

## Rosario Board of Trade (BCR) Market Outlook – December 2021

### Executive Summary

#### Grain Market

- The trend persists and November closes with record exports for the month. Therefore, during the first 11 months of 2021, exports of the main products of the agribusiness sector reached a record for the same month in previous years. On the other hand, export forecasts for 2022 reach US\$ 35,966 million, US\$ 1,002 million below 2021.
- The total corn 2020/21 traded amounts to 45.9 Mt, an absolute record for this moment of the year.
- There have been changes in the balance sheets of corn and wheat.

#### Pig Market

- ROSPORC: The price of “5 kg of corn + 2 kg of soybean mix” goes up at the same rate as the price of hog.
- The trading deficit of the pork sector until October reaches US\$ 34,3 million.
- The value of steer reflects the seasonal pressure facing the end-of-year celebrations.
- The consumption of poultry meat per capita might end 2021 being the second highest record in history.

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

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## Rosario Board of Trade (BCR) Market Outlook – December 2021

### GRAIN MARKET

#### Exports

#### Export forecast of the main agribusiness products

The export forecast of the main products from the agribusiness sector for 2021 reaches **US\$ 37,504 million**, US\$ 536 million above November's forecast. This is mainly due to a rise in the export price forecasts for biodiesel, soybean meal and corn grain, which overcompensates the lower prices received for sunflower and barley.

In this way, the exports of soybean complex for the current year are forecast at US\$ 22,969 million, the corn complex at US\$ 8,848 million, and the wheat complex would contribute US\$ 3,468 million. The sunflower complex and the barley complex will generate shipments for US\$ 1,265 and US\$ 995 million, respectively.

Forecasts for 2022 reach **US\$ 37,491 million**, US\$ 1,525 million above November's estimation and only **US\$ 14 million below than the present year's forecast**. The lower forecast export prices for soybean and sunflower oil are overcompensated by an increase in the prices forecast to be received for the rest of the main products of the agribusiness sector, particularly soybean meal, wheat and corn grain. In addition, an increase in the forecast exported volume of wheat given the higher production also helps to explain the improvement in the forecast value of exports.

### Main Exports of the Agricultural Sector.

Million US\$

	2019	2020	2021		2022		Var. USD
			November	December	November	December	2022 vs 2021
			Estimate	Estimate	Estimate	Estimate	
Soybean, Oilseed	3,440	2,317	2,869	2,846	3,284	3,352	415
Soybean Meal	9,045	7,754	11,570	11,687	9,155	9,371	- 2,415
Soybean Oil	3,493	3,788	6,977	7,064	6,870	6,389	- 107
Biodiesel	775	442	1,066	1,371	1,379	1,667	313
Corn	5,925	6,023	8,710	8,848	8,819	9,533	109
Wheat	2,450	2,114	3,226	3,283	3,915	4,593	688
Wheat Flour	215	194	180	185	183	192	3
Sunflower Seed	70	96	117	118	83	85	- 33
Sunflower Meal	165	98	181	200	184	183	3
Sunflower Oil	686	444	964	947	1,004	976	40
Malting Barley	329	281	358	262	331	345	- 27
Feed Barley	370	219	485	408	494	523	9
Malt	284	211	265	285	266	282	1
<b>Total Exports</b>	<b>27,244</b>	<b>23,981</b>	<b>36,968</b>	<b>37,504</b>	<b>35,966</b>	<b>37,491</b>	<b>- 14</b>
<b>Soybean Imports</b>	<b>1,604</b>	<b>1,978</b>	<b>2,393</b>	<b>2,477</b>	<b>2,464</b>	<b>2,400</b>	<b>71</b>
<b>Net Exports</b>	<b>25,641</b>	<b>22,003</b>	<b>34,575</b>	<b>35,027</b>	<b>33,502</b>	<b>35,090</b>	<b>63</b>

Source: INDEC and own estimates. @BCRmercados

Thus, the soybean complex will generate exports for US\$ 20,779 million in 2022, US\$ 2,190 million below the forecast value to be reached in the current year, as a result of lower FOB prices forecast for next year compared to those received in 2021. The corn complex will contribute US\$ 9,533 million, above (US\$ 685 million) the figure for 2021. In this case, the higher tonnage forecast to be exported compensates the lower FOB prices expected for next year. The wheat complex will reach shipments for US\$ 4,784 million, US\$ 1,316 million more than in 2021, as a result of both a higher exportable balance and an increase in the forecast FOB prices. Finally, the sunflower and barley complexes will reach exports for US\$ 1,244 and US\$ 1.150 million, respectively. In the case of the

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oilseed, this will be slightly lower than the value reached in 2021, as a result of the lower FOB prices forecast for oil in particular, while barley will improve its performance by US\$ 195 million as a result of the higher prices forecast for all the products of the complex.

In the following chart the monthly exports of the main products of the agribusiness sector for year 2021 and 2022 are shown. It includes forecast export data from the report Rosario Board of Trade (BCR) Market Outlook – November 2021 and the new forecasts for December.

### Argentina's Monthly Exports Of Main Agro-Industrial Products

million US\$

Mes	2016	2017	2018	2019	2020	2021		2022		2020 vs. 2021	
						October Estimate	November Estimate	October Estimate	November Estimate	Var. USD	Var. %
January <sup>1</sup>	1,793	1,923	1,947	2,086	2,119	2,562	2,562	3,180	3,463	901	35%
February <sup>1</sup>	1,891	1,523	1,610	1,629	1,541	2,210	2,210	2,384	2,550	340	15%
March <sup>1</sup>	1,953	2,019	2,130	2,074	1,890	2,813	2,813	2,889	3,039	227	8%
April <sup>1</sup>	2,130	2,380	2,100	2,306	2,330	3,561	3,561	3,383	3,532	-29	-1%
May <sup>1</sup>	2,847	2,670	2,213	2,977	2,829	3,598	3,598	3,799	3,861	263	7%
June <sup>1</sup>	2,769	2,315	1,991	2,171	2,545	3,709	3,709	3,414	3,461	-248	-7%
July <sup>1</sup>	2,426	2,367	1,931	2,702	2,417	3,826	3,826	3,770	3,819	-7	0%
August <sup>1</sup>	2,868	2,337	1,857	2,254	2,203	3,897	3,897	3,071	3,109	-788	-20%
September <sup>1</sup>	2,083	2,058	1,681	2,473	1,877	3,606	3,606	3,020	3,051	-555	-15%
October <sup>2</sup>	1,983	1,978	1,829	2,348	1,781	2,939	3,070	2,714	2,976	-94	-3%
November <sup>3</sup>	1,934	1,677	1,785	2,207	1,650	2,150	2,378	2,252	2,442	64	3%
Dicember <sup>3</sup>	1,843	1,626	2,120	2,016	798	2,099	2,276	2,091	2,188	-88	-4%
Total Exports	26,521	24,872	23,194	27,244	23,981	36,969	37,504	35,966	37,491	-14	0%

\* trigo, maíz, soja, cebada, girasol, harina/pellets de soja, harina pellets de girasol, harina de trigo, malta, aceite de soja y aceite de girasol.

<sup>1</sup> INDEC official data.

<sup>2</sup> Estimated based on shipments and avg. FOB prices.

<sup>3</sup> Projected based on own estimates.

Regarding the forecasts for the rest of 2021, an element to be highlighted is that, based on the shipments in **November** and the average FOB prices for that month, **the exports of the main products of the sector are forecast in US\$ 2,378 million, an all-time high for that month.** Therefore, the trend persists and, **during the first 11 months of the year, monthly exports of the main products of the sector systematically reached a record for the same month in previous years.** In addition, while wheat threshing progresses and given the high FOB prices of the cereal to date, it is likely that December exports will also reach a historical record for the month and 2021 will close with all its months hitting a record.

On the other hand, regarding the estimates for next year, as in the previous month, the forecast remains that the highest value of exports will be reached in May 2022 due to seasonal factors. In this sense, shipments abroad for US\$ 3,861 million are forecast as a result of the early corn and soy complex products being shipped abroad as the harvest of the oilseed progresses. Likewise, a high value of exports is also forecast for the month of July (US\$ 3,819), when late corn begins to enter.

Another element that stands out is the good export performance projected for the first months of 2022. The good production obtained from the fine harvest, added to the high export prices, will result in a record income of foreign currency for the first three months of the year. Between January and March, about US\$ 9,000 million will be exported, almost US\$ 1,500 million above the first quarter of 2021 and US\$ 3,500 million above the average of the last five years.

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### Productive and Trade Balance

#### Soybean, Corn and Wheat Trading Indicators – Crop Season 2020/21.


- **Soybean:** as of December 8th, the export sector has acquired 7.9 Mt of grain, while no new external sales of beans were registered in the last month, so the accumulated total amounts to 5.3 Mt, below the figures of previous years on the same date. Meanwhile, actual exports total 5.3 Mt. As for the industry, the sector has purchased 27.8 Mt of grain, below the volume purchased by this moment in previous years. However, the high rate of industrialization of the oilseed remains high, and by October 27.1 Mt had been processed, exceeding by more than 2.5 Mt the volume industrialized during the previous crop season by the same date, as well as the average of the last five crops.

In this way, the total sales of soybean 2020/21 add up to 35.7 Mt, below the volume traded by the same date last year (36,6 Mt) and below the average of the last five years (40,2 Mt). Considering that 8 Mt will be destined as seed and for animal consumption, there are still available for purchase 1.3 Mt of the production obtained during the crop season, which equals to 3%, and 11.1 Mt of the total supply of the crop season (production plus initial stocks). In addition, only 2.9 Mt of the soybean already traded is unquoted, a lower share than what remained unpriced by this point in previous years.

- **Corn:** only a little over two months away from the end of the 2020/21 crop season, 45.9 Mt of the cereal have already been traded, a record for the time of year. From this total, the export sector acquired 41.5 Mt, while it has exported 39.5 Mt. Effective exports, in the meantime, reached 35.8 Mt by December 14th, the highest volume for the same date in previous years. As for the industry, purchases of the sector amount to 4.3 Mt (a lower rate of acquisitions than in previous years), 2.4 Mt of which have already been processed, a faster rate than the previous crop season and the average of the last five.
- **Wheat:** with wheat crop season 2020/21 finalized, total purchases amount to 17.3 Mt. The export sector acquired 12.9 Mt of bean and exported 11 Mt. Regarding exports, taking into account the preliminary shipment data for November, these amounted to 10.6 Mt throughout the season. As for the industry, the sector made purchases for 4.4 Mt, below the volume acquired in previous years, while up to October the industrialization of the cereal reached 5.4 Mt.



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Trading indicators 2020/21 Marketing Year. Million Metric Tons

By Dec- 8th each year

Week nr. 50

SOYBEANS

2020/21 2019/20 5-Year Avg.

CORN

2020/21 2019/20 5-Year Avg.

WHEAT

2020/21 2019/20 5-Year Avg.

COMPARISON BETWEEN MARKETING YEARS

SUPPLY

Beginning Stocks \* (1)

Production \* (2)

Imports (3)

TOTAL SUPPLY (4 = 1 + 2 + 3)

DEMAND

Exporting Sector Purchases \*\* (5)

Export Sales \*\*

Exports-to-date \*\*\*

MY Total Exports (Est.)

Needs to acquire

Industrial Sector Purchases \*\* (6)

Industrialized-to-date

MY Total Industrial Use (Est.)

Needs to acquire

Feed, Seed and Residual Use

Deferred pricing contracts (Expo+Ind)

STOCKS

Available stocks\*\*\*\* (7 = 4 - 5 - 6)

% of Total Supply

\*Source: Rosario Board of Trade

\*\* Source: Ministerio de Agricultura, Ganadería y Pesca. (MAGyP)

\*\*\* For current Marketing Year, it includes shipments up to Oct-12th, as reported by NABSA. For previous years, total monthly exports are included.

\*\*\*\* Includes beginning stocks. In the case of soybeans, it excludes imports.

Source: Economic Studies Dept.- Rosario Board of Trade, based on information provided by MAGyP and own estimates.

### Soybean, Corn and Wheat Trading Indicators – Crop Season 2021/22.

- **Soybean:** the domestic trade of soybean 2021/22 keeps a lower pace than in previous years. The export sector has bought 400,000 t of bean, both below the purchase volume of the previous crop season to this date and the average of the last five crop seasons. Industry purchases are also below the average of the last five crops by the same time of year, but above the volume acquired in the previous season. This sector has purchased 3.4 Mt. As for exports, there are operations on record for 40,000 t, slightly below 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 8 Mt, 37.3 Mt are available for purchase, which equals to 76% of the production. Considering that, of the total purchases, 73% still remains unquoted, 82% of the forecast production for the new crop is unpriced, a higher share than that observed in previous years.

- **Corn:** the export sector has acquired 11.3 Mt of the 2021/22 grain. In addition, the rate of purchases by the sector continues at a fast pace, and between November 3rd and December 8th 1.6 Mt have been acquired. In this way, the volume to date exceeds the records of the previous crop and the average of the last five years, but is still considerably below 2019, when by this time of the year purchases for 17.4 Mt had been recorded. Regarding the external sales of the cereal, 15.4 Mt have already been committed, doubling the volume that had been sold by this moment last year, and only below the records from 2019/20. As for the industry, purchases of the sector amount to 100,000 t, identical to the volume acquired last year.


Considering that the production for the new crop is forecast in 57.1 Mt, and that the grain destined as seed and for animal consumption amounts to 12.2 Mt, there are still available for purchase 33.5 Mt. Also, 40% of what has already been traded is still unquoted, above the volume of last year and of the last five years.

- **Wheat:** domestic trade of wheat 2021/22 shows an uneven outlook between the export and the milling sectors.

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As for the exports, purchases by the sector reach 11.4 Mt, the second highest record for this moment of the year (only behind 2019/20). In addition, during last month a strong dynamism persisted, with purchases for 1.8 Mt between November 3rd and December 8th. The milling sector, in the meantime, has only acquired 0.6 Mt of grain, the lowest volume in 7 years by this time of the year. Last, the total of wheat declared for export reaches 9.1 Mt, that is to say, somewhat less than the double of the sales of wheat by the same date during the previous crop. In the first 14 days of December, 0.7 Mt have been shipped, so it is on its way to exceed the figure of the previous year, which during the whole month reached 0.8 Mt.

Last, considering that the production of the current crop is forecast at 22.1 Mt, and that 1 Mt will be destined as seed and for animal consumption, only 9.2 Mt are available for sale, equivalent to 42% of the production. Another aspect to highlight is that 46% of the production has already been priced, widely exceeding the volume of last year and that of the last five years.

 <b>Trading indicators 2021/22 Marketing Year. Million Metric Tons</b>											
By Dec- 8th each year			SOYBEANS			CORN			WHEAT		
Week nr. 50			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)	6.8	9.8	6.3	3.6	7.0	5.7	1.9	2.5	2.2
		Production * (2)	49.0	45.0	48.9	57.1	52.0	45.6	22.1	17.0	18.2
		Imports (3)	5.0	5.0	4.7	-	-	-	-	-	-
		<b>TOTAL SUPPLY (4 = 1 + 2 + 3)</b>	<b>60.7</b>	<b>59.7</b>	<b>59.9</b>	<b>60.7</b>	<b>59.0</b>	<b>51.4</b>	<b>24.1</b>	<b>19.5</b>	<b>20.5</b>
	DEMAND	Exporting Sector Purchases ** (5)	0.4	1.4	2.3	11.3	10.4	8.5	11.4	6.1	7.4
		Export Sales **	0.0	0.1	1.0	15.4	7.7	6.3	9.1	4.6	4.8
		MY Total Exports (Est.)	7.3	5.5	6.7	41.1	39.5	32.3	14.7	10.8	11.7
		Needs to acquire	6.9	4.1	4.4	29.8	29.1	23.8	3.3	4.7	4.3
		Industrial Sector Purchases	3.4	3.3	4.0	0.1	0.1	0.2	0.6	0.7	0.9
		MY Total Industrial Use (Est.)	38.5	39.5	39.2	3.5	3.6	3.6	6.2	5.8	5.9
		Needs to acquire	35.1	36.2	35.2	3.5	3.5	3.4	5.6	5.1	5.1
		Feed, Seed and Residual Use	8.0	8.0	7.0	12.2	12.1	9.7	1.0	1.0	0.9
		Deferred pricing contracts (Expo+Ind) (7)	73%	56%	48%	40%	28%	31%	22%	21%	17%
	STOCKS	<b>Available stocks*** (7 = 2 - 5 - 6)</b>	<b>37.3</b>	<b>32.3</b>	<b>35.6</b>	<b>33.5</b>	<b>29.4</b>	<b>27.2</b>	<b>9.2</b>	<b>9.2</b>	<b>9.0</b>
		% of output	76%	72%	73%	59%	57%	60%	42%	54%	50%
		Volume still not priced	40.0	34.9	38.6	38.1	32.3	29.9	11.9	10.7	10.5
		% of output	82%	78%	79%	67%	62%	66%	54%	63%	57%
<p>*Source: Rosario Board of Trade</p> <p>** Source: Ministerio de Agricultura, Ganadería y Pesca. (MAGyP)</p> <p>***Excludes beginning stocks. In the case of soybeans, it also excludes imports.</p> <p>Source: Economic Studies Dept.- Rosario Board of Trade, based on information provided by MAGyP and own estimates.</p>											

## Rosario Board of Trade (BCR) Market Outlook – December 2021

### Supply and demand balance forecast for Soybean, Corn and Wheat.

- **Soybean:** the soybean balance sheet 2020/21 and 2021/22 remains unchanged from last month's.
- **Corn:** the 2020/21 wheat balance sheet shows adjustments in use of the cereal. The use as forage for animal consumption, the use as seed and residual, and industrial use were cut, so that domestic consumption falls to 15.9 Mt (-0.1 Mt). In addition, exports grow to 39.5 Mt (+1 Mt) as a result of the high rate of shipments and the good availability of grain. Given that the supply remains unmodified, initial stocks fall to 3.6 Mt (-0.9 Mt).  
As for the new crop corn 2021/22, production remains unchanged, while demand shows some modifications. Just as for the current crop, domestic use as forage and industrial use was slightly adjusted to 15.9 Mt (-0.1 Mt). Exports grow to 41.1 Mt (+2.1 Mt) as a result of the large production forecast for the next crop. In this way, stocks fall to 3.7 Mt.
- **Wheat:** wheat balance sheet 2020/21 shows modifications with regards to the domestic consumption of the cereal. After having been below the previous year in six of the first seven months of the crop, milling accelerated its pace and in the last three months it reversed the trend, so the forecast for the crop rises to 5.73 Mt (+130,000 t). In this way, considering that 50,000 t are destined to the production of animal feed products, the industrial use is at 5.8 Mt. Given that exports remain unchanged at 10.8 Mt, stocks fall to 1.9 Mt.

As for wheat 22/21, the balance sheet shows adjustments both in supply as in demand. As for the supply, as reported in the [last monthly report of the Agribusiness Strategy Guide by the Rosario Board of Trade](#), the yields have been placed above what was initially anticipated, so that the production grows to 22.1 Mt (+ 1.7Mt), an all-time high. Regarding demand, the greater availability of grain translates into a marginal increase in industrial use to 6.2 Mt (+0.1 Mt) and an increase in exports reaching 14.7 Mt (+1.7 Mt). In this way, the stocks by the end of the crop stand at 2.2 Mt.

### Supply and Demand Estimates

By October 15th, 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	6.6	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	0.3	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	3.4	7.7	8.2	8.2	8.3	3.1	2.9	2.8	3.1
	BEGINNING STOCKS	Mt		3.2	2.0	2.5	1.9	5.4	6.3	7.0	3.6	6.0	5.1	9.8	6.8
	IMPORTS	Mt										4.9	4.0	5.0	5.0
	PRODUCTION	Mt		17.1	19.5	17.0	22.1	37.0	51.5	52.0	57.1	50.7	51.0	45.0	49.0
TOTAL SUPPLY			Mt	20.3	21.5	19.5	24.1	42.3	57.8	59.0	60.7	61.7	60.1	59.7	60.7
DEMAND	DOMESTIC CONSUMPTION	Mt		6.8	7.1	6.7	7.1	11.6	14.6	15.9	15.9	45.3	46.4	47.5	46.5
	Industrial Use	Mt		5.9	6.2	5.8	6.2	3.5	3.3	3.6	3.5	-	-	-	-
	Seed and other uses	Mt		0.8	0.9	1.0	1.0	-	-	-	-	-	-	-	-
	Feed, Seed and Residual Use	Mt		-	-	-	-	8.3	11.3	12.3	12.4	-	-	-	-
	Crushings	Mt		-	-	-	-	-	-	-	-	37.8	39.9	39.5	38.5
	Feed, Seed and Residual Use	Mt		-	-	-	-	-	-	-	-	7.5	6.5	8.0	8.0
	EXPORTS	Mt		11.3	11.9	10.8	14.7	25.3	36.0	39.5	41.1	6.6	7.4	5.5	7.3
TOTAL DEMAND			Mt	18.0	19.0	17.5	21.8	36.9	50.6	55.4	57.0	51.9	53.8	53.0	53.8
ENDING STOCKS			Mt	2.3	2.5	1.9	2.2	5.5	7.2	3.6	3.7	9.8	6.3	6.8	7.0
STOCKS/USE RATIO			(%)	13%	13%	11%	10%	15%	14%	6%	6%	19%	12%	13%	13%

Source: Economic Studies Department - Rosario Board of Trade



BOLSA  
DE COMERCIO  
DE ROSARIO

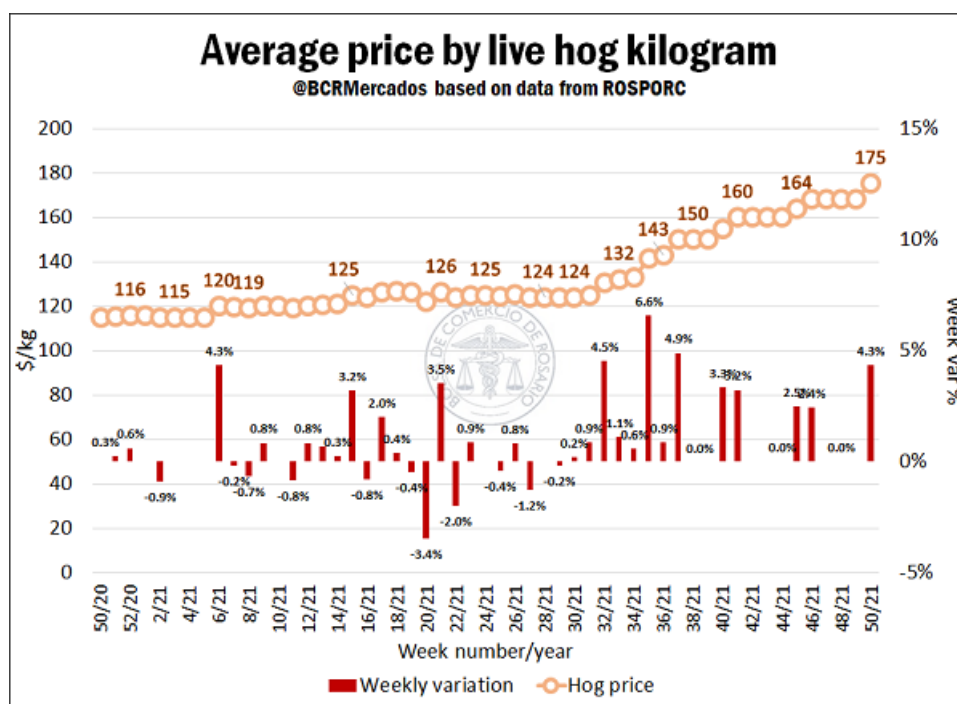
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## Rosario Board of Trade (BCR) Market Outlook – December 2021

### PIG MARKET

**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. It started to operate in mid August 2020, and a year has passed since that moment to the present.

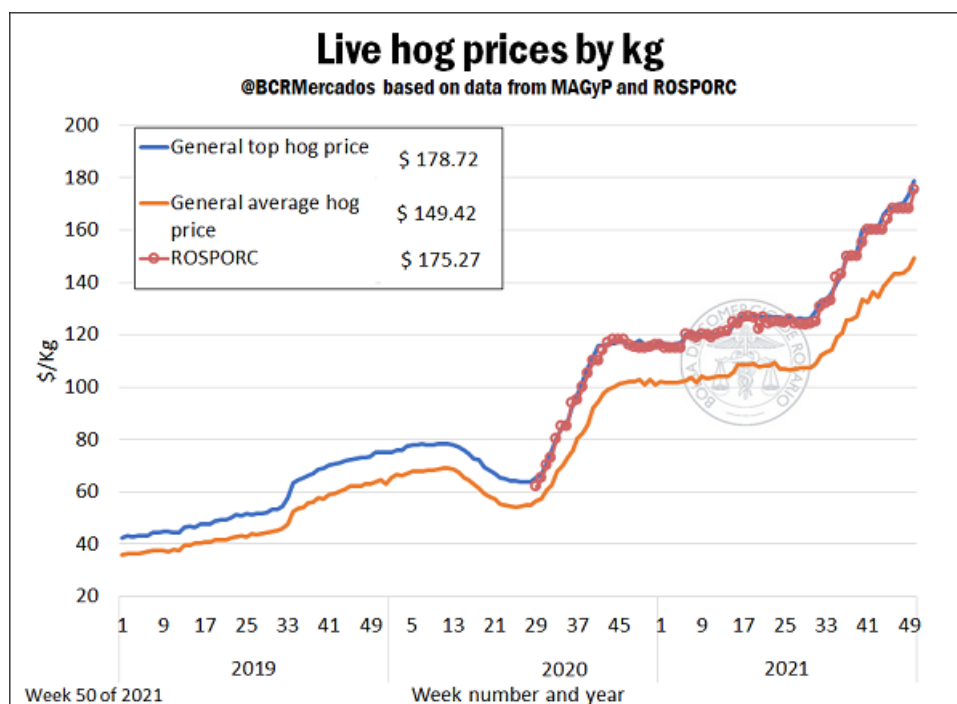
At ROSPORC, the main segment traded is the hog and, for week 50 of 2021, that is to say, between December 5th and 11th, the average quote reached a value of \$ 175.3/kg, which results in a 4.3% increase week-on-week. This is the first increase in value in a month, since the hog values remained at \$ 168/kg for 4 consecutive weeks. Additionally, versus the same week of 2020, there is a 52% increase, since at that time the value per kg of live hog was \$ 115/kg.



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). The value published by MAGyP for week 50 (December 6th to 12th) for general maximum live hog was \$ 178.72/kg, while on the ROSPORC platform the value for the same week was \$ 175.27/kg, resulting in a difference lower than 2% between both quotes.



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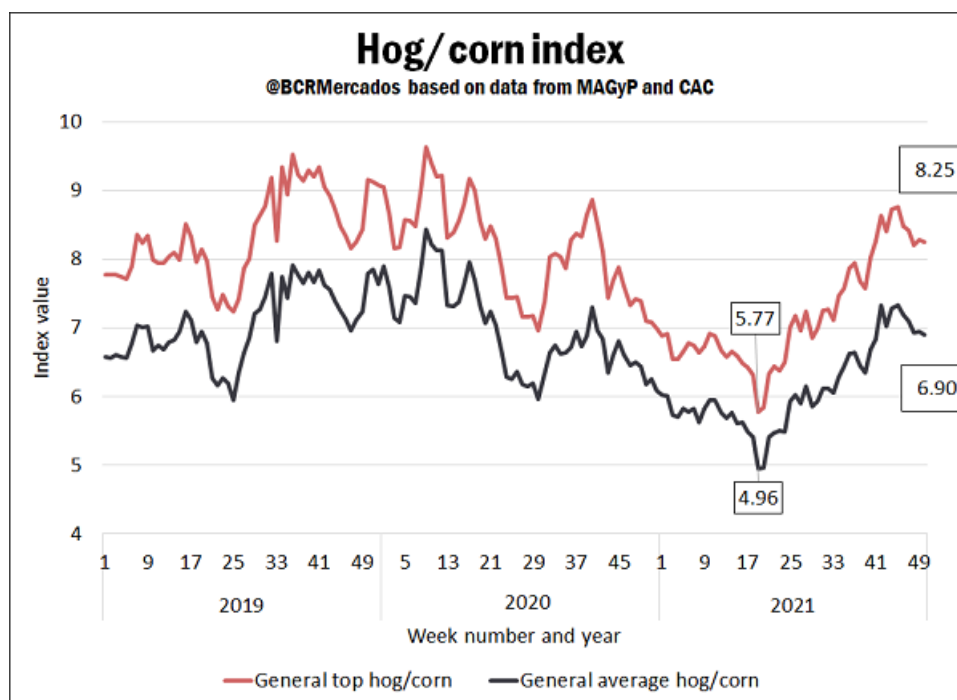


### Activity indicators

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. With the knowledge that pigs' diet is mainly based on corn and soybean by-products, we elaborated the following indexes commonly used within the sector:

- Hog/corn index:** this indicator shows the relation between the relative price of corn and the prices of hog in the domestic market through time. It results from dividing the price of hog by the kilogram of corn, conveying in this way **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**. After the high volatility between 2019 and mid-2020, a decreasing trend started for the ratio **general maximum live hog/corn**, until on week 19 of 2021 it reached a minimum in at least 2 years. From that point on, a rising trend started until week 45, where the ratio had a value of 8.75, and then falling to **8.25**, registered for **week 50**. In a similar way, the formulated index with the **general average price live hog** in week 20 of 2021 got the lowest record since 2019, getting to a value of **4.96**. Later, there has been a remarkable recovery, hitting during week 45 a ratio value of 7.33. However, during the last few weeks, there has been a retraction of this ratio, showing and index of **6.90** for week 50 of this year.

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- **“5 kg of corn + 2 kg of soybean mix”:** in the sector, this indicator is frequently used under the idea that the value in pesos of a kilogram of live hog should equal the sum of the market value of 5 kg of corn and 2 kg of soybean. It is a market convention upon which we make no judgement. We simply calculate it 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.

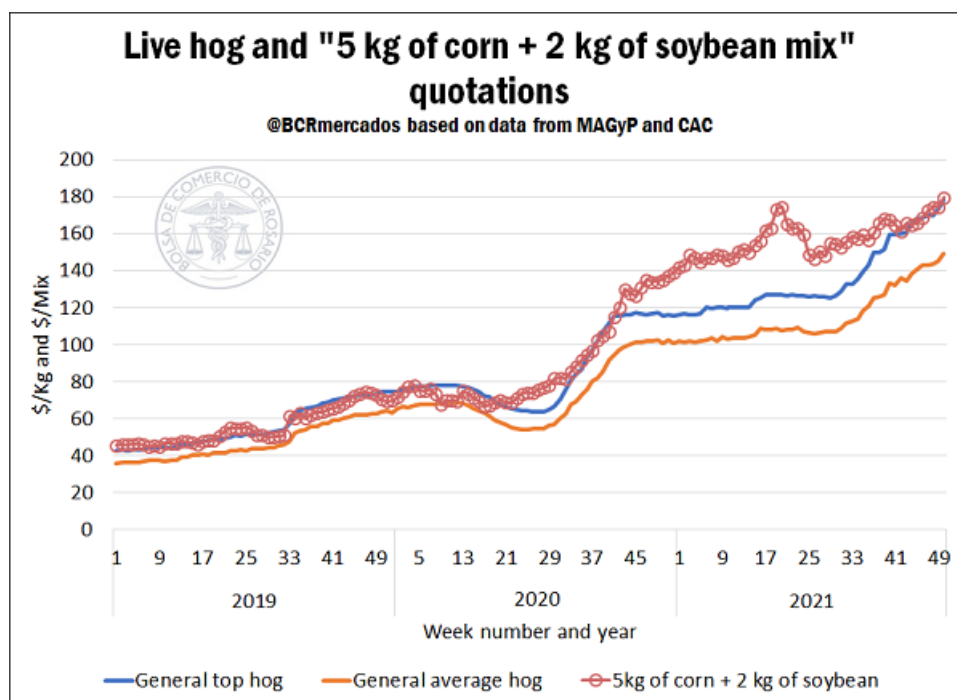
In the chart, three variables are compared:

- 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.

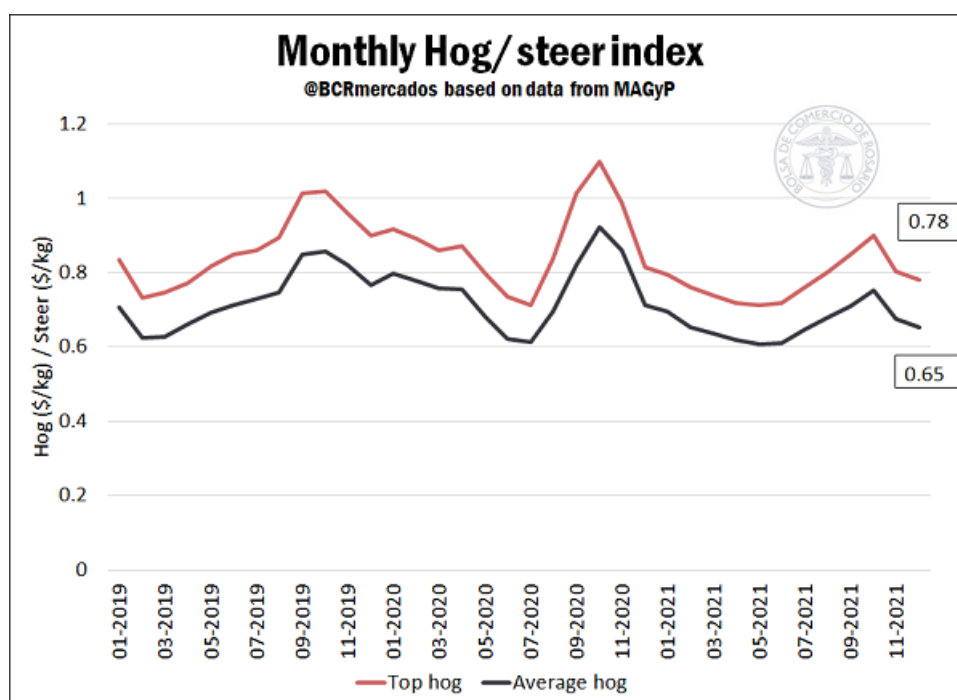
By analysing the period 2019-2021, the historical development showed a gap in the maximum hog price surveyed by MAGyP in connection to the mentioned “Mix”, particularly from the last months of 2020 until October 2021.

At present, the differential between both quotes is only \$ 1.3 for week 50 of 2021, since the “Mix” reached a value of \$ 180 during that week and the value for the general maximum live hog was of \$ 178.8 during the same period. The difference between both values is only 0.7% of the value of the maximum live hog. Consequently, a limited gap is perceived between the prices per kilogram of live hog and the evolution of the prices of soybean and corn, because in week 20 of 2021, the “Mix” was \$ 47 above the maximum value of live hogs. Regarding the feeding costs, it can be understood that the productive outlook has tended to improve during the last few months. Also, the ratio obtained from the general maximum live hog price and the 5+2 Mix is 0.99. That is to say, the maximum live hog typified has a price only 1% 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 is reflected, in this case we analysed the performance of quotes of live kilogram of beef and pork since 2019, represented by their highest exponents regarding domestic trade. In this sense, hog prices surveyed by MAGyP are used again, while for the value of steer we used the monthly quotes surveyed by Mercado de Liniers S.A. cattle market. Again, the value of live hog is divided by the value of steer, taking into account the monthly average values in both cases, representing **how many kilograms of live steer are needed to buy a kilogram of live hog in the markets.**



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This ratio usually ranges from 0.6 to 1. In the last few months, government measures that reduced the value of steer indirectly generated a rise in this ratio. In this sense, pork showed a relative growth in its prices. However, it is evident that during the last few months this has been reversed, resulting in a **general maximum live hog/steer ratio of 0.78**, and a **general average live hog/steer ratio of 0.65 for the first half of December**.

### Indicators of the pig market

 <b>Pork market dashboard</b>									
Indicator	Unit of measure	Oct-21 (1)	Sep-21 (2)	Oct-20 (3)	Chg. (1) vs (2)	Chg. (1) vs (3)	Accumulated		Y.o.Y. chg
Slaughter	(Thousands of heads)	590,651	603,686	583,660	↓ -2.2%	↑ 1.2%	6,148,153	5,767,149	↑ 6.6%
Production	(CWE)	54,640.3	55,815.6	54,433.3	↓ -2.1%	↑ 0.4%	575,865.0	542,342.3	↑ 6.2%
	(CWE)	978.9	1,490.2	4,205.9	↓ -34.3%	↓ -76.7%	28,488.1	34,621.8	↓ -17.7%
Exports	Millions of US\$	1.1	1.6	8.3	↓ -34.3%	↓ -87.0%	52.9	57.6	↓ -8.2%
	(CWE)	4,517.1	3,861.8	2,767.5	↑ 17.0%	↑ 63.2%	30,441.9	17,638.1	↑ 72.6%
Imports	Millions of US\$	12.8	10.8	8.1	↑ 18.0%	↑ 57.1%	87.2	53.2	↑ 63.9%
Trade Balance (c)	Millions of US\$	-11.7	-9.2	0.1	↓ -2.51	↓ -11.83	-34.3	4.4	↓ -38.71
Apparent consumption	(CWE)	60,337.5	60,094.6	54,730.9	↑ 0.4%	↑ 10.2%	590,611.2	536,735.2	↑ 10.0%
Consumption per capita (a)	(kg/person/year)	15.5	16.0	15.7	↓ -2.9%	↓ -1.4%	15.6	15.5	↑ 0.6%
Consumption per capita yearly average	(kg/person/year)	15.7	15.7	15.3	↓ -0.1%	↑ 2.8%			
Export/production ratio(a)(b)	(%)	1.8%	2.7%	7.7%	↓ -0.88	↓ -5.94	4.9%	6.3%	↓ -1.36

Source: BCRmercados based on data from MAGYP  
Y.o.Y. chg = Year over Year change in accumulated values/average values. CWE = Carcass Weight Equivalent  
(a) = Average jan - oct values. (b) Change in porcentual points. (c) Y.o.Y. accumulated change

Pig **slaughter** in September was 590,651 heads, falling by 2.2% compared to the previous month, while compared to the same month of 2020 it implied an increase of 1.2%. Likewise, in the accumulated of 2021, pig slaughter is 6.6% higher, exceeding the 5.8 million animals slaughtered between January and October 2020. Then, meat **production** in October was 54,640 tons, which is 2.1% below the previous month (55,815 tons), although in year-on-year terms this figure results in an increase of 0.4%. Likewise, in the period between January-October 2021, pork production was 6.2% above 2020.

Regarding **foreign trade**, in October the **export** was barely 980 tons, resulting in a 34.3% decrease compared to September (1,490 tons), while compared to the same month in 2020 it shows a 76.7% fall. For its part, the October **import** was 4,517 tons, which exceeded the 3,862 tons of September by 17% and the tons of October 2020 by 63.2%. If we compare exports and imports in dollars, a **trade balance** with an 11.7 million dollars deficit is obtained, only for October 2021. In accumulated terms, this results in net expenditures of 34.3 million dollars. In addition, analysing the share of exports over the national production of pork (**export/production ratio**), it can be concluded that in 2021 the export sector has reduced its share by 1.36 percentage points.

**Apparent consumption** had a 4.5% increase in October compared to September, while it exceeded by 10.2% the same month of 2020. However, if we analyse the **annual per capita consumption**, a figure of 15.7 kg/inhab/year is obtained in October 2021, only 0.1% below the previous month, while it exceeds the record for the same month in 2020 by 2.8% (15.3 kg/inhab/year).



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### Highlight of the pig market

During the last few years, Argentina has showed a strong growth in some of the main indicators of the pig market. Reviewing some of them, the slaughter, production and consumption at a national level have developed positively, exceeding the previous records year after year. This has resulted in the consolidation of a production scheme that in 2020 came to slaughter 7 million pigs, producing 655,000 tons of pork and consuming over 650,000 tons. On the other hand, the foreign trade of the activity proves to be an area in which, for the time being, the structural difficulties that have historically been present have not been overcome.

Although in 2020 there has been a trade surplus with the rest of the world for the first time in history, in 2021 the trade balance deficit returned. This has been the consequence, at almost similar levels, of the increase in imports and the fall in exports. The outflows of foreign currency due to the trade of the sector have been registered mainly in the last months of this year. To account for this, until June 2021, there was a deficit of US\$ 3.3 million, which represented a relatively low value, considering that the average trade result is an annual deficit of US\$ 77 million since 1995 until 2020. Later, from July to October, exports have been registered for US\$ 6.9 million, while imports have been US\$ 37.9 million, implying a deficit of 31 million dollars in those 4 months.

At present, the trade deficit that the sector has for year 2021 (until October) is US\$ 34.3 million, a value that reduces the average of the balance results when analysing the external performance of the sector. However, the decline in exports and the increase in imports during recent months put trade expectations on edge. In spite of this, it should be borne in mind that export income for 2021 exceed the foreign currency obtained from exports in 2019, implying that the dynamism of external sales remains at historically high levels.

