

INSTITUTIONAL PERTURBANCES IN THE ARGENTINE WHEAT AGRIBUSINESS SYSTEM

Authors: Benjamín Fuhr, Sebastián Senesi, Hernán Palau.

Food and Agribusiness Program-School of Agronomy,

University of Buenos Aires, Argentina.

Corresponding author: hpalau@agro.uba.ar

ABSTRACT

Argentina is characterized by being one of the main producers and exporters of wheat. However, it has presented great volatility in terms of production and trade for more than 20 years, due to the uncertainty derived from policies that sought to reduce the price of this commodity in the domestic market. The present work aims to identify and analyze how institutional and political changes impact on the dynamics of the wheat agribusiness system. A systemic study is developed, contemplating a deep analysis of the political, economic, social and technological aspects of the Argentine wheat agribusiness system. The results show that constant changes at the institutional level -i.e., implementation of changing export duties and discretionary export authorizations- and the rules of the game within the Argentine macroeconomy, generated disincentives to investment, increases in volatility, and vulnerability of property rights, distorted farmers' prices and high transaction costs that affected the development of the agribusiness system. On the other hand, the interventionist policies that sought to reduce prices in the basic food basket did not achieve their objectives either, given that the planted area, production and productivity generated a detriment of the product supply and consequently an increase in the price of wheat and flour in the domestic market. The path dependence explains throughout the analysis that political fluctuations existed and will exist in the Argentine macroeconomy and in particular affected the agribusiness system under study. This is a strong determinant of development, innovation and productivity, generating irremediability in the system.

KEY WORDS: institutional environment, political changes, enforcement, path dependency.

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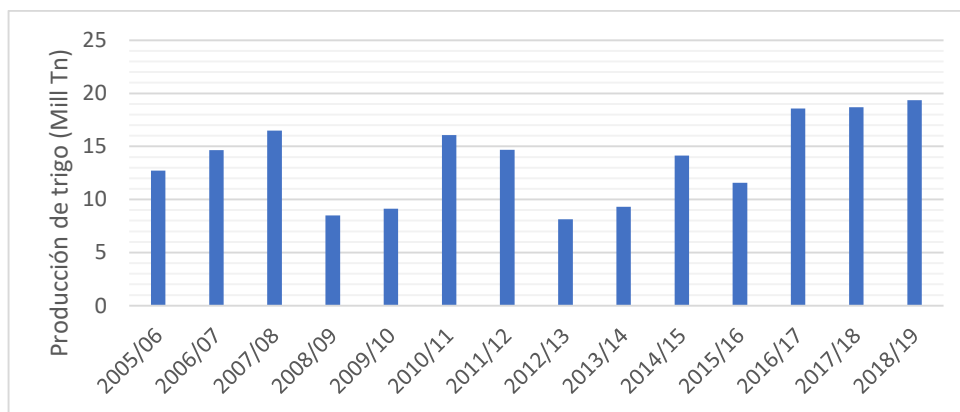
1. INTRODUCTION

1.1. Research problem and objectives

Wheat is one of the historically most important crops worldwide due to its importance in human consumption. The international market for this commodity corresponds to a market that normally presents high levels of price volatility related to changes in world supply. In recent years, world production has been increasing; it reached a maximum peak in the year 2020/21 with about 772.64 million tons (FAO). On the other hand, consumption has also been increasing, reaching 759.3 million tons (FAO), so that, although this causes a support in the price level (increase in demand in the context of greater supply), increases are observed in world ending stocks that may generate current price level risk.

In the case of Argentina, wheat production ranks 3rd among grains, after soybeans and corn. Argentine wheat represents 2.4% of world production, ranking eleventh at the country level, while, in terms of exports, its share increases to 7.19% and is the seventh largest exporter in the world (WTO, 2018). On the other hand, the Agribusiness System (SAG) of wheat is one of the main contributors of foreign exchange in the export of products of Argentine agro-industrial origin. It represented 4.6% of the total foreign exchange received in 2018 and is the fourth most important within the agro-industrial sector, contributing 8.35% of the foreign exchange of the agro-export complex (INDEC). Despite the aforementioned, the evolution of wheat production in Argentina had an erratic behavior in the last 15 years (figure 1).

Figure 1. Evolution of the wheat Argentine production (in Million tons).



Source: authors by using info of Minagri and INDEC.

This instability in wheat production in Argentina prompts us to understand what are the factors that limit it. On the one hand, some authors indicate that the high share of wheat in the basic food basket could influence various political and regulatory measures that limit exports, so that the incentives to plant wheat are low. On the other hand, Argentina's dependence on almost a single wheat buyer in the international market (Brazil), in a context where that country has promoted planting in its territory and the search for agreements with the European Union for the importation of wheat with lower tariffs could mean that producers prefer to switch to crops with lower levels of uncertainty. That is why it is intended to investigate the impact of the institutional environment on wheat SAG in Argentina, its dependence and influence on policies and institutional changes.

2. THEORETICAL APPROACH

The NIE (new institutional economics) brings together a set of contributions where it assumes that institutions matter, and that the determinants of institutions are capable of being analyzed with the apparatus of economic theory (Matthews, 1986; Williamson, 2000). North (1990) affirms that institutions are the formal and informal “rules of the game” that shape the behavior of individuals and organizations, as well as the mechanisms for compliance with those rules.

North (1990) argues that institutions provide a set of incentives and disincentives for individuals and modify the set of options that human beings can access. And within this institutional framework, individuals form organizations to make the gains from specialization and the division of labor their own. On the other hand, it mentions that if property rights and the application of the rules of the game are not well defined in the institutional environment - hence the importance of enforcement -, the path of growth and development requires the creation of these or of its strengthening.

Kahn (2017) mentions that “*Institutions and policies describe rules that in turn determine the allocation of resources, and these can affect different types of organizations in very different ways. Organizations can be expected to support, resist, or distort particular institutions or policies based on their interests and capabilities.*” Therefore, NIE presents an institution as a regularity of behavior or a rule that is imposed and generally accepted by members of a social group, that specifies behaviors in specific situations and that can be self-imposed or maintained by an authority. external (Rutherford, 1994). In this sense, in each society there will be rules of the game that will determine the cost of carrying out transactions. These rules work both by facilitating and hindering transactions. They are not relevant when we assume zero transaction costs, but they are relevant in a reality where negotiating is expensive (North, 1990).

The NEI finds that in an economic reality characterized by positive frictional and transaction costs (also increased by assuming the limited rationality of the individual), property rights and markets will be incomplete, and institutions will play a determining role. In NEI, institutions are in charge of providing the incentive structure of an economy (North, 1991), reducing uncertainty by defining and limiting the set of choices of individuals and determining the opportunities that exist in a society (North, 1990). In this way, institutions make the NEI the underlying determinant of the functioning of economies. In this sense, Williamson (2000) argues that the costs derived from institutional uncertainty, either due to continuous and unforeseen changes in the rules of the game, or due to low law enforcement, are the so-called macro transaction costs.

These situations can be repeated throughout the political history of countries, creating a path dependency (North, 1990) that will prevent the possibility of “remedying” the development of a business system (Williamson, 1985). Ordóñez (2002) suggests that future events are closely related to past events. It is like a temporary river, downstream and upstream, where the occurrence of certain actions at the institutional, organizational and technological levels in the present depend heavily on past actions.

Williamson (1985) states that when a current design can be improved based on a superior alternative, which can be formulated, implemented, give net gains and be durable over time, the previous design is said to be remediable; failing that, the system is hopeless. The ability to achieve superior designs and improve the prevailing paradigm depends on the existing capacity for innovation in institutional, organizational and technological environments, and these are influenced by the more or less entrenched path dependency that accelerates or hinders the process.

3. METHODOLOGY

This work is limited to studying the SAG of Argentine wheat from the perspective of the new institutional economics applied to agribusiness and its context. This emerges as a new paradigm to explain the functioning of the economic system due to the restrictions presented by the neoclassical economic approaches to understand the complex web of interactions that determine the performance of agri-food businesses (Ordóñez, 2009).

In order to understand the performance of a SAG, Senesi (2009) proposes the Strategic Study and Planning of Agribusiness Systems (EPESA) method. The method is based on the fact that it provides the necessary tools to understand the performance of a SAG, and thus be able to identify its restriction based on the market. The description and quantification of the SAG allows defining the flow of product and its economic value, identifying if there are actors that are counting on greater appropriation of income within the system and if this characteristic gives rise to restrictions of an organizational and transactional nature.

Continuing with what was previously postulated, the wheat SAG consists of a series of processes, in which a series of actors intervene that generate a range of products. In turn, these processes are framed within result areas. For its part, it is the institutional environment that provides the framework for the operation of the entire system. Qualitatively mapping this system implies determining what are the result areas and subsystems, what are the processes and products, who are the actors and how they relate to each other. On the other hand, quantifying the system means adding value to the processes and products mentioned above.

This analysis is complemented by the PEST analysis, which is a tool to analyze the macroenvironment in which the organization works. Forecasting, exploring and monitoring the environment is very important to detect trends and key events of the past, present and future. The PEST analysis consists of examining the impact of those factors that are beyond the control of the organization, but that may affect its future development (Martínez and Milla, 2012). In this work, the PEST tool was used, mainly the Political / Economic part to analyze the context and institutional changes in which the SAG of Argentine wheat takes place. The analysis is complemented with social and technological variables.

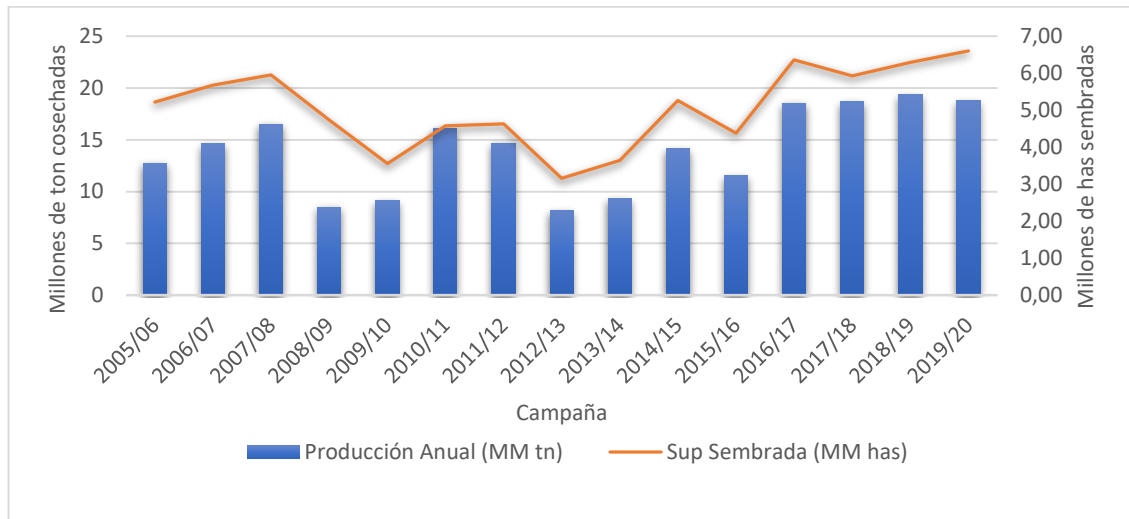
This qualitative-quantitative research was carried out from the search for primary and secondary information. Semi-structured interviews were carried out with experts of the system and were complemented with the consultation of bibliographic sources: databases of international entities specialized in foreign trade, web pages of the sector, specialized magazines and government agencies.

4. RESULTS

4.1. Map of the Argentine wheat Agribusiness System

For Argentina, wheat is one of its historical crops and engines of growth as a nation. With production records from the beginning of XIX Century, it became increasingly important at the national level until it became part of one of the pillars of agricultural production (Díaz Alejandro, 1970). Production (as an indicator of volume) and sowing (as an indicator of intention and confidence in the cultivation by producers) had an erratic dynamic between 2005 and 2020 with increases and falls in the indicators that are not necessarily associated with the climate effect, without a clear trend (figure 2).

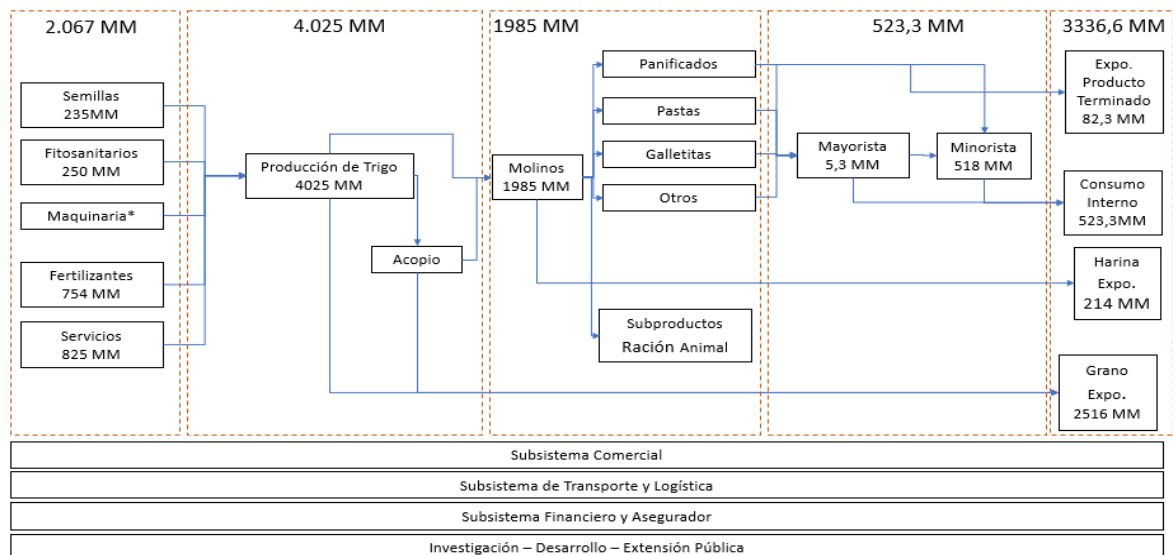
Figure 2. Evolution of production (in Million tons) and sowing area (in Million hectares) 2005-2020.



Fuente: authors with Minagri database.

On the other hand, the agribusiness system (SAG) of Argentine wheat generates value for about 12,000 million dollars (year 2019). According to the contribution of each actor, the most important comes from the wheat production link, contributing 1/3 of what the SAG generates. On the other hand, 2,800 million dollars is what is generated in the export market where wheat grain contributes 89% of the value of the exported product (see figure 3) and 8.5% of the foreign exchange of agricultural origin that entered to the country (source: INDEC).

Figure 3. Quantification of wheat SAG 2018/19



Source: authors by usign primary and secondary data.

The SAG of Argentine wheat is oriented 70% to export and 30% to supply the domestic market. The evolution of exports (in millions of tons) has been even more erratic in recent years (figure 4). This does not necessarily correlate with the price of the commodity in Chicago (international reference market) or with production.

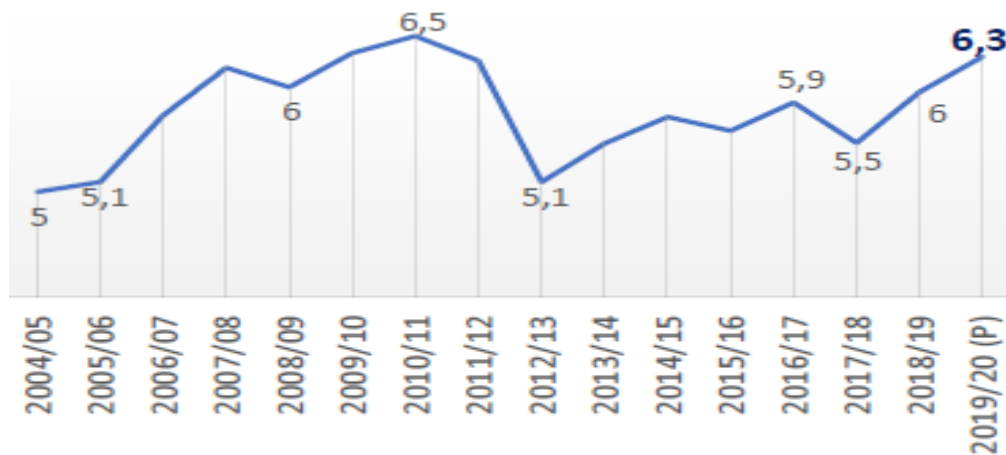
Figure 4. Argentine wheat exports 2001-2020*est. (in Million tons).



Source: Instituto de Estudios Económicos de la Bolsa de Cereales (2020)

Regarding the domestic market, the first indicator is milling, that is, wheat that becomes flour to later be exported or continue on the processing path until it reaches the consumer. During the last years, milling had erratic behavior (figure 5) due to several factors that distort profitability and a lack of clear policies for decision-making. This generated conflict in two of the main SAG players: production and industry, increasing uncertainty, transaction costs and appropriation of quasi-rents between both links.

Figure 5. Wheat milling in Argentina (in Million tons) 2004/5 – 2019/20



Source: BCBA. Informe Cierre Trigo 2019/20.

4.2. PEST analysis

Political variables

The interventionist assumptions are based on the fact that the wheat must first meet the supply of the domestic market at an accessible price and then export the balances. This makes it a market that has been intervened by policies in search of ensuring domestic supply and controlling the price level of these in the national economy. This is how the Argentine wheat SAG suffered interventions of different kinds for the last 60/70 years.

The economic policies and institutional changes had two different lines of government for the period 2003-2020 with different objectives and consequences on the SAG. Table 1 shows a summary of the policies carried out by governments with an impact on wheat SAG. Regardless

of the objective and consequences of these policies that will be analyzed later, the table is a sample of the constant change in the “rules of the game”, resulting in a less predictable, riskier business with greater vulnerability in the property rights that it generates. The consequence is an increase in macro transaction costs and disincentives to investment.

Tabla 1. Políticas macro y micro implementadas para el período 2003-2020.

Variable	2003 – 2015	2015 - 2019	2019 -2020
Export duties / Export taxes	Yes, with changes in aliquots and relative differences between players	0 (zero) and then with a new scheme	Yes, different depending on the stage of the chain
Registro de Operaciones de Exportación (ROE) Register in Export Operations	Yes, with strong controls and arbitrariness	No limitations	No limitations
Export reimbursements	No	Yes, but with some limitations	Yes, but with some limitations
Dollar Exchange / Currency control (Multiple currency value)	Yes	No	Yes
Currency Settlement Obligation	Yes	No	Yes
Commercial Agreeents	No	Yes	No

Source: authors by usign primary and secondary data.

The intervention policies most used were:

- Export Duties / “Export taxes”: the history of export taxes and –in general- state intervention in export trade is long-standing in Argentina (Díaz Alejandro, 1970). They work as an aliquot to the value of the commodity or flour in the international market on the exporter who then transfers to the agricultural producers. This depresses the price at the local level over international prices.

- Register in Export Operations (ROEs): they basically function as a record that must be obtained to export. The government argument was that they would be granted as long as local demand could be satisfied, they were imposed in 2006, on wheat, corn, beef and milk. It then underwent various changes over time until dissolution in 2011.

- Export reimbursements: basically it is the refund of indirect taxes that were collected in the national territory during the production process and that do not have a refund when exported. In 2007, a delay of more than one growing season (6-8 months) was estimated, reaching 4 years. This occurs in situations of high cost of money due to inflation and devaluation in which a large percentage of its value is lost (Ordóñez and Senesi, 2015).

- Currency control: exchange or currency control is called the action of the State to supervise and limit, totally or partially, the operations of purchase / sale of currencies within the territory where it exercises sovereignty, with effects on the balance of payments. This affects generating various types of change in the economy.

- Currency Settlement Obligation: what is carried out is the obligation to liquidate the foreign currency generated by the export after a certain number of days after the export sale in order to

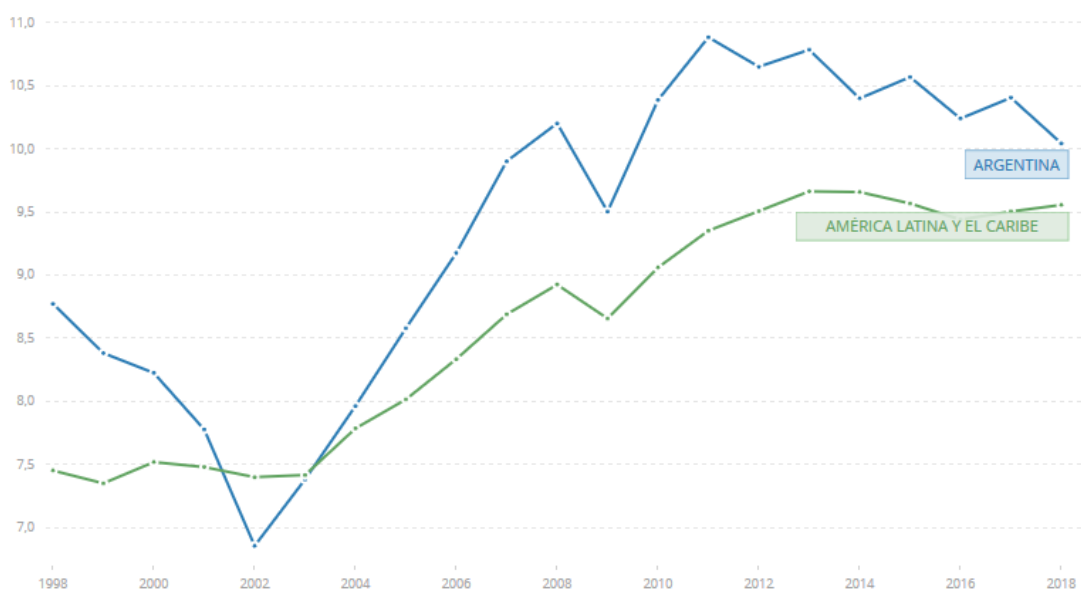
enter the country. This creates a problem for the export sector since it is forced to liquidate its exports without being able to re-dollarize its portfolio at the same exchange rate or incur high costs of dollarization of its surpluses or profits.

Economical variables

To contextualize the Argentine situation, a comparison of GDP per capita with data from Latin America and the Caribbean will be made (figure 6). Argentina being a developing country, two very important events occurred that broke trends. On the one hand, the crisis in Argentina in 2001 and, on the other, the international crisis of 2008. After the crisis, Argentina resumed a growth path at high rates until 2011 where its growth rate decreased and remained practically stagnant or falling. In this case we see that, although Argentina is above the average, the fall that has been taking place since 2011 reduces these differences and if it continues in this trend it could equal or even be less than the average during the next few years.

Another aspect to note, linked to the economic, is inflation in Argentina, which has reached rates close to 50% in the last 10 years. This translates into loss of the purchasing power of the population and the value of the Argentine currency. The result is a mismatch between the prices of each of the links in the chain of the Argentine wheat agribusiness system. For example, the price of wheat is at a dollar value, which was often arbitrarily manipulated by the government, while the value of products in the domestic market is strongly associated with inflation and, at times, also controlled by the government through mechanisms such as “maximum prices” generating uncertainty, disincentives to investment, and conflict between actors within the SAG.

Figure 6. GDP per capita (en thousands of dollars constant prices of 2010) - Argentina, Latin American Countries and Caribe



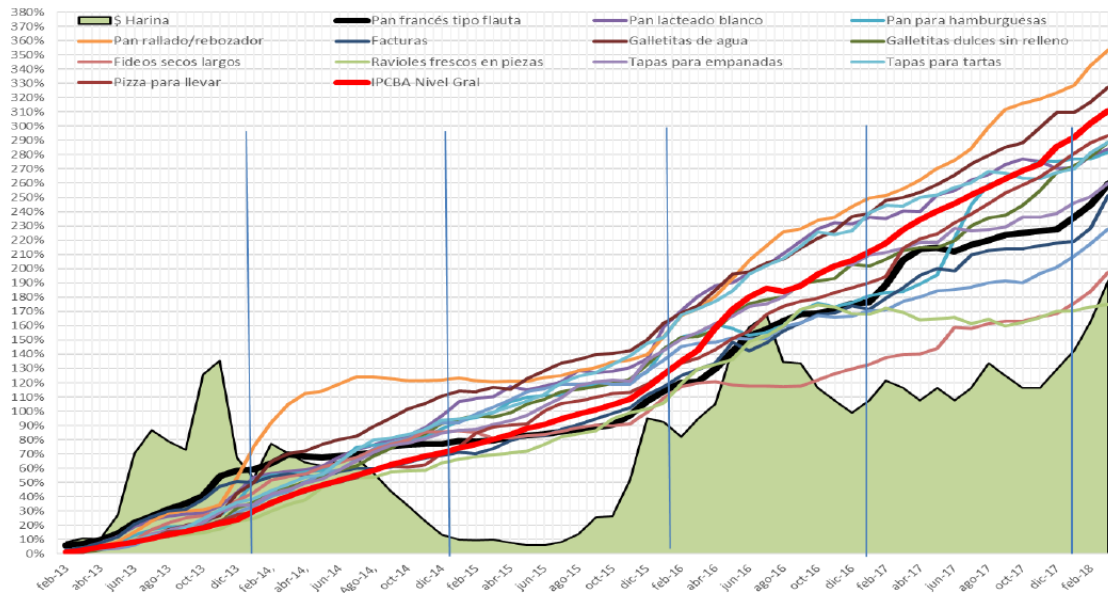
Source: World Bank.

Social variables

Wheat and its derivatives have a high share in the basic food basket and have an important influence on the CPI (consumer price index; IPC in Spanish). In the case of the CPI, the participation of the food item is 23% and increases as the purchasing power of families falls and foods derived from wheat flour increase in the diet; here the farinaceans contribute bread, flour, cookies, noodles, etc. Hence its political and social "importance".

In this sense, the inflation index for wheat flour and products derived from it has increased between 150% (flour) and 320% (bread) between 2013 and 2018 (see figure 7). The figure shows a clear trend of price growth, as a result of macroeconomic and fiscal policies that have driven inflation.

Figure 7. Price variation in the principal products based in wheat



Source: FAIM.

This becomes important when analyzing poverty indicators in Argentina. In the second semester of 2019, the percentage of households below the poverty line reached 25.9%; 35.5% of the people reside there. This indicator has been growing in the last 10 years since in 2010 8.1% of households and 12% of people were below the poverty line (source: INDEC). This places Argentina as one of the emerging countries with the highest poverty rate.

Technological variables

Approximately 80% of the budget for the agricultural sector is destined to the support of groups / organizations, etc. of research and general services for the producer in which Argentina is well valued internationally, with institutes such as INTA (National Institute of Agricultural Technology) or SENASA (National Service of Agrifood Health and Quality). The work carried out by these organizations in conjunction with private companies, for example, generated the basis for the determination of wheat qualities at the national level. On the other hand, they are the facilitators of the Wheat Competitiveness Table where the different links in the chain come together with the government to seek tools that facilitate the competitive advantages of SAG.

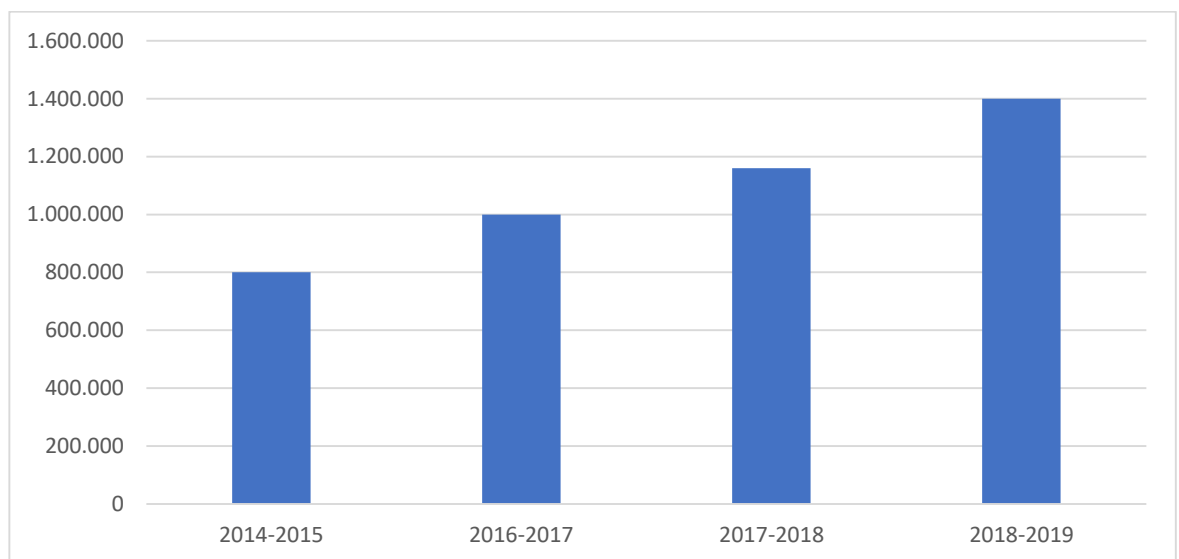
The R&D system in Argentina is highly specialized in agri-food research. As a result, 14% of patents, 21% of publications and 17% of calls refer to the agri-food sector. These percentages are higher than in Brazil and than in most OECD countries. Despite the organizational innovations that have generated new roles for new private actors, investment in R&D is for the most part at the public level, and measures must be taken so that the system can better respond to demand. However, the intensity of research in the sector has fallen in the last two decades (OECD, 2019).

A direct impact of the policies, institutions and legal framework is then observed on the technological aspects associated with SAG. On the one hand, we have the case of wheat seed,

as a basic input. The wheat seed market has its peculiarities, since by law producers can save seed for their own use the following year. The low enforcement of the law leads to an illegal trade in wheat seed, impacting on lower investments in R&D by seed companies and therefore generating limitations on the genetic improvement of this species.

Another important aspect is that the level of input technology is directly associated with the prices of the product (remember that it is intervened by the government). This generates an increase in the risk of the capital that is invested, resulting in low levels of investment, especially in fertilizers (see figure 8).

Figure 8. Fertilizers use in winter crops (in tons).



Source: authors based in BCBA.

5. IMPLICATIONS

To understand the relevance of the influence of the state and the institutions in the SAG, the starting point is that the one who drives the SAG is the demand and from here comes the importance of its analysis to understand the dynamics, structure and organizational arrangements in them. (Ordóñez, 2009). As could be observed in the mapping and quantification of the wheat SAG, the demand responds to both the internal and external markets. Within the first group, there are mostly products with a high degree of transformation, while in the external sector the highest percentage of exports and value is generated as grain wheat, with little added value.

Kahn (2017) mentions that “*institutions and policies describe rules that in turn determine the allocation of resources, and these can affect different types of organizations in very different ways.*” The policies implemented in the 2003/15 period were interventionist in nature, and were sustained on the basis that the Argentine state should intervene in the SAG to ensure the supply of wheat in the domestic market, at prices that the Argentine population could afford (in an inflationary context). Once the domestic market was supplied, the balances could be exported. The interventions were carried out mainly on the export market through taxes, granting of licenses, obligation of liquidation of foreign exchange, etc. seeking to regulate exports to “ensure” price and quantity within the domestic market.

Export duties were located at 20% of the FOB value for the period 2003-2007, then they increased to 28% until 2009 and later dropped to 23%. Initially, this caused a drop in the domestic price of the commodity, an objective sought by the government, but which resulted in disincentives to its production in the medium term, generating a shortage of wheat in the Argentine market. As it is an annual crop, the disincentives to production have a rapid effect on the decision of agricultural producers about whether or not to plant it, since it does not imply any major complications to plant another crop with better profitability. This shows the erraticity of production and yields.

This is how the sowing of the crop fell by 840,000 hectares for the selected period (16%) with years of historical levels of 3.1 MM hectares when the average for the entire timeline is above 5 MM hectares. Total grain production fell by 1.5 million tons in the period, expressing high temporary volatility due to the measures that were being implemented. Peaks of 16.49 million were reached in the 2007/2008 harvest, with a subsequent fall in the following season to 8.51 million tons, a year-on-year fall of 50% in a context of high international prices of the commodity. This is an example of how policy changes that seek redistributive effects can have unintended opposite effects.

On the other hand, North and Weingast (1989) argue that the existence of a solid and credible property rights system is a key issue for social interaction, since they reduce the uncertainty of the agent. Thus, in terms of formal institutions, the institutional structure of the State appears as a key element to favor the credibility of government commitment. In the case of the Argentine wheat SAG, the state became a key participant in the dynamics of the system through the granting of licenses in the form of ROEs and export tax refunds, alternating the formal structure of respect for property rights, generating high uncertainty among the actors of the system. These measures were arbitrarily granted and the reimbursements suffered a delay of more than 6 months in a context of high cost of money. The result was an increase in macro transaction costs due to the lack of predictability in the records and reimbursements for exporters, further discouraging the export business, generating diseconomies of the first order (Williamson, 2000).

Wheat exports, which in 2004/5 were above 10 million tons, reached a floor of 1.6 million and went from representing 70% of production to less than 40%. As a result, the price of wheat paid in the domestic market was distorted, the disincentives of the export business translated into prices (which was initially sought by the government) but ended in less wheat sowing. This is a clear example of what Eggertsson (1990) argues that *“the State affects the situation of the structural production frontier, being able to bring it (or not) closer to the technical production frontier.”*

As for the volume of flour processing, it increased by 30% in the 2003/11 period, although in the medium term, due to wheat shortages, it fell by 11% until 2015. Tax refunds were at 2.7% and the segmentation of export taxes (23% for wheat and 13% for wheat flour) ended up affecting the production of wheat that ended with a shortage of stock for the local milling industry, having to, at times, pay for wheat in the local market at a higher price than international slate. Likewise, the prices of wheat flour derivatives had very uneven increases, but well above the price of flour, being another sign that the uncertainty generates price distortions.

The arbitrariness in the quotas (ROEs), the control of foreign exchange (stocks) and the obligation of liquidation of the foreign currency entered by the exporters in a certain period did not allow managing the strategic freedom of better price negotiations, generating relationships of trust with buyers, establish medium or long-term relationships that encourage investment.

This both in the domestic market (production - milling / industry) and in the foreign market (export grain / flour). In some cases this resulted in the capture of quasi-rent between actors, loss of value and trust, and high transaction costs in operations between producers and industrialists / exporters.

Following Eggertsson (1997, 1998), politics tends to isolate political problems from economic ones, generating increases in transaction costs. This case may be a sample of this statement since the search objectives of "securing" the domestic market and then exporting the surpluses and thus achieving the supply, de-dollarization and lower price of inputs in the domestic market and higher tax collection could not be achieved. The consequences were less planted area, lower production and exports, and increased prices of farinaceous products.

Continuing with the following period, during 2015/17 there was a change of government that implemented a drastic change in relation to the policies implemented in the previous period. A government less interventionist in the markets and more pro-exports that generated a change in the expectations of economic agents. The most important changes for the Argentine wheat SAG were those related to the opening of markets, freeing up the exchange rate and removing the export taxes.

At first, the shock of the abrupt change in policies generated imbalances in the SAG. The liberation of the exchange rate and the reduction of export duties generated what is called "shock therapy" that generates rearrangements and redistribution of income in an economy in the short term. In this period again there was a change in the rules of the game within the SAG, but, in this case, we must take into account what North (1990) raises where he mentions that "*institutions structure incentives in human exchange.*" The change in the incentives of the SAG actors that were generated from the new policies led to increases in the planting area and in the use of technologies. In terms of sowing, it went from an average of 4.5 MM hectares sown in the 2001-2015 period to 6.2 MM hectares in the 2016-2019 period. This is a 38% increase in hectares sown between stages. Production went from an average of 12 million tons in the previous period to a new average of 16.5 million tons for the period under analysis (+ 37.5%). The change in expectations generated sustained growth up to production peaks of 19 million tons for the 2018/19 season.

The wheat milling sector expressed an initial abrupt change in the period analyzed (2015/16) in its cost structure due to the fact that the wheat input represents 70% of this and its price increased by 84.6% in pesos current between November 2015 and May 2016. Even so, milling in the medium term increased by 13% from 15/16 to 19/20 since there was more availability of wheat grain input and there were better commercial conditions for the export of flour, to which the export taxes were also removed. These went from 108,000 tons in 2013 to 646,000 tons in 2019, almost 400%.

Finally, the change in policies towards the liberalization and promotion of exports, contrary to what was postulated in the previous period, did not lead to shortages in the domestic market for exports, but instead generated increases in production that were placed in the market. external generating greater income of foreign currency. The foreign exchange income from SAG exports increased from a floor of 955 million dollars in 2014 to 2812 million dollars for the 18/19 campaign, this represents an increase of 194% in dollars.

On the other hand, it was not related to the increase in prices in the economy since for the present period inflation continued its rhythm of between 25 and 40% per year regardless of the price of wheat and flour in the international and local markets, again the data show that the incidence of this input in the final product is between 7 and 10%.

The analyzed period served to show what was the effect of the institutional changes on the SAG of Argentine wheat on 2 different economic and thought currents. How institutional weakness and increases in uncertainty, among other variables, generated diseconomies of the first order (Williamson, 2000) causing increases in transaction costs and consequently lower performance of the system. The path dependency explains throughout the analysis that political fluctuations existed and will exist in the Argentine macroeconomy and it is very difficult to influence them. This risk, although it does not belong to the SAG itself, is an implicit risk due to the environment in which the system is located. This is a strong determinant of progress within the SAG since innovations can be conditioned by said path dependency, generating an irremediability in the system (Williamson, 1996).

6. CONCLUSIONS

Despite the importance of the SAG of wheat already mentioned above, the evolution of production and the agribusiness system of wheat in Argentina had an erratic behavior in the last 20 years, it showed great volatility in terms of production, planting intention, processing, grain and flour exports, without a clear long-term trend. This volatility was not related to what happened at the international level where both wheat production and trade had a sustained growth rate, hence the objective of analyzing how institutional changes could influence the performance of the system.

Regarding the policies implemented in this period on SAG and the country's macroeconomics, they were varied, volatile and arbitrary, which generated in the first instance an increase in risk due to the constant change in the "rules of the game", giving as The result is a less predictable business with greater vulnerability in property rights, generating an increase in associated transaction costs. No long-term trend could be observed, a very changing political, economic and social environment over the years, where the interventions were on the sector were recurrent, led to moments of very low production where the country was close to importing wheat to record harvests and exports in just a few seasons apart.

Based on the analysis of 2 periods of government with very different economic currents, several conclusions could be drawn. For the first period, policies were based on wanting to supply the domestic market, ensure an economic price, and then export surplus wheat and flour. They focused on the fact that since it is a main input for the basic Argentine food basket, it should be intervened in order to take care of "the Argentine table" and de-dollarize the input. From here several policies arose such as export duties, ROEs, foreign exchange settlement obligation, etc. All these policies were duly analyzed throughout the work through the evaluation and secondary sources of bibliography found and it was concluded that none fulfilled the proposed objective, and that the reason for their implementation was based on the need for foreign exchange and tax collection for the financing of macroeconomic policies of the different governments.

Wheat and its system have a positive trade balance and from here arose the need to intercede in the market, appropriating part of said currencies in the form of export duties. This source of collection was and is important for governments in a context of macroeconomic weakness and shortages of foreign exchange, in addition to being an "easy to collect" tax on exporters. This led in the medium / long term to falls in the intention of sowing, production and value generated by the SAG. In addition to this, there were disincentives associated with the obligation to settle foreign currency by exports in a context of multiple exchange rates, generating income losses between the differences in the settlement of the currency and the re-dollarization of the profit. Mostly all measures that hindered the free exchange of currencies in a context of "shortage" of dollars in the economy.

Continuing with the following period, during 2015/17 there was a change of government that implemented a drastic change in relation to the policies implemented in the previous period. Again this was another change in the rules of the game, but with appropriate incentives for production. The most important changes for the SAG were those related to the opening of markets, the release of the exchange rate and the removal of withholdings on exports. Through these measures, the Argentine wheat SAG resumed a path of growth and stability.

In this period, it was the market that regulated prices and quantities without state intervention (until the final stage of government). The area planted, production, export and value generated by the SAG grew significantly. And, on the other hand, the research data also showed that several of the previously applied policy premises lacked support since, inflation continued its increasing course regardless of the international value of wheat and the quantities exported, there was a greater entry of foreign exchange from exports, there was no shortage of the input in the domestic market and, without differentials of export taxes, both the second transformation sector and the final industry grew.

That said, it is concluded that there were several reasons why the SAG has high volatility and does not find a clear growth trend in the long term. The reasons that affect the most are difficult to "manipulate" by the SAG, they are mainly due to the situation and recurrent institutional changes in the country. Due to this, the profitability demanded by the actors on the system is greater than that demanded in the same business in other countries and this forces the productivity work to be redoubled, increasing efficiency with new technologies, new organizational arrangements, etc., that allow to reduce transaction costs.

The dynamics of the environment where the SAG of Argentine wheat develops, with high volatility, vulnerability of property rights and frequent changes in the rules of the game threatens its efficiency, on this Coase (1998) affirms "*... productivity of an economic system depends on specialization ... But specialization depends on exchange ... And the lower the cost of exchange (transaction cost, as it is called), the greater the specialization, the greater the development of people and higher the standard of living of the people ... However, the level of transaction costs depends on the institutions of a country, its legal system, its political system, its culture ...*"

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