components of successful meat production in principle apply to the beef, veal, pork and poultry sectors, but the beef, veal and lamb sector currently also begins to establish integrated

programs that force farmers to document for each specific animal every treatment during the production process. However, it is very plausible that the strict enforcement of governmental and private supply chain controls, quality certifications systems and brands with regionally traceable origin of meat have significantly contributed to the quick recovery of the sector after the BSE crisis in 2001.

Potential exporters of meat and meat products to EU markets should be aware of the fact that complying with the EU legal framework is only a necessary, but not a sufficient condition for market access in the EU! Nevertheless, policy makers in a potentially exporting country such as Ukraine should primarily be concerned about fulfillment of EU legal standards in order to create and maintain the administrative structures that are necessary in order to have private enterprises start doing the actual business. As soon as firms start to look for actual marketing opportunities within Europe, the adoption of the necessary quality schemes will follow as part of the business to business cooperation.

Figure 4.1: Scheme of Legal and Voluntary Components of the Supply Chain Control for Meat Marketed in the EU

<i>Level of the Meat Supply Chain (Arrows represent information flows based on continued process documentation)</i>	<i>Typical Requirements of EU Legislation</i>	<i>Requirements of a typical industry standard / certification scheme</i>	
Feed industry	Feed from EU and non-EU origin, produced according to EU legislation	-certified feed -information on feed ingredients	vertical integrated system
↓ ↑			
Farm that raises animals for meat production; intra- or extra EU	- animal number / marking individual animals - documentation of transport - hygiene requirements - mandatory test for animal health - slaughter account	- animal number / marking individual animals -documentation of transport - animal health status -slaughter account	
↓ ↑			
Slaughterhouse; intra- or extra EU	- hygiene requirements	- certified meat according to industry standard -batch number	
↓ ↑			
Meat Processor	- hygiene requirements - EU legislation retailing	- certified meat according to industry standard -batch number	
↓ ↑			
Retailer			

Source: Own presentation based on Theuvsen, Plumeyer and Gawron (2007).

For these reasons the purpose of this chapter is merely to provide an overview of important quality schemes and standards that currently exist. Gaining an intuition of their specific objectives and underlying principles should make clear that complying with the overall framework of EU meat quality legislation already sets the cornerstones for the business to business (B2B) implementation of most other voluntary quality schemes.

Table 4.1 presents a selection of important quality schemes and voluntary programs that apply especially to meat processing, but to some extent also to other processed food products such as dairy products marketed within the EU. Table 4.1 points out that the HACCP standard is at the back of many principles of the EU meat quality legislation. The principles behind this standard are as simple as they are strict: Meat processors should just avoid anything that may at any stage of production and under any circumstance introduce hazardous effects into the product! In order to reach this goal the standard requires the development of objective and transparent process routines that are frequently monitored, benchmarked and documented.

Furthermore, Table 4.1 points out that quality certificates can be either targeted towards other businesses or towards consumers or towards both. Business-to-Business (B2B) standards are not communicated to the final consumers, who are often unaware of the existence of these standards (e.g. BRC Global Standard, IFS, ISO). B2B standards intend to remedy asymmetric information between different stages of the food supply chain.

Table 4.1: Objectives and Origin of Quality Schemes in the EU Meat Processing Industry

Name	Countries	Sectors	Business to Business (B2B)	Business to Consumer (B2C)	Objectives:
HACCP quality concept for food processing ("Hazard Analysis and Critical Control Point")	World wide, recommended as standard for food processing by the FAO. <i>This concept is foundation of all legal EU quality standards in food processing!</i>	Food	Yes	no	Analyze all risks with regard to food safety. Develop process flows that enable detection and remedy of hazardous steps. Frequently test process flows with regard to food safety. Document all steps.
Protected Destination of Origin (PDO)	Introduced with support from EU commission	Food	No	yes	Ensure consumers about aspects of food quality
Protected Geographical Information (PGI)	Introduced with support from EU commission	Food	No	yes	Ensure consumers about aspects of food quality
Traditional Specialty Guaranteed (TSG)	Introduced with support from EU commission	Food	No	yes	Ensure consumers about aspects of food quality
ISO 9001:2000	World wide	All except primary agriculture	Yes	no	Monitors management systems
GlobalGAP	Europe	Primary agriculture	Yes	no	Improvement of food safety through monitoring of management systems with regard to minimum standards
Q&S	Germany, other EU countries	Agriculture and food processing	Yes	yes	Monitors the quality of management systems; covers the whole supply chain from agriculture to the final consumer; ensures minimum standards.
BRC Global Standard	Britain; other EU countries, Rest of the World Initiated by retailers	Food processing chain	Yes	no	Guaranteeing minimum standards, monitors quality of management systems, audits in food processing companies
International Food Standard (IFS)	Germany; other EU countries, Rest of the World Initiated by retailers	Food processing chain	Yes	no	Guaranteeing minimum standards, audits in food processing companies.
Organic Production Certificates, e.g. Demeter, Bioland	Europe; wide range of EU labels and national labels	Primary production of agricultural products, but also food processing	Yes	yes	From imposition of minimum standards to complete control of the entire food processing chain according to own criteria (e.g. Demeter!)

Source: Own presentation based on Theuvsen, Plumeyer and Gawron (2007).

On the other hand, Business-to-Consumer (B2C) schemes address the final consumer, typically by displaying a logo on the products produced by certified farms and firms (PDOs, PGIs, TSGs, Demeter). The B2C standards represent the majority of certification schemes in the EU but tend

to capture the purchasing power of very specific groups of consumers and therefore have a limited potential to grow. Few schemes address not only consumers but also other businesses and typically represent major parts of the market, for instance, Q&S accounts for about 80 % of the German pork market and Little Red Tractor for 65 % (beef) to 90 % (pork, poultry) of the British meat market (cf. <http://www.defra.gov.uk>; Theuvsen, Plumeyer and Gawron 2007).

Certification schemes have various objectives, ranging from the improvement and protection of food safety to the remedy of quality uncertainties. Public authorities often have only a limited capacity to control each specific step of the meat supply chain and therefore the enforcement of minimum legal standards is typical for many B2B schemes (BRC Global Standard, EurepGAP, IFS).

In the northern and western parts of Europe, schemes that control the production process with regard to the compliance with minimum standards are most important. In the Mediterranean countries however a stronger tradition of high quality, regional specialties has led to the spread of differentiation systems such as PDOs and PGIs. With regard to these geographical certification schemes in the EU it is noteworthy that some regional labels set standards on the one hand, but admit only local producers and processors as partners, which is the case for many PDOs and PGIs. Regional certification schemes are often founded by regional governments or medium-sized processors in order to protect their products against low-price imitation from abroad (e.g. special sausages, bacon, etc...). For Ukrainian producers this can become relevant if specific meat products of high quality shall be marketed within the EU under a certain name: It has to be checked whether this name is already legally protected as part of a regional quality scheme within the EU.

In summary, public and private certification schemes in the EU at a first glance reveal a very heterogeneous picture with regard to focus and geographical location. However, with regard to the underlying principles it is obvious that the key objectives of most schemes follow the general idea to eliminate various types of risks that can be introduced into the final products at any stage of the processing chain. In addition, some labels and schemes intend to remedy asymmetric information with regard to the origin of the final products and the way how they have been produced. A tendency can be observed that those voluntary programs that regulate the production process more strictly than others typically serve also a smaller market segment.

Ukrainian policymakers should primarily be concerned about the establishment of administrative structures that comply with the general legal EU framework. The experience within the EU has shown that the private market will generate solutions to properly implement these and additional regulations into the production process, because obviously a huge market does exist within the EU for meat products that comply with various quality standards!

5 Current Trends on Meat Markets in Europe and the World

5.1 Understanding Consumer Demand for Meat and Meat Products in the EU

World meat markets are currently characterized by high prices for feedstuff and high opportunity cost for land (partly due to the rush for biofuels). On the other hand, global meat markets face a rising world population and rapidly growing incomes in major developing countries (China, India and Brazil). White meats, namely pork and poultry, experience the highest increase in demand but at the same time they are the most vulnerable ones with regard to high factor prices for grain and oilseeds.

However, the production of beef and veal also critically hinges upon grain prices because corn, cereals and oilseeds constitute a major share of feed ratios in intense beef production such as feedlots or indoor beef production that is especially common in the EU. Furthermore, processed beef often is obtained from dairy cows, and the number of calves available for veal and beef production partly is also a function of the size of the global dairy herd. Therefore, in the medium term changes of major dairy policies such as quota abolishment in the EU can also be expected to have an impact on beef supply. In Europe an increase in the number of dairy cows will

automatically result in a mounting number of male calves for fattening. However, current trends on dairy markets do not project a dramatic increase in dairy cows in Europe.

With regard to meat production other than beef, veal, pork and poultry, markets tend to be much smaller. Especially the production of lamb face slow opportunity cost since sheep utilize marginal grazing land and bigger amounts of grain are typically not part of feed ratios. However, demand for lamb in developed countries remains constant, and especially within Europe a large share of the Muslim population seems to rely on local, informal sources with regard to lamb. Therefore, the only official market for lamb in the EU is for premium quality, which in turn is dominated by exporters from Oceania.

In order to understand current trends on global meat markets, the EU market can be seen as setting the stage with regard to the development of demand and policy. Other affluent countries, such as Japan or the USA, tend to exhibit similar patterns. However, consumers may have slightly different tastes and different attitudes towards risk and environment, and therefore political regulations will tend to differ slightly with regard to the specific regulations. Nevertheless, exporting meat to the US or to Japan nowadays requires similar procedures of approval as it takes to export to the EU. At the same time, developing markets such as India, China or Brazil can also be expected to develop food safety regulations sooner or later- if not for pure reasons of consumer protection, they may also consider do so in order to retain a way to control imports beyond tariff-based market protection. For these reasons, it is useful to investigate the European market for meat more closely.

Chapter 4 has shown that European consumers increasingly care about how meat is produced. In this respect, especially the poultry industry but also the pig industry to some extent have a bad reputation among European consumers and are regarded as production systems that make animals suffer and are environmentally damaging. Therefore, the poultry industry in Europe in particular faces an increasing challenge to develop production methods that are both competitive and accepted by the consumers, which tends to raise total cost of production. Recent studies with consumers in EU countries have pointed towards very strong attitudes of consumers in favor of domestically produced poultry that guarantees animal welfare and certain consumer health aspects.

Consumers furthermore expect traceability of meat products and are to some extent willing to encounter higher prices if they can trace the origin of the meat. For European farmers, this has lead to detailed regulations about how to mark each individual animal soon after birth and how to document this animal's entire life on the farm. However, the European approach with regard to strict meat quality regulations does not imply that European consumers would pay any price for meat if only their expectations with regard to animal welfare and environment are matched. In fact, rather the opposite is true: European consumers are aware of prices and expect animal welfare and environmental concerns to be matched at the same time.

It has already been mentioned that the EU Commission and the national governments have implemented a dense system of tracking meat products "from farm to fork" and on transport routes across Europe. In addition, the environmentally damaging side effects of meat production are regulated and/or taxed, and a horizontally and vertically ever more integrated meat industry is increasingly more threatened by diseases such as foot and mouth, BSE or avian influenza. Consumers tend to react extraordinarily sensitive to an outbreak of such a disease, and usually the loss in market shares after a diseases is many times more costly to producers than the actual loss of animals.

All this applies in principle to all types of meat produced in Europe and raises the cost of production. For instance, according to recent studies, the cost of pork production in Western Europe, as an average, is higher than in the US, Canada and Brazil.

Den Hartog (2004: 21) concisely summarizes the challenges that European producers of pork currently face: *"European consumers expect attractive, nutritious and safe food from environmentally responsible and sustainable sources for a fair price."*

5.2 Understanding Ongoing Trends within the European Supply Chain for Meat

As mentioned before, and partly as a reaction to recent diseases (e.g. BSE) that have shattered consumer confidence, EU farmers, slaughterhouses and retail chains have established programs to certify the supply chain for meat products, and in some instances these requirements even exceed governmental regulations. To some degree, however, retailers have been able to gain and to expand market shares due to the imposition of quality standards that more convincingly address consumers' concerns than those of their competitors. In this respect, certified organic production systems constitute an extreme case of supply chain monitoring that even frequently reaches price premia.

The development of integrated supply chains has been initiated either by farmers, slaughterhouses or retail chains. Typically, the initiators of a specific program enjoy increased bargaining power - at least during the initial period of the new program. Classic meat supply chain programs cover all stages from breeding, feeding, husbandry, slaughter, processing and marketing of the final product (see Chapter 4.3). It has to be emphasized that this vertical integration, although common in the poultry sector and increasingly dominating European pork production, nevertheless is also likely to serve as a model for the European beef production in the near future. In this respect it does not necessarily matter whether cattle is raised under 'intensive' (=indoor, high energy feed) or 'extensive' (=outdoor, grass and green land pasture) conditions: Since transportation cost tend to be low within Europe due to good infrastructure, even marginal land and remote areas will increasingly be reached by supply chain programs that certify, monitor and sell specific attributes of meat to consumers.

In turn, this will also increasingly involve breeding companies closely working together with marketing teams of retail companies in order to anticipate changing consumer preferences early enough to adequately react to in order to gain market shares, e.g. through an introduction of new meat products such as lean meat.

Backhus and Dijkhuizen (2002) characterize the European supply chain for pork as a saturated market that is shaped by the following components (adapted):

- Farmers, slaughterhouses and retail companies all experience strong economies of scale. This leads to an ever increasing specialization of individual companies into very specific tasks during the production process (e.g. breeding, hedging, etc. as separate tasks for specialized operations).
- Profit margins at each stage are small per unit of output unless there is a premium for quality or brand names.
- Bargaining power of those with high fixed costs, small market shares and least market diversification is smallest.
- Products without clearly distinguishing features are subject to fierce competition from domestic as well as from foreign sources. Therefore, supply chains increasingly try to tie consumers through provision of additional environmental and safety attributes attached to the final product.

On the other hand, some farmers have tried to escape the process of specialization as part of a vertically integrated supply chain and have tried to keep value added at their farm through on-farm breeding, feeding and processing or to do so within small cooperatives often operating according to organic production technologies. These initiatives also address the demand of some consumers for 'alternative' meat that involves short distances of transportation, organic production strategies and authentic regional origin of meat products or special 'gourmet' quality due to (protected) food preparation and culinary arts recipes. While the bulk of production happens under conditions of saturated markets, fierce competition and small profit margins, the latter way of 'alternative' production typically bears the potential for high profit margins. At the same time, however, this strategy makes it difficult to reap economies of scale and usually has to cope with a much smaller market potential as products can only be sold at the local or regional markets.

5.3 Pre-Requisites for Imports of Meat and Meat Products into the EU

The previous chapters have shown that increasingly vertically integrated supply chain systems for meat have been installed as a large scale reaction to consumer preferences by incorporating all standards required. On the other hand, a niche market exists for premium and/or organic products and regional specialties. The supply chain for this niche market typically is controlled by few actors who control most of the value added. The downside of this is typically a limited capacity to expand.

Neither EU policy makers nor consumers oppose meat imports in general, since they add to the varieties of products being available, and partly keep the negative side effects of intensive animal production out of the EU. Therefore, although the EU meat market can be considered as 'saturated', there is plenty of potential for imports at various levels of the supply chain. However, in any case the EU regulations with regard to meat imports constitute the first key challenge, before the second major challenge - establishing a marketing channel - can be addressed:

Challenge 1: EU Legal requirements (adapted from the EU commission Website, for more detailed information see the links provided in Chapter 4 and in the Appendix):

- EU officials check status and administrative efficiency with regard to the following issues:
- Legislation of the third country;
- health status of livestock, of other domestic animals and wild life;
- regularity and rapidity of information on infectious animal diseases provided by the third country to the Commission and the World Organization for Animal Health;
- the country's rules on the prevention and control of animal diseases, and
- the organisation, structure, competence and power of the veterinary services in the country of origin.

A potentially interesting option for Ukraine is the possibility to regionalize the country. This means that only a certain part of a specific country may be authorized to export (fresh) meat to the EU.

However, all imports of fresh meat into the Community must come from EU approved slaughterhouses, cutting plants etc. The EU commission has posted guidelines on how to get this approval. The general procedure requires that the Commission's Food and Veterinary Office ([FVO](#)) carries out a mission to verify that all the criteria provided for under Community legislation are properly fulfilled. Depending on the results from this mission, the third country may be added to the list of third countries authorized for the export of fresh meat. In addition, an assessment of the specific disease situation is carried out. In order to export fresh meat, third countries must also comply with certain public health requirements, a country is required to have an approved 'residue' plan, and implement certain conditions in relation to [BSE](#). In addition animal welfare requirements at slaughter must be met in accordance with Community legislation.

Imports of meat products into the EU in principle have a chance in the vertically integrated, large market segment, but also in terms of specialties that fill niches. Therefore, Ukraine may become a supplier of meat to the European food processing industry, but may very well be able to develop Ukrainian meat products that are delivered to European retail chains directly and bear the potential to retain much more value added to production within the country. In other words, it is up to Ukrainian producers whether they decide to compete with European farmers through provision of cheap meat as an input to the European meat processing industry, or whether they enter the EU market directly with products that consumers would only buy from them (for a detailed assessment see e.g. Spiller and Schulze 2008).

Challenge 2: Connecting to marketing channels within the EU

Obviously, the vertical linkages from meat producing farms via slaughterhouses to the retailing stores have to be included into any analysis of the overall market situation. Retailing companies are likely to bundle consumers' preferences with regard to meat products and can be expected to pass these preferences on through the supply chain back to the breeding company (Spiller and Schulze 2008). In this regard, the enlargement of the EU towards CEE enables useful comparisons

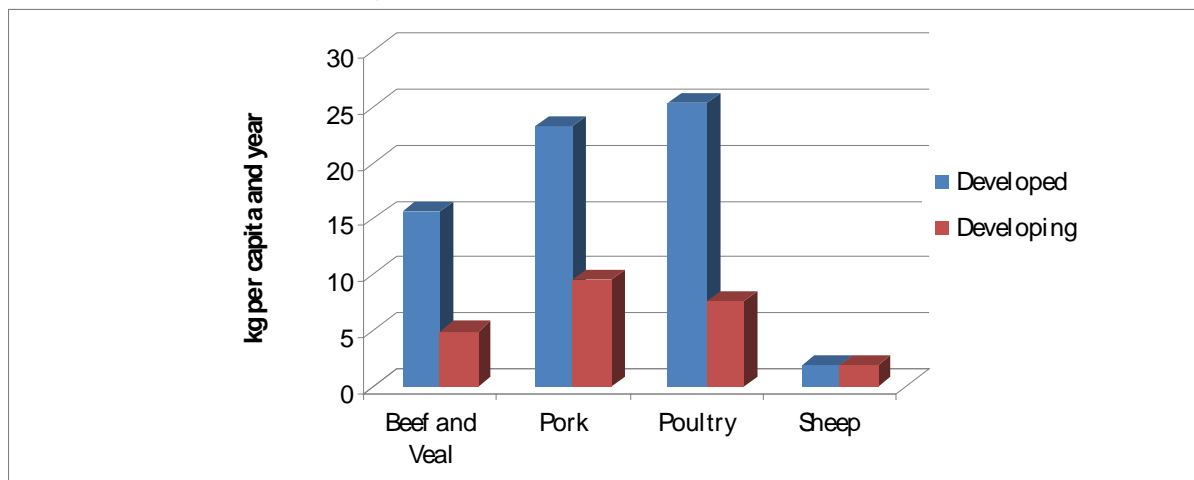
for Ukraine because it shows how the food industry within the EU has introduced standards that comply with legal EU requirements and match the preferences of retail chains and consumers on the one hand, while dealing with the specific transitional situation of formerly planned economies on the other.

For instance, certification schemes are gaining more and more importance in CEE countries and often exceed legal EU requirements with regard to transparency and information traced during the production process (compare Chapter 4.3). It has to be emphasized that certification schemes are voluntary schemes used by the food processing industry in order to give quality signals to retail chains and consumers.

5.4 Ongoing Trends on Global Meat Markets

Meat consumption generally tends to rise with income per capita, however, it can be observed in developed countries that the total amount of meat consumed remains constant while the demand for higher quality increases.

Figure 5.1: World Meat Consumption per Capita, Developed and Developing Countries, 2002-2006



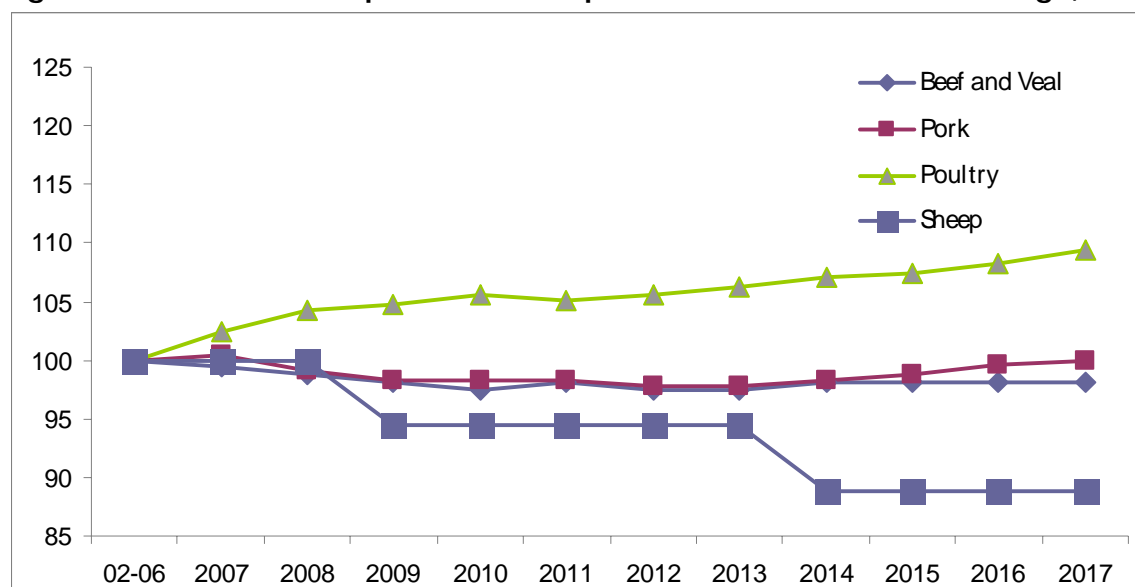
Source: OECD (2008).

Furthermore, along with increasing income, beef and veal tend to substitute for pork, and recently in many European countries one can observe that poultry tends to replace some of the additional meat consumption that would otherwise have happened. In this regard, ongoing trends within most developed countries are:

- an increasing demand for lean meat,
- an increasing awareness of the negative side effects of intensive, large scale meat production,
- substitution away from beef and pork towards poultry, and
- an increasing number of people who reduce the absolute amount of meat in their diet to a minimum (vegetarians).

For these reasons, developed countries' markets for meat are large in absolute terms and still growing at slow pace on the one hand, but must be considered saturated markets overall. Growth potentials on these markets will mostly be in the area of premium quality and meat products with a high level of processing (convenience food).

Figure 5.2 shows a recent forecast issued by the Organisation for Economic Co-operation and Development (OECD) for consumption levels in developed countries, with rising consumption estimated for poultry, while quantities consumed of beef, veal and pork are nearly constant. Consumption of sheep meat, however, is predicted to decline.

Figure 5.2: Meat Consumption in Developed Countries relative to average, 2002-2006

Source: Own calculations based on projections by OECD (2008).

In developing countries, current meat consumption in general is still much lower than in developed (=OECD) countries. Therefore, large developing countries with rapid economic growth, such as China and India, are going to develop as dynamic markets for meat products in the near future. The OECD predicts meat consumption in developing countries to constantly rise in the upcoming decade. However, the regional distribution of these increases is unlikely going to follow the same average pattern as outlined by Figure 5.3. Instead for each geographical region it has to be considered how overall income, but also the distribution of income will develop, and whether consumers have special preferences for certain types of meat, e.g. due to religious reasons.

Figure 5.3: Meat Consumption in Developing Countries relative to average, 2002-2006

Source: Own calculations based on projections by OECD (2008).

5.5 Current Trade Situation and Prospects for the Future

5.5.1 World Beef and Veal

World markets for beef and veal are currently shaped by slow recovery after a sharp decline in Europe and the US during the years of the BSE crisis. At the same time, growing demand in developing countries and soaring feed prices on a global scale are boosting price increases in the short run. Long term demand in Europe, however, is on a constant or even slightly declining trend, with changing preferences of consumers in favour of poultry and meat-free diets offsetting the increase of beef demand especially due to rising incomes in the new member states.

World supply response is driven especially by Brazil, that is expected to reap more and more market shares from established beef exporters, such as Australia, New Zealand and Argentina. In contrast, supply response in Europe is expected to be slow, and the EU as well as China will become major net importers in the next decade. China itself also produces beef, but supply is expected to remain constant due to geographical conditions in China that are short of high quality pasture land.

5.5.2 World Pork

Import demand for pork world wide is –similar as in the case of beef – expected to remain about constant in developed countries such as the EU, and will grow strongly in developing countries such as Mexico. As in the case of the other main meat categories, short term import demand shifts can occur as a result of food scandals or diseases in any of the major importing or exporting countries.

With regard to supply response, again, Brazil is expected to improve its sanitary standards and will increase its exports substantially. On the other hand, world exports from the EU are unlikely to expand much beyond its current level because of the costs of its strict environmental standards and the appreciating Euro.

Pork production in China is expected to grow slightly slower than demand. If these projections hold, China would be a net importer of pork by the end of the next decade.

5.5.3 World Poultry

As in the other meat markets, global poultry consumption in the next decade is also expected to rise slightly faster than global production. If this projection is right, stable and rising prices will be the result. However, projected differences in growth rates for production and consumption are rather narrow in countries such as Brazil, Thailand and China, and therefore it has to be anticipated that the supply response could be faster or demand increase somewhat slower than projected, leaving the world poultry market balanced at comparatively low prices.

Currently, especially Brazil supports domestic investment into poultry production and is expected to rapidly gain market shares on world export markets. Internationally competitive poultry production is vertically highly integrated and capital intensive, but at the same time life cycles for broilers are short, implying that supply response is much more flexible in the short run than e.g. with beef production.

After avian influence, EU poultry exports are recovering but remain under constant threat of new outbreaks. Therefore, and due to fierce competition at traditional export destinations, the EU's trade prospects are not very strong. In addition, the introduction of an import quota by Russia, high feed costs, strict animal welfare rules, and other environmental regulations are slowing down international competitiveness of the EU's poultry production.

6 Meat Market Outlook: Projections and Reflections

As the previous chapters have shown, producer prices for meat in the EU are determined by a wide range of influencing and partly interrelated factors; however, a set of key parameters can be isolated that has to be considered for any evaluation of future trends on EU and global meat markets:

- Supply response and demand shifts on the internal EU market as well as on domestic markets of key exporters and importers,
- currency exchange rate fluctuations,
- changing quality requirements and industry standards, as well as
- policy interference with regard to environmental standards and CAP measures not only involving meat production directly, but also dairy policy and policies altering EU market prices for feedstuffs (grain, oilseeds);
- future development of world markets for feedstuff, namely grain and oilseeds, but also the opportunity cost of land, e.g. as a result of increasing bio fuel production.

A number of well known institutions frequently issues long term market projections for the most important agricultural commodities, including meat products. These institutions are the *Organisation for Economic Co-operation and Development (OECD)*, the *Food and Agriculture Organization (FAO) of the United Nations*, and the *Food and Agricultural Policy Research Institute (FAPRI)*. Forecasts issued by the *EU Commission* and the *United States Department of Agriculture (USDA)* can also be useful because they tend to express the political positions of these institutions.

Predictions and projections should never be considered as measurements. Even market projections issued by the best economic institutes and international organizations have frequently been turned out to be wrong with regard to future events. However, projections provide a summary of what leading experts currently think about future developments; and therefore provide guidance on how to think systematically about likely future developments; projections should not be seen as 1:1 forecasts of reality: On the one hand, it is impossible to foresee global events, such as natural disasters, or political crisis, such as 9/11. On the other hand, it is extremely difficult to correctly forecast global gross domestic product (GDP) and population growth. However, since most long term market projections have to incorporate these macroeconomic forecasts as well, small deviations from reality may cause a projection to digress significantly from what is actually going to happen in reality.

Projecting the future of world meat markets cannot do more than assessing those factors that typically determine prices and quantities traded at national and international markets. These factors are supply and demand. It has to be clearly distinguished whether supply and demand are analyzed for meat products in aggregate or for specific products because this determines to what extent substitution due to rising prices has to be taken into account.

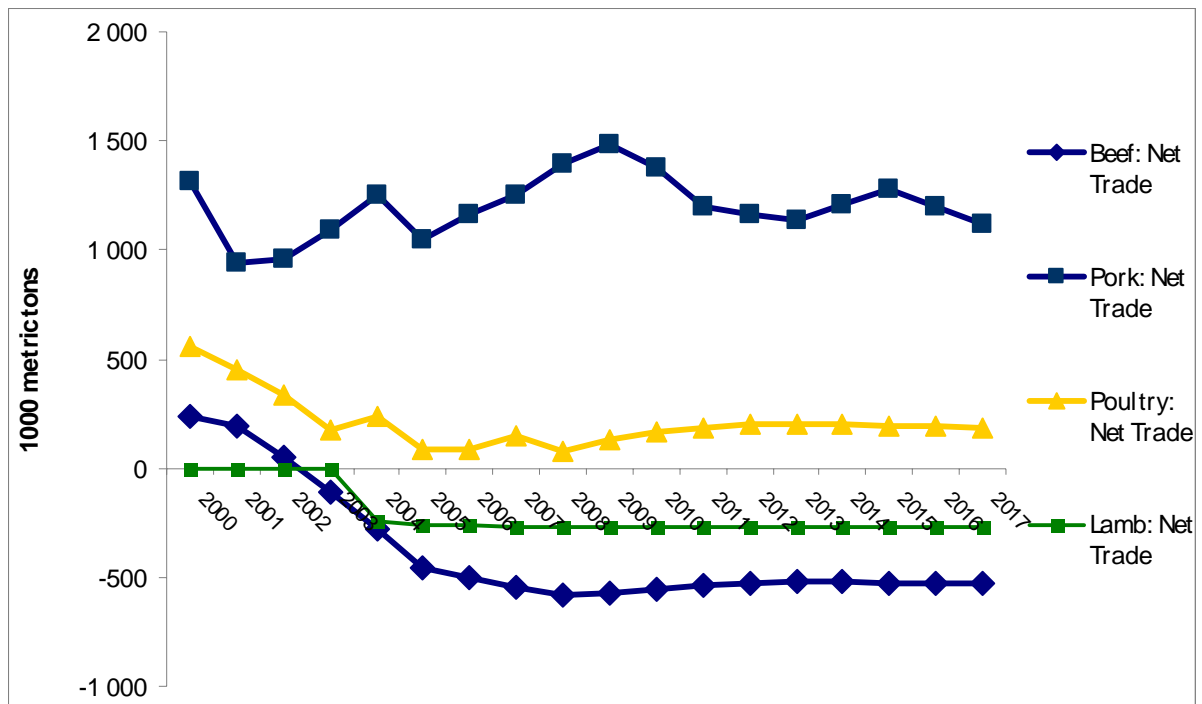
For meat products in general as well as for disaggregated meat products such as beef, pork and poultry, the EU Commission as well as the FAO, OECD and FAPRI, all project favourable conditions on world markets for the medium term. However, these prospects mainly rest on calculations about the development of supply and demand, and projections about demand growth are only slightly larger than projections of supply growth. Therefore, understanding future projections of world meat markets requires understanding factors that drive supply and demand for meat.

6.1 Projections of EU meat markets

Figure 6.1 is based on most recent projections by FAPRI (2008) and provides an overview on the net trade position of European meat products in aggregate. Especially on the market for beef, veal and lamb production the EU is expected to maintain its current net trade position. This is partly due to recent CAP reforms that have reduced coupled payments and faced out intervention storage of beef along with subsidized exports. However, the EU Commission has signaled that it is willing to declare beef as a sensitive product under WTO regulations, implying that the EU will keep import protection in the beef sector large in place, with liberalization according to domestic market requirements, but without putting the entire beef sector in the EU at risk (Fischer-Boel, 2008).

The market for lamb will remain a business of marginal areas and few specialized producers, while the constant domestic demand is projected to be filled in future times as in the past by imports from Oceania.

Figure 6.1: Recent and Projected EU net Trade of Major Meat Categories



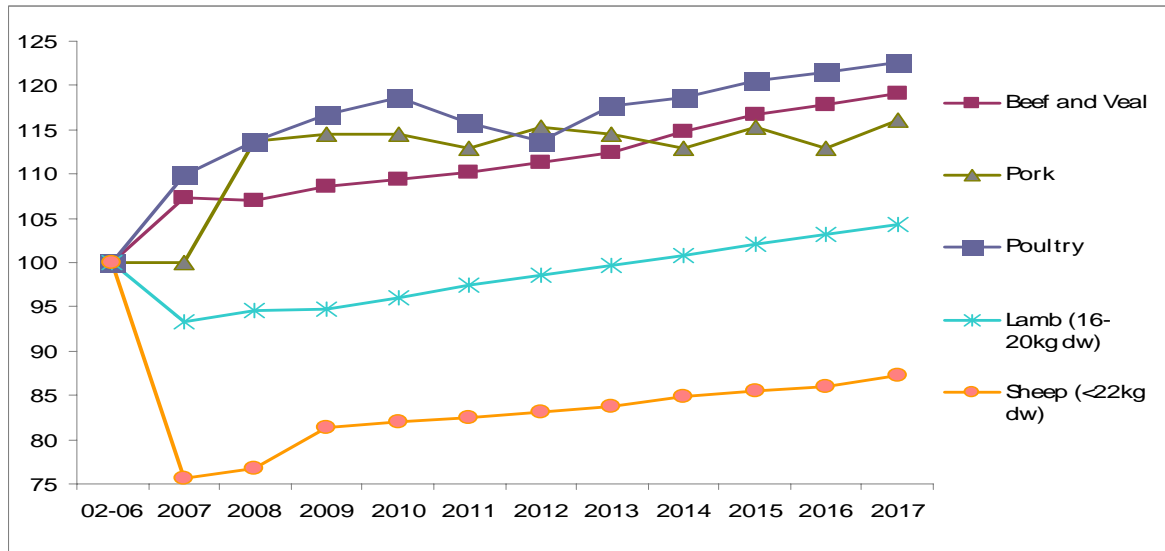
Source: Own depiction based on FAPRI (2008).

In the pork sector, the EU will retain its net export position, with now Spain rather than Denmark and the Netherlands having the lowest average cost of production.

The European poultry industry is expected to maintain its current level of exports; however, it is unlikely that this industry will expand much beyond the projected growth in domestic demand. Therefore, the EU is rather losing some of its current market share on world poultry markets.

But these projections of EU markets critically hinge upon trends on the global markets for meat, and therefore, it is easier to understand what will likely happen in Central Europe if probable trends on global markets for meat and meat products have been closely examined.

Figure 6.2: Projected Meat Prices in the EU Relative to Average, 2002-2006



Source: Own calculations based on projections by OECD (2008).

Figure 6.2 is based on recent price projections issued by the OCED. Apparently, the trends outlined in this figure overall are in line with the conclusions from previous Figure 6.1: Prices of

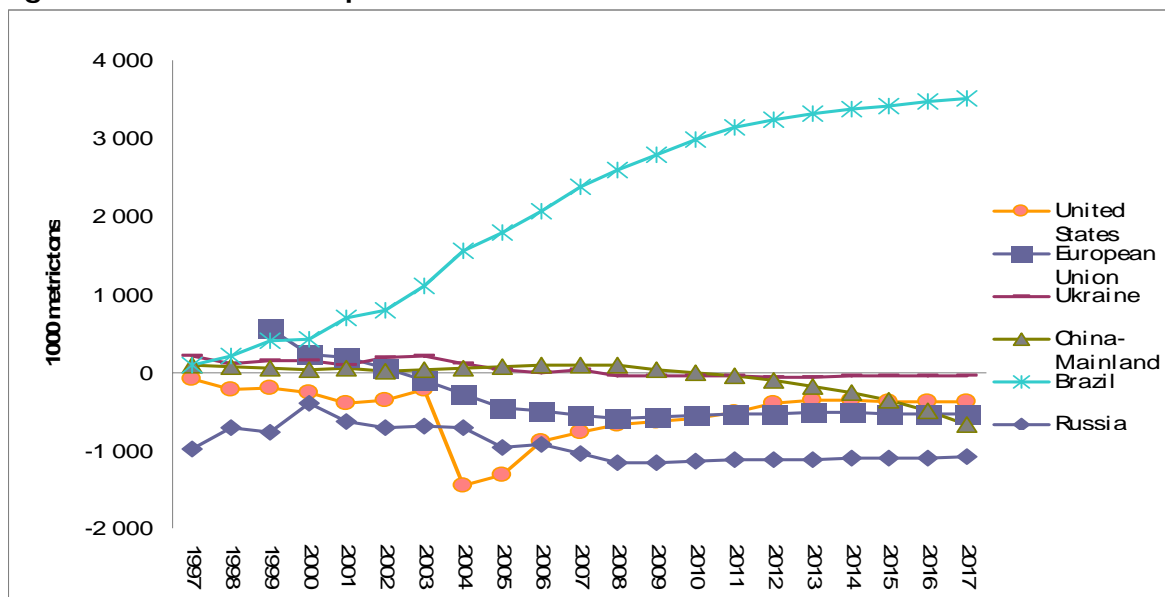
aggregated meat products within the EU are not expected to fundamentally change current relative patterns and will largely follow the expected increase in income, with a slight decline in the relative price for pork because pork consumption in Germany is expected to decline.

In summary, projections from different independent institutions estimate future developments of European meat markets to be shaped by the fact that this market is already saturated. Therefore, the future is estimated to look carefully optimistic because demand and income within the EU are projected to grow slightly faster than domestic supply.

6.2 World Meat Market Outlook

The actual projections of global food markets agree that the ongoing global 'food crisis' will only to a limited extent increase demand for meat due to high feed cost and the fact that consumers especially in emerging markets will substitute away from meat products. In the long run, however, both institutions, the OECD as well as FAPRI, expect global demand for meat products to grow slightly faster than global supply. Therefore, increasing price levels are projected. The FAO World Food Outlook (FAO 2007) (not depicted here) is also in line with this reasoning, concluding that due to rising incomes and changing consumer preferences global meat demand is going to grow slightly faster than global supply in the medium term. However, none of the institutions involved project meat markets to develop with extraordinary dynamics. This, however, does not imply that the market shares of world exports are safe of being significantly redistributed in the upcoming decade. The following paragraphs discuss several selected examples.

Figure 6.3: Beef: Net Exports of Selected Countries



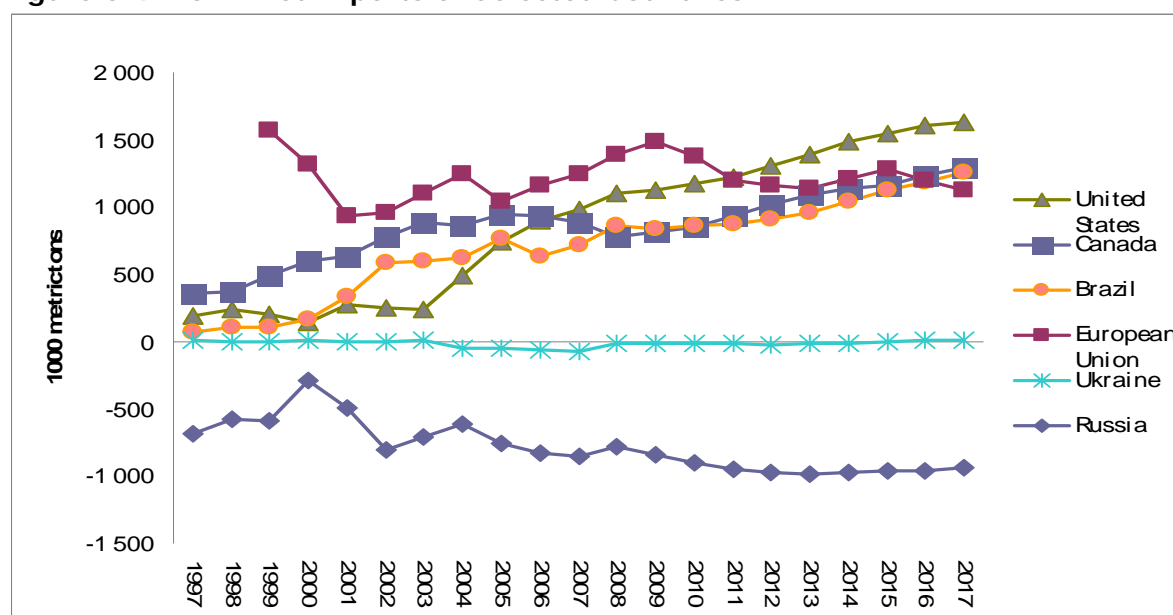
Source: Own presentation. Data: FAPRI 2008.

As can be seen from Figure 6.3, Brazil is expected to become the world's leading exporter of beef over the next ten years. Currently, however, Brazil is not allowed to export beef into the EU due to food safety issues. If these problems are resolved, Brazil still has a huge potential for expanding its beef production, and the potential for this growth is well beyond the growing domestic demand.

On the other hand, the EU will remain a net beef importer in the future, and the USA is also not expected to reach a net exporting position. Russia and China are both going to keep and extend their net importing position for beef. In China, this is largely due to a lack of high quality pasture; in Russia rather the slow recovery and restructuring of production is the reason.

For Ukraine, trade balance for beef is currently about even and will likely stay so, unless Ukraine manages to reach access to foreign markets and utilize its large agricultural potential also for beef production.

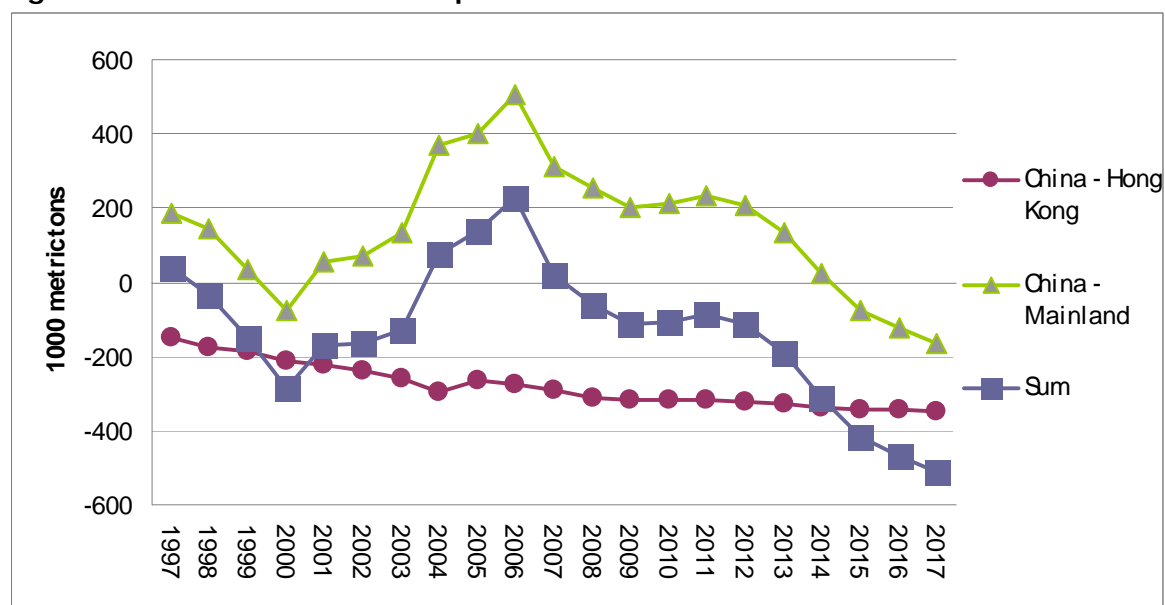
Figure 6.4: Pork: Net Exports of Selected Countries



Source: Own presentation. Data: FAPRI 2008.

Figure 6.4 depicts major pork trading nations. It becomes clear that world markets for pork are expected to change face much more dynamically than world beef markets: While the EU will struggle to maintain its comparatively high level of exports, other players are expected to gain market shares - especially the United States, Canada and - again - Brazil. As in the case of beef, Ukraine is not expected to gain significant market shares abroad in the next decade, and Russia also satisfies its demand for pork partly through imports.

Figure 6.5: China's Net Pork Exports

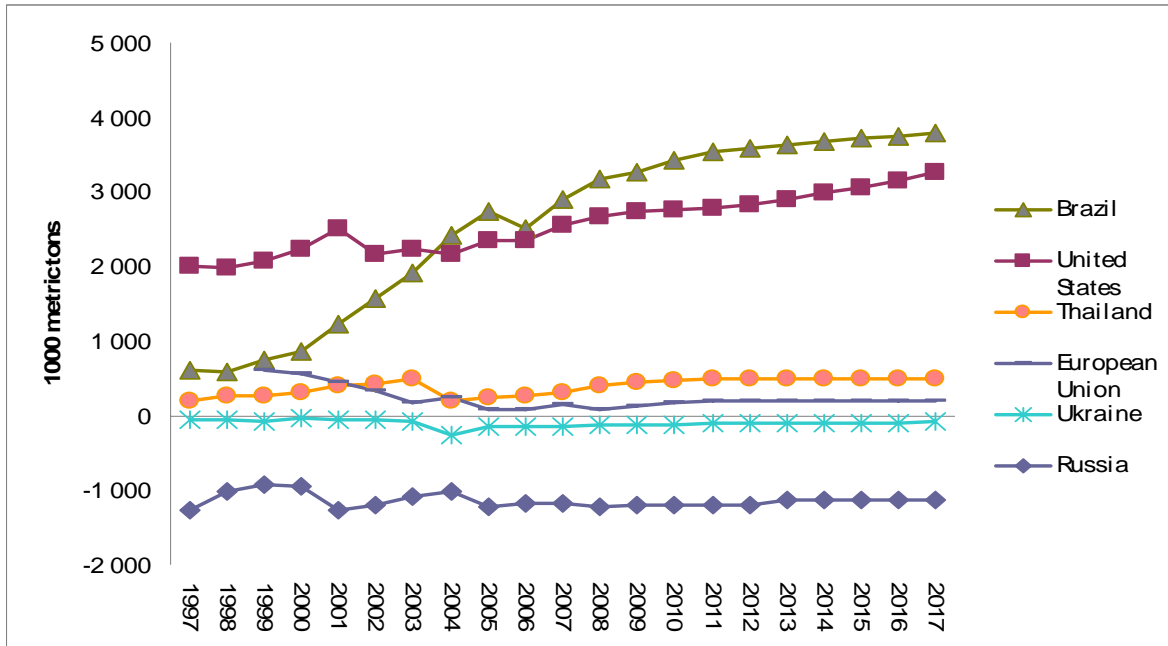


Source: Own presentation. Data: FAPRI 2008.

However, with regard to pork production, consumption and trade, China is frequently cited as a major exporter, as well as a key importer. For these reasons, Figure 6.5 looks at China more closely. It reveals that with regard to China it has to be distinguished between mainland China on the one hand, which is a major exporter that currently exports about as much pork as Brazil, and Hong Kong on the other, which is a large metropolitan area with an increasing demand for pork.

Therefore, in sum China’s import-export balance for pork is already negative, implying a net import position, and this net import position is expected to remain.

Figure 6.6: Broiler: Net Exports of Selected Countries



Source: Own presentation. Data: FAPRI 2008.

Figure 6.6 presents some of the world’s most important exporters of chicken meat. The market for chicken accounts for more than 70 % of all poultry meat and therefore may serve as an approximation to trends within this heterogeneous sector: Europe is going to lose some of its market share in global exports, but remains in a next export position. The emerging markets for chicken meat will mainly be served by Brazil and the USA, which is already an important producer of chicken meat, and will continue to expand its position in future. Thailand will only gradually recover from the consequences of the avian influenza outbreak and is expected to defend its level of exports, yet without major expansion. Russia and Ukraine, as in the case of beef and pork, are not expected to utilize their agricultural potential much beyond the current level and therefore will remain strong and slight net exporters, respectively.

Overall, global projections by OECD and FAPRI agree on the same directions of future trends within global meat markets. Their assumptions are shaped by a growth in demand that will exceed supply response. Brazil, according to these projections, will become the global meat supplier of the next decade. Obviously, it is assumed that Brazil will manage to comply with all important food safety standards at any export destination.

The EU has been a major meat exporter of the last decades, partly due to subsidized exports. In the future, the EU will continue to satisfy most of its domestic demand for meat from domestic production and will continue to export. However, the pork and poultry sectors that have been globally competitive in recent years are expected to suffer from rising cost due to the extraordinary high food safety and environmental standards. Therefore, European meat exports are not expected to grow much beyond their current level.

Finally, Russia and Ukraine are not expected to utilize their agricultural potential in a way that would put them into a net exporting position for any major meat product in the near future. These assumptions incorporate the fact that it might be easier especially for Ukraine to export grain and oilseeds in the short run than to invest into a meat producing sector that would match international standards and open export markets. The following chapter however will explain that Ukraine would be well advised to develop the pre-conditions for a competitive meat industry in order to have an alternative channel to utilize its grain harvest and add value to it if global meat market conditions are favorable.

7 Implications for Ukraine as a Potential Meat Exporter to the EU

The analysis has shown that most long term projections currently are carefully, but not overwhelmingly, optimistic with regard to world meat market developments. This is because demand is projected to grow slightly faster than supply, especially in markets with high purchasing power. However, with regard to these projections it should be noted that agricultural supply response has repeatedly been underestimated in the past, especially in times of high world food prices. Therefore, a note of caution should be applied to all those projections that extrapolate primarily from the current, comparatively high international food price level.

Considering the future of EU markets, the CAP policy has always had a very severe impact on intra-EU prices. However, a further exposure of European farmers to world market conditions is - as in other key sectors, such as the dairy sector - under way. This implies that more and more imports will gradually be admitted and producer support is already largely decoupled from production.

On the other hand, in the meat processing sectors other than primary beef, veal and lamb production, did EU policy hardly ever interfere with markets in order to protect producers other than through import tariffs. The pig and poultry industry can be regarded as highly productive and competitive, especially with regard to exports of processed meat products of premium quality.

In the short run, however, the EUR/USD exchange rate as well as high prices for production inputs squeeze profit margins for farmers and may slow response to high prices. In addition, it is not clear, how fast structural change will react to policy changes in the EU after the CAP 'Health Check'. In this regard, the EU dairy sector plays an important role also for the development of beef, veal and lamb production, since these animals typically compete with dairy cows for pasture, and dairy herds provide a large share of beef production.

In addition, meat production has frequently been associated with food scandals, diseases, and damaging side effects to the environment (climate change, nitrification of ground water, etc.), and large scale animal farms are typically opposed to criticism by the neighboring population due to their high level of emissions. In order to address these concerns, the EU has imposed strict laws that guide and limit production processes, meat quality, animal welfare, and environmental side effects of European meat production.

All together, these facts are likely to imply that the EU meat production as an aggregate is not growing very fast in the near future, but will likely defend its strong position on the domestic market.

With regard to Ukraine, the meat producing sector currently has little access to the EU market and may also face severe competition on other foreign export destinations, e.g. from Brazil. Chapter 2 has shown that Ukraine's export and import partners, though already more diverse than few years ago, still fluctuate a lot. This indicates that Ukraine currently is far from having a stable set of reliable export destinations for meat products. The EU as the largest single market in the world with policy makers and consumers being extremely concerned about food quality and food safety will under no circumstances and with no other non-EU country make any concessions with regard to the quality of its meat product standards. However, the EU closely monitors meat quality and meat safety of its imports, but currently there is no sign that the EU would require importing countries to also impose the same restrictions on environment protection such as emissions of nitrogen. Expanding large scale animal production plants are unlikely to face the same legal and political problems in Ukraine as they already do in the EU. At the same time, feed input is readily available in Ukraine at low transportation cost. Intensive meat production in Europe increasingly lacks qualified personnel willing to work with animals under the sometimes tough conditions of large in-door stables.

All this potentially leaves Ukraine with a competitive advantage against European meat producers, and may suggest the proximity to EU markets as a natural advantage for Ukrainian producers compared to other meat exporters such as Brazil or Australia.

However, Ukraine is still dominated by backyard production of beef and pork (in mid-2007, households accounted for 64% (same as in 2006) of all cattle and 61% (1% drop from 2006) of all swine in Ukraine) with very little attention paid to animal genetics, feeding rations and animal health issues. Furthermore, as Chapter 2 of this paper has explained, industrial production of beef will likely continue to decline while industrial production of pork and poultry will increase. Ukraine continues to import pork and export domestically produced beef to Russia, although the volume of beef exports will likely be substantially lower in future than it is currently the case. Of course, export volumes remain highly dependent on the political situation in both Ukraine and Russia. Ukrainian production of pork will likely continue to grow, while beef production will continue to shrink due to the inefficient organization of many enterprises in that industry. Therefore, Ukraine's recent accession to the World Trade Organization would potentially alter the market situation only if quality standards of EU markets can be matched.

Would it be worthwhile for Ukraine to work towards a full implementation and full compliance with those EU meat quality standards at all? Since Ukraine clearly has a comparative advantage already to export grain and oilseeds, it might be tempting to think that it would not be necessary to pay too much attention to the development of a competitive meat producing and exporting industry. However, the example of e.g. Brazil shows that a country with a large agricultural potential can very well have both: Playing a leading role on world grain and oilseed markets on the one hand, and at the same time generate potentially large profits from value added in the meat exporting sector. Therefore, Ukraine as a large player on world agricultural markets should not forgive this opportunity to also benefit from value added in the meat sector. In addition- just as in Western countries, Ukrainian consumers will especially in urban areas in the long increasingly request information about meat safety and process quality, and Ukrainian policy makers will increasingly have to react to those concerns in a similar way as in Europe.

Therefore the EU market for meat may in the short and medium term perspective provide both for Ukraine: Marketing opportunities on the one hand, and opportunities to develop a way of how to deal with ever increasing meat quality regulations on the other: Much of the analysis in this paper has focused on the strict quality issues imposed by public and private institutions in the EU. Matching these requirements and still supplying meat products to the European market at competitive prices clearly constitutes a major challenge for almost any meat exporting country. On the other hand, if Ukraine moves ambitiously towards an implementation of some or even all of these standards, the EU Commission would support Ukrainian efforts. The EU has in this regard published easy to follow guidelines (see Chapter 4) because the EU meat industry is generally willing to import competitive meat and meat products.

If Ukraine works towards gradual implementation of higher quality standards in meat production and processing it will along the way likely be able to explore other emerging markets for meat and processed meat products much easier because global meat markets will clearly be dominated by an ever increasing amount of procedures to monitor, avoid and remedy risks and environmental side-effects. Therefore, by mounting efforts to comply with EU standards, Ukrainian policymakers and members of the Ukrainian agricultural administration would give a clear signal to any potential importer of Ukrainian meat products! In other words: Exploring marketing opportunities in Europe may currently constitute a major chance for Ukrainian producers because the gradual adoption of European standards for meat production will likely open up many other emerging markets in the near future as well!

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