



# INVEST IN CÓRDOBA

Summary of finances  
and investments

Fourth Trimester 2021



Ministerio de  
**FINANZAS**



**CÓRDOBA**  
entre todos





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# PROVINCIAL ECONOMY

## ECONOMIC ACTIVITY IN CÓRODBA

### Agriculture

According to the Córdoba Grain Exchange, the wheat season 2021/22 has not only evidenced a recovery in the economic value of this cereal, but has also set as a record. The gross value of wheat production for the 2021/22 season, which translates to the amount of foreign exchange that could be generated if the entire production were exported at the month of harvest, was nearly US\$1,287 million, 182% above the previous season and 98% more respect to the historical average (2011-2020), set around US\$ 650 million ([Graph 1](#)).

The winter season closed with a harvest of more than 4 million tons, 120% more than the volume produced in the previous cycle and 51% above the historical average (2007-2020).

These positive values and differences can be explained, on the one hand, by the approximately 1.2 million hectares of sown area, which was 3% higher than in the previous season and 19% higher than the historical average (2007-2020) and, on the other hand, by the provincial average yield of 36.1 q/ha (1 q= 100 kg), which was the highest in the last 14 years.

The national production, according to the Ministry of Agriculture, Livestock and Fisheries of the Nation, was 22.1 million tons, accounting Córdoba for 18% of the total. In terms of planted area, which amounted to 6.7 million hectares in the country, the province of Córdoba also represented 18% of the national wheat area. In addition, Córdoba was above the national average yield with a difference of 2.4 q/ha.

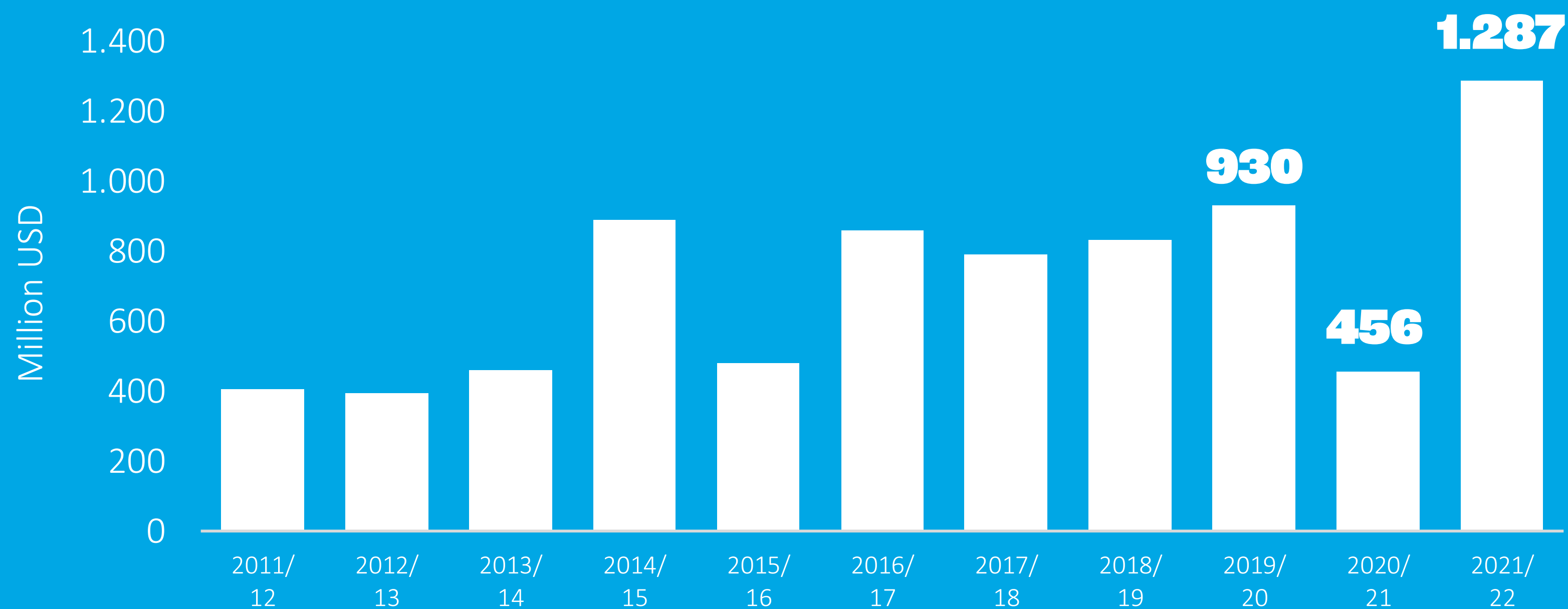




GRAPH 1

## Gross Value of Wheat Production in Córdoba

In million dollars



Source: Own elaboration based on the Córdoba Grain Exchange.



## Commercial and Industrial Activity

**Basing on the Córdoba en Foco report , which assesses different sectors of the industrial production and the sales to provincial end consumers, in the year 2021 most of the industrial activities and services evidenced a recovery, compared to the year 2019, a reference prior to the pandemic (Graph 2).**

Such is the case of the Health Sector, which in 2021 showed a real growth in turnover equivalent to 58% respect to the same period in 2019.

The industries of Agricultural Machinery and Car Parts also continued evidencing high production levels during 2021, with a growth of 37% and 18% in units produced, respectively, above the level achieved during 2019.

Turnover at constant prices in the Plastic industry and in the Wood and Furniture industry was a 32% and 50% higher, respectively, compared to the year 2019. On the other hand, sectors as Food, Graphic and Mining Industries failed to recover pre-pandemic levels in 2021, showing declines from 2019 of 5%, 30% and 66%, respectively.

In the different commerce sectors, sales of hardware, sanitary ware, iron and construction-related material sustained their high levels, indicating an actual rise of an 67% respect to 2019. Also, sales of industrial inputs recorded an increase of 57% in real terms respect to the year 2019 and home appliances sales recorded a rise in turnover at constant prices of 18% in 2021, respect to the same period in 2019. Supermarket sales, for their part, measured in units sold, dropped 25% compared to the same period in 2019.

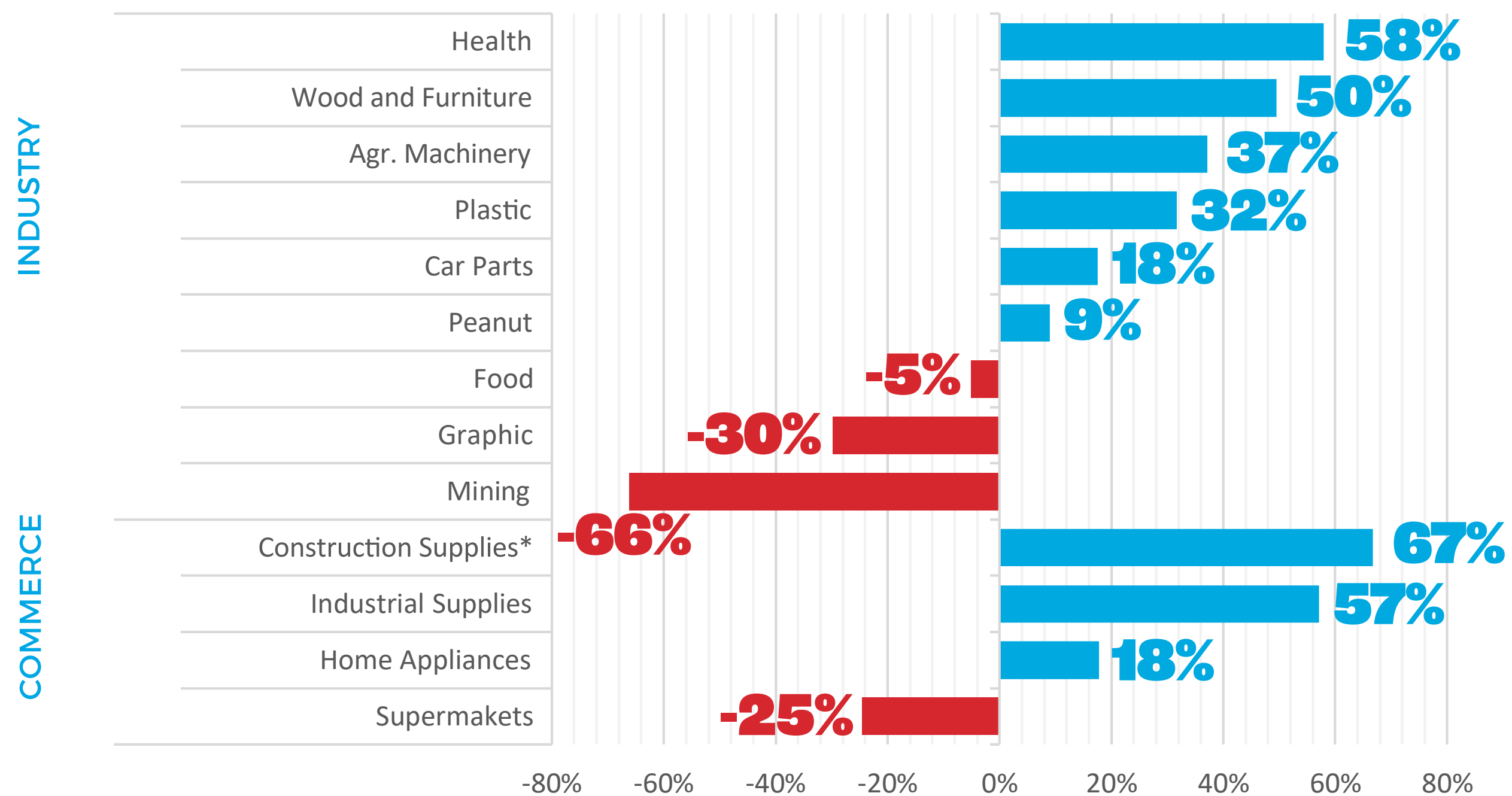


## GRAPH 2

## Summary of industrial and commercial activity.

## Activity rate per segment

Actual variation % year 2021 / year 2019



Note: \*Including hardware, sanitary ware, iron and related items. Source: Córdoba en Foco – Ministry of Industry, Commerce and Mining.

## Exports

According to the data provided by the National Institute of Statistics and Census (INDEC for its acronym in Spanish), in 2021 Córdoba sales to other countries amounted to USD 11,757 million, 44% above the USD 8,180 million of the year 2020.

Agriculture and the agro-industry had a high influence on the value of exports, given that 85% of the out-of-country sales came from the agro-industrial chain. Within this participation, primary products (PP) totaled USD 5,291 million (45% of the total), while manufactures from agricultural and livestock origin (MOA for its acronym in Spanish) almost reached USD 4,668 million (40% of the total).

Manufactures from industrial origin (MOI for its acronym in Spanish) were just over USD 1,785 million (15% of the total).

Although prices were the main drivers of exports, the volumes of agro-industrial products were within the average. Such is the case of corn, of which the exported volume was the second largest in the history of the province. Taking corn and wheat together, Córdoba exported USD 3,68 billion.

Within the Córdoba exports basket, cereals accounted for 31% of the total, followed by 20% from soybean meal and pellets, 13% from seeds and oleaginous fruits, 12% from fats and oils and 9% from land transport equipment (basically automobiles).

The main destinations for Córdoba products were: the Mercosur, the Southeast Asian countries, the European Union, the Maghreb, Egypt and the Middle East.

Córdoba's performance within national exports places it as the third province generating foreign currency, with 15% of the turnover. The ranking is leaded by Buenos Aires, with 36%, and followed by Santa Fe, with 23%.



# SITUATION OF PUBLIC FINANCES

## BUDGET EXECUTION

### The Province sustained high levels of current saving

The prolonged and severe macro-economic crisis, deepened by the Covid-19 pandemic, has posed a challenging context for the provincial finances, particularly due to the sharp drop of resources during the year 2020. Even considering the recovery that revenues are showing in 2021, the levels are still lower than those observed prior to the beginning of the crisis in 2018. In this adverse scenario, the Province has kept a prudent and austere management thus allowing for the recovery of public investment throughout 2021 and coping with the extraordinary expenditure necessary for the fight against the pandemic.

As accrued to December 2021, the net income of the province (resources available after subtracting the au-

tomatic transfers to municipalities and communes of the Province) was AR\$ 575,764 million (USD 6,050 million), showing a real increase of 10% compared to the year 2020. In turn, net current expenditure (provincial expenditures without considering the automatic distribution to municipalities and communes) was AR\$ 457,645 million (USD 4,809 million), which implies a year-on-year decrease in expenditure of 1% in real terms (Table 1).

As a result, the 'current saving available' obtained during the year 2021 was AR\$ 118,119 million (USD 1,241 million), (Table 1). Even in an adverse macro-economic context, it was possible to keep throughout the year a 'current saving available' representing the 21% of the provincial net income, almost doubling the ratio observed in the same period of 2020 and the historical average (Graph 2).





TABLE 1.

## Income and Expenditure of the Non-Financial Public Administration

Accrued to December 31 of every year – in million current pesos and in American dollars

Concept	2020		2021		Variation AR\$	
	AR\$	US\$ / <sup>1</sup>	AR\$	US\$ / <sup>1</sup>	Nominal	Real / <sup>2</sup>
<b>NET INCOME</b>	<b>355.504</b>	<b>5.036</b>	<b>575.764</b>	<b>6.050</b>	<b>62%</b>	<b>10%</b>
Taxable and Non-Taxable Net / <sup>3</sup>	259.397	3.674	432.410	4.544	67%	13%
Social Security Contributions	42.065	622	57.645	617	37%	-6%
Net Current Transfers / <sup>4</sup>	28.446	403	42.141	443	48%	1%
Property Income	7.390	105	16.016	168	117%	47%
Other Income	565	8	852	9	51%	2%
<b>OPERATING EXPENSES</b>	<b>312.499</b>	<b>4.427</b>	<b>457.645</b>	<b>4.809</b>	<b>46%</b>	<b>-1%</b>
Wages and related and Social Security Benefits	245.692	3.480	343.718	3.612	40%	-5%
COVID-19 Program Expenses / <sup>5</sup>	4.459	63	11.745	123	163%	79%
Property Income	11.459	162	13.112	138	14%	-22%
Other Net Current Expenses (Consumer Goods, Non-Personal Services and Net Transfers / <sup>6</sup>	50.890	721	89.070	936	75%	19%
<b>CURRENT SAVING AVAILABLE</b>	<b>43.005</b>	<b>609</b>	<b>118.119</b>	<b>1.241</b>	<b>175%</b>	<b>86%</b>
<b>CURRENT SAVING AVAILABLE/ TOTAL NET INCOME</b>	<b>12%</b>		<b>21%</b>			
<b>NET CAPITAL INCOME /<sup>7</sup></b>	<b>4.207</b>	<b>60</b>	<b>8.049</b>	<b>85</b>	<b>91%</b>	<b>30%</b>
<b>CAPITAL EXPENDITURE</b>	<b>27.718</b>	<b>393</b>	<b>58.572</b>	<b>615</b>	<b>111%</b>	<b>43%</b>
Expenditure on Construction and Capital Goods / <sup>8</sup>	23.831	338	45.413	477	91%	29%
Other Net Capital expenditure / <sup>9</sup>	3.888	55	13.159	138	238%	130%
<b>FINANCIAL SAVING AVAILABLE</b>	<b>19.493</b>	<b>276</b>	<b>67.596</b>	<b>710</b>	<b>247%</b>	<b>135%</b>

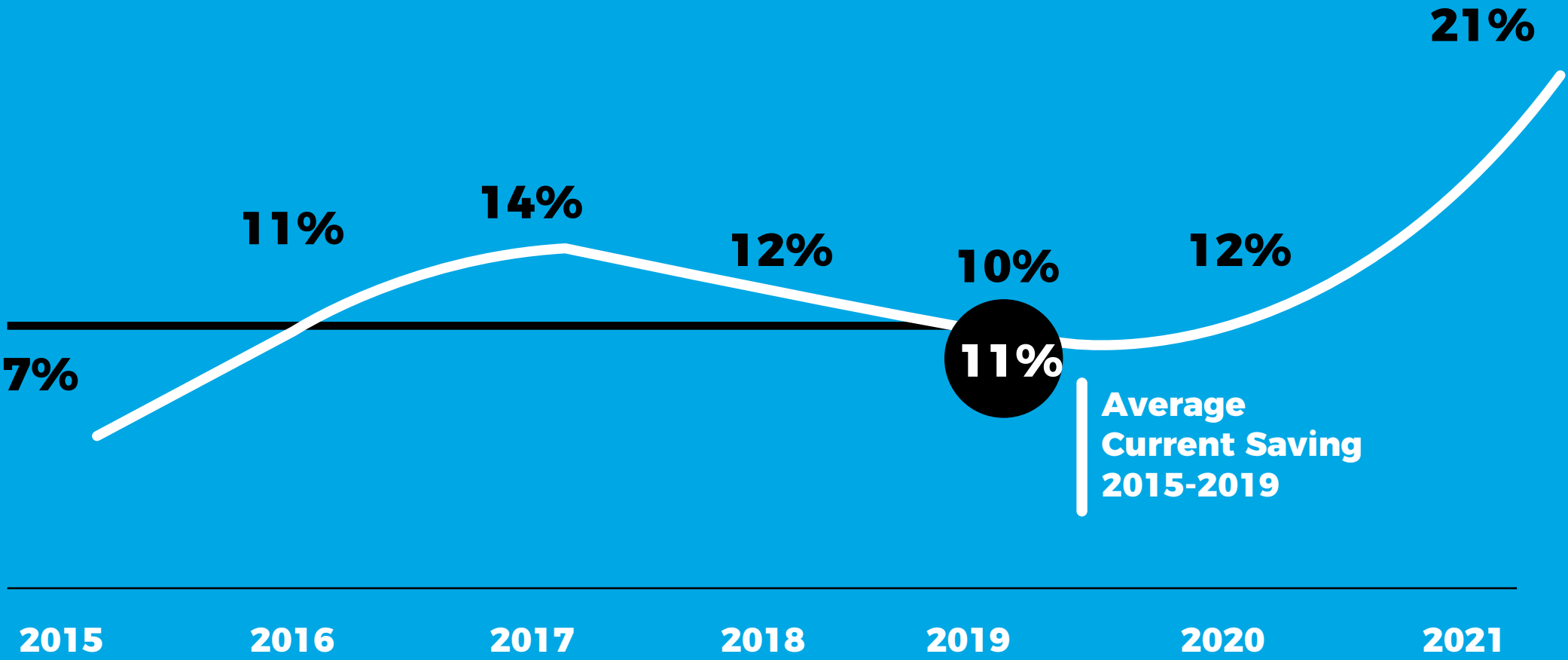
Notes: /1 The reference Exchange rate is the one published by the BCRA in Communication "A" 3500 (Wholesaler); /2 Based on the Córdoba Consumer Price Index; /3 Taxable and Non-Taxable resources available to the Province after subtracting the current resources automatically distributed to Municipalities and Communes; /4 Includes amounts received as Tax Consensus Compensation Item II Section A; excludes capital resources automatically distributed to Municipalities and Communes; /5 Fund for the state of alert, prevention and sanitary action for epidemic diseases created by Decree 156/2020; /6 Net of the resources automatically distributed to municipalities and communes; /7 Net Capital income from Capital co-participation to municipalities y communes and from Tax Consensus Compensation Item II Section A; /8 Construction expenses and Capital Goods is equivalent to Direct Real Investment plus the Capital Transfers to Others in the Public Sector; /9 Other Net Capital expenses from capital resources automatically distributed to Municipalities and Communes.

Source: Own elaboration based on the Budget execution to December 31 of the years 2020 and 2021. Ministry of Finance of the Province of Córdoba. See: <https://finanzas.cba.gov.ar/ejecuciones/>.

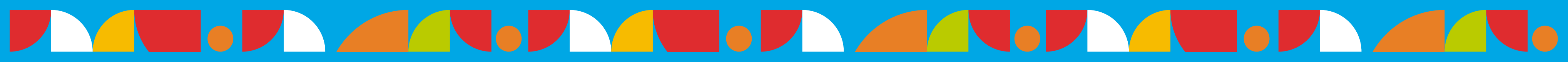
GRAPH 2

# Available Current Saving of the Non-Financial Public Administration.

To December 31 of every year - in % of the genuine income available/1



Notes: /1 Are the resources available to the Province after deducting the resources automatically distributed to Municipalities and Communes. Source: Own elaboration based on Budget execution to December 31 of the years 2015 to 2021. Ministry of Finance of the Province of Córdoba. See: <https://finanzas.cba.gov.ar/ejecuciones/>.



# Recovery of investment

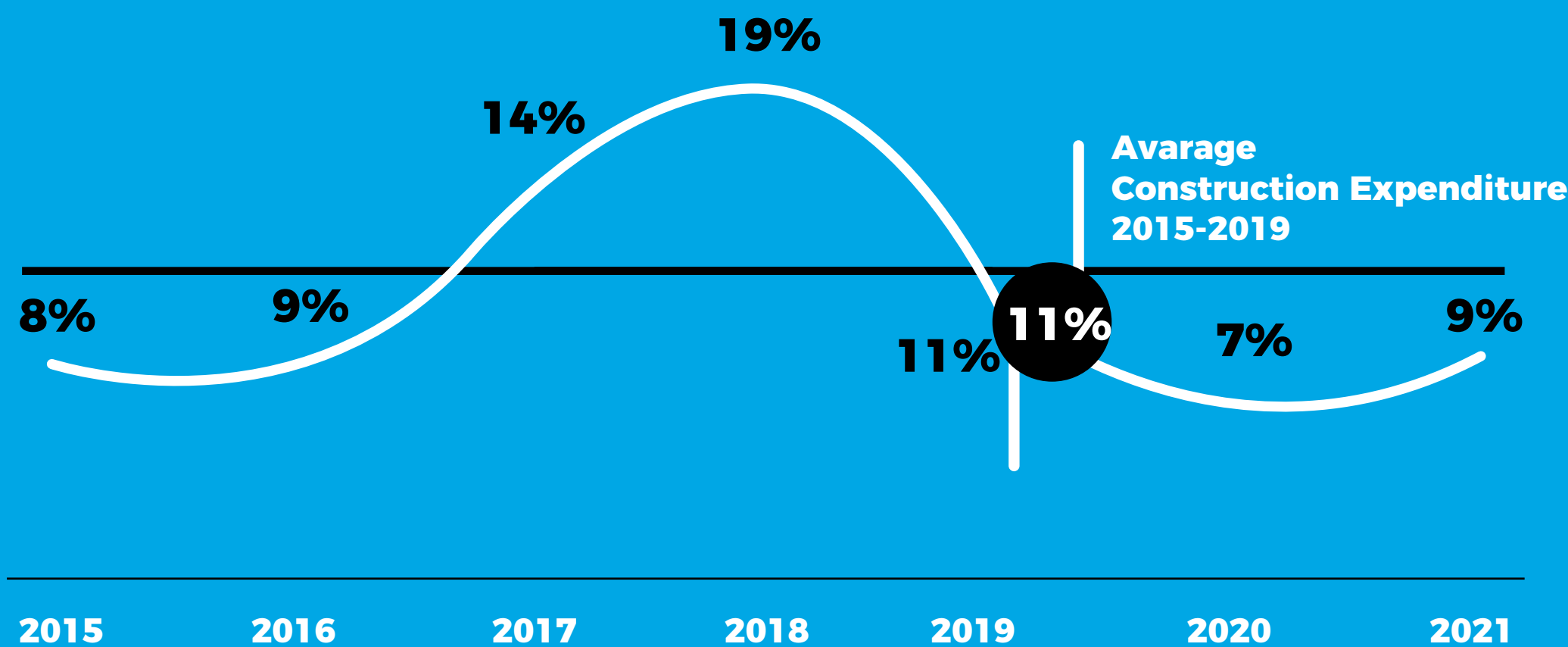
The provincial administration reduced the expenditure on construction during the pandemic in order to stabilize the provincial operating cash flow, yet in the year 2021, it reactivated works that are necessary to maintain the provincial infrastructure and also initiated the execution of new projects.

In fact, the expenditure on construction to December 2021 (AR\$45,413 million, USD 477 million) increased 41% measured in dollars respect to the levels observed in the same period of 2020 (AR\$23,831 million, USD 338 million). The construction expenditure as a percentage of the total net public expenditure of co-participation to municipalities reached 9% in 2021 (Graph 3), narrowing the gap with the average for the 2015-2019 period, which stood at 12%.

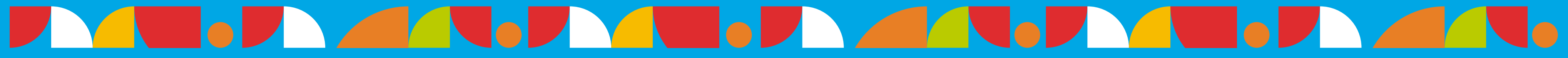
GRAPH 3

## Gasto en obras<sup>/1</sup> de la Administración Pública No Financiera.

Al 31 de diciembre de cada año - en % de los gastos totales netos<sup>/2</sup>



Notes: <sup>/1</sup> Construction expenditure considers Direct Real Investment (Spanish initials IRD) and the Capital Transfers to Others in the Public Sector. <sup>/2</sup> Net total expenses of current and capital co-participation to Municipalities and Communes. Source: Own elaboration based on budget execution to December <sup>31</sup> of the years <sup>2015</sup> al <sup>2021</sup>. Ministry of Finance of the Province of Córdoba. See: <https://finanzas.cba.gov.ar/ejecuciones/>.



# FINACIAL DEBT

To December 31, 2021 the provincial financial debt stock was AR\$ 263,923 million (USD 2,569 million). In addition, interests and amortization payments were made in a timely manner, which accrued AR\$ 31,492 million (USD 307 million), not considering the payment of the floating debt from prior years.

In 2021, the debt stock decreased 24% in real terms compared to the same period of 2020 (Graph 4.a). This was mainly due to a growth of 22% of the nominal exchange rate compared to a 47% inflation, given that 91% of the financial debt of the Province is denominated in foreign currency.

Also, measured in terms of provincial revenue, in 2021 the debt stock was in average equivalent to 5.5 months of collection. This indicator decreased 18% compared to the year 2020, when 6.7 months of collection were necessary to pay back the debt (Graph 4.b).

This improvement is partly due to the fact that in 2021 revenue collection accumulated an 11% increase in real terms respect to the year 2020 (at 2021 constant prices).





GRAPH 4A

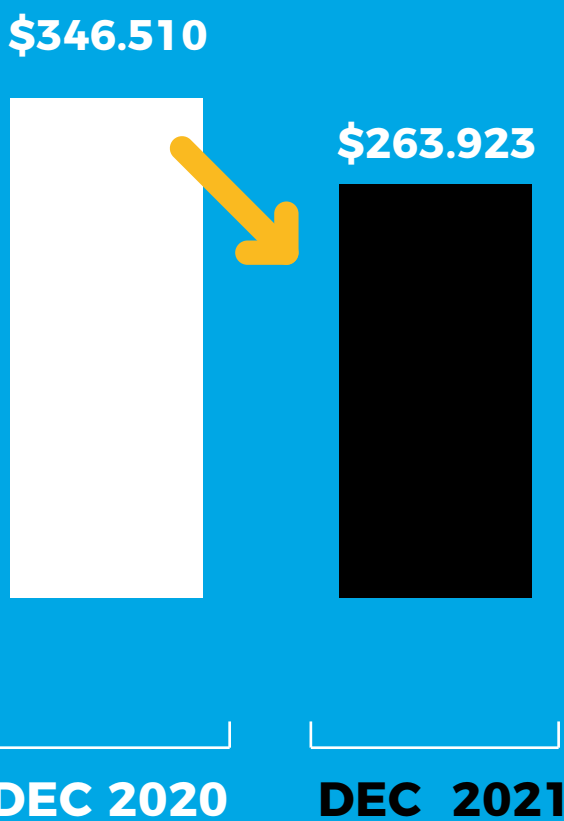
## Debt Stock

To December 31 of every year\*

In million constant pesos of 2021\*

Note: \*Based on Córdoba CPI.

Source: Ministry of Finance.

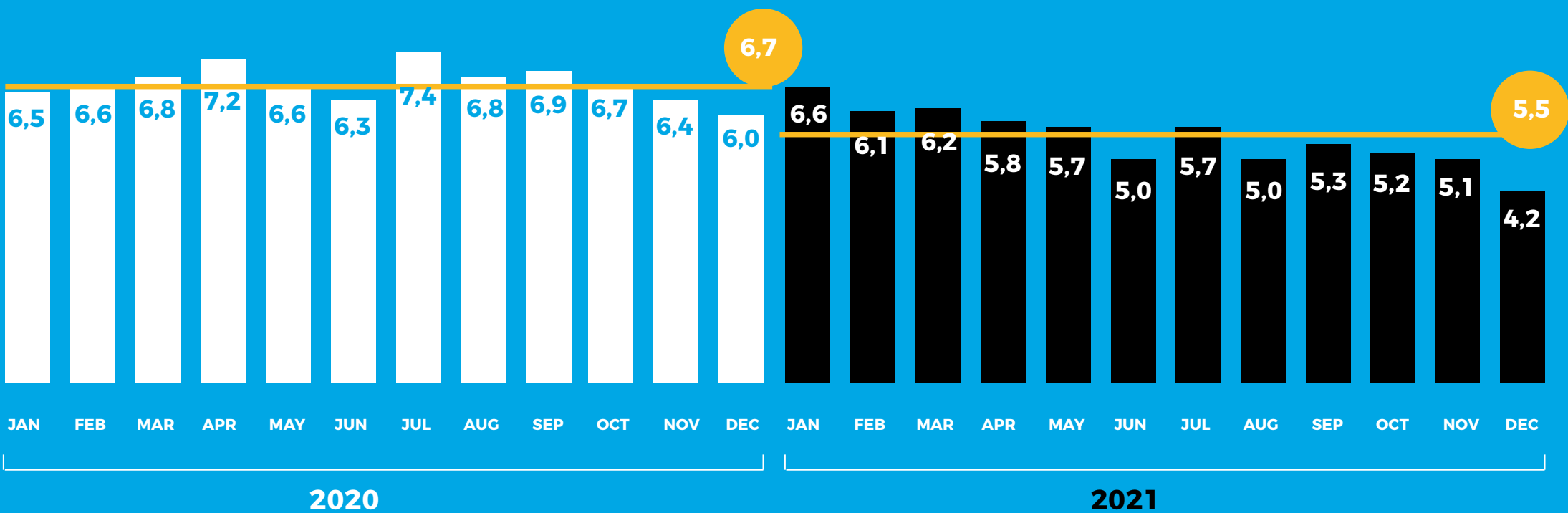


GRAPH 4B

## Debt Stock in relation to Income

January to December of every year

Number of months of collection equivalent to public debt\*



## LATEST NEWS

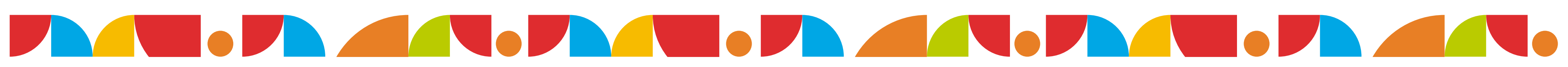
# CÓRDOBA MANAGED TO SUSTAIN REAL ESTATE TAX COLLECTION DESPITE THE CRISIS

Argentina is going through a long and deep recessionary cycle with high inflation. It started in mid-2018 and worsened in the beginning of 2020, with the emergence of the pandemic and the paralysis of economic activity imposed by the mandatory social isolation. This had very negative consequences, both productive and social, generating a really adverse context for tax collection.

The negative impact is harder among property (direct) taxes because payment is subject to the citizens' decisions, particularly of families. Other taxes pose different instances, such as the Gross Income, which, being an indirect tax, is charged on the price of goods and services and has automatic advance collection systems.

Among the property taxes, the urban real estate tax is the one that affects most taxpayers and generates most revenue. An analysis of the results achieved with the 2021 issuance shows that taxpayers regularized 72% of the amount due, this is to say that \$72 out of every \$100 of urban real estate tax issued were regularized within the year of expiration .

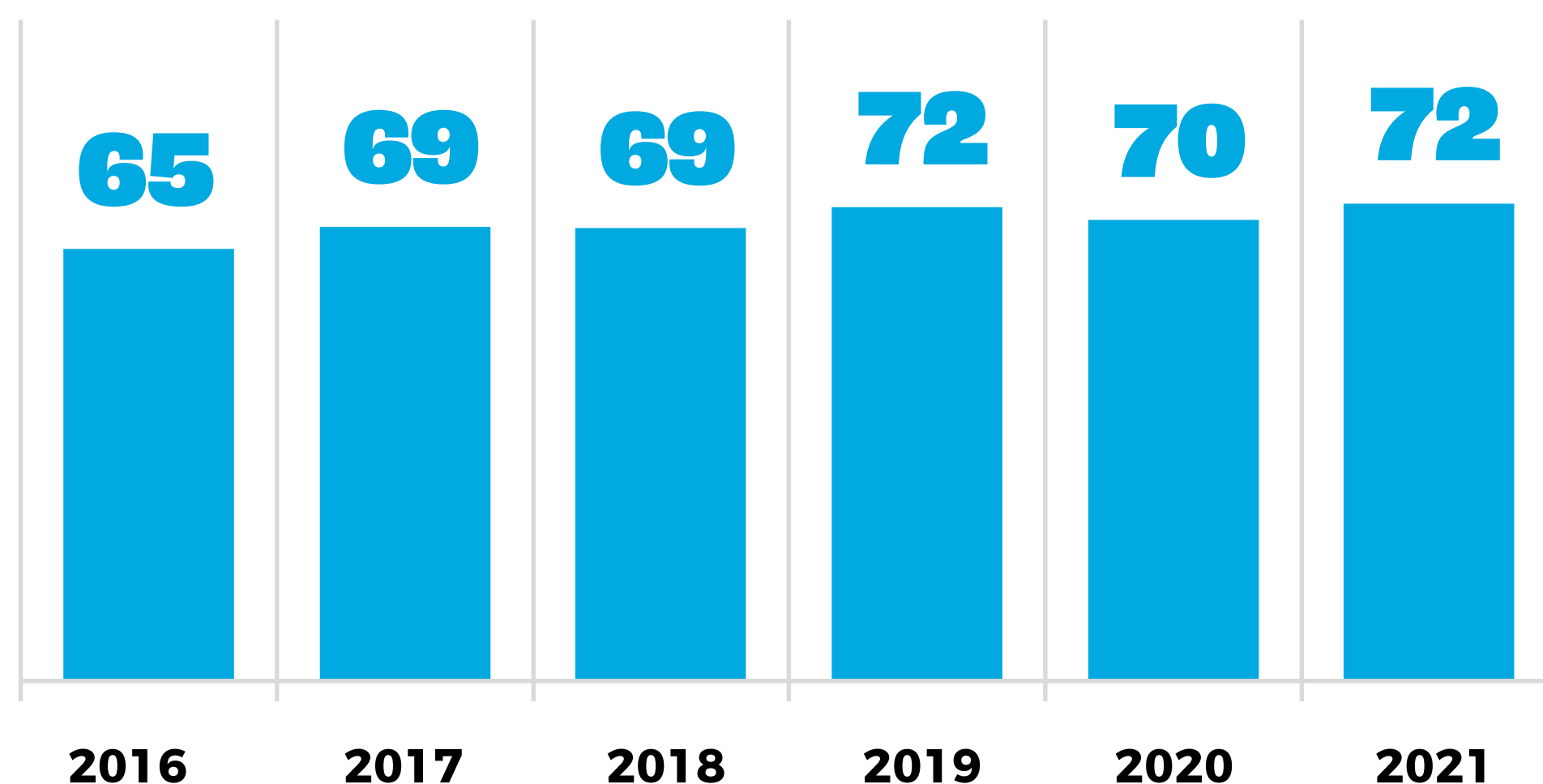
This collection rate was 7 percentage points above that the one recorded in 2016, when the analogous period evidenced a collection rate of 65%.



# GRAPH 5

## Urban Real Estate Collectibility

Amount regularized / Amount Past-due<sup>1</sup>



In the years after the due date there are obligations owed (tax installments) that are cancelled (paid) by some taxpayers, but these payments are not taken into account so that the information is comparable between different years. If this criterion is not adopted, it would be "penalizing" the most recent years where less time has elapsed after the maturity of the obligation.

A key element to sustain and improve collectibility in such an adverse context is the digital transformation that @ren-tascba has implemented. The digitization, in 2017, of the administration and payment of property taxes, in replacement of the obsolete mechanism based on the tax payment slip issued on paper, was a transcendental step in this process. In addition to this, the expansion of digital payment channels and means of payment, the redesign of monetary incentives to encourage compliance, the active management of communication with the taxpayer, the improvement and expansion of taxpayer service and the measurement and management of quality of service through the NPS (Net Promoter Score) methodology, assisted with a machine-learning model developed by @famaf\_unc, to automatically classify and systematize suggestions and complaints.



# THE PROVINCE PROMOTES BIOTECHNOLOGY IN CÓRDOBA

The provincial government has designed a program to promote biotechnology in Córdoba. The intention is to carry out coordinated actions between the public, private and academic sectors to foster the development of biotechnology in the province and make it a benchmark at the national and regional level.

Three actions will be implemented to boost biotechnology activity.

The Oriented Research Program (PIO Bio for its acronym in Spanish), aimed at financing research in the biotechnological areas. It will have a budget of AR\$ 10 million, financed by the Province. For each project, the maximum amount to be financed will be AR\$ 1 million.

A call for research initiatives will be made.

The Córdoba Biotec Fund, whose objective will be to co-finance biotechnology-related projects and undertakings with the private sector. It will have a budget of AR\$ 80 million and the maximum amount to be financed per project amounts to AR\$ 5 million.

The third one will be the Biotechnology Cluster of Córdoba, an inter-institutional space with the presence of actors from the public, private and academic sectors.





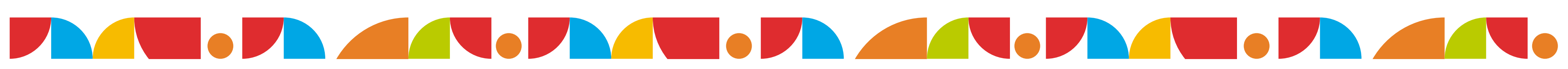
## **HIGH-END ELECTRIC CAR TO BE PRODUCED IN CÓRDOBA**

Córdoba could well be the location for a Canadian company to manufacture a three-wheeled electric car for the Canadian, the U.S. and the European markets. The project is from Daymak Inc., a company based in Toronto, which has been producing and selling light electric vehicles for two decades. The car prototype was developed entirely in Córdoba, with technology, engineering and design from Córdoba, through a consortium between the Argentine companies FDC Competición and Emerx.

Daymak is preparing two models. One of them is Spiritus Ultimate, a sporty model for a high-end market, with a low production volume and a price of around USD 150,000. The second is Spiritus Deluxe, a less exclusive model with a higher production volume and a value of around USD 20,000.

Initially, the vehicles could be manufactured at two plants. One in Córdoba, with a production line of 300 to 400 vehicles per year of the Ultimate version and some more than 1,000 of the Deluxe version, in order to make the investment sustainable. The other plant would be in Canada and would be responsible for the rest of the production of the Deluxe units.

According to the first projections of FDC Competición, the planned investment for the vehicle assembly line and for a supplier to manufacture the bodywork is of around US\$ 10 million. We will also need to include suppliers of front suspension, headlights and other components that can be developed within the Córdoba car parts industry. The project involves a level of 75% of local composition - it requires importing engines and batteries - and the creation of approximately 200 direct jobs positions. Daymak has already started pre-sales on the Internet and vehicles could be delivered as early as September 2023.



# PRECISION AGTECH: NORTHERN CÓRDOBA IS “TOKENIZED” TO IMPROVE YIELDS

The Agricultural Technology Surveillance Network (@ravitagro) began operating three years ago in the center and the north of Córdoba and has already been in operation for three seasons, in which 50 producers, willing to build knowledge from their fields by installing sensors and taking measurements, gather field data and share them to search for common parameters to explain crop yield variability, as well as which management tools can be adjusted to get as close as possible to the productivity ceilings.

In the last 2020/21 cycle, RAVIT was able to build a predictive model that, based on 13 variables, can explain about 70% of corn yields. These are aspects that are not environmentally-bound, such as rainfall or soil, but are absolutely connected to the decisions made by producers.

## TOKENS Y PIXELS

RAVIT intends to multiply the generation of data. Until now, they have been working with Intensive Monitoring Units (USI for its acronym in Spanish): a total of 100 in the area of influence (agricultural areas in the departments of Santa María, Río Segundo, Río Primero, Totoral, Colón, Río Seco and Tulumba), distributed in pairs, in lots of 120 hectares.

For the oncoming cycle, the bet is to scale up gigantically. They are heading for a 'hypersensitization' of agriculture: with cutting-edge tools, such as artificial intelligence and computational models, to map the lots in grids of just 20 meters by 20 meters. They will leave the USI, and those pixels will be the new information generation unit.

Each digital mini-plot will be a "token" as well and the bet is that in 120 hectares, instead of having only two USIs that generate information, there will be 3,000 "tokens" collecting data, which can be managed and processed and made available to producers on an app.

The goal is to get 40 farmers to join this new stage, which would result in obtaining 120,000 data-generating "tokens". If they manage to have a RAVIT producer every 20 kilometers, it will be like having cellular telephone antennas that multiply a signal and transmit data that can reach the entire farming community and improve decision-making on a large scale.

The dream is to cover the entire country: to rely on 1,300 producers, or one every 20 producers, who will provide assistance to the 100,000 producers in the intensive production areas of Argentina.

