

Rosario Board of Trade (BCR) Market Outlook – September 2021



Executive Summary

Grain Market

- For year 2021, the new total export forecasts for the country are US\$ 74,854 million. Besides, the first export forecast for 2022 reaches US\$ 82,917 million, of which US\$ 36,328 million come from the main products of the agribusiness sector.
- 2020/21 corn trade amounts to 39.7 Mt, a record for this moment of the year. Also, 35.9 Mt have been already exported.
- There have been modifications in the balance sheets of the three main crops for the current season, and forecasts for the new crop 2021/22 are presented.

Livestock Market

- ROSPORC: during last month, there has been a strong reduction of the price gap of live hog versus the “5 kg of corn + 2 kg of soybean mix”.
- In terms of volume, exports of pork in July were the lowest since June 2018.

Panel of Commodities and Financial Variables

Report by the Department of Information and Economic Studies of Rosario Board of Trade (BCR)

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GRAIN MARKET

Exports

Total exports and main agribusiness product forecasts

According to new estimations, **Argentina would export US\$ 74,854 million in 2021, US\$ 19,970 above 2020.** Also, this represents an improvement of US\$ 5,267 million from the previous month, which can be explained both by an increase in volume and value of the main agribusiness products forecast to be exported, as by a re-estimation of the exports of the rest of the products, which have been above the initial forecasts.

Besides, **the first forecast for year 2022 shows total exports by our country for US\$ 82,917 million. The main complexes of the agribusiness sector might reach shippings for US\$ 36,328 million**, while the rest of the export complexes would total US\$ 46,589 million. Therefore, the country's exports would exceed by US\$ 8,063 million the forecasts for the current year.

Argentina Monthly Exports

Million US\$

Month	2020			2021 (e)				2022 (p)		
	Agro-industrial	Rest	Total	Agro-industrial	Rest	August Estimate	September Estimate	Agro-industrial	Rest	September Estimate
January ¹	2.119	2.460	4.579	2.562	2.350	4.912	4.912	3.303	2.798	6.101
February ¹	1.541	2.837	4.378	2.210	2.565	4.775	4.775	2.484	2.985	5.469
March ¹	1.890	2.493	4.383	2.813	2.907	5.720	5.720	2.899	3.438	6.337
April ¹	2.330	2.019	4.349	3.561	2.582	6.143	6.143	3.349	2.954	6.303
May ¹	2.829	2.249	5.078	3.598	3.148	6.746	6.746	3.762	3.658	7.421
June ¹	2.545	2.241	4.786	3.709	3.267	6.976	6.976	3.374	3.820	7.194
July ¹	2.417	2.514	4.931	3.826	3.426	6.287	7.252	3.738	4.015	7.752
August ²	2.203	2.752	4.955	4.231	3.366	5.767	6.573	3.145	4.051	7.196
September ³	1.877	2.850	4.727	2.766	3.369	5.938	6.087	3.056	4.155	7.211
October ³	1.781	2.893	4.674	2.493	3.764	5.826	6.231	2.705	4.721	7.426
November ³	1.650	2.850	4.500	2.287	4.173	5.568	6.377	2.299	5.220	7.520
December ³	798	2.746	3.544	2.269	3.794	4.929	6.062	2.214	4.774	6.988
Total Exports	23.981	30.903	54.884	35.111	34.476	69.587	73.854	36.328	46.589	82.917

¹ INDEC official data.

² Estimated based on shipments and avg. FOB prices.

³ Projected based on own estimates.

In the following chart, agribusiness exports are detailed per selected product per year. It includes forecast export data from the report BCR Market Outlook – August 2021 and the new forecasts regarding export of grain and by-products per complex.

The export forecast of the main products from the agribusiness sector at current prices reaches US\$ 36,143 million, US\$ 1,032 million above last month's forecast. This is mainly due to three factors: in the first place, an improvement in the export prices of wheat, which have grown considerably during last month; in the second place, an increase in the corn export volume forecast; and third, an increase in the prices obtained for sunflower oil.

If we disaggregate per export complex, soybean complex would reach exports for US\$ 22,487 million, followed by the corn complex with US\$ 8,136 million. In the third place, wheat complex would account for US\$ 3,207

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million, barley complex for US\$ 1,239 million, and sunflower complex for US\$ 1,073 million. Since temporary soybean imports are forecast in US\$ 2,346 million, the main complexes of the agribusiness sector would generate net exports for US\$ 33,797 million, US\$ 11,795 million above 2020.

Main Exports of the Agricultural Sector.

Million US\$

	2018	2019	2020	2021		2022	Var. USD 2022 vs 2021
				August Estimate	September Estimate	September Estimate	
Soybean, Oilseed	1.448	3.440	2.317	2.618	2.640	3.485	845
Soybean Meal	9.459	9.045	7.754	11.572	11.629	9.996	- 1.633
Soybean Oil	2.958	3.493	3.788	6.912	6.940	6.410	- 530
Biodiesel	938	775	442	1.192	1.279	1.418	140
Corn	4.189	5.925	6.023	7.990	8.136	8.729	593
Wheat	2.489	2.450	2.114	2.444	3.053	3.783	730
Wheat Flour	194	215	194	174	155	146	- 9
Sunflower Seed	37	70	96	114	116	91	- 25
Sunflower Meal	143	165	98	157	186	183	- 3
Sunflower Oil	550	686	444	821	937	916	- 21
Malting Barley	269	329	281	364	350	356	6
Feed Barley	293	370	219	521	465	554	89
Malt	227	284	211	234	258	261	3
Total Exports	23.194	27.244	23.981	35.111	36.143	36.328	184
Soybean Imports	2.504	1.604	1.978	2.338	2.346	2.714	368
Net Exports	20.690	25.641	22.003	32.773	33.798	33.614	- 183

Source: INDEC and own estimates. @BCRmercados

For year 2022, the first export forecasts for the main products of the agribusiness sector reach US\$ 36,328 million, US\$ 185 million above the current year's forecasts. The highest increase would be registered in the exports of soybean, due to a rise in the tonnage shipped that overcompensates the lower export prices. A similar situation is forecast for corn, with the volume increase easily outweighing the cut in prices. For the case of wheat, export prices are expected to remain high, so the higher forecast export volume in comparison to the present year will result in a considerably increase in the value of exports. On the opposite side, the highest cut is forecast for soybean meal, followed by soybean oil, which mainly responds to lower forecast prices for next year.

In this way, soybean complex will continue to be the industry leader in foreign currency generation per exports, with a total of US\$ 21,308 million. It is followed by the corn complex, with US\$ 8,729 million in terms of exports for 2022. It would be the second year in a row that corn exceeds the barrier of US\$ 8,000 million, consolidating as a key complex in Argentinian exports. In the third place comes the wheat complex, with exports for US\$ 3,929 million between grain and meal. Last, barley and sunflower complexes sign up with foreign shippings for US\$ 1,171 and US\$ 1,190 million each, both exceeding US\$ 1,000 million also for the second consecutive year.

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Calculation methodology of the **export forecast** for the main agribusiness products

It is based on three assumptions:

1. The balance sheet of supply and demand of the main crops (wheat, corn and soybean), where the different uses of grains are forecast -based on productive estimations- both for domestic consumption as well as export.
2. The monthly distribution of exports of the new crop as an average pattern of the previous business cycles. In this way, once the export forecast is completed, this is distributed monthly along the cycle according to a seasonal indicator, obtained from the distribution pattern of past crops.
3. Traded prices to present date in the FOB market for future delivery, that reflect the intrinsic value of the goods quoted in current pesos/dollars. In this way, although in the future effective import and export FOB prices will present fluctuations with regards the forecast values, these fluctuations are valued at the current quote for those positions. In the case of not having references for a particular month, this is calculated as the simple average between the closest ends.

As for the first item, export forecasts for the different crops are made according to crop seasons and not per calendar year. Also, each crop starts its season in different months of the year: wheat (MY: December-November), corn (MY: March-February) and soybeans (MY: April-March). In the specific case of the soybean product, an additional balance is made in order to forecast the destination of crushing, which results mainly in the production of soybean oil and meal. Out of that production, exports of both products are forecast, as well as its domestic consumption. Based on what was previously explained, it is important to emphasise that, in case of performing export forecasts for a specific year, the months of two different trade cycles must be considered, due to the fact that supply and demand forecasts do not match the calendar year.

As for the second item, the seasonality of exports is forecast according to their historical pattern, after the data published by the National Institute of Statistics and Census (INDEC, for its acronym in Spanish). It is important to underline that the INDEC summarizes the transactions between residents and non residents regarding different products on a monthly basis, using the method of balance of payments. In that sense, the transactions of the balance of payments are registered taking into consideration the “accrual method”, regardless of the moment of its collection or payment (“cash accounting method”). In this way, the monthly forecast values in export FOB price refer to the concretion of operations between residents and non residents in the periods under consideration, without necessarily implying the effective income of foreign currency in the exchange market. It is appropriate to clarify this because differences may come up between the export values of the products under consideration and the currency settlement data published by the Central Bank of the Argentine Republic (BCRA, for its acronym in Spanish) about the related sectors. Next, the seasonality results used in the export forecasts of the main grains (soybean, wheat and corn) are shown.

Regarding the third assumption under consideration, the future trajectory of the relevant products is forecast based on the official FOB values and the FOB “market” premiums reported by international brokers (JJ Hinrichsen, Cosur, Agrosud, among others). Last, we need to stress that in the case of soybean, forecast imports of the grain must be subtracted in order to obtain the net exports of the grain, since Argentina usually purchases grain abroad in order to industrialise it locally. In that case, forecasts of the CIF import values are made using the forecast export FOB value for each month, weighed by the quotient between the import CIF values average obtained during the previous year and the FOB obtained.

Productive and trading balance

Soybean, Corn and Wheat Trading Indicators - Current Crop Season

- **Soybean:** five months into the start of crop season 2020/21, the export sector has purchased 7.5 Mt of the oilseed, while it has declared exports for 5.2 Mt, below the volume committed by the same date both on the previous crop and the average of the last five years. Effective exports, on their part, totaled 4.5 Mt, considerably below the 6.4 Mt that had already been exported by the same date last year. As for the industry, the sector has already acquired 21.9 Mt of soybean, below the level of purchase of the previous crop and of the average of the last five years. Also, the sector has industrialized 16.5 Mt of soybean during the first five months of the crop,

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exceeding the industrialization rate of the previous crop season and the average of the last five crop seasons.

In this way, 29.48 Mt of soybean 2020/21 have already been traded. Considering that 7.5 Mt are forecast to be destined as seed and for animal consumption, there are still available for purchase 8.1 Mt of the 45 Mt obtained during the crop season, which equals to 18% of the production, a lower ratio to the one recorded by the same date last year, and to the average of the last five crop seasons. It is clear that the lower volume of soybean traded is solely due to the lower production of the crop, and no lower rate of soybean trading can be observed, but quite the opposite.

- **Corn:** by September 8, 39.7 Mt of corn have been traded, which is a record for this moment of the year. The export sector has acquired 36.92 Mt, exceeding the volume of purchases made by the same date not only in the previous crop season but the average of the last five years as well. Besides, 35.9 Mt have been declared as foreign trade, exceeding also the pace of crop season 2019/20 and that of the last five years. Actual exports to date totalize 25.9 Mt, below the volume shipped in the previous crop. As for the industry, this sector has acquired 2.8 Mt, of which 1.5 Mt have already been processed, exceeding the industrialization rate from the previous year.

13% of what has already been traded still needs to be quoted, equivalent to 4.4 Mt. Considering that the crop production is forecast in 51 Mt, this equals 9% of the total of grain obtained during the current crop season.

- **Wheat:** of the 17 Mt obtained during the current crop season, 93% have already been traded, that is to say, 15.8 Mt. The export sector has acquired 12.1 Mt of wheat, while exports have been declared for 10.5 Mt. Effective exports to date totalize 8.9 Mt, so there still need to be shipped abroad 1.6 Mt of the total declared. As for the milling sector, it shows a more lethargic purchase rate than in previous years: it has acquired 3.7 Mt, 500,000 t less than by the same date the previous year. The industrialized total since the beginning of the crop season to date rises to 3.9 Mt, below the figure reached by the same date last year.

Bearing in mind that 0.9 Mt of wheat will be destined for use as seed and for animal consumption, the availability of the grain is only 0.2 Mt, that is to say, 1% of production. Last, taking into account the tons that still have to be sold plus the tons still unquoted, 8% of the production still needs to be quoted.

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By Sep-8 th each year Week nr. 37		SOYBEANS			CORN			WHEAT			
		2020/21	2019/20	5-Year Avg.	2020/21	2019/20	5-Year Avg.	2020/21	2019/20	5-Year Avg.	
COMPARISON BETWEEN MARKETING YEARS	SUPPLY	Beginning Stocks * (1)	11,4	7,7	6,7	6,8	6,9	7,7	2,5	2,0	2,2
		Production * (2)	45,0	50,7	51,0	51,0	51,5	35,9	17,0	19,5	18,2
		Imports (3)	5,0	4,9	4,0	-	-	-	-	-	-
		TOTAL SUPPLY (4 = 1 + 2 + 3)	61,3	63,3	61,7	57,8	58,4	43,5	19,5	21,5	20,5
	DEMAND	Exporting Sector Purchases ** (5)	7,5	7,7	8,8	36,9	33,6	24,0	12,1	15,4	11,7
		Export Sales **	5,2	6,3	6,4	35,9	31,9	24,5	10,5	12,3	10,6
		Exports-to-date	4,5	6,4	5,9	25,9	28,4	20,5	8,9	11,5	10,3
		MY Total Exports (Est.)	5,0	6,6	7,4	37,0	36,2	25,3	10,2	11,9	11,6
		Needs to acquire	-2,5	-1,1	-1,4	0,1	2,6	1,3	-1,9	-3,5	-0,1
		Industrial Sector Purchases	21,9	23,6	24,6	2,8	3,3	3,5	3,7	4,2	4,0
		Industrialized-to-date	16,5	14,9	15,6	1,2	1,0	1,1	3,9	3,6	3,4
		MY Total Industrial Use (Est.)	38,0	37,8	39,9	3,7	3,3	3,5	5,7	6,2	5,9
		Needs to acquire	16,1	14,3	15,3	0,8	0,0	0,0	1,9	1,9	1,9
		Feed, Seed and Residual Use	7,5	7,5	6,5	12,0	11,9	7,6	1,0	0,9	0,9
	Deferred pricing contracts (Expo+Ind) (7)	18%	26%	21%	13%	12%	10%	7%	5%	4%	
	STOCKS	Available stocks*** (7 = 2 - 5 - 6)	8,1	12,0	11,1	-0,7	2,7	0,8	0,2	-1,0	1,7
		% of output	18%	24%	22%	-1%	5%	2%	1%	-5%	9%
		Volume still not priced	13,5	20,0	18,3	4,4	7,1	3,5	1,4	0,0	2,2
	% of output	30%	39%	36%	9%	14%	10%	8%	0%	12%	

*Source: Rosario Board of Trade
** Source: Ministerio de Agricultura, Ganadería y Pesca. (MAGyP)
(3) For current Marketing Year, it includes shipments up to Jun-6, as reported by NABSA. For previous years, total monthly exports are included.
***Excluye el stock inicial. En el caso de la soja tampoco se contempla la importación del grano.
Source: Economic Studies Dept.- Rosario Board of Trade, based on information provided by MAGyP and own estimates.

Soybean, Corn and Wheat Trading Indicators - New Crop Season

- Soybean:** the domestic trade of soybean 2021/22 shows a lower pace with regards to what happened in previous years. The export sector has acquired 300,000 t of soybean, in line with what occurred by the same date last year, and behind the average of the last five crop seasons. However, industry purchases are below the volume acquired not only in the previous season, but also below the average of the last five crops by the same moment of the year. As for exports, there are still no operations on record, just as last year.

Considering that the forecast production for the new crop rises to 49 Mt and that the use destined to seed and animal consumption totals 7.5 Mt, 39.8 Mt are available for purchase, which equals to 81% of the forecast production.


- Corn:** the export sector has acquired 6.4 Mt of the grain 2021/22, exceeding the purchase volume of last year as well as the average of the last five years. Besides, it is the second highest volume traded by the same date for previous crops, only behind what happened in 2019/20. The industrial sector does not register purchases of new crop corn to date. As for exports, 4.6 Mt of corn have already been declared to be exported in the next crop. Although until the previous month the declared volume hit a record for the moment of the year, the slowdown of the last few weeks causes anticipated export sales to be exceeded today by the sales declared during crop 2020/21.

Considering that the total production for the new crop is forecast in 56.1 Mt, and that the volume destined as seed and for animal consumption rises to 12.1 Mt, there are still available for purchase 37.5 Mt, which equals to 67% of the forecast production. Also, 45% of what has already been traded is still unquoted, above the volume of last year and of the last five years.

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- Wheat:** domestic trade of wheat 2021/22 shows an uneven outlook between the export and the milling sectors. Exports-wise, purchases reach 6.4 Mt, which exceeds considerably the rate of purchase both with regards to last crop as to the average of the last five crop seasons. Also, it is the highest volume of new crop wheat bought for export by this time of the year. The milling sector, in the meantime, has made almost no purchases of new crop wheat, showing a more sluggish rate of purchases than in previous years. This is in line with what was observed for wheat in the current crop season since, as mentioned before, purchases made by mills are lower than the ones made in previous years. As for exports, operations for 5.2 Mt have already been declared, 51% more than during the previous crop.

Last, considering that the production of the current crop is forecast in 20.5 Mt, and that 1 Mt will be destined as seed and for animal consumption, only 13.1 Mt are available for sale, equivalent to 64% of the production. Another aspect to highlight is that 29% of the production has already been set a price, exceeding the volume of last year and that of the last five years.

		 Trading indicators - New Crop. Million Metric Tons									
By Sep-8 th each year		SOYBEANS			CORN			WHEAT			
Week nr. 37		2021/22	2020/21	5-Year Avg.	2021/22	2020/21	5-Year Avg.	2021/22	2020/21	5-Year Avg.	
COMPARISON BETWEEN MARKETING YEARS	SUPPLY	Beginning Stocks * (1)	10,9	11,4	7,9	4,9	6,8	6,8	2,7	2,5	2,2
		Production * (2)	49,0	45,0	48,9	56,1	51,0	44,8	20,5	17,0	18,2
		Imports (3)	5,0	5,0	4,7	-	-	-	-	-	-
		TOTAL SUPPLY (4 = 1 + 2 + 3)	64,9	61,3	61,5	61,0	57,8	51,6	23,2	19,5	20,5
	DEMAND	Exporting Sector Purchases ** (5)	0,3	0,3	0,7	6,4	6,3	4,9	6,4	4,3	3,9
		Export Sales **	0,0	0,0	0,1	4,6	5,3	3,3	5,2	3,3	3,0
		MY Total Exports (Est.)	7,3	5,0	6,6	39,0	37,0	31,8	13,0	10,2	11,6
		Needs to acquire	7,0	4,7	5,9	32,6	30,7	26,8	6,6	5,9	7,7
		Industrial Sector Purchases	1,4	1,5	1,8	0,0	0,1	0,1	0,0	0,1	0,1
		MY Total Industrial Use (Est.)	38,5	38,0	38,9	3,4	3,7	3,6	6,2	5,7	5,9
		Needs to acquire	37,1	36,5	37,1	3,3	3,6	3,5	6,2	5,6	5,8
	Feed, Seed and Residual Use	7,5	7,5	6,9	12,1	12,0	9,7	1,0	1,0	0,9	
	Deferred pricing contracts (Expo+Ind) (7)	60%	88%	64%	42%	36%	35%	22%	24%	20%	
	STOCKS	Available stocks*** (7 = 2 - 5 - 6)	39,8	35,7	39,5	37,5	32,5	30,1	13,1	11,6	13,3
		% of output	81%	79%	81%	67%	64%	67%	64%	69%	73%
Volume still not priced		40,8	37,3	41,1	40,2	34,8	31,8	14,5	12,7	14,1	
	% of output	83%	83%	84%	72%	68%	71%	71%	75%	77%	

*Source: Rosario Board of Trade
 ** Source: Ministerio de Agricultura, Ganadería y Pesca. (MAGyP)
 ***Excluye el stock inicial. En el caso de la soja tampoco se contempla la importación del grano.
 Source: Economic Studies Dept.- Rosario Board of Trade, based on information provided by MAGyP and own estimates.

Supply and demand balance forecast of Soybean, Corn and Wheat.

- Soybean:** the balance sheet of soybean 2020/21 shows modifications with regards to the supply of the oilseed. Initial stocks have been adjusted, going from 14.1 Mt to 11.4 Mt. Given that the rest of the components both of supply as of demand remain unmodified, initial stocks go from 13.5 Mt to 10.9 Mt.

As for soybean 2021/22, with regards to supply, initial stocks are forecast in 10.9 Mt, imports are forecast in 5 Mt, and production in 49 Mt. Therefore, total supply is forecast in 64.9 Mt, exceeding by 3.5 Mt the current crop's supply. With regards to demand, the total use of grain is forecast in 53.3 Mt. Out of this total, 7.3 Mt are destined to export, 38.5 Mt to industrial use and 7.5 Mt to use as seed and for animal consumption. Initial stocks reach 11.6 Mt, growing with regards to crop season 2020/21. However, given the higher demand, the stock/consumption ratio remains stable between crop seasons.

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- Corn:** the balance sheet of corn 2020/21 presents a slight increase of 0.1 Mt in initial stocks. The domestic use of the cereal drops by 0.4 Mt, reaching 15.9 Mt. This is due to a cut in the forecast of use as seed and for animal consumption (↓ 0.3 Mt) and a reduction in the industrial use forecast (↓ 0.1 Mt) due to a lower industrialization rate. Also, a 1 Mt increase in the exports of grain is forecast, therefore reaching 37 Mt during the crop season. Given that the cut in the domestic use is lower than the increase in exports, stocks fall from 5.5 Mt to 4.9 Mt.

With regards to corn 2021/22, the total supply reaches 61 Mt, with production totalizing 56.1 Mt (historical maximum) and stocks at the start of the crop forecast in 4.9 Mt. As for the use of the cereal, exports for 39 Mt are forecast, which also sets a historical record. Domestic consumption is forecast in 15.7 Mt, 12.3 Mt of which are destined for farm consumption and for use as seed, and 3.4 Mt for industrial use. In this way, the total demand adds up to 54.7 Mt, increasing by 3% crop-on-crop. Final stocks grow with regards to crop season 2020/21 and are situated at 6.3 Mt, which is why the stock/consumption ratio also rises, reaching 12%.

- Wheat:** the wheat balance sheet 2020/21 presents a slight increase in the forecast of exports, that go from 10 Mt to 10.2 Mt, due to a higher rate of export sales. Since no other modifications were made either on the side of supply nor use, final stocks of the crop season fall by 200,000 t to 2.7 Mt.

With regards to wheat 2021/22, a total production of 20.5 Mt is forecast in the country, a historical maximum for the cereal. In this way, considering that stocks at the start of the crop season are estimated in 2.7 Mt, the total supply reaches 23.2 Mt. As for domestic demand, wheat destined to meal and animal feed reaches 6.2 Mt, increasing by 500,000 with regards to crop season 2020/21. The use as seed remains identical to the previous crop in 1 Mt. Exports, however, are forecast in 13 Mt, as a consequence of the higher production obtained. In this way, the total demand adds up to 20.1 Mt. Final crop stocks are 3 Mt, increasing with regards to last crop season. However, given the higher use, the stock/consumption ratio is forecast to drop to 15%.

Supply and Demand Estimates

By August 17 th, 2021

		Wheat				Corn				Soybeans				
		5-Year Avg.	2019/20	2020/21 e	2021/22 p	5-Year Avg.	2019/20	2020/21 e	2021/22 p	5-Year Avg.	2019/20	2020/21 e	2021/22 p	
SUPPLY	Planted Area	Mha	5,6	6,8	6,5	6,9	5,7	7,3	7,4	7,9	17,2	18,3	16,9	16,2
	Harvested Area	Mha	5,4	6,5	6,0	6,7	4,8	6,3	6,4	6,9	16,6	17,4	16,2	15,9
	Area Lost	Mha	0,2	0,3	0,6	0,2	1,0	1,0	1,0	1,0	0,6	0,9	0,7	0,3
	Yield	t/ha	3,1	3,0	2,9	3,1	7,5	8,2	8,0	8,1	3,1	2,9	2,8	3,1
	BEGINNING STOCKS	Mt	3,2	2,0	2,5	2,7	7,7	6,9	6,8	4,9	7,7	6,7	11,4	10,9
IMPORTS	Mt									4,9	4,0	5,0	5,0	
PRODUCTION	Mt	17,1	19,5	17,0	20,5	35,9	51,5	51,0	56,1	50,7	51,0	45,0	49,0	
TOTAL SUPPLY		Mt	20,3	21,5	19,5	23,2	43,5	58,4	57,8	61,0	63,3	61,7	61,3	64,9
DEMAND	DOMESTIC CONSUMPTION	Mt	6,8	7,1	6,6	7,1	11,2	15,4	15,9	15,7	45,3	46,4	45,5	46,0
	Industrial Use	Mt	5,9	6,2	5,7	6,2	3,5	3,3	3,7	3,4	-	-	-	-
	Seed and other uses	Mt	0,8	0,9	1,0	1,0	-	-	-	-	-	-	-	-
	Feed, Seed and Residual Use	Mt	-	-	-	-	8,6	12,1	12,2	12,3	-	-	-	-
	Crushings	Mt	-	-	-	-	-	-	-	-	37,8	39,9	38,0	38,5
	Feed, Seed and Residual Use	Mt	-	-	-	-	-	-	-	-	7,5	6,5	7,5	7,5
	EXPORTS	Mt	11,3	11,9	10,2	13,0	25,3	36,0	37,0	39,0	6,6	7,4	5,0	7,3
TOTAL DEMAND		Mt	18,0	19,0	16,8	20,1	36,4	51,4	52,9	54,7	51,9	53,8	50,5	53,3
ENDING STOCKS	Mt	2,3	2,5	2,7	3,0	7,1	7,0	4,9	6,3	11,4	7,9	10,9	11,6	
STOCKS/USE RATIO	(%)	13%	13%	12%	12%	19%	14%	9%	12%	22%	15%	22%	22%	

Source: Economic Studies Department - Rosario Board of Trade

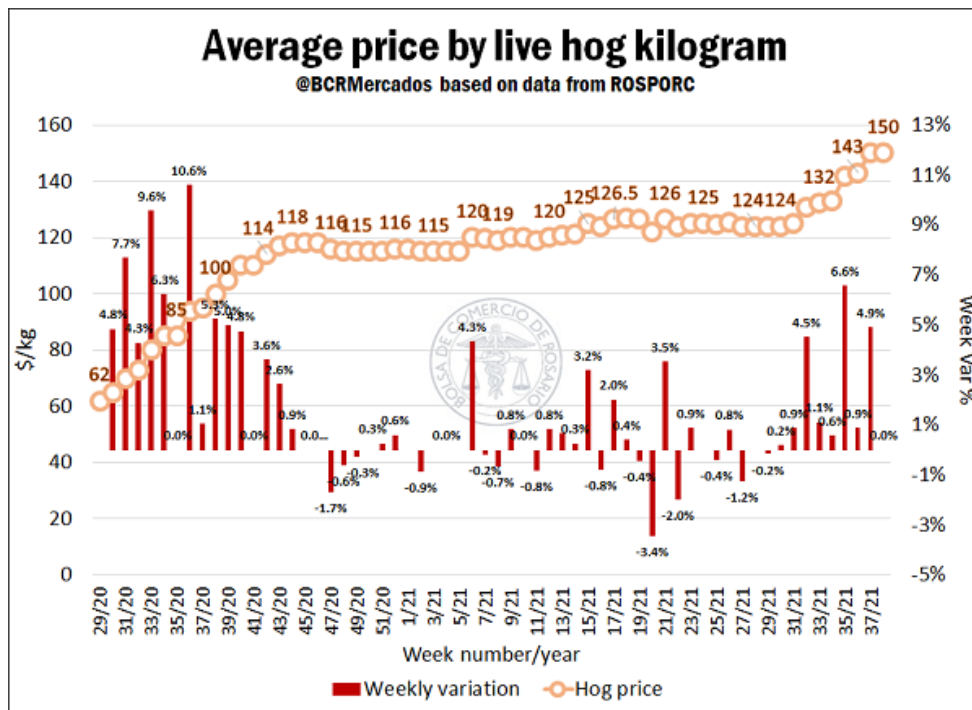
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LIVESTOCK MARKET

ROSPORC – Lean Hog Quote

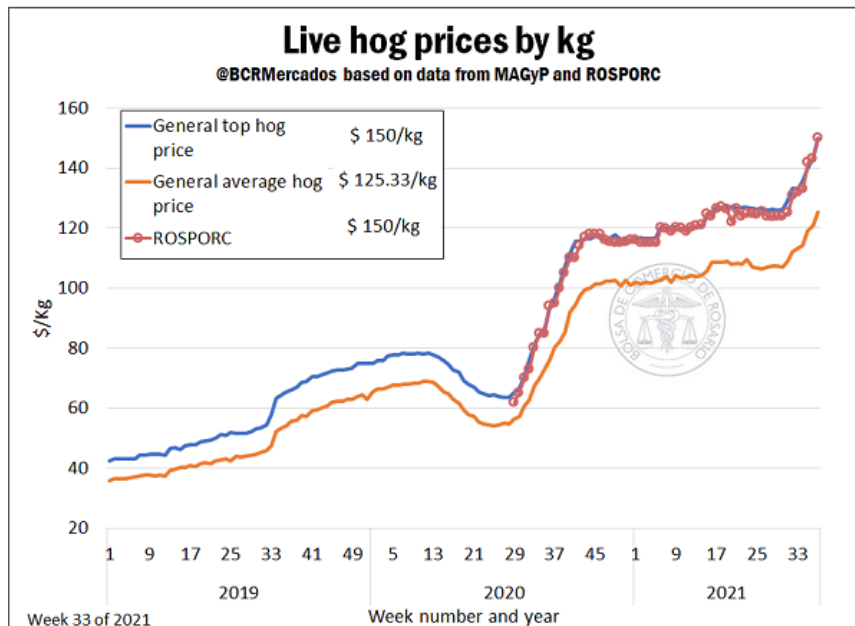
ROSPORC, the first electronic trading platform of swine in Argentina, was developed by the *Rosario Board of Trade (BCR)*, which allows users to buy and/or sell swine with great ease.

At ROSPORC, the main segment traded is the hog and, for delivery on the 38th week of 2021, that is to say, between September 12th and 18th, the average quote reached a value of \$ 150/kg. This value is the same obtained for the average of operations last week. However, with regards to the \$133/kg obtained a month ago, current quotes represent an increase close to 13%, being the highest increase of producer prices this year to date. In order to obtain increases higher than the ones registered this last month, we need to go back to October 2020, when the prices of live hogs rose by 14% in comparison to the previous month.



The **average quote** of ROSPORC operations presents a high correlation to the hog maximum quote published by the Argentinian Ministry of Agriculture, Livestock and Fisheries (MAGyP, for its Spanish acronym). In that sense, the value published by MAGyP for week 37 (September 6 to 12) for general maximum live hog was \$150/kg, while on the ROSPORC platform the value for the same week was also \$150/kg.

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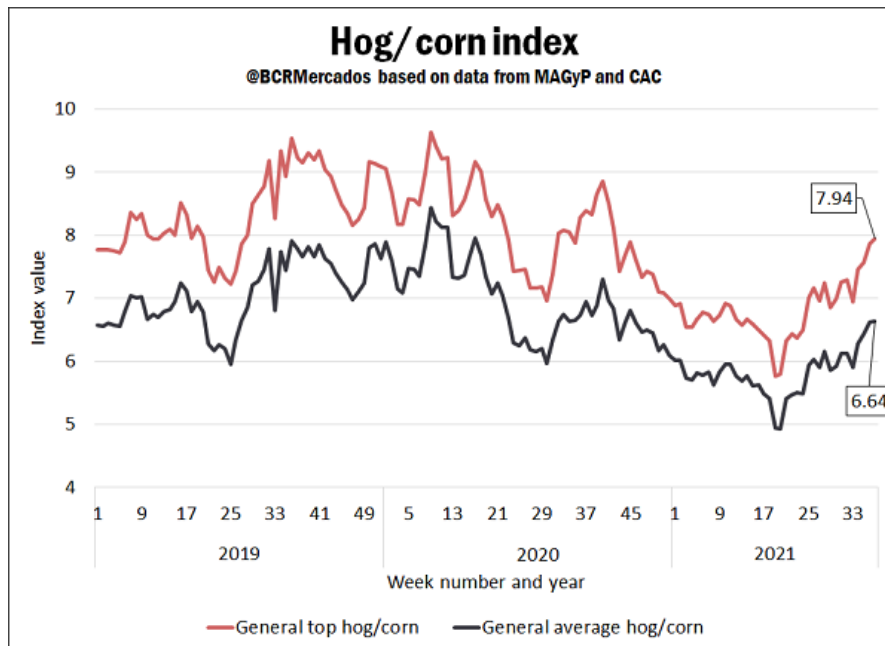


Main indexes of sector reference

Bearing in mind that, according to different analysis and studies made on the pork market, swine feed represents between 60 and 70% of the production costs, the prices of those inputs and their evolution are variables of the utmost importance for pig breeding. This way, due to the fact that these animals' diet is mainly based on corn and soybean by-products, we present the following indexes commonly used within the sector:

- Hog/corn index:** this indicator captures the relation between the price of the hog in the domestic market and the price of corn through time, and it results from dividing the price of hog by the kilogram of corn. In this way, it conveys how many kilograms of corn can be bought with the proceedings per kilogram of the sale of live hogs at a certain point in time. Since 2019, a high volatility of this index was observed, which then started a downwards trend that started during the first months of 2020. Later, on week 19 of 2021 there were reached minimum values since 2019 for the **general maximum live hog/corn** ratio, hitting a value of **5.76**, and later recovering ground after the decrease in the price of the cereal, recording an index of **7.94** during week 37, that is to say, a 38% increase in almost 4 months. In a similar way, the formulated index with the **general average price live hog** during week 20 of 2021 got the lowest record since 2019, getting to a value of **4.93**. From that point onwards, there has been a remarkable recovery on the mentioned index, hitting during week 37 a value of **6.64**, and resulting in a 35% increase.

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- **“5 kg of corn + 2 kg of soybean mix”**: in the sector, this indicator is frequently used in order to reach a more precise approximation to the relation between the value in pesos of a kilogram of live hog and the value of the mixed diet usually used for hog breeding (market value of 5 kg of corn and 2 kg of soybean). It is a market convention upon which we make no judgement, but simply calculate as an additional indicator for decision-making.

It assumes a reference of which should be the theoretical price that hog should have regarding the price of these two essential grains for animal feed: corn and soybean.

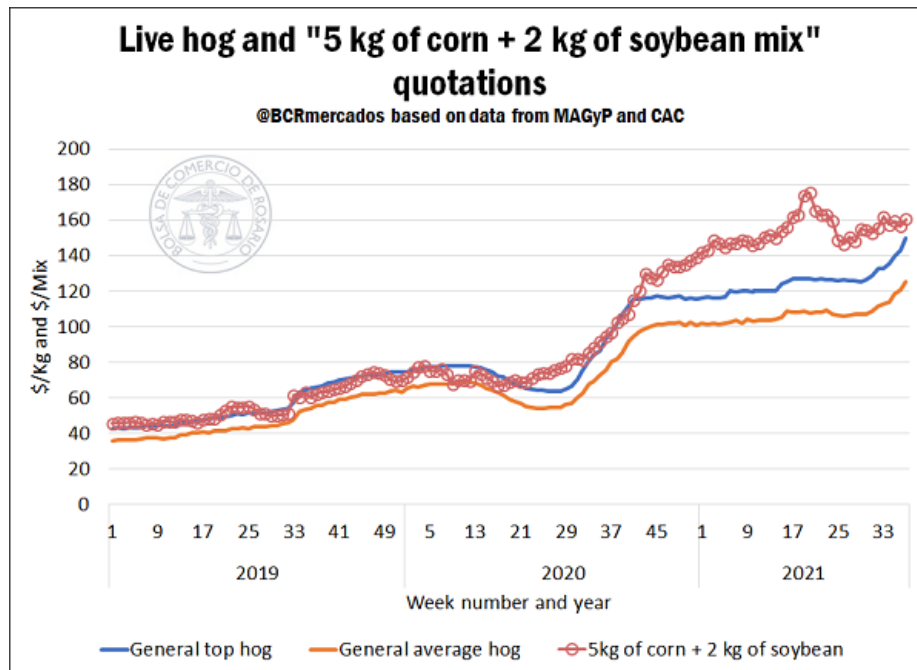
In the chart, three variables are compared:

- Price in pesos of “5 kg of corn + 2 kg of soybean mix”
- Maximum price in pesos of live hog.
- Average price in pesos of live hog.

By analysing period 2019-2021, we can see a gap in the theoretical price (maximum or average) in relation to the mentioned “Mix”, particularly from the last months of 2020. During week 20 of 2021, the maximum value for the “Mix” was registered, with a value of \$ 175.6, with a subsequent drop of the index. Until week 37, this index has receded almost \$15, to finally set at \$160.8.

At present, the differential between the theoretical “Mix” and the value measured by MAGyP for general maximum live hog is approximately \$11 for this last week, which shows an evident reduction of the theoretical delay that was present weeks ago between the prices per kilogram of live hogs, given the prices of soybean and corn. It must be highlighted that since the highest gap seen during week 20 (\$47/kg) to the present, this difference has been reducing, so it can be affirmed that the productive outlook has tended to improve. On the other hand, the ratio obtained from the general maximum live hog price and the 5+2 Mix is 0.93. That is to say, the maximum live hog typified has a price 7% lower than what is marked by this indicator.

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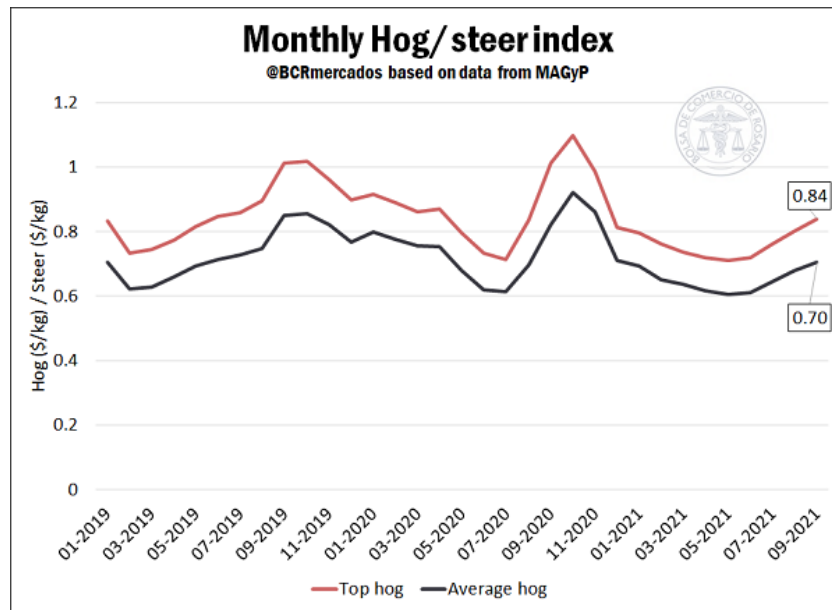


- Hog/steer index:** following a similar methodology to that of the hog/corn index, where the evolution of relative prices between the final product (hog) and its main input (corn) is reflected, in this case we analyse the performance showed since year 2019 by the live kilogram prices of beef and pork. They are two final foodstuff products, key exponents of the domestic meat trade. In this sense, hog prices per kilogram measured by MAGyP are used again, while for the value of steer we used the monthly quotes measured by Mercado de Liniers S.A. cattle market. For that purpose, we divided the value of live hog per kilogram by the value of steer (also, per kilogram), considering monthly average values in both cases. The index **shows how many kilograms of steer are needed to buy a kilogram of live hog in the markets.**

In the following graphic, it can be observed that the relationship between the prices of these two substitute products has been maintained (from year 2019 to the present) in a range going from 0.6 to the unit (although that value has been exceeded in 4 opportunities), with periods of relative increases of the hog on the second half of the years 2019 and 2020. Specifically, in October 2020 the maximum value of the series since 2019 was recorded, reaching a value of 1.1 between the general maximum live hog and the steer.

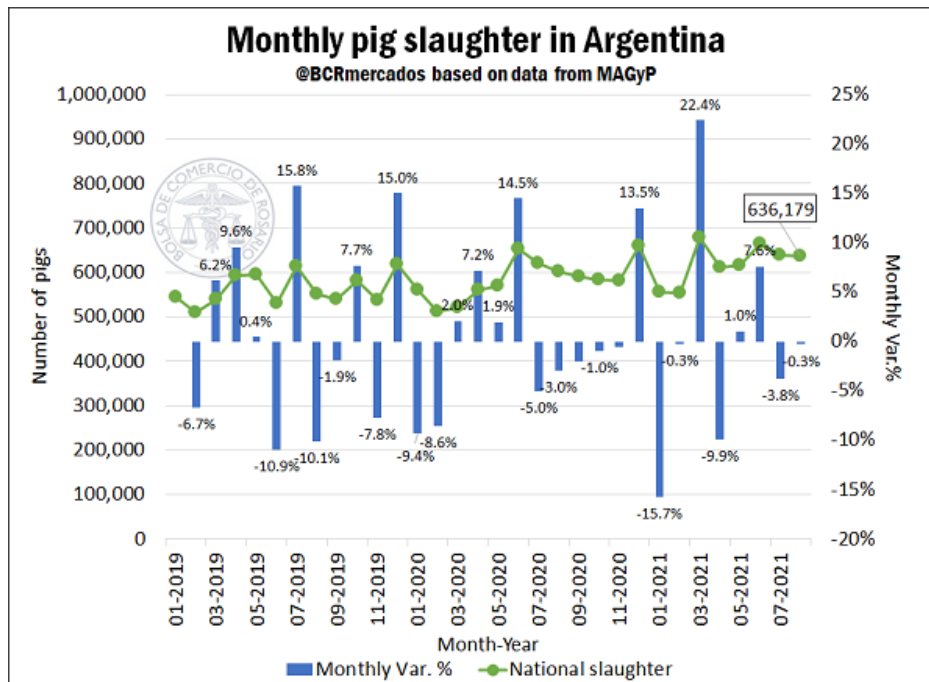
From that moment until May, the index has been dropping until in May it reached a value of 0.71 for the general maximum live hog/steer ratio and of 0.61 for the general average live hog/steer ratio, which results in a relative cost reduction of pork versus beef. However, since June 2021 until the present, a recovery of the value of hogs versus steer has been observed, due, on the one hand, to the measures taken by the National Government, which reduced the quotes of live steer, while that the pork market has presented a rise in prices during the last month, resulting in an increase in the **general maximum live hog/steer ratio up to 0.84 and 0.7 for the general average live hog/steer ratio.**

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Activity indicators

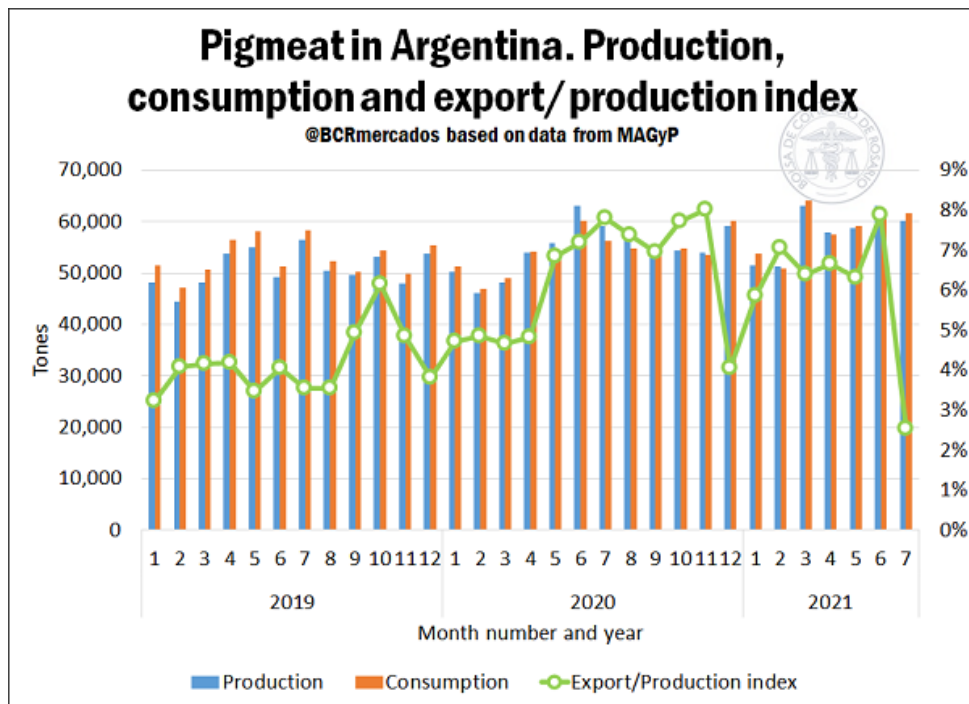
- Slaughter** on a national level in the month August 2021 reached 636,179 hogs, slightly below the 638,000 hogs registered in July, according to MAGyP records. However, the number of hogs processed during the same month of 2020 is exceeded by 5.8%. At the same time, this year to date slaughter exceeds 4,950,000 hogs, far above the almost 4,600,000 hogs slaughtered during the same period (January-August) a year ago. This record shows the strong growth the sector has been achieving year after year in the national slaughter, heading to be a year of record production of pork in Argentina.



- As for **production**, in July there were produced 60,122 tons (bone-in beef equivalent) of pork, representing a year-on-year rise of 1.5%, although there is a drop of 3,000 tons with regards to the previous month. On the other hand, the production of pork in 2021 to date is the highest in Argentina in comparison with similar periods in

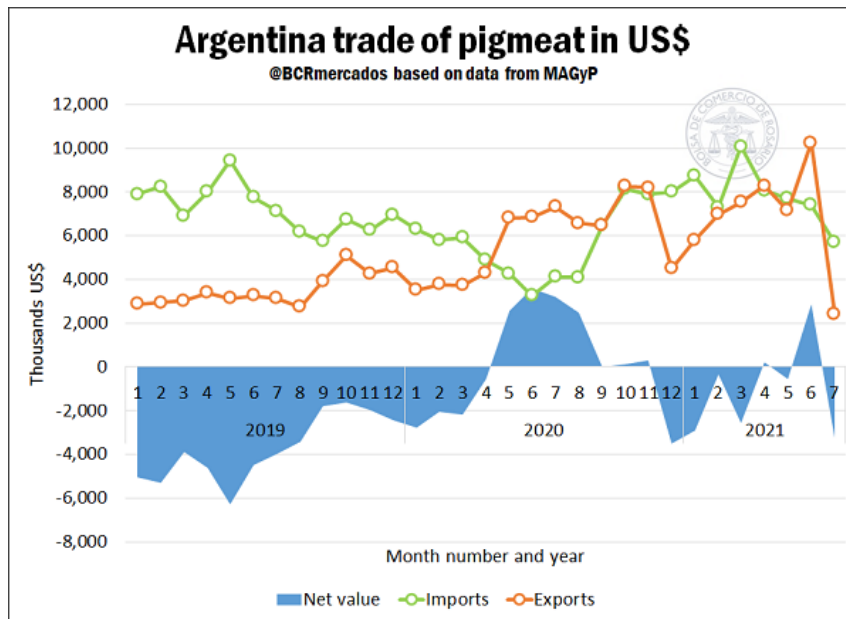
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previous years. That is to say, with the 405,519 tons of pork generated until July 2021, the record held in 2020 for the same period is exceeded by 7.7%. Also, Argentina's **apparent consumption** in July was of 61,664 tons of pork, which shows a slight increase of 0.4% regarding the previous month, while in year-on-year terms, it represents a rise of 9.7%. In line with the productive rise of the last few years, domestic consumption also shows a sustained increase and reaches in 2021 a record for the first 7 months of the year, with a total of 408,000 tons absorbed domestically.

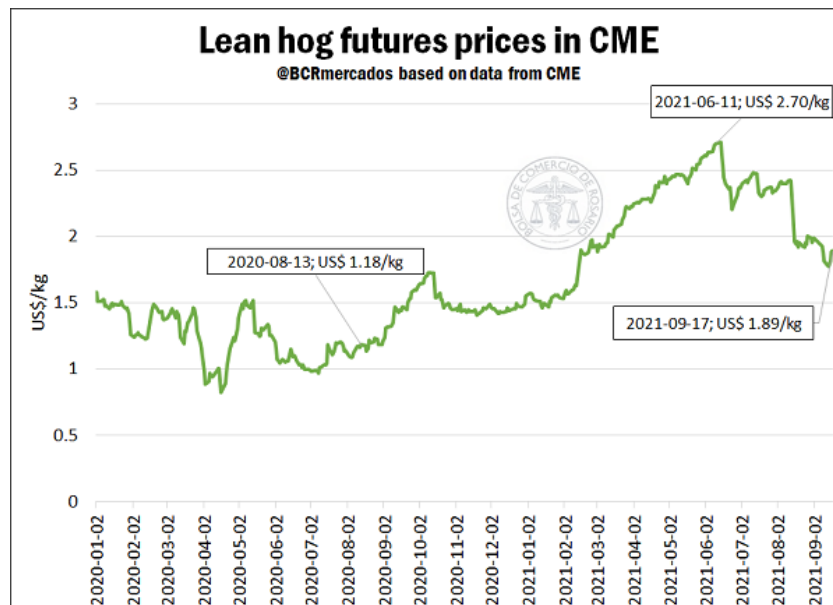


- On the other hand, national **exports** during period January-July 2021 represented on average a 6.1% share of the production, above the figure of 2020, when this ratio was 5.8%. This emphasises a higher integration of Argentinian pork exports and makes it possible to propose a scenario where the necessary incentives are generated to drive the production due to the higher dynamism of the domestic and external demand.
- The **trade balance** of the pork sector registered in July the highest trading deficit of the year measured in dollars, with a net exit of foreign currency for US\$ 3.26 million. Although in tons the exports exceeded the imports, the average value per ton of imports exceeds the average value of exports. Although the strengthening of the export facet of the pork sector makes it possible to partially revert the historical deficit of the trade balance, in year 2021, 5 of the 7 months have presented negative results and to date, the accrued deficit results in a negative balance of almost US\$ 6.5 million.

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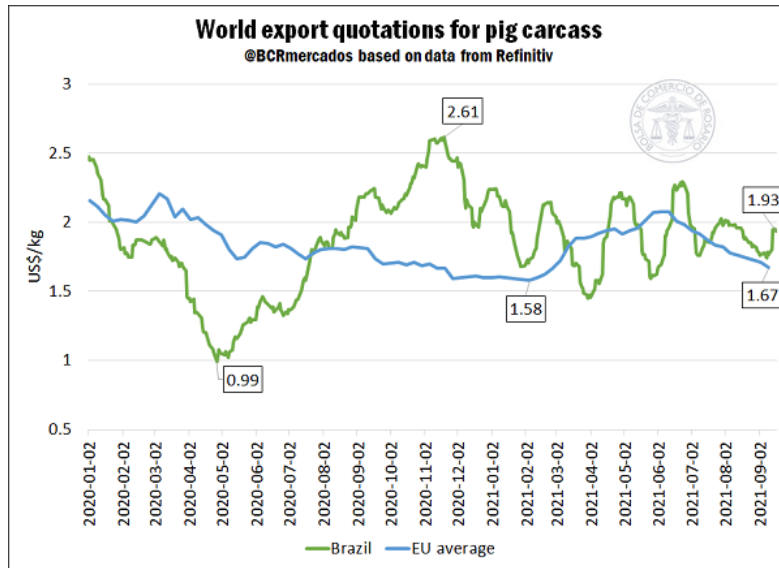
- Bearing in mind that the United States is one of the main producers and exporters of pork on international level, at the same time that their financial and futures system is a world-reference in regards to commodity quotes. Regarding the futures of lean hog operated on the Chicago Mercantile Exchange, these have presented a huge rise in their quotes since mid-2020. Since the minimum value reached at the beginning of 2020, (April 16 2020, US\$ 0.82/kg), there has been a 229.2% increase in the values of these contracts until June 11, reaching US\$ 2.71/kg. From that point on, there has been a drop in quotes, currently reaching US\$ 1.89/kg or 30% below June's maximums. However, in year-on-year terms, there has been a 29% increase, since on September 17, 2020, the kg of live hog for those futures had a quote of US\$ 1.46/kg.



- Meanwhile, considering other export values, it is worth mentioning the evolution of quotes in **Brazil and the European Union**. As for Brazil, according to data by the Brazilian Centre for Advanced Studies on Applied Economics (CEPEA, for its Portuguese acronym), the quotes of pork carcass dropped during the last few weeks, reaching US\$ 1.94/kg. Also, according to the **Directorate-General for Agriculture and Rural Development**, the export price average of pork carcasses in Europe keeps above last year's figures, with a value of US\$ 1.67/kg

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by September 10 this year.



- Going back to the local market, the slaughter of porks in the province of **Santa Fe** reached 123,694 hogs in August. This record is above the 123,441 hogs slaughtered in July, resulting in a 0.2% increase, while in year-on-year terms, there is a 9.5% increase, due to the fact that in August 2020 113,011 hogs had been slaughtered. On the other hand, the province's share within the national slaughter remained constant in relation to July, processing 19.4% of the hogs of the country. Also, the shares of previous years were exceeded, due to the fact that in 2020 there were processed 8.8% of the pigs slaughtered in Argentina. The province's share of hog slaughter in accumulated terms in 2021 to date is of 19.6% hogs, improving the records of 2019 (17.67%) and 2020 (18.53%) in the first 8 months of the year.

