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WHO IS COVERING THE MOST PART OF THE MEAT IMPORTING DEMAND IN CENTRAL AND EASTERN EUROPE IN THE CONTEXT OF THEIR OVERALL DECLINING LIVESTOCK?

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Abstract

The decline in livestock numbers in the Central and Eastern European Countries (CEECs) in the last decade has affected not only the regional meat production but also the trade flows. This paper examines the evolution of livestock and meat imports in the CEECs over the past decade, a period marked by a significant rise in meat imports across most of these countries. The method is quantitative based on data sourced from ITC and Eurostat. Findings reveal that the leading livestock producing countries in the region are also major importers. Additionally, countries such as Spain, Germany, and the Netherlands — which hold a large share of the EU's livestock — play a key role in meeting the meat import demand of the CEECs. Romania and Poland, which account for the largest share of livestock within the CEECs, along with the Czech Republic, also rank among the top meat-importing countries in the region. Excepting poultry meat sector, all the other sectors are depending on the imports from the Western Europe.

Key words: *livestock, trade, meat, import flows, Central and Eastern Europe, Romania, Poland*

INTRODUCTION

Covering the demand for meat has been examined by some authors through the evolution of trade flows, especially during significant political events that disrupted international trade [16]. The dynamic of meat imports in the group of countries defined by The Organisation for Economic Co-operation and Development (OECD) as Central and Eastern European Countries (CEECs) [13] – comprising the Baltic States (Estonia, Latvia and Lithuania), the Visegrad Group: Czech Republic, Hungary, Poland and Slovakia, as well as Bulgaria, Romania, Slovenia, and Albania (although geographically located in the Southeastern Europe) can be analysed from multiple perspectives. However, recent trends are particularly relevant for the development of future national and regional strategies, as they offer a valuable basis for further analysis and policy evaluation. Several years after their accession to the European Union, the CEECs were assessed in the context of agricultural trade. This accession was generally seen as having a positive impact, supported by comprehensive studies on their roles in the EU poultry meat production and foreign trade [14]. Studies on livestock development in some of these countries are also pertinent [2, 7], as livestock dynamics directly affect agricultural output and significantly influence meat trade flows in the CEECs. These should be considered in the context of the scientific debates concerning sectoral competitiveness [5]. An assessment of self-sufficiency in beef and pork across the CEECs revealed significant disparities between countries, which have in turn shaped regional meat trade flows [11]. Furthermore, livestock health crises—such as outbreaks of African Swine Fever, particularly in Romania [15, 3, 4] and Poland [17, 10] - must be taken into account when analysing the evolution of meat trade in the region, given their substantial impact on domestic production and meat prices. A recent study highlighted that Poland, a key meat exporter in the region, recorded one of the lowest meat price levels, followed by Romania. Both countries had an internal market meat price index below 62% of the EU average. However, it is important to note that

Polish consumers benefit from higher average annual salaries compared to Romanian consumers [12]. Each CEEC is characterized by a specific context in terms of meat trade. For instance, Romania is recognized as a net importer of meat, particularly pork and poultry [8]. Germany remains the primary exporter of meat to CEECs. Paradoxically, the competitiveness of Germany's meat industry relies heavily on low-paid labour from CEECs, which contributes to its ability to maintain low export prices [1].

MATERIALS AND METHODS

The paper analyses individual and aggregate data related with the livestock and meat trade in the Central and Eastern Europe. We focused first on the evolution of the livestock, then on identifying the main meat trade importers in this region and we analysed data related with the main meat exporters. In order to evaluate the dependence on the meat imports for the CEECs we insisted more on the import flows and we also considered the trade balance, because some countries, as Poland and Romania are also important meat exporters, and the trade balance reflect better the overall trade context. The free access data were offered in relation with trade by International Trade Centre – ITC through its official web site [9] and for livestock by Eurostat [6].

RESULTS AND DISCUSSIONS

The evolution of livestock in CEECs

As in the EU, the livestock in the CEECs is held in only some countries. The pig population decreased in CEECs by 16.42% from 23,204.97 thousand heads in 2015 to 19,394.57 thousand heads in 2023. In 2015 the main livestock of swine of CEECs was recorded in Poland - 10,590.20 thousand heads, followed by Romania - 4,926.90 thousand heads, Hungary - 3,124 thousand heads and Czechia -1,555.40 thousand heads. In 2023, Eurostat centralized a decrease of swine livestock in all these countries: Poland -9,769.70 thousand heads (-7.75%), Romania - 3,154.10 thousand heads (-7.34%), Hungary -2,607.70 thousand heads (-6.6%) and Czechia 1,362.28 thousand heads (-12.4%). The bovine population also decreased in CEECs between 2015 and 2023, but only by 1.3% from 13,448.57 thousand heads in 2015 to 13,277.85 thousand heads in 2023. The number of bovines is almost at the same level because some of the main countries specialised from CEECs has increased the production and covered the decreased of bovine livestock from the other countries. While Poland recorded 6,267.46 thousand live bovines in 2023, compared to only 5,762.50 thousand bovines in 2015, Romania declared 1,817 thousand heads in 2023, versus 2,092.40 thousand in 2015. Czech Republic, the third producer in terms of bovines' livestock from CEECs has slightly increased the bovine's livestock from 1,366.33 thousand live bovines in 2015 to 1,369.59 thousand in 2023.

The sheep population also decreased in CEECs from 15,429.25 thousand live animals in 2015 to 13,691.76 thousand live animals in 2023. Romania, which is by far the main sheep-breading country in this region, increased its sheep livestock from 9,809.50 thousand animals in 2015 to 10,299.50 thousand animals in 2023. Instead, Bulgaria and Hungary, which are the second and the third sheep breeders in the region, decreased the sheep livestock from 1,331,89 thousand animals in 2015 to 1,072.77 thousand animals in 2023 when it comes to Bulgaria, respectively from 1,190 thousand animals to 907.10 thousand animals in 2023 for Hungary.

The same decreasing trend can be noticed related with the goat livestock in the CEECs. The goat's population decreased in CEECs from 2,898.01 thousand live animals in 2015 to 2,292.51 thousand live animals in 2023. The main goat breeders from CEECs recorded a decrease of the live goats from 2015 to 2023: Romania, from 1,440.20 thousand goats in 2015 to 1,421.70 thousand goats in 2023, Albania from 932 thousand goats in 2015 to 640.24 thousand goats in 2023, and Bulgaria from 276.92 thousand goats in 2015 to 174.95 thousand goats in 2023.

Being complicated to estimate the evolution of the poultry population, we can only mention that the main poultry farming countries from CEECs, Poland, Hungary and Romania increased their poultry meat production in the last decade, based on use of advanced technology and high consumption demand.

Main importing meat countries in the CEECs

From 2015 to 2024 the meat imports in the CEECs became more than doubled, from 4,916 million Euro to 10,129 million Euro (Fig.1).

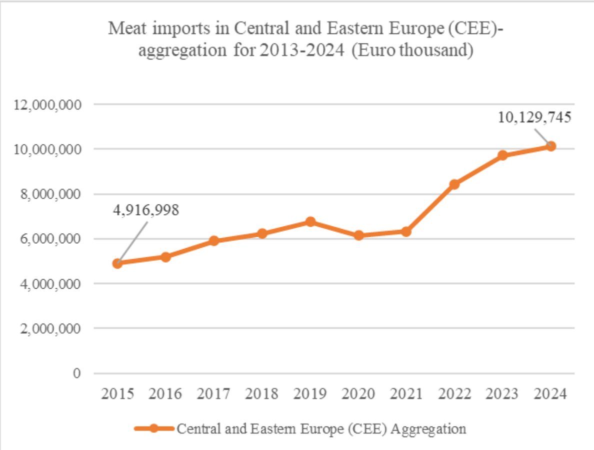

Fig. 1. Meat imports in Central and Eastern Europe (CEE) aggregation from 2015 to 2024 (Euro thousands)
Source: Eurostat [6].

After a steady upward trend up to 2019, the COVID – 19 pandemics made its decline impact, but from 2021 until 2024 the imports increased considerably, reaching the highest level in 2023 and 2024, based on some states decline in domestic meat production, collaborated with the need to cover the internal consumption by imports and, on impacting economic aspects as changes in purchasing power in some ECE countries or strengthened intra-European meat trade, especially within the EU. Poland faced the highest meat imports within this period in value terms, from 1,371,043 thousand Euro in 2015 to 2,201,619 thousand Euro in 2024 (Table 1), corresponding to an increase of 60.57%. Czech Republic recorded the second highest increase value of meat imports for the same period in this region, from 943,627 thousand Euro in 2015 to 1,714,388 thousand Euro in 2024, corresponding of an increase of around 82%. Romania, the third in this chart, also increased significant its meat imports, from 568,661 thousand Euro in 2015 to 1,600,147 thousand Euro in 2024, which correspond to the highest percentage increase from the region in this period, of 181%.

Table 1. Top importers of meat in CEECs between 2015 and 2024 (Euro thousand)

Year	Imports value by country		
2015	Poland	Czech Republic	Romania
	1,371,043	943,627	568,661
2016	Poland	Czech Republic	Romania
	1,369,960	984,712	643,710
2017	Poland	Czech Republic	Romania
	1,546,016	1,068,564	766,528
2018	Poland	Czech Republic	Romania
	1,687,389	1,093,051	817,588
2019	Poland	Czech Republic	Romania
	1,748,237	1,177,175	940,316
2020	Poland	Czech Republic	Romania
	1,563,524	1,082,694	912,484
2021	Poland	Czech Republic	Romania
	1,533,083	1,096,799	973,613
2022	Poland	Czech Republic	Romania
	2,004,689	1,461,312	1,300,729
2023	Poland	Czech Republic	Romania
	2,219,794	1,672,886	1,534,539
2024	Poland	Czech Republic	Romania
	2,201,619	1,714,388	1,600,147

Source: ITC [9].

Main meat suppliers for the CEECs

Only four countries could take a place in the top meat suppliers of CEECs between 2014 and 2023: Germany, Spain, Netherlands and Belgium. Germany was between 2014 and 2023 the main supplying meat market for the CCE countries. The value of the meat exported by Germany in CEECs, increased from the 1,100,781 thousand Euro in 2014 to 1,710,504 million Euro in 2024. Belgium, which was the second main meat supplier in the CEECs in 2015 with a value of 424,782 thousand Euro increased its export in this region up to 639,505 thousand Euro in 2024 but left the top 3 of the main CEE meat exporters in 2023 and 2024. Spain consolidates its role of supplier in the region, increasing deliveries from 423,682 thousand Euro in 2015 up to 1,636,599 thousand Euro in 2024. Also, Netherlands re-entered in the top 3 suppliers in 2023 and 2024. As regarding the meat suppliers within CEECs, can be noticed, based on the ITC statistic, that Poland is the main provider in the region, and increased its meat exports value from 667,595 thousand Euro in 2015 to 1,478,912 thousand Euro in 2024. Hungary, which was the second main meat exporter in the region in this period, increased its meat exports from 257,382 thousand Euro in 2015 to 602,277 thousand Euro in 2024. Romania increased its meat deliveries in the CEECs but with a value of only 108,585 thousand Euro in 2024.

Table 2. Top suppliers of meat in CEECs between 2015 and 2023 (thousand Euro)

Year	Exports value by country		
2015	Germany	Belgium	Spain
	1,100,781	424,782	423,682
2016	Germany	Spain	Belgium
	1,117,862	572,054	421,540
2017	Germany	Spain	Netherlands
	1,283,328	704,297	488,227
2018	Germany	Spain	Belgium
	1,279,869	772,212	518,915
2019	Germany	Spain	Belgium
	1,338,892	891,202	594,143
2020	Germany	Spain	Belgium
	1,255,359	757,776	591,860
2021	Germany	Spain	Belgium
	1,346,041	775,757	562,426
2022	Germany	Spain	Belgium
	1,554,355	1,138,629	666,615
2023	Germany	Spain	Netherlands
	1,668,304	1,625,267	846,864
2024	Germany	Spain	Netherlands
	1,710,504	1,636,599	849,920

Source: ITC [9].

While at CEECs level the trade balance increased from a positive sold of 1,077,794 thousand Euro in 2015 to 1,484,955 thousand Euro in 2024 (Fig.2), only Poland and Hungary had a positive sold, of 5,984,000 thousand Euro, respectively 517,690 thousand Euro in 2024 (Table 3). The ITC data indicates that only Poland recorded a positive balance trend from 2015 to 2024. While Czech Republic recorded a negative trade balance for meat of 1,438,810 thousand Euro in 2024, which was more than double related with the one recorded in 2015 and is the CEE country with the highest deficit balance for the meat trade, Romania, ranked in the second place in this negative top, having a meat balance trade deficit in 2024 of 1,202,964 thousand Euro, which is almost 4 times higher than in 2015.

Table 3. The CEECs with the highest positive and negative meat trade balance between 2015 and 2024 (Euro thousand)

Year	Trade balance by country			
2015	Poland	Hungary	Romania	Czech Republic
	2,447,953	598,356	-320,798	-706,507
2016	Poland	Hungary	Romania	Czech Republic
	2,501,055	579,658	-406,632	-761,249
2017	Poland	Hungary	Romania	Czech Republic
	2,959,896	426,823	-485,849	-872,173
2018	Poland	Hungary	Romania	Czech Republic
	3,388,128	451,555	-553,576	-907,806
2019	Poland	Hungary	Romania	Czech Republic
	3,458,042	422,183	-699,758	-996,834
2020	Poland	Hungary	Romania	Czech Republic
	3,266,636	361,891	-717,287	-905,716
2021	Poland	Hungary	Romania	Czech Republic
	3,835,523	549,214	-733,921	-915,091
2022	Poland	Hungary	Romania	Czech Republic
	5,606,285	514,572	-978,721	-1,195,157
2023	Poland	Hungary	Romania	Czech Republic
	5,307,417	516,340	-1,211,945	-1,393,176
2024	Poland	Hungary	Romania	Czech Republic
	5,984,000	517,690	-1,202,964	-1,438,810

Source: ITC [9].

Slovakia was the third country in terms of deficit of meat trade balance, with 784,718 thousand Euro in 2024, in a high increase compared with 2015 when the deficit was only 247,964 thousand Euro (Fig. 3).

From 2015 to 2024 only one country (Lithuania) switched from positive to negative meat trade balance.

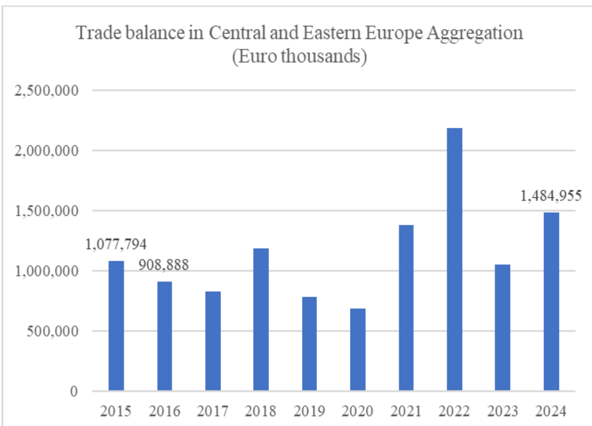

Fig. 2. The meat trade balance in Central and Eastern Europe (CEE) build-up between 2015 and 2024 (Euro thousands)

Source: ITC [9].

The positive meat trade balance of Poland is based on a value of exports of 8,185,619 thousand euro, comparative with only 2,201,619 thousand euro imports.

As for Romania, the meat import value is 4 time higher than the meat export value: 397,182 thousand euro exported meat value in 2024, comparative with 1,600,147 thousand euro imported meat value in 2024.

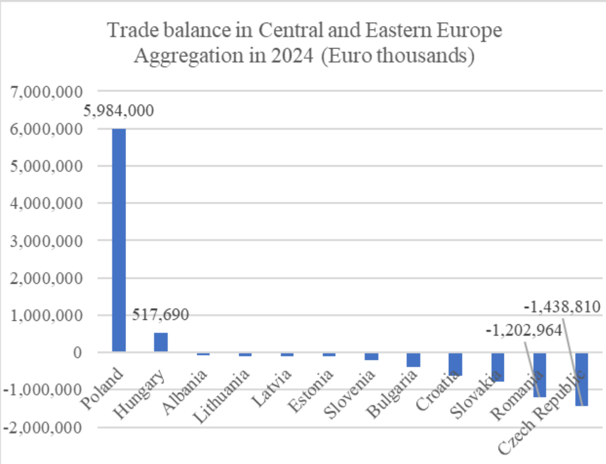

Fig. 3. The meat trade balance in Central and Eastern Europe (CEE) aggregation in 2024 (Euro thousands)
Source: ITC [9].

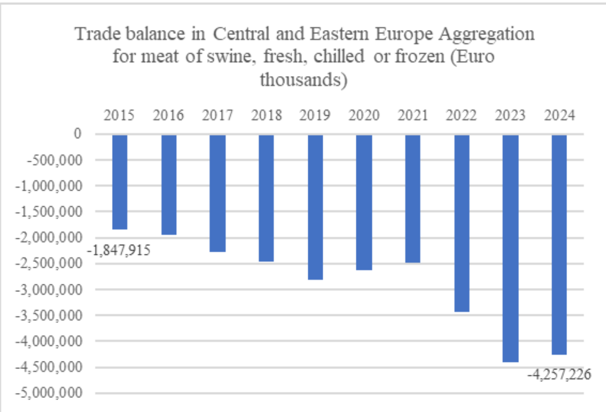

Fig. 4. Trade balance in Central and Eastern Europe build-up for meat of swine, either fresh, chilled or frozen (Euro thousands)
Source: ITC [9].

In 2024 Spain (436,820 thousand euro), Germany (278,667 thousand euro), Hungary (277,329 thousand euro), Netherlands (160,929 thousand euro) and Poland (152,429 thousand euro) covered most part of the meat import demand from Romania. The trade balance for swine meat in the CEECs show an increased deficit from 1,847,915 thousand euro in 2015 to 4,257,226 thousand euro in 2024.

Romania had the highest swine meat trade balance deficit in 2024, of 1,073,764 thousand Euro, followed by Poland with 945,679 thousand Euro and Czech Republic with 810,366 thousand Euro (Fig. 4, Fig. 5).

The same countries mentioned for Romania's total meat imports are also among the top exporters of swine meat to Romania.

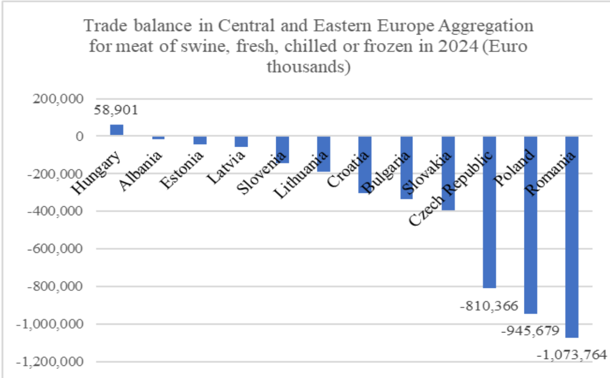

Fig. 5. Trade balance in Central and Eastern Europe build-up for meat of swine, either fresh, chilled or frozen in 2024 (Euro thousands)
Source: ITC [9].

Poland imported in 2024 swine meat mainly from Denmark, Germany, Belgium, Spain and Netherland, while Czeck Republic imported in the same year most part of the swine meat from Spain, Germany, Poland, Belgium and Netherland.

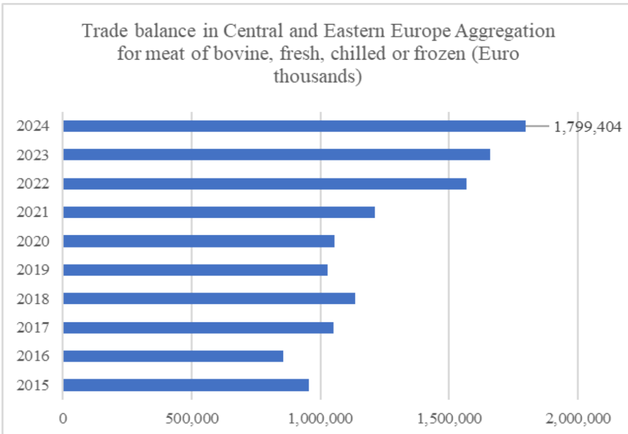

Fig. 6. Trade balance in Central and Eastern Europe build-up for meat of swine, either fresh, chilled or frozen in 2024 (Euro thousands)
Source: ITC [9].

In the frozen bovine meat category, the trade balance of the CEECs in 2024 showed a surplus of 314,939 thousand euros.

The CEECs region recorded in 2024 a positive trade balance for meat of bovine either fresh, chilled or frozen. While CEECs recorded a positive balance of 1,484,465 thousand euro for fresh and chilled meat bovine, Romania had in 2024 a negative trade balance for this category of 21,832 thousand euro.

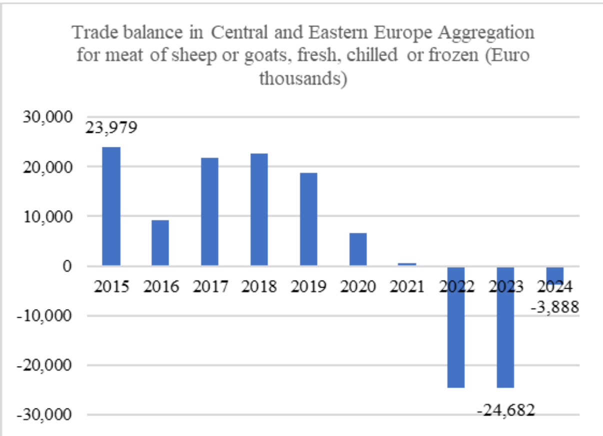

Fig. 7. Trade balance in Central and Eastern Europe build-up for meat of sheep or goats, fresh, chilled or frozen (Euro thousands)
Source: ITC [9].

Poland and Romania are in opposing positions, the first, in the top, with a positive trade balance for this category of 314,939 thousand euro, and the second, the last, with a negative balance of 48,526 thousand Euro.
The trade balance for sheep and goat meat, fresh, chilled, or frozen, was slightly negative in 2024, whereas in 2015 it recorded a positive value.

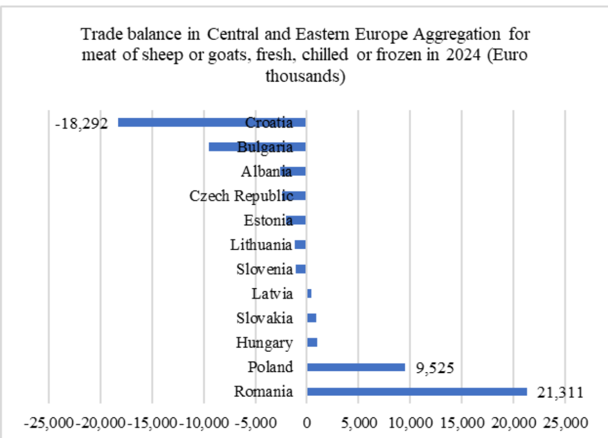

Fig. 8. Trade balance in Central and Eastern Europe build-up for meat of sheep or goats, fresh, chilled or frozen in 2024 (Euro thousands)
Source: ITC [9].

The trade balance of the meat from the poultry sector recorded a positive value of 3,999,406 thousand Euro in 2024 comparative with only 1,761,801 in 2015. Only Poland, Hungary and Slovenia recorded a positive trade balance for poultry meat in 2024. Romania that imported poultry meat worth 245, 840 thousand euro in 2024, recorded a negative balance of 1,442 thousand euro in euro in 2024.

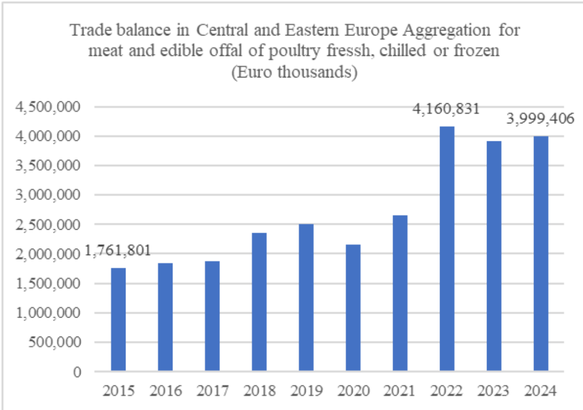

Fig. 9. Trade balance in Central and Eastern Europe aggregation for meat and edible offal of poultry, fresh, chilled or frozen in 2024 (Euro thousands)
Source: ITC [9].

CONCLUSIONS

The CEECs increased their dependence for meat imports in the last decade due to the decrease of their livestock, which manifest with few exceptions. The meat consumption is depending heavily from the huge imports from Germany, Spain, Netherlands or Belgium. The main deficit for meat trade in the CEECs is related with the swine meat, associated with the huge pig livestock decline. The poultry meat is the only sector that brings a significant contribution to the trade balance for meat in the CEECs, assuring its overall positive value and having Poland as the main engine in the region. Two aspects can be related with the importing countries: the distance between countries implied in trade and the the robustness of each category of livestock production and level of development of processing sector of the exporting country. Taking into account the inclusion of Romania and Bulgaria in the Schengen space and the switch to Euro of Bulgaria, in the context of improving infrastructure in these two countries, an increase of meat trade can be seen in the next years in this region of CEE.

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