AN EXAMINATION OF FOOD DISTRIBUTION AND SPECIALISED RETAIL SALES IN PORTUGAL

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ABSTRACT
The food retail sector in Portugal is mostly concentrated in five main players holding 69.6% of its market share, with two groups leading the Portuguese preference, Continente with 21.9% market share, Pingo Doce with 20.8% market share, followed by Jumbo, Lidl and Intermarché with 9.5%, 8.8% and 8.6%, respectively. These operators up to the year 2012 have guided their performance and price strategy by applying the strategy Every-day-Low-Price that privileges the application of low and stable prices. In this paper we aim to characterize the food retail market in Portugal after the year 2012, identifying the main factors and contextualizing the economic climate. This analysis takes into account that most retailers opted to follow a strategy of high-low pricing, which determined that 47% of sales of the year 2018 correspond to promotional sales; in this way, we will devote the analysis of the promotion and the impacts that it has for forecasting sales and supply chain management. Thus, to evaluate the influence of promotions on global sales, we will use weekly data referring to sales in the hypermarkets & "Superstores" channel that includes hypermarkets > 2,500 m²; Supermarkets 400-2,500 m²; Proximity < 400 m², in the period between the first week of 2012 and the last week of 2018, and also data on the number of promotions printed on promotional leaflets on the same period in question. Applying multiple linear regression models and a previous exploratory analysis of the data we can conclude that the promotions carried out via leaflets actions have a weak capacity to explain the sales obtained in the Hypermarkets & Superstores channel and that are explained in large scale by other variables and the impact of these variables should be object of study in future works.

Keywords: Portuguese retail market, Promotion, Retail, Retail pricing strategy

1. INTRODUCTION
The 2007 subprime crisis that began with the bankruptcy of the American bank Lehman Brothers had worldwide repercussions felt in several countries. In the Portuguese case the pressure exerted on the financial conditions of the country, led to an escalation of the interest rates with which Portugal was financed in the international markets. This process culminated in the international request for financial aid on 7 April 2011, since then and during the following 3 years Portugal was conditioned in its governance by the memorandum signed with the Troika.
The economic and financial adjustment that country was made through the instantaneous interruption of public investment, the reduction of public expenditure, particularly the cut of wages and social benefits, and also by the implementation of measures on the revenue side, such as the increase of taxation on labor and consumption (Rodrigues & Silva, 2015). As we can see in Figure 1, between 2011 and 2014, the constant prices GDP contracted significantly reaching is low in 2013, with a decrease of 6.85% in relation to 2010.

![GDP Constant prices](image)

*Figure 7: Gross Domestic Product Constant Prices (Pordata, 2019)*

Private consumption was also significantly affected during the years of the adjustment program, as can be seen in Figure 2 during the program period, private consumption reached its minimum in 2013 which corresponds to a decline of 6.1% compared to 2010.

![Private consumption](image)

*Figure 2: Private Consumption (Pordata, 2019)*
As is shown in Figure 3, during the economic adjustment program, the consumer confidence index reached its minimum in 2012, with the indicator decreasing 52% compared to the year of 2010.

![Consumer Confidence Indicator](image)

*Figure 3: Consumer Confidence Indicator (INE, 2019)*

Thus, taking into account the national context, there were several changes in the consumer profile, who began to plan and organize the purchase acts in a more rational way, buying less quantity and increasing the frequency of visits to stores. This "new" consumer who emerges in the midst of the crisis, is characterized by the constant demand for promotions, discounts and lower prices, is concerned with acquiring private label or first price products, this consumer is also characterized by being unreliable in relation with the point of sale (Beirão, 2001). Retailers have also adjusted to deal with the changes in consumer habits, highlighting mainly the shift in their strategy. Up to 2012, retailers set their performance and price strategy by applying the Everyday Low-Price model, which is defined by a low and stable price (Pechtl, 2004). However, from 2012 most of the players have chosen to implement a High Low Pricing strategy, which is characterized by promoting temporary price variations with the propose to attract customers (Pechtl, 2004). The prices advocated in a strategy everyday low price are characterized by being lower than the prices, out of the promotional moment, of the High Low Pricing strategy, however in the case of products in promotion, the high low pricing strategy presents a more competitive price than the everyday low price strategy. (Hoch, et al, 1994; and Lal & Rao, 1997).

2. THE PORTUGUESE FOOD RETAIL MARKET

The food retail sector in Portugal is mostly concentrated in five main players holding 69.6% of its market share, with two groups leading the Portuguese preference, Continente with 21.9% market share, Pingo Doce with 20.8% market share, followed by Jumbo, Lidl and Intermarché with 9.5%, 8.8% and 8.6%, respectively.
It is therefore possible to affirm that the focus of retailers is on promotions, these are characterized as short-term actions that aim to influence and stimulate the product acquisition process, the power of this variable is based on its ability to create an extra motive for impulse buying, experimentation of new / other products or even promote the stock disposal (Honea & Dahl, 2005). Thus, since 2012 we have witnessed a great increase in the number of promotions via leaflet, according to (Huang et al, 2014) it is in promotions that retailers spend a large part of their budget. Promotional leaflets are the main tool to retailers impulse promotions, they are used to promote new products, store openings and special price communication (Miranda & Kónya, 2007). According to Figure 5, the number of promotional inserts has increase by 439.9% between 2012 and 2018, indicating that to meet new consumer demands, retailers have made the promotional sales their principal focus.
Taking into account the information presented above, the weight of domestic market promotional increased by 80.8% between 2012 and 2018, from 26% to 47%, as can be seen from the information in Figure 6.

The values presented, in Figure 6, show that almost 50% of retail sales are promotional sales, which proves the preponderances they have in competitive retail dynamics. However, although promotional campaigns cause short-term sales to increase, they also increase consumers' price sensitivity and lower reference prices that consumers attribute to products (Gedenk et al, 2006). Thus, taking into account the weight of promotions, these should be planned and analyzed in detail, giving to managers the freedom to define the best strategy. they should promote well-designed campaigns with the capacity to predict the competitors’ actions and responses (Ma & Fildes, 2017).

3. THE IMPACT OF LEAFLETS INSERTIONS ON SALES
To evaluate the impact that leaflets promotional actions have on sales, we will use a simple linear regression model, where the variable explained are global sales and the explanatory variable are the leaflets inserts. The data of the explained variable corresponds to the global sales of the channel Hypermarkets & "Superstores" that includes hypermarkets> 2,500 m2; Supermarkets 400-2,500 m2; Proximity <400 m2. These amount included the sales of the groups, Auchan, Continente, Dia / Minipreço, El Corte Inglês, E.Leclerc, Mosqueteiros and Pingo Doce, in the period from the first week of 2012 to the last week of the year 2018. In the case of the explanatory variable number of leaflet insertions, this number represents the number of promotional photographs presented in the described above insignia leaflets, during the weeks in question, for the accounting of this variable it was assumed that a highlight of the brand is the same number if inserts that an individual highlight of a product.
In Figure 7, despite including several articles the Quaker brand is counted as one promotional insert just like the Fitness cereals were considered as one promotional insert. Although there are leaflets who crosses more than one-week duration, for this study we considered the starting date of the leaflet was to be the date of the leaflet. Thus, by applying a simple linear regression using the number of weeks as explanatory variable and the global sales as explained variable, we obtain a line of equation $Y = 0.1167X + 186.34$ (Figure 8), who have associated with this regression a coefficient of determination of 0.2591 which means that the variable number of weeks can explain 25.91% of the total variation of the global sales variable.

![Figure 8: Portuguese Retail Sales, (Nielsen, 2019)](image)

Applying a simple linear regression using the number of inserts in leaflet as explanatory variable and the global sales as explained variable, we obtain a line of equation $Y = 0.0116X + 188.29$ (Figure 9), who have associated to the regression a coefficient of determination of 0.1551 which means that the leaflet inserts variable can explain 15.51% of the total variation in the global sales variable.

![Figure 9: Portuguese retail sales/Promotional insertions in leaflets (Nielsen & Action Focus 2019)](image)

4. CONCLUSIONS
Portugal went through a severe period of economic adjustment, which has significantly affected the purchasing power of most of the people, from the restrictions stemming through this program has emerged new consumption habits and a high sensitivity to price by the consumer.
This sensitivity made the act of consumption become much more pondered and scrutinized, leading the consumer to make several comparisons between the various retailers before making the purchase. The Portuguese food distribution chains, in order to fit with the changes in the consumer preferences have adapted their strategies of price, moving from an everyday low prices to continuously focusing on promotional mechanics. The most visible part of this promotional mechanic is the leaflets, these have significantly evolved in quantity during the analyzed period. This new work model has resulted in an increase in promotional sales, having reached 47% of total sales in 2018, although its growth rate has declined in the last 3 years. As such, it would be expected that leaflet promotional insertions would be able to explain much of the global sales, however as we have seen through the simple linear regression method this is not true and the insertions can only explain 15.51% of the total variation in global sales. Taking into account the above, it would be pertinent in future work to test other variables and methods in order to formulate a better fit model to explain Portuguese global retail.

LITERATURE: