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Jerónimo Martins: An uncertainty's resistant

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Abstract

Many people think that a worldwide recession is coming soon in the wake of a pandemic as well as these days of conflict, uncertainty, inflation, and rising interest rates. This research seeks to analyze and model the effects of the macroeconomic variables that most strongly define this recession on the share price of Jerónimo Martins, through statistics, forecasts and estimates. These macroeconomic factors are the Inflation Rate, Interest Rate and GDP.

Keywords: Recession, Inflation, Interest Rate, Gross Domestic Product

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This report is part of the “Jerónimo Martins A Consumer’s Favorite” report (annexed), developed by José Craveiro, Francisco Jesus, Gonçalo Alegria and Miguel Mendes and should be read as an integral part of it.

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Introduction

We are living in an environment where food and energy prices are increasing, influencing a lot the headline inflation of almost all countries. To combat inflation, the governments/central banks have been increasing their interest rates, in order for businesses and consumers to cut back on spending, reduce the money in circulation and cool down the economy, chasing low and stable levels of inflation.

This paper was created with the goal of building a model that can relate the macroeconomic environment of a possible recession with the revenues of Jerónimo Martins, and finally, the JMT's share price.

To do this, it was collected historical quarter data (from the 1st quarter of 2015 to the 3rd quarter of 2022) about the inflation rate (CPI all items), the GDP and also the Interest Rate (2Y benchmark). This data was collected for the three countries of operation of Jerónimo Martins, which are Poland, Portugal, and Colombia.

A Multiple Regression analysis was performed using as dependent variable Jerónimo Martins' revenues (for each subsidiary). As explanatory variables (independent variables) the model uses the change in percentual points (p.p.) of the inflation rate and interest rate, and GDP growth. Ultimately, these regressions are made to try to understand firstly if these variables explain into some extent the growth rate of sales of each subsidiary and, if that happens, how they affect the growth on sales and the share price.

Finally, to complement the forecast made (assumed to be the base-case), it was made a scenario analysis, where a worst and a best-case scenario were pictured, with the final goal of having an estimation for Jerónimo Martins' revenues in different types of macroeconomic environments.

World Recession

Uncertainty, high inflation, high interest rates, and a slowing GDP growth, all resulted from the effects of the pandemic and, after that, reinforced by the Russia Ukraine war. These are undoubtedly the major influences on the world economy for 2022 and could lead to a probable global recession. There was already significant pricing inflationary pressure due to the easy monetary policy central banks adopted during the pandemic, and the war made it worse.

The Ukraine conflict and skyrocketing inflation sparked one of the fastest monetary policy tightening cycles in recent memory. The world's leading investment banks anticipate that global economic growth will drop even further in 2023. The major central banks are expected to maintain their hawkish attitude, and additional rate hikes are anticipated until the inflationary pressure diminishes, which raises concerns about a recession.

The Organization for Economic Cooperation and Development (OECD) estimates that by the end of 2023, the global economy will have lost \$2.8 trillion due to price increases brought on by the Ukraine war, the energy crisis in Europe, aggressive interest rate increases by central banks, a collapsing stock market and the sanctions imposed on Russia that cut off vital transport routes to Europe, disrupting global trade.

The European Commission's autumn economic forecast predicts that the eurozone and the majority of EU nations will enter a recession in the fourth quarter of 2022 - "the economic situation has deteriorated significantly and we are heading into two quarters of contraction."

In regular times, Central Banks can raise rates to make borrowing more expensive if inflation is too high as a result of excessive demand chasing too few goods and services. This will lower inflation, calm inflation expectations, and cool the economy. The decrease on rates makes borrowing more affordable if inflation is excessively low, which it was for a while. This encourages investment and demand. However, since Russia invaded Ukraine, we have been dealing with an issue where inflation is out of control, but the economy is contracting. The war has resulted in significant price increases. The pandemic also made challenges even worse for many businesses since it is becoming harder for them to find the labor, supplies, and spare materials they require for manufacturing. All of these issues cannot be resolved by raising interest rates alone. However, higher rates will help to keep inflation expectations under control.

Recession in Portugal

In the first quarter of 2022, Portugal's real GDP managed to break pre-pandemic levels with the main drivers being private consumption and net exports (Figure 1), which gained traction since the beginning of the year. However, with an ageing and fast shrinking working age population, future growth will hinge on productivity gains.

The COVID-19 crisis has triggered a deterioration of public finances in Portugal, widening the fiscal deficit to 5.8% of GDP in 2020. Public debt increased to the record high level of 145% of GDP in the first quarter of 2021 (now declined to 133%).

The Russian invasion of Ukraine has worsened substantially the external framework and a recovering Portugal was also affected. Energy prices and food prices have skyrocketed, with two digits increases (year-on-year) for all months in 2022 (Figure 2); headline inflation which turned negative in 2020, has been rising relatively strongly over the past months, reaching 10.1 % in October 2022. Core inflation also has increased substantially in 2022, reaching 6.49% in August, the highest value in 25 years (Figure 3). Production costs have risen sharply largely as the industrial production prices index rose 25% on average in 2022.

Following a significant rebound, Portugal's economy is expected to significantly slowdown in the near future due to weak external demand and high energy prices. Growth is expected to pick up again as of next summer, but risks remain on the downside.

Until September 2022, Portuguese households spent in supermarkets a total of €7981m, which represents an increase of 7.7% compared to the same period in 2021. In total, it was €567m more than in 2021. Gonalo Lobo Xavier (APED's general director) claims that "they bring fewer purchases home" and that there are "clear signs of a retraction, with the consumer searching for cheaper goods and going from chain to chain to find discounts".

Recession in Poland

In the first quarter of 2022, the economy grew rapidly due to a significant growth in retail sales and industrial production, as well as wage growth and low unemployment. High energy and food price growth and supply chain disruptions persisted into 2022, exacerbated by the war in

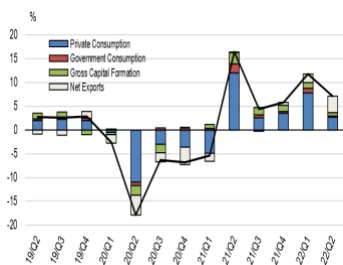


Figure 1-Contributions to Portugal's real GDP growth (Source: Eurostat)

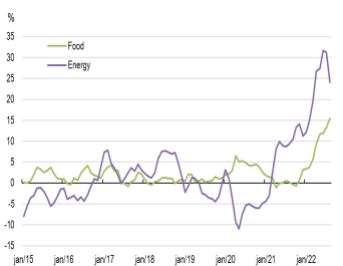


Figure 2- Portugal's Food and Energy Inflation (Source: INE)



Figure 3- Portugal's Headline and Core Inflation (Source:INE)

Ukraine. In April 2022, annual headline inflation increased further to 11.4%, while core inflation rose to 8.6% (Figure 4).

The Polish economy will be heavily impacted by the conflict in Ukraine. A rise in the cost of food and energy as well as the depreciation of the zloty have contributed to inflation. Over three million Ukrainian refugees have reached Poland in the meantime, primarily women and children. The forecasts imply that an extra 350 000 workers will enter the labor force after being granted access to the labor market and social benefits, easing labor shortages in some industries.

The National Bank of Poland has maintained hiking its benchmark short-term interest rates from 1.25% in November to 5.25% in May due to rising headline inflation, increasing internal inflationary pressures, and an expansionary fiscal policy.

Over the following two years, economic growth is expected to significantly decline. Inflation is predicted to peak by the end of the year, however it is expected to remain high over the following years. A major slowdown in consumption growth should result from low real incomes and rising uncertainty, with trade and investment growth also being restrained.

This forecast is surrounded by a great deal of uncertainty, and the balance of risks is negative. A further escalation of the conflict would worsen inflation, increase uncertainty, and put pressure on the government's budget. Growth would be hampered by further energy supply problems. Continuous spending growth and a tight labor market could raise inflation further. Positively, a speedy end to the war would boost GDP growth and lower inflation.

Recession in Colombia

The pandemic triggered Colombia's first recession in 20 years. COVID-19 caused over 135,000 lost lives, set back income growth for years, destroyed over 6.2 million jobs and about 3.5 million people became poor. In the second half of 2020, the economy recovered more rapidly than regional peers, recovering pre-pandemic GDP levels by the third quarter of 2021.

Headline inflation has risen since April 2021, from 5.6% in 2021 to 10.84% in August 2022, exceeding the tolerance band of 3% threefold (Figure 5). Rising energy and oil prices are one source of inflationary pressures, but some of the recent factors could well be temporary, such as supply chain disruptions related to global supply bottlenecks and local social protests. Headline inflation is projected by the IMF to be around target over a two-year horizon.

The Russo-Ukrainian can bring additional revenues to big exporters like Colombia due to the climbing price of oil. However, they will have to contend with rising inflation and squeezed family budgets. In theory, the additional revenues from oil could help lessen the blow, but corruption and inefficiency will make it all but impossible to fully neutralize inflation's impact. Unlike other regions of the world, LAC is characterized by large oil-producing countries coexisting with net oil importers, being the main export of Colombia. The sanctions imposed on Russia could benefit oil producers and affect the fiscal balance of net importers. However, the conflict also affected the price of food and agricultural staples, as Russia is the world's largest wheat producer, while Ukraine is the third. Export restrictions due to conflict and sanctions are likely to significantly affect the prices of these commodities.

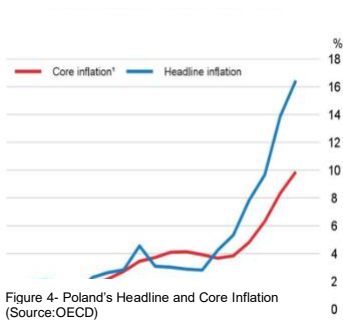


Figure 4- Poland's Headline and Core Inflation (Source:OECD)

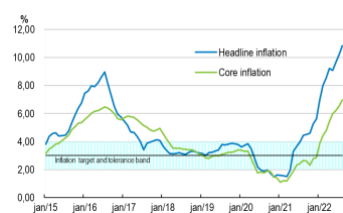


Figure 5- Colombia's Headline and Core Inflation (Source:DANE)

GDP, Interest and Inflation Rate on JMT

Although there are many additional elements that contribute to economic downturns and recessions, this study primarily focuses on three of them. In this essay, we will try to comprehend how they might affect Jerónimo Martins' future revenues and, consequently, its' share price. GDP growth, interest rates, and inflation make up the three factors.

Consumers are worried about inflation in a meaningful way. Food and other necessities are getting more expensive, nevertheless it is something that people simply must have. Thus, this industry typically outperforms other industries in more volatile markets, because there's the ability to pass along rising costs to consumers in total or partially, However, this does not imply that customers will continue to shop for food in the same manner as they did when prices are lower. Many customers will search for discounts or buy at stores that offer lower prices. Regarding other types of goods, there starts to be a trade-off between what people want versus what they really need, and consumers start to make more choices and decisions, not buying some non-essential goods To conclude, with inflation increasing, revenues of Jerónimo Martins are expected to increase.

Regarding interest rates, the cost of capital will increase when rates rise, and the possible rise in the unemployment rate might put more pressure on labor resources. In a higher-rate environment, there are opportunities to gain increased yields on interest income assets. Therefore, there is more money saved, less money in circulation, and as a result, the economy slows down, which means that consumption reduces, for savings to increase. It is expected that when interest rates increase, sales decrease

Finally, relative to GDP, it represents the total monetary value of all the finished goods and services produced within a country's borders in a specific time period (in this case, quarters). This indicator is used to estimate the size of an economy. We know that the tendency for the GDPs of Colombia, Poland and Portugal are to slow down, to decrease in the next quarter because of the macroeconomic environment talked previously. If there is any relation between this factor and JMT's revenues, it is expected that the increase of the GDP is aligned with an increase in sales for Jerónimo Martins.

Multiple Regression Analysis

Multiple regression is an extension of a simple linear regression. It is used when we want to predict the value of a variable based on the value of two or more other variables. The variable we want to predict is called the dependent variable, which in this case is the growth on sales. Whereas the variables we are using to predict the value of the dependent variable are called the independent variables, which are the interest rate's variation in percentual points (p.p.) of the respective country, the growth of the GDP of the nation and, finally, the variation in p.p. of all items' inflation of the respective country.

As mentioned previously, five multiple regressions were performed for each subsidiary. The first one has the independent variable and the explanatory variable at the same frequency, both in time t. The following regressions are with lag, in order to capture the (not immediate) consumer's reaction to the change in three macroeconomic factors (GDP, inflation, and interest rate).

$$y_t = \beta_0 + \beta_1 * \text{Interest Rate}_t + \beta_2 * \text{GDP}_t + \beta_3 * \text{Inflation}_t$$

$$y_{t+1} = \beta_0 + \beta_1 * \text{Interest Rate}_t + \beta_2 * \text{GDP}_t + \beta_3 * \text{Inflation}_t$$

$$y_{t+2} = \beta_0 + \beta_1 * \text{Interest Rate}_t + \beta_2 * \text{GDP}_t + \beta_3 * \text{Inflation}_t$$

$$y_{t+3} = \beta_0 + \beta_1 * \text{Interest Rate}_t + \beta_2 * \text{GDP}_t + \beta_3 * \text{Inflation}_t$$

$$y_{t+4} = \beta_0 + \beta_1 * \text{Interest Rate}_t + \beta_2 * \text{GDP}_t + \beta_3 * \text{Inflation}_t$$

After looking at the r-squared of each regression, the regression of one quarter lag was the globally most significant. This means that there is a more significant reaction in sales when a quarter passes after the change in the macroeconomic conditions. Only this regression will be taken into account in order to understand the impact that each factor has on sales and also in order to perform the forecast of the share price of Jerónimo Martins.

The coefficients describe the relationship between each independent variable and the dependent variable, and each coefficient has a correspondent p-value, which indicates whether the relationship between the factors and the revenues are statistically significant. When the p-value is less than our significance level, it suggests a non-zero correlation in the population (the sample data provide enough evidence to reject the null hypothesis for the entire population. The variable is statistically significant in this case. On the other hand, a p-value that is greater than the significance level indicates that there is insufficient evidence in our sample to conclude that there is a non-zero correlation exists in the population.

Then, if we were to perform a hypothesis test for the multiple linear regression, to test if the model is globally significant, we would have:

$$H_0: \beta_1 = \beta_2 = \beta_3 = 0$$

H_a : At least one of the coefficients is not equal to zero.

Depending on the F-statistic and Prob(F-statistic) we are able to conclude if we reject or fail to reject the null hypothesis (if the model is or is not globally significant, respectively).

To denote that it's quite clear that the chosen independent variables are far from being the ones that explain the most the variation in the dependent variable (the main factors were analysed in the Group Work), so it's not expected that the F-statistic enables the rejection of the null hypothesis in every regression.

Biedronka's Regression (t+1 \Rightarrow t)

Looking from a broader perspective, we can notice first of all the R-squared of this regression is equal to 0.1331, which means that the independent variables can only explain about 13.31% of the variation in Biedronka's revenues. We get an F-Statistic of 1.28, with a respective Prob (F-statistic) equal to 0.3032, which means that we fail to reject the null hypothesis and that the model for this subsidiary is not statistically significant at a 1%, 5% or 10% significance level.

Based on the coefficients, it was determined that:

A positive variation of one p.p. in the polish interest rates increases Biedronka's Revenues in 2.3%, *ceteris paribus*. This goes against what was expected, however, this variable is not statistically significant, since its' p-value is equal to 0.13 (p-value > 0.1);

A growth of 1% in the Polish GDP decreases by 0.1% the revenues of Biedronka, *ceteris paribus*. Also against what was expected, but again, this variable is not statistically significant as well, with a p-value of 0.81 (p-value > 0.1);

An increase of one p.p. in the Polish inflation rate, makes the Biedronka's Revenues decrease by 1.5%, *ceteris paribus*. This coefficient is not statistically significant since it presents a p-value of 0.13 (p-value > 0.1).

Although these values will still be used for the final forecasting, since they all are not statistically significant, it could mean that there isn't any relationship between these macroeconomic factors and Biedronka's Revenues and that these values are not very accurate to establish a relationship. The results are presented in Figure 7.

Hebe's Regression ($t+1 \Rightarrow t$)

This regression's R-squared is equal to 0.2566, which indicates that the independent variables can explain around 25.66% of the variation in Hebe's revenues. Regarding the F-statistic, a value of 2.88 was obtained, with a respective Prob (F-statistic) equal to 0.0562, which means that we fail to reject the null hypothesis for a 1% and 5% significance level, but we reject the null hypothesis for a 10% significance level. The results are presented in Figure 8.

Based on the coefficients, it was determined that:

A positive variation of one p.p. in the Polish interest rates increases Hebe's Revenues in 6.64%, *ceteris paribus*. This goes against what was expected, however, this variable is not statistically significant, since its' p-value is equal to 0.206 ($p\text{-value} > 0.1$);

A growth of 1% in the Polish GDP decreases by 2.58% the revenues of Hebe, *ceteris paribus*. Also against what was expected, but this time, this variable is statistically significant with a significance level of 10%, with a p-value of 0.089 ($p\text{-value} < 0.1$). This might happen because when GDP increases, people might start substituting Hebe's products by other chains more premium.

An increase of one p.p. in the Polish inflation rate, makes Hebe's Revenues decrease by almost 8%, *ceteris paribus*. This coefficient is statistically significant for a significance level of 5% since it presents a p-value of 0.028 ($p\text{-value} < 0.05$). This might happen because with inflation increasing, people start to make choices about what they really need. Since Hebe is a specialised retail chain of Health & Beauty, they do not sell essential goods, ending up being seen as secondary and are not prioritized by the consumer.

Pingo Doce's Regression ($t+1 \Rightarrow t$)

The R-squared for this regression, which equals 0.3484, shows that the independent variables can explain around 34.84% of the variation in Pingo Doce's revenues. In terms of the F-statistic, a value of 4.46 was achieved, with a corresponding Prob (F-statistic) equal to 0.0122. This means that we fail to reject the null hypothesis for a 1% significance level, but we reject the null hypothesis for a 5% and a 10% significance level. This means that the model is statistically significant for a 5% significance level. The results are presented in Figure 9.

Looking at the coefficients it was concluded that:

A positive variation of one p.p. in the Portuguese interest rates increases Pingo Doce's Revenues in 1.33%, *ceteris paribus*. This goes against what was expected, however, this variable is not statistically significant, since its' p-value is equal to 0.784 ($p\text{-value} > 0.1$);

A growth of 1% in the Portuguese GDP increases by 0.27% the revenues of Pingo Doce, *ceteris paribus*. This goes according to what was expected, however this variable is not statistically significant with a p-value of 0.469 ($p\text{-value} > 0.1$).

An increase of one p.p. in the Portuguese inflation rate, makes Pingo Doce's Revenues decrease by almost 3%, *ceteris paribus*. This coefficient is statistically significant for a significance level of

1% since it presents a p-value of 0.009 (p-value < 0.01). This confirms that food retailers profit with inflation, since they have the ability to pass the rising costs (in total or partially) to the consumers. The positive sign goes according to what was expected.

Recheio's Regression ($t+1 \Rightarrow t$)

This regression's R-squared is equal to 0.5392, which indicates that the independent variables can explain almost 54% of the variation in Recheio's revenues. This is the regression with the most explanatory power. In terms of the F-statistic, a value of 9.75 was achieved, with a corresponding Prob (F-statistic) equal to 0.0002. This means that null hypothesis gets rejected for a 1% significance level and that this model is statistically significant for a 1% significance level. The results are presented in Figure 10.

Looking at the coefficients it was concluded that:

A positive variation of one p.p. in the Portuguese interest rates decreases Recheio's Revenues in -5.77%, *ceteris paribus*. This goes according to what was expected, however, this variable is not statistically significant, since its' p-value is equal to 0.525 (p-value > 0.1);

A growth of 1% in the Portuguese GDP increases by 0.29% the revenues of Recheio, *ceteris paribus*. This goes according to what was expected, however this variable is not statistically significant with a p-value of 0.67 (p-value > 0.1).

An increase of one p.p. in the Portuguese inflation rate, makes Recheio's Revenues increase by 8.89%, *ceteris paribus*. This coefficient is statistically significant for a significance level of 1% since it presents a p-value of 0 (p-value < 0.01). This confirms that even the cash & carry business can profit with inflation for the same reason as the food retailers (they have the ability to pass the rising costs, in total or partially, to the consumers). In line with what was predicted.

Ara's Regression ($t+1 \Rightarrow t$)

This is the regression where there were obtained the worse results. Relatively to the R-squared, its value is 0.0694, which means that the independent variables can only explain 6.94% of the variation of Ara's Revenues. The results are presented in Figure 10. In terms of the F-statistic, a value of 0.62 was achieved, with a corresponding Prob (F-statistic) equal to 0.6080, which means that we fail to reject the null hypothesis and that the model for this subsidiary is not statistically significant at a 1%, 5% or 10% significance level (Figure 11).

Looking at the coefficients it was concluded that:

A positive variation of one p.p. in the Colombian interest rates decreases Ara's Revenues in around 1%, *ceteris paribus*. This goes according to what was expected, however, this variable is not statistically significant, since its' p-value is equal to 0.727 (p-value > 0.1);

A growth of 1% in the Colombian GDP increases by 0.62% the revenues of Ara, *ceteris paribus*. This goes according to what was expected, however this variable is not statistically significant with a p-value of 0.256 (p-value > 0.1).

An increase of one p.p. in the Colombian inflation rate, makes Ara's Revenues increase by 0.72%, *ceteris paribus*. This coefficient is also not statistically significant since it presents a p-value of 0.663 (p-value > 0.1). Nevertheless, the sign of the coefficient is in line with what was expected.

JMT's Revenues: Scenario Analysis

In order to do a scenario analysis, there were assumed 3 possible scenarios: a base case, a best case, and a worse case (forecasts presented in Figures 12-20).

Base-Case Scenario

Current market forecasts for the three factors from 2023 to 2027 were obtained for the base case. Forward interest rates were used to calculate estimate future interest rates (information found on Bloomberg), and for the Inflation and GDP growth it was used the Statista's forecasts.

For Portugal, inflation is forecasted to average 8% in 2022 and to gradually moderate amid the assumed decrease in prices of energy and food commodities while service prices are expected to remain high, paced by wage adjustments; regarding the GDP, it is assumed that the Portuguese economy is projected to slow down substantially constrained by mainly the high energy prices and weak external demand, with tourism picking up a bit, but risks remaining on the downside. Interest rates increase, but stable between 2 and 3%.

Relative to Poland, despite the government-imposed cap on electricity costs, energy price inflation is anticipated to continue to be high in the future, mostly as a result of an increase in natural gas prices, particularly towards the start of 2023. Nevertheless, inflationary pressures are anticipated to progressively ease near the end of the forecast horizon as economic activity deteriorates and high interest rates restrain the demand of consumers. Regarding the Polish GDP, the economic activity is set to weaken due to increased uncertainty, finance restrictions becoming more stringent and the economy adjusting to rising commodities costs.

Finally, for Colombia, inflation is expected to reach its peak in 2022, remaining high in 2023, but gradually correcting until reaching a stable 2.96% it will move into a phase of slower development, with in the medium run private consumption stabilizing at more sustainably high levels. Since this scenario assumes forecasts updated and made by specialists, it was attributed a 80% probability.

Worst-Case Scenario

Under this scenario, we enter in a global recession. A significant, pervasive, and prolonged decline in economic activity.

The COVID-19 outbreak, the conflict in Ukraine, the energy shock, and years of historically low interest rates all contributed to the current state of affairs. It's safe to argue that these events aren't typical. This worst case scenario will forecast a scenario where inflation grows a lot in the first years (assuming maybe that the war under Ukraine territory continues with no future prospects of Russia leaving, generating a cold war); interest rates would grow along inflation in order to try to stabilize prices; and then this would all translate in a negative GDP growth in the first years, only recovering when the prices fall, interest rates fall, and when there are conditions to resume a normal economic activity.

Specialists state that these assumptions are not very likely to happen, so for this scenario it was given a 5% probability.

Best-Case Scenario

The best scenario that could happen for the economy (and for Jerónimo Martins as well) would be a de-escalation of the War reducing the tension on the World Stage and raising the likelihood of a stable economic cycle. This would result in a withdrawal from Ukraine. This raises market

optimism and enhances chances for international trade. With this, production would rise, and the economy would realign, with energy prices rebounding. Regarding interest rates, they would have an effective impact, meaning that they would indeed affect the loan demand and the consumer demand, but not significantly slowing down the economic activity. With stronger supply systems and a moderate increase in consumer demand, there would be less pricing pressure. Due to these factors, most central banks would be able to regulate the financial markets and provide a soft landing. The rate of inflation would remain stable for the following ten years.

Putin does not intend to leave Ukraine, but it is likely that due to military defeats and a crumbling economy, the army and the population would turn against the Russian government, so it was attributed a 15% probability.

Scenario analysis: Interpretation of the Results

Looking at the results of the different scenarios, we can see that the revenues are similar in all of them, which confirms that the food retail industry is an industry that doesn't have that much volatility when compared to the market. Also, these results can mean that Jerónimo Martins is well diversified, in a sense that has operations in geographies and industries that allow that when macroeconomic factors like GDP growth, inflation and interest rates oscillate, the revenues don't oscillate that much (Figures 20,21 and 22). No matter what scenario it is, the company (despite 2023) will always be able to grow. After that, for each subsidiary it was computed the FCF in order to discount them and achieve the respective EVs (for the Polish subsidiaries it was assumed a 1.5% Terminal growth; For the Portuguese 1% and for Ara 2%). The cost of sales and operating costs were assumed as a percentage of the revenues, the rest of the values were assumed equal to the Group Project.

| Scenarios | Probability | Consolidated | SOTP |
|--------------------------|-------------|----------------|----------------|
| Worst-Case Scenario | 5.00% | 23.82 € | 21.20 € |
| Base-Case Scenario | 80.00% | 21.28 € | 19.64 € |
| Best-Case Scenario | 15.00% | 25.83 € | 22.15 € |
| Final Share Price | | 22.09 € | 20.09 € |

Figure 6- Scenario Analysis JMT's Share Price

For the base case, the model predicts a fall on Total Revenues of 3.3% in 2023, but then a quick recuperation of 7.7% in 2024, and after that a stable growth until achieving almost 29.8bn euros in 2027 (Figure 21). In the best case, the Total Revenues, throughout the five forecasted years, were in a consistent way increasing, reaching a value of 30bn euros in revenues in 2027 (Figure 22) For the worst-case, there was a decrease of 3.5% in 2023, but the company also manages to recover until 2027, reaching revenues of 29.2bn euros in this last forecasting year (Figure 23)

After a final ponderation of the probabilities, taking into account that the Group in these scenarios managed to grow (not as well as it would be in better macroeconomic conditions), we reach a final share price of 20.09, which represents a downside of 2% (comparing to the 20.52 euros closing value in the 15th of December of 2022).

Conclusion

This model analyses the macroeconomic variables that most strongly influence this possible recession and the current economic environment, to construct a link between them and Jerónimo Martins' revenues. These factors are changes in inflation, interest rates, and GDP growth.

Five multiple linear regressions were conducted for each subsidiary since it was used lagged independent variables. After looking at the results of the regressions, it could be seen that globally the results were more significant using the lag of one quarter.

The results not being all statistically significant may raise some questions about the reliability of the relations established to perform the forecast. This might have happened because of the low number of observations (only 30). Also, on top of that, these observations didn't capture a major recession or major oscillations in the factors historically, which harmed the model.

To conduct a more complete forecast about the revenues, a scenario analysis was created, using the relationships computed in the multiple regression analysis for each subsidiary and each factor, with three different possible scenarios for the future.

As we can see, the results obtained prove the title of this paper. It's certain that some of these values might be biased because of the limitations presented above, nevertheless, these three scenarios being that close between each other, prove that Jerónimo Martins is prepared to resist uncertainty, since it is well diversified in terms of industries and geographies and since it's forecasted to grow throughout the following years.

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Appendix Figures

Figure 7 – Biedronka’s Regression (t+1 ⇒ t) Output

| Sales of the Quarter in PLN Biedronka (lag t+1 → t) | Coefficient | P> t | Important Regression Information |
|---|-------------|-------|----------------------------------|
| Intercept : | 0.0 | | No. Observations: 29 |
| Interest Rate Poland 2Y : | 2.3 | 0.130 | R-squared: 0.1331 |
| Inflation Poland : | -1.5 | 0.133 | F-statistic: 1.28 |
| GDP Poland : | -0.1 | 0.814 | Prob (F-statistic): 0.3032 |

Figure 8 – Hebe’s Regression (t+1 ⇒ t) Output

| Sales of the Quarter in PLN Hebe (lag t+1 → t) | Coefficient | P> t | Important Regression Information |
|--|-------------|-----------|----------------------------------|
| Intercept : | 0.11 | | No. Observations: 29 |
| Interest Rate Poland 2Y : | 6.64 | 5.1047604 | R-squared: 0.2566 |
| Inflation Poland : | -2.58 | 1.4609759 | F-statistic: 2.88 |
| GDP Poland : | -7.97 | 3.4211951 | Prob (F-statistic): 0.0562 |

Figure 9 – Pingo Doce’s Regression (t+1 ⇒ t) Output

| Sales of the Quarter in EUR Pingo Doce (lag t+1 → t) | Coefficient | P> t | Important Regression Information |
|--|-------------|-----------|----------------------------------|
| Intercept : | 0.01 | | No. Observations: 29 |
| Interest Rate Poland 2Y : | 1.33 | 4.8022069 | R-squared: 0.3484 |
| Inflation Poland : | 0.27 | 0.3659871 | F-statistic: 4.46 |
| GDP Poland : | 2.97 | 1.0603257 | Prob (F-statistic): 0.0122 |

Figure 10 – Recheio’s Regression (t+1 ⇒ t) Output

| Sales of the Quarter in EUR Recheio (lag t+1 → t) | Coefficient | P> t | Important Regression Information |
|---|-------------|-----------|----------------------------------|
| Intercept : | 0.01 | | No. Observations: 29 |
| Interest Rate Poland 2Y : | -5.77 | 8.9531377 | R-squared: 0.5392 |
| Inflation Poland : | 0.29 | 0.6823390 | F-statistic: 9.75 |
| GDP Poland : | 8.89 | 1.9768498 | Prob (F-statistic): 0.0002 |

Figure 11 – Ara’s Regression (t+1 ⇒ t) Output

| Sales of the Quarter in COP Ara (lag t+1 → t) | Coefficient | P> t | Important Regression Information |
|---|-------------|-----------|----------------------------------|
| Intercept : | 0.10 | | No. Observations: 29 |
| Interest Rate Poland 2Y : | -1.00 | 2.8463318 | R-squared: 0.0694 |
| Inflation Poland : | 0.62 | 0.5326304 | F-statistic: 0.62 |
| GDP Poland : | 0.72 | 1.6339870 | Prob (F-statistic): 0.6080 |

Figure 12 – Inflation Forecast Scenarios Poland

| Poland | Inflation Rate Forecasts | | | | | |
|---------------------|--------------------------|--------|-------|-------|-------|-------|
| | 2022* | 2023* | 2024* | 2025* | 2026* | 2027* |
| Worst-Case Scenario | 8.87% | 12.50% | 6.95% | 6.80% | 6.00% | 5.00% |
| Base-Case Scenario | 8.87% | 10.35% | 3.95% | 3.15% | 2.60% | 2.50% |
| Best-Case Scenario | 8.87% | 4.00% | 3.00% | 3.00% | 3.00% | 2.00% |

Figure 13 – Inflation Forecast Scenarios Portugal

| Portugal | Inflation Rate Forecasts | | | | | |
|---------------------|--------------------------|-------|-------|-------|-------|-------|
| | 2022* | 2023* | 2024* | 2025* | 2026* | 2027* |
| Worst-Case Scenario | 7.90% | 6.67% | 5.55% | 4.30% | 3.06% | 2.53% |
| Base-Case Scenario | 7.90% | 4.67% | 2.55% | 2.30% | 2.06% | 2.03% |
| Best-Case Scenario | 7.90% | 4.00% | 2.40% | 2.30% | 2.05% | 2.00% |

Figure 14 – Inflation Forecast Scenarios Colombia

| Colombia | Inflation Rate Forecasts | | | | | |
|---------------------|--------------------------|-------|-------|-------|-------|-------|
| | 2022* | 2023* | 2024* | 2025* | 2026* | 2027* |
| Worst-Case Scenario | 9.75% | 9.15% | 7.78% | 4.96% | 3.98% | 3.46% |
| Base-Case Scenario | 9.75% | 7.15% | 4.78% | 2.96% | 2.98% | 2.96% |
| Best-Case Scenario | 9.75% | 6.50% | 4.50% | 2.85% | 2.80% | 2.75% |

Figure 15 – Interest Rate Forecast Scenarios Poland

| Poland | Interest Rate Forecasts | | | | | |
|---------------------|-------------------------|-------|-------|-------|-------|-------|
| | 2022* | 2023* | 2024* | 2025* | 2026* | 2027* |
| Worst-Case Scenario | 7.52% | 7.30% | 7.00% | 6.80% | 6.40% | 6.00% |
| Base-Case Scenario | 7.52% | 7.03% | 6.56% | 6.24% | 6.07% | 5.97% |
| Best-Case Scenario | 7.52% | 6.00% | 6.00% | 5.80% | 5.75% | 5.70% |

Figure 16 – Interest Rate Forecast Scenarios Portugal

| Portugal | Interest Rate Forecasts | | | | | |
|---------------------|-------------------------|-------|-------|-------|-------|-------|
| | 2022* | 2023* | 2024* | 2025* | 2026* | 2027* |
| Worst-Case Scenario | 2.81% | 5.00% | 4.50% | 4.25% | 4.10% | 4.00% |
| Base-Case Scenario | 2.81% | 2.87% | 2.78% | 2.71% | 2.67% | 2.65% |
| Best-Case Scenario | 2.81% | 2.70% | 2.50% | 2.00% | 1.50% | 1.00% |

Figure 17 – Interest Rate Forecast Scenarios Colombia

| Colombia | Interest Rate Forecasts | | | | | |
|---------------------|-------------------------|--------|--------|--------|--------|--------|
| | 2022* | 2023* | 2024* | 2025* | 2026* | 2027* |
| Worst-Case Scenario | 8.43% | 12.00% | 14.00% | 13.00% | 13.00% | 12.90% |
| Base-Case Scenario | 11.50% | 10.44% | 9.52% | 9.34% | 9.14% | 8.94% |
| Best-Case Scenario | 8.43% | 8.00% | 8.00% | 8.00% | 7.90% | 7.85% |

Figure 18 – GDP Growth Forecast Scenarios Poland

| Poland | GDP Growth Forecast Scenarios | | | | | |
|---------------------|-------------------------------|--------|-------|-------|-------|-------|
| | 2022* | 2023* | 2024* | 2025* | 2026* | 2027* |
| Worst-Case Scenario | 3.70% | -0.20% | 0.50% | 2.00% | 3.50% | 2.00% |
| Base-Case Scenario | 3.70% | 2.85% | 3.16% | 3.27% | 3.31% | 3.31% |
| Best-Case Scenario | 3.70% | 3.00% | 3.20% | 3.30% | 3.33% | 3.50% |

Figure 19 – GDP Growth Forecast Scenarios Portugal

| Portugal | GDP Growth Forecast Scenarios | | | | | |
|---------------------|-------------------------------|--------|-------|-------|-------|-------|
| | 2022* | 2023* | 2024* | 2025* | 2026* | 2027* |
| Worst-Case Scenario | 6.24% | -3.50% | 0.20% | 1.70% | 2.00% | 1.50% |
| Base-Case Scenario | 6.24% | 0.65% | 2.40% | 2.15% | 1.90% | 1.90% |
| Best-Case Scenario | 6.24% | 2.00% | 2.50% | 3.00% | 3.10% | 3.50% |

Figure 20 – GDP Growth Forecast Scenarios Colombia

| Colombia | GDP Growth Forecast Scenarios | | | | | |
|---------------------|-------------------------------|--------|-------|-------|-------|-------|
| | 2022* | 2023* | 2024* | 2025* | 2026* | 2027* |
| Worst-Case Scenario | 7.56% | -1.00% | 0.50% | 1.00% | 1.00% | 3.00% |
| Base-Case Scenario | 7.56% | 2.18% | 2.79% | 3.23% | 3.35% | 3.35% |
| Best-Case Scenario | 7.56% | 2.30% | 3.00% | 3.50% | 5.00% | 5.50% |

Figure 21 – Total Group’s Revenues Base-Case

| FY 2022E | FY 2023F | FY 2024F | FY 2025F | FY 2026F | FY 2027F |
|------------|------------|------------|------------|------------|------------|
| 12/31/2022 | 12/31/2023 | 12/31/2024 | 12/31/2025 | 12/31/2026 | 12/31/2027 |
| €26,237 | €25,382 | €27,332 | €28,122 | €28,997 | €29,858 |
| 25.6% | -3.3% | 7.7% | 2.9% | 3.1% | 3.0% |

Figure 22 – Total Group’s Revenues Best-Case

| FY 2022E | FY 2023F | FY 2024F | FY 2025F | FY 2026F | FY 2027F |
|------------|------------|------------|------------|------------|------------|
| 12/31/2022 | 12/31/2023 | 12/31/2024 | 12/31/2025 | 12/31/2026 | 12/31/2027 |
| €26,237 | €26,738 | €27,417 | €28,023 | €28,785 | €30,030 |
| 25.6% | 1.9% | 2.5% | 2.2% | 2.7% | 4.3% |

Figure 23 – Total Group’s Revenues Worst-Case

| FY 2022E | FY 2023F | FY 2024F | FY 2025F | FY 2026F | FY 2027F |
|------------|------------|------------|------------|------------|------------|
| 12/31/2022 | 12/31/2023 | 12/31/2024 | 12/31/2025 | 12/31/2026 | 12/31/2027 |
| €26,237 | €25,329 | €27,193 | €27,754 | €28,421 | €29,274 |
| 25.6% | -3.5% | 7.4% | 2.1% | 2.4% | 3.0% |

JERÓNIMO MARTINS

FOOD DISTRIBUTION AND RETAIL

STUDENT: JOSÉ CRAVEIRO

COMPANY REPORT

16 DECEMBER 2022

49044@novasbe.pt

Jerónimo Martins a Consumer's Favorite

Adapt and Overcome

- Based on our estimations, the price that we predict at the end of the **year 2023** is which represents a Recommendation.
- The Group was able **to adapt very quickly** to the global events that cause disruptions across the world, **reinforcing** its position as a market leader in most of its subsidiaries.
- The **expansion plans** of its subsidiaries have been **surpassing the company expectations**, especially in Colombia, where the company revised the strategy mid-year due to its success.
- We identify as a possible **future opportunity** the **development of the e-commerce** segment across all subsidiaries since it has high potential growth.

Company description

Jerónimo Martins SGPS, S.A. (JMT) is an international group founded in Portugal in 1972, operating in two different areas: food distribution their main business, and specialized retail. The company serves millions of consumers across Portugal, Poland, and Colombia. Through a value proposition centered in proximity stores, JMT has over 4,900 stores.

Recommendation: BUY

Price Target FY23: 22.91 €

Price (as of 16-Dec-22) 20.64 €

Reuters: JMT.LS, Bloomberg: JMT.LI

52-week range (€) 17.67-23.30

Market Cap (€m) 11755.012

Outstanding Shares (m) 629.293

Other (...)

Source: Refinitiv



Source: Refinitiv

| (Values in € millions) | 2021 | 2022E | 2023F |
|------------------------|--------|--------|--------|
| Revenues | 20 889 | 26 257 | 31 500 |
| EBITDA | 1 585 | 2 000 | 2 435 |
| Net Profit | 484 | 731 | 972 |
| EPS | 0.74 | 0.95 | 1.08 |
| P/E | 25.50 | 23.14 | 21.21 |

Source: Refinitiv, Team's Calculations

THIS REPORT WAS PREPARED EXCLUSIVELY FOR ACADEMIC PURPOSES BY JOSÉ CRAVEIRO, A MASTER IN FINANCE STUDENT OF THE NOVA SCHOOL OF BUSINESS AND ECONOMICS. THE REPORT WAS SUPERVISED BY A NOVA SBE FACULTY MEMBER, ACTING IN A MERE ACADEMIC CAPACITY, WHO REVIEWED THE VALUATION METHODOLOGY AND THE FINANCIAL MODEL. (PLEASE REFER TO THE DISCLOSURES AND DISCLAIMERS AT END OF THE DOCUMENT)

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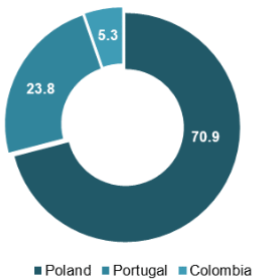
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Figure 1: Jerónimo Martins Logo



Source: JMT Website

Figure 2: Revenues



Source: JMT Annual Report

Company Overview

Jerónimo Martins SGPS, S.A. (JMT) is an international group founded in Portugal in 1972. Their core business, which accounts for almost 99% of the Group's consolidated sales, is Food Distribution. Besides that, the Group also operates in Specialized Retail Sectors such as Manufacturing, Marketing, Restaurant Services, Health & Beauty, and, since 2014, Agribusiness. The company has over 4,900 stores and more than 123,458 employees, generating around €20.9 billion in revenues in 2021. Through a value proposition centered in proximity stores with a pleasing environment that offers a large variety and quality of fresh food products at competitive prices, Jerónimo Martins' stores are appropriate and attractive for all consumers. This proposition allows the firm to serve the everyday needs of millions of consumers across three nations: Poland, Portugal, and Colombia. The company's revenues in 2021, displayed in **Figure 2**, were broken down into 70.9% in Poland, 23.8% in Portugal, and 5.3% in Colombia. Although there are expansion plans, they were postponed because of the uncertain environment caused by the pandemic and, more recently, the war.

Poland

The company operates in Poland under two main banners, Biedronka, related to the food distribution segment, and Hebe, related to the Health and Beauty sector.

Figure 3: Biedronka's Logo



Source: JMT Website

- **Biedronka**

Biedronka is the largest subsidiary of the Group, representing 69.6% of the total group sales and 84.5 % of the Group's EBITDA in 2021. In the last few years, it has been the undisputed leader in food retail, particularly as a discounter, continuing to strengthen its leadership position. It comprises a store network of 3250 outlets in 2021 and intends to expand further in 2022, planning to open 130 new stores and refurbish 350 old ones to become more modern and include self-checkout services. On top of that, according to the company, it will continue to invest in intense promotional dynamics and price competitiveness, striving to maintain basket inflation below the average food inflation in the country.



Figure 4: Hebe's Logo

Source: JMT Annual Report

- Hebe

Hebe is a Health and Beauty retailer that manages a considerable collection of products following the company motto of offering competitive prices in all the markets it operates. The company also offers consultation services in its stores. With the momentum growth of the online channel, Hebe was able to reinforce its competitive advantage of differentiation by consolidating an omnichannel approach with the full integration of physical stores into its digital vision.

Portugal

Portugal is the country where Jerónimo Martins has a broader range of operations. The firm operates in the food distribution sector through Pingo Doce and Recheio. Further, they operate in the specialized retail sector with Jeronymo (coffee shops) and Hussel (chocolate stores). Finally, the company has recently launched a banner operating in the agribusiness sector, Jerónimo Martins Agro-Alimentar.

Figure 5: Pingo Doce's Logo



Source: JMT Annual Report

- Pingo Doce

Pingo Doce is one of the largest supermarket chains in continental Portugal and has recently entered the Azores market with a partnership with the Finança group. As a result, in 2021, it registered its best year ever, surpassing €4 billion in sales and accounting for 15.4% of the Group's EBITDA, even with all the restrictions imposed by the Portuguese government. This increase resulted from the competitive pricing strategies and multiple promotions that rewarded Portuguese families. Besides, the company also focused on improving its online channel presence, gaining much visibility with the campaign "O Natal traz o melhor de nós" (Christmas brings out the best in us), with the partnership with Glovo and the improvement of its app.

- Recheio

Recheio is one of the most significant Cash and Carry stores in Portugal, which had tough losses caused by the pandemic as their primary customers: Hotels, Restaurants, and Cafes (HoReCa), were heavily targeted by the restrictions imposed by the Portuguese government. Still, the company improved its business model by creating a specialized delivery system that served HoReCa customers. Moreover, the company also focused on Traditional Retail by partnering with Amanhecer.

Figure 6: Recheio's Logo



Source: JMT Annual Report

Figure 7: Jerónimo Martins Agro-Alimentar banners



Source: JMT Annual Report

- Jerónimo Martins Agro-Alimentar (JMA)

A company created with the particular purpose of guaranteeing the supply of strategic products to the Group's companies always focused on sustainable production. JMA operates in three segments: dairy products (Terra Alegre), livestock farming (Best Farmer), and aquaculture (Seaculture). 2021 was a year of development for this company, entering multiple strategic partnerships and acquisitions to amplify its product sustainability and range.

- Others

Hussel is a specialized retailer that sells chocolates and confectionery and recently finished its rebranding process, hence starting 2022 with a consolidation process. This company suffered from the pandemic since its physical stores were closed, and its online presence was small. **Jeronymo** is a company that manages kiosks and coffee shops and is investing in innovation, sustainability, and communication with customers, particularly in social media.

Figure 8: Portugal specialized retail banners



Source: JMT Annual Report

Colombia

- Ara

In Colombia, JMT operates under one banner in the retail food industry, **Ara**, one of the largest discounters in that market. Under new leadership in 2021, the company was able to improve its expansion strategy by opening a new location every two days. In 2022 this strategy was even more intensive and allowed the company to reach the 1000 outlets target. Currently, it is present in three regions the Coffee-Growing Region, the Caribbean Coast, and Bogota. Ara's motto is proximity stores that combine price competitiveness with promotional opportunities and a wide variety of high-quality products with the intention to become the "one-stop shop for all the food needs of Colombian families."

Figure 9: Ara's logo



Source: JMT Annual Report

Business Description/Strategy

JMT commits to having solid brands in all businesses, with quality products and services, focusing on market leadership. It is recognized for its capability to adapt its business models to the markets and countries where it operates, understanding consumer needs, and having highly competitive prices. Also, the company looks to innovate with strong private brands and fresh, high-quality products.

They focus on the operating activities by improving efficiency, productivity, and exploiting economies of scale and Group synergies.

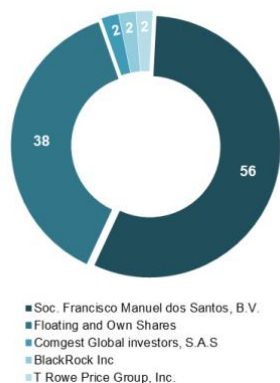
The Group adheres to the following four strategic guidelines to achieve value creation and fulfill its strategic goals:

- Strengthening the balance sheet continuously (by having a good net working capital, positive cash flows, and a balanced capital structure).
- Managing risk to protect asset values (through the hedging of many assets they have abroad).
- Maximizing economies of scale and synergies.
- Fostering innovation and a pioneering spirit.

Moreover, the Group introduces four lines of action: improve operational effectiveness, raise pricing competitiveness, and value proposition, incorporate innovative technology, and identify opportunities for profitable expansion.

Shareholder’s structure

Figure 10: JMT’s shareholder structure



Source: JMT Annual Report

Sociedade Francisco Manuel dos Santos, BV, JMT's largest shareholder, is owned by the Soares dos Santos family and represents 56.14% of the company's capital. The currently outstanding shares traded on the market are free float and represent 32.41% of the total shares. The remaining stockholders are present in **Figure 10**.

JMT has adopted the Anglo-Saxon governance model since 2007, which the Group feels to be the most appropriate in terms of serving shareholders' interests. JMT has 629,293,220 outstanding ordinary shares, each with a nominal value of one euro. In addition, the corporation has 859,000 shares in its portfolio, which accounts for 0.14% of the company's voting rights and share capital.

Management

JMT's corporate structure is composed of four entities elected for three years terms. In addition, there are five specialized committees to oversee and monitor particular areas.

The CEO, Pedro Soares dos Santos, presides over the Board of Directors (BoD), which currently has 11 members. Sixty percent of its members represent a variety of countries and are independent. A minimum of 7 and a maximum of 11 people, including the chairperson, must make up the Board of Directors. The BoD meets at least four times a year; in 2021, it did so seven times. The general conduct of the business, its management, direction, and performance are only a few of the many obligations that the BoD must take care of, both legally and internally. The Board of Directors has also established a Managing Committee

(charged with assisting the CEO and the BoD) and specialized committees intended to monitor and oversee parts of the operations.

Environment, Social, and Governance

Not only is it essential to create value, but also to ensure social development and environmental sustainability as a priority.

The Jerónimo Martins ESG Risk Rating was ranked 13th among the 201 food retail companies evaluated by Sustainalytics in February 2022 and was part of the 2022 Top-Rated ESG Companies (which covers more than 14,000 companies from 42 industries). In addition, the Group has a low risk of experiencing material financial consequences impacts from environmental, social, and governance problems, receiving an ESG Risk Rating of 16.2.

Also, JMT is present in the STOXX Global ESG Environmental Leaders Index, the STOXX Europe Sustainability Index, and the EURO STOXX Sustainability Index, the leading European indexes in social, environmental, and governance best practices.

Environment

In 2021, Jerónimo Martins had an environmental score of 89.95, well above the average of its peers (82), resulting in an A grade. In addition, compared to 2017, the Group reduced its carbon footprint by 35% and energy consumption by 11% for every 1,000 euros in sales. On the other hand, compared to 2018, the Group reduced plastic consumption by 15% for every million sales.

Jerónimo Martins Group Environmental Policy outlines the top priorities for action aimed at minimizing the adverse environmental effects of its operations and supply chains: **protecting biodiversity**, combating **climate change**, and fostering a more circular economy, also through responsible **waste management**.

Relative to **preserving biodiversity**, the Group is aware of the importance of preserving ecosystems and reversing biodiversity loss. In their operations, for example, they promote the protection of wild fish species, introduce sustainable practices in their productions, and introduce products and services with a better environmental and social profile.

Regarding **climate change**, the Group's strategy is transversal to its entire value chain and includes measures to identify and manage climate-related risks and opportunities. It also includes mitigation measures such as reducing energy consumption in operations and action with suppliers through, for example,

promoting good agricultural practices and pledges to fight deforestation. Also, the Group can mitigate climate change through renewable energies, efficient refrigeration, lighting technologies, and water-saving systems. Optimization of distribution routes and management of refrigeration gases are other measures.

As a result, Jerónimo Martins is the food retailer with the best CDP (Carbon Disclosure Project) score worldwide. Indeed, the Group received a double A (highest score) from CDP in the "climate change" and "water security" categories and is the only food retailer in the world to score A- in the management of deforestation commodities. Furthermore, since June 2020, JMT has been part of the Euronext Eurozone ESG Large 80 Index, which includes the Euronext-listed companies that better adapt their businesses to the energy transition, supporting the transition to a low-carbon economy and reducing climate impact. Also, Lean & Green distinguished Pingo Doce with three stars and Biedronka with one star for cutting greenhouse gas emissions associated with logistics.

To combat **waste management**, the Group wants to develop products and packaging that use materials efficiently, especially recycled ones. Furthermore, the Group is committed to halving food waste generated by 2030 by donating thousands of tons of food to charities through stores and distribution centers and selling products near their expiration date at a discount. Not surprisingly, JMT's integrated strategy for fighting food waste was distinguished in the first edition of the National Sustainability Award in the "Circular Economy" category. Also in 2021, Pingo Doce logistics won the "Decarbonisation" category (an initiative promoted by Jornal de Negócios).

Social

The social pillar of JMT's overall ESG framework is the best pillar of the Group, with a remarkable score of 92.84, above the peer median of 74. The social component articulates itself around three main concerns: **People, Health and Safety**, and **Local Communities**.

Regarding **People**, JMT's primary concern is becoming a benchmark employer. At the end of 2021, the Group employed 123,458 people, 4.4% more than the previous year. The company has employees of more than 75 different nationalities, and compared to 2020, the number of permanent contracts increased their relative weight by 1.2 p.p. The Group is committed to gender equality, ensuring women's representation at distinct levels of leadership and equal opportunity. Also, the Group provides options for internal mobility, more training hours, and active participation for their workers. For example, Biedronka was named the Best Quality Employer 2021 by the Central National Certification Office; JMT is the only Portuguese company listed in its sector on the Bloomberg

Gender-Equality Index; and finally, the Group was also distinguished as an Inclusive Employer by the Portuguese Employment and Professional Training Institute.

Regarding **Health & Safety**, JMT's business sector could pose some risks to its employees. However, all hazards are identified and assessed by the health and safety in the workplace (HSW) teams by measuring chemical, physical and biological agents and establishing measures to prevent workplace accidents. Furthermore, the Group promotes health and physical exercise initiatives and offers spaces dedicated to prevention and physical rehabilitation.

Finally, the Group strives to be an active part of society, focusing on and supporting the most vulnerable groups: the elderly and underprivileged children and young people, sponsoring institutions that help fight hunger and malnutrition, and working towards breaking cycles of poverty and social exclusion. JMT also promotes good lifestyle options like eating healthier and having better reading habits. In 2021, the firm donated more than €51.3 million to 1,800 organizations.

Governance

Governance is by far the poorest ESG pillar for JM, but it appears that this is the case for the entire sector, as the peers' median is also the worst of the three pillars. JMT has a score of 67.54 (B+), and the median of the peers is 67, so the Group is above its peers in this pillar as well.

Inside this pillar, the two worst scores are Management and Shareholders. The former measures a company's commitment and effectiveness towards following the best practice corporate governance. Here, we can highlight the lack of a succession plan for executive management in the event of unforeseen circumstances, the lack of information reporting regarding the total individual compensation of all executives and board members, and the remunerations not being linked to long-term targets/objectives. The latter score measures a company's effectiveness towards equal treatment of shareholders and the use of anti-takeover defenses. Here JMT is "punished" because not all board members were elected with a majority vote in shareholder's meetings.

Despite the Anglo-Saxon approach by Jeronimo Martins, we would like to bring up two possible risks for minority investors. First, there is a concentrated ownership structure, where the company's largest shareholder, the family holding Sociedade Francisco Manuel dos Santos, B.V. (**Figure 10**), holds a controlling interest in the business, giving them the right to veto any motion from a stockholder. Second, there is no distinction between management and control because Pedro Soares dos Santos serves as the CEO and the chairman of the board of Directors (while being a member of the family holding Sociedade

Francisco Manuel dos Santos). The thin line separating ownership and management exposes minority investors to the possibility of power abuse, requiring tighter control measures.

Industry Overview

Overall, the food retail industry comprises multiple store formats and can be divided into Traditional channel formed by Mom & Pop stores and Modern channel that englobes all the other store formats such as Supermarkets, Cash and Carry, and Discounters. The main revenue source is the sale of all packaged and unpackaged food products, as well as beverages, tobacco, and household products.

This sector shares several similarities in terms of market forces independently of the geographic location, as can be seen by the similar effects of the Covid-19 pandemic that caused lockdowns all over the world, limiting the regular operation of the retail sector and drastically changing consumer habits. Moreover, it spiked an increase in global inflation and uncertainty that were even more drastically affected by the Russian invasion of Ukraine, which also caused more extensive disruptions in supply chains. The increase in inflation led to a relevant loss of consumer purchasing power and an increase in price sensitivity that made customers shift towards store formats that offer more competitive prices with a focus on local consumer preferences. Particularly discounters due to their ability to offer “Everyday Low-Prices” (EDLP) strategies while taking advantage of economies of scale and reduced overhead costs in the adaptation to the new volatile environment.

Even with the increase in raw materials and energy prices, large discounters (such as Biedronka, Ara, and Pingo Doce) maintained competitive pricing strategies due to their high bargaining power and tendency to represent a large part of suppliers’ revenues. Moreover, with the homogeneity of products, they may be able to change suppliers without relevant switching costs. Additionally, there are no appropriate substitutes for this market; the most common options are food services, subsistence agriculture, or homemade products (for household products), which during the pandemic saw their revenues decrease as consumers transferred to retail outlets (MarketLine, 2021a).

Poland

Figure 11: Poland Macro Indicators



Source: Euromonitor

Poland is currently the largest market for food and beverages in Central and Eastern Europe, accounting for almost 4.2% of the European food & grocery market value, representing the vital importance of the retail sector in Poland's economy (Figurska, 2021). However, the events mentioned before altered the retail market in Poland, as can be seen in **Figure 11**, the retail market suffered a slight decrease from 2019 to 2020, but from 2020 to 2021 it was able to recover and increase the growth rate, this was partially caused by the recovery of consumer spendings and slight increase in inflation rate. In terms of country effects, the pandemic caused a decrease in the growth rate of the Polish GDP swinging from a positive growth rate in 2019 to a negative in 2020. Additionally, increases in population numbers due to the immigration of Ukrainian refugees to this country, significant disruptions in the supply chain, and uncertainty regarding the future were some of the other consequences of the previously mentioned events. Poland's government is a critical participant in the Polish food market, often implementing policies to help and benefit consumers. For example, in 2019, they changed the Family 500+ program to simplify the attribution process and to include more families. Additionally, to counterpoise the rapidly growing inflation levels in 2022 (expected to be around 13,6% by the end of the year according to the National Bank of Poland), the Polish Parliament approved the reduction of the Value Added Tax (VAT) on food to zero and monitored the companies to make sure that this reduction would be transferred to the final consumer. The government also increased the minimum wage to reduce the impact of inflation; however, more was needed to prevent the decrease in disposable income as inflation grew more than 20 % in some products (Figurska, 2022).

The most significant competitors in this market are Jerónimo Martins (largest retailer), Biedronka's owner (representing 67% market share of discounters in 2021), Eurocash (owner of Lewiatan and abc stores) and Schwarz Gruppe (owner of Lidl and Kaufland) with the following market shares in 2021, 11.9%; 6.9% and 6.7%; respectively (Euromonitor International, 2022). This concentration leads to intense rivalry among the players as the price sensitivity of consumers increases, and price schemes influence not only rivals' strategies but also consumer choices. Hence companies are forced to diversify their product mix, introducing more private-label products according to local consumer preferences and loyalty programs while actively monitoring their prices (Euromonitor Int., 2021). For example, Biedronka launched 215 private brand products, reaching a 39% weight of private brand products in its stores.

Even though Hebe, operates in the specialized retail sector of health and beauty segment, which has as leading players Dirk Rossmann KG, Pelion Healthcare

Group, and JMT (Statista, 2021). Most of the effects mentioned above also apply to this market's conditions; some were even more drastic, such as consumer price sensitivity. For example, non-essential goods and services saw a significant decrease as consumers attributed more importance to essential goods, thus mainly decreasing the sales of the first segment. Additionally, with the closure of stores, lockdowns, and lack of tourists and students, people attributed less perceived value to these products, which drove more pressure into the segment (Passaport, 2022). Nevertheless, Hebe overcame the situation and quickly adapted by creating and executing a digital and omnichannel strategy that enhanced differentiation, resulting in improved sales performance (mentioned ahead) and overperforming the market.

- Trends

The adoption and adaptability to integrate online shopping into companies' current business models have been one of the most common trends in this industry. Consumers started to value fast home delivery services with a considerable range of available products. Biedronka reinforced its online presence by partnering with Glovo, creating Biek, a delivery service that takes less than 15 minutes, available in six Polish cities. Furthermore, it reinforced its online catalog by offering more than 2000 products ready to be ordered in more than 31 cities (according to the company), allowing it to monitor the consumer's preferences and needs for each region more easily. Hebe also took advantage of this trend and started marketing its products outside of Polish borders, consolidating its online platform (which won two awards in 2020 and 2021) and doubling the weight of online sales in its revenues (accounting for 13% in 2021).

Another noticeable trend is the improvement of the physical outlets to provide a better shopping experience and be closer to the consumers. Biedronka executed a robust investment plan to open 66 additional proximity stores in 2021 and refurbish other stores to provide more efficiency to shopping activities by using self-checkouts in more than 65 % of the total outlets. Besides, it invested in the creation of new products to improve its private brand. On the other hand, Hebe decided to close stores that were only used as pharmacies and invested in the digitalization of stores, being the first "Beauty retailer in Poland to offer 2-hour delivery and in-store pickup" as well as self-checkout in all its outlets.

Portugal

Figure 12: Portugal Macro Indicators



Source: Euromonitor

The Portuguese retail industry has a similar structure as the previously described; however, its competitive landscape is more concentrated than other countries. In Portugal, the big players are Sonae, JMT, and SG (with Lidl); these three players in 2020 represented around 60% of retail's market share. Covid-19 and Russia's invasion have clearly changed the macroeconomic environment of the country and the industry, impacted the economy and industry growth and affecting the inflation levels. Looking at **Figure 12**, it is possible to see the pandemic's impact because from 2019 to 2020 the consumer expenditures decreased significantly as well as the GDP growth, both reaching negative growth rates in 2020, contrasting with the stable growth rate from the previous periods. On the other hand, the growth rate of inflation increased between 2019 and 2021, meaning that the consumers were in fact losing their purchasing power. This translates into a more demanding situation for customers since they had to adapt and define new priorities, especially regarding their groceries.

In addition, during lockdowns, there was a shift from food services such as cafes and restaurants towards food retail and home food consumption since these businesses were closed, negatively impacting cash and carry stores such as Recheio, but partially explaining the increase in the retail market growth rate in 2021 (**Figure 12**). However, the implemented safety measures by the Portuguese government and the mass vaccination allowed the control of the virus spreading and the gradual reopening of stores, which, together with the National Recovery and Resilience Plan, provided an additional stimulus for the local economy and consumption (Medina, 2021).

This sector grew because of the changes retailers incorporated to meet new customer needs and operating conditions. One of the necessary changes was the adoption and improvement of online shopping platforms as well as the incorporation of click and collect method. Besides, consumers became more price sensitive as they saw purchasing power decrease. Therefore, Pingo Doce took this opportunity to reinforce its position among Portuguese families creating good trade opportunities with dynamic promotions and operating at a lower basket inflation than the one from the market.

▪ Trends

Online brand presence has been of the main trends in the Portuguese retail industry; this fast-growing segment was one of the main reasons for the growth of the food retail industry in Portugal during the pandemic. Numerous retailers quickly incorporated this channel into their activities or improved the one they had, making online revenues rise 44% compared to pre-pandemic levels

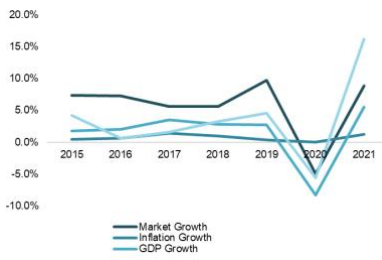
(MarketLine, 2021b). For example, Pingo Doce reinforced its e-commerce channel by partnering with Glovo to deliver ready-to-eat meals from Pingo Doce Fresh Food restaurants, launched the new Pingo Doce app to provide a better shopping experience for the customer, as well as to serve as the “ultimate savings assistant”. Likewise, Recheio also pursued digital opportunities investing in new communication strategies and creating partnerships with picking and delivery service players.

During the pandemic, consumers prioritized convenience and safety in their shopping visits, benefiting companies that operated near them with shorter queues and better safety measures, more specifically, neighborhood stores. For example, Jerónimo Martins had multiple banners under this type of store format, such as Amanhecer (Recheio’s banner) and Pingo Doce & Go, creating a higher connection with consumers and improving brand recognition and performance.

Consumers also became more aware of the product’s characteristics, such as its origin, how it is produced, and its nutritional scale. The demand for local and domestic products has notably increased over the last few years due to the previously mentioned events; consumers increased their demand for better “deals”, not only cheaper products but higher quality. Consequently, Portuguese private-label products have gained from this demand; according to Private Label Iberia, these products represent 43% of the market share (Private Label Iberia, 2022). Sourcing policies implemented by Jerónimo Martins have both these characteristics in common; for example, since 2021, 80% of Pingo Doce’s purchases have been from domestic producers, and many of the products available in store were 100% produced in Portugal by Jerónimo Martins Agro-Alimentar that ensures the supply of key products to the Group’s companies. Furthermore, both Recheio and Pingo-Doce have increased their offer of private label products with 105 launches and 26% weight of private brand; and 279 launches and 35% private brand weight, respectively. Pingo Doce also addressed the new healthier consumer habits by launching Go Active, the first private brand in food retail dedicated to a healthier and active lifestyle (eight of the private label launches are related to Go Active).

Colombia

Figure 13: Colombia Macro Indicators



Source: Euromonitor

The Colombian retail structure is divided in the same manner as previously described. According to Euromonitor, the top retailer in Colombia in 2021 is the Group Almacenes Éxito SA, which owns brands such as Éxito, Carulla, and Surtimax. It is followed by Koba Colombia SAS group, the owner of the larger discounter in Colombia, D1. Ara (owned by Jerónimo Martins) comes in sixth place as the largest food retailer and second as the largest discounter in Colombia (Euromonitor, 2022).

Regarding the discounters' segment, the only one in which JMT has operations, evidence shows that Covid-19 reinforced this channel position in the industry since it was the preferred store format to shop by Colombians (Euromonitor, 2022; FAS Staff, 2022). Moreover, the decrease in consumers' purchase power (due to the inflation increase available in **Figure 13**) and confidence, jointly with the fear of exposure to the virus and circulation restrictions, caused shoppers to start looking for safer and closer shopping channels while gaining more price-consciousness. All these restrictions caused a decrease in the market growth, in the Colombian GDP and in the growth of consumer spendings that even reached negative values in 2020 (**Figure 13**).

Ara developed multiple strategies during 2021 and 2022 to take advantage of these new habits. First, it adopted a more aggressive store expansion strategy by opening more than 100 stores in 2021 and increased its store expansion plan to around 250 store openings from the initial 180 stores in 2022. Hence achieving more than 1,000 stores operating (partially due to the bankruptcy of the third larger discounter Justo y Bueno). Additionally, Ara is aware of the high price competition in this market and the importance of economies of scale and reduced overhead costs to maintain its price leadership advantage (EDLP). Henceforward, in 2022 even with the roaring inflation, it started a project to strengthen its logistics and keep a lower store basket inflation than the overall market inflation, enabling it to capture more consumer surplus.

▪ Trends

With the increase in price consciousness, Colombian consumers became more open to purchasing private label products, mainly if retailers can offer high-quality products on their private label. Moreover, consumers also recognized the importance of sourcing and treating products, whether locally produced or processed. This is a positive trend for retailers and discounters since private label products tend to have higher profit margins, allowing companies to provide more competitive prices. Ara managed to increase its value proposition by leveraging this trend, investing in the differentiation and innovation of its private label

portfolio, launching 97 new products, and relaunching 118, achieving a 40% weight of private brand products in 2021.

With the isolation effects of the pandemic, brand loyalty was far from being a customer preoccupation; however, retailers wanted to establish a closer relationship with the consumers, which is why many of them invested more in communication strategies. Their intention was not only to show their competitive pricing strategies and reliability but also the proximity to consumers' homes. Ara focused its approach on showing consumers that it is the one-stop store for all Colombian family's needs; consequently, it held numerous campaigns and, the most noteworthy, "Mercado Todo en Ara" (Shop All at Ara), which was nationally televised. Furthermore, leveraging the decentralized strategy to show proximity to consumers in different places and to fight local competition, Ara implemented local promotions ("Local Rebajon") that impacted some of the key stores, according to the company.

A Dynamic Overview

Revenues

- **Main Banners – current year performance**

Jerónimo Martins has had a strong sales performance across all businesses in the current financial year. In the first nine months:

- Biedronka's sales in local currency grew by 23%, with like-for-like (LFL sales – sales made by stores that operated under the same conditions in the two periods) growth of 19.5%. A strong price position was central to the strategy, focusing on containing food inflation, ensuring the competitiveness of shelf prices, and implementing relevant consumer campaigns.
- Hebe's sales have benefited from the previous year's low base, growing in local currency 33.6%, with LFL at 26.4%.
- Pingo Doce's sales grew by 10.3%, with LFL at 8.3%. The banner maintained an intense promotional dynamic, working to create valuable opportunities to help families cope with a deterioration in purchasing power.
- Recheio sales, helped by a favorable comparable impacted by pandemic-related restrictions and benefitting from the substantial HoReCa evolution driven by the tourism recovery, grew 28.8%, with LFL sales of 28.9%.

- Ara's local currency sales grew by 66.2%, including LFL at 40.2%. Low-price positioning and its promotional dynamics were the main sales drivers, guaranteeing consumer recognition in a challenging context for Colombian families.

Briefly, the price-focused strategies and the food inflation sharp increase in all markets boosted JMT sales.

- Main Banners – Forecast

Given that JMT operates in different markets and across several industries, we forecast the revenues of each banner in their local currency. Therefore, we forecasted Biedronka and Hebe in Polish zlotys, Pingo Doce and Recheio in euros, and Ara in Colombian pesos. Moreover, the forecasting period from 2022 to 2033 is divided into two subperiods - from 2022 to 2026 and from 2027 to 2033.

For the 2022 to 2026 subperiod, the forecasting process is as follows.

Firstly, revenues are forecasted by regressing past quarterly sales growth with its two main drivers, the number of stores growth and LFL. Our primary rationale is to follow what the company does. In all the company's annual reports, revenues are broken down by the same drivers used in our forecasting analysis and an extra one, the forex (FX) impact, which we did not consider because we are forecasting in local currency, which eliminates the FX effect.

The results of the regression, shown in **Table 1**, yield an R-squared over 0.3 for most banners, with Ara and Biedronka having the highest values (0.63 and 0.53, respectively). The LFL coefficient is statistically significant at the five percent level for Biedronka and Hebe and statistically significant at the one percent level for Ara. On the other hand, the number of stores' growth coefficients is statistically significant at the five percent level for Biedronka. Nevertheless, the number of stores coefficient from the regression for Hebe and Ara was negative, arguably a reasonable estimate. In this way, we adjusted their betas to reflect their actual values. For Ara's coefficient, we used the upper bound from the ninety-five percent confidence interval, and for Hebe's, we used the following formula:

$$\beta_{Hebe} = 0.66 \times \beta_{Hebe \text{ regression}} + 0.33 \times \beta_{Biedronka}$$

We used two different methodologies because the two banners are inherently different. For Hebe it makes sense to use Biedronka's beta since it operates in the same country and its beta is statistically significant. On the other hand, for Ara, it makes more sense to look at the regression output, given that we do not have any banners from the same country.

Table 1: Sales growth regression results

| Banners | Biedronka | Hebe | Pingo Doce | Recheio | Ara |
|----------------------|-----------|-------|------------|---------|-------|
| R-squared | 0.53 | 0.30 | 0.16 | 0.14 | 0.63 |
| Stores Growth | | | | | |
| Coefficient | 2.21 | -0.55 | 1.46 | 3.10 | -0.01 |
| p-value | 2.1% | 57.6% | 34.9% | 36.8% | 51.7% |
| Adj. Coefficient | 2.21 | 0.37 | 1.46 | 3.10 | 0.03 |
| LFL | | | | | |
| Coefficient | 0.25 | 0.48 | 0.50 | 0.36 | 0.40 |
| p-value | 3.1% | 3.7% | 13.9% | 11.0% | 0.1% |

Source: Team's contribution

Table 2: LFL regression results

| Banners | Biedronka | Hebe | Pingo Doce | Recheio | Ara |
|----------------------------------|-------------|-------------|-------------|-------------|-------------|
| R-squared | 0.63 | 0.52 | 0.41 | 0.53 | 0.83 |
| CPI | | | | | |
| Coefficient | 2.91 | 4.92 | 1.49 | 6.77 | 14.18 |
| p-value | 0.0% | 1.3% | 1.7% | 0.0% | 0.0% |
| Total Retail Trade Volume | | | | | |
| Coefficient | 0.98 | 1.45 | 0.44 | 1.18 | 0.37 |
| p-value | 1.3% | 16.7% | 0.4% | 0.4% | 3.2% |

Source: Team's contribution

Thirdly, the resulting coefficients are then paired with driver estimates to project annual segment revenue. It is important to note that the drivers' estimates are obtained in distinct ways.

The store's growth was estimated using JMT's store network outlook and team consensus.

LFL was projected by regressing past LFL against the CPI change and the total retail trade volume growth (or market growth), which makes economic sense. As previously mentioned, inflation can be a big sales driver, so naturally, it should be in our analysis. Besides that, if the company maintains its market share, as the market grows, so will its revenues.

Table 3: Revenues CAGR

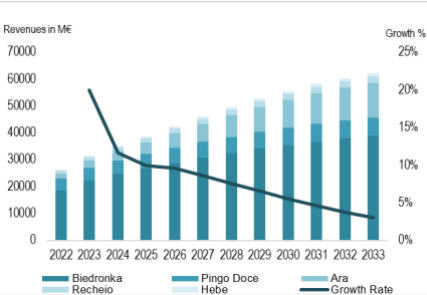
| CAGR | 2022-2026 | 2027-2033 | 2022-2033 |
|--------------|--------------|-------------|-------------|
| Group | 10.0% | 4.4% | 7.4% |
| Biedronka | 9.1% | 3.4% | 6.3% |
| Hebe | 4.8% | 2.2% | 3.6% |
| Pingo Doce | 26.6% | 9.7% | 18.6% |
| Recheio | 8.0% | 4.1% | 6.3% |
| Ara | 16.1% | 5.6% | 10.8% |

Source: Team consensus

The results of the regression, displayed in **Table 2**, produce an R-squared over 0.4 for all banners, with Ara and Biedronka having, once again, the highest values (0.83 and 0.63, respectively). In addition, the CPI change coefficient is statistically significant at the one percent confidence level for all banners, except for Hebe and Pingo, which is statistically significant at the five percent level. Furthermore, apart from Hebe, the market growth coefficient is also statistically significant at the five percent level for all banners.

From 2026 onwards, we applied an exponential decay factor to 2026's growth rate so that the sales growth rate in 2033 is in line with the average long-term economic growth.

Figure 14: Revenues Projections



Source: Team consensus

The compound annual growth rate (CAGR) for the two subperiods and the total forecasting period are displayed in **Table 3**. In the first sub-period, 2022 to 2026, the group's revenues CAGR is 10%, while in the second sub-period, 2027 to 2033, it decreases to 4.4%. Thus, for the total forecasting period, the group's revenues CAGR is 7.9%, driven mainly by Ara's 19.3% revenues CAGR and Biedronka's 6.3% revenues CAGR.

For an overview of the evolution of main banners sales, check **Figure 14**. To see the yearly sales growth rates by banner, please see **Figure 15**.

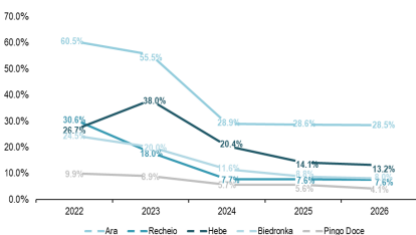
Growth Opportunities

Jerónimo Martins, in the others' segment, eliminations, and adjustments item, includes business units with reduced materiality (Jeronymo, Hussel, and Jerónimo Martins Agro-Alimentar), holding companies, and group consolidation adjustments.

The business units with reduced materiality can create a growth opportunity for JMT. In that sense, we will consider what the prospects for each company are:

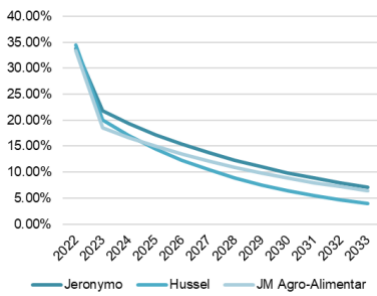
- Jeronymo 2022 registered a growth of 33.7%, recovering the positive performance in sales after the challenging year of 2020 due to the

Figure 15: Banners sales growth rates



Source: Team consensus

Figure 16: Growth Opportunities Revenues growth rate evolution



Source: Team consensus

pandemic restrictions, which negatively affected the business. For future forecasts, with the development of online promotions and the increase in the industry of coffee shops, mainly due to the success of Starbucks, it is expected to register strong sales growth over the years (**Figure 16**).

- Hussel was severely affected in 2020. The pandemic's restrictions and the tourism decline really made a dent in its sales growth rate. In 2022, by promoting campaign actions through its online channel, digital interactions, and with the ease of restrictions, we expected the banner to grow 34.5% this year and to continue to deliver a good performance over the long term (**Figure 16**).
- Jerónimo Martins Agro-Alimentar's business was not affected by the pandemic and registered strong growth in 2021 due to the entry into a new market under a partnership established for the production of sea bass and sea bream in Morocco. Therefore, in 2022, it is expected to grow by 33.3%. For the future, we forecast the company to maintain positive performance due to JMT's substantial investments, as the group wants to increase its sustainability. In this way, sales will rise for the following forecasting periods as the agribusiness sector continues to improve and grow (**Figure 16**).

To conclude, the total value of the metric "other, eliminations, and adjustments items" will increase by 33.3% in 2022, in line with the performance of their business units and also based on the nine-month results. In the future, it will increase but with a progressively lower growth rate, finishing our forecasting window in 2033 with €77 million in sales, representing only roughly 0.1% of total sales.

Costs

The company's Total Costs are divided in the Income Statement into four captions: Cost of Sales, Distribution Costs, Administrative Costs, and Other Operating Profits/Losses.

To start, according to the Jerónimo Martins annual report, the company's cost of sales represents the "costs of goods sold fewer vendor allowances based on volume purchased, and promotional allowances obtained for commercial activity and in-store advertisement, and it also includes materials consumed in the production of goods by the companies." In that sense, we analyzed the cost of sales as a percentage of revenues over the historical years. The value stays around 78% across the historical sample, giving confidence about its use for future forecasts of each subsidiary. Therefore, we assumed the cost of sales to be 78.44% of revenues, the historical average. For the year 2022, the

consolidated cost of sales forecasted value is €-20.596 billion, and the gross margin is €5.661 billion. In the future, given that the cost of sales fluctuates with revenues, then by construction, the gross margin will remain constant throughout the forecasting period.

The company's operating costs, which include distribution and administrative costs, while excluding the depreciations and amortizations, represent 89.58% and 10.42%, respectively, in 2022. Moreover, the operating costs can be identified as staff costs, supplies, and services, transportation costs, rents, advertising costs, and other profits/losses.

In their annual report, Jerónimo Martins only provides the total costs by nature, meaning there is no disclosure about which costs are a part of the distribution and administration. Therefore, our team considered it crucial to look for information that would allow us to break the costs because it would add value to our valuation, especially when forecasting the future value of operating costs. In that sense, the costs were assigned to distribution and administration based on references from previous years' annual reports and notes.

In line with their importance, the operating costs were analyzed and forecasted in more detail from 2022 to 2026 according to each one of the subsidiaries.

Jerónimo Martins staff costs, which can be found in the distribution and administrative costs, include the wages, salaries, and social security of the company's employees. That said, as our cost driver, we used the number of employees of each subsidiary, computed by multiplying the number of stores in that year by the number of employees per store. In 2022, the total staff costs increased by 16.03%, reaching a value of €-2.163 billion, due to the considerable increase in employees coming from the high number of store openings. From 2022 to 2026, the number of employees continued to increase based on the number of stores growth.

The supplies and services are part of the distribution costs and were calculated in terms of the percentage of revenues, which had very stable historical values. We assumed they remained the same for the future in each one of the subsidiaries. Therefore, these costs increased in line with revenues achieving a consolidated value of €-1.542 billion in 2026.

Another metric that is a part of the distribution costs is transportation costs. The average diesel/biodiesel fuel price in each subsidiary country was used as our cost driver to estimate future transportation costs. Over the last two years, and especially in 2022, diesel prices have been booming because of the fuel scarcity worldwide, intensified due to supply constraints resulting from the war in Ukraine, except for Colombia, which as a petroleum exporter was not affected. So, in 2022

the consolidated transportation costs increased by 27.13% with an amount of €-0.296 billion. However, for the future, based on sources from reports (Søgaard and Aau, 2017) and recent news (Jorge Liboreiro, 2022), it is expected to see a reduction in the price of fuel, considering a recovery in the global economy with inflation turning back to normal in a few years.

The advertising costs are included in the administration costs, and their values forecasted were computed considering a growth rate of advertising spending from a reliable source (A. Guttman, 2022), reaching a consolidated growth rate in 2026 of 4.70%.

Finally, the rents will increase, while other profits/losses will decrease and their total value over time. It is important to note that both these items are inside the distribution costs.

From 2026 onwards, we applied an exponential decay factor, similar to what was done in revenues, to 2026's growth rate. The CAGR for each of the costs in the two subperiods and the total forecasting period are displayed in **Table 4**.

To conclude, the values of other operating profit/losses were assigned to the "Others and Cons. Adjustments" segment since it was not a part of any of the subsidiaries in particular. For the current year, the value increased to €-75 million, more than double the value registered in 2021 because of the donations and other solidarity measures implemented by Jerónimo Martins related to the Ukraine war. So, for the future, it was assumed to be a constant value of €-34 million according to the value stated in 2021 prior to the war.

EBITDA

The company's earnings before interest, taxes, depreciation, and amortization (EBITDA) corresponds to the company's ability to generate value through its normal operations. The consolidated EBITDA achieved an estimated value of €2 billion in 2022, a 26.2% increase compared to the previous year. The high revenue growth rate was one of the main reasons for that result, which in our analysis will continue to grow until perpetuity. Moreover, to better understand the profitability of the company we decided to compute the EBITDA Margin which measures the operational profitability generated by one euro of revenues.

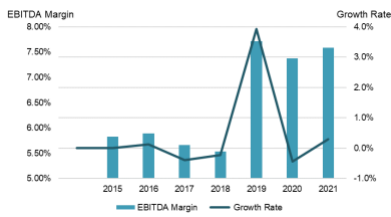
Looking at the historical value of the consolidated EBITDA Margin, the ratio has remained stable until 2018 at around 5.7%. However, in 2019, with the implementation of the IFRS-16 standard in the company's accounting methodology, the margin increased to 7.7%. Because, according to this new approach, an asset rented by the company is recognized as part of the balance sheet, whereas previously it was accounted for in the income statement as part of the operating costs (under item "rents").

Table 4: Costs CAGR

| CAGR | 2022-2026 | 2027-2033 | 2022-2033 |
|----------------------|-----------|-----------|-----------|
| Cost of Sales | 10.0% | 4.4% | 7.4% |
| Distribution Costs | 10.2% | 4.2% | 7.3% |
| Administrative Costs | 9.3% | 4.1% | 6.9% |

Source: Team consensus

Figure 17: Historical EBITDA



Source: JMT's Annual Report

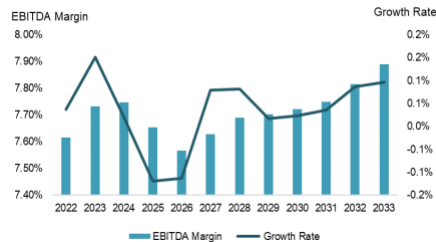
In the next year (2020), the ratio decreased to a value of 7.4%, due to the slower increase in sales (only 3.5%), which was insufficient to cover the 14.5% growth rate in operating costs caused by the covid-19 pandemic.

Furthermore, after a year of intense restrictions that severely impacted the company, Jerónimo Martins managed to recover in 2021, achieving an 8.3% growth in revenues that increased the EBITDA margin to 7.6%, close to the value registered in 2019, before the pandemic (**Figure 17**). To better understand the performance of the company in an environment filled with uncertainty and volatility we decided to analyze each subsidiary's results:

- Biedronka increased both distribution and administrative costs by 26.20% and 19.76% respectively, mainly caused by the price increase of fuel and electricity. Nevertheless, in 2021 the EBITDA margin was 9.2%, which only translates to a 0.1 percentage point decrease compared to the previous year. This was only possible due to the implementation of a low-price investment strategy to alleviate the consumers from the sudden cost increase.
- Hebe presented strong EBITDA performance in 2021 with an increase in the total EBITDA of 37.95% compared to 2020 and an increase in EBITDA margin of 1.39 p.p. in the homologous period. One of the main factors for this growth was the lifting of restrictions in Poland which increased the demand for Hebe's products (visible in the 16.58% revenues increase in 2021).
- Pingo Doce, in line with the other subsidiaries, also saw an increase in its distribution and administrative costs, however, the recovery process from the pandemic on the country led to an increase of sales that more than offset this increase of costs (revenues increased 4.57% from 2020 to 2021) resulting in the EBITDA margin raising to 6.03%, an increase of 0.27 p.p.
- Recheio performance also benefited from the reopening of the economy and country's frontiers to alleviate the negative impact of the pandemic. Even though it still did not reach pre-pandemic levels, Recheio was able to leverage the increase of tourists and lifting of food services restrictions to increase its revenues and its EBITDA margin compared to the previous year. The value of the ratio in 2021 was 4.75%, above the 3.90% of 2020, but still under the 5.3% threshold of pre-pandemic levels.
- Ara's EBITDA margin in local currency amounted to 2.36%, hence establishing the first fiscal year when the company becomes profitable in terms of operational result. One of the major causes of this result

was the recovery from the pandemic because it enabled the company to register a large increase in sales (36.5% compared to 2020) and a lower increase in operating costs. Distribution costs only grew 7.05% in 2021 compared to a 20.68% increase in 2020 and administrative costs only grew 9.77% compared to the 17.73% increase in the previous year.

Figure 18: Forecasted EBITDA



Source: Teams Consensus

For the forecasted period, the EBITDA margin of Jerónimo Martins has remained stable from 2022 to 2026 around the values of 7.6% and 7.7%, which were based on more concrete assumptions of both revenues and operating costs and previously explained. Afterward, in 2027 the values started to increase because of the expectations that operating costs started to weigh less as a percentage of company revenues, allowing the EBITDA margin to register a value of 7.9% in 2030 (Figure 18).

Net Working Capital

JMT has an impressive Cash Conversion Cycle (CCC) of about -65 days in 2021, a result of a very low collection period (1 day), a low holding period (25 days), and a high payable period (90 days). JMT suppliers are financing the company's operational activity, leading to low execution risk and low pressure on the firm's liquidity. We estimate the CCC to remain stable during the forecasted period, although with some differences between banners: Biedronka and Hebe's of -53 days, Pingo Doce's, Recheio's, and Ara's of -67/68 days.

JMT carefully manages its working capital, and the proof of that is the impressive stability of the working capital (WC) around the -12% to -13% percent range of its revenues. Therefore, the company will maintain the WC stable in that range in our forecasted analysis.

CAPEX

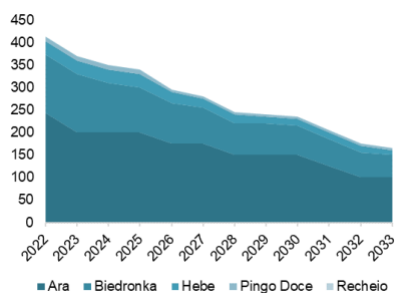
JMT capital expenditures (CAPEX) are hard to forecast due to two main limitations. Firstly, JMT CAPEX numbers appear out of the blue, so we could not reconcile the company's CAPEX numbers with the ones the team calculated through the consolidated financial statements. Secondly, JMT incorporated the IFRS 16 in 2019, making historical data before 2019 "useless" because, without proper conversion, we cannot use it to forecast future years. Therefore, we opted not to convert this data as, in our opinion, the benefit of converting it was residual.

Despite the limitations mentioned, we tried to find a reasonable metric we could use in the future to forecast capital expenditures. In this way, the metric we chose

was long-term assets – defined as the sum of tangible and right-of-use assets – per hundred square meters. We selected this ratio because it incorporates the square meter area of the store network and, indirectly, the total number of stores a given banner has. In addition, it is stable in the historical window from 2019 to 2021.

To reach the forecasted long-term assets per hundred square meters, we need to follow the next steps:

Figure 19: Total Number of Stores Forecast



Source: Teams Consensus

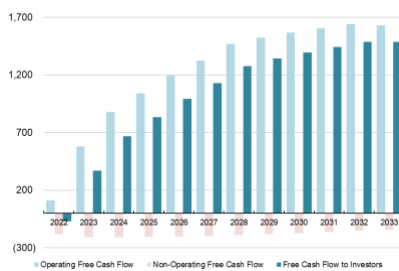
- Forecast the number of new stores. The number of stores was forecasted considering JMT’s 2022 outlook and team consensus. **Figure 19** shows our forecast.
- Forecast the average number of square meters per store. The average square meters per store differs between banners due to their strategic differences. That said:
 - Biedronka, Hebe, and Pingo Doce will increase their average square meters per store ten percent less than the previous year growth rate. In this way, the banners will approach a mature phase throughout the years, where the average square meters per store stays mostly the same.
 - Ara and Recheio will keep the average square meters per store stable for varied reasons. Ara’s history shows us that the average square meters per store are pretty much the same, and by the sales figures, the strategy is working, so we do not see a reason for the average square meters to change. On the other hand, we do not expect Recheio to open new stores, so consequently, the average square meter per store will not change as well.
- Multiply the average square meters per store by the total number of squares to get the total square meters.
- Multiply the total square meters by the long-term assets per hundred square meters, then divide the result by a hundred to get the total value of the long-term assets. It is important to note that the long-term assets per hundred square meters evolve with inflation. For example, if inflation is 3% in a given year, we expect the long-term assets per hundred square meters to increase by 3%.

Finally, we allocate a percentage of long-term assets to get long-term assets divided into tangible and right-of-use assets. Historically the percentage of tangible assets (right-of-use assets) is around 64% (36%), so we used this percentage for our forecasting period.

Notwithstanding, for the “Others and Cons. Adjustments” segment, we estimated long-term assets differently. We saw that this segment tends to have 6% of the main banners’ long-term assets. Thus, we just multiplied the long-term assets of the main segments by this percentage.

Cash Flows

Figure 20: Free Cash Flow Forecast



Source: Teams Consensus

In 2022, the first year of our forecasting period, we expect the values of the consolidated Operating Free Cash Flow to be €110 million and the Equity Cash Flow to be €-582 million, respectively. We also expect the Non-Operating Cash Flow to be €-180 million and the Debt Cash Flow to be €652 million, respectively (Figure 20).

In 2022, the first year of our forecasting period, the free cash flow (FCF) values are negative across all subsidiaries except for Biedronka. Therefore, the consolidated Operating FCF in 2022 decreased by 90.49%, obtaining a value of €74 million due to the high increase in CAPEX from the significant investment in store openings. However, over time the values of each subsidiary will improve, originating a CAGR of 9.2% from 2026 to 2028 and 2.2% from 2029 to 2033 in the consolidated FCF. In addition, each subsidiary registers a positive Operating FCF in 2033, the year before the terminal growth in perpetuity.

Valuation

WACC Calculation

Since we are doing a valuation divided by subsidiaries, a sum of the parts (SOTP), we decided to calculate the discount rate for each of them that will later be used to discount their cash flows to the present value. We assumed that the company implements a similar capital structure for each subsidiary, equal to the overall capital structure of the Group, which according to the company, is intended to remain stable in the future, particularly over our forecasted period.

At the time of the valuation, the market capitalization (market value) of JMT was around €12 billion and the market value of Debt, according to Refinitiv, was €1.3 billion, resulting in a Market Debt- to Equity (D/E) of 11%.

To calculate the levered beta (β), we selected a group of comparable companies for each subsidiary based on the business activities they conduct, their geographic positioning, and the similarity of their market capitalization compared to Jerónimo Martins. Then we aggregated the daily returns of each company, from May 2013 until the beginning of November 2022, getting 2418 data points for most of them. However, some companies were not publicly traded at the

beginning of the period, so we only used the available period from when they started publicly trading. Additionally, we collected the same data points for the following indexes: Psi-20 (Portuguese market index (Mi)); WIG (Polish Mi); MXX (Mexican Mi); FTSE (British Mi); FCHI (French Mi); MSCI Europe Consumer Staples index and S&P Latin America 40. Subsequently, we performed a linear regression between each company and each respective index; for Portuguese companies, we used Psi-20; for Polish companies, we used WIG, and so forth; for British, French, and Mexican companies. For other European companies, we used the MSCI Europe Consumer Staples index, and for other south American companies, we decided to use S&P Latin America 40. The result of each linear regression was the levered beta of each company from the peers' group; however, we needed to exclude the effects of the capital structure of each company from this value to calculate the unlevered beta of each peer that would later be used to calculate the unlevered β of each subsidiary, which we did using the following formula.

$$\beta_{unlevered} = \frac{\beta_{levered}}{1 + (1 - Tax\ rate) * \frac{D}{E}}$$

Table 5: Peers Betas

| Identifier | Market Cap | Net Debt | Levered Beta (t) | Unlevered Beta |
|-------------------------|------------|----------|------------------|----------------|
| JMT.LS | 11,76B | 1,32B | 0,80 | 0,74 |
| Biedronka Peers | | | | |
| DNP.WA | 36,04B | 1,06B | 0,73 | 0,71 |
| AXFO.ST | 54,65B | 7,27B | 0,47 | 0,42 |
| CARR.PA | 12,5B | 11,6B | 1,01 | 0,59 |
| KESKOB.HE | 11,46B | 1,91B | 0,68 | 0,60 |
| Hebe Peers | | | | |
| 4MSP.WA | 0,055B | 0,004B | 0,87 | 0,83 |
| PHR.WA | 0,088B | 0,008B | 0,94 | 0,87 |
| GLC.WA | 0,401B | 0,044B | 0,70 | 0,64 |
| LAV.BB | 0,038B | 0,003B | 0,11 | 0,10 |
| Pingo Doce Peers | | | | |
| YSO.LS | 2,01B | 1,77B | 1,04 | 0,58 |
| MKS.L | 3,09B | 2,55B | 1,01 | 0,62 |
| TSCO.L | 21,87B | 10,71B | 0,71 | 0,52 |
| AD.AS | 31,51B | 13,74B | 0,61 | 0,45 |
| Recheio Peers | | | | |
| MARR.MI | 1,26B | 0,15B | 0,67 | 0,62 |
| EUR.WA | 1,51B | 2,92B | 0,73 | 0,65 |
| B4B.DE | 4,08B | 3,2B | 0,95 | 0,88 |
| ATP.WA | 0,05B | 0,05B | 0,36 | 0,22 |
| Ara Peers | | | | |
| CHDRAUIB.MX | 805,15B | 552,4B | 0,68 | 0,46 |
| IMI.CN | 51429,7B | -541,26B | 0,41 | 0,41 |
| SORIANAB.MX | 467,64B | 157,57B | 0,51 | 0,42 |
| GMAT3.SA | 133,22B | 11,17B | 0,97 | 0,89 |

Source: Refinitiv

Afterward, we decided that the unlevered β of each subsidiary would be computed by doing the average of its peers' unlevered beta and the unlevered beta of the whole company, resulting in the unlevered betas present in **Table 5**. Moreover, we assumed a Debt beta equal to 0 (Debt is risk-free compared to an equity investment; therefore, the volatility of Debt is equal or remarkably close to 0) and re-levered the previously calculated β (using the formula below), according to the capital structure of each subsidiary, resulting in the levered beta used to calculate the cost of equity, present in Table 7. The tax rate used to calculate each subsidiary levered β corresponds to the effective tax rate of the country in which each of them operates.

$$\beta_{levered} = \beta_{unlevered} + \frac{D}{E} * (\beta_{unlevered} - \beta_{Debt}) * (1 - Tax\ rate)$$

We calculated the cost of equity of each subsidiary according to the Capital Asset Pricing Model (CAPM) formula described below, using not only the "Equity Risk Premium" but also the "Country Risk Premium" (values used in **Table 6**) since most of the countries in which the company operates suffer from multiple risks such as the lack of liquidity in the stock market and unstable economic and social environments. (Aswath Damodaran, 2022).

$$rE = Rf + \beta_{levered} * (Equity\ Risk\ Premium + Country\ Risk\ Premium)$$

Table 6: Country Inputs

| Country Inputs | Portugal | Poland | Colombia |
|------------------------------|----------|--------|----------|
| Tax rate per country in 2021 | 22,5% | 19,0% | 35,0% |
| Country Risk Premium | 1,9% | 0,8% | 1,9% |
| Risk-free rate (10Y) | 2,8% | 5,9% | 13,2% |
| Equity Risk Premium | 4,2% | 4,2% | 4,2% |

Source: Refinitiv, World Government Bonds, Team Estimates, Damodaran

For each subsidiary, we assumed the risk-free rate to be the yield of each government's ten-year bond (Portuguese, Polish and Colombian), visible in **Table 6**. Regarding the cost of Debt, we decided to use the previously mentioned risk-free rates plus a credit risk premium based on the company's past tradable bonds. Finally, we used the following equation to compute each subsidiary's weighted average cost of capital (WACC), resulting in the values presented in **Table 7**.

$$WACC = rE * \frac{E}{EV} + (1 - Tax\ rate) * rD * \frac{D}{EV}$$

Since each subsidiary has a different influence on the overall performance of the Group, the WACC of each subsidiary will also have a different impact on the Group's WACC. Therefore, we decided that the weighted method would be the percentage of total revenues in 2021 since it is the indicator that we found to be the most accurate in representing the individual impact of the company, which means that the subsidiary that has more influence on the Groups WACC is Biedronka since in 2021 it represented 69.62% of the total revenues of the company. Therefore, reaching a Group's WACC of 8.9%.

Table 7: WACC

| | Biedronka | Hebe | Pingo Doce | Recheio | Ara | Consolidated |
|------------------------------------|--------------|--------------|--------------|--------------|---------------|--------------|
| Cost of equity levered (Re) | 9,29% | 9,44% | 6,68% | 6,95% | 17,08% | |
| β levered (Equity beta) | 0,67 | 0,70 | 0,63 | 0,68 | 0,63 | |
| β debt | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | |
| β unlevered (industry) | 0,61 | 0,64 | 0,58 | 0,62 | 0,58 | |
| Cost of equity unlevered (Ru) | 9,01% | 9,14% | 6,37% | 6,62% | 16,82% | |
| Cost of debt (Rd) | 8,96% | 8,96% | 5,88% | 5,88% | 16,31% | |
| Credit Risk premium | 3,06% | 3,06% | 3,06% | 3,06% | 3,06% | |
| WACC | 9,1% | 9,2% | 6,5% | 6,7% | 16,4% | 8,9% |

Source: Teams Consensus

Discounted Cash Flow

In order to value Jerónimo Martins, we decided to use the Discounted Cash Flows model (DCF) since we believe it to be the most accurate method to capture the consolidated Group's value and the subsidiaries' value. Hence, we made two analyses. On the one hand, a DCF for the whole Group using the Group's WACC of 8.9% to discount the total Free-Cash-Flow of each year to the present value, assumed to be the end of December of 2023.

On the other hand, we computed a sum of the parts evaluation by calculating each subsidiary's value by discounting each's FCFs by their respective WACC presented in the previous section (**Table 7**) to the same moment in time as the one presented above. Additionally, we used the FCFs in local currency to disregard the effect of future changes in the interest rates of the different

countries, therefore after discounting these cash-flows with the accordingly WACC; we used the current spot rate (as of 30/11/2022), to convert the present value of each company from local currency to Euro to be able to sum them and obtain JMT's total core enterprise value.

To calculate the terminal value for the company and each subsidiary, we needed to calculate the perpetuity growth rate that would be used to determine the Group's and subsidiaries' growth after the forecasted period, from 2033 onwards. It is assumed across the report that in the future, the company as a whole and each subsidiary will tend to grow at approximately the same rate as the long-term growth of the economy, which according to specialists, will be around 1.5% to 3.5% (International Monetary Fund, 2022).

Firstly, focusing on the Group consolidated analysis, by discounting the Core FCFs by the Group's WACC, we reach a Core Enterprise Value of €18 372 million. By applying the same method for the Non-Core FCFs, we reach a non-Core enterprise value of €-2.033 billion. Deducting the Net Debt and the Non-controlling interests (assumed to remain constant over the forecasted period and equal to its value in 2021) results in a total Equity Value of €14.316 billion, which divided by the 629 million shares outstanding results in a value per share of €22.74 which represents a 10.2% upside compared to the value of the share on the 14th of December 2022, thus earning a BUY Recommendation.

On the other hand, on the SOTP analysis, by discounting each of the subsidiaries' local Core cash-flows with the respective WACC, the resultant Core Enterprise value for each company is present in **Table 8**. The sum of all the subsidiaries' Core enterprise value equals €18.478 billion. Since the value of Net Debt and non-Core enterprise value are equal to the ones presented above, by deducting them, the total Equity value of the company is equal to €14.422 billion, divided by the total shares outstanding, resulting in a value per share of €22.91 which represents a 11.0% upside compared to the value of the share in thus also earning a BUY Recommendation for JMT's stock.

Table 8: Valuation

| Discounted Cash-Flow Model | Consolidated | SOTP |
|--------------------------------------|-----------------|-----------------|
| Biedronka Core Enterprise Value (M) | | € 16 260 |
| Hebe Core Enterprise Value (M) | | € 375 |
| Pingo-Doce Core Enterprise Value (M) | | € 1 338 |
| Recheio Core Enterprise Value (M) | | € 1 529 |
| Ara Core Enterprise Value (M) | | -€ 506 |
| Others & Cons Adjustments (M) | | -€ 1 807 |
| Core Enterprise Value in EUR | € 16 984 | € 17 188 |
| Non Core Enterprise Value (M) | -€ 2 042 | -€ 2 042 |
| Net Debt (M) | -€ 1 769 | -€ 1 769 |
| Non-controlling interests (M) | -€ 254 | -€ 254 |
| Equity Value | € 12 919 | € 13 124 |
| Number of shares (M) | 629 | 629 |
| Value per share | € 20,53 | € 20,85 |
| Current Share Value | €20,64 | €20,64 |
| Total Expected Return | -0,6% | 1,0% |

Source: Teams Consensus

This is the method that we considered to be the most accurate since the analysis involved a greater detail of the variables impacting each subsidiary. Thus, being the value assumed as the expected price in FY of 2023.

Relative Valuation/Multiples Analysis

Peers Multiples valuation was achieved using the multiples EV/Revenues, EV/EBITDA, EV/EBIT, and P/E for each subsidiary's peers.

This selection was mainly made through industry, geography, and market cap filtering according to the subsidiary we want to compare. The comparables were found using the Screener App on Refinitiv Workspace. All peers had to be public to have better access to their multiples.

For Biedronka, the criteria used to find a peer that best fitted the company was:

- In the first place, the industry, which belongs to the sector of Consumer Non-Cyclicals, with the industry name of Food Retail & Distribution.
- For the geography, the comparable had to operate in Europe (Eastern and Northern), to get a better perception and relatability of the European market.
- Finally, the market cap had to be greater than €1 billion.

For Hebe, the criteria used to find a peer that best suited the company were:

- The geography had to be in Europe, in order to get a better perception and relatability of the European market.
- Market cap wasn't filtered since there were already few options and the industry, which is in the sector of Consumer Non-Cyclicals with the name of Personal & Household Products.

About Pingo Doce, the criteria were similar to the ones used for Biedronka, but this time captured more peers in Central, Southern, and Western Europe. Same industry and same market cap filtering.

Recheio's peers' requirements only differ from those for Pingo Doce in terms of the industry because it is more appropriate here to select companies that are in the "Cash & Carry" business.

Finally, relative to Ara's peers, six Discount Stores in Latin America were elected.

Also, this valuation was done based on historical multiples (2021) and forecasted multiples (2022, 2023, and 2024). Although the share values were computed for all years, for the purpose of this valuation, it was given more relevance to the valuation computed for 2022, since the multiples are more accurate.

Since we do not have enough data to be able to compute these multiples for each subsidiary, in this analysis, the multiples obtained in all peers are going to be compared to the multiples of the whole Group.

Regarding EV/Revenues, which was the first multiple analyzed, JMT presents a value of around 0.65 in 2022. In this case, Biedronka and Hebe's peers present an average value for this multiple higher than the whole group (1.04 and 1.854), which might lead us to think that is because of the geographical regions where they operate (operating in central/northern Europe). Recheio's peers present a value a little bit lower than the whole group's EV/Revenue, but if this value is further analyzed, we can see that it is quite typical in the Cash & Carry Business to have lower ratios, while the "Health & Beauty" industry has higher multiples. The tendency for the following years for JMT as a group is to see this multiple decrease to 0.54 in 2023 and 0.48 in 2024, but that is a pattern for all peers.

About EV/EBITDA, JMT is expected to present a value of around 8.49. The same happens as in the previous multiple since we see Biedronka and Hebe peers presenting higher multiples (11.65 and 11.866, respectively). The remaining subsidiaries reach a lower value for the multiple, around 6x. This ratio is expected to decrease in the following years, but also move according to the comparable's ratios.

EV/EBIT for the whole group represents a value of 14.03 in 2022 (expectedly). In this case, all subsidiaries' peers but Ara's presented values higher than the Group, which might give indications that this ratio is below the average. In the upcoming years, it is anticipated a decline in this ratio.

Finally, for the P/E, the expected value for the Group is 21.27x. This value is a little bit higher when compared to all peers but is also expected to decrease in the future.

Utilizing the first three multiples, we were able to compute the Enterprise Value (EV) of each subsidiary, and then aggregate it to achieve the whole Group's EV. Once the Group's EV was reached, the only thing left was to remove the Net Financial Assets, and then divide it by the number of shares outstanding.

Regarding the last multiple (P/E), since we don't have the EPS of each subsidiary, we had to conduct the valuation for the Group itself, taking into account all peers.

To reach a final value for the share price of JMT, it was given to all multiples the same weight, since there's no outlier. To achieve this value, it was done an average of all the median share values for the four multiples in 2022, achieving a share price of €23.28 (the following 2 years serve only as a benchmark and for consulting).

Also, another method to perform a Relative Valuation is to analyze the multiples in the past transactions of this industry. This is a way of valuing businesses in which the price paid for comparable companies in the past is taken into account as a gauge of the company's value.

In order to select past transactions that are appropriate and that fit the purpose of this valuation, criteria had to be defined. Also, this method was performed for the Group and not for each subsidiary.

The chosen criteria to select the past transactions were: geography, since JMT is a European company, it only made sense to choose past transactions that occurred in Europe; the Deal Status had to be already completed; the target of the transaction had to be public, in order to know accurately the multiples associated with this transactions; the time frame, which we selected only from 2019 until now, in order to have updated and recent market values; transaction type could only be a Merger, an Acquisition or a Stock Purchase; the target had to operate in the industry of "Food Retail & Distribution" and, finally, the equity of the target had to be higher than €1 billion. Using these criteria, five past transactions were selected.

The same multiples were considered (EV/Revenues, EV/EBITDA, EV/EBIT, and P/E). In this case, the valuation was performed using LTM data, and the results were undervalued for all ratios. One should highlight that the EV/EBITDA was the multiple that provided the lowest value.

There was no multiple disregarded since, although the transactions are below what is the JMT's reality, there is no big outlier (the EV/EBITDA median value of 6.554 provided the lowest share value, but there is not that much of a difference when compared to the JMT's ratio of 8.29 for this multiple). With that being said, the same method was utilized. It was given to all multiples the same weight and the average of the median share values for all multiples LTM and achieved a final share value of €18.31.

Regarding Past Transactions, in the time span of approximately three years, five transactions were selected based on the industry (Food & Beverage Retail) and the transaction is made in Europe, with the target having an equity value of more than €1 billion. Again, the same multiples were considered, and the value was achieved the same way as the previous method (doing the average of the medians of all multiples), achieving a share value of €18.31.

Sensitivity Analysis

In order to estimate how sensitive, the share price target is to a setting of impactful variables of the model, we used a sensitivity analysis.

To start, we analyzed in more detail the sensitivity of the share price when fluctuating the WACC and the terminal growth rate, both considered to be key variables. First, the terminal value weighs around 51% of the total enterprise value, so the terminal growth value is very important for the final target price. If all variables remain the same and the terminal growth rate varies between 0.5% and 2.50%, the share price will range from €20.82 to €25.27. Then, the WACC is used in the DCF method as the discount rate for future cash flows to derive an enterprise value. The WACC values used in the sensitivity analysis are between 7.97% and 9.74%, which affects the share price achieving values from €26.91 to €19.48 respectively (assuming a constant terminal growth), since the WACC has a negative correlation with the share price.

In line with this analysis, to test the stability of the company target share price, we increased and decreased by 10% some of the key line-item assumptions of the model. As expected, the estimated share price is more sensitive to the discount rate used (WACC), meaning is the metric that affects more the share price of Jerónimo Martins (e.g., a 10% increase in WACC lowers the implied value by 14.34%). As mentioned, the consolidated firm's WACC was calculated according to each subsidiary discount rate, which makes the value much more accurate, since we accounted for various specific factors in each segment. The second largest risk factor is the Revenues values, in which a 10% increase (decrease) in revenues would generate a 3.32% rise (drop) in share price. Therefore, revenues were the item that suffered a more detailed analysis, as it was previously explained, to estimate future values that were highly accurate.

The other factors that were analyzed were the operating costs, Capex, terminal growth and EBITDA, which were not as relevant for the share price, since a 10% increase or decrease would only originate a change of less than 1.17%.

Scenario Analysis

Even though the assumptions and the data used across the model are well supported, unforeseeable events may cause a complete disruption in the objectivity of the model. In fact, recently, two of these events occurred, them being the Covid-19 pandemic that, as was stated before, affected companies, governments, and populations globally. Interfering with consumers' habits and liberties, causing disturbances in supply chains and political crises were some of the consequences that this event brought. Additionally, the war in Ukraine also caused significant changes in the world, for instance, the rise of raw materials, energy, and commodities prices. Therefore, financial analysts saw their forecasting models turn unreliable and obsolete, which is why in our analysis, we believe it is essential to consider what would happen to the company's value if changes in its operational structure occurred. To this end, we decided to do a

scenario analysis where we change the variables that most influence our model, them being Revenues, Operating costs, and the Number of stores.

Nevertheless, we assume that the changes will take time to occur; hence only after 2022 will there be changes in these factors. Moreover, as stated before, after 2026, the company will start to enter a stable growth stage, and the overall growth of the company will tend to the global economic growth. Also, our main forecast analysis will be considered the base scenario for the two scenarios presented.

In terms of revenues, we decided to incorporate an additional yearly growth rate (positive or negative depending on the case analyzed) to the local revenues of each subsidiary in local currency to eliminate any Fx gain or loss that may occur from changes in exchange rates, hence only accounting for the organic growth of each company. We decided on the growth rates based on the opportunities that each company has and that we found essential to explore; for example, Ara has been growing exponentially in Colombia, however in it is only present in three regions (Coffee-Growing Region, Bogota, and the Caribbean Cost), in our opinion, if it can increase its expansion plans than it would generate higher revenues as customers are responding very well to the strategies that the company is implementing such as EDLP and strong and relatable commercials. On the other hand, companies like Biedronka and Pingo-Doce are leaders in their countries and have more mature operations, will tend to have more difficulties in increasing their sales at a much larger growth rate.

Concerning Operational costs, we will also implement an additional yearly growth rate for each subsidiary in terms of local currency costs. The growth rates that we decided to use in each scenario are symmetrical variations for each company, representing the possibility of the company becoming more efficient in operations management, negotiating better prices with the suppliers, or reducing the costs related to staff and transportation. On the other hand, we also want to analyze the inverse situation, where costs are increased due to operations limitations, loss of buying power, or other reasons that may cause the increase in costs.

Lastly, regarding the number of stores, we decided to vary the projection of store openings since JMT only makes expansion plans for the next financial year. It is essential to evaluate how the company's results are impacted if it can open more stores than the ones we predict. On the other hand, what happens if the number of store openings we estimated is too high and there are fewer openings. We assumed symmetric movements for the number of additional or fewer store openings (depending on the scenario), except for Recheio, which will have no additional store openings or closings.

- Bull Scenario

In this scenario, we will assume that the company will surpass our expectations and will be able to increase its revenues in all its subsidiaries, reduce its operating costs and exceed the project store openings. We decided that the maximum yearly additional growth would be 2%, and the company with higher growth potential is Ara (for the reasons explained before), followed by Polish subsidiaries and then Portuguese companies. We believe that this additional increase will not be sustainable over time. Therefore, we reduce 0.25 percentual points (p.p.) to the previous year's additional growth until it reaches zero (which is the case of Pingo-Doce and Recheio after 2025). Regarding costs in this scenario, we decided that the maximum yearly operational cost savings are 2% in 2023 by Ara.

Moreover, we assumed that this improvement would not be sustainable in the future; therefore, the percentual decrease rate in operational cost will decrease by 0.25 p.p. each year until it reaches 0. Finally, in terms of store openings, we assumed that the subsidiaries with higher projections for stores opening would have more additional store openings; therefore, the companies with more exceeding openings are Biedronka and Ara. On the other hand, Recheio only has one projected opening every two years, and since it has been constant over the years, we believe that the company will keep this policy, thus not having any additional openings.

Looking at the impact on the Group's consolidated performance, the revenues increase led to an additional long-term growth of 2.5% in the total revenues and a cost decrease of 2.4% until 2033, both cases compared to the forecasts calculated before. The combination of these changes causes a long-term increase in the EBITDA Margin of 0.6 percentual points (8.4% growth) in 2033 compared to the same period on the initial forecast. This means that the company is more efficient in its operations, thus causing a visible effect in the Operating Free-Cash Flow generated by the company, which in 2033 shows a 24% additional growth compared to the base scenario.

Finally, by implementing these values in the SOTP DCF valuation method, we reach a new value per share of 27.67€ at the end of 2023, representing a 4.99€ increase (22%) from the base scenario. Compared with the price on the 14th of December 2022 (20.64€), it represents a 34.1% upside, thus receiving a hypothetical BUY recommendation.

- **Bear Scenario**

In terms of revenue additional growth, in this scenario, we assume that a possible event that damages the company's revenue growth rate will occur, which will cause them to be lower than the one previously computed in the base scenario, and the values assumed for each subsidiary are available in Table X. Regarding costs, we considered that the company instead of being able to decrease them, it would increase them. Either by the lack of operating efficiency or an increase in the distribution or administrative costs in an inverse percentage of the previous scenario.

As expected, this leads to a decrease in consolidated revenues, as well as an increase in operational costs across the analyzed period. This causes a long-term reduction in the EBITDA Margin of 0.7 percentual points (-8.2%) compared to the base scenario, consequently causing a decline in the Operational Free-Cash Flow.

Ultimately, by implementing the same valuation method as in the previous scenario, we reach a value per share of 18.63€, 4.05€ less than the base scenario (18% decrease), meaning that the price of the stock in December 2022 is overvalued, causing a negative expected return of 9.7% thus representing a SELL recommendation.

- **Conclusion**

This allows us to understand that if the company suffers structural changes caused by either endogenous or exogenous factors, investors need to be attentive to the stock's valuation since it can quickly change from a HOLD Recommendation to a SELL or a BUY. Besides, our base scenario is the one that best represents the most accurate valuation of the company, and therefore, it will be the one we choose as the final value of the share at the end of December 2022.

Investment Risks

Financial Risks

- **Foreign Exchange Risk**

Foreign exchange risk is related to the impact of a company engaged in international transactions that involve different currencies from the one the company usually uses. The volatility of exchange rates can severely impact a company's results and strategies. Poland and Colombia represent the principal

sources of exposure to the Group's foreign exchange risk. This is because the transactions executed in these countries involve multiple currencies, namely the Zloty (in Polish operations), Colombian Pesos (in Colombia), and Euros and US Dollars. The Group uses a natural hedging policy by contracting debt in local currency when it deems it advantageous. Since the transactions in these countries are typically short-dated, forward purchases of the payment currency can cover the exchange rate risks of specific procedures such as the import of goods. If the transactions have distinctive characteristics that inhibit using these hedging instruments, the company negotiates hedging strategies using derivative instruments such as swaps and options.

- **Interest Rate Risk**

Interest rate risk results from the possibility of a loss of value in an investment caused by unexpected changes in interest rates caused by unforeseen events, such as the pandemic and the war. This risk is inherent to all financial liabilities since they are either directly or indirectly indexed to a reference interest rate, putting the Group's cash flow at risk. Therefore, as a preventive mechanism, the Group implemented regular risk assessments. The risk associated with interest rates is regularly assessed. Sensitivity tests to changes in the interest rate level are also carried out to evaluate future interest expenses based on forward rates. The main ones the Group is exposed to are the Euro, the Polish Zloty, and the Colombian Peso interest rate curves.

- **Credit Risk**

This risk results from the possibility of entities being unable to fulfill their contractual obligations. Jerónimo Martins is exposed to this risk due to the nature of its business since it can grant credit lines to some of its customers, especially in the Cash & Carry business. Also, the hedging instruments contracted to financial institutions may also be exposed to the risk of the institution not guaranteeing the conditions agreed upon in the future. Another exposure is in the company's bank deposits, to which the bank may limit its access. The company controls these risks by choosing institutions based on a minimum approved rating emitted from independent benchmark credit risk rating agencies and defining a maximum exposure to each financial institution. Regarding the Cash & Carry segment, the Group limits its exposure by limiting credit lines, contract credit insurance, and doing due diligence on the customer's background and financial position.

- **Liquidity Risk**

Liquidity risk corresponds to the threat that the company faces due to the inability to meet the payment obligations on time, therefore incurring in losses. One of the

main factors that generate more of this type of risk in companies is related to the lack of liquidity of the company's assets. That is, even though the company has a significant excess of assets compared to liabilities, they are not liquid; therefore, they cannot be used to pay current liabilities, thus risking putting the company in an insolvency situation. Hence, it is essential that companies can professionally manage their current assets and liabilities. One way to control this risk is negotiating advantageous credit lines that ensure the normal development of the Group's activities and provide some flexibility to absorb shocks unrelated to those activities. JMT applies the methods described above in managing this risk but to better understand its liquidity position, we computed three ratios: Current Ratio, Quick Ratio, and Cash Ratio. These ratios are meant to evaluate the firm's ability to meet its short-term obligations. Firstly, the Current Ratio, which measures the firm's ability to meet its short-term obligations using all its short-term assets, should be higher than one so that the company verifies the minimum short-term financial equilibrium. However, this ratio, historically, was never above 0.58, which raises some concerns about the company's liquidity position.

The Quick Ratio measures the firm's ability to meet its short-term obligations using the assets that are more likely to be "quickly" converted into cash, excluding inventories. This ratio was never above 0.38 (FY2021), thus increasing the risk in the company's liquid position. Lastly, the Cash Ratio, which measures the firm's ability to meet its short-term obligations using only Cash and Equivalents (assets that are very easily converted into cash), was never higher than 0.28 (FY2021); thus, if for some reason the company is forced to pay a large segment of its current liabilities it most likely will have to liquidate non-current assets. This can be a problem for the company because financial institutions will impose worst financing terms due to the challenging liquidity position of the company. Therefore, this subject should be addressed; however, it could also mean that the company implemented an expansion and innovation strategy (which it did in most of its subsidiaries) that required more money invested in the business. Additionally, it is worth mentioning that all these ratios have been significantly improving since 2015.

- **Capital Risk Management**

This risk arises from the company's capability of absorbing (or not) the impact of the risks previously described. The Group has a clearly defined strategy to manage this risk to guarantee the continuation and growth of its operations and to provide reasonable returns while optimizing its cost of capital. There are two main ratios that the Group finds to be ideal for monitoring this risk; they are the Gearing Ratio (Equity/Net Debt) and the Net Debt/EBITDA ratio. According to the company, the first one should be below 100%, which, historically (until 2021), the

company has accomplished, never surpassing the value of 56% and even reaching a negative value (-3%) in 2016. The second ratio should always be below 3, which the company has been able to maintain, reaching a maximum historical value of 1.77 in 2019, meaning that the risks of incurring in a situation of financial distress are lower due to the effective strategy of the company.

Operational Risks

- **Food Quality and Safety Risk**

Throughout the years, several food scandals in the food industry have been impacting the industry's reputation and consumer confidence in the sector. Products that were contaminated were sold, causing health injuries to millions of people, and since companies were not able to guarantee the safety of equivalent products, it also caused significant losses in the results of the intervenient players. One example of these scandals is the contamination of a lot of spinach from a single producer that caused a nationwide outbreak of E. coli in the US. Since JMT's operations involve the transaction of food products, it should be one of the firm's primary concerns to guarantee food quality and safety because if it is not able to do it, not only will it lose consumers' trust, but it will also be required to pay massive fees and compensations to the hazard people.

Acknowledging the importance of the before mentioned, JMT carefully manages this risk by ensuring that each business unit has a Quality and Food Safety Department responsible for monitoring the products across the logistic process, thus guaranteeing rigorous compliance with food safety and quality requirements. Additionally, quality control professionals supervise each business unit to ensure that procedures are followed as regulated and evaluate the efficiency of training programs. Additionally, they assess the suitability of buildings and equipment.

- **Environmental Risks**

Environmental risks incorporate the probability and consequences of human or natural factors that cause unexpected ecological hazards. Identifying, evaluating, and managing environmental hazards is critical to Jerónimo Martins's operations as they aim to protect it against potential natural risks like extreme weather occurrences and other events that may perturb the company's current operations that can cause significant imparity losses. Since the Group focuses its environmental strategy on fighting climate change, protecting biodiversity, and implementing efficient waste management processes, it aligns environmental risk management with the search for more sustainable products and processes.

Environmental hazards primarily affect the Group in terms of regulation, physical factors, and reputational issues. The company must follow the environmental legislation of each country but also aim to implement internal objectives that surpass the limits required by law and reinforce its sustainable internal policy. Regarding physical factors, adverse effects may lead to a decrease in natural resources, which could hurt the Group's supply chain. Regarding reputation, JMT needs to address climate issues given the societies' growing knowledge of these issues and the expectations of the Group's shareholders to reduce carbon emissions and aid in the prevention of deforestation.

- **Information System Risks**

This reflects the risk of malfunctions related to the use of technology in the company's everyday operations; these risks not only refer to hardware and software but also human error. A widespread problem related to this risk is information leaks and viruses, which is why the company has an exclusively dedicated Department that oversees the Group's risk management for information security, which entails putting in place and maintaining an information security management system to guarantee the privacy, availability, and integrity of crucial business data. As well as conducting, monitoring, and controlling operations to find and address potential vulnerabilities.

- **Supply Chain Risk**

Due to the fact that, usually, for products to arrive to the final consumer, they must cross multiple intervenients across the supply chain, which increases the probability of problems occurring compared to a direct sale from producer to consumer, supply chain risks emerge. The food supply chain has inherently more risks than other businesses' supply chains due to the intrinsic characteristics of the products that circulate in it (particularly the perishability of food products).

Therefore, for JMT is even more critical to have a well-managed supply chain that can adapt quickly to disruptions that may occur since its operations highly depend on having a network of suppliers that can guarantee the appropriate inventory levels, sales, and selling prices. Therefore, businesses must carefully choose their suppliers to accomplish their objectives and satisfy client expectations. 90% of JMT's total food purchases are still made through partnerships with regional vendors, which increases the Group's efficiency because goods are acquired and distributed inside the same nation. More information regarding this risk is explained in the individual report: "Is Blockchain the Hidden Gem for Jeronimo Martins' Supply Chain?".

Economic Risks

- **Market Competition Risk**

This risk refers to the possibility of competitors' decisions affecting the growth and success of the company's operations. As was previously stated, the industry in which JMT operates in all its geographical locations is characterized by a significant concentration of market power in a few participants. Besides, since margins tend to be low, companies must be very attentive to changes in competitors' strategies and be able to adapt quickly. Therefore, market competition is a significant risk to JMT's operations as the rivalry is very intense in the market, aggravated by the similarity of the products sold and the low switching costs for consumers. Consequently, companies like JMT strive to implement more efficient processes, for example, to achieve economies of scale and provide higher-quality and less expensive products that create added value for customers.

- **Taxation Risk**

JMT is vulnerable to various tax regulations because it operates in three countries and plans to expand into more nations. Hence, unexpected changes in any of these tax rates can cause more significant losses to the company results, thus being a risk that the company must consider.

- **Geopolitical Risks**

Since the Group has multinational operations, it is directly affected by political developments in each country it operates and by spillovers of countries with whom they transact. Examples of these negative spillovers caused by significant developments in large economies that indirectly affect the Group are Brexit and the US-China trade war. Ara reacted to calls for food assistance and distributed food supplies to poor people during recent political tensions in Venezuela, which borders Colombia. Biedronka also helped raise 9.5 million euros to "help people fleeing the war." Market disruptions, economic crises, and other variables detrimental to enterprises can result from political tensions. Thus, to lessen this risk, JMT makes sure that its risk management procedures are adequate and effective, for example, maintaining enough cash to manage immediate problems that may appear, such as the financial crisis and Covid-19. Due to its strategies, the company was able to adapt its stores and help the population deal with these problems (mainly through donations to charities that concentrate on solving those problems).

- **Regulatory Risks**

Companies must follow the regulations and legislation of the countries in which they operate; since these are constantly adapting and changing, companies must

adapt to them; otherwise, they risk suffering the negative consequences of not following them, such as costly fees, removal of operational licenses and damage the reputation of the company. Consumer protection, market competitiveness, pricing control, and environmental protection are among the main regulatory priorities in the food retail sector. Jerónimo Martins' management team has specific departments to manage this risk and propose necessary regulatory changes; additionally, independent auditors and legal advisors are contracted to help the company comply with any regulation and legislation changes. However, it is not always possible to do so; for example, in August 2022, Biedronka was fined by the Polish Regulators for misleading advertising, and that fine could reach 10% of their yearly revenues.

Peers

To have a more accurate assessment between Jerónimo Martins' practices and the ones from the industry, we decided to attribute different peers to each of the subsidiaries to promote a better term of comparison for each one. The first criteria used to choose peers was to look at JMT's website and search for the companies that they considered as peers; however, since two of them (Distribuidora Int. de Alimentacion and Casino Guichard-Perrachon) had an extremely low volume of stock trading we believed that the use of these companies would prejudice the quality of our analysis, therefore, we decided to cut them from our selection. Subsequently, we decided to do a stock screen in Refinitiv for each subsidiary, restraining the geography location of peers to the ones that the subsidiary operates, restricting the market capitalization (market cap.) of companies to a value lower than € 13 billion (slightly higher than the current market of JMT), and restrict the sector to the same one as the subsidiary. We defined the maximum number of peers for each subsidiary to four.

Biedronka Peers

Dino Polska SA (DNP.WA) is a nationwide chain of grocery retail stores in Poland that was founded in 1999 and, at the end of 2021, operated 1 815 stores across the country. According to Euromonitor, it has a store proximity format and is one of the top 10 retailers in Poland.

Axfood AB (AXFO.ST) is a Swedish retail company, the second largest food retailer in Sweden, that opened its first store in 1958 and wants to become the leader in affordable, good, and sustainable food.

Carrefour SA (CARR.PA) is a French group founded in 1958 that owns a global chain of retail and wholesale operations. It is one of the top retailers in the world and currently has 12 225 stores in around 30 countries.

Kesko Oyj (KESKOB.HE) is a Finnish group that operates in multiple sectors of the retail industry, such as the grocery and car trade. It has approximately 1 800 stores across even European countries. It was founded in 1940 through a merger of four regional wholesaling companies.

Hebe Peers

4Mass SA (4MSP.WA) is a Polish health and beauty retailer focusing on producing and distributing cosmetic products, which currently has four private labels and exports worldwide with its online channel.

Pharmena SA (PHR.WA) is a Polish biotechnical company that was founded in 2002 to be able to commercialize an invention discovered by the Lodz University of Technology, but now has as its main activity the commercialization of Derma cosmetic products in Poland.

Global Cosmed SA (GLC.WA) is a leading Polish manufacturer of fast-moving consumer goods (FMCG) in Europe, founded in 182, that focuses on creating and selling its own brand of innovative and sustainable products.

Lavena AD (LAV.BB) was founded in 1962 and is currently one the leading Bulgarian retailer of cosmetic products that are produced, focusing on the balance between tradition and innovation. Besides, it is known worldwide for its essential oils.

Pingo Doce peers

Sonae - SGPS AS (YSO.LS) is a multinational Group founded in 1959 that operates in diversified business areas such as financial services, real estate, communications, and one of the most important, retail. In fact, Sonae is the leading retailer in Portugal.

Marks and Spencer Group PLC (MKS.L) is a leading British retailer founded in 1884 that focuses on offering high-quality food, clothing, and homeware products. The company also operates in other industries, such as renewable energy and financial services.

Tesco PLC (TSCO.L) was founded in 1919 in London and is currently one of the biggest multinational chains of retail and wholesale stores. It operates under

multiple store formats, from convenience stores to larger outlets across the world.

Ahold Delhaize NV (AD.AS) was founded in 2016 due to a merger of Ahold and Delhaize Group, innovative retailers with almost 150 years of experience. It is one of the biggest retailers in the world, focusing on sustainable retail and e-commerce, and currently holds a 49% stake in Pingo-Doce.

Recheio Peers

Marr S.p.A (MARR.MI) is the Italian leader in food distribution to the Italian food services industry. This Group was founded in 1972 and started by serving hotels and restaurants on the Riviera and now serves commercial clients and canteens all over the country.

Eurocash SA (EUR.WA) is a Polish group that operates in the wholesale industry (with more than 180 wholesalers across the company) and retail distribution of FMCG. It was founded in 2003 through a buy-out from the previous owner, Jerónimo Martins.

Metro AG (B4B.DE) is a Germany-based company founded in 2017 that operates in the wholesale and food service sectors. Acting as a food specialist, it grew its wholesale presence in approximately 35 countries in Europe and Asia, owning one of the largest wholesalers in Portugal, Makro.

Atlanta Poland SA (ATP.WA) is a Polish company founded in 1990, engaged in the food industry through multiple activities, including manufacturing, wholesale, and retail. Since 2011 the Company's majority stakeholder was Rockfield Trading Limited, which collected a stake of 58.8% in the company.

Ara Peers

Grupo Comercial Chedraui SAB de CV (CHDRAUIB.MX) is a Mexico-based company primarily engaged in the retail and real estate sectors. The Company has a store network in over 20 Mexican states and is in the southern-east region of the United States.

Almacenes Exito (IMI.CN) is a Colombia-based company engaged in the retail sector. The Company's activities are structured into three geographical divisions: Colombia, Brazil, and other countries. In Colombia, the Company operates retail and wholesale departments and discount stores. In Brazil, its services comprise

selling food products, distributing non-food goods, and operating e-commerce stores.

Organizacion Soriana (SORIANAB.MX) is a Mexico-based company primarily engaged in the food retail sector. The Company focuses on developing and managing a network of supermarkets, grocery, and discount stores. It operates stores under various brand names and offers online shopping and delivery services.

Grupo Mateus (GMAT3.SA) is a Brazil-based company engaged in the food distribution sector. The Company's activities are divided into two business lines: Wholesale and Retail. The Wholesale area focuses on self-service stores and delivery establishments for wholesale customers. The Retail segment operates supermarkets, convenience shops, furniture stores, and e-commerce platforms.

Appendix

Financial Statements

Income Statement

| In Millions of EUR | 12 Months Ending | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 | FY 2031 | FY 2032 | FY 2033 | |
|---|------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------|
| | | 12/31/2016 | 12/31/2017 | 12/31/2018 | 12/31/2019 | 12/31/2020 | 12/31/2021 | 12/31/2022 | 12/31/2023 | 12/31/2024 | 12/31/2025 | 12/31/2026 | 12/31/2027 | 12/31/2028 | 12/31/2029 | 12/31/2030 | 12/31/2031 | 12/31/2032 | 12/31/2033 | |
| Revenues | | 13 728 | 14 622 | 16 276 | 17 337 | 18 638 | 19 203 | 20 889 | 26 257 | 31 500 | 35 154 | 38 647 | 42 351 | 45 984 | 49 469 | 52 711 | 55 629 | 58 176 | 60 351 | 62 179 |
| - Cost of Revenue | | (10 700) | (11 509) | (12 818) | (13 977) | (14 863) | (15 067) | (16 202) | (20 596) | (24 709) | (27 575) | (30 315) | (32 220) | (36 070) | (38 803) | (41 346) | (43 633) | (45 633) | (47 339) | (48 773) |
| Gross Margin | | 2 937 | 3 113 | 3 458 | 3 760 | 4 076 | 4 227 | 4 487 | 5 661 | 6 792 | 7 579 | 8 333 | 9 131 | 9 914 | 10 666 | 11 365 | 11 994 | 12 543 | 13 012 | 13 406 |
| - Operating Costs | | (2 138) | (2 251) | (2 538) | (2 800) | (2 804) | (2 912) | (3 081) | (3 681) | (4 356) | (4 896) | (5 375) | (5 926) | (6 407) | (6 862) | (7 304) | (7 699) | (8 026) | (8 296) | (8 500) |
| EBITDA | | 800 | 862 | 920 | 960 | 1 472 | 1 423 | 1 986 | 2 000 | 2 436 | 2 723 | 2 958 | 3 205 | 3 507 | 3 804 | 4 060 | 4 295 | 4 506 | 4 716 | 4 906 |
| EBIT | | (295) | (294) | (331) | (364) | (715) | (754) | (789) | (789) | (940) | (1 094) | (1 204) | (1 300) | (1 402) | (1 509) | (1 602) | (1 701) | (1 802) | (1 901) | (1 993) |
| Depreciation & Amortization | | (280) | (280) | (318) | (350) | (379) | (405) | (444) | (444) | (520) | (616) | (678) | (731) | (785) | (839) | (893) | (950) | (1 006) | (1 064) | (1 121) |
| Depreciation of Right-of-Use Assets | | - | - | - | - | (322) | (316) | (311) | (311) | (364) | (459) | (566) | (646) | (740) | (856) | (977) | (1 103) | (1 234) | (1 370) | (1 511) |
| Amortization of Intangible Assets | | (15) | (14) | (13) | (13) | (14) | (13) | (13) | (13) | (16) | (19) | (21) | (23) | (25) | (27) | (29) | (31) | (32) | (34) | (36) |
| EBIT | | 505 | 568 | 591 | 596 | 722 | 689 | 840 | 1 211 | 1 496 | 1 629 | 1 754 | 1 905 | 2 112 | 2 312 | 2 471 | 2 604 | 2 716 | 2 824 | 2 913 |
| Green Rate | | 3.7% | 12.4% | 4.2% | 2.8% | 21.1% | -4.5% | 27.5% | 44.1% | 23.6% | 3.3% | 7.7% | 3.5% | 16.9% | 9.3% | 6.3% | 5.4% | 4.3% | 4.0% | 3.7% |
| EBIT Margin | | (19) | (32) | (14) | (9) | (16) | (50) | (54) | (75) | (54) | (34) | (34) | (34) | (34) | (34) | (34) | (34) | (34) | (34) | (34) |
| Core Result Before Taxes | | 488 | 538 | 577 | 587 | 708 | 639 | 868 | 1 136 | 1 462 | 1 595 | 1 720 | 1 871 | 2 078 | 2 278 | 2 437 | 2 570 | 2 682 | 2 790 | 2 879 |
| Statutory Tax Rate | | (100) | (121) | (130) | (132) | (159) | (144) | (191) | (255) | (300) | (359) | (387) | (421) | (468) | (512) | (548) | (578) | (603) | (626) | (646) |
| Tax Adjustments | | 23 | 27 | 34 | 33 | 32 | 45 | 51 | 55 | 55 | 55 | 54 | 53 | 51 | 49 | 46 | 44 | 41 | 41 | 38 |
| Other Comprehensive Income | | (1) | 0 | (0) | 0 | (2) | (0) | (0) | (0) | (0) | (0) | (0) | (0) | (0) | (0) | (0) | (0) | (0) | (0) | (0) |
| Core Result | | 398 | 443 | 482 | 488 | 581 | 502 | 684 | 931 | 1 188 | 1 291 | 1 387 | 1 504 | 1 663 | 1 816 | 1 938 | 2 039 | 2 122 | 2 203 | 2 269 |
| % of Revenues | | 2.9% | 3.0% | 2.9% | 2.8% | 3.1% | 2.7% | 3.2% | 3.5% | 3.8% | 3.7% | 3.6% | 3.6% | 3.6% | 3.7% | 3.7% | 3.7% | 3.6% | 3.7% | 3.6% |
| Non-Core Business | | 2 | 2 | 4 | 2 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Interest Income | | - | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Interest on Capitalized Operating Leases | | - | - | - | - | (133) | (127) | (130) | (142) | (149) | (148) | (144) | (139) | (135) | (129) | (124) | (119) | (115) | (107) | (102) |
| Other Financial Gains and Losses | | (4) | (3) | (4) | (4) | (5) | (7) | (7) | (7) | (7) | (7) | (7) | (7) | (7) | (7) | (7) | (6) | (6) | (5) | (5) |
| Foreign Exchange (Gain) Loss | | (0) | (0) | (0) | (1) | 2 | (30) | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Non-Operating (Gains) Losses | | 15 | 228 | (0) | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Non-Core Result Before Taxes and OCI | | 13 | 223 | 3 | (3) | (130) | (145) | (147) | (149) | (145) | (145) | (145) | (145) | (146) | (134) | (128) | (123) | (117) | (111) | (106) |
| Statutory Taxes | | (3) | (5) | (1) | 1 | 29 | 36 | 31 | 33 | 35 | 35 | 34 | 33 | 31 | 30 | 29 | 28 | 26 | 25 | 24 |
| Statutory Tax Rate | | 22.9% | 23.9% | 23.5% | 23.9% | 23.8% | 23.9% | 22.8% | 22.8% | 22.8% | 22.8% | 22.8% | 22.8% | 22.8% | 22.8% | 22.8% | 22.8% | 22.8% | 22.8% | 22.8% |
| Tax Adjustments | | (36) | 9 | (60) | (38) | (40) | (65) | (66) | (75) | (81) | (81) | (80) | (79) | (75) | (75) | (68) | (64) | (60) | (56) | (56) |
| Other Comprehensive Income | | (5) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) | (3) |
| Non-Core Result | | (49) | 148 | 4 | (70) | (124) | (276) | (191) | (189) | (201) | (200) | (196) | (192) | (196) | (179) | (172) | (164) | (158) | (148) | (137) |
| Financial | | (25) | (15) | (15) | (22) | (26) | (21) | (17) | (15) | (20) | (22) | (24) | (26) | (27) | (28) | (30) | (31) | (33) | (35) | (36) |
| Interest Expense | | (25) | (15) | (15) | (22) | (26) | (21) | (17) | (15) | (20) | (22) | (24) | (26) | (27) | (28) | (30) | (31) | (33) | (35) | (36) |
| Other Investment (Income) Loss - Dividends | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Derivative Instruments | | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Financing Result Before Taxes and OCI | | (26) | (13) | (16) | (22) | (27) | (26) | (19) | (19) | (20) | (22) | (24) | (26) | (27) | (28) | (30) | (31) | (33) | (35) | (36) |
| Statutory Taxes | | 6 | 3 | 3 | 5 | 6 | 4 | 4 | 3 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | 8 | 8 |
| Statutory Tax Rate | | 22.9% | 23.9% | 23.5% | 23.9% | 23.8% | 23.9% | 22.8% | 22.8% | 22.8% | 22.8% | 22.8% | 22.8% | 22.8% | 22.8% | 22.8% | 22.8% | 22.8% | 22.8% | 22.8% |
| Tax Adjustments | | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) |
| Other Comprehensive Income | | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) |
| Financing Result | | (16) | (9) | (14) | (14) | (19) | (19) | (14) | (14) | (14) | (14) | (14) | (14) | (14) | (14) | (14) | (14) | (14) | (14) | (14) |
| Total Comprehensive Income | | 322 | 551 | 457 | 454 | 422 | 351 | 423 | 731 | 972 | 1 074 | 1 172 | 1 222 | 1 468 | 1 615 | 1 743 | 1 859 | 1 941 | 2 009 | 2 103 |
| Attributable to: | | | | | | | | | | | | | | | | | | | | |
| Non-controlling Interests | | 25 | 21 | 27 | 29 | 31 | 11 | 21 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| Jordano Matias Shareholders | | 307 | 560 | 430 | 375 | 401 | 250 | 402 | 713 | 954 | 1 056 | 1 154 | 1 204 | 1 438 | 1 597 | 1 725 | 1 832 | 1 923 | 2 012 | 2 085 |
| Total Comprehensive Income | | 322 | 551 | 457 | 454 | 422 | 351 | 423 | 731 | 972 | 1 074 | 1 172 | 1 222 | 1 468 | 1 615 | 1 743 | 1 859 | 1 941 | 2 009 | 2 103 |

Balance Sheet

| In Millions of EUR 12 Months Ending | FY 2015 12/31/2015 | FY 2016 12/31/2016 | FY 2017 12/31/2017 | FY 2018 12/31/2018 | FY 2019 12/31/2019 | FY 2020 12/31/2020 | FY 2021 12/31/2021 | FY 2022E 12/31/2022 | FY 2023F 12/31/2023 | FY 2024F 12/31/2024 | FY 2025F 12/31/2025 | FY 2026F 12/31/2026 | FY 2027F 12/31/2027 | FY 2028F 12/31/2028 | FY 2029F 12/31/2029 | FY 2030F 12/31/2030 | FY 2031F 12/31/2031 | FY 2032F 12/31/2032 | FY 2033F 12/31/2033 | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|--|
| Core Business | | | | | | | | | | | | | | | | | | | | |
| Operating Cash | 271 | 290 | 329 | 344 | 375 | 379 | 415 | 525 | 630 | 703 | 773 | 847 | 920 | 989 | 1 054 | 1 113 | 1 164 | 1 207 | 1 244 | |
| % of Revenues | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | |
| Accounts Receivable | 54 | 46 | 56 | 58 | 64 | 43 | 52 | 69 | 81 | 91 | 99 | 108 | 117 | 125 | 133 | 140 | 146 | 151 | 156 | |
| Average Collection Period | 1.4 | 1.1 | 1.3 | 1.2 | 1.3 | 0.8 | 0.8 | 1.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | |
| Accrued income and other current assets | 224 | 265 | 331 | 377 | 361 | 350 | 427 | 525 | 626 | 702 | 769 | 840 | 906 | 970 | 1 029 | 1 083 | 1 130 | 1 171 | 1 206 | |
| % of Revenues | 1.8% | 1.8% | 2.0% | 2.2% | 1.9% | 1.9% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | |
| Average Holding Period | 21.5 | 22.8 | 24.6 | 26.1 | 26.0 | 23.6 | 24.7 | 25.0 | 23.0 | 24.9 | 24.9 | 24.9 | 24.9 | 24.9 | 24.9 | 24.9 | 24.9 | 24.9 | 24.9 | |
| Biological Assets | 0 | 1 | 5 | 4 | 6 | 5 | 7 | 9 | 10 | 11 | 12 | 12 | 12 | 13 | 14 | 14 | 15 | 15 | 15 | |
| % of Revenues | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | |
| Operating Current Assets | 1 187 | 1 321 | 1 564 | 1 754 | 1 844 | 1 751 | 2 009 | 2 537 | 3 037 | 3 390 | 3 721 | 4 078 | 4 407 | 4 750 | 5 056 | 5 331 | 5 573 | 5 779 | 5 983 | |
| Accounts Payable | (2 542) | (2 790) | (3 215) | (3 273) | (3 655) | (3 534) | (4 046) | (4 869) | (5 535) | (6 700) | (7 370) | (8 081) | (8 807) | (9 491) | (10 133) | (10 717) | (11 225) | (11 656) | (12 020) | |
| Average Payable Period | 85.0 | 89.2 | 81.6 | 85.0 | 91.6 | 83.6 | 90.1 | 89.1 | 87.7 | 86.7 | 85.7 | 84.7 | 83.7 | 82.7 | 81.7 | 80.7 | 79.7 | 78.7 | 77.7 | |
| Accrued costs and other current liabilities | (330) | (377) | (447) | (521) | (527) | (619) | (723) | (902) | (1 090) | (1 181) | (1 317) | (1 462) | (1 568) | (1 685) | (1 798) | (1 890) | (1 976) | (2 042) | (2 093) | |
| % of Cost of Revenue + Operating Costs | 2.4% | 2.7% | 2.9% | 3.2% | 3.2% | 3.3% | 3.7% | 3.7% | 3.9% | 3.7% | 3.7% | 3.7% | 3.7% | 3.7% | 3.7% | 3.7% | 3.7% | 3.7% | 3.7% | |
| Income tax payable, net | (28) | (43) | (53) | (37) | (41) | (33) | (24) | (21) | (16) | (11) | (7) | (5) | (3) | (2) | (1) | (1) | (1) | (0) | (0) | |
| % of Consolidated Taxes | 22.5% | 32.8% | 36.8% | 27.9% | 31.7% | 24.1% | 16.3% | 8.9% | 5.1% | 3.1% | 1.9% | 1.9% | 1.9% | 1.9% | 1.9% | 1.9% | 1.9% | 1.9% | 1.9% | |
| Operating Current Liabilities | (2 886) | (3 209) | (3 715) | (3 831) | (4 223) | (4 167) | (4 786) | (5 852) | (6 641) | (7 382) | (8 084) | (8 847) | (9 547) | (10 378) | (11 179) | (11 930) | (12 608) | (13 199) | (13 686) | |
| Working Capital | (1 711) | (1 888) | (2 151) | (2 077) | (2 379) | (2 436) | (2 786) | (3 355) | (4 004) | (4 502) | (4 973) | (5 469) | (5 957) | (6 428) | (6 874) | (7 277) | (7 626) | (7 919) | (8 160) | |
| % of Revenues | -12.9% | -12.9% | -13.2% | -12.0% | -12.6% | -12.6% | -12.6% | -12.9% | -12.7% | -12.8% | -12.9% | -12.9% | -12.9% | -13.0% | -13.0% | -13.1% | -13.1% | -13.1% | -13.1% | |
| Property Plant & Equipment, Net | 2 890 | 3 023 | 3 475 | 3 687 | 3 970 | 3 817 | 3 993 | 4 852 | 5 639 | 6 205 | 6 722 | 7 226 | 7 744 | 8 261 | 8 805 | 9 352 | 9 896 | 10 436 | 10 973 | |
| % of Revenues | 21.4% | 20.7% | 21.3% | 21.3% | 21.3% | 19.2% | 19.1% | 19.3% | 17.9% | 17.7% | 17.4% | 17.1% | 16.9% | 16.7% | 16.5% | 16.3% | 16.2% | 16.0% | 15.7% | |
| Right-of-use assets | - | - | - | - | 2 335 | 2 167 | 2 248 | 2 734 | 3 179 | 3 503 | 3 795 | 4 083 | 4 378 | 4 674 | 4 985 | 5 295 | 5 603 | 5 909 | 6 224 | |
| % of Revenues | 0.0% | 0.0% | 0.0% | 0.0% | 10.5% | 10.2% | 10.8% | 10.4% | 10.9% | 10.0% | 9.8% | 9.5% | 9.3% | 9.1% | 8.9% | 8.6% | 8.5% | 8.2% | 8.0% | |
| Intangible assets | 170 | 157 | 164 | 155 | 137 | 130 | 130 | 172 | 201 | 225 | 246 | 265 | 273 | 295 | 319 | 338 | 355 | 369 | 387 | |
| % of Revenues | 1.2% | 1.1% | 1.0% | 0.9% | 0.7% | 0.7% | 0.7% | 0.7% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | |
| Other non-current assets | 63 | 78 | 76 | 68 | 70 | 73 | 61 | 63 | 63 | 56 | 51 | 41 | 30 | 17 | 2 | 2 | 2 | 3 | 3 | |
| % of Revenues | 0.6% | 0.6% | 0.5% | 0.6% | 0.6% | 0.6% | 0.5% | 0.2% | 0.2% | 0.2% | 0.2% | 0.1% | 0.1% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | |
| Core Invested Capital (excluding Goodwill) | 1 432 | 1 370 | 1 564 | 1 833 | 4 149 | 3 758 | 3 655 | 4 627 | 5 079 | 5 493 | 5 842 | 6 153 | 6 492 | 6 842 | 7 256 | 7 727 | 8 244 | 8 807 | 9 446 | |
| Goodwill | 640 | 630 | 647 | 637 | 641 | 620 | 618 | 627 | 626 | 624 | 623 | 622 | 622 | 622 | 622 | 622 | 622 | 622 | 622 | |
| % of Revenues | 4.8% | 4.6% | 4.0% | 3.2% | 3.4% | 3.2% | 3.2% | 2.4% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | |
| Core Invested Capital | 2 072 | 2 000 | 2 211 | 2 470 | 4 790 | 4 378 | 4 273 | 5 095 | 5 704 | 6 117 | 6 466 | 6 776 | 7 114 | 7 464 | 7 877 | 8 349 | 8 865 | 9 429 | 10 068 | |
| Non-Core Business | | | | | | | | | | | | | | | | | | | | |
| Investment property | 20 | 14 | 14 | 12 | 9 | 9 | 8 | - | - | - | - | - | - | - | - | - | - | - | - | |
| Investments in joint ventures and associates | 76 | - | 2 | 3 | 5 | 6 | 13 | - | - | - | - | - | - | - | - | - | - | - | - | |
| Other financial investments | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | |
| Derivative financial instruments | 0 | 1 | (2) | (0) | (3) | 3 | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Deferred tax, net | 2 | 10 | 34 | 39 | 67 | 98 | 109 | 135 | 162 | 181 | 199 | 218 | 236 | 254 | 271 | 286 | 299 | 310 | 320 | |
| Employee benefits | (643) | (62) | (65) | (65) | (70) | (70) | (70) | (76) | (87) | (91) | (94) | (96) | (98) | (99) | (102) | (104) | (106) | (108) | (110) | |
| # Employees at the end of the year | 89 227 | 96 533 | 104 203 | 109 550 | 115 428 | 118 639 | 123 455 | 135 616 | 156 523 | 166 243 | 172 957 | 178 643 | 185 250 | 190 853 | 196 253 | 201 483 | 205 857 | 209 400 | 212 541 | |
| Revenues per employee | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | |
| Benefit for a thousand employees | (0.5) | (0.5) | (0.5) | (0.5) | (0.5) | (0.5) | (0.5) | (0.5) | (0.5) | (0.5) | (0.5) | (0.5) | (0.5) | (0.5) | (0.5) | (0.5) | (0.5) | (0.5) | (0.5) | |
| Provisions for risks and contingencies | (84) | (22) | (20) | (27) | (28) | (33) | (34) | (42) | (51) | (56) | (62) | (69) | (74) | (80) | (85) | (90) | (94) | (98) | (100) | |
| % of Revenues | -0.6% | -0.1% | -0.2% | -0.2% | -0.1% | -0.3% | -0.3% | -0.3% | -0.3% | -0.2% | -0.2% | -0.2% | -0.2% | -0.2% | -0.2% | -0.2% | -0.2% | -0.2% | -0.2% | |
| Total Non-Core Invested Capital | (26) | (58) | (47) | (53) | (43) | (43) | (25) | (25) | (25) | (25) | (25) | (25) | (25) | (25) | (25) | (25) | (25) | (25) | (25) | |
| Total Funds Invested | 2 346 | 1 942 | 2 164 | 2 254 | 4 712 | 4 331 | 4 248 | 5 113 | 5 730 | 6 153 | 6 511 | 6 831 | 7 180 | 7 540 | 7 933 | 8 443 | 8 997 | 9 537 | 10 181 | |
| Financial | | | | | | | | | | | | | | | | | | | | |
| Short-term Bank Loans | 123 | 224 | 298 | 347 | 424 | 160 | 113 | - | - | - | - | - | - | - | - | - | - | - | - | |
| % of Revenues | 0.9% | 1.5% | 1.8% | 2.0% | 2.3% | 0.8% | 0.5% | - | - | - | - | - | - | - | - | - | - | - | - | |
| Long-term Bank Loans | 534 | 112 | 232 | 278 | 309 | 364 | 347 | - | - | - | - | - | - | - | - | - | - | - | - | |
| % of Revenues | 3.9% | 0.8% | 1.6% | 1.9% | 1.9% | 2.3% | 2.3% | - | - | - | - | - | - | - | - | - | - | - | - | |
| Lease Liabilities | 0 | 4 | 15 | 2 384 | 2 273 | 2 387 | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| % of Revenues | 0.0% | 0.0% | 0.1% | 17.6% | 12.0% | 11.2% | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Total Debt | 658 | 339 | 537 | 629 | 3 117 | 2 797 | 2 847 | - | - | - | - | - | - | - | - | - | - | - | - | |
| Debt/Equity (book value) | 0.5 | 0.2 | 0.3 | 0.4 | 1.6 | 1.4 | 1.2 | - | - | - | - | - | - | - | - | - | - | - | - | |
| Excess Cash | (171) | (353) | (352) | (202) | (554) | (662) | (1 076) | - | - | - | - | - | - | - | - | - | - | - | - | |
| % of Revenues | -1.2% | -2.5% | -2.2% | -1.4% | -4.5% | -5.1% | -8.1% | - | - | - | - | - | - | - | - | - | - | - | - | |
| Collateral deposits associated to financial debt | (34) | (34) | (34) | (19) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Net Debt | 453 | (48) | (151) | (418) | (2 543) | (2 134) | (1 769) | 2 427 | 2 732 | 2 938 | 3 112 | 3 267 | 3 437 | 3 611 | 3 817 | 4 052 | 4 307 | 4 586 | 4 902 | |
| Net Debt/Equity (book value) | 1.1 | 0.2 | (0.4) | (1.2) | (6.1) | (5.1) | (4.1) | 5.7 | 6.1 | 6.3 | 6.5 | 6.7 | 6.9 | 7.1 | 7.3 | 7.5 | 7.7 | 7.9 | 8.1 | |
| Non-controlling interests | 252 | 253 | 225 | 238 | 254 | 249 | 254 | 259 | 267 | 277 | 287 | 297 | 307 | 318 | 328 | 340 | 352 | 365 | 378 | |
| % of Pwco Dco's Core Capital | 28.5% | 27.2% | 24.1% | 26.5% | 19.1% | 19.4% | 21.4% | 20.2% | 20.2% | 20.2% | 20.2% | 20.2% | 20.2% | 20.2% | 20.2% | 20.2% | 20.2% | 20.2% | 20.2% | |
| Net Financial Assets | 704 | 204 | 376 | 656 | 2 797 | 2 983 | 2 923 | 2 686 | 2 999 | 3 215 | 3 399 | 3 564 | 3 744 | 3 929 | 4 146 | 4 391 | 4 659 | 4 951 | 5 200 | |
| Equity | 1 342 | 1 738 | 1 788 | 1 778 | 1 975 | 2 008 | 2 278 | 2 427 | 2 732 | 2 938 | 3 112 | 3 267 | 3 437 | 3 611 | 3 817 | 4 052 | 4 307 | 4 586 | 4 902 | |
| Total Funds Invested | 2 048 | 1 942 | 2 164 | 2 254 | 4 712 | 4 331 | 4 248 | 5 113 | 5 730 | 6 153 | 6 511 | 6 831 | 7 180 | 7 540 | 7 933 | 8 443 | 8 997 | 9 537 | 10 181 | |

Cash Flows

| In Millions of EUR 12 Months Ending | FY 2015 12/31/2015 | FY 2016 12/31/2016 | FY 2017 12/31/2017 | FY 2018 12/31/2018 | FY 2019 12/31/2019 | FY 2020 12/31/2020 | FY 2021 12/31/2021 | FY 2022E 12/31/2022 | FY 2023F 12/31/2023 | FY 2024F 12/31/2024 | FY 2025F 12/31/2025 | FY 2026F 12/31/2026 | FY 2027F 12/31/2027 | FY 2028F 12/31/2028 | FY 2029F 12/31/2029 | FY 2030F 12/31/2030 | FY 2031F 12/31/2031 | FY 2032F 12/31/2032 | FY 2033F 12/31/2033 |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Operating Cash Flow | | | | | | | | | | | | | | | | | | | |
| Operating Cash | 468 | 536 | 577 | 527 | 577 | 539 | 605 | 1 136 | 1 442 | 1 565 | 1 720 | 1 871 | 2 078 | 2 247 | 2 437 | 2 652 | 2 790 | 2 974 | 3 178 |
| Change in CAPEX | (109) | (121) | (130) | (132) | (159) | (144) | (181) | (256) | (329) | (359) | (387) | (421) | (468) | (512) | | | | | |

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Disclosures and Disclaimers

Report Recommendations

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| 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. |

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