

Crețu, Diana

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# STUDY ON THE IMPACT OF SARS-COV 2 ON THE PIG MARKET AT NATIONAL LEVEL

DIANA CREȚU <sup>1</sup>

## Abstract

*Pandemic caused by the new coronavirus has affected both farmers and the country's economy. In this study will be analyzed aspects such as: the balance of pork made in Romania (slaughter, average weight at slaughter, total production, consumption) price, pig herds, import and export. Pork is one of the most popular foods with content rich in protein, being considered a "heavy" meat with slow metabolism. It is also rich in vitamins and minerals, such as iron, magnesium, phosphorus, potassium and zinc, as well as a number of B, B6, B12 vitamins, nicotinic acid, thiamine, riboflavin. Pork contains both saturated and unsaturated fats, the muscle being framed in lean meat, and the neck and ribs in fatty meat. During the winter holidays, pork is consumed more often by the Romans and is used to prepare traditional dishes. The research method used in the study is statistical processing and economic analysis of existing data on specialized sites such as the National Institute of Statistics (INS), Eurostat, FAO, Ministry of Agriculture and Rural Development (MADR) and other specialized materials.*

**Keywords:** evolution, prices, pandemic, pork

**JEL Classification:** Q11;Q13;L11.

## INTRODUCTION

The meat industry is one of the most important sectors in the food sector, ranking 4th in terms of fresh food production. If before the pandemic, the meat industry was afloat, from a financial point of view there were no problems and consumer confidence in the products on the market was high now things have changed considerably. For more than a year the pandemic caused by the new Coronavirus it has affected all sectors of the food sector, including the meat industry. Due to the pandemic year, the meat industry suffered heavy losses due to the closure of HoReCa due to labor difficulties and its migration to other states. negative effects on this market. In this article I set out to analyze statistically the current situation of the pork market.

## MATERIAL AND METHOD

The research method used in the study is statistical processing and economic analysis of data. The research was based on statistical data provided by INS, EUROSTAT, MADR, but also books, magazines, scientific papers on the balance of pork in Romania (slaughter, average slaughter weight, total production, consumption) price, pig herds, import and export.

## RESULTS AND DISCUSSION

In Romania, according to the press releases provided by INSSE (table 1) regarding the animals slaughtered in the period 2017-2021 in July, we can see that in 2021 compared to 2017, the slaughters also increased the weight in the carcass (table 2).

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<sup>1</sup>PhD Student. Eng.Crețu Diana, University of Agronomic Sciences and Veterinary Medicine, Bucharest, e-mail:cretu.diana@iceadr.ro

**Table 1. Animals slaughtered in July (%)**

Animals slaughtered	2017	2018	2019	2020	2021
<b>Swine - total</b>	101,5	98,7	99,2	102,5	102,8
of which: in specialized industrial units (slaughterhouses)	105,1	101,7	96,4	103,8	111,6

Source:INSSE

**Table 2. Carcass weight in July (%)**

Carcass weight	2017	2018	2019	2020	2021
<b>Swine - total</b>	98,5	96,4	99,8	104,0	100,0
of which: in specialized industrial units (slaughterhouses)	105,9	100,4	95,5	105,0	109,4

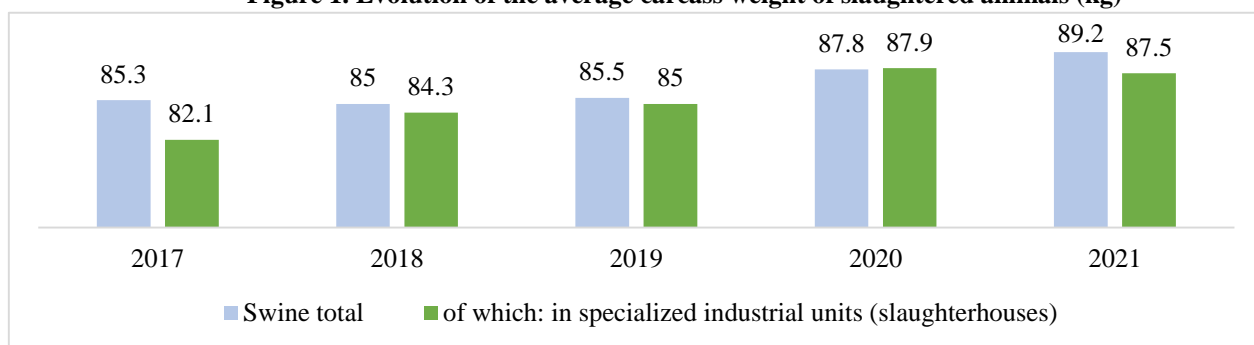
Source:INSSE

In the case of pigs, the carcass weight represents the weight of the body of the slaughtered animal, whole or divided in equal parts along the spinal cord, after bleeding, without internal organs, hair, hooves, tongue, bone and diaphragm.

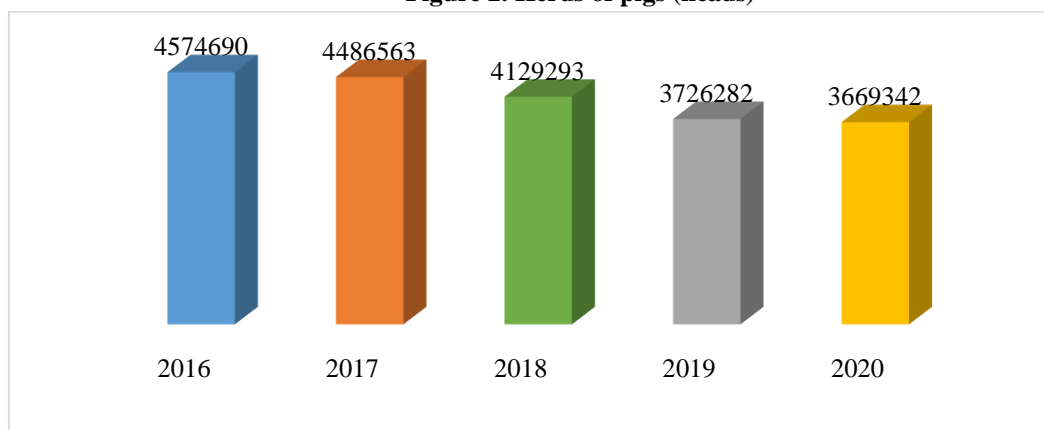
**Table 3. Average weight of animals slaughtered in the carcass in July(kg)**

Average weight in the housing	2017	2018	2019	2020	2021
<b>Swine - total</b>	85,3	85,0	85,5	87,8	89,2
of which: in specialized industrial units (slaughterhouses)	82,1	84,3	85,0	87,9	87,5

Source:INSSE

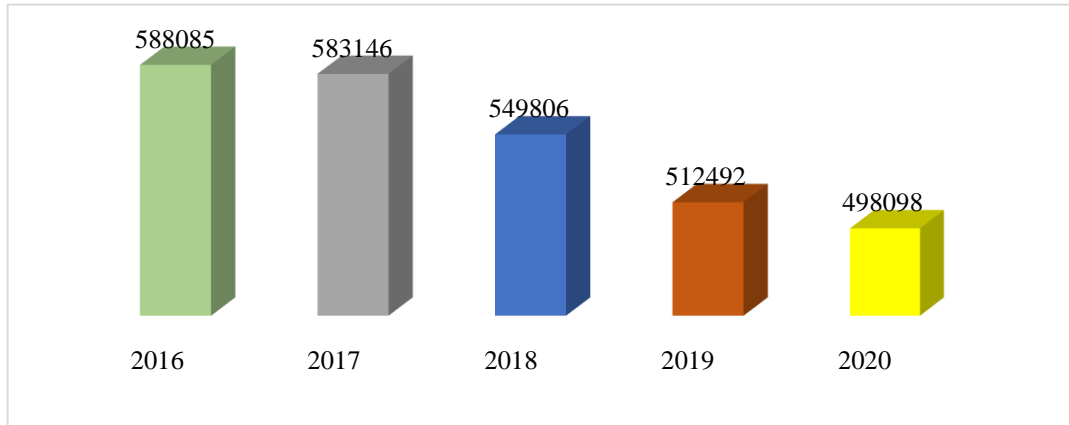
**Figure 1. Evolution of the average carcass weight of slaughtered animals (kg)**

Average carcass weight: represents the ratio between the carcass weight and the number of animals slaughtered. From the Table 3 respectively the Figure 1 we can observe the fact that the average weight in the carcass increased in 2021 compared to 2017.

**Figure 2. Herds of pigs (heads)**

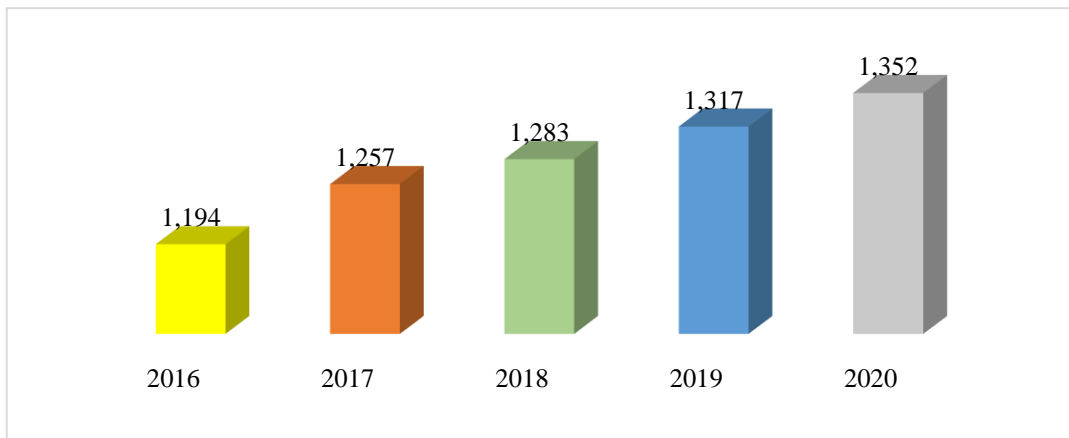
The Figure 2 shows the number of pigs in the period 2016-2020, which had a constant decrease according to the National Institute of Statistics. In 2020, compared to 2016, the number of pigs decreased dramatically. The possible causes of this increase may be due to the African swine fever but also the slaughter in large numbers with small replacement of the herd.

**Figure 3. Fresh weight of animals for slaughter for consumption (pigs)**



According to statistical data, the live weight of animals intended for slaughter for consumption (pigs) had a constant decrease from 2016 to 2020. If in 2016 a value of 588085 tons was recorded in 2020, it decreased to 498098 tons.

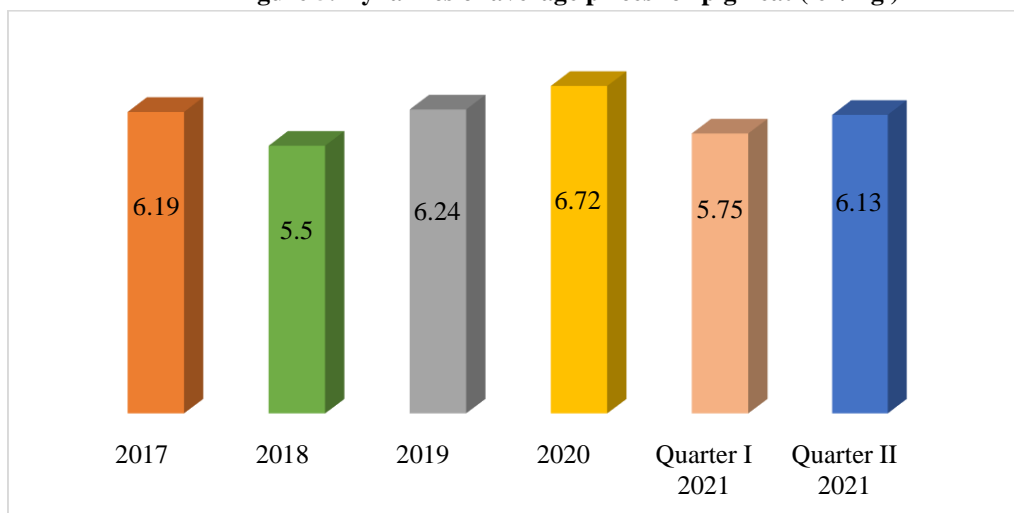
**Figure 4. Average monthly consumption of pork meat per person**



*Source:INSSE*

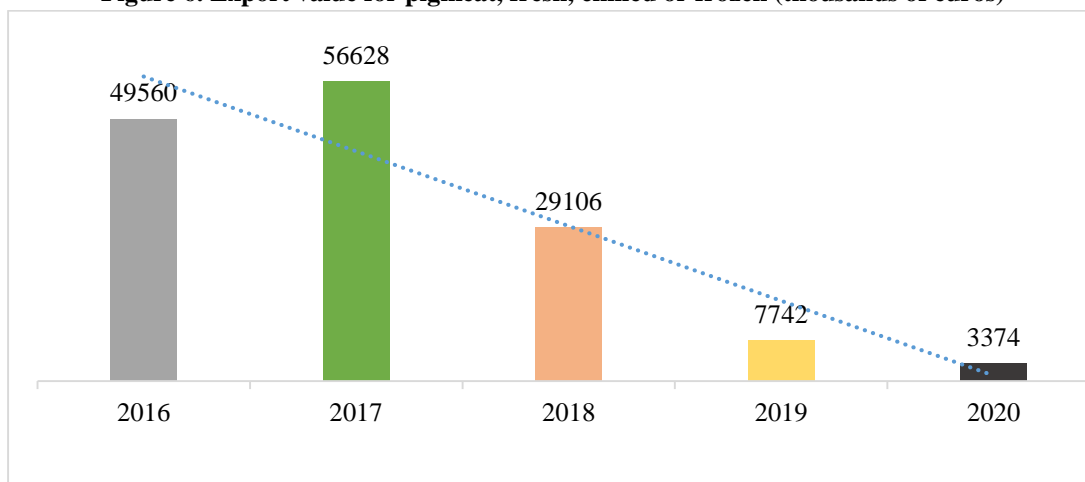
Figure 4 shows the average monthly consumption of pork in the period 2016-2020. As can be seen in the graph, consumption has increased steadily from 2016 to 2020. One of the causes of this increase could be due to the increase net salary which means a larger budget in the consumer's pocket to be able to ensure the minimum food.

**Figure 5. Dynamics of average prices for pigmeat (lei / kg )**



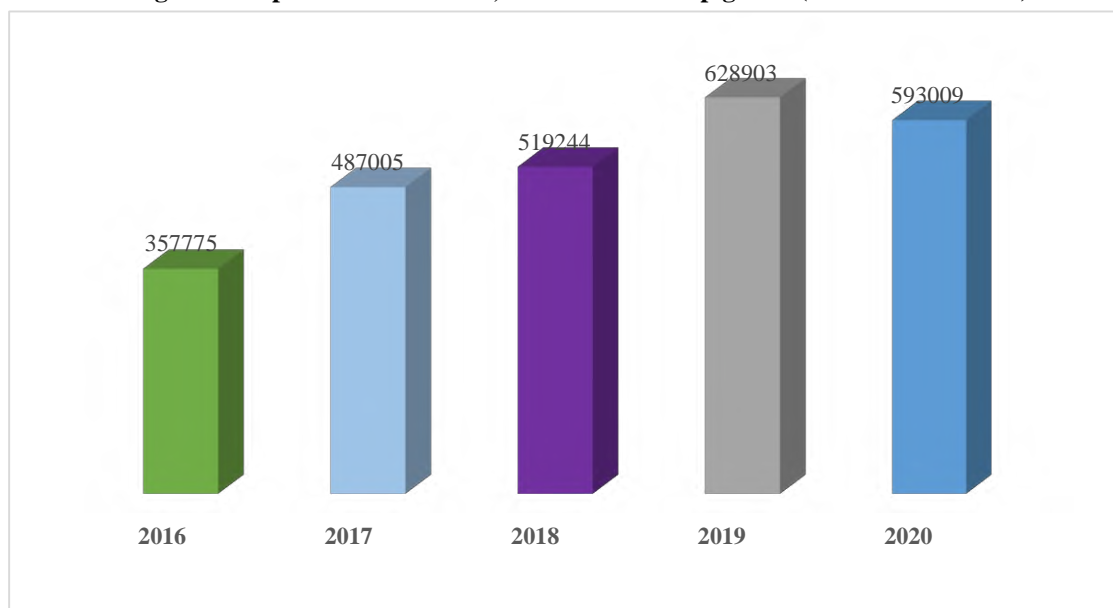
According to statistical data recorded by the National Institute of Statistics on average prices for pork in 2017 and mid-2021, we see a decrease in the second quarter of 2021, compared to 2017, where there was a price of 6.19 lei / kg live. The highest value was recorded in 2020 with an average price of 6.72 lei / kg live and the lowest value was recorded in 2018 with an average price of 5, 50 lei / kg live. A cause of this situation could be the coronavirus pandemic but also the swine fever that negatively influenced sales, which caused prices to fall.

**Figure 6. Export value for pigmeat, fresh, chilled or frozen (thousands of euros)**



According to the Figure 6 regarding the value of exports to the pig species, we notice that since 2017 it has registered a constant decrease. If in 2017 an export value of 56628 thousand euros was registered, in 2020 it registered a value of only 3374 thousand euros. This decrease is due to the fact that Romania is affected by a drastic decrease in staff, which makes it unable to ensure self-consumption for the population.

**Figure 7. Import value for fresh, chilled or frozen pigmeat (thousands of euros)**



In Figure no.7 the value of imports increased considerably in 2020 compared to 2016 where a value of 357775 thousand euros was registered being the lowest value recorded in the analyzed period..The highest value of imports was 628903 thousand euros in 2019. The causes of this increase is the lack of pigs in Romania, which has a trade deficit in terms of pork.

## **CONCLUSIONS**

In Romania, pork meat can be considered a traditional product, being consumed more during the winter holidays for the preparation of traditional Romanian products.

Due to the pandemic caused by the new Coronavirus, many industries have suffered here, including the pork industry that I chose to analyze its market.

From the existing statistical data on the specialized sites, books, brochures, profile materials can conclude that the meat sector in Romania is severely affected by the Covid-19 pandemic.

Once the number of pigs decreased due to African swine fever and the mass slaughter, this sector was degraded in all respects.

The pandemic caused by the new coronavirus was another additional reason to increase the value of imports, lower exports, increased demand, lack of labor, increased consumption but also lower average prices due to the fact that we have meat imported from European countries.

The disruption caused by the new virus is unique and cannot be compared with other economic crises in recent years. The uncertainty caused by the duration of this pandemic, the depth and lack of prescriptions ready "from economic textbooks" requires a robust analysis of the scenario. But there is a consensus that the impact of COVID-19 is present on both the demand and supply of the economy. We could also distinguish between real shocks, financial shocks, as well as expectations in the economic analysis of this shock.

We draw conclusions based on data on the spread of the pandemic and its mortality, economic activity, as well as the measures taken by the government - restrictions imposed and support provided. The data are also compared with those of the averages across the region to measure how well the country has behaved in terms of limiting its spread and supporting its citizens.

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