

Rosario Board of Trade (BCR) Market Outlook – January 2022



Executive Summary

Grain Market

- The trend persists and December closes with record exports for the month. Therefore, during all months of 2021, exports of the main products of the agribusiness sector reached a record for the same month of previous years. On the other hand, export forecasts for 2022 reach US\$ 35,196 million, US\$ 2,683 million below 2021.
- External sales of wheat 2021/22 reach 13.1 Mt, while those of corn 2021/22 add up to 22.5 Mt, an absolute record for the time of the year in both cases.
- There have been changes in the balance sheets of corn and wheat.

Pig Market

- **ROSPORC:** The “hog/corn index” suffers 5 consecutive drops, while the “5 kg of corn + 2 kg of soybean mix” detaches from the values of pigs.

*Report by the Department of Information and Economic Studies of Rosario Board of Trade
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GRAIN MARKET

Exports

Export forecast of the main agribusiness products

The exports of the main products from the agribusiness sector in 2021 reached US\$ 37,852 million, US\$ 347 million above December's estimate, setting a historical record. Considering that Argentina's total exports during last year reached US\$ 77,934 million, these products alone represented no less than 49% of the country's total exports.

The exports of the soybean complex for last year totalled US\$ 23,283 million, the corn complex reached US\$ 9,047 million, and the wheat complex amounted to US\$ 3,311 million. The sunflower complex and the barley complex generated shipments for US\$ 1,298 and US\$ 912 million, respectively. The soybean complex alone represented 30% of total national exports in 2021.

Main Exports of the Agricultural Sector.

Million US\$

	2019	2020	2021		2022		Var. USD 2022 vs 2021
			December Estimate	January Estimate	December Estimate	January Estimate	
Soybean, Oilseed	3.440	2.317	2.846	2.780	3.352	2.170	- 611
Soybean Meal	9.045	7.754	11.687	12.105	9.371	10.432	- 1.672
Soybean Oil	3.493	3.788	7.064	7.101	6.389	6.772	- 329
Biodiesel	775	442	1.371	1.298	1.667	1.154	- 143
Corn	5.925	6.023	8.848	9.047	9.533	7.841	- 1.206
Wheat	2.450	2.114	3.283	3.123	4.593	4.182	1.059
Wheat Flour	215	194	185	188	192	192	4
Sunflower Seed	70	96	118	119	85	107	- 12
Sunflower Meal	165	98	200	194	183	183	- 12
Sunflower Oil	686	444	947	984	976	980	- 4
Malting Barley	329	281	262	265	345	331	67
Feed Barley	370	219	408	364	523	546	182
Malt	284	211	285	284	282	279	- 5
Total Exports	27.244	23.981	37.504	37.852	37.490	35.169	- 2.683
Soybean Imports	1.604	1.978	2.477	2.620	2.400	2.688	68
Net Exports	25.641	22.003	35.027	35.232	35.090	32.480	- 2.751

Source: INDEC and own estimates. @BCRmercados

As the forecasts for 2022, they reach US\$ 35,169 million, US\$ 2,322 million above December's forecast and US\$ 2,683 million less than last year's exports. The fall in the forecast of soybean and corn production results in a cut of the forecast volume of yellow grains and products of the soybean complex to be shipped.

Thus, soybean exports are forecast at US\$2.17 billion, over US\$1.1 billion less than the amount forecast a month ago. Corn shipments are forecast at US\$ 7,841 million, showing a drop of almost US\$ 1,700 million in relation to December's forecast. Cuts are also expected in the exports of soybean oil, as a result of the lower volume to be

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shipped, and of wheat, as a result of the lower prices forecast for the new year. These falls are partially compensated by a higher value of exports forecast for soybean meal. Although the estimates of a lower production of beans leave result in a lower processing and consequent lower production of meal/pellets, the sharp rise in export prices overcompensates this drop in volumes. Thus, this by-product would reach exports for US\$ 10,428 million, slightly over US\$ 1,000 million more than what was forecast a month ago.

In addition, considering that given the lower production of soybean, greater temporary imports of the oilseed are forecast and an increase in import prices is also expected, the imports of the sector are forecast at US\$ 2,688 million, almost US\$ 300 million more than a month ago. Thus, net exports of the sector are forecast at US\$ 32,480 million, US\$ 2,751 million less than the year that ended.

The chart below shows the monthly exports of the main products of the agribusiness sector. It includes forecast export data from the report Rosario Board of Trade (BCR) Market Outlook – December 2021 and the new forecasts for January.

Argentina´s Monthly Exports Of Main Agro-Industrial Products

million US\$

Mes	2016	2017	2018	2019	2020	2021		2022		2022 vs. 2021	
						December Estimate	Official Data	December Estimate	January Estimate	Var. USD	Var. %
January	1.793	1.923	1.947	2.086	2.119	2.562	2.562	3.463	3.013	451	18%
February	1.891	1.523	1.610	1.629	1.541	2.210	2.210	2.550	2.345	135	6%
March	1.953	2.019	2.130	2.074	1.890	2.813	2.813	3.039	2.816	3	0%
April	2.130	2.380	2.100	2.306	2.330	3.561	3.561	3.532	3.334	-227	-6%
May	2.847	2.670	2.213	2.977	2.829	3.598	3.598	3.861	3.653	55	2%
June	2.769	2.315	1.991	2.171	2.545	3.709	3.708	3.461	3.280	-428	-12%
July	2.426	2.367	1.931	2.702	2.417	3.826	3.826	3.819	3.507	-319	-8%
August	2.868	2.337	1.857	2.254	2.203	3.897	3.897	3.109	3.021	-876	-22%
September	2.083	2.058	1.681	2.473	1.877	3.606	3.606	3.051	2.884	-723	-20%
October	1.983	1.978	1.829	2.348	1.781	3.070	3.071	2.976	2.842	-228	-7%
November	1.934	1.677	1.785	2.207	1.650	2.378	2.328	2.442	2.397	69	3%
December	1.843	1.626	2.120	2.016	798	2.276	2.672	2.188	2.077	-595	-22%
Total Exports	26.521	24.872	23.194	27.244	23.981	37.505	37.852	37.490	35.169	-2.683	-7%

*wheat, corn, soybeans, barley, sunflower, soybean meal, sunflower meal, wheat flour, malt, soybean oil, sunflower oil and biodiesel.

@BCRmercados based on INDEC and own estimates

During last December, the value of exports reached US\$ 2,672 million, hitting a record for the same month in previous years. In this way, exports of the main agribusiness products end 2021 setting a particular record: in value, every month of the last year reached a maximum compared to the same month of previous years. In addition, August of last year was the month in which the value of exports of these products reached an all-time historical record, with US\$ 3,897 million. Until then, the previous record was held by May 2011, when exports of these products totalled US\$ 3,594 million.

On the other hand, an element to highlight is that, for year 2022, the good results of the fine harvest added to the good international prices of grains would leave as a result a value of exports higher than that of the first months of last year. However, as the months go by and given the meagre production prospects for the coarse crop, exports would lose strength compared to what happened in 2021, and the total value of exports in 2022 would be below 2021.

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Productive and Trade Balance


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

- **Soybean:** as of December 5th, the export sector has acquired 8 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. As a consequence, actual exports total 5.3 Mt. As for the industry, the sector has purchased 29.5 Mt of grain, below the volume purchased by this moment in previous years. However, the rate of industrialization of the oilseed remains high, and by December 32.9 Mt had been processed, exceeding by more than 4.5 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 37.5 Mt, below the volume traded by the same date last year (38,6 Mt) and below the average of the last five years (42,1 Mt). Considering that 7.6 Mt will be destined as seed and for animal consumption, there are still available for purchase 9.9 Mt of the total supply of the crop season (production plus initial stocks). In addition, only 2.4 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, 47.4 Mt of the grain have already been traded, an absolute record for the time of year. From this total, the export sector acquired 42.7 Mt, while it has exported 39.9 Mt. Effective exports reached 39.2 Mt as of January between what has already been shipped and what is scheduled to be shipped, the largest volume for the same date in previous years. As for the industry, purchases of the sector amount to 4.7 Mt (a lower rate of acquisitions than in previous years), 3.1 Mt of which have already been processed, a higher volume than the previous crop season and the average of the last five.
- **Wheat:** with wheat crop season 2020/21 finalized, total purchases amount to 17.4 Mt. The export sector acquired 12.9 Mt and exported 11 Mt. Regarding exports, taking into account the final data for November, these amounted to 10.7 Mt throughout the season. As for the industry, the sector made purchases for 4.5 Mt, below the volume acquired in previous years, while up to November the industrialization of the cereal reached 5.9 Mt.

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 Trading indicators 2020/21 Marketing Year. Million Metric Tons											
By Jan - 12th each year		SOYBEANS			CORN			WHEAT			
Week nr.	3	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)	9,8	6,0	5,1	7,0	6,3	5,4	2,5	2,0	2,2
		Production * (2)	45,0	50,7	51,0	52,0	51,5	37,0	17,0	19,5	18,2
		Imports (3)	5,0	4,9	4,0	-	-	-	-	-	-
		TOTAL SUPPLY (4 = 1 + 2 + 3)	59,7	61,7	60,1	59,0	57,8	42,3	19,5	21,5	20,5
	DEMAND	Exporting Sector Purchases ** (5)	8,0	8,4	10,0	42,7	38,1	29,0	12,9	15,6	12,3
		Export Sales **	5,3	6,5	7,3	39,9	34,9	28,3	11,0	12,3	11,2
		Exports-to-date ***	5,3	6,6	7,3	39,2	35,2	27,5	10,7	11,9	11,3
		MY Total Exports (Est.)	5,5	6,6	7,4	39,5	36,2	25,3	10,7	11,9	11,7
		Needs to acquire	-2,5	-1,8	-2,6	-3,2	-1,8	-3,7	-2,2	-3,7	-0,6
		Industrial Sector Purchases ** (6)	29,5	30,3	32,1	4,7	5,2	5,2	4,5	5,0	4,7
		Industrialized-to-date	32,9	28,4	31,5	3,1	2,7	2,9	5,9	6,1	5,8
		MY Total Industrial Use (Est.)	39,5	37,8	39,9	3,7	3,3	3,5	5,9	6,2	6,0
		Needs to acquire	10,0	7,6	7,8	-1,1	-1,9	-1,7	1,5	1,2	1,3
		Feed, Seed and Residual Use (7)	7,6	7,5	6,5	12,1	11,1	8,1	1,0	0,9	0,9
	Deferred pricing contracts (Expo+Ind)	6%	11%	10%	6%	6%	5%	5%	2%	2%	
	STOCKS	Available stocks**** (8 = 4 - 5 - 6 - 7)	9,6	10,6	7,5	-0,5	3,5	0,1	1,1	0,0	2,6
		% of Total Supply	21%	21%	15%	-1%	7%	0%	7%	0%	14%

*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 with regards to what happened 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. The industry's purchases accelerated in the last week and exceeded the volume acquired by the same date of the previous year and the average of the last five years. This sector has purchased 5.1 Mt. As for external sales, a low volume of sales was recorded in the last month, so the total stands at 0.1Mt, slightly below the previous year.

Considering that the forecast production for the new crop rises to 40 Mt, for the time being, and that the use destined to seed and animal consumption totals 7.6 Mt, 27 Mt are available for purchase, which equals to 67% of the production. In addition, 76% of the volume already sold still needs to be set at a price, considerably above what happened in previous years.

- Corn:** the export sector has acquired 14.3 Mt of the grain 2021/22. In addition, the rate of purchases by the sector continues at a fast pace, and between December 8th and December 12th, 3 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 18.2 Mt had been recorded. Regarding external sales of the cereal, 22.5 Mt have already been committed, a historical record for this time of the year. As for the industry, purchases of the sector amount to 200,000 t, above the volume acquired last year.


Considering that the production for the new crop is forecast in 48 Mt, and that the grain destined as seed and for animal consumption amounts to 12 Mt, there are still available for purchase 21.6 Mt. Also, 43% 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 keeps an uneven outlook between the export and the milling sectors.

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As for the exports, purchases by the sector reach 12.8 Mt, the second highest record for this moment of the year (only behind 2019/20). The milling sector, in the meantime, has only acquired 1.1 Mt of grain, of which it has already processed 452.000 t. However, in the last month, purchases by the sector stepped up and surpassed the previous year's record. Last, the total of wheat declared for export reaches 13 Mt, that is to say, 5 Mt more than the sales of wheat by the same date during the previous crop. Between what was shipped from the beginning of the crop until January 12th and what is scheduled to be shipped until the end of the month, exports totalled 4.4 Mt, widely exceeding what was exported in the first two months of the previous cycle and also above the average of the last five years.

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 7.2 Mt are available for sale, equivalent to 33% of the production. Another aspect to highlight is that 55% of the production has already been priced, widely exceeding the volume of last year and that of the last five years.

 Trading indicators 2021/22 Marketing Year. Million Metric Tons											
By Jan - 12th each year			SOYBEANS			CORN			WHEAT		
Week nr.	3		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)	7,2	9,8	6,3	3,5	7,0	5,7	1,9	2,5	2,2
		Production * (2)	40,0	45,0	48,9	48,0	52,0	45,6	22,1	17,0	18,2
		Imports (3)	5,5	5,0	4,7	-	-	-	-	-	-
		TOTAL SUPPLY (4 = 1 + 2 + 3)	52,7	59,7	59,9	51,6	59,0	51,4	24,0	19,5	20,5
	DEMAND	Exporting Sector Purchases ** (5)	0,4	2,0	2,7	14,3	13,1	9,8	12,8	7,6	8,9
		Export Sales **	0,1	0,3	1,3	22,5	14,7	7,9	13,1	8,4	7,5
		<i>Exports-to-date</i>	-	-	-	-	-	-	4,4	2,5	4,3
		<i>MY Total Exports (Est.)</i>	4,0	5,5	6,7	33,5	39,5	32,3	14,7	10,7	11,7
		<i>Needs to acquire</i>	3,7	3,5	3,9	19,2	26,4	22,5	1,9	3,1	2,9
		Industrial Sector Purchases	5,1	4,0	4,6	0,2	0,1	0,2	1,1	1,1	1,4
		<i>Industrialized-to-date</i>	-	-	-	-	-	-	0,5	0,4	0,4
		<i>MY Total Industrial Use (Est.)</i>	36,4	39,5	39,2	3,6	3,7	3,6	6,2	5,9	6,0
		<i>Needs to acquire</i>	31,3	35,5	34,6	3,4	3,5	3,4	5,1	4,9	4,6
		Feed, Seed and Residual Use	7,6	7,6	6,9	12,0	12,1	9,7	1,0	1,0	0,9
	Deferred pricing contracts (Expo+Ind) (7)	76%	55%	49%	43%	28%	31%	19%	21%	15%	
	STOCKS	Available stocks*** (7 = 2 - 5 - 6)	27,0	31,4	34,6	21,6	26,7	26,0	7,2	7,3	7,1
		<i>% of output</i>	67%	70%	71%	45%	51%	57%	33%	43%	39%
		Volume still not priced	31,2	34,7	38,3	27,8	30,4	29,1	9,9	9,1	8,6
		78%	77%	78%	58%	58%	64%	45%	54%	47%	

*Source: Rosario Board of Trade
 ** Source: Ministerio de Agricultura, Ganadería y Pesca. (MAGyP)
 ***Excludes beginning stocks. In the case of soybeans, it also excludes imports.
 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 2020/21 soybean balance sheet shows a slight cut in the forecasts of use as seed and animal consumption, which falls to 7.6 Mt (-0.4 Mt). As there are no changes in other aspects, the final stocks grow to 7.2 Mt (+0.4 Mt).

The 2021/22 soybean balance sheet presents changes on both supply and use. Regarding supply, a drop in production is expected to 40 Mt (-9 Mt) as a result of a greater area lost and consequently less harvested area, added to a drop in the expected yields. As commented in the January [monthly report of the Agribusiness Strategy Guide](#), the lack of significant rains in the last 30 days and the high temperatures have taken a toll on the crops and their potential yield. In this way, given that a slight increase in initial stocks (+0.4 Mt) and in imports (+0.5 Mt) is expected, the total supply for the crop is forecast at 52.7 Mt, that is, 8 Mt less than a month ago. On the

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demand side, this lower supply leads to a lower industrial use (36.4 Mt) and a drop in the forecast grain exports for the crop season to 4 Mt (-3.3 Mt). Given that a lower consumption as seed and animal feed is forecast (-0.4 Mt), the total demand for the crop season is forecast at 48 Mt. In this way, final stocks fall to 4.7(-2.3 Mt).

- **Corn:** corn balance sheet of crop season 2020/21 remains unchanged from December.

As for the new crop corn 2021/22, changes are presented both on the side of supply and demand. Regarding supply, production falls to 48 Mt (-9.1 Mt), as a result of a drop in the harvested area and lower expected yields due to the drought and high temperatures. Regarding the uses of cereal for the new crop season, a slight cut in domestic consumption is forecast to 15.8 Mt (-0.1 Mt) and a drop in exports to 33.5 Mt (-7.6 Mt). In this way, total demand falls to 49.2 Mt. Since the decrease in supply is greater than that of demand, final stocks grow to 2.3(-1.3 Mt).

- **Wheat:** the 2020/21 wheat balance sheet already presents the final crop data. Total industrial use reached 5.9 Mt throughout the crop season, while exports totalled 10.7 Mt. In this way, considering that 1 Mt were destined for use as seed and others, the total demand for the crop season reached 17.6 Mt. Taking into account that the total supply of the crop was 19.5 Mt, the final stocks are estimated at 1.9 Mt, showing a drop of 0.4 Mt between crops.

As for wheat 2021/22, the balance sheet is unchanged from December forecasts.

Supply and Demand Estimates													
By Jan 17th, 2022													
		Wheat			Corn				Soybeans				
		5-Year Avg.	2020/21	2021/22 e	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	6,5	6,9	5,7	7,3	7,4	8,0	17,2	18,3	16,9	16,2
	Harvested Area	Mha	5,4	6,0	6,6	4,8	6,3	6,4	6,7	16,6	17,4	16,2	15,4
	Area Lost	Mha	0,2	0,6	0,3	1,0	1,0	1,0	1,2	0,6	0,9	0,7	0,8
	Yield	t/ha	3,1	2,9	3,4	7,7	8,2	8,2	7,1	3,1	2,9	2,8	2,6
	BEGINNING STOCKS	Mt	3,2	2,5	1,9	5,4	6,3	7,0	3,6	6,0	5,1	9,8	7,2
	IMPORTS	Mt								4,9	4,0	5,0	5,5
	PRODUCTION	Mt	17,1	17,0	22,1	37,0	51,5	52,0	48,0	50,7	51,0	45,0	40,0
TOTAL SUPPLY		Mt	20,3	19,5	24,0	42,3	57,8	59,0	51,6	61,7	60,1	59,7	52,7
DEMAND	DOMESTIC CONSUMPTION	Mt	6,8	6,9	7,1	11,6	14,6	15,9	15,8	45,3	46,4	47,1	44,0
	Industrial Use	Mt	5,9	5,9	6,2	3,5	3,3	3,6	3,6	-	-	-	-
	Seed and other uses	Mt	0,8	1,0	1,0	-	-	-	-	-	-	-	-
	Feed, Seed and Residual Use	Mt	-	-	-	8,3	11,3	12,3	12,2	-	-	-	-
	Crushings	Mt	-	-	-	-	-	-	-	37,8	39,9	39,5	36,4
	Feed, Seed and Residual Use	Mt	-	-	-	-	-	-	-	7,5	6,5	7,6	7,6
	EXPORTS	Mt	11,3	10,7	14,7	25,3	36,0	39,5	33,5	6,6	7,4	5,5	4,0
TOTAL DEMAND		Mt	18,0	17,6	21,8	36,9	50,6	55,4	49,2	51,9	53,8	52,6	48,0
ENDING STOCKS		Mt	2,3	1,9	2,2	5,5	7,2	3,6	2,3	9,8	6,3	7,2	4,7
STOCKS/USE RATIO		(%)	13%	11%	10%	15%	14%	6%	5%	19%	12%	14%	10%

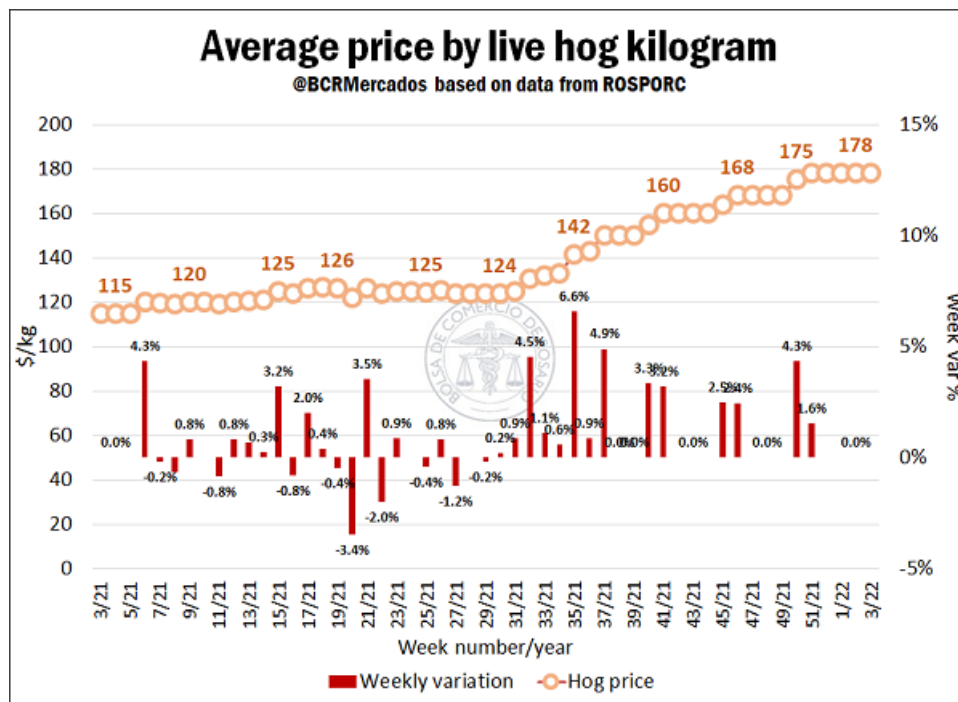
Source: Economic Studies Department - Rosario Board of Trade

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PIG MARKET

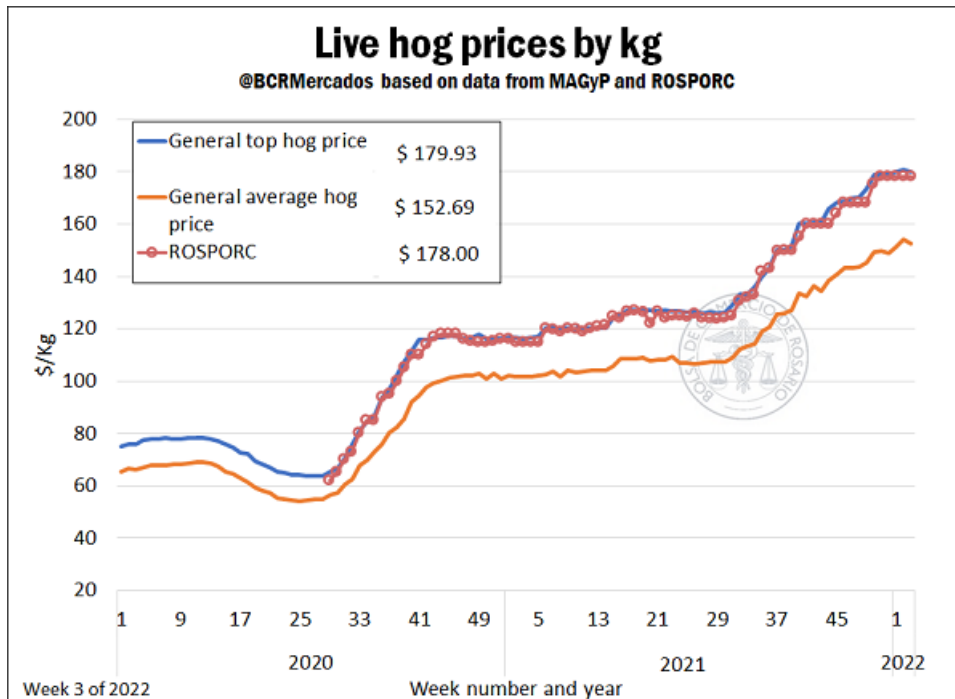
ROSPORC, the first electronic trading platform of swine in Argentina, was developed by the Rosario Board of Trade (BCR), which allows users to buy and/or sell swine with great ease. It started to operate in mid-August 2020, and a year has passed since that moment to the present.

At ROSPORC, the main segment traded is the hog and, for the third week of 2022, that is to say, between January 9th and 15th, the average quote reached a value of \$ 178/kg, which did not result in changes regarding the values from the previous week. In fact, this weekly average has remained the same during the last 5 weeks. On the other hand, the price per kilo of live hog for the same period a year ago was \$115/kg, which means that the year-on-year increase was of 54.8%.



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The **average quote** of ROSPORC operations presents a high correlation with the general maximum live hog price 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 3 (January 10 to 16) for the general maximum live hog was \$ 179.93/kg, while on the ROSPORC platform the value for the same week was \$ 178/kg, resulting in a difference lower than 1.1% between both quotes.

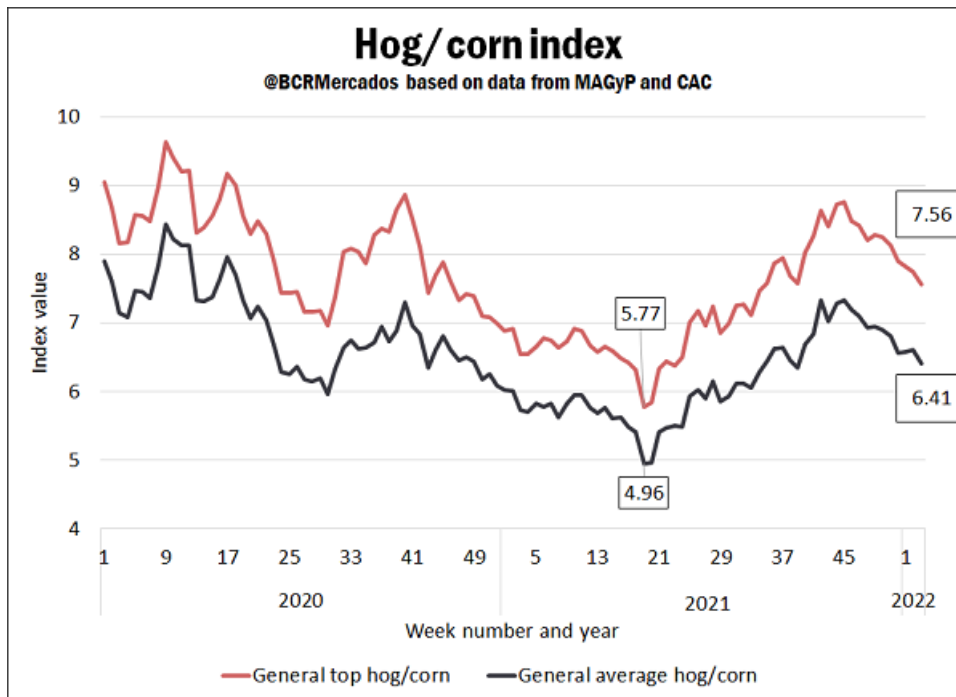


Activity indicators

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**. If we analyse the variations of this index in the last few years, we can conclude that during 2020 until week 19 of 2021 there was a downward trend until minimum values were reached in at least 2 years for the **general maximum hog/corn** (5.77) and **general average hog/corn** (4.96) ratios. From that point on, there was an increase in these figures until week 45 of 2021, where their latest maximums were reached. However, in recent weeks a retraction has been perceived, reaching a value of **7.56** for the **general maximum hog/corn** and **6.41** for the **general average hog/corn** in the third week of 2022.

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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.

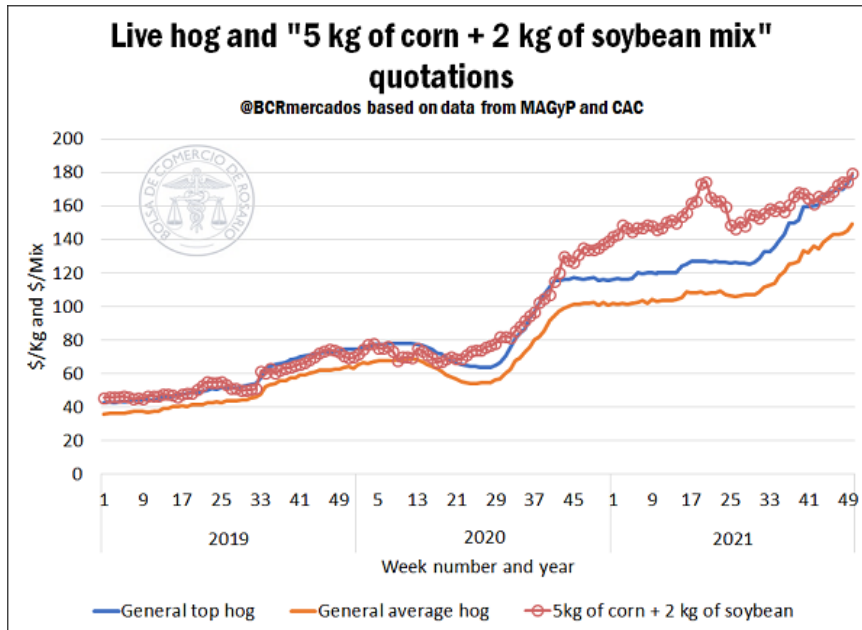
It assumes a reference of which should be the theoretical price that hog should have regarding the price of these two essential grains for animal feed: corn and soybean.

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.

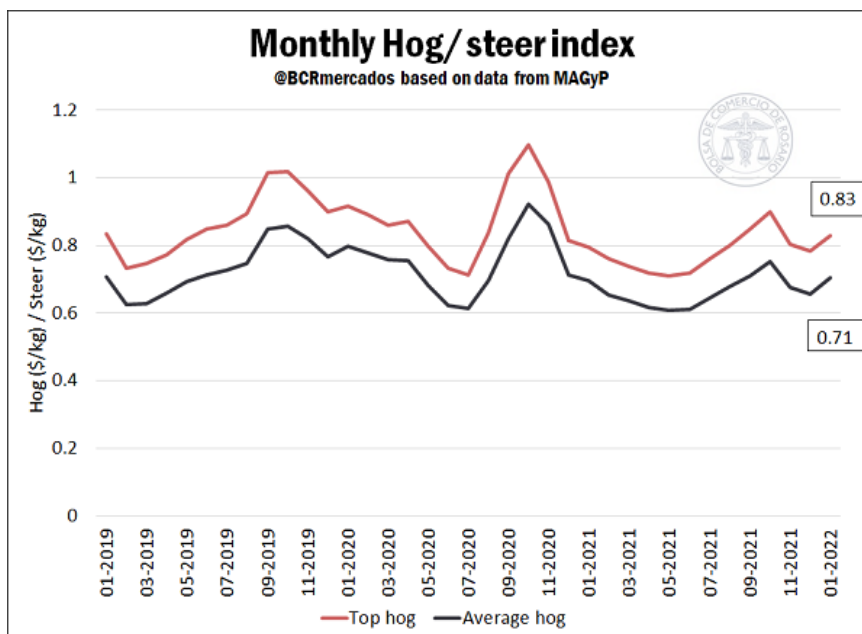
The historical development of this "Mix" and of the maximum prices of hogs surveyed by MAGyP show cycles where there is a separation between both figures, while there are also periods where their movements are very similar. At present, the differential between both quotes is only \$ 19 for week 3 of 2022, since the “Mix” reached a value of \$ 198.9 during that week and the value for the general maximum live hog was of \$ 179.9 during the same period. The difference between both values is 10.5% of the value of the general maximum live hog, which results in a new separation between the production costs and the income obtained in the market. However, this difference is lower than the records obtained throughout 2021, since the average gap for that year was 13.9%. Finally, it is highlighted that with these values there is a slight delay in the prices of live animals compared to production costs.

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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.**

This ratio usually ranges from 0.6 to 1. After the government measures that reduced steer prices, there was a relative increase in hog prices. However, in recent months there has been a reversal and both indices are below the last maximum, since the **maximum general hog/steer ratio is 0.83**, while the **average general hog/steer ratio is at 0.71** for mid-January.



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Indicators of the pig market

Pork market dashboard									
Indicator	Unit of measure	Nov-21	Oct-21	Nov-21	Chg.	Chg.	Accumulated		Y.o.Y. chg
		(1)	(2)	(3)	(1) vs (2)	(1) vs (3)	jan-Nov 2021	jan-Nov 2020	
Slaughter	(Thousands of heads)	627,392	595,743	580,317	↑ 5.3%	↑ 8.1%	6,791,706	6,347,465	↑ 7.0%
Production	(CWE)	57,727.3	55,004.8	53,912.5	↑ 4.9%	↑ 7.1%	634,292.5	596,254.8	↑ 6.4%
Exports	(CWE)	900.5	978.9	4,320.8	↓ -8.0%	↓ -79.2%	29,423.4	38,942.5	↓ -24.4%
	Millions of US\$	0.8	1.1	8.2	↓ -23.5%	↓ -90.0%	53.9	65.8	↓ -18.1%
Imports	(CWE)	5,326.7	4,517.1	2,385.6	↑ 17.9%	↑ 123.3%	35,768.6	20,023.7	↑ 78.6%
	Millions of US\$	15.5	12.8	7.9	↑ 21.2%	↑ 96.1%	102.7	61.1	↑ 68.0%
Trade Balance (c)	Millions of US\$	-14.7	-11.7	0.3	↓ -2.96	↓ -14.97	-48.8	4.7	↓ -53.51
Apparent consumption	(CWE)	64,341.1	60,702.0	53,588.2	↑ 6.0%	↑ 20.1%	657,163.6	590,323.4	↑ 11.3%
Consumption per cápita (a)	(kg/person/year)	17.1	15.6	15.4	↑ 9.4%	↑ 11.0%	15.7	15.5	↑ 1.6%
Consumption per cápita yearly average	(kg/person/year)	15.9	15.7	15.4	↑ 0.9%	↑ 2.8%			
Export/production ratio(a)(b)	(%)	1.6%	1.8%	8.0%	↓ -0.22	↓ -6.45	4.6%	6.5%	↓ -1.82

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 - nov values. (b) Change in porcentual points. (c) Y.o.Y. accumulated change

Pig **slaughter** in November was 627,392 animals, rising by 5.3% compared to the previous month, while compared to the same month of 2020 it implies an 8.1% increase. Likewise, in the accumulated of 2021, pig slaughter is 7% higher the previous year, almost reaching the 6.8 million animals slaughtered between January and November 2021. Then, meat **production** in November was 57,727 tons, which is 4.9% above the previous month (55,005 tons), although in year-on-year terms this figure results in a 7.1% increase. Also, in the period between January and November 2021, pork production was 6.4% above 2020.

Regarding **foreign trade**, in November the **export** was barely 900.5 tons, resulting in an 8% decrease compared the previous month (978.9 tons), while compared to the same month in 2020 it shows a 79.2% fall. For its part, the **import** of the eleventh month of the year was of 5,327 tons, which exceeded the 4,517 tons of October by 17.9% and the tons of November 2020 by 123.3%. If we compare exports and imports in dollars, a **trade balance** with a 14.7 million dollars deficit is obtained only for November 2021. In accumulated terms, this results in net expenditures of 48.8 million dollars. Last, the share of exports in pork production at a national level (**export/production ratio**) dropped by 1.8 percentage points between 2020 and 2021.

Apparent consumption maintains a high rate since the November record was 6% higher than the previous month and 20% higher than the same month in 2020. In addition, the **annual per capita consumption** presented a value of 15.9 kg/inhab/year in November 2021, 0.9% above the previous month, while it implies a 2.8% increase compared to the record for the same month of 2020 (15.4 kg/inhab/year).

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Highlight of the pig market

From data published by the National Directorate of Agricultural Trade Control – Information Management, with the preliminary figures of pig slaughter and meat production, the final numbers for 2021 can be estimated.

First, domestic pig processing in Argentina has grown steadily since the turn of the millennium. The years from 2011 to 2021 represent 10 consecutive years of increases in slaughter numbers in a row. In addition, the annual growth rate for that period averaged 8%, reflecting the enormous speed at which the activity in this sector has advanced. In 2021, there was once again an increase in pig slaughter, exceeding the 7 million animals that had been processed in 2020, totalling some 7.46 million pigs according to MAGyP data. These 460,000 animals in which the Argentinian slaughter increased imply a year-on-year growth of 6.5%, being the highest year-on-year increase since 2017.

In the same way, pork production advanced towards its respective historical record. Directly deriving from slaughter, pork meat produced in Argentina in 2021 was 694,660 tons (bone-in beef equivalent), exceeding by 6% the 655,380 tons that had been generated in the previous year. Production growth is lower than that of slaughter, due to a slight drop in the average weight of cattle obtained from processed pigs. While in 2020 the cattle had reached a weight of 93.54 kg, in 2021 we had a weight equivalent to 93.1 kg, barely slowing down relative growth. However, it should be noted that cattle are at high weights, since from 1999 to 2018 they had not reached 90 kg/cattle. In fact, 2020 marks the highest historical weight for the average beef, while 2021 is in second place.

