JERONIMO MARTINS SGPS

Recommendation: **BUY** (33.12% Upside)

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<u>KEY HIGHLIGHTS</u>

Group consists of 5 major brands, Biedronka (77% of revenues), Pingo Doce (13%), Recheio (6%), Ara (3%) and Hebe (1%).

Maturing of the Polish discount store market will lead to a slowdown of growth and tightening of margins for Biedronka.

Jeronimo Martin has set their sights on Colombia in order to achieve the levels of growth experience in Poland with the rapid expansion of their Ara brand. Management expects 1000 stores in Colombia by 2020.

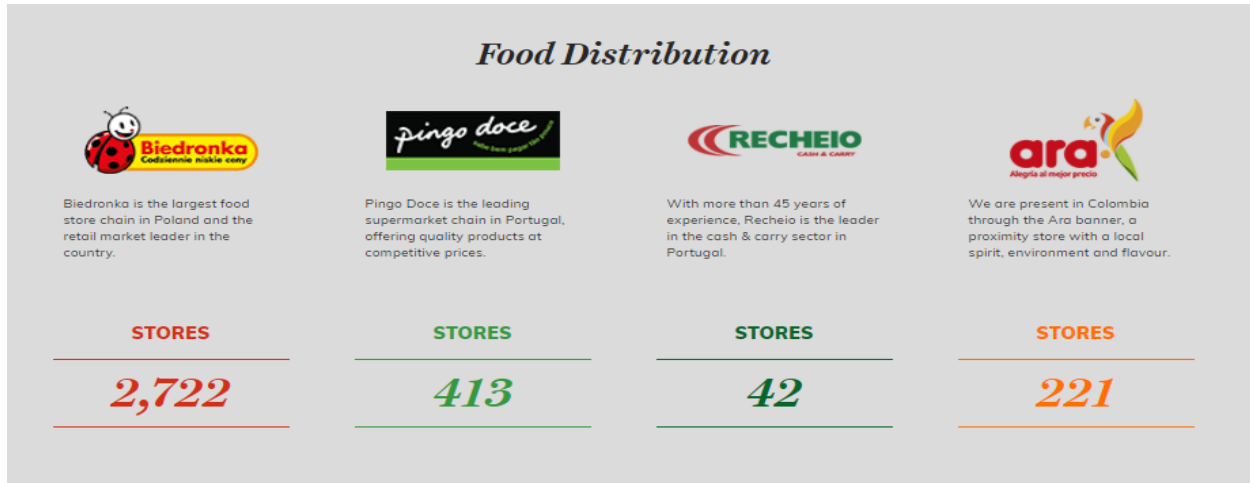*Revenue growth will slow down from an average of 9.76% for the past 5 years to 2.92% by 2027.*

We forecast that EBIT Margins will tighten in Biedronka from 5.4% in 2017 to 2.5% by 2027.
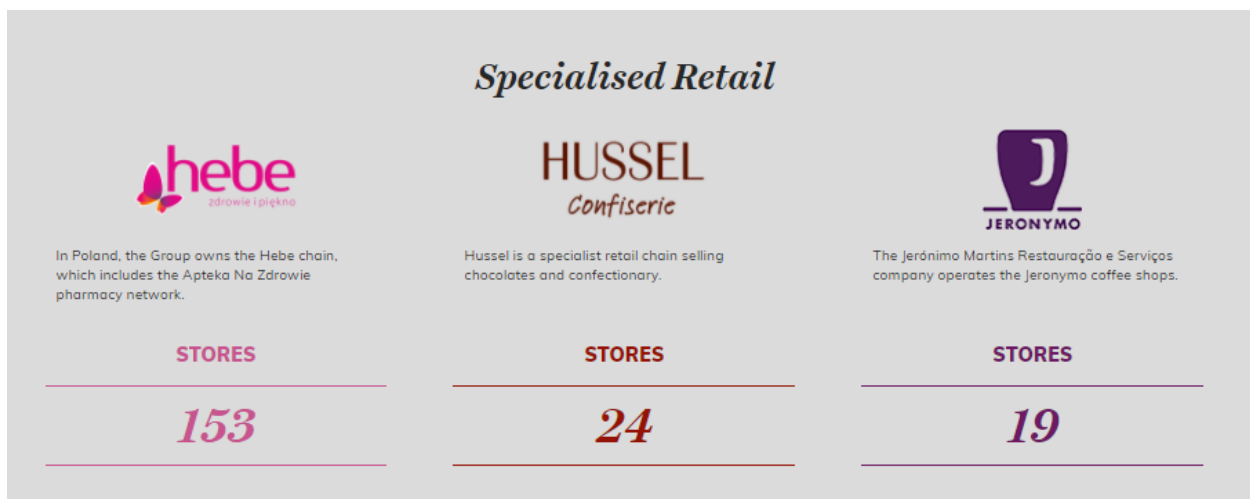
INTRODUCTION

Jeronimo Martins SGPS is an international group based in Portugal with an accumulated experience of over 225 years in the food business.

They meet the requirements of millions of retail consumers, offering them a value proposition based on quality at competitive prices. Their core business area is Food Distribution, which accounts for nearly 95% of the Group's combined sales.

In Poland, their main business is *Biedronka* (chain of discount food stores) while in Portugal, *Pingo Doce* and *Recheio* are market leaders in their own segments: retail and wholesale, respectively. In Colombia, they run the *Ara* chain of convenience stores.

Food Distribution

Biedronka	**Pingo Doce**	**Recheio**	**Ara**
Biedronka is the largest food store chain in Poland and the retail market leader in the country.	Pingo Doce is the leading supermarket chain in Portugal, offering quality products at competitive prices.	With more than 45 years of experience, Recheio is the leader in the cash & carry sector in Portugal.	We are present in Colombia through the Ara banner, a proximity store with a local spirit, environment and flavour.
STORES	**STORES**	**STORES**	**STORES**
2,722	*413*	*42*	*221*

They are also into specialized retail with Hebe, Hussel, and Jeronymo, which operate in Health & Beauty, Confectionery, and coffee shop business, respectively.

Specialised Retail

hebe	**HUSSEL** *Confiserie*	**JERONYMO**
In Poland, the Group owns the Hebe chain, which includes the Apteka Na Zdrowie pharmacy network.	Hussel is a specialist retail chain selling chocolates and confectionary.	The Jerónimo Martins Restauração e Serviços company operates the Jeronymo coffee shops.
STORES	**STORES**	**STORES**
153	*24*	*19*

They have a strong presence in Poland and Portugal and an emerging presence in Colombia. Their Colombian business is growing rapidly and is expected to witness an even faster growth in the near future.

They are well positioned to achieve the targets set by their management and maintain the levels of growth that they have historically witnessed. They have a large team of employees with strong margins as compared to the industry.

SALES	EBITDA	NET INCOME
€16,276 Million	€922 Million	€385 Million

INVESTMENT THESIS

Jeronimo Martins Group (JMT) is a Portuguese company with operations in Portugal (19% of revenues), Poland (78%) and Colombia (3%). They own the largest grocery store chains in Portugal (Pingo Doce) and Poland (Biedronka). The company's origins are in Portugal however in 1995 the expanded into the Polish market, acquiring a cash and carry there. In 1997 they bought Biedronka, a discount store. This was very much a case of being in the right place at the right time. The Polish GDP has tripled in that time, largely benefiting from joining the European union in 2003. The discount store business model is enormously popular in Poland. Biedronka has seen enormous growth with a strong hold of the retail grocery market in Poland. A study conducted by Oliver Wyman in 2017 showed that 36% of Poles believe Biedronka is their closest supermarket. However, this rapid growth phase must end at some stage. We have forecast that the discount store market growth will plateau at 45% share of the market by 2020. Increased competition from Aldi and Lidl will ensue resulting in tightening margins. This is compounded by the pro workers' rights political atmosphere occurring in Poland at present which has seen a rise of minimum wage as well as a ban on Sunday trading. We do not see the Sunday ban as a big impact on Biedronka's revenues. A similar ban occurred in Hungary in 2015 however, a year later the ban was lifted due to loss in workers earnings. The ban in Hungary did not have an effect on the retail sector (Eurofound, 2017). That said rises in minimum wage will affect Biedrona's margins which we have factored into our model. The Portuguese segment of the business is in a mature phase of the business cycle. There is relatively low growth in like for like sales and no plans of major expansions. The big emphasis is on refurbishments. Ara, JMT's Colombian brand is where management are looking for growth. They can see that a slowdown in Poland is imminent and therefore wish to replicate the success of Biedronka in Colombia. The business model is similar, discount neighborhood stores and if the Colombian economy grows like Poland's JMT could stand to create another very profitable brand. We used management's guidance for growth as well as Biedronka as a proxy in order to model the expansion of Ara. However, we modeled less favorable margins and per store revenue growth than what occurred in Biedronka.

Overall, we found the JMT is in a very good position. They have low amounts of debt (€530 Million total FY 2017) with a large stock pile of cash (€712 FY 2017). The Biedronka brand is extremely profitable with a commanding market share in Poland. If the Ara brand is successful JMT have the fire power to continue the rapid expansion and create a market leader in Colombia. We have found that the market is currently undervaluing JMT by **25.2%.** We believe this is due to an overreaction of potential margin tightening in the polish market. We have a detailed analysis of our reasoning behind our forecasted margins in the EBIT MARGIN section of this report but if we were to further decrease these margins by 1% we come to the market price. This however would imply that Biedronka would eventually only be achieving a 1.5% EBIT margin. To put this into context, that is 1% tighter margins than grocery companies experience in the ultra-competitive UK market.

Another comparison we made was to set the margins of Ara to 0% all the way out to 2022. This would bring that value of JMT down to roughly 10 Billion. If Ara was to make a 5% loss out until 2022 our model would give us back the market value. We believe our forecast is the most likely scenario however a 5% loss in Ara until 2022 is unreasonable. JMT would likely sell off the brand before they would realize 5 years of 5% EBIT margins losses.

REVENUE

As Jeronimo Martins group (JMT) has a number of significant operating segments, we conducted a sum-of-parts analysis by analyzing each one of them, separately. The five brands include Biedronka, Pingo Doce, Recheio, Ara and Hebe.

1. BIEDRONKA

Biedronka is the largest grocer in Poland. They are a discount store with a vast network of stores throughout the neighborhood in Poland. JMT's first venture in the Polish market was in cash and carry in 1995. JMT decided that "frill-free discounting was the way to go". In 1997, it bought Biedronka, with 243 discount stores, adding outlets in small towns at first and seeking the kind of customers who run out of cash before the end of the month" (Economist, 2014). This venture was massive and JMT has realised huge growth in Poland since it accounts for approximately 77% of their revenues as of 2017.

Exhibit 2: Which is your nearest grocery store?

Biedronka	36.0%
Lidl	8.8%
Tesco	5.7%
Lewiatan	5.5%
Żabka	4.0%
Kaufland	3.9%
Delikatesy Centrum	3.3%
Netto	3.2%
Spolem	2.9%
Stokrotka	2.6%
Carrefour	2.4%
Auchan	2.4%
Polomarket	2.3%
Intermarché	2.0%
Groszek	1.2%
Carrefour express	1.1%
ABC	1.1%
Fresh Market	0.9%
Mila	0.9%
Piotr i Paweł	0.8%
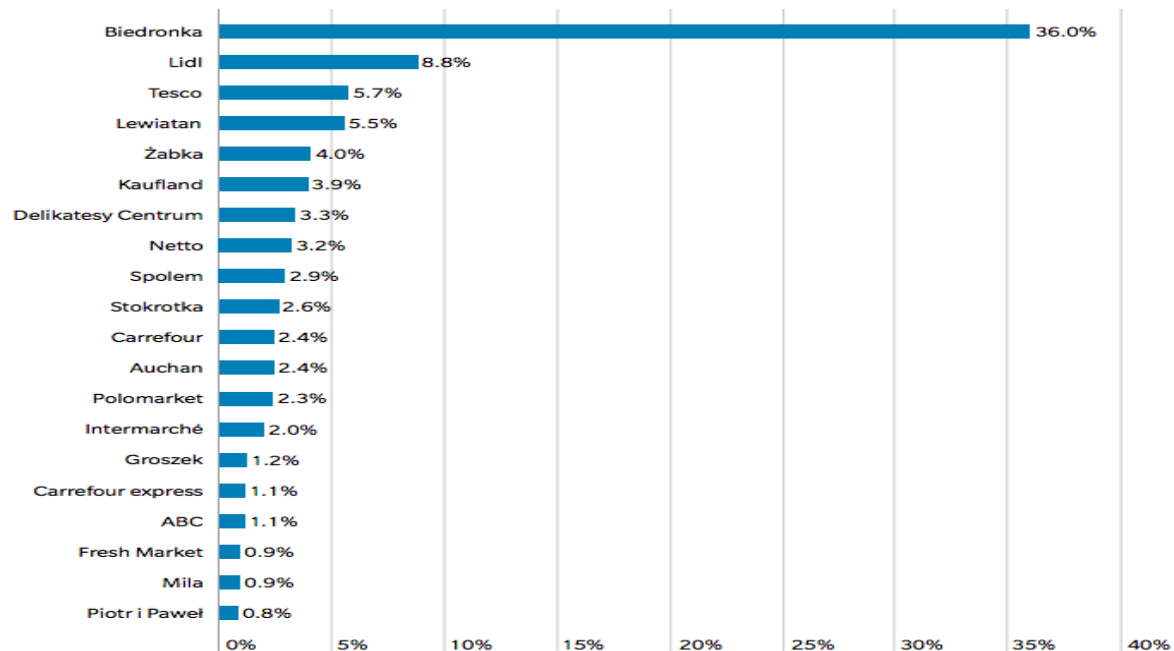
Source: Oliver Wyman Customer Perception Map Poland 2017

Biedronka's Dominance of Polish Market. Source: Oliver Wyman

Biedronka has a strong hold of the Polish grocery market. It is classed as a discount store. This business model is extremely effective in the polish market. A study into the European grocery market by Boston consulting group released in 2017 shows that Poland is ahead of many of its European -peers in regards of the growth of discount stores. As Biedronka are the biggest grocery retailer in Poland they have a large part to play in this expansion. Taking all of this into account we forecasted that the discount store market will continue to grow to the levels in Germany or Norway to reach roughly a 45% share of the market by the year 2022. This translates into roughly 6% growth for Biedronka. We have used this 6% growth figure in our model for the period to 2022. We believe that 50% of this growth will come from continued expansion and the rest from an increase in like-for-like sales. Management has forecasted 70-80 new stores next year, which roughly translates to a 3% growth in their store portfolio.
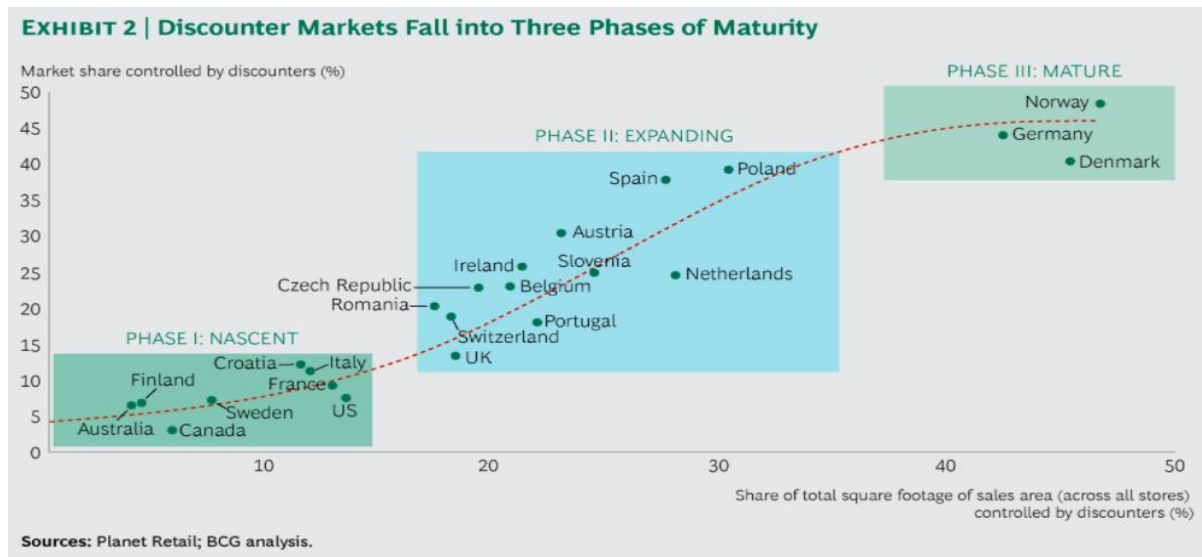
Discounters impact in Europe. Source: BCG

Beyond 2022, we forecasted the market to enter into a stagnation stage. This means less expansion and more focus on like-for-like sales growth; which means a slowdown in the number of new stores. We have also decreased the growth in same store sales to 2% due to the increased competition involved in a mature market. To calculate the nominal revenue from the growth due to expansion, we calculated the revenues per store. We grew this figure by the projected like for like sales growth. We could then find the revenues by multiplying the number of stores by revenue per store. For the new stores in a given year we assumed their revenues would be half of the traditional stores for their first year. This is to factor in the fact that new stores may take a while

to build a customer base. Also we do not know when in a given year the store opens therefore it may only be in the business for half of the financial year. A similar methodology was used for all of the other brands in the group.

BIEDRONKA	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Revenue	3724.6	4805.8	5785.9	6731	7703	8432	9206	9781	11075
Rev growth	5.8%	29.0%	20.4%	16.3%	14.4%	9.5%	9.2%	6.2%	13.2%
Same Store Sales %	8.3%	11.6%	13.4%	6.4%	4.2%	-0.8%	3.2%	9.5%	8.6%
Number of Locations	1466	1649	1873	2125	2393	2587	2667	2722	2823
Change	107	183	224	252	268	194	80	55	101
Rev/Store	2.54	2.91	3.09	3.17	3.22	3.26	3.45	3.59	3.92

Biedronka Historical Revenues

Phase 1	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E
Revenue	11578.4	12283.5	13031.5	13825.2	14667.1
Rev growth	4.5%	6.1%	6.1%	6.1%	6.1%
Same Store Sales %	0.03	0.03	0.03	0.03	0.03
Number of Locations	2907.7	2994.9	3084.8	3177.3	3272.6
Change	85	87	90	93	95
Rev/Store	4.0	4.2	4.3	4.4	4.5

Phase 1 Forecast

Phase 2	FY 2023E	FY 2024E	FY 2025E	FY 2026E	FY 2027E
Revenue	15297.5	15792.7	16205.1	16578.5	16960.2
Rev growth	4.3%	3.2%	2.6%	2.3%	2.3%
Same Store Sales %	0.02	0.02	0.02	0.02	0.02
Number of Locations	3322.6	3352.6	3362.6	3372.6	3382.6
Change	50	30	10	10	10
Rev/Store	4.6	4.7	4.8	4.9	5.0

Phase 2 Forecast

As it can be seen in the three tables above, our model forecasts a slowdown in revenue growth from 13% in the year 2017 to 2.3% in the year 2027.

2. PINGO DOCE

Before the rapid growth of Biedronka, Pingo Doce was JMT's main brand. With 422 stores (FY 2017), they are Portugal's largest supermarket chain. The brand has been performing well in terms of revenue growth for the past 10 years and like for like sales growth for the past 5. However, the growth is a lot slower and the revenues now make up for roughly 13% of the group's total sales. We forecasted that this will fall to approximately 11% by the year 2027. We forecasted a continued growth of 1% in like for like sales in Portugal. Pingo Doce have a strong position in the market and management has not indicated any major changes in their strategy besides a refurbishment programme. With regards to opening of new stores, we forecasted that they would continue to open stores in line with the historical average of 8 per year. Again this is due to management not indicating any plans for rapid expansion. Their strategy is mainly focussed on refurbishments and upgrading their distribution services. The forecasts of Pingo Doce under these assumptions can be seen in Table 4. The forecast to 2027 can be found in the appendix section.

Pingo Doce	FY 2015	FY 2016	FY 2017	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E
Revenue	3407.0	3558.0	3667.0	3738.8	3847.1	3957.2	4069.1	4182.8
Rev growth	5.3%	4.4%	3.1%	2.0%	2.9%	2.9%	2.8%	2.8%
Same Store Sales %	0.046	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Number of Locations	399.0	413.0	422.0	430.0	438.0	446.0	454.0	462.0
Change	19	14	9	8	8	8	8	8
Rev/Store	8.5	8.6	8.7	8.8	8.9	9.0	9.0	9.1

Pingo Doce Revenue Forecast till FY2022E

3. RECHEIO

Similar to Pingo Doce, Recheio was one of JMT's core brands until they added Biedronka to their portfolio of brands. Situated in Portugal, Recheio is a Cash and Carry format with 43 stores as of FY 2017. With revenues of €942 Million, it makes up about 4% of JMT's total revenue. We forecasted it in a similar manner to Pingo Doce. This is a mature segment with no major plan outlined for expansion. Again most of the capital expenditures is due to refurbishments and distribution. We therefore forecasted revenues per store to increase in-line with the CAGR of 2.3%. We forecasted that they would expand in-line with their historical averages (roughly one new store every two years). The modelled revenues to 2022 can be in table 5. Full model can be seen in appendix

Recheio	FY 2015	FY 2016	FY 2017	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E
Revenue	832.0	878.0	942.0	963.7	1008.8	1032.0	1079.7	1104.5
Rev growth	4.1%	5.5%	7.3%	2.3%	4.7%	2.3%	4.6%	2.3%
Same Store Sales %	0.035	0.05	0.062	0.023	0.023	0.023	0.023	0.023
Number of Locations	41.0	42.0	43.0	43.0	44.0	44.0	45.0	45.0
Change	0	1	1	0	1	0	1	0
Rev/Store	20.3	20.9	21.9	22.4	22.9	23.5	24.0	24.5

Forecasted Recheio Revenue till FY2022E

4. ARA

Ara is JMT's next growth venture and a potential cash-cow. It is a chain of supermarkets in Colombia which JMT is currently rapidly expanding. JMT has planned to increase its current store base of 389 as of 2017 to 1000 by the year 2020. This is to counter the slowdown in growth which is going to occur in the Polish market. JMT wishes to emulate the success of Biedronka, with Ara in Colombia. There are lots of similarities between the two ventures and Colombia's GDP per capita is also similar to what Poland's GDP was, in the year 1997. JMT is hoping that Colombia will experience the same economic growth as Poland has experienced for the past 20 years. Management, however, is under no illusion and states in their earnings calls that they do not expect the same results as what occurred in Poland. They have also experience with failing in expansions into Brazil in the early 2000's (Economist, 2014). They failed before as they were not a big enough firm to conquer a large market like Brazil's. However JMT is now a much larger firm (JMT market cap in 2002 was just under €2 Billion) and can withstand the losses associated with rapid expansion in a new market.

Taking all this into account, we created our forecast. Management mentioned that Ara will eventually break-even by 2020 and begin to make profit in the following years. To the year 2020, we have forecasted a linear growth of stores to 100 which amounts to roughly 200 stores per year. Beyond that, we used Biedronka as a proxy to forecast expansion. Observing Biedronka's store growth from 2008 to 2017, we found that the store portfolio grew at 8.4% per year (CAGR). We therefore forecasted Ara's new store growth in a similar fashion. As Ara will be in a rapid expansion phase, we forecasted that the revenues would remain constant (average of past two years). The reason behind this is that as they expand into new regions in Colombia it will take time for the brand's awareness to grow. So the lower revenues in the new regions will be offset by the increase in revenues in the maturing stores, leading to a constant figure for revenue per store. All of this results in rapid revenue growth of between 4-16% until 2020 followed by a growth of 8.4%. This can be seen in the table of Ara revenue forecast below.

ARA	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	FY 2025E	FY 2026E	FY 2027E
Revenue	516	727	943	1099	1192	1293	1402	1521	1650	1789
Rev growth	27.3%	40.9%	29.8%	16.5%	8.46%	8.46%	8.46%	8.46%	8.46%	8.46%
Number of Locations	589	789	1000	1085	1176	1276	1384	1501	1628	1766
Change	200	200	211	85	92	100	108	117	127	138
Rev/Store	1.055	1.055	1.055	1.055	1.055	1.055	1.055	1.055	1.055	1.055

Ara Revenue Forecast

5. *HEBE*

Hebe is a drugstore chain founded in 2011 in Poland. "This business concept is based on the offer of a Health and Beauty assortment with high quality advice, at very competitive prices" (JMT annual report, 2017). The chain is continuing to expand in the Polish market with 182 stores. Management have suggested that the wish to grow by 30 more in 2018. They only began to report the revenues for Hebe in 2015 and they now account for 1% of the group's total revenues. Hebe is not yet profitable but management have again set the date for profitability for Hebe as 2020. We forecasted growth in number of stores as 30 for 2018 followed by a gradual slow down.

HEBE	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	FY 2025E	FY 2026E	FY 2027E
Revenue	182	199	208	212	216	220	225	229	233	237
Rev growth	9.9%	9.3%	4.2%	2.0%	2.0%	2.0%	1.9%	1.9%	1.8%	1.8%
number of locations	212	232	242	247	252	257	262	267	272	277
Change	30	20	10	5	5	5	5	5	5	5

Hebe Revenue Forecast

6. COMBINED GROUP REVENUE

Combining the forecasted revenues of all of their segments, it is clear that the group's revenue growth that it has achieved in recent years will slow down in-line with the stagnation of the grocery market in Poland by 2027. We had to adjust the revenues of Pingo Doce by 51% as JMT only possesses a 51% stake in it but they report the full revenues of the subsidiary in their consolidated reports.

In Millions of EUR	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	FY 2025E	FY 2026E	FY 2027E
Revenue	15147	16180	17233	18291	19313	20158	20854	21503	22100	22745
Biedronka	11578	12283	13032	13825	14667	15298	15793	16205	16578	16960
Pingo Doce	1907	1962	2018	2075	2133	2192	2252	2313	2375	2438
Recheio (Cash & Carry)	964	1009	1032	1080	1105	1155	1182	1235	1263	1320
Ara	516	727	943	1099	1192	1293	1402	1521	1650	1789
Hebe	182	199	208	212	216	220	225	229	233	237

Combined Groups Revenues

EBIT MARGIN

JMT reports the EBITDA margin for each of their brands. With some reverse engineering and the segmented depreciation and amortization figures, we computed the EBIT margins.

BIEDRONKA

The Polish discounter has obtained large margins in comparison to comparable companies in other European countries. For the past 8 years it has realised EBIT margins of up to 6.64% with an average of 5.4%. However there are changes in the political and economic climate in Poland which could mean reductions in this margin. The political party currently in government in Poland PiS (Law and Justice) are a conservative party. One of their main objectives is increasing workers compensation. This has resulted in a 5% increase in the minimum wage in Poland beginning in 2018 (Poland Radio, 2017). This will have a knock on effect on the margins achieve by Biedronka. We estimate that the nominal increase in employment costs from a 5% increase in minimum wage is €44 Million. If we were to forecast the EBIT margin at the historic average and then take €44 Million off the figure we find that the resulting EBIT margin is 5%. Therefore we have taken 5% as the new EBIT margin up until 2020. This is the year when we have forecasted a plateau of the growth in the discount store market. We therefore forecast a further drop in EBIT margin to 4% and finally to 3%. This is due to increased competition associated with mature markets. The 2.5% figure was taken by observing comparable firm in mature markets across Europe such as Pingo Doce (2.6% EBIT Margin) and Morrsions a UK retailer (2.5% EBIT Margin).

BIEDRONKA	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E
EBIT	579	614	652	691	587
EBIT Margin	5.00%	5.00%	5.00%	5.00%	4.00%

Biedronka EBIT Forecast

PINGO DOCE

Similar to Poland, Portugal has also witnessed an increase in minimum wage of 4.1%. Taking the impact of this minimum wage increase off the historic average margin, we obtain a new EBIT margin of 2.37%. We forecasted at this rate for the entire period.

RECHEIO

As Recheio is also in Portugal we reduced the margin in a similar fashion to Pingo Doce and took a margin of 3.53% going forward.

ARA

As Ara is currently unprofitable, they do not break down their margin. JMT has stated however that the combined loss of Ara and Hebe is €85 Million (FY 2017) and will be similar in 2018. We reduced the loss to €45 Million in 2019 and the 0 in 2020 (the proposed breakeven year). From there we forecast a slow gain in margins for Ara up to 4%. We came to this figure by observing Biedronka's margins when it was in a similar stage of the business cycle which was roughly 6%. However Biedronka was a particularly successful venture, which occurred in line with a considerable growth in the Polish economy. We therefore reduced the forecasted EBIT margins for Ara to 4%.

ARA	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	FY 2025E	FY 2026E	FY 2027E
EBIT	NA	NA	0	11	24	39	56	61	66	72
EBIT Margin	NA	NA	0	0.01	2.00%	3.00%	4.00%	4.00%	4.00%	4.00%

Ara EBIT Forecast

HEBE

As stated previously, Ara and Hebe's losses have been reported in a combined amount for the past few years. Hebe was forecasted in a similar fashion to Ara; Breaking-even in 2020, followed by a steady growth in margins and finally plateauing at 3.5%. The 3.5% figure was found by looking at the EBIT margin of a comparable firm (Walgreens Boots Alliance).

Hebe	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	FY 2025E	FY 2026E	FY 2027E
EBIT	NA	NA	0	2	4	8	8	8	8	8
EBIT Margin	NA	NA	0	0.01	2.00%	3.50%	3.50%	3.50%	3.50%	3.50%

Hebe EBIT Forecast

COMBINED EBIT FORECAST

As you can see from Table 12 the EBIT increase up until 2021 inline with the growth of Biedronka followed by a slight decline. The decline in growth of Biedronka effect is offset by the increase in Ara.

PARTICULARS	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	FY 2025E	FY 2026E	FY 2027E
Biedronka	578.9	614.2	651.6	691.3	586.7	611.9	631.7	405.1	414.5	424.0
Pingo Doce	45.2	46.5	47.8	49.2	50.5	51.9	53.4	54.8	56.3	57.8
Recheio (Cash & Carry)	33.9	35.5	36.3	38.0	38.8	40.6	41.6	43.4	44.4	46.4
Ara	NA	NA	NA	11.0	23.8	38.8	56.1	60.8	66.0	71.6
Hebe	NA	NA	NA	2.1	4.3	7.7	7.9	8.0	8.2	8.3
Ara & Hebe	-85.0	-45.0	0.0							
Total	573.0	651.1	735.7	791.5	704.2	751.0	790.6	572.2	589.3	608.1

Combined EBIT Forecast

CAPITAL EXPENDITURE

1. BIEDRONKA

The capital expenditure (CAPEX) for Biedronka was broken down into cost of new stores and cost of refurbishments. Unfortunately JMT does not break down the CAPEX for each of the brands. All they report is a total capital expenditure per brand. However, in 2013 they stated that new store costs were 79% of Biedronka's CAPEX. This meant that the CAPEX per store could be calculated and the CAPEX on refurbishment was the remainder. This gave us a figure of €1.34 Million per new store and €700 Thousand per refurbishment. We used these figures to forecast the capital expenditure going forward. We also conducted a back test using this model for the other years and found the maximum error produced was 10%.

The number of refurbishments was forecasted as 8.5% of the total number of stores. This is the FY 2017 figure. A historic average would give too low a figure; as the brand matures, the number of refurbishments must increase. Therefore, we increased this further to 10% by 2022.

BIEDRONKA	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E
Capital Expenditure	278	287	295	304	348
Number of Locations	2908	2995	3085	3177	3273
Change	85	87	90	93	95
Number of Refurbishments	248	256	263	271	327
New Store Cost	96	99	102	105	108
Refurbishment Cost	182	188	193	199	240

Biedronka Capital Expenditure

PINGO DOCE

For Pingo Doce, we calculated CAPEX by computing the cost per new store to be €1.94 Million and new refurbishments to be €1.165 Million. The entire portfolio is going through a refurbishment programme at the moment. Management has suggested that this will continue for the next two years therefore we forecasted the same proportion of store would be refurbished for the next two year (18%) it would then drop to the historic average of 13.7%.

Pingo Doce	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E
Capital Expenditure	106	107	87	88	90
Number of Locations	430	438	446	454	462
Change	8	8	8	8	8
Number of Refurbishments	77	79	61	63	64
New Store Cost	16	16	16	16	16
Refurbishment Cost	90	92	72	73	74

Pingo Doce Capital Expenditure

RECHEIO

As there was not enough information available for conducting a detailed analysis of Recheio's CAPEX, we forecasted it by taking an average of the historical CAPEX per store and multiplying it by the number of stores forecasted in the future years. For the first two years, we took the preceding year's CAPEX per store (€660 Thousand) as it encompasses the new refurbishment programme. From 2020 onwards, we used the historic average (€240 Thousand).

RECHEIO	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E
Capital Expenditure	29	29	11	11	11
Number of Locations	43	44	44	45	45

Recheio Capital Expenditure

ARA

By observing the CAPEX of Ara, it was found that new store costs were €1 Million. JMT is yet to start refurbishing Ara stores as it is a relatively new venture. However, we have forecasted that they will have to begin renovating stores by 2021. We estimated the cost per renovation would be €500 Thousand and that they would renovate 5% of their stores per year.

ARA	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E
Capital Expenditure	200	200	211	111.7	150.6
Number of Locations	589	789	1000	1084.6	1176.4
change	200	200	211	84.6	91.8
Refurbishments	0	0	0	54.2	117.6

Ara Capital Expenditure

OTHER CAPITAL EXPENDITURE

Other capital expenditure includes Hebe and other small brands under the specialized retail segment which have a negligible impact on the company as a whole. We forecasted these as an average of the past two years which came to €30 Million.

COMBINED CAPITAL EXPENDITURE

Specialized Retail	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E
Total Capital Expenditure	631	601	592	502	586

Combined Capital Expenditure

NON-CASH CHARGES

Depreciation was taken as a fixed percentage of PP&E (Property plant and Equipment) as there was almost no deviation in the historical figures. Amortization was almost non-existent.

WORKING CAPITAL

Working capital and its management are the most important aspects to be considered when valuing a company operating primarily in the retail grocery segment. Therefore, we conducted a comprehensive analysis on the historical figures of current assets and current liabilities to identify their operational efficiencies and management's control over the working capital. To begin with, the group operates via quite a lot of brands that it treats as operating segments, such as – Biedronka (Largest discount stores chain in Poland), Pingo Doce (Largest supermarket chain in Portugal), Recheio (Largest Cash & Carry chain in Portugal), Ara (New food distribution chain in Columbia), and Hebe (Specialized health and beauty chain in Poland). The working capital requirements of each of these operations must intuitively be different and varied in many aspects. Therefore, conducting any quantitative analysis before considering the impact of each of these operations individually would not make any sense.

Although the group does not break-down the balance sheet and P&L on the basis of each of these brands, making it hard to obtain the current assets' and current liabilities' figures for each of their abovementioned operations, separately; we found a very counter-intuitive relationship of the current level of working capital with the group's revenues. Since they are majorly into food retail (discount stores and supermarkets), food distribution, and specialized retail, the other businesses, such as – Hebe (Health and Beauty) might not have a significant impact on the working capital of the group as a whole and therefore, the working capital to revenue relationship of Jeronimao Martins is like any other major food retailer in Europe. The historical relationship of working capital with the group's revenues is displayed in graph 1 below:
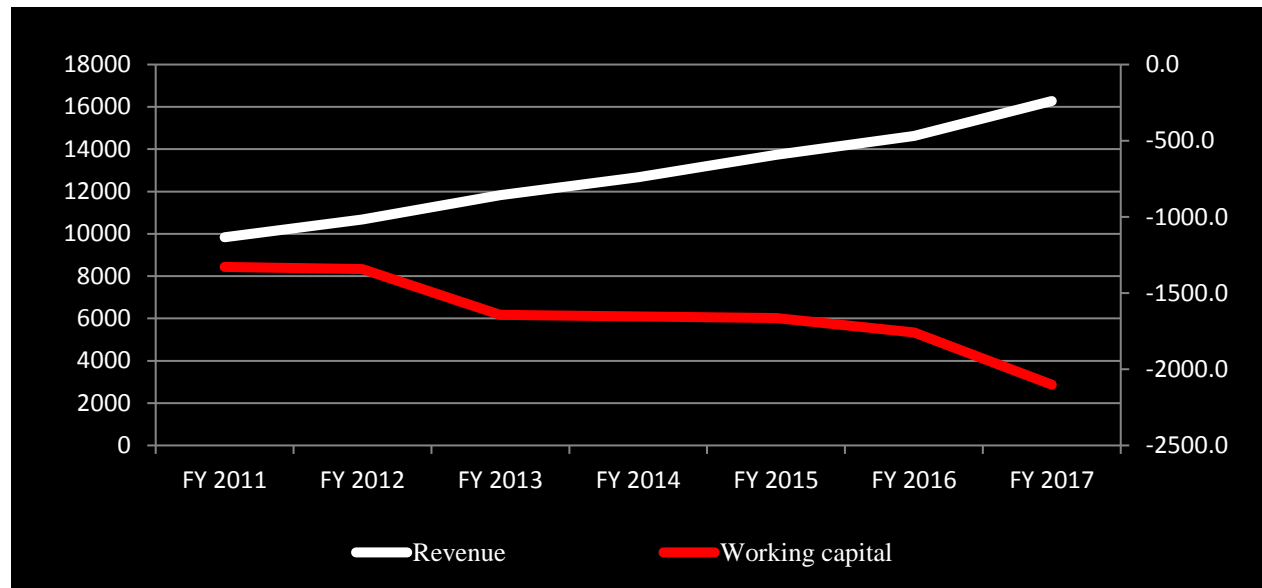
Graph 1

We also looked at the correlation and regression levels to find a statistical relationship between working capital and revenues. The correlation coefficient that we obtained was -0.95. This means that for every 1 unit of positive movement in revenues, there is a negative movement in the working capital to the extent of 0.95 units. We also looked at the regression of Levels (Impact of Revenues on Working capital) as well as Changes (Impact of changes in Revenues on changes in Working capital). We obtained the following results (Table 1):

Regression Statistics (Changes)	
Multiple R	0.955442
R Square	0.91287
Adjusted R Square	-1.4
Standard Error	84.83441

Table 1

Now that we know that the changes in working capital are majorly driven by the changes in the group's revenues, we found it safe to forecast the working capital as a fixed percentage of revenues. The five-year historical average was exactly same as the most recent figure (12.9%) so we assumed the working capital to remain at this level for the horizon of our forecast. A graph

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displaying the historical (normal line) and the projected (dotted line) levels of revenues and working capital is displayed in graph 2 below:
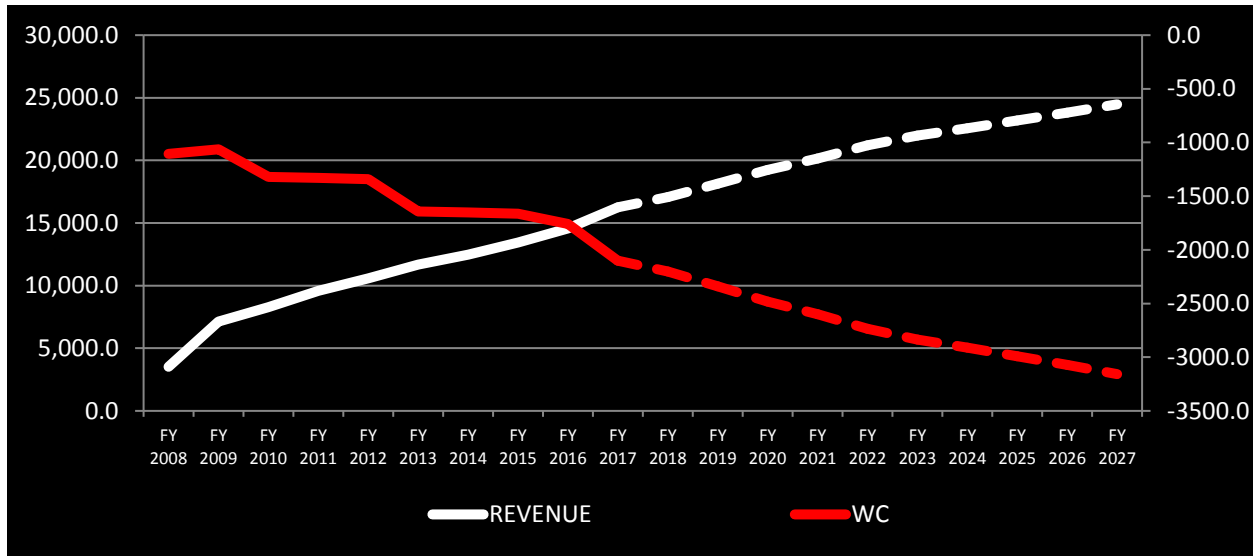
Graph 2

The linear downward sloping graph of working capital forecast may seem counterintuitive to many readers. However, this is one of the key characteristics of this industry. The retail grocery industry is characterized by very large amounts of current liabilities as compared to the current assets. Most of the suppliers provide SKUs (Stock keeping units) on consignment basis where the actual payment is made to the supplier only if the product is sold within a specified amount of time and is returned to the supplier otherwise. Therefore, a linear decline shows in the working capital levels show that the company is doing well. Since we are forecasting working capital as a fixed percentage of the revenues (based on the statistical relationship shown earlier in this section), it is completely normal for the working capital to continue to decline as the revenues go up.

ADJUSTED PRESENT VALUE

DEBT/EQUITY RATIO

It is clear from graph 3 that the debt to equity ratio has not been constant. This is due to the decreased debt levels due to their strong performance. Management has been actively mentioning that they would not consider going beyond a certain level of leverage and would primarily focus on their own funds for expansion. Therefore, we cannot reasonably say that the debt to equity levels will remain constant in future.

The debt level is currently at roughly €530 million, which is the figure we expect that it will remain at in future. Therefore we used the adjusted present value, calculating the PV of the all equity cash flows as well as the present value of the tax shield of this constant debt amount.
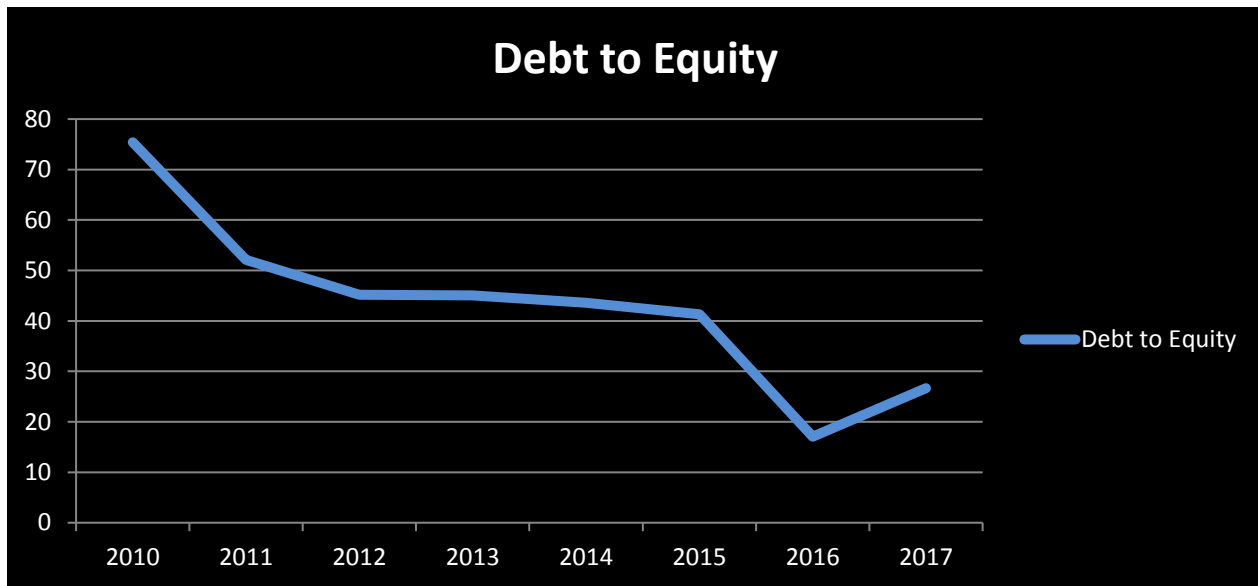
Graph 3

RISK-FREE RATE

In order to calculate the risk-free rate, we could have taken a weighted average of the 10 year bond yield from the countries the revenues are derived from (Poland: 3.1%, Portugal: 1.6%, Colombia: 6.1%). However, it would have proved to be difficult and less accurate to calculate a default risk premium on these yields. We therefore took the German 10 year bond yield (0.579%) and figured that the difference was the default risk premium.

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MARKET PREMIUM

Market premium was taken from the NYU Stern data base of market risk premiums. The risk premium for the Poland, Portugal and Colombia was 6.06%, 7.96%, and 7.27%, respectively. The aggregate market premium that we computed by considering the proportion of operations in each of these countries is 6.44%.

BETA

We calculated a rolling beta for 5 years by comparing JMT returns to the Stoxx 600 which follows 600 large cap companies in 17 European states. As you can see in the figure (5 year rolling beta),

5 Year Rolling Beta
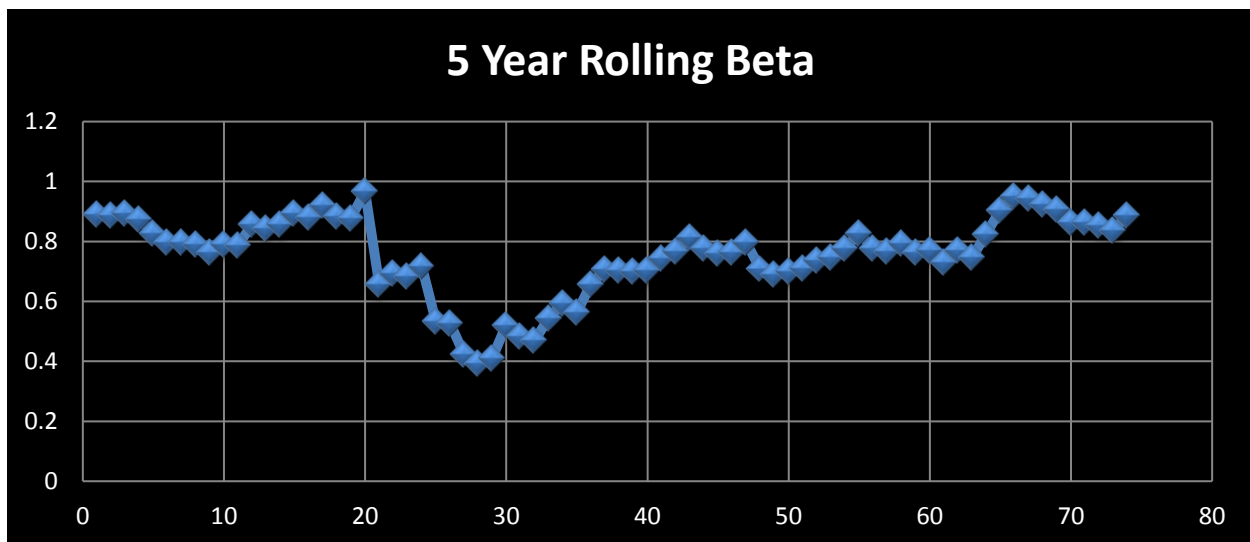
JMT's beta generally hovers between 0.8 and 1. However, there was a period where the beta dropped to as low as 0.4. This was due to a period of deflation that occurred in Europe which had a negative effect on the grocery industry. This hit JMT's profits with a slowdown in like for like sales (Biedronka: -0.8%). This had an adverse effect on the stock price which did not occur in the market as a whole. We do not believe that this abnormal event of deflation is likely to occur again therefore we went with the most recent figure for Beta of 0.88. We then found the unlevered Beta to be 0.85.
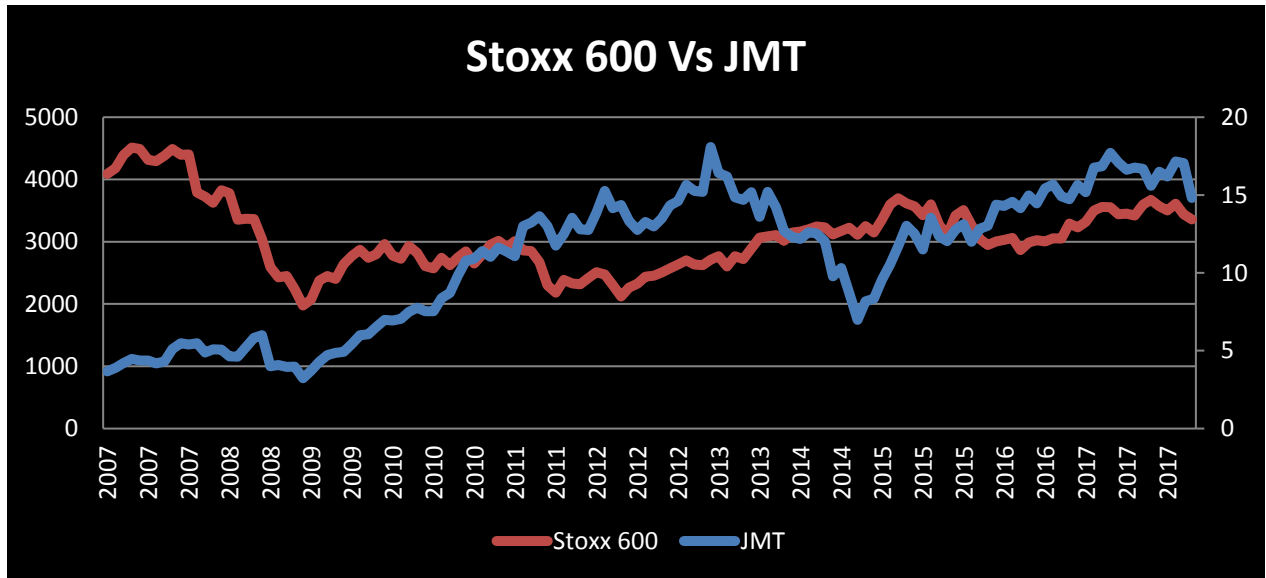
TAX

We took the average of effective tax rate paid by JMT for the previous 8 years and observed that there was not much of a deviation in the figures. The average came out to by 23%; we used this figure to forecast future tax rate since there are no expectations about tax rate changes in the regions that JMT operates.

TAX SHIELD

The tax shield was found by using the risk free rate multiplied by the amount of debt to find the interest on the debt. Multiplying this by the tax rate we found the tax shield. Dividing the Tax shield by the risk free rate gives the PV of the tax shield. All of this is outlined in Table 2.

INPUTS	VALUES
Future Debt	530
Risk free rate (rf)	0.58%
Interest on debt	3.069
Tax	23%
Tax Shield	0.706
PV Tax Shield	121.9

Table 2

COST OF EQUITY

Using the figures calculated above as well as the capital asset pricing model we found that the cost of equity for the group was 6.04%.

TERMINAL GROWTH

Since the group is expected to be having a quite strong presence in three countries by the last year of our forecast period (2027E), the terminal growth rate was calculated by allotting weights to each of these three countries' long-term GDP forecasts on the basis of the proportion of their contribution to the group's revenues. The following table (Table 3) shows the weights allotted to the countries that they operate in and the calculation of terminal growth rate.

COUNTRY	WEIGHT	GDP (Forecast)	VALUE
POLAND (Biedronka & Hebe)	76.66%	2.54%	1.951%
PORTUGAL (Pingo Doce & Recheio)	15.37%	2.37%	0.365%
COLOMBIA (Ara)	7.98%	3.30%	0.263%
TERMINAL GROWTH RATE	**100.00%**		**2.58%**

Table 3

VALUATION RESULTS

The intrinsic value of equity based on our comprehensive discounted cash flow model is approximately €11.32 billion, as compared to the most recent market capitalization of €8.5 billion.

This is a difference of €2.815 billion or 33.12%, which is a considerable difference to make an investment decision. The decent gap in the intrinsic value and the market capitalization makes us believe that it is the right time to invest on the basis of its fundamentals.

Therefore, we recommend a BUY call on the company (Table 4).

(€ millions)

INPUTS	VALUES
PV of FCF	3555.13
Terminal Value	7179.91
Terminal Growth	2.58%
PV Tax Shield	165.41
Enterprise Value	11133
Total Debt	530
Cash	712
Equity Value	11315
Market Value	8500
Difference	2815
UPSIDE	**33.12%**
RECOMMENDATION	**BUY**

Table 4

APPENDIX

REVENUES

Pingo Doce	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	FY 2025E	FY 2026E	FY 2027E
Revenue	2755.8	2996.4	3063.0	3181.0	3234.0	3407.0	3558.0	3667.0	3738.8	3847.1	3957.2	4069.1	4182.8	4298.5	4416.0	4535.4	4656.8	4780.2
Rev growth	1.8%	8.7%	2.2%	3.9%	1.7%	5.3%	4.4%	3.1%	2.0%	2.9%	2.9%	2.8%	2.8%	2.8%	2.7%	2.7%	2.7%	2.6%
Same Store Sales %			-0.005	0.036	0.012	0.046	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Number of Locations	364.0	369.0	372.0	376.0	380.0	399.0	413.0	422.0	430.0	438.0	446.0	454.0	462.0	470.0	478.0	486.0	494.0	502.0
Change	6	5	3	4	4	19	14	9	8	8	8	8	8	8	8	8	8	8
Rev/Store	7.6	8.1	8.2	8.5	8.5	8.5	8.6	8.7	8.8	8.9	9.0	9.0	9.1	9.2	9.3	9.4	9.5	9.6

Recheio	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	FY 2025E	FY 2026E	FY 2027E
Revenue	719.1	792.5	792.0	805.0	799.0	832.0	878.0	942.0	963.7	1008.8	1032.0	1079.7	1104.5	1155.0	1181.6	1235.1	1263.5	1320.0
Rev growth	4.4%	10.2%	-0.1%	1.6%	-0.7%	4.1%	5.5%	7.3%	2.3%	4.7%	2.3%	4.6%	2.3%	4.6%	2.3%	4.5%	2.3%	4.5%
Same Store Sales %	0.032	0.024	-0.009	0.004	-0.009	0.035	0.05	0.062	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023
Number of Locations	38.0	41.0	41.0	41.0	41.0	41.0	42.0	43.0	43.0	44.0	44.0	45.0	45.0	46.0	46.0	47.0	47.0	48.0
Change		3	0	0	0	0	1	1	0	1	0	1	0	1	0	1	0	1
Rev/Store	18.9	19.3	19.3	19.6	19.5	20.3	20.9	21.9	22.4	22.9	23.5	24.0	24.5	25.1	25.7	26.3	26.9	27.5

ARA	FY 2016	FY 2017	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	FY 2025E	FY 2026E	FY 2027E
Revenue	236	405	516	727	943	1099	1192	1293	1402	1521	1650	1789
Rev growth		71.61%	27.32%	40.90%	29.83%	16.52%	8.46%	8.46%	8.46%	8.46%	8.46%	8.46%
Number of Locations	221	389	589	789	1000	1085	1176	1276	1384	1501	1628	1766
Change	79	169	200	200	211	85	92	100	108	117	127	138
Rev/Store	1.068	1.041	1.055	1.055	1.055	1.055	1.055	1.055	1.055	1.055	1.055	1.055

HEBE	FY 2016	FY 2017	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	FY 2025E	FY 2026E	FY 2027E
Revenue	122	166	182	199	208	212	216	220	225	229	233	237
Rev growth		36.07%	9.88%	9.27%	4.24%	2.04%	1.99%	1.96%	1.92%	1.88%	1.85%	1.81%
number of locations	153	182	212	232	242	247	252	257	262	267	272	277
Change		29	30	20	10	5	5	5	5	5	5	5
rev/area	3.439	3.856	3.647	3.647	3.647	3.647	3.647	3.647	3.647	3.647	3.647	3.647

In Millions of EUR	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	FY 2025E	FY 2026E	FY 2027E
Revenue	9095.13	10193.31	11017.34	11977.57	12878.58	14479.17	15146.85	16180.11	17232.68	18291.20	19313.23	20158.22	20853.58	21503.22	22099.81	22744.89
	0.11	0.12	0.08	0.09	0.08	0.12	0.05	0.07	0.07	0.06	0.06	0.04	0.03	0.03	0.03	0.03
Biedronka	6731.00	7703.00	8432.00	9206.00	9781.00	11075.00	11578.36	12283.48	13031.54	13825.17	14667.12	15297.52	15792.74	16205.13	16578.46	16960.24
Pingo Doce	1562.13	1622.31	1649.34	1737.57	1814.58	1870.17	1906.78	1962.01	2018.16	2075.23	2133.25	2192.21	2252.15	2313.06	2374.96	2437.88
Recheio (Cash & Carry)	792.00	805.00	799.00	832.00	878.00	942.00	963.67	1008.76	1031.96	1079.69	1104.52	1155.03	1181.60	1235.05	1263.46	1320.02
Ara	—	—	—	—	236.00	405.00	515.65	726.55	943.25	1099.12	1192.12	1293.00	1402.41	1521.08	1649.79	1789.39
Hebe	—	—	—	—	122.00	166.00	182.39	199.31	207.77	211.99	216.22	220.45	224.68	228.91	233.14	237.37
Consolidation Adjustments	10.00	63.00	137.00	202.00	47.00	21.00										

EBIT MARGIN

BIEDRONKA	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	FY 2025E	FY 2026E	FY 2027E
EBIT	278	363	447	467	417	468	537	635	579	614	652	691	587	612	395	405	414	424
EBIT Margin	5.79%	6.28%	6.64%	6.07%	4.94%	5.09%	5.50%	5.46%	5.00%	5.00%	5.00%	5.00%	4.00%	4.00%	4.00%	2.50%	2.50%	2.50%

ARA	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	FY 2025E	FY 2026E	FY 2027E
EBIT	NA	NA	0	11	24	39	56	61	66	72
EBIT Margin	NA	NA	0	0.01	2.00%	3.00%	4.00%	4.00%	4.00%	4.00%

Hebe	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	FY 2025E	FY 2026E	FY 2027E
EBIT	NA	NA	0	2	4	8	8	8	8	8
EBIT Margin	NA	NA	0	0.01	2.00%	3.50%	3.50%	3.50%	3.50%	3.50%

PARTICULARS	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	FY 2025E	FY 2026E	FY 2027E
Biedronka	202.8	278.4	363.4	446.7	467.3	416.9	468.2	537.5	605.1	578.9	614.2	651.6	691.3	586.7	611.9	631.7	405.1	414.5	424.0
Pingo Doce	46.6	49.0	47.3	35.0	42.4	45.2	46.3	48.3	46.5	45.2	46.5	47.8	49.2	50.5	51.9	53.4	54.8	56.3	57.8
Recheio (Cash & Carry)	32.8	35.2	38.4	38.6	35.5	29.8	31.8	34.2	37.1	33.9	35.5	36.3	38.0	38.8	40.6	41.6	43.4	44.4	46.4
Ara										NA	NA	NA	11.0	23.8	38.8	56.1	60.8	66.0	71.6
Hebe										NA	NA	NA	2.1	4.3	7.7	7.9	8.0	8.2	8.3
Ara & Hebe					-12.9	-34.2	-41.6	-37.3	-85.0	-85.0	-45.0	0.0							
Total	282.2	362.6	449.1	520.3	545.2	491.9	546.3	620.0	587.3	573.0	651.1	735.7	791.5	704.2	751.0	790.6	572.2	589.3	608.1

CAPEX

BIEDRONKA	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	FY 2025E	FY 2026E	FY 2027E
Capital Expenditure	312.476	397.668	402.05	360.575	204.132	232.895	354	278	287	295	304	348	301	280	258	259	260
Number of Locations	1873	2125	2393	2587	2667	2722	2823	2908	2995	3085	3177	3273	3323	3353	3363	3373	3383
Change		252	268	194	80	55	101	85	87	90	93	95	50	30	10	10	10
Number of Refurbishments	99	106	115	127	155	180	241	248	256	263	271	327	332	335	336	337	338
New Store Cost								96	99	102	105	108	57	34	11	11	11
Refurbishment Cost								182	188	193	199	240	244	246	247	248	248

Pingo Doce	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	FY 2025E	FY 2026E	FY 2027E
Capital Expenditure	107.527	42.25	76.249	55.31	133.152	136.839	101	106	107	87	88	90	91	92	94	95	96
Number of Locations	369	372	376	380	399	413	422	430	438	446	454	462	470	478	486	494	502
Change	33	13	36	13	75	75	32	8	8	8	8	8	8	8	8	8	8
Number of Refurbishments	75	29	41	42	59	62	70	77	79	61	63	64	65	66	67	68	69
New Store Cost								16	16	16	16	16	16	16	16	16	16
Refurbishment Cost								90	92	72	73	74	75	77	78	79	81

Recheio	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	FY 2025E	FY 2026E	FY 2027E
Capital Expenditure	13.037	4.085	14.002	9.249	18.332	30.42	28.5	29	29	11	11	11	11	11	12	12	12
Number of Locations	41	41	41	41	41	42	43	43	44	44	45	45	46	46	47	47	48

ARA	FY 2016	FY 2017	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	FY 2025E	FY 2026E	FY 2027E
Capital Expenditure	77.19	169	200	200	211	111.7	150.6	163	177	192	208	226
Number of Locations	221	389	589	789	1000	1084.6	1176.4	1276	1384	1501	1628	1766
change		168	200	200	211	84.6	91.8	100	108	117	127	138
Refurbishments	0	0	0	0	0	54.2	117.6	128	138	150	163	177

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018E	FY 2019E	FY 2020E	FY 2021E	FY 2022E	FY 2023E	FY 2024E	FY 2025E	FY 2026E	FY 2027E
Total Capital Expenditure	383	437	501	442	344	413	672	631	601	592	502	586	552	546	540	557	577

DCF MODEL

PARTICULARS		FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018 Est	FY 2019 Est	FY 2020 Est	FY 2021 Est	FY 2022 Est	FY 2023 Est	FY 2024 Est	FY 2025 Est	FY 2026 Est	FY 2027 Est
Revenue		8178.05	9095.13	10193.31	11017.34	11977.57	12878.58	14479.17	15146.85	16180.11	17232.68	18291.20	19313.23	20158.22	20853.58	21503.22	22099.81	22744.89
Growth (%)			11.21%	12.07%	8.08%	8.72%	7.52%	12.43%	4.61%	6.82%	6.51%	6.14%	5.59%	4.38%	3.45%	3.12%	2.77%	2.92%
Margin		0.071	0.083	0.089	0.093	0.099	0.106	0.115	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200
+ Cost of Goods & Services		7594.18	8337.45	9288.68	9988.52	10790.49	11508.99	12818.00	12117.48	12944.09	13786.14	14632.96	15450.58	16126.58	16682.86	17202.58	17679.85	18195.91
Gross Profit		**583.87**	**757.68**	**904.63**	**1028.82**	**1187.08**	**1369.59**	**1661.17**	**3029.37**	**3236.02**	**3446.54**	**3658.24**	**3862.65**	**4031.64**	**4170.72**	**4300.64**	**4419.96**	**4548.98**
- Operating Expenses		1730.398	1823.569	2008.308	2234.001	2432.788	2530.043	2867	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.212	*0.200*	*0.197*	*0.203*	*0.203*	*0.196*	*0.198*										
Operating Income (Loss)		**-1,146.5**	**-1,065.9**	**-1,103.7**	**-1,205.2**	**-1,245.7**	**-1,160.5**	**-1,205.8**	**3,029.4**	**3,236.0**	**3,446.5**	**3,658.2**	**3,862.6**	**4,031.6**	**4,170.7**	**4,300.6**	**4,420.0**	**4,549.0**
EBIT		449.1	520.3	545.2	491.9	546.3	620.0	587.3	573.0	651.1	735.7	791.5	704.2	751.0	790.6	572.2	589.3	608.1
Effective Tax	23%	24%	24%	22%	24%	25%	17%	27%										
EBI		342.55	394.86	425.19	372.90	412.13	511.72	429.30	439.59	499.55	564.42	607.24	540.29	576.14	606.53	439.01	452.12	466.51
		5.49%	5.72%	5.35%	4.46%	4.56%	4.81%	4.06%	3.78%	4.02%	4.27%	4.33%	3.65%	3.73%	3.79%	2.66%	2.67%	2.67%
Non cash charges		208.31	218.67	246.92	274.50	292.20	294.33	331.00	362.06	386.50	405.97	422.85	430.05	444.22	454.00	462.34	469.37	477.37
Working Capital									-1953.94	-2087.23	-2223.02	-2359.56	-2491.41	-2600.41	-2690.11	-2773.92	-2850.88	-2934.09
Change WC									-94.52	-133.29	-135.78	-136.55	-131.84	-109.00	-89.70	-83.80	-76.96	-83.22
Capex		383.49	436.76	501.34	441.78	344.39	412.66	672.49	630.72	600.58	591.53	502.02	585.81	551.72	545.71	539.65	557.30	576.57
FCF		167.37	176.76	170.77	205.62	359.94	393.39	87.81	265.46	418.76	514.64	664.62	516.37	577.64	604.52	445.50	441.15	450.53
Discount rate	6.05%																	
PV FCF									250.32	372.36	431.52	525.50	385.00	406.12	400.78	278.51	260.06	250.44

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