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GPA Group Equity Research – Improving market positioning

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Abstract

This report is part of a broader Equity Research on GPA Group and aims to estimate the expected share price for the company, as of 31st December 2023. The company is composed by GPA Brazil and Grupo Éxito, being one of the largest food retailers in Latin America, with more than 1,500 stores. It can be found in this report how the current macroeconomic and food retail industry situation affect the projections, and also the rationale behind the forecasted values.

Keywords: Equity Research; Target Price; Food Retail; Financial Forecast.

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This report is part of the “Physical and financial growth - Rebuilding the brand’s strength” report (annexed), developed by Pedro Borges Fernandes (49186) and Vitor Realdo Guglielmi (50519) and should be read has an integral part of it.

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Introduction

The purpose of this report is to estimate GPA Group's share price as of 31st December 2023. The company is composed by 2 main units, GPA Brazil, and Grupo Éxito, and it is one of the largest food retailers in Latin America with more than 1,500 stores. Headquartered in Brazil, the group through its multiformat and multichannel business model, bring together the most valuable retail chains and brands, being presented all over the country, as well as in Colombia, Uruguay, and Argentina through Grupo Éxito.

Given the current scenario of volatility in the financial market mainly because of the war in Ukraine and the still effects of Covid on the economies, reports like this serve as an important source for investors that are looking for the implicit value of a stock, helping the process of decision making when building a portfolio.

The report starts given a macroeconomic and industry framework, presenting how is the current macroeconomic situation of the countries in which the company operates, as well as the trends and the risks of the food retail sector. Then it is presented the valuation of the company, presenting the reasons to use the APV approach, cost of capital and terminal value calculations.

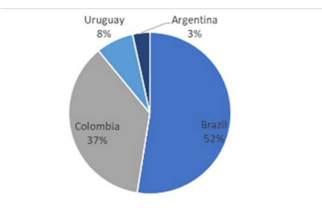
Based on the assumption that the company will be able to increase its market share in the industry, mainly due to rebuilding the brand's strengths and investments in more profitable stores, the implicit share price based on the analyst estimation within the APV method is BRL28.17 as of 31st December 2023. This results in a return of 61.51% comparing with the current share price of BRL17.48. GPA will be able to generate value for its shareholders, resulting in a BUY recommendation.

Macroeconomic Context

The GPA Group inserts itself in a much complex and dynamic economics scenario for being exposed to countries that, although with much different market conditions, present a similar story in both economic and political terms. The group is more exposed to Brazil, which concentrates 53% of the total revenues and 46% of total Ebitda, while Colombia, the second exposure, concentrates 37% revenues with 43% of total Ebitda, in line with its higher profitability. Regarding the minor ones, Uruguay accounts for 8% of total revenues and 10% of total Ebitda, while Argentina only 3% and 1%, respectively. Therefore, it is more important to direct the attention to Brazil and Colombia macroeconomic contexts, although data will vary accordingly with each country.

Moreover, it is important to note how the industry itself is less cyclical given it relates to common goods, as well as how this is applicable to Pão de Açúcar's case with its target audience being wealthier, less dependent on income. As such, the main macro factors that will affect the company's operational performance are the inflation in each country, as well as, in the long-term, the GDP growth over its sales and the interest rates over its investments.

Figure 1 - GPA Group revenue by country in 2021



In Brazil, the recent economic background lies over the politics: it is expected the country to face a strong GDP growth in 2022 of 2.8%[1], a substantial change compared to the situation before the COVID-19 pandemic with growth around 1.1%. Despite it being referred to the previous government, the exact change can be seen in the political framework, with Lula's return to power. Lula has won the presidential elections in a close pool against Bolsonaro (50.9% vs. 49.1%), showcasing the country's political division. This is also reflected by the congressional and states elections, with a solid presence of right-wingers who will counterbalance the presidency's power. On the one hand, this means that Lula will have to be more fiscally responsible during his term, more aligned with what was presented during his first government.

However, recent indications shows that Lula will likely engage on a more second-government economic policies: the next president has chosen Fernando Haddad to be his economics minister, a politician from the same party that competed in the 2018 presidency elections against Bolsonaro. Haddad is considered an important leader in his party after being São Paulo's (a commonly right-wing centre) mayor and assuming the responsibility during the 2018's elections. In other words, Lula has chosen him as someone he might trust to do what he is intended to, as well as dispose the political abilities to approve his ideas. During Lula's second government, the fiscal policy was marked, for instance by the adoption of "PAC (Programa de Aceleração do Crescimento)" in 2007, an infrastructure plan to develop the country in that area with a BRL500 bn budget to the period of his second government. The issue is that now the government's budget faces a different scenario in which the country is yet to recover from the recent crisis.

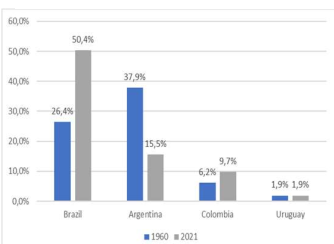
The Covid-19 pandemics in conjunction with the political scenario rekindled the active fiscal policy from previous governments, expressed in allowances for discretionary expenses and the continuity of financial aid. According to the proposed budget for 2023, the government will face a 0.3% GDP deficit in 2023 that doesn't even consider other fiscal risks such as the planned extension of financial aid to women. This is summed to the fact that the country still faces a high and persistent inflation since the Covid 19 crisis. The combination of both factors limits the

[1] Boletim Focus, Brazilian Central Bank, 4th of November 2022.

economic allowance to an active fiscal policy.

However, the Brazilian central bank seems already to be monitoring the fiscal risks for inflation. In the most recent report, in December 2022, when Copom (interest rate council) decided to keep the basic interest rate, Selic, at 13.75% after a remarkable ramp up from the historical low 2% at March 2021. Copom also reaffirmed the fiscal uncertainty of future steps and that it "will pay special attention to developments in fiscal policy and, in particular, their effects on asset prices and inflation expectations, with potential impacts on the dynamics of prospective inflation". Therefore, despite the recent data indicating a decline in inflationary pressures, lowering the interest rates will depend highly on the fiscal policy. Furthermore, annual inflation, while trending lower, remains well above the Brazilian central Bank's 5.25% upper limit, reaching 5.90% YoY as of November 2022. Internationally, inflationary pressures remain a key concern of policy makers in Brazil, driven by higher international energy and food prices prompted by the war in Ukraine. The Brazilian economy is expected to decelerate in the medium-term, hampered by a potential economic slowdown in China and the continued impact of the war in Ukraine on the global economy. GDP growth is expected to slow down to 1.1% in 2023.

Figure 2 - Participation of GDP generated in South America



This restates the need to revaluate the political steps Lula has been taking to his future government. The first fact to be analysed is how Lula can attract different spectrums of politics. This is particularly done by conceding requests at tactical spots and times. Currently, we believe that Lula is accordingly still playing with his political capital, mainly from left-wingers, but as the government develops, his term will be also marked by fiscal responsibility. Although Haddad is the trustable minister he needs, he is also considered a reasonable person and economist, being a former professor at Insper, a notoriously orthodox economics school. From the main points to be addressed for now, there is to note the simplification of taxes, reinforced by the inclusion of Bernardo Appy as taxes secretary. This movement showcases how Lula is able to open opportunities to conciliate divergent interests. Given the country is politically divided, we believe that for now Lula will focus on a peaceful transition more aligned to the previous government in economic terms. This backs up a scenario of controlled inflation for the next years around the one projected for 2024 according to the market expectations that will mostly conclude in a stable cost of sales for the group.

In terms of economic activity, after a sharp economic contraction of 3.9% in 2020 due to the pandemic, GDP grew by 4.6% in 2021. GDP growth expectations were also revised upwards from 0.7% at the beginning of the year to 2.5% in 2022, following the normalization of economic activity post-COVID, as well as a strong external sector performance. With controlled inflation and a likewise fiscal policy, the country might reach its potential GDP between 1 and 2% for the future, that based our projections.

Colombia, Argentina and Uruguay

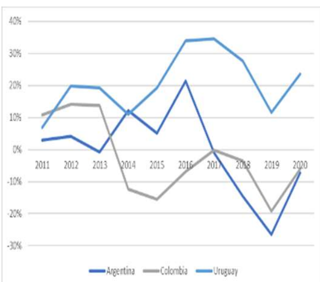
As previously mentioned, Grupo Éxito operates in 3 countries, Argentina, Uruguay, and Colombia. To assess the company's expansion and investment strategy, we consider it crucial to understand the macroeconomic conditions of each country to build projections based on their individualities and have more accurate forecasts for the consolidated group.

As Grupo Éxito is headquartered in Colombia, and currently the revenue in the country represents 77% of the revenue generated by the group, we project an increase in investment in the country, based mainly on cost reduction due to not needing to internationalize, and also due to the more favourable economic conditions from the country in relation to Argentina and Uruguay.

Unlike Argentina and Uruguay, Colombian representativeness in South America's GDP increased between 1960 and 2021, from 6.2% to 9.7%[2]. The economy is based mainly on agriculture and oil exploration and is expected to grow by 6.5% in 2022[3], having the highest growth for the year among OECD member nations.

We expect the country to achieve sustainable growth by 2040 and control its inflation, keeping it around 6.1% given the recent historical of the country. In this sense, with a developing economy and the population maintaining its purchasing capacity according to a traditional orthodox monetary policy and a left winger fiscal policy, it is feasible for the group to support investment in the country, increasing the number of stores by 55% until 2040, according to the economic growth, at least to keep its control over the sector in the country.

Figure 3 - Colombia, Argentina and Uruguay cumulative GDP growth



Argentina has the smallest representation for Grupo Éxito, representing 4% of total stores and 7% of revenue in 2021. Due to the current macroeconomic scenario, we project that the group will reduce its investments in the country to protect itself from country risk. The country's drop in efficiency is remarkable; in 1960, Argentina represented 37.9% of the total GDP generated in South America, and in 2021 it represented only 15.5%. Furthermore, the country had the highest GDP per capita in the world in 1896, and today poverty reaches 36.5%[4]. The explanation for such inefficiency can be summarized by the country's political instability in the last century, where there were six coups d'état, five dictatorships and six defaults on the IMF.

High inflation, projected to end 2022 at 95%, and the 90% devaluation of the Argentine peso against the U.S dollar in the last five years, are solid foundations for the company's strategy of reducing investment in the country, where it is increasing harder to import products and for consumers to do their day-to-day shopping. We believe the group will gradually withdraw from the country to increase overall efficiency, closing stores to reach a representativeness of 2.2% by 2040.

Uruguay in the last 10 years has been the country that grew the most among the countries in which Grupo Éxito operates, 24% growth in GDP. This evolution, accompanied by the fact that it is the country in which operations are most profitable are strong evidence to continue to invest in the country, reaching 135 stores until 2040, following the economic growth of the country.

Industry Overview

The food retail industry, which comprises foods sold in grocery stores, consumer stores, drugstores, hypermarkets, and food service facilities, had a strong impact due to the covid pandemic started in 2019, and, unlike most sectors, it had an economically positive impact, increasing revenue and operating margins of companies around the world. In 2021, the global food retail market reached US$8.27 trillion in sales, surpassing the previous year's record by US$500 billion. One of the main reasons for this result is the specificity of the business, which, being considered an essential service, did not have to close during the pandemic lockdown days,

[2] World Bank
[3] Bloomberg
[4] National Institute of Statistics and Census, Argentina Republic

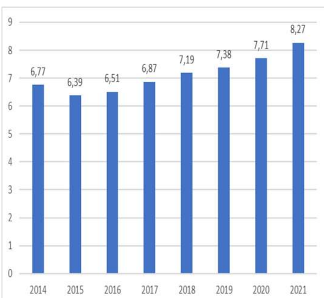
causing many customers who preferred hospitality services, such as bars and restaurants, to shift their daily purchases.

Trends

The industry has three clear trends for the future, which have been defined by the rapid changes in consumer behaviour over the last few years.

The first would be digital expansion. The sector has seen an acceleration in online purchases, putting companies with a solid digital presence at a competitive advantage against competitors that had to adapt to this way of buying. However, far beyond being a momentary acceleration, the expansion of e-commerce continues to be a strong trend for the sector, with the expectation that it will double its representation in total sales by 2030, affirmation made by McKinsey Partner Daniel Läubli[5].

Figure 4 - Revenue of the worldwide food market (U.S dollar trillion)

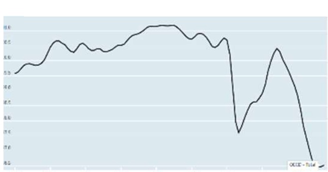


The second is better prices for consumers. Contrary to the pandemic's beginning, when the most significant concern was related to the product's availability, today, the consumer is much more concerned with the final value. Companies that create strong discount programs and invest in their products, making the final price lower for the customer, will have a remarkable ability to retain and develop roots with new customers, especially considering the supermarket with perishable products and private label ones.

And finally, the demand for environmentally friendly and healthy products. Every day consumers are becoming more concerned about their own and the planet's sustainability, much related to the acceleration of the global debate on the subject. Building ways to increase ESG actions is key for value in the long run.

Our projections for the GPA Group are closely related to our understanding of how the company will position itself within these trends. We believe that the group is well positioned in relation to digital, where the strategy was mentioned in the corporate strategy topic. Related to the improvement in product prices, the company is investing heavily in loyalty programs, where in 2021, more than 650 thousand customers received more than BRL2.8 mm in prizes and discounts, in addition to the expansion of its own brands and better products assortments. And on health and sustainability, the company's commitment is seen from one of the five committees being directly focused on this topic in it strategical plan where the company deals with issues such as combating climate change, promoting human rights and relationships with the local community.

Figure 5 - Consumer confidence index



Risks

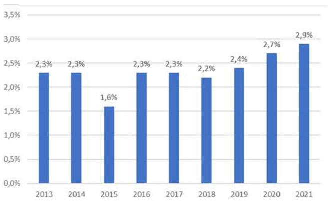
Regarding risks, we believe the most relevant one is the industry's relationship with consumer confidence. To better assess the risk, we used the consumer confidence index[6], which practically indicates the future evolution of household consumption based on feelings related to the macroeconomic situation in general, investment and savings capacities. The indicator is at one of the lowest historical levels, even lower than the beginning of the pandemic, where values below 100 indicate that consumers have negative projections in relation to the future evolution of the economy, resulting in the tendency to consume less and save more.

[5] Aull, Kuijpers and Läubli. 2022. The state of grocery retail around the world. McKinsey & Co.
[6] Consumer confidence index. OCDE.

This indicator is closely related to the current macroeconomic scenario in general, where countries are reaching record levels of inflation. Consumer confidence is the main consequence of controlled inflation rates. This factor is generating a strong movement among consumers in search of better prices, making companies to reduce their sales margins in order to retain customers.

Another relevant risk is the number of players in the industry and the loyalty towards certain companies. Many customers end up creating strong roots with some stores making it very difficult for the competitor to attract this desired customer, making activities such as brand rebuilding and focusing on the customer experience essential to combating the risk.

Figure 6 - Industry profit margin

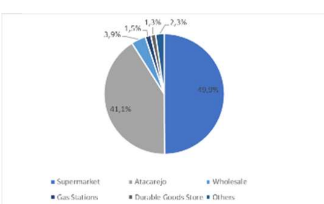


Industry in Brazil

In 2021, the food retail sector reinforced its representation in the Brazilian economy, reaching a total revenue of BRL611.2 bn through all its formats and channels of distribution (proximity stores, supermarket, hypermarket, “atacarejo” and e-commerce), representing 8.26% of the Brazilian gross domestic product (GDP), a YoY growth of 1.5%. This growth was largely due to the increase in the universe of establishments, where in 2020, a total of 91,351 stores were registered. In 2021 the number increased to 92,588, illustrating the commitment of retail companies to expand their businesses and offer products to the population. We believe the representation of the sector in the Brazilian GDP will remain constant and that large companies will continue to increase the number of stores, focusing on proximity stores. Moreover, the populational growth is likely to counterbalance the development of more productive sectors.

According to the ABRAS report[7], the sector broke the record in its profit margin for the second consecutive year, registering 2.9% on average profit, an increase of 0.2% in relation to the previous year. It is worth mentioning that the Covid 19 pandemic had a positive effect on the indicator, with the sector experiencing linear growth in margin since the beginning of the pandemic. The main explanation for this boost in profitability is that during the period of social isolation, the food retail industry remained open, while bars and restaurants, for example, had to close, increasing the need to eat at home.

Figure 7 - Revenue Allocation by business, industry 2021



The ABRAS report indicates that investment in the sector was BRL19.8 bn in 2021. The main investments were the refurbishment of stores, acquisition of refrigerated equipment and construction of new stores, totalling more than 70% of the total. This movement towards renovating and building new stores reinforces the idea of expansion and improving their product in order to better position themselves in this highly competitive market.

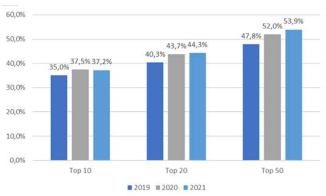
Related to store formats, the main source of revenue continues to be supermarkets, accounting for 49.9%, but it is important to comment on the evolution of "atacarejo", which in 2021 represented 41.1%. Atacarejo is the combination of the words "wholesale" and "retail" in Portuguese, and since 2010 it has been gaining space and representation in retail companies. This type of store was created to serve the final consumer, with less focus on the customer experience and more on low prices, due to the reduction in the chain's operating costs. Assaí and Atacadão are two examples of this model.

A strong competitive advantage for large companies in the sector has been the ability to invest in their own brands, thus being able to increase their profitability with the sale of their own products

[7] Ranking ABRAS 2022

and also increase the company's brand reach by being more present in the consumer's daily life. The ABRAS report indicates that 79% of retail companies have a product with their own brand that influences their revenue. The main items of private label sales are bakery and confectionary, and dry grocery. GPA follows this trend, bringing competitive prices and savings to customers, where over 2021, more than 100 products were created with exclusive brands.

Figure 8 - Market share concentration



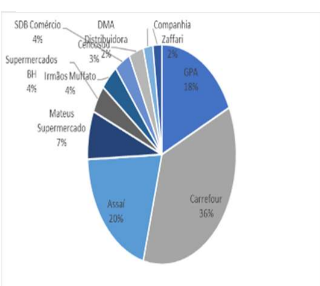
- Market Share

In the Brazilian territory, there are more than 500 supermarket companies, resulting in a sector of high competition. On the other hand, figure 8 shows how the concentration of the 50 largest companies has been increasing in recent years, accounting for 53.9% of the sector's revenues in 2021.

In 2021, the company with the highest representation in the sector was the Carrefour Group, with revenues of BRL81 bn, followed by Assai, with revenues of BRL45 bn, and in third place the GPA group, with revenues of BRL27 bn. An important point to highlight is the regionalization of the brands; due to the fact that Brazil is a country with a very large territorial extension, there are different leaderships by region, with Carrefour being the leader in the southeast region, Grupo Mateus in the northeast region and the south region Irmãos Muffato.

The most representative companies also demonstrated to have better efficiency indices. According to ABRAS, the largest companies in the supermarket retail sector have the best annual revenue ratios per employee or per square meter of stores, showing increasing returns to scale – the larger in area and number of employees, the greater their revenues by area and employees. In this way, it makes sense for a large food retail company to prioritize a territory of action instead of spraying stores in all regions of the country, although we still believe there is room to explore different regions for GPA as it is too concentrated in the Southeast.

Figure 9 - Market share in 2040



Another important point for the dominance of a few and large companies in the share of revenues in this market is the trend towards mergers and acquisitions. As it is difficult to find land located at strategic points, especially in large capitals, it may be more convenient and cheaper to convert stores from other chains than to look for a good point to build and expand your own chain from there, thus reusing the logistics infrastructure and storage for stores already built, with more interesting prices, in addition to getting points that are no longer available on the market.

We project the GPA's market share based on two assumptions. The first is that the top 10 companies will represent 40% of total sales by 2037, whereas in 2021 represented 36.8%, understanding that the past evolution of the main players will continue mainly due to M&E strategies and higher ability of investment due to higher margins. And the second is that the GPA group will represent 18% of sales of the top 10 companies by 2037, increasing 6% if comparing to 2021, due to the reconstruction of the brand after a drop in market share in recent years, creating a relationship with several Brazilian consumers who know this strong company in the national territory.

Valuation

Given the assumptions made under the company's capital structure, the APV model was chosen to value the company based on the division between core and non-core operations. From the projected cash flows and discount rates, it was possible to infer the NPV of the company financed solely by equity separately from the effects of debt, such as tax shield.

APV Approach and Cost of Capital

Figure 10 - Discount rate assumptions

Discount Rate Calculation - Assumptions	
Rf	3,16%
MRP	4,99%
βu	0,53
β (relevered)	0,60
Country Risk (EMBI+)	1,61%
Ru	**6,66%**
Re	**7,11%**

As in the APV methodology, the different types of cash flow are discounted at different discount rates, the unlevered free cash flow was discounted at the unlevered cost of equity, and the financial debt cash flow was discounted at the cost of debt. As our debt is pre-defined, instead of using the cost of debt to discount the tax shield, we used the unlevered cost of equity. In our valuation methodology, we do not use WACC, but for illustration purposes, we also calculate it.

It is important to note that the risk-free rate, MRP and country risk premium were brought into the currency in which the cash flows are, switching from US$ to BRL, using the inflation differential formula bellow.

$$\text{Local Currency Cost of Capital} = (1 + \text{US \$ Cost of Capital})\,\frac{(1+\text{Inflation Rate in local currency})}{(1+\text{inflation Rate in US \$})} - 1$$

- Cost of Debt

To calculate the cost of debt, we used the last issued bond by the GPA Group, maturing in 6 years, price and face value of R$1000.00, no coupon payments, and an annual interest rate of 4.35%. Since the bond is traded at par value and it is a pure discount bond, its yield to maturity is the same as the interest rate.

After the YTM calculation, we verified the latest GPA group credit rating provided by Standard & Poor's, downgrading its rating from AAA to BBB, which is explained by the fact that the main controller of GPA Group, Casino Group, had its rating as well downgraded by recent lower-than-expected operating performance.

Figure 11 - Cost of debt inputs

Cost of Debt Calculation	
YTM - PCAR3 Bond	4,35%
Probability of Default	0,11%
Loss Given Default	53,90%
Rd	**4,29%**

Since the probability of default of a BBB-rated bond is 0.11% and the loss given default is 53.9%, the cost of debt resulted in a rate of 4.29%.

- Cost of Equity

To compute the unlevered cost of equity, we use the traditional Capital Asset Pricing Model Formula (CAPM), added by country risk premium[8], since investors demand higher returns for investing in Brazil due to its higher associated risks, assuming that the company's exposure to country risk is similar to its exposure to other market risk.

As inputs to the formula, we use a market risk premium of 4.99% based on the latest KPMG Corporate Finance Research, a risk-free rate of 3.16% from the 30 years US treasury T – Bill, and a country risk premium of 1.61% for Brazil, based on J.P Morgan research.

To calculate the beta, we performed a regression of 4 companies that are in the same sector as the GPA Group and that are also traded on the Brazilian financial market with the Ibovespa Index. After that, unlevering the beta of all comparable companies, we arrived at a mean beta of 0.53 for the sector. With all inputs in hand, we apply the formula resulting in an unlevered cost of equity of 6.66%.

- WACC

As the WACC is a weighted average cost of capital of the company's different forms of financing, we had to use the D/E ratio of 2021 as input, which is 24.0%. With the previously unlevered beta,

[8] $Ri = Rf + \beta i * (MRP + CRP)$

we had to re-leverage to GPA Group's actual capital structure, resulting in a cost of equity of 7.10%. As debt financing results in tax shield, we had to use the 34% tax rate on the formula to get its benefits.

Applying the formula with all inputs, the weighted average cost of capital resulted in 6.41%.

Terminal Value

Figure 12 - Sensitivy analysis MRP x βu

Sensitivity Analysis						
		MRP				
	6,66%	4,2%	4,6%	4,99%	5,4%	5,8%
βu	0,43	5,65%	5,83%	6,00%	6,17%	6,34%
	0,48	5,94%	6,14%	6,33%	6,52%	6,71%
	0,53	6,23%	6,45%	6,66%	6,87%	7,08%
	0,58	6,52%	6,76%	6,99%	7,22%	7,45%
	0,63	6,81%	7,07%	7,32%	7,57%	7,82%

We believe that the expansion strategy of GPA Brazil and Grupo Éxito will reach its peak in 2037, reaching the expected market share to consolidate its strategy of increasing representation in Brazil and consolidating itself as the largest company in the sector in Colombia. For the last two years of our forecast, the group achieves a steady growth of 2.1%, value used as our terminal growth rate, very similar to the GDP growth projections of the countries in which the company operates.

Sensitivity Analysis

One of the biggest challenges in a valuation model is to make assertive assumptions, such as discount rates, terminal growth and operating margin, simply because we cannot predict the future. In the face of this fact, the sensitivity analysis helps to understand this uncertain future, being able to show how different assumptions affect final results, such as the share price.

Figure 13 - Sensitivity analysis Ru x g

Sensitivity Analysis						
		Ru				
	28,17	5,4%	6,0%	6,66%	7,3%	8,0%
g	1,7%	44,03	34,51	27,57	22,29	18,17
	1,9%	45,48	35,25	27,88	22,35	18,05
	2,1%	47,08	36,01	28,17	22,35	17,87
	2,3%	48,84	36,80	28,42	22,27	17,58
	2,5%	50,79	37,59	28,59	22,07	17,16

Firstly, we made a sensitivity analysis regarding the cost of equity, in which the value of 6.66% was obtained by the Capital Asset Pricing Model. The first sensitivity analysis was exactly about these computation inputs, specifically about beta unlevered for the sector and market risk premium. To get the unlevered beta for the sector, we ran a regression with four competitors, obtaining a value of 0.53 with a 95% confidence interval, where the upper bound is 0.63 and the lower bound 0.43, which were used as boundaries for our analysis. In figure 12, it is possible to observe how these variations modify the cost of equity, ranging from 5.65% to 7.82%.

In order to perform a sensitivity analysis where the final result affected was the share price, we chose as inputs the assumptions that we considered most difficult to estimate accurately, discount rates and perpetuity growth. As we have two discount rates, cost of equity and cost of debt, we performed two analyses.

Figure 14 - Sensitivity analysis Rd x g

Sensitivity Analysis						
		Rd				
	28,17	3,5%	3,9%	4,29%	4,7%	5,1%
g	1,7%	23,00	25,70	27,57	28,93	29,97
	1,9%	22,50	25,73	27,88	29,41	30,55
	2,1%	21,68	25,65	28,17	29,91	31,18
	2,3%	20,37	25,40	28,42	30,42	31,85
	2,5%	18,23	24,89	28,59	30,94	32,56

For the perpetuity growth, we made a range from 1.7% to 2.5%, with 2.1% being our actual estimate. For the cost of equity, we used the boundaries we got from its own sensitivity analysis performed before, and for the cost of debt, a range from 3.5% to 5.1%, with 4.29% being our actual estimate.

Figures 13 and 14 show how these variations change the share price. It is interesting to mention how an increase in the two discount rates is changing the share price in opposite directions due to the fact that one discounts the unlevered cash flow and the other the tax shield and the financial debt cash flow, which in sum is a negative value. With BRL28.17 being our actual estimated share price, we obtained from both analyses an upper bound of BRL44.03 and BRL32.56 and a lower bound of BRL17.17 and BRL23.00 for the cost of equity and cost of debt analysis, respectively.

Finally, it is also important to establish a sort of dependency of the model to the macroeconomic factors. We have simulated scenarios in which the perpetuity inflation is in line with the GDP growth, and the years to reach this period are equally varying according to the 2025 projection. The results show that for a 3,3% rate for both, the target price would increase to BRL30.44, an 8% increase against a 2.5x increase in the factor, showcasing how the sensitivity is low and higher for other factors regarding the model itself. We believe that the company will be able to counterbalance a higher inflation with the operational improvements given by the new digital restock platform.

Relative Valuation

Figure 15 - Multiples

	Valuation		
Company	EV/Revenue	EV/EBITDA	P/E
Atacadão S.A	0.61x	8.45x	13.64x
Grupo Mateus S.A	0.99x	13.43x	19.23x
Sendas Distribuidora S.A	0.71x	10.22x	20.67x
GPA Group	**0.11x**	**2.47x**	**4.89x**

In order to address a relative valuation for GPA Group, we selected the multiples method by the fact we believe there are three companies in the Brazilian market which we consider as true comparables, Atacadão, Grupo Mateus and Sendas Distribuidora. Even though the multiples method doesn't estimate the potential of future cash flows, either firm-specific information such as discount rates and risk, we believe this method adds to our valuation since it has important benefits such as the incorporation of market consensus and the possibility to compare the company with its main competitors. Before going to the analysis itself, it is important to mention that relative valuation doesn't influence our final recommendation, which is based solely on the APV valuation.

The valuation by multiples consists of relating the market price with the financial statements of the company, taking into account some financial quantities, such as profits, cash flow and EBITDA. We have used three multiples in order to get an implied share price for GPA Group, EV/Revenue, EV/EBITDA and P/E.

Figure 16 - Multiples implied share price

GPA Group Valuation	EV/Revenue	EV/EBITDA	P/E
Implied Enterprise Value	364 778	226 942	185 134
Net Debt	7 773	7 773	7 773
Implied Market Value	357 005	219 169	177 361
Shares Outstading	2 696	2 696	2 696
Implied Value Per Share	**132,4**	**81,3**	**65,8**
Avarage	**93,2**		

Calculating the average multiples of the three comparable companies, we got for the food retail sector the EV/Revenue multiple of 0.77x, EV/EBITDA of 10.70x and P/E of 17.84 for the sector. GPA Group has an EV/Revenue multiple of 0.11x, EV/EBITDA of 2.47x and P/E of 4.89. The GPA Group's multiples are traded on average three times below its competitors, meaning that the share price is undervalued in its sector.

Applying the average multiple of the comparable companies to GPA Group's financial results, we got an implied share price for EV/Revenue of BRL132.4, for EV/EBITDA of BRL81.3 and for P/E of R$65.8. In order to reach a unique value, we consider that the three multiples have the same importance, arriving at an average implied share price of BRL93.2. The conclusion of this valuation implies that GPA Group's share price is 80% under-priced and may reach the value that was last negotiated in February 2021, before its huge fall.

Final Recommendation

GPA Group will be able to increase its market share primarily through rebuilding the brand's strength and through the expansion of proximity and premium stores. Furthermore, the "Novo GPA" plan makes the company well positioned in the main trends of the sector, such as digitization and ESG, and also increasing the group's operational efficiency. This is much in line with the company description as the group is considered and has a culture of being a holding company of food retail brands, focusing on where are the main sources of value within the sector.

The company's value creation is explicit in the expected share price of BRL28.17 for FY23, resulting in 61.51% upside compared to the current share price. Hence, we recommend a BUY position, also backed by the fact that the company is heavily discounted when compared to its peers.

GRUPO PÃO DE AÇÚCAR

COMPANY REPORT

FOOD RETAIL

16 DECEMBER 2022

PEDRO BORGES & VITOR GUGLIELMI

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Physical and financial growth

Rebuilding the brand's strength

- According to our projections, GPA will be able to generate value based on its business plan. **We issue a BUY recommendation** based on a target price of BRL28.17, representing a 61.51% upside from its actual price.

- GPA is one of the biggest food retailers in Latin America and has radical plans to align itself with the market trends such as the opening of more 300 stores in Brazil, alongside other operational improvements under the **"Novo GPA" plan.**

- The expansion plan is ought to be done with cash and cash generation. Heavily reliant on its cash generation, the level of debt is expected to be kept constant. This is in line with the **APV model**, where the value of debt financing costs is computed separately according to a volatile debt to equity ratio.

- **GPA will increase its market share** between the ten-most representative companies from 12% in 2021 to 18% in 2037. This, combined with the **operational improvements** will allow the company to reach its Ebitda margin target of around 9% in 2032, a more conservative approach to the company's targets.

Company description

GPA is among the main food retailers in Latin America. Headquartered in Brazil, the group is present in all of its regions with more than 800 stores. It is also present in Colombia, Argentina and Uruguay through its affiliate, Grupo Éxito, with more than 700 stores. The group was founded in 1948 in São Paulo and currently has the Groupe Casino as its controlling shareholder.

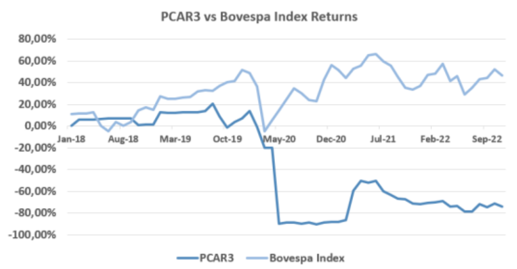
Recommendation:	**BUY**
Upside	*61.51%*
Price Target FY23:	**28.17 R$**

Price (as of 14-Dec-22)	**17.48 R$**

Reuters: PCAR3.SA, Bloomberg: PCAR

52-week range (R$)	15.06 - 25.43
Market Cap (R$m)	4,713
Outstanding Shares (m)	270
Fiscal Year End-Date	Dec 31st

Source: Bloomberg



Source: Bloomberg

(Values R$ millions)	FY21	FY22F	FY23F
Revenues	51,291	53,164	55,561
Net Profit	-448	2,003	2,003
NOPLAT	2,114	2,383	2,496
EBIT	2,177	3,086	3,231
FCF	2,379	2,764	3,160
EPS	-0.17	0.74	0.87

Source: GPA annual report and Own Estimates

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Company Overview

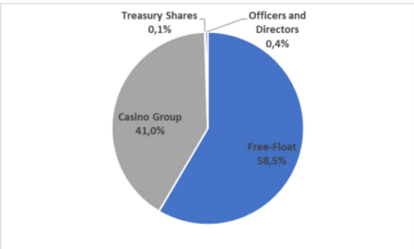
Figure 1 - Via Varejo and Assaí, former GPA brands

Source - GPA investor relation's website.

Companhia Brasileira de Distribuição is the holding company of Pão de Açúcar, the second largest Brazilian food retail network. The group was founded in 1981, but its history had started long before in 1959 when the first establishment had been initiated as a candy store and turned into the first Pão de Açúcar supermarket. During the 70's, the company's founder Mr. Valentim dos Santos Diniz had used his experience in different countries to start the first Brazilian hypermarket. The services expanded exponentially during the 80's after mergers and acquisitions of broad, extensive and varied retail businesses. These, combined with the existent network and recently created Extra brand and the capital acquired in the financial markets from Casino's investment helped to consolidated already in the 90's a complete retail experience to the consumer within the group.

After the group had entered the financial markets with its IPO in 1995 and ADS in the New York Stock Exchange in 1997, the complete experience concept also developed its reflections over the company's governance. A holding company, Casino, acquired 25% of its shares focused on building a symbiotic relationship with the group by using its experience in the French food retail market. 6 years later, the controlling Diniz family shared the Pão de Açúcar's control equally with Casino upon the payment of US$900 mm and more than BRL2.5 bn to be invested in 40 hypermarkets and 120 supermarkets. The agreement also included a poison pill, where Casino would be able to constantly increase its share in the company until it had its control. The family tried to revert the process in 2011 with a fusion with its main competitor, Carrefour, but had its operation cancelled by local authorities.

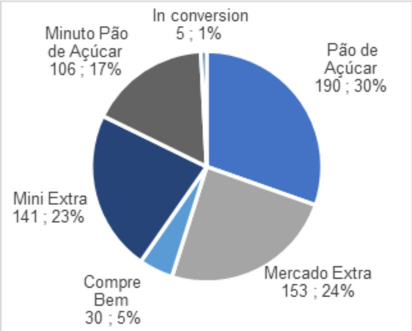
Figure 2 - Ownership structure



Source - GPA investor relation's website.

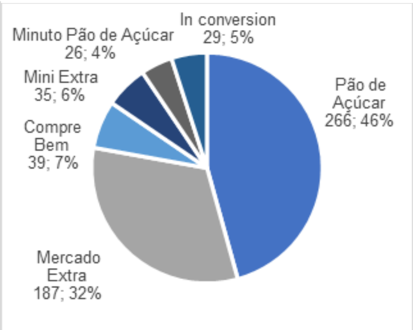
In 2012, the Casino Group took the control of the company, followed by other important acquisitions that developed the network in unexplored markets and digital channels. More recently, in 2019, the company has been reorganizing and simplifying its structure to focus on its core business. The company divested its 36.3% stake in the second largest retail Brazilian company, Via Varejo and reinvested on Éxito, a Colombian food retail company. The operation was well received by the market, with the stock going 3% up during the opening hours. We reckon this was an important and coherent step with the current strategy of focusing on its core business and, more importantly, core brands in order to reconstruct the market share through the reconsolidation of mainstream brands, alongside the expansion to new and more profitable markets such as the proximity and premium ones.

Figure 3 - Number of Food Retail Stores from GPA Brazil in 3Q22 (#, %)



Source – GPA's investor kit.

Figure 4 - Thousand m2 per Food Retail Store from GPA Brazil in the 3Q22 (#, %)



Source – GPA's investor kit.

Under the same strategy, in 2021, the company spun-off the wholesale operation Assaí specialized in the cash and carry business, separating the different businesses, although keeping the commercial relationship. This meant that the multichannel concept has shrunk to focus solely on the food retail markets in order to facilitate the search for value. The concept is reflected today not only as a specific strategy, but rather a broader guide: as a food retail holding company, find what are the main sources of value within the same business to build a complete service network under the similar branding.

As such, the company is currently based on a multichannel, multiformat and multiregional businesses in different microsegments of the food retail market. Multichannel is explained by its broad services network, ranging from in person traditional markets to "Click & Collect" and delivery. Multiformat is translated as a variety of food retail stores, such as the currently important proximity stores as well as the already established supermarkets. Finally, the company is present through its variety of brands and channels in 16 Brazilian states as well as in Colombia, Argentina and Uruguay through Éxito, which follows a similar strategy.

The 2 main business units, GPA Brasil and Grupo Éxito are divided between an extensive range of brands that will combine to form a multichannel structure. Both are relatively similar in terms of sales and profits: GPA Brasil represented 52% of total sales during 2021, while Éxito displays a slightly more profitable operation, generating 55% of total gross profit and with a net margin at 2.0% vs. 1.5% from GPA Brasil during 2021. It is important to note how the operations are not correlated operationally, with its own logistics and digital structures. Given the group has a more extensive and established structure in Brazil, the growth plans are more likely to occur and develop in the operation where the company has more room for improvement.

GPA Brasil

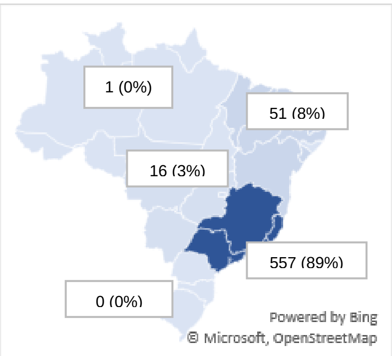
The main segments for GPA Brasil, on its place, could be split into supermarkets (Pão de Açúcar, Extra and Compre Bem), hypermarkets (Extra Hiper) and proximity stores (Minuto Pão de Açúcar, Mini Extra, etc). The stores are well split amongst the different lines of business, providing a diversification in terms of structure.

Geographically, the stores in Brazil are concentrated in the Southeast region of the country, in line with the expansion of the proximity model with 234 of the total 240 stores located in this region at the end of 2021. While we understand that this is biased by Pão de Açúcar being the most important brand within the company and originated from the region, the Brazilian Southeast concentrates 55% of the

Figure 5 - GPA Brazil main brands

Source – GPA's investor relations website.

Figure 6 – Stores per Region, 2018 (#, %)



Source – "Formulário de Referência".

Brazilian GDP[1]. This showcases how the current plans will increase the group's exposure to a specific region instead of looking to other regions in order to diversify its exposure and reach new markets.

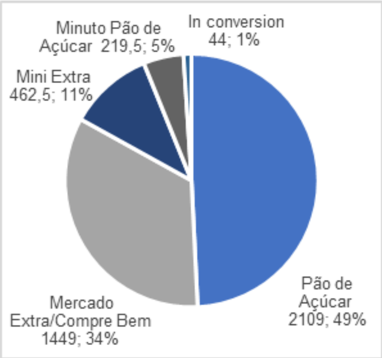
A snapshot of the number of stores at the end of 3Q22 displays such division in line with a consolidated multi-channel division that is to be improved in the future. According to the new strategy, the group sold all its own hypermarket's operations through Extra Hiper to its former subsidiary Assaí (which used to operate it when was incorporated) and focus mainly on proximity and premium stores. This is part of what is called the "Novo GPA", a turnaround strategy to modernize and expand the market share of the company by consolidating the channels and growing on the current market trends.

To fully comprehend the financial reasons for such strategy, it is important to dissociate the business models. Supermarkets are the well-established business upon which the Pão de Açúcar brand has developed since 1959 with its first store next to the candy shop. Pão de Açúcar positions itself as a premium brand, focused on providing a wide range of products and services with a modern delivery. Its clients are mainly from A and B classes and will often look for imported products at a higher average ticket. During the third quarter of 2022, 50% of the GPA Brasil's sales originated from Pão de Açúcar (supermarkets and "Minuto"), the group's premium business, while it represents 30% of its total stores with an average of 1,400 m^2 per store.

Looking more specifically into the brand, it is possible to note how the combination of premium and proximity stores generates more value to the group. The Pão de Açúcar's proximity stores offers approximately the same products assortment model of the larger stores, although with a higher profitability margin given the fixed investment is lower with equally lower expenses by lesser need of employees and local stock. Minuto Pão de Açúcar stores are in average a 200 m^2 store, but with an average revenue of 8.4 thousand per m^2 while the supermarket delivers 7.9 with a much larger infrastructure. When the brand was created in 2014 with its first store, the investment to be made during its beginning was 10 times smaller when compared to another supermarket opened in the same year[2]. The need of employees is also lower: as of December 2021, proximity stores needed approximately 6.1 times less employees than supermarkets, generating

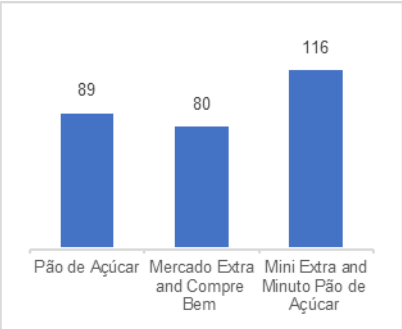
1 IBGE, 2018
2 Pão de Açúcar opened its first supermarket in the Minas Gerais state back in 2014, investing BRL11 mm in the 1,080 m2 store. Earlier in the same year, the company introduced the proximity model Minuto, with an investment around BRL1,4 mm per store. **Source:** Estadão and Seafood Brasil.

Figure 7 – Revenues per Brand (3Q22)



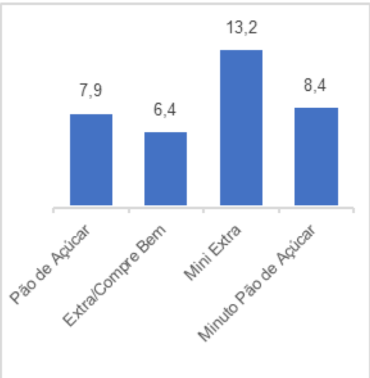
Source - 3Q22 Sales report.

Figure 8 – Net Operating Revenue per Employee 2021 (US$ thousand)



Source - SEC Filling.

Figure 9 – Revenue per m^2 (BRL thousand)



Source - Annual Report 2021.

approximately 1.5 times more net operating revenue when compared to the larger stores.

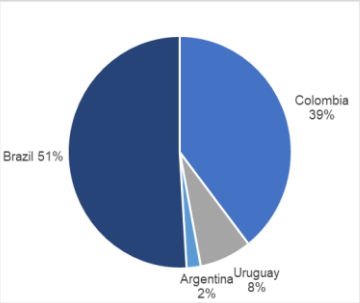
The second most important brand within the Brazilian supermarkets' operation is Extra, created in 1989 to operate initially only through hypermarkets. This initial focus had established an even more diversified range of channels and products assortment. Extra had to be seen as a supermarket with all daily products that also matched the consumers financing needs. Therefore, its products complement the network in terms of target audience to classes C and B, and, more importantly, (although Pão de Açúcar offers a wider variety of services) Extra was firstly integrated to new channels, with the first proximity store inaugurated in 2006. Moreover, the purchase of Via Varejo in 2009 conceded the ability to work on the e-commerce market with not only food goods, but also home appliances. Currently, Extra operations are divided between the "Mercado Extra" and "Mini Extra", which accounts for 47% of total stores for GPA Brasil and 38% of its selling area.

Figure 10 - Grupo Pão de Açúcar brands

Source – Formulário de Referência.

Lastly, Compre Bem is a brand that offers the proximity products assortment aligned with local needs. The brand is also directed towards a lower income audience, and it is more focused on perishable products, which are more likely to induce a repurchase at the same store or developing a sense of local loyalty to the supermarket. It was launched in 2018 to fulfil a gap in the group's structure of regional brands that would be able to locally generate consumer fidelity through the precise distinguished assortment of products (in this case, the Northeast region of

Figure 11 – Food Retail Stores per country (2021)



Source – SEC Filings .

Brazil). This displays how the company, despite not including the strategy in its plans, is prepared to also expand to new regions within the country. The brand so far only disposes of 30 stores with an average of 1.3 thousand m^2 per store, similarly to Extra. Given both brands aim at a lower income audience, and provide a wider variety of products, its margins are also lower. The average revenues per store for both combined is BRL6.4 thousand per m^2, while only the Mini Extra stores showcase a 13.2 ratio.

The group also includes other brands to complement the businesses, mostly related to different sales channels or services, such as gas stations at Extra supermarkets, e-commerce platforms and fidelity programs. Partnerships are also important part of the brand structure, such as the one with Itaú in credit cards, given 58.1% of the total net operating revenue in Brazil are credit sales. Drugstores which were also part of the group will be discontinued in 2022, in line with the strategy to focus on the core business.

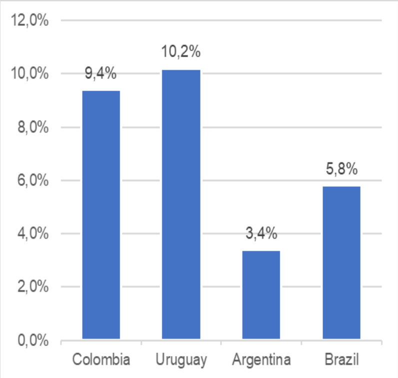
Grupo Éxito

Grupo Éxito is the market leading food retail company in Colombia, in addition to also operating its business branches in Argentina and Uruguay. While its core strategic focus is targeting the food market in its operating countries, the group also sells non-foods products.

It has an omni-channel strategy, which means it has vertically integrated the entire supply chain of its products destined to end consumers. This enables Grupo Éxito to create and explore synergies and economies of scope with full control of its supply chain. Furthermore, this strategy enables the company to reach (if successfully adapted) the highest overall profits as it does not owe fees or payments to other players within the supply chain, who would of course only be willing to do so with and additional mark-up.

Éxito is composed of a more restrict group of brands, namely, in Colombia, Viva Malls, Éxito, Carulla, Surtimayorista, Surtimax and Super Inter; Devoto, Disco and Géant in Uruguay; and Libertad, Mini Libertad and Paseo Libertad Malls in Argentina. The Colombian operation concentrated 76% of the group's total net operating sales during 2021, a country in which only Éxito sales accounts for approximately 72% of the total sales. Therefore, the Éxito operation accounts for more than half of total revenues for the group. These are split into Éxito Hypermarket, Supermarket, Express and Vecino, being the last two proximity stores. Other two important operations are Carulla, a premium brand of the group in Colombia, that accounts for 11% of total group's sales mix and Devoto and Disco, that sums for most of the 14% Uruguayan participation in the total group's

Figure 12 – Ebitda margin per country (2021)



Source – Earnings release and investor kit.

sales. While the first is diversified between different channels, the second is mainly focused on supermarkets. In Argentina, Libertad is the only operation and accounts for 7% of total sales, being divided in the hypermarket and proximity models.

In terms of sales structure, Colombia concentrates even more the operation, with 81% of total stores and total selling area, although with half of the group's total employees. Profitability in Colombia is lower than in Uruguay, where the participation of proximity stores is higher and there are no low-income operations, only premiums. While Colombia presents a recurring Ebitda margin of 9.4% during 2021, Uruguay showcased a 10.2% figure for the same period. The country accounts for 15% of total stores and only 9% of total selling area, but 48% of employees, displaying how the personnel expense is lower in the country from its revenue generation. Finally, Argentina is the least profitable operation much impacted by the country's monetary situation, showcasing a 3.4% recurring Ebitda margin during 2021. It counts with 4% of total stores, 10% of total selling area and 4% of total employees.

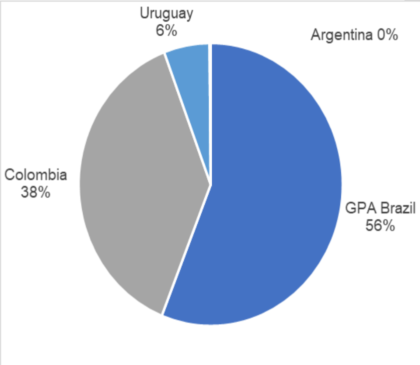
Production and Logistics

Regarding the production process, most of the products are outsourced to be sold to final consumers in both groups. Only a few specific products are made or packed within the stores, mostly perishable ones such as fruits and legumes, meat and bread. Even exclusive brands for the company are outsourced from specific suppliers. Some products are directly delivered by the suppliers in requests known as "Entrega Direta". Although the company affirms that the number of suppliers reduce the risk of supply shocks, exclusive brands might suffer an individual impact given these are outsourced from fewer accredited suppliers, representing a risk source.

Most of its products are centrally outsourced through its own digital and logistics structure, mainly on spot or short-term negotiation from local and international suppliers. While this is positive from the perspective of immediate restock, it raises the risk of supply shocks being stronger than they otherwise would if the company had long-term agreements. Therefore, the main value driver to which the company is exposed is inflation, a significant risk for the markets it operates. Uruguay is the only country where most of the products are bought locally by each store, being a decentralized restock system.

When it comes to logistics, the group operates in Brazil 11 distribution centers spread throughout the country with the total of 400.579 m^2 and with the support of pd@net, a digital platform that connects the purchases requests and suppliers to automatically refill its stocks. Although already representing 14.6% of the group's total revenues, proximity stores only need one distribution center as stock given the localization, which is shared with online purchases. Despite the positive aspect of being less dependent on more distribution centers, we see as a source of risk to concentrate the distribution of most growing business channels in a single distribution center, which is not done in Colombia for instance. In total, the Brazilian logistics concentrates 46% of the group's total useful stock area, delivering an efficiency ratio of 7.0 net operating revenue per stock m^2, compared to 9.3 from Éxito. The minor difference could be explained by the geographical differences between the respective regions, as well the higher profitability of Éxito.

Figure 13 – Stock area per country (%)



Source – SEC Filling.

In Colombia, there are 10 distribution centers and 3 intermodal points located in Bogotá, Medellín, Cali, Santander and the Atlantic Coast, summing 272,902 m^2 in total. Uruguay counts with 4 distribution centers or 40,000 m^2 at its disposal located across Montevideo. Finally, Argentina disposes of 1 distribution center in Cordoba.

In other words, the group is well established in terms of logistics structure, being capable of sourcing most of the regions it operates. The points for improvement would mainly be related to developing the digital assortment of stocks according to the appropriate ones to stores, alongside the better distribution of distribution centers between the selling channels.

To summarize, the company reflect its main shareholder, Casino, with a complex capital structure that is, however, much in line with the business model to diversify and extend the services possibilities. GPA Brazil is currently one of the largest food retail companies in Brazil, while Éxito is the largest one in Colombia. The growth in the future therefore not only goes through the operational improvement, but also the change for a new model, in line with the observed one in the market. GPA is expected to benefit from this perception and reach a stronger performance level in the future based on the right directioned efforts.

Corporate Strategy – Novo GPA

The GPA group has set out a new strategy after having revised its placement in the market, customer needs and future trends. This strategy entailed a corporate reorganization which resulted in the spin-off of the wholesale operation Assaí, the termination of hypermarkets in Brazil, all in order to focus on more profitable segments with elevated customer preferences by adjusting the store portfolio and redefined value proposition. The main pillars of the so-called "Novo GPA" are the top line, NPS[3], digital, expansion, profitability and ESG and culture.

[3] Net Promoter Score.

For the top line, the company expects to open more 300 stores by 2024 split between 250 for proximity stores and 50 supermarkets. The focus on proximity stores is assertive given it is the fastest growing in terms of revenue and profitability, alongside its complementary effect of extending the brand's reachability. Partnerships are also included in the plan, with complementary access to more digital sales. However, as a prudential measure, we have included the target reached only by 2027.

Figure 14 – "Novo GPA" pillars

Source – Investor Day 2022.

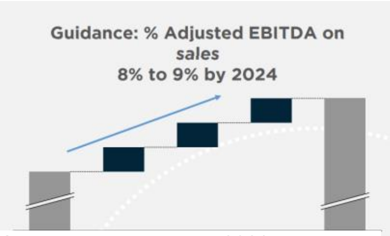
Regarding the in-store experience, perishable products are also one of the focus points, alongside the efficiency in products assortment and pricing. The consumer experience will also be addressed through the flag points in the NPS score, alongside the development of the loyalty programs, such as the "Pão de Açúcar Mais". On the digital front, the management expects to develop its app and CRM platforms. Operationally, the company plans to reform its commercial positioning and its sell-out model, as well as better splitting its production structure and focusing more on the sale of credit cards. During the strategy presentation, the management mentioned how the company had 300 projects in mind to be developed that were reduced to 20. Although simplification is indeed needed, we believe there are still many factors to take into consideration for the strategy to be fully concretized. As such, it is useful to divide it even further into physical and digital expansion and channels strategy.

The first and the last are combined into the projections for the number of stores to be opened. The company aims to open 300 more stores by the end of 2024, focusing more on proximity and premium models. This is in line with the perception of being a holding company and finding the value generation where it is but should not be overstated up to the point where the company might lose track of totally unexplored opportunities. While the expansion on number of stores in needed, especially under the proximity business, the company could also consider exploring new regions within Brazil, given more than 80% of its stores are concentrated in only one region.

Despite this, a crucial part of the strategy is digital transformation and operations, with a higher focus on the omnichannel distribution by developing its app and growing in complementary industries and businesses, such as credit cards. Furthermore, the digital operational side of the company will be addressed by undertaking three distinctive strategies. First, by partnering up with leading food delivery services for the "last mile"[4]. Second, by developing a center in which all orders and products are being tracked for GPA's marketplace. Third, by launching

[4] Last mile are the brands that operate the final delivery step to the client.

Figure 15 – "Novo GPA" Guidance



Source – Investor Day 2022.

their Layout Distribution Control (CDE), which keeps track of all stores' supplies and the general data necessary to run all stores, in substitution of the current system. By taking all these supply chain and logistical steps, the goal is to operationally deliver more than inflation with an Ebtida margin target of 8 to 9% as of 2024.

Qualitatively, in order to retain customer engagement to deliver such targets, GPA develops its own loyalty program which boasts approximately 21 million active customers in Brazil and generated an extra 6 million customers in Colombia. With the program trackability of customers' shopping habits the company might engage on special, personalized offers which is an advantage for both client and customer and ensures client satisfaction. These loyalty programs have turned out especially well for the GPA group, with over 50% of sales done through the "Clube Extra" and "Pao de Açúcar Mais" loyalty brands.

All these initiatives of digitalization and loyalty programs are also aligned with the perishable products rethinking and assortment to increase client retention. Some other initiatives to mention are the Click & Collect that enables customers to order products online and pick them up within one hour at over 290 stores in Brazil. Besides convenience, GPA reports additional in-store spending once customers have arrived to pick up their initial product. In Colombia there are over 320 stores which in total processed 1.4 million orders.

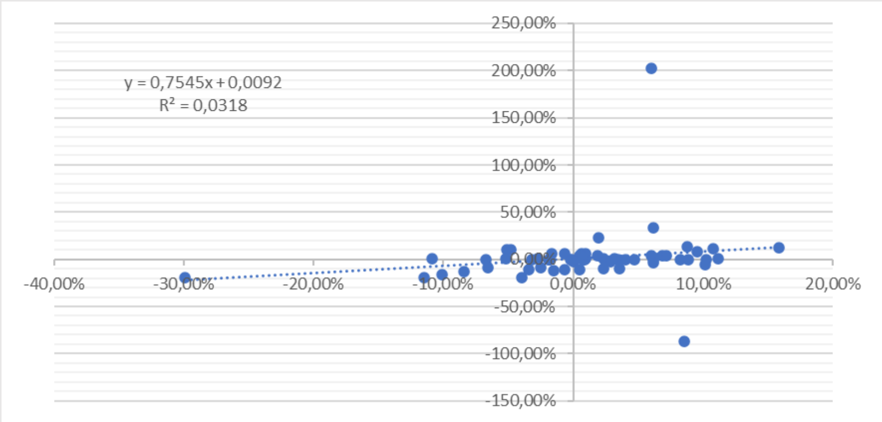
To sum up, aligned with the historical of being a pioneer in digital transformation within the Brazilian food retail industry[5], we believe the group might be able to reach its targets backed by digital efforts, mainly under the operational improvements for selling expenses. However, due to still lower market penetration for the digital channels in Brazil and limited long-term expansion of the proximity model, we think that the expansion to new regions would be a complementary path in terms of top line growth. Moreover, we have included some amendments to the company's target that seemed to be too optimistic based on mathematical observations. This results in a more conservative approach to the company's strategy results, but with its inclusion in the model given the management's capabilities. Concluding, the brand has already a historical well-established recognition within the market, and, in terms of top line, only had to rethink its efforts to further explore and regain the market share it once had by aligning the recognition to the new market trends.

Stock Performance

[5] Pão de Açúcar Mais was the first fidelity program within the whole Brazilian retail industry.

Following the concept that every investment is the present value of all future cash flows, the past performance of a stock does not influence its future projections, but on the other hand, it is essential to understand its variations and its co-movements with the market for a more accurate forecast.

Figure 16 - Regression PCAR3 and Ibovespa



Source – Own formulation.

Based on a regression between the GPA Group and the Ibovespa, the main Brazilian index, analysing monthly data with a 5-year history, we arrived at a beta for the GPA group of 0.754. The same was done for Atacadão S.A, one its main competitors, resulting in a beta of 0.471, meaning that the share of GPA was more cyclical, in line with the fact the Atacadão is a cash and carry operation. Furthermore, we also ran a regression between 4 competitors and Ibovespa, arriving to a beta of 0.795 which is very related to the one observed to GPA as the companies included were more procyclical.

Figure 17 - Regression peers and Ibovespa

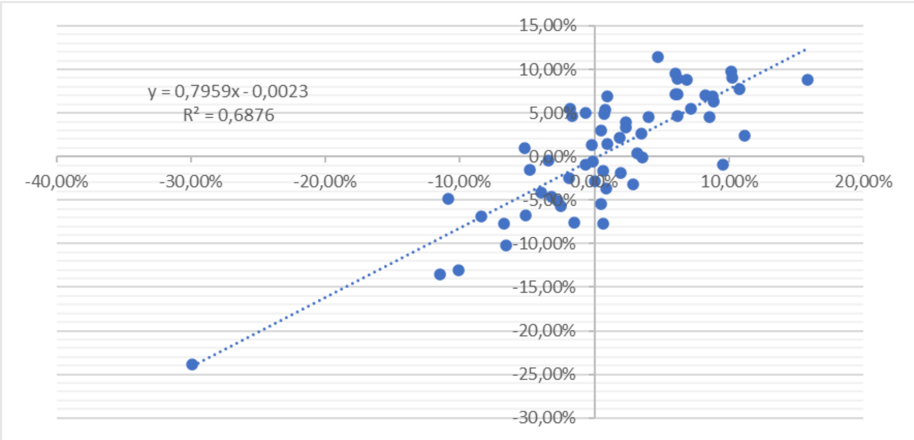
	PCAR3	ASAI3	CRFB3	GMAT3	Average	Avg/PCAR3
Price to Earnings	19,4	63,7	17,9	27,1	32	1,7
Price to Book	0,4	7,2	1,6	1,7	2,7	7,3
EV/Ebitda	4,1	11	7	10	8	2
Price to Sales	0,1	0,8	0,5	1,3	0,7	7,4

Source – Yahoo Finance.

GPA shares display a remarkable decline after Assai was phased out of the stocks, but in line with the fact that each shareholder of PCAR3 received a ASAI3 stock. On Friday, PCAR3 stocks closed at BRL83.00, and on Monday each shareholder received the percentage of Assaí within the group according to what was owned by PCAR3. Given this percentage was 17.7%, Assaí was initially quoted at BRL14.69, while PCAR3 went to BRL68.69. However, given the market's euphoria with the transaction and how Assaí would be able to focus on its own operations and develop its higher profitability even further, the stock price went 386% up on the first day of negotiations, while PCAR went 66% down, representing a valuable exit opportunity for former Pão de Açúcar group investors. In the end, accounting both companies, the transaction marked a 14.2% increase in total market value on Monday.

Despite the value generated, Pão de Açúcar's stock performance has not been satisfactory since the transaction, peaking at BRL47.51 on 04/07/2021 to negotiate as of 15/12/2022 around BRL17.54, a negative 63.1% return. Assaí shareholders have seen the company go up 10.9% during the same period, while the most important competitor, Carrefour Brasil (CRFB3) went 29.9% down and the Ibovespa index 17,3%. From all these compared, Pão de Açúcar displays the most undervalued stock, confirmed by its multiples that are way below the market average. Therefore, a simple valuation exercise using multiples already indicates how the company is currently undervalued against the market.

Figure 18 - Regression peers and Ibovespa



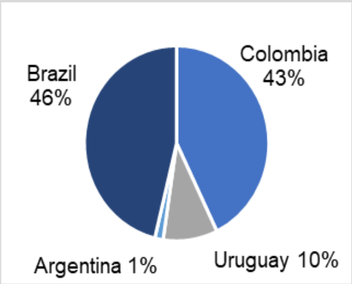
Source – Own formulation.

Macroeconomic Context

The GPA Group inserts itself in a much complex and dynamic economics scenario for being exposed to countries that, although with much different market conditions, present a similar story in both economic and political terms. The group is more exposed to Brazil, which concentrates 53% of the total revenues and 46% of total Ebitda, while Colombia, the second exposure, concentrates 37% revenues with 43% of total Ebitda, in line with its higher profitability. Regarding the minor ones, Uruguay accounts for 8% of total revenues and 10% of total Ebitda, while Argentina only 3% and 1%, respectively. Therefore, it is more important to direct the attention to Brazil and Colombia macroeconomic contexts, although data will vary accordingly with each country.

Moreover, it is important to note how the industry itself is less cyclical given it relates to common goods, as well as how this is applicable to Pão de Açúcar's case with its target audience being wealthier, less dependent on income. As such, the main macro factors that will affect the company's operational performance are the inflation in each country, as well as, in the long-term, the GDP growth over its sales and the interest rates over its investments.

Figure 19 – Ebitda share (%)

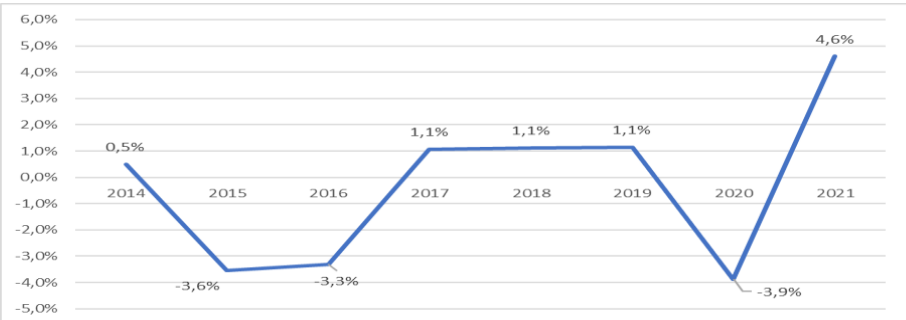


Source – Investor kit and Earnings Release.

In Brazil, the recent economic background lies over the politics: it is expected the country to face a strong GDP growth in 2022 of 2.8%[6], a substantial change compared to the situation before the COVID-19 pandemic with growth around 1.1%. Despite it being referred to the previous government, the exact change can be seen in the political framework, with Lula's return to power. Lula has won the presidential elections in a close pool against Bolsonaro (50.9% vs. 49.1%), showcasing the country's political division. This is also reflected by the congressional and states elections, with a solid presence of right-wingers who will counterbalance the presidency's power. On the one hand, this means that Lula will have to be more fiscally responsible during his term, more aligned with what was presented during his first government.

However, recent indications shows that Lula will likely engage on a more second-government economic policies: the next president has chosen Fernando Haddad to be his economics minister, a politician from the same party that competed in the 2018 presidency elections against Bolsonaro. Haddad is considered an important leader in his party after being São Paulo's (a commonly right-wing centre) mayor and assuming the responsibility during the 2018's elections. In other words, Lula has chosen him as someone he might trust to do what he is intended to, as well as dispose the political abilities to approve his ideas. During Lula's second government, the fiscal policy was marked, for instance by the adoption of "PAC (Programa de Aceleração do Crescimento)" in 2007, an infrastructure plan to develop the country in that area with a BRL500 bn budget to the period of his second government. The issue is that now the government's budget faces a different scenario in which the country is yet to recover from the recent crisis.

Figure 20 – GDP growth (%)



Source – IBGE.

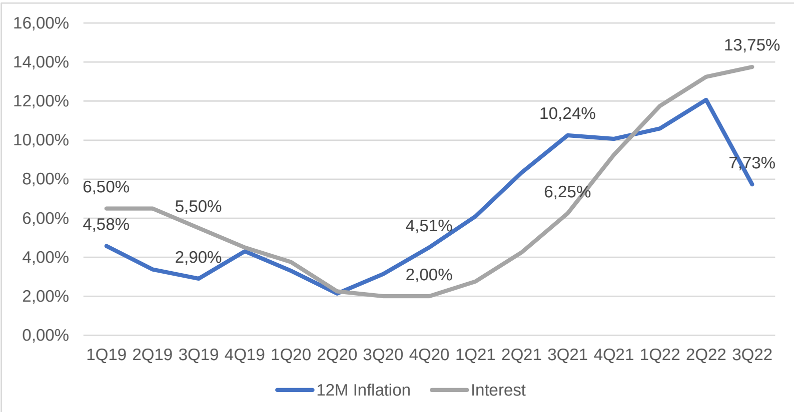
The Covid-19 pandemics in conjunction with the political scenario rekindled the active fiscal policy from previous governments, expressed in allowances for

[6] Boletim Focus, Brazilian Central Bank, 4th of November, 2022.

discretionary expenses and the continuity of financial aid. According to the proposed budget for 2023, the government will face a 0.3% GDP deficit in 2023 that doesn't even consider other fiscal risks such as the planned extension of financial aid to women. This is summed to the fact that the country still faces a high and persistent inflation since the Covid 19 crisis. The combination of both factors limits the economic allowance to an active fiscal policy.

However, the Brazilian central bank seems already to be monitoring the fiscal risks for inflation. In the most recent report, in December 2022, when Copom (interest rate council) decided to keep the basic interest rate, Selic, at 13.75% after a remarkable ramp up from the historical low 2% at March 2021. Copom also reaffirmed the fiscal uncertainty of future steps and that it "will pay special attention to developments in fiscal policy and, in particular, their effects on asset prices and inflation expectations, with potential impacts on the dynamics of prospective inflation". Therefore, despite the recent data indicating a decline in inflationary pressures, lowering the interest rates will depend highly on the fiscal policy. Furthermore, annual inflation, while trending lower, remains well above the Brazilian central Bank's 5.25% upper limit, reaching 5.90% YoY as of November 2022. Internationally, inflationary pressures remain a key concern of policy makers in Brazil, driven by higher international energy and food prices prompted by the war in Ukraine. The Brazilian economy is expected to decelerate in the medium-term, hampered by a potential economic slowdown in China and the continued impact of the war in Ukraine on the global economy. GDP growth is expected to slow down to 1.1% in 2023.

Figure 21 – 12M accumulated Inflation and Interest Rates in Brazil (%)

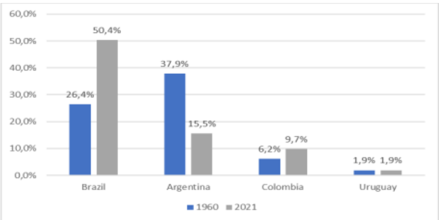


Source – IBGE.

This restates the need to revaluate the political steps Lula has been taking to his future government. The first fact to be analysed is how Lula can attract different spectrums of politics. This is particularly done by conceding requests at tactical spots and times. Currently, we believe that Lula is accordingly still playing with his political capital, mainly from left-wingers, but as the government develops, his term will be also marked by fiscal responsibility. Although Haddad is the trustable minister he needs, he is also considered a reasonable person and economist, being a former professor at Insper, a notoriously orthodox economics school. From the main points to be addressed for now, there is to note the simplification of taxes, reinforced by the inclusion of Bernardo Appy as taxes secretary. This movement showcases how Lula is able to open opportunities to conciliate divergent interests. Given the country is politically divided, we believe that for now Lula will focus on a peaceful transition more aligned to the previous government in economic terms. This backs up a scenario of controlled inflation for the next years around the one projected for 2024 according to the market expectations that will mostly conclude in a stable cost of sales for the group.

In terms of economic activity, after a sharp economic contraction of 3.9% in 2020 due to the pandemic, GDP grew by 4.6% in 2021. GDP growth expectations were also revised upwards from 0.7% at the beginning of the year to 2.5% in 2022, following the normalization of economic activity post-COVID, as well as a strong external sector performance. With controlled inflation and a likewise fiscal policy, the country might reach its potential GDP between 1 and 2% for the future, that based our projections.

Figure 22 - Participation of GDP generated in South America



Source – World Bank.

Colombia, Argentina and Uruguay

As previously mentioned, Grupo Éxito operates in 3 countries, Argentina, Uruguay, and Colombia. To assess the company's expansion and investment strategy, we consider it crucial to understand the macroeconomic conditions of each country to build projections based on their individualities and have more accurate forecasts for the consolidated group.

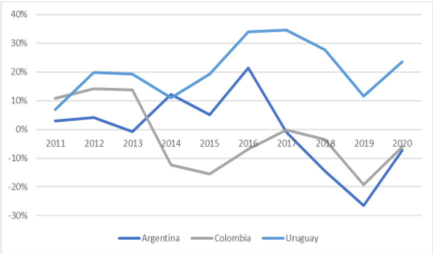
As Grupo Éxito is headquartered in Colombia, and currently the revenue in the country represents 77% of the revenue generated by the group, we project an increase in investment in the country, based mainly on cost reduction due to not needing to internationalize, and also due to the more favourable economic conditions from the country in relation to Argentina and Uruguay.

Unlike Argentina and Uruguay, Colombian representativeness in South America's GDP increased between 1960 and 2021, from 6.2% to 9.7%[7]. The economy is based mainly on agriculture and oil exploration and is expected to grow by 6.5% in 2022[8], having the highest growth for the year among OECD member nations.

[7] World Bank
[8] Bloomberg

We expect the country to achieve sustainable growth by 2040 and control its inflation, keeping it around 6.1% given the recent historical of the country. In this sense, with a developing economy and the population maintaining its purchasing capacity according to a traditional orthodox monetary policy and a left winger fiscal policy, it is feasible for the group to support investment in the country, increasing the number of stores by 55% until 2040, according to the economic growth, at least to keep its control over the sector in the country.

Figure 23 - Colombia, Argentina and Uruguay cumulative GDP growth



Source – World Bank.

Argentina has the smallest representation for Grupo Éxito, representing 4% of total stores and 7% of revenue in 2021. Due to the current macroeconomic scenario, we project that the group will reduce its investments in the country to protect itself from country risk. The country's drop in efficiency is remarkable; in 1960, Argentina represented 37.9% of the total GDP generated in South America, and in 2021 it represented only 15.5%. Furthermore, the country had the highest GDP per capita in the world in 1896, and today poverty reaches 36.5%[9]. The explanation for such inefficiency can be summarized by the country's political instability in the last century, where there were six coups d'état, five dictatorships and six defaults on the IMF.

High inflation, projected to end 2022 at 95%, and the 90% devaluation of the Argentine peso against the U.S dollar in the last five years, are solid foundations for the company's strategy of reducing investment in the country, where it is increasing harder to import products and for consumers to do their day-to-day shopping. We believe the group will gradually withdraw from the country to increase overall efficiency, closing stores to reach a representativeness of 2.2% by 2040.

Uruguay in the last 10 years has been the country that grew the most among the countries in which Grupo Éxito operates, 24% growth in GDP. This evolution, accompanied by the fact that it is the country in which operations are most profitable are strong evidence to continue to invest in the country, reaching 135 stores until 2040, following the economic growth of the country.

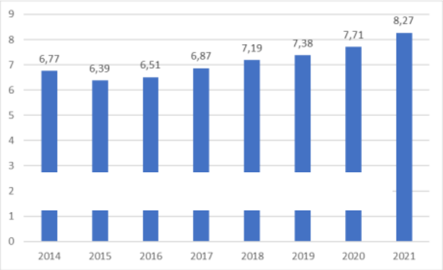
Industry Overview

The food retail industry, which comprises foods sold in grocery stores, consumer stores, drugstores, hypermarkets, and food service facilities, had a strong impact due to the covid pandemic started in 2019, and, unlike most sectors, it had an

[9] National Institute of Statistics and Census, Argentina Republic

economically positive impact, increasing revenue and operating margins of companies around the world. In 2021, the global food retail market reached US$8.27 trillion in sales, surpassing the previous year's record by US$500 billion. One of the main reasons for this result is the specificity of the business, which, being considered an essential service, did not have to close during the pandemic lockdown days, causing many customers who preferred hospitality services, such as bars and restaurants, to shift their daily purchases.

Figure 24 - Revenue of the worldwide food market (U.S dollar trillion)



Source – Statista.

Trends

The industry has three clear trends for the future, which have been defined by the rapid changes in consumer behaviour over the last few years.

The first would be digital expansion. The sector has seen an acceleration in online purchases, putting companies with a solid digital presence at a competitive advantage against competitors that had to adapt to this way of buying. However, far beyond being a momentary acceleration, the expansion of e-commerce continues to be a strong trend for the sector, with the expectation that it will double its representation in total sales by 2030, affirmation made by McKinsey Partner Daniel Läubli[10].

The second is better prices for consumers. Contrary to the pandemic's beginning, when the most significant concern was related to the product's availability, today, the consumer is much more concerned with the final value. Companies that create strong discount programs and invest in their products, making the final price lower for the customer, will have a remarkable ability to retain and develop roots with new customers, especially considering the supermarket with perishable products and private label ones.

And finally, the demand for environmentally friendly and healthy products. Every day consumers are becoming more concerned about their own and the planet's sustainability, much related to the acceleration of the global debate on the subject. Building ways to increase ESG actions is key for value in the long run.

Our projections for the GPA Group are closely related to our understanding of how the company will position itself within these trends. We believe that the group is well positioned in relation to digital, where the strategy was mentioned in the corporate strategy topic. Related to the improvement in product prices, the company is investing heavily in loyalty programs, where in 2021, more than 650 thousand customers received more than BRL2.8 mm in prizes and discounts, in addition to the expansion of its own brands and better products assortments. And

[10] Aull, Kuijpers and Läubli. 2022. The state of grocery retail around the world. McKinsey & Co.

on health and sustainability, the company's commitment is seen from one of the five committees being directly focused on this topic in it strategical plan where the company deals with issues such as combating climate change, promoting human rights and relationships with the local community.

Risks

Regarding risks, we believe the most relevant one is the industry's relationship with consumer confidence. To better assess the risk, we used the consumer confidence index[11], which practically indicates the future evolution of household consumption based on feelings related to the macroeconomic situation in general, investment and savings capacities. The indicator is at one of the lowest historical levels, even lower than the beginning of the pandemic, where values below 100 indicate that consumers have negative projections in relation to the future evolution of the economy, resulting in the tendency to consume less and save more.

Figure 25 - Consumer confidence index

Source – OCDE.

This indicator is closely related to the current macroeconomic scenario in general, where countries are reaching record levels of inflation. Consumer confidence is the main consequence of controlled inflation rates. This factor is generating a strong movement among consumers in search of better prices, making companies to reduce their sales margins in order to retain customers.

Another relevant risk is the number of players in the industry and the loyalty towards certain companies. Many customers end up creating strong roots with some stores making it very difficult for the competitor to attract this desired customer, making activities such as brand rebuilding and focusing on the customer experience essential to combating the risk.

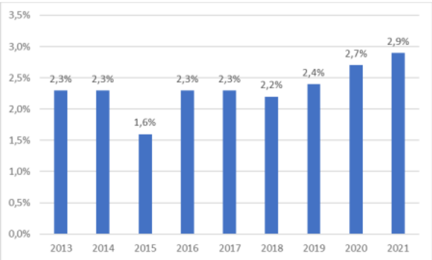
Industry in Brazil

In 2021, the food retail sector reinforced its representation in the Brazilian economy, reaching a total revenue of BRL611.2 bn through all its formats and channels of distribution (proximity stores, supermarket, hypermarket, “atacarejo” and e-commerce), representing 8.26% of the Brazilian gross domestic product (GDP), a YoY growth of 1.5%. This growth was largely due to the increase in the universe of establishments, where in 2020, a total of 91,351 stores were registered. In 2021 the number increased to 92,588, illustrating the commitment of retail companies to expand their businesses and offer products to the population. We believe the representation of the sector in the Brazilian GDP will

[11] Consumer confidence index. OCDE.

remain constant and that large companies will continue to increase the number of stores, focusing on proximity stores. Moreover, the populational growth is likely to counterbalance the development of more productive sectors.

Figure 26 - Industry profit margin

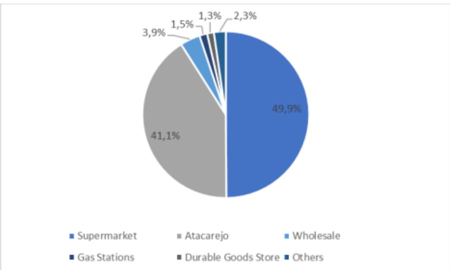


Source – ABRAS.

According to the ABRAS report[12], the sector broke the record in its profit margin for the second consecutive year, registering 2.9% on average profit, an increase of 0.2% in relation to the previous year. It is worth mentioning that the Covid 19 pandemic had a positive effect on the indicator, with the sector experiencing linear growth in margin since the beginning of the pandemic. The main explanation for this boost in profitability is that during the period of social isolation, the food retail industry remained open, while bars and restaurants, for example, had to close, increasing the need to eat at home.

The ABRAS report indicates that investment in the sector was BRL19.8 bn in 2021. The main investments were the refurbishment of stores, acquisition of refrigerated equipment and construction of new stores, totalling more than 70% of the total. This movement towards renovating and building new stores reinforces the idea of expansion and improving their product in order to better position themselves in this highly competitive market.

Figure 27 - Revenue Allocation by business, industry 2021



Source – ABRAS.

Related to store formats, the main source of revenue continues to be supermarkets, accounting for 49.9%, but it is important to comment on the evolution of "atacarejo", which in 2021 represented 41.1%. Atacarejo is the combination of the words "wholesale" and "retail" in Portuguese, and since 2010 it has been gaining space and representation in retail companies. This type of store was created to serve the final consumer, with less focus on the customer experience and more on low prices, due to the reduction in the chain's operating costs. Assaí and Atacadão are two examples of this model.

A strong competitive advantage for large companies in the sector has been the ability to invest in their own brands, thus being able to increase their profitability with the sale of their own products and also increase the company's brand reach by being more present in the consumer's daily life. The ABRAS report indicates that 79% of retail companies have a product with their own brand that influences their revenue. The main items of private label sales are bakery and confectionary, and dry grocery. GPA follows this trend, bringing competitive prices and savings to customers, where over 2021, more than 100 products were created with exclusive brands.

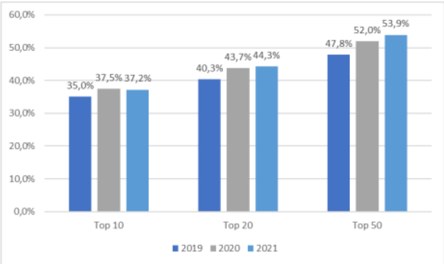
- Market Share

[12] Ranking ABRAS 2022

In the Brazilian territory, there are more than 500 supermarket companies, resulting in a sector of high competition. On the other hand, figure 28 shows how the concentration of the 50 largest companies has been increasing in recent years, accounting for 53.9% of the sector's revenues in 2021.

In 2021, the company with the highest representation in the sector was the Carrefour Group, with revenues of BRL81 bn, followed by Assai, with revenues of BRL45 bn, and in third place the GPA group, with revenues of BRL27 bn. An important point to highlight is the regionalization of the brands; due to the fact that Brazil is a country with a very large territorial extension, there are different leaderships by region, with Carrefour being the leader in the southeast region, Grupo Mateus in the northeast region and the south region Irmãos Muffato.

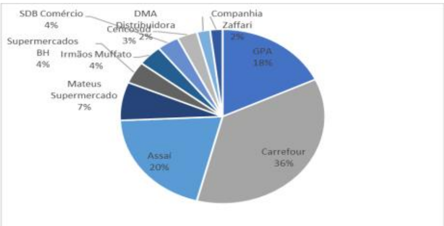
Figure 28 - Market share concentration



Source – ABRAS.

The most representative companies also demonstrated to have better efficiency indices. According to ABRAS, the largest companies in the supermarket retail sector have the best annual revenue ratios per employee or per square meter of stores, showing increasing returns to scale – the larger in area and number of employees, the greater their revenues by area and employees. In this way, it makes sense for a large food retail company to prioritize a territory of action instead of spraying stores in all regions of the country, although we still believe there is room to explore different regions for GPA as it is too concentrated in the Southeast.

Figure 29 - Market share in 2040



Source – ABRAS.

Another important point for the dominance of a few and large companies in the share of revenues in this market is the trend towards mergers and acquisitions. As it is difficult to find land located at strategic points, especially in large capitals, it may be more convenient and cheaper to convert stores from other chains than to look for a good point to build and expand your own chain from there, thus reusing the logistics infrastructure and storage for stores already built, with more interesting prices, in addition to getting points that are no longer available on the market.

We project the GPA's market share based on two assumptions. The first is that the top 10 companies will represent 40% of total sales by 2037, whereas in 2021 represented 36.8%, understanding that the past evolution of the main players will continue mainly due to M&E strategies and higher ability of investment due to higher margins. And the second is that the GPA group will represent 18% of sales of the top 10 companies by 2037, increasing 6% if comparing to 2021, due to the reconstruction of the brand after a drop in market share in recent years, creating a relationship with several Brazilian consumers who know this strong company in the national territory.

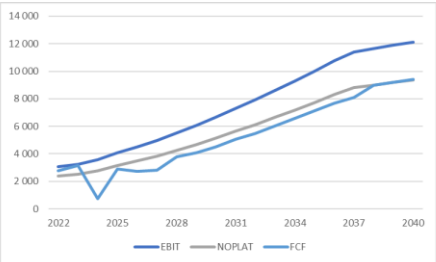
Projections & Financial Analysis

Revenue

Figure 30 – Revenue

Source – Own formulation.

Figure 31- EBIT, NOPLAT and FCF



Source – Own formulation.

The revenue was projected based on a basis scenario of store expansion in the future according to the company's strategy. It was also factored in the main trend in the business of an omnichannel structure with the use of proximity stores and how this would impact the rest of the sector.

Brazil has been in a thriving process of digitization, and the food retail sector is many parts of that. In order to expand the service area, the companies are focusing on proximity stores, which is also aligned to a new customer behaviour of shopping at nearby stores with less time available to do the house shores.

The convenience stores trend has already been incorporated into GPA's strategy with the goal of opening more than 300 stores until 2024. Most of these are the so-called proximity stores, which will complement the digital structure the company already has developed with a fidelity construction business called "Pão de Açúcar Mais". This is also fomented by the good perception of consumers when it comes to the credit card for this program, which is from Itaú and seen as the one of the gives the most miles per reais expended.

All these trends were incorporated into the model through the GPA's market share and the goal of more than 300 stores, although we think that the target to 2024 is too optimistic as the company would have to open around 100 stores per year to reach it, when it had opened a net 4 during 2021. In order to have a more conservative approach to the company's guidance, the model includes the projections to be reached in 2027, with the same split of 50 supermarkets, divided by Pão de Açúcar, Mercado Extra and Compre Bem and 250 for the proximity brands.

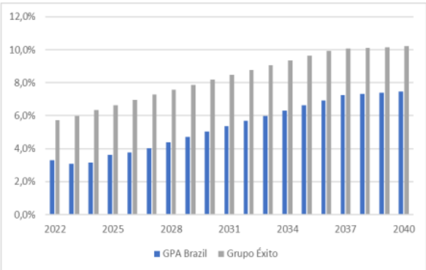
Therefore, the model includes a projection of growth in the sector, which will determine GPA's future revenues according to its strategy. It is expected that GPA will increase its participation in the sector in line with this trend. The revenues will grow at an average rate of 4.4% until 2040, determined by the assumptions that the GDP will grow according to the Bloomberg and Boletim Focus consensus and that the market share of the sector in the GDP will keep stable. However, given the market trend, the biggest supermarkets will grow in share in the sector, reaching 40% in 2037 from 36.8%. This will be incorporated by GPA going from 12% to 18% in 2037.

For Éxito, we assume that the number of stores will increase in Colombia in order to remain as the main company in the sector; increase in Uruguay because it is where the company is most profitable; decrease in Argentina due to the country's risk. Given these assumptions, it was projected a revenue exposure of 51% to Brazil, 40% to Colombia, 8% in Uruguay and 1% in Argentina to 2040.

Operating Margins

For the operations, the same assumptions were incorporated when it comes to the digitization of operations and improved business network. The proximity stores also demand fewer employees, which is why we have incorporated a stronger decline in selling expenses rather than general and administrative, as the first one is related to stores' expenses. The selling expenses as a percentage of revenues are assumed to decrease 0.15% per year until 2037, while the others are only decreasing at a 0.05% rate per year as a percentage of revenues. COGS are assumed stable throughout, as it is expected from the Brazilian central bank to keep inflation rates under control, the main caption driver. As a complementary note we have assumed that the advertisement will grow according to the investment in market share growth.

Figure 32 - Operating margins



Source – Own formulation.

For Éxito, the omnichannel strategy to be implemented is yet to mature and be clear when it comes to the service expansion in Colombia. For Uruguay and Argentina, the group does not specify what the current strategy other than keep growing is. Given such observations, it was assumed that the number of stores in Colombia would grow but in a lesser rhythm when compared to Brazil, and this would have the same impact on the selling expenses improvements, which will decrease as a percentage of revenues at half of what is observed in Brazil.

These assumptions resulted in an average operational growth of 10% per year for GPA Brasil from 2023 until 2040 and 5% for Éxito, in line with the assumptions and the strategies. This is also in the line of the company's target to reach 9% Ebitda margin but in 2032 as we are assuming a more conservative scenario.

Net Working Capital

Figure 33 - GPA Brazil stores

GPA Brazil Stores - In units	2021A	2040F
Major Stores	**667**	**1 217**
Pão De Açúcar	181	227
Extra Hiper	72	72
Extra Supermercado	-	-
Mercado Extra	146	169
Compre Bem	28	51
Mini Extra	141	370
Minuto Pão de Açúcar	99	328
Specialized businesses	**142**	**74**
Gas Stations	74	74
Drugstores	68	-
Total	**809**	**1291**

Source – Own formulation and investor kit.

Working capital is the difference between a company's current assets and its current liabilities, measuring its liquidity and short-term health. It's crucial a well-defined working capital management, enabling the company to meet its obligations, maintain inventories and even offer better payment conditions for clients.

To better understand GPA's accounts receivable, inventories and suppliers, we calculated the cash conversion cycle. This metric allows us to understand in days how long it takes for the company to convert its investments into inventories and other resources into cash flows from sales. The cash conversation cycle (CCC) of GPA Brazil and Grupo Éxito in the fiscal year 2021 amounted to -21 and -62 days, respectively. We believe the company will maintain the average DIO, DSO and DPO of the last two years, assumptions which we used to forecast the future NWC.

The negative days in the GPA Group's CCC give the company a strong competitive advantage, requiring less time to sell its inventory and receive cash than it does to pay its suppliers. This reflects the company's business model, having high liquidity due to the fact of working with clients who pay mostly in cash, without long-term financing, and the fact of high power to bargain with their suppliers, negotiating long days until payment.

Capital Expenditure

Figure 34 - Grupo Éxito stores

Grupo Éxito Stores - In units	2021A	2040F
Colombia	503	782
Uruguay	92	135
Argentina	25	21
Total	**620**	**938**

Source – Own formulation and investor kit.

Capital Expenditure (CapEx) involves all costs related to acquiring equipment and facilities to improve a product, service, or the company itself. In the food retail sector, investment in CapEx is mostly related to expansion in the number of stores, where the asset categories are practically divided into buildings, leasehold improvements and machinery and equipment.

In our projection, we relate the investment in Capex to the projected evolution in the number of stores. To reach the projected market share, GPA Brazil will open another 482 stores by 2040. For Grupo Éxito, we project different scenarios for each of the countries in which the company operates, reducing the number of stores in Argentina and increasing in Uruguay and Colombia, totalling another 318 stores from 2021 to 2040 for the group.

According to our projections, the group will invest BRL49 mm until 2040.

Capital Structure

The group's capital structure is detrimental to the valuation of the company. Given the cash generation Pão de Açúcar currently disposes of, it is assumed that the company might grow with only its own cash, reinvesting most of its income. Cash and financial investments are as such dependent the investments that are made alongside the interest rate with which the company will have financial gains. Therefore, we expect that the debt levels to keep stable while the company's equity will grow with the increase in invested capital and the expected strong growth in results. This structure is likely more acquainted with a sustainable growth model, as the company expects to have significant growth, and it is currently cheaper to acquire equity. The markets that the company operates are also likely to grow with foreign investments, making equity even more attractive relative to debt.

Valuation

Given the assumptions made under the company's capital structure, the APV model was chosen to value the company based on the division between core and non-core operations. From the projected cash flows and discount rates, it was possible to infer the NPV of the company financed solely by equity separately from the effects of debt, such as tax shield.

APV Approach and Cost of Capital

Figure 35 - Discount rate assumptions

Discount Rate Calculation - Assumptions	
Rf	3,16%
MRP	4,99%
βu	0,53
β (relevered)	0,60
Country Risk (EMBI+)	1,61%
Ru	**6,66%**
Re	**7,11%**

Source – Own formulation.

As in the APV methodology, the different types of cash flow are discounted at different discount rates, the unlevered free cash flow was discounted at the unlevered cost of equity, and the financial debt cash flow was discounted at the cost of debt. As our debt is pre-defined, instead of using the cost of debt to discount the tax shield, we used the unlevered cost of equity. In our valuation methodology, we do not use WACC, but for illustration purposes, we also calculate it.

It is important to note that the risk-free rate, MRP and country risk premium were brought into the currency in which the cash flows are, switching from US$ to BRL, using the inflation differential formula bellow.

$$\text{Local Currency Cost of Capital} = (1 + \text{US \$ Cost of Capital})\frac{(1+\text{Inflation Rate in local currency})}{(1+\text{inflation Rate in US \$})} - 1$$

- Cost of Debt

To calculate the cost of debt, we used the last issued bond by the GPA Group, maturing in 6 years, price and face value of R$1000.00, no coupon payments, and an annual interest rate of 4.35%. Since the bond is traded at par value and it is a pure discount bond, its yield to maturity is the same as the interest rate.

Figure 36 - Cost of debt inputs

Cost of Debt Calculation	
YTM - PCAR3 Bond	4,35%
Probability of Default	0,11%
Loss Given Default	53,90%
Rd	**4,29%**

Source – Bloomberg.

After the YTM calculation, we verified the latest GPA group credit rating provided by Standard & Poor's, downgrading its rating from AAA to BBB, which is explained by the fact that the main controller of GPA Group, Casino Group, had its rating as well downgraded by recent lower-than-expected operating performance.

Since the probability of default of a BBB-rated bond is 0.11% and the loss given default is 53.9%, the cost of debt resulted in a rate of 4.29%.

- Cost of Equity

To compute the unlevered cost of equity, we use the traditional Capital Asset Pricing Model Formula (CAPM), added by country risk premium[13], since investors demand higher returns for investing in Brazil due to its higher associated risks, assuming that the company's exposure to country risk is similar to its exposure to other market risk.

As inputs to the formula, we use a market risk premium of 4.99% based on the latest KPMG Corporate Finance Research, a risk-free rate of 3.16% from the 30 years US treasury T – Bill, and a country risk premium of 1.61% for Brazil, based on J.P Morgan research.

To calculate the beta, we performed a regression of 4 companies that are in the same sector as the GPA Group and that are also traded on the Brazilian financial market with the Ibovespa Index. After that, unlevering the beta of all comparable companies, we arrived at a mean beta of 0.53 for the sector. With all inputs in hand, we apply the formula resulting in an unlevered cost of equity of 6.66%.

- WACC

As the WACC is a weighted average cost of capital of the company's different forms of financing, we had to use the D/E ratio of 2021 as input, which is 24.0%. With the previously unlevered beta, we had to re-leverage to GPA Group's actual capital structure, resulting in a cost of equity of 7.10%. As debt financing results in tax shield, we had to use the 34% tax rate on the formula to get its benefits.

Applying the formula with all inputs, the weighted average cost of capital resulted in 6.41%.

Figure 37 – Sensitivy analysis MRP x βu

Sensitivity Analysis						
		MRP				
	6,66%	4,2%	4,6%	**4,99%**	5,4%	5,8%
βu	0,43	5,65%	5,83%	6,00%	6,17%	6,34%
	0,48	5,94%	6,14%	6,33%	6,52%	6,71%
	0,53	6,23%	6,45%	**6,66%**	6,87%	7,08%
	0,58	6,52%	6,76%	6,99%	7,22%	7,45%
	0,63	6,81%	7,07%	7,32%	7,57%	7,82%

Source – Own formulation.

Terminal Value

We believe that the expansion strategy of GPA Brazil and Grupo Éxito will reach its peak in 2037, reaching the expected market share to consolidate its strategy of increasing representation in Brazil and consolidating itself as the largest company in the sector in Colombia. For the last two years of our forecast, the group achieves a steady growth of 2.1%, value used as our terminal growth rate,

[13] $Ri = Rf + \beta i * (MRP + CRP)$

very similar to the GDP growth projections of the countries in which the company operates.

Sensitivity Analysis

One of the biggest challenges in a valuation model is to make assertive assumptions, such as discount rates, terminal growth and operating margin, simply because we cannot predict the future. In the face of this fact, the sensitivity analysis helps to understand this uncertain future, being able to show how different assumptions affect final results, such as the share price.

Figure 38 - Sensitivity analysis Ru x g

Sensitivity Analysis						
		Ru				
	28,17	5,4%	6,0%	6,66%	7,3%	8,0%
g	1,7%	44,03	34,51	27,57	22,29	18,17
	1,9%	45,48	35,25	27,88	22,35	18,05
	2,1%	47,08	36,01	28,17	22,35	17,87
	2,3%	48,84	36,80	28,42	22,27	17,58
	2,5%	50,79	37,59	28,59	22,07	17,16

Source – Own formulation.

Firstly, we made a sensitivity analysis regarding the cost of equity, in which the value of 6.66% was obtained by the Capital Asset Pricing Model. The first sensitivity analysis was exactly about these computation inputs, specifically about beta unlevered for the sector and market risk premium. To get the unlevered beta for the sector, we ran a regression with four competitors, obtaining a value of 0.53 with a 95% confidence interval, where the upper bound is 0.63 and the lower bound 0.43, which were used as boundaries for our analysis. In figure 37, it is possible to observe how these variations modify the cost of equity, ranging from 5.65% to 7.82%.

Figure 39 - Sensitivity analysis Rd x g

Sensitivity Analysis						
		Rd				
	28,17	3,5%	3,9%	4,29%	4,7%	5,1%
g	1,7%	23,00	25,70	27,57	28,93	29,97
	1,9%	22,50	25,73	27,88	29,41	30,55
	2,1%	21,68	25,65	28,17	29,91	31,18
	2,3%	20,37	25,40	28,42	30,42	31,85
	2,5%	18,23	24,89	28,59	30,94	32,56

Source – Own formulation.

In order to perform a sensitivity analysis where the final result affected was the share price, we chose as inputs the assumptions that we considered most difficult to estimate accurately, discount rates and perpetuity growth. As we have two discount rates, cost of equity and cost of debt, we performed two analyses.

For the perpetuity growth, we made a range from 1.7% to 2.5%, with 2.1% being our actual estimate. For the cost of equity, we used the boundaries we got from its own sensitivity analysis performed before, and for the cost of debt, a range from 3.5% to 5.1%, with 4.29% being our actual estimate.

Figures 38 and 39 show how these variations change the share price. It is interesting to mention how an increase in the two discount rates is changing the share price in opposite directions due to the fact that one discounts the unlevered cash flow and the other the tax shield and the financial debt cash flow, which in sum is a negative value. With BRL28.17 being our actual estimated share price, we obtained from both analyses an upper bound of BRL44.03 and BRL32.56 and a lower bound of BRL17.17 and BRL23.00 for the cost of equity and cost of debt analysis, respectively.

Figure 40 – Multiples

	Valuation		
Company	EV/Revenue	EV/EBITDA	P/E
Atacadão S.A	0.61x	8.45x	13.64x
Grupo Mateus S.A	0.99x	13.43x	19.23x
Sendas Distribuidora S.A	0.71x	10.22x	20.67x
GPA Group	**0.11x**	**2.47x**	**4.89x**

Source – Own formulation.

Finally, it is also important to establish a sort of dependency of the model to the macroeconomic factors. We have simulated scenarios in which the perpetuity inflation is in line with the GDP growth, and the years to reach this period are equally varying according to the 2025 projection. The results show that for a

3,3% rate for both, the target price would increase to BRL30.44, an 8% increase against a 2.5x increase in the factor, showcasing how the sensitivity is low and higher for other factors regarding the model itself. We believe that the company will be able to counterbalance a higher inflation with the operational improvements given by the new digital restock platform.

Relative Valuation

In order to address a relative valuation for GPA Group, we selected the multiples method by the fact we believe there are three companies in the Brazilian market which we consider as true comparables, Atacadão, Grupo Mateus and Sendas Distribuidora. Even though the multiples method doesn't estimate the potential of future cash flows, either firm-specific information such as discount rates and risk, we believe this method adds to our valuation since it has important benefits such as the incorporation of market consensus and the possibility to compare the company with its main competitors. Before going to the analysis itself, it is important to mention that relative valuation doesn't influence our final recommendation, which is based solely on the APV valuation.

Figure 41 - Multiples implied share price

GPA Group Valuation	EV/Revenue	EV/EBITDA	P/E
Implied Enterprise Value	364 778	226 942	185 134
Net Debt	7 773	7 773	7 773
Implied Market Value	357 005	219 169	177 361
Shares Outstading	2 696	2 696	2 696
Implied Value Per Share	**132,4**	**81,3**	**65,8**
Avarage	**93,2**		

Source – Own formulation.

The valuation by multiples consists of relating the market price with the financial statements of the company, taking into account some financial quantities, such as profits, cash flow and EBITDA. We have used three multiples in order to get an implied share price for GPA Group, EV/Revenue, EV/EBITDA and P/E.

Calculating the average multiples of the three comparable companies, we got for the food retail sector the EV/Revenue multiple of 0.77x, EV/EBITDA of 10.70x and P/E of 17.84 for the sector. GPA Group has an EV/Revenue multiple of 0.11x, EV/EBITDA of 2.47x and P/E of 4.89. The GPA Group's multiples are traded on average three times below its competitors, meaning that the share price is undervalued in its sector.

Applying the average multiple of the comparable companies to GPA Group's financial results, we got an implied share price for EV/Revenue of BRL132.4, for EV/EBITDA of BRL81.3 and for P/E of R$65.8. In order to reach a unique value, we consider that the three multiples have the same importance, arriving at an average implied share price of BRL93.2. The conclusion of this valuation implies that GPA Group's share price is 80% under-priced and may reach the value that was last negotiated in February 2021, before its huge fall.

Final Recommendation

GPA Group will be able to increase its market share primarily through rebuilding the brand's strength and through the expansion of proximity and premium stores.

Furthermore, the “Novo GPA” plan makes the company well positioned in the main trends of the sector, such as digitization and ESG, and also increasing the group’s operational efficiency. This is much in line with the company description as the group is considered and has a culture of being a holding company of food retail brands, focusing on where are the main sources of value within the sector.

The company’s value creation is explicit in the expected share price of BRL28.17 for FY23, resulting in 61.51% upside compared to the current share price. Hence, we recommend a BUY position, also backed by the fact that the company is heavily discounted when compared to its peers.

Appendix

Financial Statements

Income Statement

in BRL million - Dec, 31st	2021A	2022F	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F
CORE OPERATIONS										
Total revenue	**51 291**	**53 164**	**55 561**	**58 652**	**61 828**	**65 076**	**68 390**	**71 764**	**75 190**	**78 662**
YoY-Growth	*0,1%*	*3,7%*	*4,5%*	*5,6%*	*5,4%*	*5,3%*	*5,1%*	*4,9%*	*4,8%*	*4,6%*
GPA Brazil										
Revenue	26 933	25 885	27 007	28 487	30 052	31 663	33 319	35 020	36 765	38 554
COGS	- 20 275	- 19 472	- 20 303	- 21 401	- 22 562	- 23 755	- 24 981	- 26 239	- 27 529	- 28 849
Selling Expenses	- 4 387	- 4 177	- 4 318	- 4 512	- 4 714	- 4 920	- 5 127	- 5 336	- 5 547	- 5 759
General and Administrative Expenses	- 703	- 663	- 678	- 701	- 724	- 747	- 770	- 792	- 813	- 833
D&A	- 1 082	- 717	- 881	- 978	- 957	- 1 044	- 1 099	- 1 111	- 1 146	- 1 171
Core result before taxes	**486**	**855**	**827**	**895**	**1 094**	**1 196**	**1 341**	**1 542**	**1 730**	**1 942**
Grupo Éxito										
Revenue	24 357	27 279	28 554	30 166	31 777	33 414	35 072	36 744	38 425	40 108
COGS	- 18 066	- 20 220	- 21 151	- 22 329	- 23 506	- 24 700	- 25 908	- 27 125	- 28 347	- 29 568
Selling Expenses	- 3 259	- 3 609	- 3 734	- 3 900	- 4 060	- 4 220	- 4 376	- 4 530	- 4 680	- 4 824
General and Administrative Expenses	- 1 005	- 1 111	- 1 149	- 1 199	- 1 247	- 1 295	- 1 341	- 1 387	- 1 431	- 1 474
D&A	- 771	- 776	- 815	- 827	- 854	- 874	- 897	- 917	- 938	- 959
Core result before taxes	**1 257**	**1 564**	**1 705**	**1 911**	**2 109**	**2 326**	**2 549**	**2 785**	**3 029**	**3 283**
Total core result before taxes	**1 744**	**2 419**	**2 533**	**2 806**	**3 203**	**3 522**	**3 891**	**4 327**	**4 760**	**5 225**
YoY-Growth	*-33%*	*39%*	*5%*	*11%*	*14%*	*10%*	*10%*	*11%*	*10%*	*10%*
Statutory Taxes	- 634	- 822	- 861	- 954	- 1 089	- 1 197	- 1 323	- 1 471	- 1 618	- 1 776
Tax adjustments	250	347	363	402	459	505	558	620	682	749
Core Result	**1 360**	**1 943**	**2 035**	**2 254**	**2 573**	**2 829**	**3 125**	**3 476**	**3 824**	**4 197**
YoY-Growth	*-27%*	*43%*	*5%*	*11%*	*14%*	*10%*	*10%*	*11%*	*10%*	*10%*
NON-CORE OPERATIONS										
Equity income	- 47	-	-	-	-	-	-	-	-	-
Other Operating Revenue (Expenses)	- 7	- 10	- 11	- 12	- 14	- 15	- 16	- 18	- 20	- 22
Other financial result	488	677	709	785	897	986	1 089	1 211	1 332	1 463
Non-Core result before taxes and OCI	**433**	**667**	**698**	**774**	**883**	**971**	**1 073**	**1 193**	**1 312**	**1 440**
Statutory Taxes	- 158	- 227	- 237	- 263	- 300	- 330	- 365	- 406	- 446	- 490
Tax adjustments	479	-	-	-	-	-	-	-	-	-
Net Result from discontinued operations	- 3	434	506	312	417	412	380	403	398	394
Other Comprehensive Income	- 1 408	324	359	- 242	147	88	- 2	78	55	44
Non-Core Result	**- 656**	**1 198**	**1 326**	**581**	**1 147**	**1 141**	**1 086**	**1 268**	**1 319**	**1 388**
YoY-Growth	*-117%*	*-283%*	*11%*	*-56%*	*97%*	*-1%*	*-5%*	*17%*	*4%*	*5%*
FINANCIAL										
Financial costs	- 1 809	- 1 724	- 1 534	- 1 712	- 1 691	- 1 680	- 1 731	- 1 738	- 1 754	- 1 781
Financial result before taxes	**- 1 809**	**- 1 724**	**- 1 534**	**- 1 712**	**- 1 691**	**- 1 680**	**- 1 731**	**- 1 738**	**- 1 754**	**- 1 781**
Statutory taxes	658	586	522	582	575	571	588	591	597	605
Financial Result	**- 1 151**	**- 1 138**	**- 1 013**	**- 1 130**	**- 1 116**	**- 1 109**	**- 1 142**	**- 1 147**	**- 1 158**	**- 1 175**
YoY-Growth	*-2%*	*-1%*	*-11%*	*12%*	*-1%*	*-1%*	*3%*	*0%*	*1%*	*1%*
TOTAL COMPREHENSIVE INCOME	**- 448**	**2 003**	**2 348**	**1 706**	**2 604**	**2 861**	**3 069**	**3 597**	**3 985**	**4 410**
YoY-Growth	*-110%*	*347%*	*17%*	*-27%*	*53%*	*10%*	*7%*	*17%*	*11%*	*11%*

in BRL million - Dec, 31st		2031F	2032F	2033F	2034F	2035F	2036F	2037F	2038F	2039F	2040F
CORE OPERATIONS											
Total revenue		**82 172**	**85 711**	**89 271**	**92 843**	**96 419**	**99 989**	**103 543**	**104 962**	**106 324**	**107 626**
	YoY-Growth	*4,5%*	*4,3%*	*4,2%*	*4,0%*	*3,9%*	*3,7%*	*3,6%*	*1,4%*	*1,3%*	*1,2%*
GPA Brazil											
Revenue		40 387	42 261	44 177	46 133	48 129	50 162	52 232	52 960	53 673	54 371
COGS		-30 200	-31 581	-32 990	-34 428	-35 893	-37 384	-38 901	-39 443	-39 974	-40 494
Selling Expenses		-5 972	-6 186	-6 400	-6 615	-6 828	-7 042	-7 254	-7 355	-7 454	-7 551
General and Administrative Expenses		-852	-871	-888	-904	-919	-933	-946	-932	-918	-903
D&A		-1 195	-1 224	-1 249	-1 275	-1 302	-1 328	-1 354	-1 354	-1 354	-1 354
Core result before taxes		**2 167**	**2 400**	**2 649**	**2 911**	**3 186**	**3 475**	**3 778**	**3 876**	**3 973**	**4 069**
Grupo Éxito											
Revenue		41 785	43 450	45 094	46 710	48 290	49 827	51 311	52 002	52 651	53 256
COGS		-30 784	-31 989	-33 176	-34 342	-35 480	-36 584	-37 648	-38 155	-38 631	-39 075
Selling Expenses		-4 963	-5 096	-5 221	-5 338	-5 446	-5 545	-5 710	-5 787	-5 859	-5 926
General and Administrative Expenses		-1 514	-1 553	-1 589	-1 623	-1 654	-1 681	-1 706	-1 703	-1 698	-1 691
D&A		-979	-998	-1 017	-1 035	-1 052	-1 069	-1 085	-1 100	-1 114	-1 127
Core result before taxes		**3 545**	**3 814**	**4 090**	**4 372**	**4 658**	**4 948**	**5 163**	**5 258**	**5 349**	**5 437**
Total core result before taxes		**5 712**	**6 215**	**6 740**	**7 283**	**7 844**	**8 423**	**8 940**	**9 134**	**9 322**	**9 507**
	YoY-Growth	*9%*	*9%*	*8%*	*8%*	*8%*	*7%*	*6%*	*2%*	*2%*	*2%*
Statutory Taxes		-1 942	-2 113	-2 291	-2 476	-2 667	-2 864	-3 040	-3 105	-3 170	-3 232
Tax adjustments		819	891	966	1 044	1 125	1 208	1 282	1 309	1 336	1 363
Core Result		**4 588**	**4 993**	**5 414**	**5 851**	**6 302**	**6 767**	**7 182**	**7 338**	**7 489**	**7 637**
	YoY-Growth	*9%*	*9%*	*8%*	*8%*	*8%*	*7%*	*6%*	*2%*	*2%*	*2%*
NON-CORE OPERATIONS											
Equity income		-	-	-	-	-	-	-	-	-	-
Other Operating Revenue (Expenses)		-24	-26	-28	-31	-33	-36	-38	-39	-39	-40
Other financial result		1 599	1 740	1 887	2 039	2 196	2 358	2 503	2 557	2 610	2 661
Non-Core result before taxes and OCI		**1 575**	**1 713**	**1 858**	**2 008**	**2 163**	**2 322**	**2 465**	**2 518**	**2 570**	**2 621**
Statutory Taxes		-535	-583	-632	-683	-735	-790	-838	-856	-874	-891
Tax adjustments		-	-	-	-	-	-	-	-	-	-
Net Result from discontinued operations		398	397	396	397	397	397	397	397	397	397
Other Comprehensive Income		59	52	52	54	53	53	53	53	53	53
Non-Core Result		**1 496**	**1 580**	**1 674**	**1 777**	**1 877**	**1 982**	**2 077**	**2 112**	**2 146**	**2 180**
	YoY-Growth	*8%*	*6%*	*6%*	*6%*	*6%*	*6%*	*5%*	*2%*	*2%*	*2%*
FINANCIAL											
Financial costs		-1 798	-1 820	-1 843	-1 865	-1 889	-1 914	-1 939	-1 965	-1 992	-2 020
Financial result before taxes		**-1 798**	**-1 820**	**-1 843**	**-1 865**	**-1 889**	**-1 914**	**-1 939**	**-1 965**	**-1 992**	**-2 020**
Statutory taxes		611	619	627	634	642	651	659	668	677	687
Financial Result		**-1 187**	**-1 201**	**-1 217**	**-1 231**	**-1 247**	**-1 263**	**-1 280**	**-1 297**	**-1 315**	**-1 333**
	YoY-Growth	*1%*	*1%*	*1%*	*1%*	*1%*	*1%*	*1%*	*1%*	*1%*	*1%*
TOTAL COMPREHENSIVE INCOME		**4 898**	**5 371**	**5 872**	**6 397**	**6 932**	**7 486**	**7 980**	**8 152**	**8 321**	**8 484**
	YoY-Growth	*11%*	*10%*	*9%*	*9%*	*8%*	*8%*	*7%*	*2%*	*2%*	*2%*

Balance Sheet

in BRL million - Dec, 31st	2021A	2022F	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F
CORE OPERATIONS										
GPA Brazil										
Operating Cash	1 346,7	1 294,2	1 350,3	1 424,3	1 502,6	1 583,1	1 665,9	1 751,0	1 838,3	1 927,7
Accounts Receivable	346,9	300,3	330,5	339,6	363,0	379,9	401,1	420,9	442,3	463,6
Inventories	2 341,1	2 768,7	2 615,6	2 900,0	2 982,0	3 179,4	3 322,6	3 500,8	3 667,1	3 846,0
Suppliers	-3 747,8	-4 108,6	-4 018,4	-4 375,7	-4 539,3	-4 818,2	-5 046,4	-5 311,3	-5 566,6	-5 836,6
Payroll and Related Charges	-426,6	-496,0	-491,4	-516,4	-561,7	-581,6	-611,9	-629,5	-642,0	-657,3
Working Capital	**-139,7**	**-241,4**	**-213,3**	**-228,1**	**-253,5**	**-257,4**	**-268,7**	**-268,1**	**-261,0**	**-256,5**
Advertisement	-27,0	-53,1	-65,3	-80,4	-103,1	-123,2	-146,0	-171,6	-198,2	-227,1
Related Parties	-244,3	-278,8	-261,6	-270,2	-265,9	-268,0	-267,0	-267,5	-267,2	-267,4
Investments	4 686,0	4 581,8	4 871,4	5 161,0	5 450,6	5 740,3	6 029,9	6 174,7	6 319,5	6 464,3
Prepaid Expenses and Other Accounts Receivable	269,7	321,5	283,8	312,8	339,7	346,1	368,9	388,8	405,7	426,8
Investment Properties	-3 229,8	-3 158,0	-3 357,6	-3 557,2	-3 756,8	-3 956,5	-4 156,1	-4 255,9	-4 355,7	-4 455,5
Property and Equipment	6 339,6	6 198,5	6 590,3	6 982,1	7 373,9	7 765,8	8 157,6	8 353,5	8 549,4	8 745,3
Intangible Assets	2 041,8	2 242,5	2 113,4	2 285,6	2 455,4	2 535,0	2 687,7	2 830,0	2 960,1	3 110,0
Provision for Restructuring	-122,0	-119,3	-126,8	-134,4	-141,9	-149,4	-157,0	-160,8	-164,5	-168,3
Early Revenue	37,6	-24,5	29,9	14,8	6,8	19,5	15,1	15,1	18,4	17,8
Current Recoverable Taxes	1 743,0	1 922,4	1 772,8	2 379,5	2 570,0	2 849,7	3 303,9	3 697,7	4 179,2	4 710,1
Invested Capital GPA Brazil	**11 354,9**	**11 391,6**	**11 637,0**	**12 865,4**	**13 675,4**	**14 501,8**	**15 568,4**	**16 336,0**	**17 185,8**	**18 099,5**
YoY-Growth	*-13,7%*	*0,3%*	*2,2%*	*10,6%*	*6,3%*	*6,0%*	*7,4%*	*4,9%*	*5,2%*	*5,3%*
Grupo Éxito										
Operating Cash	1 217,9	1 364,0	1 427,7	1 508,3	1 588,8	1 670,7	1 753,6	1 837,2	1 921,3	2 005,4
Accounts Receivable	484,1	509,1	532,8	575,1	597,3	629,5	662,9	692,5	724,8	756,8
Inventories	2 915,9	3 462,6	3 621,9	3 750,5	3 999,5	4 193,7	4 386,2	4 604,4	4 808,0	5 013,4
Suppliers	-6 330,4	-7 487,7	-7 832,3	-8 120,5	-8 652,4	-9 073,8	-9 492,1	-9 962,6	-10 403,5	-10 848,3
Payroll and Related Charges	-382,4	-363,6	-395,6	-405,2	-408,8	-424,8	-434,1	-443,3	-454,6	-464,1
Working Capital	**-2 094,9**	**-2 515,7**	**-2 645,4**	**-2 691,8**	**-2 875,6**	**-3 004,7**	**-3 123,5**	**-3 271,8**	**-3 404,1**	**-3 536,7**
Related Parties	-221,5	-252,9	-237,2	-245,1	-241,1	-243,1	-242,1	-242,6	-242,4	-242,5
Investments	463,0	490,4	501,8	516,0	529,8	543,4	556,8	570,1	583,0	595,7
Prepaid Expenses and Other Accounts Receivable	311,3	348,6	364,9	385,5	406,1	427,0	448,2	469,6	491,0	512,5
Investment Properties	3 253,8	3 446,9	3 527,2	3 626,8	3 723,5	3 819,2	3 913,6	4 006,6	4 097,8	4 187,0
Property and Equipment	10 004,4	10 597,9	10 844,9	11 151,2	11 448,6	11 742,8	12 033,1	12 318,9	12 599,3	12 873,7
Intangible Assets	3 711,2	4 585,8	4 575,3	4 952,2	5 154,2	5 452,6	5 705,9	5 987,1	6 256,3	6 532,7
Early Revenue	-485,6	-519,4	-556,5	-581,1	-615,7	-645,6	-678,6	-710,4	-743,2	-775,6
Invested Capital Grupo Éxito	**14 941,6**	**16 181,6**	**16 375,0**	**17 113,8**	**17 529,7**	**18 091,7**	**18 613,5**	**19 127,4**	**19 637,8**	**20 147,0**
YoY-Growth	*-7,3%*	*8,3%*	*1,2%*	*4,5%*	*2,4%*	*3,2%*	*2,9%*	*2,8%*	*2,7%*	*2,6%*
Total Invested Capital Core Businesses	**26 296,5**	**27 573,1**	**28 012,1**	**29 979,2**	**31 205,1**	**32 593,5**	**34 181,9**	**35 463,4**	**36 823,6**	**38 246,5**
YoY-Growth	*-10,2%*	*4,9%*	*1,6%*	*7,0%*	*4,1%*	*4,4%*	*4,9%*	*3,7%*	*3,8%*	*3,9%*
NON-CORE OPERATIONS										
Assets for Sale	1 125,0	464,3	590,0	785,3	650,3	718,5	763,6	748,7	780,1	799,1
Long Term Assets	4 965,8	5 018,1	5 311,7	5 571,7	5 892,2	6 191,8	6 512,3	6 830,8	7 158,4	7 488,2
Taxes and Social Contribution Payable	-1 669,0	-2 025,1	-2 272,3	-2 433,3	-2 825,4	-3 080,3	-3 417,5	-3 792,4	-4 176,5	-4 582,1
Other Liabilities	-1 829,5	-1 601,7	-1 824,1	-1 788,0	-1 773,9	-1 834,1	-1 838,0	-1 855,8	-1 884,7	-1 902,6
Provision for Judicial Demand	-1 442,0	-1 466,2	-1 547,2	-1 625,4	-1 717,5	-1 805,6	-1 898,7	-1 991,7	-2 087,2	-2 183,4
Provision for loss on Investment in Associates	-689,0	-910,5	-963,8	-1 096,3	-1 200,9	-1 329,5	-1 454,4	-1 590,4	-1 729,0	-1 874,3
Financing and Purchase of Assets	-250,0	-166,8	-220,4	-202,8	-222,3	-222,5	-232,5	-236,3	-242,6	-247,5
Total Invested Capital Non-Core Businesses	**211,3**	**-687,9**	**-926,0**	**-788,8**	**-1 197,6**	**-1 361,7**	**-1 565,2**	**-1 887,1**	**-2 181,3**	**-2 502,6**
YoY-Growth	*-119,4%*	*-425,6%*	*34,6%*	*-14,8%*	*51,8%*	*13,7%*	*14,9%*	*20,6%*	*15,6%*	*14,7%*
Total Invested Capital	**26 507,8**	**26 885,2**	**27 086,0**	**29 190,4**	**30 007,5**	**31 231,8**	**32 616,7**	**33 576,3**	**34 642,3**	**35 744,0**
YoY-Growth	*-5,9%*	*1,4%*	*0,7%*	*7,8%*	*2,8%*	*4,1%*	*4,4%*	*2,9%*	*3,2%*	*3,2%*
FINANCIAL OPERATIONS										
Excess Cash	5 709,5	6 880,4	6 471,0	6 026,8	5 578,4	5 126,4	4 671,0	4 357,5	4 041,4	3 723,0
Loans and Financing	-9 052,3	-9 142,8	-9 236,1	-9 332,2	-9 431,2	-9 533,3	-9 638,5	-9 747,1	-9 859,1	-9 974,6
Lease Liabilities	-6 118,0	-6 709,8	-7 157,5	-6 796,0	-7 032,8	-7 146,4	-7 143,9	-7 266,5	-7 349,3	-7 421,5
Net Financial Assets	**-9 460,8**	**-8 972,2**	**-9 922,6**	**-10 101,4**	**-10 885,6**	**-11 553,3**	**-12 111,4**	**-12 656,0**	**-13 166,9**	**-13 673,0**
YoY-Growth	*-16,8%*	*-5,2%*	*10,6%*	*1,8%*	*7,8%*	*6,1%*	*4,8%*	*4,5%*	*4,0%*	*3,8%*
SHAREHOLDER'S EQUITY	**17 047,0**	**17 913,0**	**17 163,4**	**19 089,1**	**19 121,9**	**19 678,5**	**20 505,3**	**20 920,3**	**21 475,3**	**22 070,9**
YoY-Growth	*1,4%*	*5,1%*	*-4,2%*	*11,2%*	*0,2%*	*2,9%*	*4,2%*	*2,0%*	*2,7%*	*2,8%*

in BRL million - Dec, 31st	2031F	2032F	2033F	2034F	2035F	2036F	2037F	2038F	2039F	2040F
CORE OPERATIONS										
GPA Brazil										
Operating Cash	2 019,3	2 113,1	2 208,9	2 306,7	2 406,4	2 508,1	2 611,6	2 648,0	2 683,6	2 718,5
Accounts Receivable	485,7	508,2	531,3	554,8	578,8	603,3	628,2	636,9	645,5	653,9
Inventories	4 024,5	4 209,4	4 396,8	4 588,7	4 783,8	4 982,6	5 184,7	5 257,0	5 327,8	5 397,0
Suppliers	-6 108,4	-6 388,4	-6 673,1	-6 964,2	-7 260,4	-7 562,1	-7 868,9	-7 978,5	-8 086,0	-8 191,1
Payroll and Related Charges	-672,4	-686,6	-701,6	-716,3	-731,0	-745,7	-760,5	-760,4	-760,4	-760,4
Working Capital	**-251,1**	**-244,4**	**-237,7**	**-230,4**	**-222,3**	**-213,9**	**-204,9**	**-197,1**	**-189,5**	**-182,1**
Advertisement	-258,2	-291,3	-326,6	-364,1	-403,9	-446,1	-490,6	-523,9	-557,8	-592,2
Related Parties	-267,3	-267,3	-267,3	-267,3	-267,3	-267,3	-267,3	-267,3	-267,3	-267,3
Investments	6 609,1	6 753,9	6 898,7	7 043,5	7 188,4	7 333,2	7 478,0	7 478,0	7 478,0	7 478,0
Prepaid Expenses and Other Accounts Receivable	447,0	467,3	488,8	510,4	532,4	555,0	577,9	585,9	593,8	601,5
Investment Properties	-4 555,3	-4 655,1	-4 754,9	-4 854,7	-4 954,5	-5 054,4	-5 154,2	-5 154,2	-5 154,2	-5 154,2
Property and Equipment	8 941,2	9 137,1	9 333,0	9 528,9	9 724,8	9 920,7	10 116,6	10 116,6	10 116,6	10 116,6
Intangible Assets	3 257,8	3 406,9	3 562,8	3 720,3	3 880,9	4 045,2	4 212,0	4 270,6	4 328,2	4 384,4
Provision for Restructuring	-172,1	-175,8	-179,6	-183,4	-187,1	-190,9	-194,7	-194,7	-194,7	-194,7
Early Revenue	18,8	20,1	20,6	21,6	22,7	23,5	24,5	24,9	25,2	25,5
Current Recoverable Taxes	5 228,9	5 803,9	6 408,7	7 036,1	7 703,9	8 402,4	9 132,6	9 370,3	9 605,4	9 838,3
Invested Capital GPA Brazil	**18 998,8**	**19 955,3**	**20 946,6**	**21 961,0**	**23 017,8**	**24 107,5**	**25 230,0**	**25 509,2**	**25 783,7**	**26 054,0**
YoY-Growth	*5,0%*	*5,0%*	*5,0%*	*4,8%*	*4,8%*	*4,7%*	*4,7%*	*1,1%*	*1,1%*	*1,0%*
Grupo Éxito										
Operating Cash	2 089,3	2 172,5	2 254,7	2 335,5	2 414,5	2 491,3	2 565,5	2 600,1	2 632,6	2 662,8
Accounts Receivable	788,1	819,6	850,7	881,1	910,9	939,9	967,9	981,0	993,2	1004,6
Inventories	5 222,1	5 425,2	5 626,6	5 824,8	6 017,4	6 204,7	6 385,3	6 471,2	6 552,0	6 627,2
Suppliers	-11 299,5	-11 739,3	-12 175,0	-12 603,8	-13 020,7	-13 425,8	-13 816,6	-14 002,6	-14 177,3	-14 340,1
Payroll and Related Charges	-473,6	-483,2	-492,2	-500,9	-509,4	-517,4	-525,0	-532,3	-539,1	-545,4
Working Capital	**-3 673,7**	**-3 805,1**	**-3 935,2**	**-4 063,3**	**-4 187,1**	**-4 307,3**	**-4 422,9**	**-4 482,6**	**-4 538,7**	**-4 590,9**
Related Parties	-242,4	-242,4	-242,4	-242,4	-242,4	-242,4	-242,4	-242,4	-242,4	-242,4
Investments	608,1	620,2	631,8	643,1	653,9	664,2	674,0	683,3	692,0	700,2
Prepaid Expenses and Other Accounts Receivable	534,0	555,3	576,3	596,9	617,1	636,7	655,7	664,5	672,8	680,6
Investment Properties	4 274,1	4 358,7	4 440,6	4 519,7	4 595,6	4 668,2	4 737,2	4 802,5	4 863,8	4 921,0
Property and Equipment	13 141,4	13 401,5	13 653,4	13 896,5	14 129,9	14 353,0	14 565,2	14 765,9	14 954,5	15 130,3
Intangible Assets	6 804,6	7 076,3	7 343,8	7 607,1	7 864,4	8 114,6	8 356,3	8 469,0	8 574,6	8 673,1
Early Revenue	-808,1	-840,3	-872,1	-903,3	-933,9	-963,6	-992,3	-1 005,7	-1 018,2	-1 029,9
Invested Capital Grupo Éxito	**20 637,9**	**21 124,1**	**21 596,2**	**22 054,1**	**22 497,3**	**22 923,4**	**23 330,9**	**23 654,5**	**23 958,4**	**24 241,8**
YoY-Growth	*2,4%*	*2,4%*	*2,2%*	*2,1%*	*2,0%*	*1,9%*	*1,8%*	*1,4%*	*1,3%*	*1,2%*
Total Invested Capital Core Businesses	**39 636,7**	**41 079,5**	**42 542,8**	**44 015,2**	**45 515,1**	**47 030,9**	**48 560,9**	**49 163,7**	**49 742,1**	**50 295,7**
YoY-Growth	*3,6%*	*3,6%*	*3,6%*	*3,5%*	*3,4%*	*3,3%*	*3,3%*	*1,2%*	*1,2%*	*1,1%*
NON-CORE OPERATIONS										
Assets for Sale	809,8	829,7	845,5	860,0	875,9	890,4	904,3	914,4	923,6	932,3
Long Term Assets	7 822,7	8 159,4	8 498,4	8 838,5	9 178,9	9 518,7	9 857,0	9 992,1	10 121,8	10 245,8
Taxes and Social Contribution Payable	-5 010,4	-5 450,9	-5 911,9	-6 388,7	-6 880,9	-7 388,4	-7 842,2	-8 011,6	-8 177,3	-8 338,9
Other Liabilities	-1 925,6	-1 950,3	-1 973,6	-1 998,9	-2 024,9	-2 051,4	-2 079,1	-2 107,7	-2 137,1	-2 167,7
Provision for Judicial Demand	-2 280,9	-2 379,1	-2 477,9	-2 577,0	-2 676,3	-2 775,4	-2 874,0	-2 913,4	-2 951,2	-2 987,4
Provision for loss on Investment in Associates	-2 023,5	-2 177,5	-2 335,0	-2 495,9	-2 659,3	-2 824,6	-2 947,2	-3 001,6	-3 053,9	-3 104,0
Financing and Purchase of Assets	-253,0	-258,0	-263,0	-267,8	-272,5	-277,1	-281,5	-284,5	-287,4	-290,1
Total Invested Capital Non-Core Businesses	**-2 860,9**	**-3 226,6**	**-3 617,5**	**-4 029,8**	**-4 459,1**	**-4 907,8**	**-5 262,7**	**-5 412,3**	**-5 561,6**	**-5 710,0**
YoY-Growth	*14,3%*	*12,8%*	*12,1%*	*11,4%*	*10,7%*	*10,1%*	*7,2%*	*2,8%*	*2,8%*	*2,7%*
Total Invested Capital	**36 775,8**	**37 852,9**	**38 925,3**	**39 985,3**	**41 056,0**	**42 123,1**	**43 298,2**	**43 751,4**	**44 180,5**	**44 585,7**
YoY-Growth	*2,9%*	*2,9%*	*2,8%*	*2,7%*	*2,7%*	*2,6%*	*2,8%*	*1,0%*	*1,0%*	*0,9%*
FINANCIAL OPERATIONS										
Excess Cash	3 402,7	3 081,0	2 758,1	2 434,7	2 111,1	1 787,8	1 465,3	1 394,4	1 326,2	1 261,1
Loans and Financing	-10 093,8	-10 216,8	-10 343,9	-10 475,0	-10 610,5	-10 750,5	-10 895,2	-11 044,8	-11 199,5	-11 359,4
Lease Liabilities	-7 519,8	-7 609,7	-7 702,2	-7 801,9	-7 902,2	-8 006,2	-8 114,4	-8 225,6	-8 340,7	-8 459,9
Net Financial Assets	**-14 210,8**	**-14 745,6**	**-15 287,9**	**-15 842,2**	**-16 401,6**	**-16 968,9**	**-17 544,3**	**-17 876,0**	**-18 214,0**	**-18 558,2**
YoY-Growth	*3,9%*	*3,8%*	*3,7%*	*3,6%*	*3,5%*	*3,5%*	*3,4%*	*1,9%*	*1,9%*	*1,9%*
SHAREHOLDER'S EQUITY	**22 565,0**	**23 107,3**	**23 637,3**	**24 143,1**	**24 654,4**	**25 154,1**	**25 753,9**	**25 875,3**	**25 966,6**	**26 027,5**
YoY-Growth	*2,2%*	*2,4%*	*2,3%*	*2,1%*	*2,1%*	*2,0%*	*2,4%*	*0,5%*	*0,4%*	*0,2%*

Disclosures and Disclaimers

Report Recommendations

Buy	Expected total return (including expected capital gains and expected dividend yield) of more than 10% over a 12-month period.
Hold	Expected total return (including expected capital gains and expected dividend yield) between 0% and 10% over a 12-month period.
Sell	Expected negative total return (including expected capital gains and expected dividend yield) over a 12-month period.

This report was prepared by Pedro Borges Fernandes and Vitor Realdo Guglielmi, Master in Finance students of Nova School of Business and Economics ("Nova SBE"), within the context of the Field Lab – Equity Research.

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